

El Paso County Colorado Municipal Separate Storm Sewer System (MS4) Program Description Document



January 2019, version #1

Contents

Part I.C. Program Description Document.....	1
Part I.C.1.c Organizational Chart.....	2
Part I.D. Public Involvement/Participation	3
Part I.E.1 Public Education and Outreach	4
Part I.E.2. Illicit Discharge Detection and Elimination (IDDE) Program	8
Part I.E.3. Construction Sites.....	13
Part I.E.4. Post-Construction Stormwater Management in New Development and Redevelopment	22
Part I.E.5 Pollution Prevention/Good Housekeeping for Municipal Operations	32
Appendix 1: Stormwater Public Education and Outreach Strategy.....	38
Appendix 2: Illicit Discharge Detection and Elimination Plan and Procedures.....	45
Appendix 3: Construction Oversight Procedures.....	49
Appendix 4: Stormwater Permit Applicability Evaluation Form	60
Appendix 5: Post Construction Oversight Procedures.....	62
Appendix 6: Post Construction Stormwater Management Applicability Evaluation Form.....	75
Appendix 7: Municipal Operations Procedures	78

Part I.C. Program Description Document

Per the Phase II Municipal Separate Storm Sewer System (MS4) Permit issued April 15, 2016, effective July 1, 2016, the permittee must develop and maintain records in the form of a program description document (PDD). The following document was developed to meet the requirement found in the MS4 Permit. Requirements subject to a compliance schedule do not need to be addressed in the PDD until the due date in the compliance schedule in Part I.H of the permit. The compliance date to implement this PDD is January 1, 2019. Implementation of all other permit conditions contained within this PDD are to be consistent with the compliance schedule in Part I.H. of the permit.

The PDD must include the names of the most recent version of the documents, date of the document, and location(s) where the supporting documentation is maintained. The PDD must be available to the public at reasonable times during regular business hours and maintained in a format that can be submitted to the Division within 10 business days of a request.

Information in the PDD may be revised by the permittee at any time. The permittee must modify the PDD as changes occur to ensure that the information is up to date.

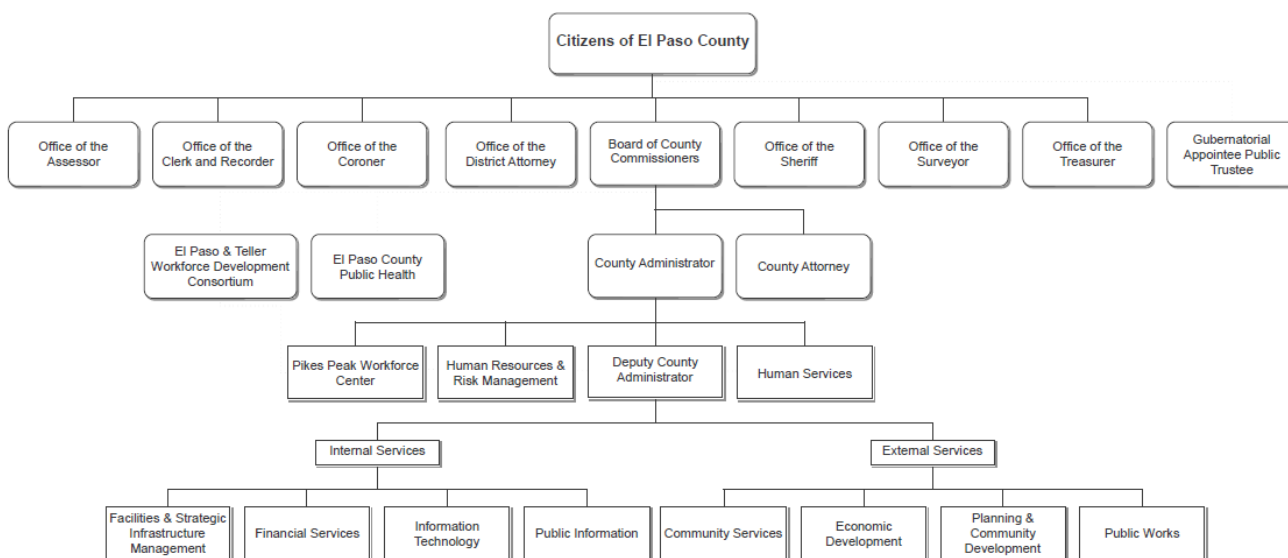
Part I.C.1.c Organizational Chart

PDD Requirement: Part I.C.1.c Organizational chart indicating responsibility over applicable departments by the legal contact.



El Paso County Organizational Chart

Attachment A



Lines of Control _____

Lines of Coordination

Approved: January 9, 2018

Part I.D. Public Involvement/Participation

Public Involvement and Participation Process

Program Requirements (Part I.D.1)	Recordkeeping (Part I.D.2)	Compliance Schedule
<p>The permittee must implement and document a Public Involvement and Participation process that complies with state and local public notice requirements for actions conducted, when applicable, to comply with this permit. The following requirements apply:</p> <p>a. The permittee must follow its own public notice requirements to provide opportunities for public involvement that reach a majority of citizens within the permittee's jurisdiction through the notification process.</p>	<p>a. Copies of the documents used to provide public notice and any public comment received as part of the public notice process.</p>	<p>None given.</p>

PDD Requirement: Part I.D.3.a. A list of citation(s) and location(s) of the written procedures used for the permittee's public notice process.

Title	Document Location
<p>Colorado Sunshine Law: Colorado Revised Statutes (CRS) 24-6-401 and 402</p>	<p>Board of County Commissioners Meeting Archives: 1st or 2nd meeting of every January the BoCC adopts the Sunshine Law and associated procedures.</p> <p>El Paso County Clerk to Board of County Commissioners maintains archive of Board Resolutions and other documents.</p>

Public Involvement and Participation Process

Program Requirements (Part I.D.1)	Recordkeeping (Part I.D.2)	Compliance Schedule
<p>b. The permittee must provide a mechanism and processes to allow the public to review and provide input on the control measures. At a minimum, the permittee must provide a statement on the permittee's web site that the PDD is publicly available for review and comment.</p> <p>c. The permittee must have the ability to accept and respond (in accordance with permit requirements) to information submitted by the public, including information on illicit discharges or failure to implement or meet control measure requirements associated with</p>	<p>b. Documentation of the mechanism used to allow the public to provide input.</p> <p>c. Records of information submitted by the public in accordance with Part I.D.1.c and any actions the permittee took to address the information.</p>	<p>None given.</p>

Program Requirements (Part I.D.1)	Recordkeeping (Part I.D.2)	Compliance Schedule
applicable construction activities, applicable development sites, or municipal operations.		

Part I.D.3.b. The web site address containing the statement that the PDD is available for public review.

The El Paso County Program Description Document will be posted at the following websites in November 2018, for public review and comment:

<http://adm.elpasoco.com/publicservices/transportation/Pages/default.aspx>;

<http://adm.elpasoco.com/Development%20Services/Pages/default.aspx>.

Part I.E.1 Public Education and Outreach

Illicit Discharges:

Program Requirements (Part I.E.1.a.)	Recordkeeping (Part I.E.1.b.)	Compliance Schedule
<p>i. The permittee must provide information to businesses and the general public regarding the permittee's prohibitions of and the water quality impacts associated with illicit discharges as part of the public education program. The permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Part I.E.1.a.ii. The information must include the following:</p> <p>(A) The permittee must determine the targeted businesses that are likely to cause an illicit discharge or improperly dispose of waste. At a minimum, the permittee must identify at least one type of business and a list of those businesses that fit the identified type of business.</p> <p>(B) The permittee must develop and implement at least one education and outreach activity to those businesses identified in Part I.E.1.a.i.(A). Educational materials and activities, individually or as a whole, must describe water quality impacts associated with illicit discharges and the improper disposal of waste, the behaviors of concern, and actions that the business can take to reduce the likelihood of illicit discharges and the improper disposal of waste.</p>	<p>i. A written list of the targeted business (es) that are likely to cause an illicit discharge or improperly dispose of waste and the education and outreach activity for the targeted business (es).</p>	<p>Begin Implementation July 1, 2018 (applies to this entire section)</p>

PDD Requirement: Part I.E.1.c.i. Illicit Discharges: A list of citation(s) and location(s) of the written procedures used to determine the targeted business (es), the outreach activity (ies) conducted, and the outreach distribution mechanism(s).

Title	Document Location
El Paso County Public Education and Outreach Strategy	Stormwater Management Files: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE - MS4 Permit\Permit - 2016 to 2021\Compliance Documents.

Education and Outreach Activities:

Program Requirements (Part I.E.1.a)	Recordkeeping (Part I.E.1.b)	Compliance Schedule
ii. Education and Outreach Activities Table: Each year, the permittee must implement at least four education and outreach activities (bulleted items) and at least two must be from the Active and Interactive Outreach column. The activities can be the same from year to year or be different each year.	ii. Education and Outreach Activities: A written list of the targeted pollutant sources and/or pollutants, the target audience, and distribution mechanism for each activity and the following: (A) Dates the activities were implemented, including, as applicable, dates of events and the materials that were made available. (B) Documentation of the activities that were provided and/or made available and the dates of distribution. Signs, markers, or equivalent intended to be maintained for the permit term must be described with location information.	Begin Implementation January 1, 2018

PDD Requirement: Part I.E.1.c.ii. Education and Outreach Activities: A list of the activities from Table 1 selected for implementation for each calendar year.

Title	Document Location
El Paso County Public Education and Outreach Strategy	Stormwater Management Files \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE - MS4 Permit\Permit - 2016 to 2021\Compliance Documents.

TABLE WITH ACTIVITIES HIGHLIGHTED IN THE TABLE.

TABLE 1 Education and Outreach Activities Table	
Passive Outreach	Active and Interactive Outreach (pick any two bullets each year)
Bus shelter/bench advertisement Billboard/dasher board advertisement Vehicle/bus advertisement Radio/television/movie theatre advertisement Newspaper advertisement Distribute educational materials by brochure Distribute educational materials by fact sheet Distribute educational material by utility bill insert Publish article (hard copy or electronic)	Ongoing advertisement/promotion of a stormwater hotline number or other method to report an illicit discharge Ongoing advertisement/promotion on how to get more information about the stormwater program Ongoing social media program Web site that is interactive or contains stormwater information that includes actions that can be taken to reduce stormwater pollution Newsletter (hard copy or electronic) Promotion of existing local stormwater/environmental events or program that help protect water quality

<p>Storm drain marking by permittee staff that maintains 25% of permittee maintained inlets.</p> <p>Stormwater related signage</p> <p>Web site</p>	<p>Distribute promotional items or giveaways</p> <p>Participate in or sponsor a water festival which involves populations that exist within the permit boundary</p> <p>Participate in or sponsor a waterway clean-up and trash removal event</p> <p>Participate in or sponsor a service project</p> <p>Participate in or sponsor a stormwater or environmental presentation</p> <p>Participate in or sponsor a stormwater or environmental event</p> <p>Participate in or sponsor community project based programs that investigate watershed health and meet applicable school Science, Technology, Engineering and Math (STEM) standards</p> <p>Participate in or sponsor a household hazardous waste event</p> <p>Participate in or sponsor an Adopt-a-Street program</p> <p>Participate in or sponsor an Adopt-a-Waterway program</p> <p>Participate in or sponsor an Adopt-a-Storm Drain program</p> <p>Provide ongoing access to motor vehicle fluids recycling program</p> <p>Stormwater booth at a community event</p> <p>Conduct a stormwater survey</p> <p>Storm drain marking program performed by the public/community</p> <p>Pet waste stations</p> <p>Participate in, plan or present stormwater materials to schools</p> <p>Stormwater demonstration projects that show control measures or other pollutant reduction methods</p>
--	--

Nutrients:

Program Requirements (Part I.E.1.a.)	Recordkeeping (Part I.E.1.b.)	Compliance Schedule
<p>iii. Nutrients: As part of their public education program, the permittee must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4. Permittees can meet the requirements of this section through contribution to a collaborative program to evaluate, identify, target, and provide outreach that addresses sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the MS4 permittee's discharge.</p> <p>(A) The permittee must determine the targeted sources (e.g., residential, industrial, agricultural, or commercial) that are contributing to, or have the potential to contribute, nutrients to the waters receiving the discharge authorized under the MS4 permit.</p> <p>(B) The permittee must prioritize which targeted sources are likely to obtain a reduction in nutrient discharges through education. The permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. Educational materials or equivalent outreach, individually or as a whole, must describe stormwater quality impacts associated with nitrogen and phosphorus in stormwater runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nutrients. The permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Part I.E.1.a.ii.</p>	<p>iii. Nutrients: A written list of the targeted sources that are contributing to, or have the potential to contribute nutrients to stormwater and the education and outreach activity for the targeted sources.</p>	<p>Part A: Completed by January 1, 2018</p> <p>Part B: Begin implementation July 1, 2018.</p>

PDD Requirement: Part I.E.1.c.iii. Nutrients: A list of citation(s) and location(s) of the written procedures used to determine factors considered and the targeted sources, the prioritized targeted sources, the outreach activities conducted, and the outreach distribution mechanisms.

Title	Document Location
<p>El Paso County Public Education and Outreach Strategy</p> <p>Documentation of Events, Videos and material used for ads located:</p>	<p>Stormwater Management Files</p> <p>\\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE - MS4 Permit\Permit - 2016 to 2021\Compliance Documents.</p> <p>\\chinook\dot\dot_data\doe\doe_copy\NPDES\Stormwater - Public Outreach.</p>

Part I.E.2. Illicit Discharge Detection and Elimination (IDDE) Program

Storm Sewer System Map

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
i. Storm Sewer System Map: The permittee shall maintain a current map of the location of all MS4 outfalls within the permit area, and the names and location of all state waters that receive discharges from those outfalls.	i. Storm Sewer System Map: The current map.	None given.

<i>PDD Requirement- Part I.E.2.c.i. Storm Sewer System Map: A list of citation(s) and location(s) of the storm sewer system map and procedures for updating the map for new outfalls or expanded permit areas.</i>	
Title	Document Location
Illicit Discharge Detection and Elimination Plan and Procedures November 2009, revised April 2018. Storm sewer System layers in ARCReader.	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge. Map files located on County Employee Shared network drive maintained by County Information Technology Services. Users access the map with ARCReader installed desktops.

Regulatory Mechanism:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
ii. Regulatory Mechanism: The permittee's regulatory mechanism must: (A) Prohibit illicit discharges into the MS4; (B) Have a procedure to request access to property(ies), as necessary to implement the illicit discharges procedures, to include judicial action; and (C) Provide the permittee the legal ability to cease or require to be ceased and remove, or require and ensure the removal of, and impose penalties for all illicit discharges for the period from when the illicit discharge is identified until removed.	ii. Regulatory Mechanism: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

<i>PDD Requirement- Part I.E.2.c.ii. Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including a list of the associated program documents used to meet the regulatory mechanism requirements.</i>	
Title	Document Location
County Ordinance 07-01 Prohibiting Illicit Discharges into the County Storm Sewer System (revised Dec 2012).	El Paso County website: https://clerkandrecorder.elpasoco.com/clerk-to-the-board/el-paso-county-ordinances/ A PDF of the code.

	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\IDDE.
--	---

Regulatory Mechanism Exemptions:

Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
iii. Regulatory Mechanism Exemptions: Procedures must be implemented to ensure that any exemptions, waivers, or variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.	iii. Regulatory Mechanism Exemptions: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement- Part I.E.2.c.iii. Regulatory Mechanism Exemptions: A list of the citation(s) and location(s) of regulatory mechanism elements that allow for exemptions and the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.

Title	Document Location
County Ordinance 07-01 Prohibiting Illicit Discharges into the County Storm Sewer System (revised Dec 2012).	El Paso County website: https://clerkandrecorder.elpasoco.com/clerk-to-the-board/el-paso-county-ordinances/ A PDF of the code. \\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\IDDE.

Tracing an Illicit Discharge:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
iv. Tracing an Illicit Discharge: The permittee must implement procedures to respond to reports/identification of illicit discharges...The permittee must document and implement procedures, including the tools needed, to trace the source of an illicit discharge when identified within the MS4.	iv. Tracing an Illicit Discharge: (A) The applicable program documents and procedures used to respond to reports/identification of illicit discharges.	Completed January 1, 2018

PDD Requirement: Part I.E.2.c.iv. Tracing an Illicit Discharge: (A) A list of citation(s) and location(s) of the written procedures for tracing an illicit discharge, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Illicit Discharge Detection and Elimination Plan and Procedures November 2009, revised April 2018.	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge.

Discharges that could be Excluded from being effectively prohibited:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
v. Discharges that can be Excluded from being Effectively Prohibited: The following discharges do not need to be effectively prohibited and the permittee is not required to address the discharges as illicit discharges in accordance with the requirements of this permit. The permittee must list all discharges excluded from being effectively prohibited in their regulatory mechanism as an allowable non stormwater discharge. Any discharges listed below that are not listed in the permittee's regulatory mechanism must be effectively prohibited. See <i>Part I.E.2.a.v.(A)-(Y)</i>	v. Discharges that could be excluded from being effectively prohibited: (A) Copies of all required submittals to the Division. (B) Copies of the documents used to provide any required public notice and any public comment received as part of the public notice process.	Completed July 1, 2019

PDD Requirement: Part I.E.2.c.v. Discharges that could be Excluded from being effectively prohibited:

A list of citation(s) and location(s) of the written procedures for excluding discharges from being effectively prohibited and the discharges that have been excluded from being effectively prohibited.

Title	Document Location
County Ordinance 07-01 Prohibiting Illicit Discharges into the County Storm Sewer System (revised Dec 2012).	El Paso County website: https://clerkandrecorder.elpasoco.com/clerk-to-the-board/el-paso-county-ordinances/ A PDF of the code: \\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\IDDE.
Illicit Discharge Detection and Elimination Plan and Procedures November 2009, revised April 2018.	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\

Removing an Illicit Discharge:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
vi. Removing an Illicit Discharge: When an illicit discharge is identified, the permittee must remove or require the removal of the source of the illicit discharge. The permittee must also cease or require the cessation of the illicit discharge. After the illicit discharge has been ceased, the permittee must also minimize surface contamination by removing or requiring the removal of surface residue or other type of pollutant source. The removal	vi. Removing an Illicit Discharge: (A) The information used by the permittee to identify repeat occurrences from the same responsible party concerning the same type of illicit discharge. The permittee must document and maintain records of each illicit discharge identified by the permittee that includes the following information, or identifies that the information is unknown or not applicable:	Completed January 1, 2018

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
requirement can be met by notifying the Division through a written report when CDPS or NPDES general permit coverage is available for a discharge and the discharge is not subject to prohibitions against issuance of a permit in regulation 61.8(1). The permittee must also have written procedures for requiring cleanup from the operator and procedures for cleanup conducted by the permittee, when necessary, to remove materials associated with the illicit discharge.	1) The date that the illicit discharge was reported to and/or identified by the permittee. 2) The date the permittee responded to the reported/identified illicit discharge. 3) The location of the illicit discharge. 4) Responsible party for the illicit discharge (if identified). 5) A description of the source and nature of the illicit discharge. 6) A description of how the source of the illicit discharge was eliminated/resolved. 7) Documentation of enforcement actions (if applicable).	

PDD Requirement: Part I.E.2.c.vi. Removing an Illicit Discharge: A list of citation(s) and location(s) of the written procedures for removing an illicit discharge, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Illicit Discharge Log	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\.

Enforcement Response:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
vii. Enforcement Response: The permittee must implement appropriate written enforcement procedures and actions to eliminate the source of an illicit discharge when identified/reported, discourage responsible parties from willfully or negligently repeating or continuing illicit discharges, and discourage future illicit discharges from occurring. The written procedures must address mechanisms for enforcement for all illicit discharges from the moment an illicit discharge is identified/reported until it is eliminated. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the responsible party to ensure that findings of a similar nature are enforced upon consistently. Written enforcement procedures must include informal, formal, and judicial enforcement responses.	vii. Enforcement Response: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	None given.

PDD Requirement: Part I.E.2.c.vii. Enforcement Response: A list of citation(s) and location(s) of the specific enforcement mechanisms available and written procedures for enforcement response, including the citation(s)

and location(s) of supporting documents. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place.

Title	Document Location
County Ordinance 07-01 Prohibiting Illicit Discharges into the County Storm Sewer System (revised Dec 2012).	El Paso County website: https://clerkandrecorder.elpasoco.com/clerk-to-the-board/el-paso-county-ordinances/ A PDF of the code: \\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\IDDE.
Illicit Discharge Detection and Elimination Plan and Procedures November 2009, revised April 2018.	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\
Illicit Discharge Log	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\

Priority Areas:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
viii. Priority Areas: The permittee must locate priority areas with a higher likelihood of having illicit discharges, including areas with higher likelihood of illicit connections. At a minimum, the priority areas must include areas with a history of past illicit discharges.	viii. Priority Areas: The map and/or list of priority areas.	Completed January 1, 2018

PDD Requirement: Part I.E.2.c.viii Priority Areas. A list of citation(s) and location(s) of the priority areas.

Title	Document Location
Illicit Discharge Detection and Elimination Plan and Procedures November 2009, revised August 2018.	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\

Training:

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
ix. Training: The permittee must train applicable municipal staff to recognize and appropriately respond to illicit discharges observed during typical duties. The permittee must identify those who will be likely to make such observations and provide training to those individuals. The training must address how suspected illicit discharges will be reported/identified, general information for recognizing and responding to illicit discharges observed during typical duties, information on the sources and types of operations	ix. Training: Name and department of each individual trained, date of training, the type of training, and a list of topics covered.	None given.

Program Requirements (Part I.E.2.a)	Recordkeeping (Part I.E.2.b)	Compliance Schedule
or behaviors that can result in an illicit discharge, and information on the location of priority areas.		

PDD Requirement: Part I.E.2.c.ix Training. A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
Illicit Discharge Detection and Elimination Plan and Procedures, August 2018, Training Section.	\\chinook\dot\dot_data\doe\doe_copy\NPDES\Illicit Discharge\
Sign In Sheets	
Training Materials (PowerPoint Presentations)	

Part I.E.3. Construction Sites

Exclusions:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
i. Exclusions: A) Construction Activities with R-Factor Waiver B) Activities for County Growth Areas: 1) Construction activities on sites that began as part of a plan of development prior to the effective date of this permit. 2) Large lot single family development... C) Activities for Non-Urban Areas: 1) Facilities associated with oil and gas ...	i. Exclusion: Maintain records for activities covered under Part I.E.3.a.i.(A) and Part I.E.3.a.i.(B)(1)(2). Records must include the site name, owner name, location, completion date, project disturbed acreage, and reason for exclusion.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.i. Exclusions: A list of citation(s) and location(s) of regulatory mechanism(s) that allow for exclusions and supporting documents used to implement the process.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures document, Section 1.	El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.

Regulatory Mechanism:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
ii. Regulatory Mechanism: To the extent allowable under state or local law, implement a regulatory mechanism to meet the requirements of Part I.E.3.a., including the following: (A) The ability to implement sanctions against entities responsible for applicable construction activities. (B) Require control measures to be implemented for all applicable construction activities from initial disturbance until final stabilization.	ii. Regulatory Mechanism: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.ii. Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including a list of the associated program documents used to meet the regulatory mechanism requirements.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures document, Section 2.	El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.

Regulatory Mechanism Exemptions:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
iii. Regulatory Mechanism Exemptions: Procedures must be implemented to ensure that any exemptions, waivers or variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.	iii. Regulatory Mechanism Exemptions: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement: Part I.E.3.c.iii. Regulatory Mechanism Exemptions: A list of the citation(s) and location(s) of regulatory mechanism elements that allow for exemptions and the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures document, Section 1.	El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.

Control Measure Requirements:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
<p>iv. Control Measure Requirements: The permittee's Construction Sites Program must address selection, installation, implementation, and maintenance of control measures that meet the requirements of Part I.B. Control measures must prevent pollution or degradation of state waters. Control measures must also be appropriate for the specific construction activity, the applicable pollutant sources, and phase of construction...Control measures must meet the minimum requirements below.</p> <p>(A) Appropriate control measures must be implemented prior to the start of construction activity, control potential pollutants during each phase of construction, and must be continued through final stabilization. Appropriate structural control measures must be maintained in operational condition.</p> <p>(B) Control measures must be selected, designed, installed, implemented, and maintained to provide control for all potential pollutants...at a minimum...(see the list of 12 in permit)</p>	<p>iv. Control Measure Requirements: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.</p>	<p>None given.</p>

PDD Requirement: Part I.E.3.c.iv. Control Measure Requirements: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to meet the requirements in Part I.E.3.a.iv. A list of the citation(s) and location(s) of supporting documents, including any documents that provide control measure design considerations, criteria, or standards.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures document, Section 2.	El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.

Site Plans:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
<p>v. Site Plans: "Site plans" are also known as construction stormwater site plans; sediment and erosion control plans, stormwater pollution prevention plans, drainage reports, drainage plans, and stormwater management plans.</p> <p>(A) Renewal Permittees: For the time period between the effective date of this permit and the date by which a renewal permittee meets the conditions in Parts I.E.3.a.v (B) through (C), the renewal permittee must continue to implement appropriate erosion and</p>	<p>v. Site Plans: Copy of the final site plan reviewed to meet the initial site plan review requirement, and confirmation of the permittee's review and acceptance.</p>	<p>Completed July 1, 2019</p>

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
sediment control as documented in the permittee's CDPS Stormwater Management Plan Description developed in accordance with the terms and conditions of the previous permit.		
(B) Site Plan Requirement: The permittee must require operators to develop site plan(s) that locate (if applicable) and identify all structural and non-structural control measures for the applicable construction activities. The site plan(s) must contain installation and implementation specifications or a reference to the document with installation and implementation specifications for all structural control measures. A narrative description of non-structural control measures must be included in the site plan(s).	Same as above.	Completed July 1, 2019
(C) Initial Site Plan Review: The permittee must implement site plan review for all applicable construction activities prior to the start of construction activities. The waiver, however, does not apply to the requirements of Part I.E.3.a.v.(A). Initial site plan review shall include the following: 1) Confirmation that the site plan includes appropriate control measures for all stages of construction, including final stabilization. 2) Confirmation that the control measures meet the requirements in Part I.E.3.a.iv.	Same as above.	Completed July 1, 2019
(D) Confirmation that the site plan meets the requirements in Part I.E.3.a.v.(A).	Same as above.	

PDD Requirement: Part I.E.3.c.v. Site Plans: (A) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to develop site plans, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures document, Section 3.	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.</p> <p>El Paso County ECM and Land Development Code located on County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90 • https://planningdevelopment.elpasoco.com/land-development-code/.

PDD Requirement: Part I.E.3.c.v. Site Plans: (B) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee conducts initial site plan reviews, including the citation(s) and location(s) of supporting documents.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures, Section 2.	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs. Grading and Erosion Control Plan and Stormwater Management Plan Checklists found in the ECM Appendix E.</p> <p>The El Paso County Engineering Criteria Manual located on the County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90.

Site Inspection:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
<p>vi. (A) Renewal Permittees: For the time period between the effective date of this permit and the date by which a renewal permittee meets the conditions in Parts I.E.3.a.vi (B) through (E), the renewal permittee must continue to implement procedures for construction site inspections, as documented in the permittee's CDPS Stormwater Management Plan Description developed in accordance with the terms and conditions of the previous permit.</p> <p>(B) Site Inspection Frequency Exclusion: The permittee is only required to conduct inspections if there are observations or reports of discharges of sediment from disturbed areas:</p> <ol style="list-style-type: none"> 1) Exclusions: <ol style="list-style-type: none"> (a) Individual Homes in a Residential Subdivision- Finished Home. (b) Individual Homes in a Residential Subdivision-Unfinished Home 	<p>(A) Routine Site Inspection or (B) Reduced Site Inspection: The report must contain the following:</p> <p>Inspection date, Name of inspector, Site identification, Inspection results including the location of any illicit discharges, failure to implement control measures, and inadequate control measures. The inspection results should also list (not locate) any control measures requiring routine maintenance, If the inspection is conducted in lieu of a compliance inspection, identification of any inadequate control measures that have not been resolved from the previous inspection, Type of inspection</p> <p>(C) Compliance Inspection: The report must contain the following:</p> <p>Inspection date, Name of inspector, Site identification, Inspection results including any inadequate control measures that have not been resolved from the previous inspection, Type of inspection</p>	<p>Completed July 1, 2019</p>

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
<p>(c) Winter Conditions</p> <p>(C) Routine Inspection: A routine inspection must be conducted at least once before final stabilization. Routine inspections do not apply to sites eligible for other inspection frequencies in accordance with this section (Part I.E.3.a.vi). (45 day assessment of control measures, pollutant sources and discharge points)</p> <p>(D) Reduced Site Inspection: Reduced site inspections must occur at the frequency and include the scope indicated in Part I.E.3.a.vi (D) of the permit for each type of site:</p> <ol style="list-style-type: none"> 1) Inactive Site Inspection 2) Stormwater Management System Administrator's Program Inspection 3) Staff Vacancy 4) Indicator Inspection <p>(E) Compliance Inspection: Compliance inspections must occur at the frequency and include the scope indicated in Part I.E.3.a.vi (E) of the permit.</p>	<p>(D) Operator Compliance Inspection: The report must contain the following: Inspection date, Name of the operator inspector, Site identification, Inspection results including photos of the new or additional control measure to resolve issued from the previous inspection and any inadequate control measures that have not been resolved from the previous inspection.</p>	

PDD Requirements: Part I.E.3.c.vi. Site Inspection: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for conducting site inspections, including the citation(s) and location(s) of supporting documents that describe the following: (A) The process for determining, implementing, and documenting the inspection frequencies.(B) The process for inspection follow-up, including determining, implementing, and documenting the nature of the follow-up action.(C) The process and tools used for documenting inspections.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures, Section 4.	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.</p> <p>El Paso County Engineering Criteria Manual located on County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90

	Completed Inspection Reports are located with other project specific documentation.
--	---

Enforcement Response:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
vii. Enforcement Response: Implement appropriate enforcement procedures and actions to meet the requirements of Part I.E.3. (A) The permittee must have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements. (B) The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. Enforcement procedures must include informal, formal, and judicial enforcement responses.	vii. Enforcement Response: The applicable codes, resolutions, ordinances and program documents used to meet the permit requirements. Maintain records of the enforcement response.	Part I.E.3.a.vii (B) Completed July 1, 2019

PDD Requirement: Part I.E.3.c.vii. Enforcement Response: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for enforcement response. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place, including as a minimum:
(A) Construction commencing without site plan review in accordance with I.E.3.a.vi.
(B) Control measures not maintained in operational condition at time of permittee inspection, including sites that have temporarily shut down construction activities.
(C) Uncorrected finding(s) from previous inspections.
(D) Failure to implement a control measure for a pollutant source or inadequate control measure resulting in a discharge of pollutants from the applicable construction site or to the MS4.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures, Section 5.	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.</p> <p>El Paso County Engineering Criteria Manual located on County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90 <p>Completed Enforcement documentation is located with other project specific documentation.</p>

Training:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
viii. Training: The permittee must provide information to operators of applicable construction activities as necessary to ensure that each operator is aware of the permittee's applicable requirements, including controlling pollutants such as trash. The training must also include information on trash as a pollutant source.	viii. Training: The applicable mechanism or program documents used to train construction operators.	None given.

PDD Requirement: Part I.E.3.c.viii. Training: A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures, Section 6; or	El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.
El Paso County Public Education and Outreach Strategy.	El Paso County Public Education and Outreach Strategy is included as Appendix 1 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.
Training Program Materials and documentation	\\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs\Training.

For Applicable Construction Activities that Overlap Multiple Permit Areas:

Program Requirements (Part I.E.3.a)	Recordkeeping (Part I.E.3.b)	Compliance Schedule
ix. For Applicable Construction Activities that Overlap Multiple Permit Areas when a written agreement is in place with a co-regulating MS4 permittee: (A) Control measure requirements may be imposed on the operator in accordance with the requirements of a co-regulating MS4 permittee pursuant to the written agreement. (B) Site plan review/acceptance and site inspection actions may be conducted by a co-regulating MS4 permittee to meet the requirement of the permit.	ix. For Applicable Construction Activities that Overlap Multiple Permit Areas: Copies of any written agreements between co-regulating MS4 permittees when required by Part I.E.3.a.ix.	None given.

PDD Requirement: Part I.E.3.c.ix. For Applicable Construction Activities that Overlap Multiple Permit Areas: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee meets all permit

requirements in Part I.E.3 for construction activities for which the permittee is the owner or operator, if different than procedures for private sites.

Title	Document Location
Refer to El Paso County Construction Oversight Procedures, Section 7.	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.</p> <p>In the event the provision is used, documentation will be kept with other project specific files: El Paso County Electronic Development Application Review Program (EDARP) for projects administered through Planning and Community Development; or On a shared Project Folder in the El Paso County Engineering Division shared file folders.</p>

Part I.E.4. Post-Construction Stormwater Management in New Development and Redevelopment

Excluded Sites:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
<p>i. Excluded Projects: Permittees may exclude the following from the requirements of an applicable development project.</p> <p>(A) "Pavement Management Projects"</p> <p>(B) Excluded Roadway Redevelopment</p> <p>(C) Excluded Existing Roadway Areas</p> <p>(D) Aboveground and Underground Utilities</p> <p>(E) Large Lot Single Family Projects</p> <p>(F) Non-Residential and Non- Commercial Infiltration Conditions</p> <p>(G) Sites with Land Disturbance to Undeveloped Land that will Remain Undeveloped</p> <p>(H) Stream Stabilization Sites</p> <p>(I) Trails</p> <p>(J) Oil and Gas Exploration</p> <p>(K) County Growth Areas</p>	<p>i. Excluded Sites: Maintain records for activities covered under Part I.E.4.a.i. Records must include the site name, owner name, location, completion date, project acreage, reason for exclusion, and any information required below.</p> <p>(A) Pavement Management Projects: The acreage of the excluded impervious area for rehabilitation and reconstruction of pavement that are not maintenance sites.</p> <p>(B) Excluded Roadway Redevelopment: The acreage of the excluded impervious area.</p> <p>(C) Excluded Existing Roadway Areas for Roadway Redevelopment: The acreage of the excluded impervious area.</p> <p>(D) Non-Residential and Non-Commercial Infiltration Conditions: The acreage of the excluded impervious area.</p> <p>(E) Sites with Land Disturbance to Undeveloped Land that will Remain Undeveloped Redevelopment: The acreage of the excluded impervious area.</p> <p>(F) Stream Stabilization Sites Redevelopment: The acreage of the excluded impervious area.</p> <p>(G) Trails: The acreage of the excluded impervious area.</p>	<p>Completed July 1, 2019</p>

PDD Requirement: Part I.E.4.c i. Excluded Sites: A list of citation(s) and location(s) of regulatory mechanism(s) that allow for exclusions and supporting documents used to implement the process.

Title	Document Location
El Paso County Post Construction Oversight Procedures Section 2.	Included in this Program Description Document as Appendix 5, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs
Post Construction Stormwater Management Applicability Evaluation Form	Included in this Program Description Document as Appendix 4. electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs
Project specific files	Located in EDARP for Projects administered by the Planning and Community Development Department (PCD);

	Located in a Shared file: \\chinook\dot\dot_projects\ Engineering\ projects. for Department of Public Works (DPW) Projects
--	--

Regulatory Mechanism:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
ii. Regulatory Mechanism: To the extent allowable under state or local law, implement a regulatory mechanism to meet the requirements in Part I.E.4.a., including: (A) Require control measures to be implemented for all applicable development sites. (B) Enforce the conditions of the exclusions above if applicable. (C) Require the long-term operation and maintenance of control measures. (D) Ensure that mechanisms are in place as necessary to meet this requirement for control measures used to meet the requirements of this permit by an applicable development site in the permit area that are located outside of the jurisdictional control of the permittee. (E) Implement sanctions against entities responsible for applicable development sites and for the long-term operation and maintenance of the control measures.	ii Regulatory Mechanism: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement: Part I.E.4.c ii. Regulatory Mechanism: A list of the citation(s) and location(s) of the required elements of the regulatory mechanism, including the section of the regulatory mechanism used for enforcement activities. A list of the associated program documents used to meet the regulatory mechanism requirements.

Title	Document Location
Stormwater Post Construction Oversight Procedures, Section 1.	<p>Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs</p> <p>Engineering Criteria Manual (ECM) located on El Paso County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90 <p>Land Development Code located on El Paso County Website: https://planningdevelopment.elpasoco.com/land-development-code/.</p>

Regulatory Mechanism Exemptions:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
iii. Regulatory Mechanism Exemptions: Procedures must be implemented to ensure that any exclusions, exemptions, waivers, and variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.	iii. Regulatory Mechanism Exemptions: The applicable codes, resolutions, ordinances, and program documents used to meet the permit requirements.	Completed July 1, 2019

PDD Requirement: Part I.E.4.c iii. Regulatory Mechanism Exemptions: A list of citation(s) and location(s) of regulatory mechanism elements that allow for exemptions. A list of the documented procedures that confirm that any exemptions, waivers, and variances comply with the permit.

Title	Document Location
Stormwater Post Construction Oversight Procedures Section 2	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs
Post Construction Stormwater Management Applicability Evaluation Form.	Located as Appendix 4, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs

Control Measure Requirements:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
iv. Control Measure Requirements: The permittee's requirements and oversight for applicable development sites must be implemented to address the selection, installation, implementation, and maintenance of control measures in accordance with requirements in Part I.B. The "base design standard" is the minimum design standard for new development and redevelopment. The control measures for applicable development sites shall meet one of the following base design standards listed below: (A) WQCV Standard (B) Pollutant Removal Standard (C) Runoff Reduction Standard (D) Applicable Development Site Draining to a Regional WQCV Control Measure (E) Applicable Development Site Draining to a Regional WQCV Facility (F) Constrained Redevelopment Sites Standard (G) Previous Permit Term standard	iv. Control Measure Requirements: The applicable codes, resolutions, ordinances and program documents used to meet the permit requirements, including the procedures to determine which design standard applies to each applicable development site and the design specifications for each design standard (if applicable).	Completed July 1, 2019

PDD Requirement: Part I.E.4.c.iv. Control Measure Requirements: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to meet the requirements in Part I.E.4.v, including any documents that provide control measure design considerations, criteria, or standards.

Title	Document Location
Stormwater Post Construction Oversight Procedures Section 3	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs
Post Construction Stormwater Management Applicability Evaluation Form.	Located as Appendix 4, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs

Site Plan Requirements:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
<p>v. Site Plans</p> <p>(A) Site Plan Requirements: Site plans that include control measures for the applicable development projects must include the following:</p> <ol style="list-style-type: none"> 1) Design details for all structural control measures implemented to meet the requirements of Part I.E.4. 2) A narrative reference for all non-structural control measures for the project, if applicable. 3) Documentation of operation and maintenance procedures to ensure the long term observation, maintenance, and operation of the control measures. The documentation shall include frequencies for routine inspections and maintenance activities. 4) Documentation regarding easements or other legal means for access of the control measure sites for operation, maintenance, and inspection of control measures. <p>(B) Site Plan Review: The permittee shall implement a site plan review process for applicable development sites. The site plan review shall include the following minimum requirements designed to prevent inadequate control measures from being implemented or modified:</p>	<p>v. Site Plans: Copies of final site plans for all applicable development sites.</p> <p>(A) For all sites for which the stormwater runoff going to a regional WQCV control measure or facility is applied: The name and location of the regional WQCV control measure or facility.</p> <p>(B) For all sites for which the constrained redevelopment sites standard is applied: The site plan and the permittee's written determination that it is not practicable to meet any of the other design standards in Parts I.E.4.a.iv(A)(B) or (C). The permittee's written determination shall include an evaluation of the applicable redevelopment sites ability to install a control measure without reducing surface area covered with the structures.</p> <p>(C) For all sites for which the previous permit term standard is applied: Date of the start of the permittee's review process, the permittee's approval of the site plan (if applicable), the control measure implementation, and any modifications to the site plan.</p> <p>(D) The applicable documentation for the operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control</p>	<p>Completed July 1, 2019</p>

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
1) Confirmation that control measures meet the requirements of Part I.E.4. 2) Confirmation that site plans meet the requirements of Part I.E.4.a.v. (C) The permittee must meet the requirements of Part I.E.4.a.v.(A) and (B) before approving any modifications to the site plan.	measures, including routine inspection frequencies and maintenance activities. (E) The applicable documentation regarding easements or other legal means for access to the control measure for operation, maintenance, and inspection of control measures.	

PDD Requirement: Part I.E.4.c.v. Site Plan Requirements: (A) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee requires operators to develop, maintain, and modify site plans, including the citation(s) and location(s) of supporting documents.

Title	Document Location
El Paso County Construction Oversight Procedures Section 3	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.</p> <p>Checklists found in the ECM Appendix E, which is located on El Paso County Website: https://publicworks.elpasoco.com/policies-manuals/ https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90</p>
El Paso County Post Construction Oversight Procedures Section 4	<p>Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs</p> <p>Please refer to Construction and Post Construction Stormwater Management Procedures documents for locations of project specific files.</p>

PDD Requirement: Part I.E.4.c.v. Site Plan Requirements: (B) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee conducts initial site plan reviews, including the citation(s) and location(s) of supporting documents.

Title	Document Location
El Paso County Construction Oversight Procedures Section 3.	<p>El Paso County Construction Oversight Procedures included as Appendix 3 of this Program Description Document. Electronic document template located here: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs.</p>

	<p>Checklists found in the ECM Appendix E, located on El Paso County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90
El Paso County Post Construction Oversight Procedures Section 4	<p>Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs</p>
<p><i>PDD Requirement: Part I.E.4.c.v. Site Plan Requirements: (C) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measures, including routine inspection frequencies and maintenance activities.</i></p>	
Title	Document Location
El Paso County Post Construction Oversight Procedures Section 5.	<p>Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs</p>
Private Detention Basin/Stormwater Quality Best Management Practice Maintenance and Agreement and Easements, which are located in the El Paso County Engineering Criteria Manual Appendix G.	<p>Agreements found in the ECM Appendix G, located on El Paso County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90
<p><i>PDD Requirement: Part I.E.4.c.v. Site Plan Requirements:(D) A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has procedures to ensure that structural control measures have easements or other legal means for access to the control measure for operation, maintenance, and inspection of control measures.</i></p>	
Title	Document Location
El Paso County Post Construction Oversight Procedures Section 4	<p>Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs</p>
Private Detention Basin/Stormwater Quality Best Management Practice Maintenance and Agreement and Easements, which are located in the El Paso County Engineering Criteria Manual Appendix G.	<p>Agreement templates found in the ECM Appendix G, located on El Paso County Website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90

Construction Inspection and Acceptance and Post Acceptance Oversight Site Inspection:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
vi. Construction Inspection and Acceptance: The permittee must implement inspection and acceptance procedures to ensure that control measures are installed and implemented in accordance with the site plan and include the following: (A) Confirmation that the completed control measure operates in accordance with the approved site plan. (B) All applicable development sites must have operational permanent water quality control measures at the completion of the project. In the case where permanent water quality control measures are part of future phasing, the permittee must have a mechanism to ensure that all control measures will be implemented, regardless of completion of future phases or site ownership. In such cases, temporary water quality control measures must be implemented as feasible and maintained until removed or modified. All temporary water quality control measure must meet one of the design standards in Part I.E.4.a.iv.	vi. Construction Inspection and Acceptance: Maintain records of inspections conducted during construction and the permittee's acceptance of the control measure(s).	Completed July 1, 2019

PDD Requirement: Part I.E.4.c.vi. Construction Inspection and Acceptance and Post Acceptance Oversight Site Inspection: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for inspections, including the citation(s) and location(s) of supporting documents that describe the following:

(A) The process and tools used for documenting inspections.

(B) The process for inspection follow-up, including determining, implementing, and documenting the nature of the follow-up action.

(C) The process for determining, implementing, and documenting Post Acceptance Site Inspection frequencies if different than once a permit term.

(D) Procedures for determining ownership through property records, as needed.

Title	Document Location
El Paso County Post Construction Oversight Procedures Section 5	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs

Post Acceptance Oversight:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
vii. Long-Term Operation and Maintenance and Post Acceptance Oversight: The permittee must implement written procedures which include the following minimum requirements to ensure adequate long-term operation and maintenance of control measures to ensure that they are functioning as designed:	vii. Post Acceptance Oversight: Maintain inspection records with the following minimum information for all inspections conducted to meet the minimum inspection frequency: (A) Inspection date (B) Name of inspector	Completed July 1, 2019

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
<p>(A) Procedures to enforce the requirements for the owner or operator to implement and maintain control measures when necessary.</p> <p>(B) Oversight shall include inspections of field conditions and control measures to confirm conformity with the site plan, identify any inadequate control measures, and identify control measures requiring routine maintenance, such as trash removal. All functional elements of control measures shall be inspected at a frequency determined by the permittee. Inspections of each control measure shall occur at least once during the permit term except when Inspections for oversight of control measures on individual residential lots serving only the individual lot shall occur as determined by the permittee and may rely on alternative oversight process.</p>	<p>(C) Control measure identification, including the type of control measure</p> <p>(D) Owner of the control measure</p> <p>(E) Confirmation that the control measure operates in accordance with the approved plan</p> <p>(F) Inspection findings including, when present: inadequate control measures and control measures requiring routine maintenance</p> <p>(G) Confirmation that the control measure is operating as designed or a list of follow up actions</p> <p>Permittees only have to keep the inspection records for the once a permit term inspection. Permittees do not have to keep records for inspections conducted more frequently than required by this permit.</p>	

PDD Requirement: Part I.E.4.c.vi.Construction Inspection and Acceptance and Post Acceptance Oversight Site Inspection: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for inspections, including the citation(s) and location(s) of supporting documents that describe the following:

(A) The process and tools used for documenting inspections.

(B) The process for inspection follow-up, including determining, implementing, and documenting the nature of the follow-up action.

(C) The process for determining, implementing, and documenting Post Acceptance Site Inspection frequencies if different than once a permit term.

(D) Procedures for determining ownership through property records, as needed.

Title	Document Location
El Paso County Post Construction Oversight Procedures Section 6	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDP HE-MS4 Permit\Permit 2016 to 2021\Compliance Docs

Enforcement Response:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
viii. Enforcement Response: Implement appropriate written enforcement procedures and actions to meet the requirements of Part I.E.4. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. The permittee must	viii. Enforcement Response: Maintain records of the enforcement response.	Completed July 1, 2019

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements. Written enforcement procedures must include informal, formal, and judicial enforcement responses.		

PDD Requirement: Part I.E.4.c.vii. Enforcement Response: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for enforcement response. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place.

Title	Document Location
El Paso County Stormwater Post Construction Oversight Procedures Section 7	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs
Private Detention Basin/Stormwater Quality Best Management Practice Maintenance and Agreement and Easements, which	<p>Template located in the El Paso County Engineering Criteria Manual Appendix G, which is available on the website:</p> <ul style="list-style-type: none"> • https://publicworks.elpasoco.com/policies-manuals/ • https://planningdevelopment.elpasoco.com/planning-community-development/engineering/#1519834440345-f2ddfd20-0d90 <p>Project specific agreements are kept with other development review and approval documentation located in the Planning and Community Development EDARP system.</p>

Tracking:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
ix. Tracking: Implement and document procedures and mechanisms to track the location of and adequacy of operation of control measures implemented in accordance with the program.	ix. Tracking: Maintain records of the required control measure and regional WQCV control measure and facilities information.	None given.

PDD Requirement: Part I.E.4.c.viii. Tracking: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for maintaining the required tracking information.

Title	Document Location
El Paso County Post Construction Oversight Procedures Section 8.	Located as Appendix 5, of this Program Description Document,, electronic document template located:

	\\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs Please refer to Post Construction Stormwater Management Procedures documents for locations of project specific files.
--	---

Training:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
x. Training: Train applicable municipal staff to inspect the control measures in accordance with the permittee's procedures in Part I.E.4.a.vi and vii. The permittee must identify those who will be likely to inspect the control measures and provide training to those individuals. The training must also include information on trash and its effects on water quality.	x. Training: Name and title of each individual trained, date of training, the type of training, and a list of topics covered.	None given.

PDD Requirement: Part I.E.4.c.ix. Training: A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
El Paso County Post Construction Oversight Procedures Section 9	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs

Applicable Construction Activities that Overlap Multiple Permit Areas:

Program Requirements (Part I.E.4.a)	Recordkeeping (Part I.E.4.b)	Compliance Schedule
xi. For applicable development sites that overlap multiple permit areas (co-regulating MS4 permittee), when a written agreement is in place with a co- regulating MS4 permittee the following is required: (A) Control measure requirements may be imposed on the operator in accordance with the requirements of a co-regulating MS4 permittee pursuant to the written agreement. This requirement does not apply to applicable development sites in the permit area of the Colorado Department of Transportation. (B) Site plan review/acceptance and site inspection actions may be conducted by a co- regulating MS4 permittee to meet the requirement of the permit.	xi. For Applicable Construction Activities that Overlap Multiple Permit: Copies of any written agreements between co-regulating MS4 permittees when required by Part I.E.4.a.xi.	None given.

PDD Requirement: Part I.E.4.c.x. For Applicable Construction Activities that Overlap Multiple Permit Areas: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee meets all permit

requirements in Part I.E.4 for applicable development site for which the permittee is the owner or operator, if different than procedures for private sites.

Title	Document Location
El Paso County Post Construction Oversight Procedures Section 7.	Located as Appendix 5, of this Program Description Document,, electronic document template located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs

Part I.E.5 Pollution Prevention/Good Housekeeping for Municipal Operations

Municipal Facility Runoff Control Measures:

Program Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
<p>ii. Municipal Facility Runoff Control Measures:</p> <p>(A) The permittee shall implement control measures to prevent or reduce potential discharges of pollutants to the MS4 from the applicable municipal facilities listed below. New written procedures shall be developed and implemented for any new applicable municipal facilities prior to associated pollutant sources being present.</p> <ol style="list-style-type: none"> 1) Vehicle maintenance facilities 2) Asphalt and concrete batch plants which are not already authorized by a separate CDPS or NPDES discharge permit 3) Solid-waste transfer stations where waste and recyclables are briefly held before further transport 4) Outdoor storage yards with exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, and rotomill material <p>(B) The permittee shall implement the following categories of control measures as necessary to prevent or reduce the pollutant sources present:</p> <ol style="list-style-type: none"> 1) Preventive maintenance 2) Good housekeeping 3) Spill prevention and response procedures 4) Structural control measures 5) Evaluation of non-stormwater discharges 6) Employee training 	<p>i. Municipal Facility Runoff Control Measures: For each applicable municipal facility:</p> <ol style="list-style-type: none"> (A) Facility identification (B) Description of all pollutant sources (C) Control measures implemented, including installation and implementation specifications and information (D) Staff (position title) responsible for implementation of control measures and associated documentation (E) Description of control measures implemented for bulk storage structures. 	<p>a.ii. Completed July 1, 2017</p> <p>b.i. Completed July 1, 2019</p>

PDD Requirement: Part I.E.5.c.i. Municipal Facility Runoff Control Measures: A list of citations(s) and locations(s) of the following:

(A) List of applicable municipal facilities.

(B) List of facilities the permittee owns or operates that are subject to separate CDPS or NPDES permit coverage under the state's general stormwater permits for discharges of stormwater associated with industrial activity.

(C) Citation(s) and location(s) of supporting documents of the municipal facility runoff control measures, including documents that provide control measure installation and implementation specifications and information.

Title	Document Location
El Paso County Municipal Operations Stormwater Manual, Section 1 and 2	<p>Included in this Program Description Document, Appendix</p> <p>Hard copy of each Facility and Runoff Control Plans are kept at each applicable facility.</p> <p>Original documents are maintained by the Stormwater Quality Coordinator at: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE - MS4 Permit\Permit 2016-2021\Compliance Docs. </p>

Municipal Facility Runoff Control Measures:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
<p>ii. Municipal Facility Runoff Control Measures: (C) The permittee shall implement written municipal facility inspection procedures, which must at a minimum include the following:</p> <ol style="list-style-type: none"> 1) An annual visual inspection of each applicable municipal facility. 2) A verification that the written procedures and documentation reflect current conditions. 3) Observation of locations and areas where stormwater from municipal facilities are discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state. 4) Observation of facility conditions, including pollutant sources and control measures, to identify inadequate control measure and control measure requiring maintenance. 	<p>i. Municipal Facility Runoff Control Measures: (F) Maintain inspection records with the following minimum information for all inspections conducted to meet the minimum inspection frequency:</p> <ol style="list-style-type: none"> 1) Inspection date 2) Name of inspector 3) Applicable facility identification 4) Inspection findings including, when present: inadequate control measures, control measures requiring routine maintenance, and if there was any evidence of polluted discharges from the facility 5) Confirmation and documentation that the control measures are adequate or a list of follow up actions 	Completed July 1, 2019

PDD Requirement: Part I.E.5.c.i. Municipal Facility Runoff Control Measures: (D) Citation(s) and location(s) of supporting documents for inspections, including the written procedures for conducting inspections.

Title	Document Location
El Paso County Municipal Operations Stormwater Manual, Section 3.	<p>Included in this Program Description Document, Appendix</p> <p>Inspection reports are maintained by the Stormwater Quality Coordinator at: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE - MS4 Permit\Permit 2016-2021\Compliance Docs. </p>

Municipal Operations and Maintenance Procedures:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
<p>iii. Municipal Operations and Maintenance Procedures: The permittee shall implement control measures that prevent or reduce discharges for applicable municipal operations that are not covered under Part I.E.5.a.ii(A). New written procedures shall be developed and implemented for any new applicable municipal operations prior to associated pollutant sources being present.</p> <p>(A) At a minimum, implementation of the procedures must prevent or reduce stormwater pollution from the following operations conducted by the permittee:</p> <ol style="list-style-type: none"> 1) Operation and maintenance of streets, roads, highways 2) Operation and maintenance of municipal parking lots 3) Operations at maintenance and storage yards 4) Operations at maintenance shops with outdoor storage areas 5) Operation and maintenance of snow dumps/snow disposal areas 6) Operation and maintenance of sites used for temporary storage of sweeper tailings or other waste piles 7) Park and open space maintenance 8) Building maintenance 9) New construction of municipal facilities 10) Application of pesticides, herbicides, and fertilizers 11) Large outdoor festivals and events 12) Construction activities not subject to the requirements of Part I.E.3 13) Maintenance, replacement, and construction of utilities and the storm system, including operations, such as storage, dewatering, or disposal, associated with removal of sediment, debris, and other pollutant sources from the MS4, including removal of materials, such as trash, from control measures implemented in accordance with Part I.E.4, unless covered by a separate CDPS or NPDES permit. 	<p>ii. Municipal Operations and Maintenance Procedures: Control measures implemented, including installation and implementation information.</p>	<p>None given.</p>

PDD Requirement: Part I.E.5.c.ii. Municipal Operations and Maintenance Procedures: A list of citations(s) and locations(s) of the following:

(A) List the municipal operations to which this program applies.

(B) Citation(s) and location(s) of supporting documents, including documents that provide control measure installation and implementation specifications and implementation.

Title	Document Location
El Paso County Municipal Operations Stormwater Manual, Section 4.	Included in this Program Description Document, as Appendix 7
El Paso County Public Works Standard Operating Procedures	SOPs are attached to the Municipal Operations Stormwater manual.

	Word and PDF versions of the Manual located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\Stormwater - Pollution Prevention and Good Housekeeping
--	---

Nutrient Source Reductions:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
<p>iv. Nutrient Source Reductions: The permittee shall implement a municipal operations program that has the ultimate goal of preventing or reducing nitrogen and phosphorus in stormwater runoff associated with the applicable municipal operations and facilities.</p> <p>(A) The permittee shall evaluate, identify, and document the municipal operations and facilities that are and/or have the potential to contribute nitrogen and phosphorus to the waters receiving the discharge authorized under this permit (identified municipal operations nutrient sources). The permittee is authorized to meet the requirements of this section through contribution to a collaborative program to evaluate, identify, and target sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the permittee's discharge(s). At a minimum, the permittee shall include the storage and application of fertilizer, including subsequent stormwater or irrigation runoff from areas where fertilizer has been applied, as an identified municipal operations nutrient source if these operations were not covered under Part I.E.5.a.ii and iii.</p>	<p>iii. Nutrient Source Reductions: Control measures implemented to prevent or reduce nitrogen and phosphorus from municipal operations, including installation and implementation information.</p>	<p>Completed July 1, 2020</p>

PDD Requirement: Part I.E.5.c.iii. Nutrient Source Reductions: A list of citations(s) and locations(s) of the method used to evaluate operations and facilities to identify sources of nitrogen and phosphorus discharges from the MS4 that can be controlled through the implementation of control measures.

Title	Document Location
El Paso County Municipal Operations Stormwater Manual, Section 5.	<p>Included in this Program Description Document, as Appendix 7</p> <p>SOPs are attached to the Municipal Operations Stormwater manual.</p> <p>Word and PDF versions of the Manual located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\Stormwater - Pollution Prevention and Good Housekeeping</p>

Outdoor Bulk Storage:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
v. Outdoor bulk storage structures, of more than 55 gallons, for petroleum products and any other liquid chemicals located at applicable municipal facilities must have control measures implemented that provide secondary containment or equivalent protection that contains all spills and prevents any spilled material from entering state waters. For the scenario of a single containment system serving multiple tanks, the containment system must have sufficient capacity to contain 10% of the volume of containers, or the volume of the largest container plus 10%, whichever is greater. Bulk storage on mobile refuelers that are subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 are not subject to the requirements of Part I.E.5.a.ii(A)(5). Before the implementation of such controls, the permittee shall implement practices, such as spill prevention and response, to prevent or reduce pollutants in runoff associated with bulk storage structures.	iv. Bulk Storage: Description of control measures implemented for bulk storage structures, if applicable.	Completed July 1, 2021

PDD Requirement: Part I.E.5.c.iv.Outdoor Bulk Storage: iv. Bulk Storage: A list of citations(s) and locations(s) of procedures to ensure that this requirement is met.

Title	Document Location
El Paso County Municipal Operations Stormwater Manual, Section 6.	<p>Included in this Program Description Document, as Appendix 7</p> <p>SOPs are attached to the Municipal Operations Stormwater manual.</p> <p>Word and PDF versions of the Manual located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\Stormwater - Pollution Prevention and Good Housekeeping</p>

Training:

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
vi. Training: Train applicable municipal staff to implement the Pollution Prevention/Good Housekeeping for Municipal Operations, including training for employees that will conduct inspections in accordance with Part I.E.5.a.ii(C). The permittee must identify those who will be likely to inspect the control measures and provide training to those individuals. The program must inform public employees responsible for operations with the potential to result in an illicit discharge about the permittee's	v. Training: Name and department of each individual trained, date of training, the type of training, and a list of topics covered.	None given.

Permit Requirements (Part I.E.5.a)	Recordkeeping (Part I.E.5.b)	Compliance Schedule
prohibitions against, and potential impacts associated with, illicit discharges from municipal operations. The training must also include information on trash and its effects on water quality.		

PDD Requirement: Part I.E.5.c.v.Training: v. Training: A list of citation(s) and location(s) of the training program and supporting documents.

Title	Document Location
El Paso County Municipal Operations Manual, Section 7.	<p>Included in this Program Description Document, as Appendix 7</p> <p>SOPs are attached to the Municipal Operations Stormwater manual.</p> <p>Word and PDF versions of the Manual located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\Stormwater - Pollution Prevention and Good Housekeeping</p> <p>Training records and documentation located: \\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs\.</p>

Appendix 1: Stormwater Public Education and Outreach Strategy

El Paso County



Revision: 2.0 December 2018

OBJECTIVES OF EDUCATION AND OUTREACH PROGRAM

To provide education and information to the public:

- of the impacts of stormwater on waterbodies,
- of steps to take to reduce pollutants in stormwater runoff,
- of water quality impacts associated with illicit discharges and improper waste disposal, and
- to comply with the COR-090000 MS4 Permit, effective July 1, 2016.

SECTION 1: ILLICIT DISCHARGES

Permit Requirements: Part I.E.1.a.i. Illicit Discharges		
Requirements Part I.E.1.a.	<p>i. The permittee must provide information to businesses and the general public regarding the permittee's prohibitions of and the water quality impacts associated with illicit discharges as part of the public education program. The permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Part I.E.1.a.ii. The information must include the following:</p> <p>(A) The permittee must determine the targeted businesses that are likely to cause an illicit discharge or improperly dispose of waste. At a minimum, the permittee must identify at least one type of business and a list of those businesses that fit the identified type of business.</p> <p>(B) The permittee must develop and implement at least one education and outreach activity to those businesses identified in Part I.E.1.a.i.(A). Educational materials and activities, individually or as a whole, must describe water quality impacts associated with illicit discharges and the improper disposal of waste, the behaviors of concern, and actions that the business can take to reduce the likelihood of illicit discharges and the improper disposal of waste.</p>	Table 1 Business Outreach
Recordkeeping Part I.E.1.b.	i. A written list of the targeted business(es) that are likely to cause an illicit discharge or improperly dispose of waste and the education and outreach activity for the targeted business(es).	Table 1 Business Outreach

Table 1: Business Outreach		Targeted Businesses determined by type and likelihood of potential illicit discharges	
Targeted Business Type	Activity	Distribution	Location of Documentation
<ul style="list-style-type: none"> ▪ Developers ▪ Builders ▪ Subcontractors Landscaping 	Website that...includes actions that can be taken	Website www.elpasoco.com/transportation	\\chinook\dot\dot_data\doe\doe_c opy\NPDES\N:\Stormwater - Public Outreach

SECTION 2: EDUCATION AND OUTREACH ACTIVITIES

Permit Requirements: Part I.E.1.a.ii Education and Outreach Activities Table		
Requirements Part I.E.1.a	ii. Education and Outreach Activities Table: Each year, the permittee must implement at least four education and outreach activities (bulleted items) and at least two must be from the Active and Interactive Outreach column. The activities can be the same from year to year or be different each year.	Table 2, Education and Outreach Activities
Recordkeeping Part I.E.1.b	ii. Education and Outreach Activities: A written list of the targeted pollutant sources and/or pollutants, the target audience, and distribution mechanism for each activity and the following: (A) Dates the activities were implemented, including, as applicable, dates of events and the materials that were made available. (B) Documentation of the activities that were provided and/or made available and the dates of distribution. Signs, markers, or equivalent intended to be maintained for the permit term must be described with location information.	Table 3, Targeted Pollutant Sources

Table 2: Education and Outreach Activities Table Highlighted items are conducted by El Paso County	
<i>Passive Outreach</i>	<i>Active and Interactive Outreach (pick any two bullets each year)</i>
Bus shelter/bench advertisement Billboard/dasher board advertisement Vehicle/bus advertisement Radio/television/movie theatre advertisement Newspaper advertisement Distribute educational materials by brochure Distribute educational materials by fact sheet Distribute educational material by utility bill insert Publish article (hard copy or electronic) (water quality report includes information on pollution prevention) Storm drain marking by permittee staff that maintains 25% of permittee maintained inlets Stormwater related signage Web site : http://adm.elpasoco.com/publicservices/transportation/Pages/default.aspx	Ongoing advertisement/promotion of a stormwater hotline number or other method to report an illicit discharge Ongoing advertisement/promotion on how to get more information about the stormwater program Ongoing social media program Web site that is interactive or contains stormwater information that includes actions that can be taken to reduce stormwater pollution Newsletter (hard copy or electronic) Promotion of existing local stormwater/environmental events or program that help protect water quality Distribute promotional items or giveaways Participate in or sponsor a water festival which involves populations that exist within the permit boundary Participate in or sponsor a waterway clean-up and trash removal event Participate in or sponsor a service project Participate in or sponsor a stormwater or environmental presentation Participate in or sponsor a stormwater or environmental event Participate in or sponsor community project based programs that investigate watershed health and meet applicable school Science, Technology, Engineering and Math (STEM) standards Participate in or sponsor a household hazardous waste event Participate in or sponsor an Adopt-a-Street program Participate in or sponsor an Adopt-a-Waterway program Participate in or sponsor an Adopt-a-Storm Drain program Provide ongoing access to motor vehicle fluids recycling program Stormwater booth at a community event Conduct a stormwater survey Storm drain marking program performed by the public/community Pet waste stations: Bear Creek Park Participate in, plan or present stormwater materials to schools Stormwater demonstration projects that show control measures or other pollutant reduction methods

SECTION 3: NUTRIENTS

<i>Permit Requirements: Part I.E.1.a.iii. Nutrients</i>		
Requirements Part I.E.1.a	<p>iii. Nutrients: As part of their public education program, the permittee must specifically address the reduction of water quality impacts associated with nitrogen and phosphorus in discharges from the MS4. Permittees can meet the requirements of this section through contribution to a collaborative program to evaluate, identify, target, and provide outreach that addresses sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the MS4 permittee's discharge.</p> <p>(A) The permittee must determine the targeted sources (e.g., residential, industrial, agricultural, or commercial) that are contributing to, or have the potential to contribute, nutrients to the waters receiving the discharge authorized under the MS4 permit.</p> <p>(B) The permittee must prioritize which targeted sources are likely to obtain a reduction in nutrient discharges through education. The permittee must distribute educational materials or equivalent outreach to the prioritized targeted sources. Educational materials or equivalent outreach, individually or as a whole, must describe stormwater quality impacts associated with nitrogen and phosphorus in stormwater runoff and illicit discharges, the behaviors of concern, and actions that the target source can take to reduce nutrients. The permittee may incorporate the education and outreach to meet this requirement into the education and outreach strategies provided in accordance with Part I.E.1.a.ii.</p>	<p>See Table 3, Targeted Pollutant Sources</p> <p>*priority sources identified in Table 3</p>
Recordkeeping Part I.E.1.b	<p>iii. Nutrients: A written list of the targeted sources that are contributing to, or have the potential to contribute nutrients to stormwater and the education and outreach activity for the targeted sources.</p>	<p>See Table 3, Targeted Pollutant Sources</p>

Table 3: Targeted Pollutant Sources <i>summarized per UDFCD vol. 3 Table 1-1 and International Stormwater BMP Database</i>						<i>*Pollutant Sources</i>
Pollutant source	Audience	Format/Activity	Distribution	Documentation	Documentation (file path)	Dates of implementation, distribution or event(s)
Nutrients *nutrient priority 1						
Soil erosion Cleared vegetation Fertilizers Waste	Residential	Video, audio and print material	Website TV and radio Billboards Bus boards	RFPs; Invoices; Ads	Hard Copy Files in Stormwater Quality Coordinator file cabinets Electronic Files: \\chinook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Public Outreach.	July through September 2017
	Commercial Landscapers	Video, audio and print material	Website TV and radio Billboards Bus boards	RFPs; Invoices; Ads	Hard Copy Files in Stormwater Quality Coordinator file cabinets Electronic Files: \\chinook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Public Outreach.	July through September 2017
	Staff	Standard Operating Procedure	Training	Training Sign In sheets	Hard Copy Files in Stormwater Quality Coordinator file cabinets	Annual Training
Solids *nutrient priority 2						
Soil erosion Cleared vegetation Waste Vehicles	Construction Industry	Wet Wednesday Presentations to HBA Members	Up to four (4) presentations per year	Presentations; Coordination emails with HBA/City of Springs; Participant Tallies/sign in sheets	\\chinook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Public Outreach\Wet Wednesdays (HBA).	March through November 2017
	Staff	Standard Operating Procedure	Training	Municipal Operations Stormwater Manual and RCPs	\\chinook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Pollution Prevention and Good Housekeeping\Training.	June 2017 (reviewed/revised SOPs); Training Annually.
Pathogens *nutrient priority 3						
Fertilizers Pet Waste	Dog owners	Pet waste bags	County parks, trails	Locations of pet waste stations	Regional Parks: <ul style="list-style-type: none"> Fox Run Black Forest Homestead Ranch Bear Creek Fountain Creek Clear Springs Ranch O/S Others: <ul style="list-style-type: none"> Widefield Community Park Palmer Lake Recreation Area Stratmoor Valley Drake Lake Natural Area Regional Trails / Trailheads <ul style="list-style-type: none"> New Santa Fe Rock Island Fountain Creek Woodlake (Black Forest) 	Ongoing
	Landscapers	Video, audio and print material	Website TV and radio Billboards Bus boards	Webpage, RFPs; Ads; Invoices	Hard Copy Files in Stormwater Quality Coordinator file cabinets \\chinook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Public Outreach.	Ongoing Ads run July through September.
	Residential	Video, audio and print material	Website TV and radio Billboards Bus boards	Webpage, RFPs; Ads; Invoices	El Paso County webpage \\chinook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Public Outreach.	Ongoing Ads run July

						through September
Illicit Discharges: Oils, Synthetic Organics, Trash/Debris						
Vehicles Waste Pesticides	Residential DIY; Small Business Automotive	Video, audio and print material stormwater hotline number to report an illicit discharge	Website TV and radio Billboards Bus boards Website	Webpage, RFPs; Ads; Invoices Illicit Discharge Log	El Paso County webpage Hard Copy Files in Stormwater Quality Coordinator file cabinets Electronic Files: \\chinoook\dot\dot_data\doe\doe_cop y\NPDES\Stormwater Public Outreach.	July 18, 2017 ongoing *active outreach
	Residential; Commercial	Household Hazardous Waste Collection	Website; Facebook Page; Recycling Directory	Facility; webpage	Website: http://adm.elpasoco.com/Environmental%20Division/Household%20Hazardous%20Waste/Pages/default.aspx .	Ongoing; Recycling Directory published annually

Appendix 2: Illicit Discharge Detection and Elimination Plan and Procedures

Illicit Discharge Detection and Elimination Plan and Procedures

November 2009

(Revised December 2018)

The following plan and procedures are developed to comply with the El Paso County Municipal Separate Storm Sewer System (MS4) NPDES permit. The enabling law is El Paso County Ordinance Number 07-01, *An Ordinance Prohibiting Illicit Discharges into the County Storm Sewer System (as amended 12/20/2012)*. There are four primary components to this plan: location of priority areas likely to have illicit discharges, including areas with higher likelihood of illicit connections; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and staff training on the plan and procedures. A fifth component of El Paso County Illicit Discharge Detection and Elimination Plan, although not a permit requirement, is prevention and will be discussed at the end the document.

Location of Priority Areas

In 2005, a comprehensive inventory of all El Paso County assets was performed. Information regarding County storm sewer assets was included in this inventory effort. Information pertaining to new assets obtained through the development process is provided by the Planning and Community Development Department (PCD) to the Department of Public Works (DPW) on an annual basis. This new asset information is collected as part of the GASB#34 reporting requirements and is used by Department of Public Works to update the county asset inventory.

Prior to acceptance of any new infrastructure all new facilities are inspected by an El Paso County (EPC) Inspector for conformance to approved plans. During these final acceptance inspections, storm sewer structures are inspected for the evidence of illicit discharges.

Priority areas for illicit discharges are identified by the use of primarily two criteria: location of an outfall receiving storm water from a highly industrialized area, and location of previously known illicit discharge. During the completion of annual storm sewer infrastructure inspections and maintenance, EPC inspectors are instructed to look for evidence suggesting an illicit discharge into the storm sewer system.

Due to the low number of reported, suspected or actual illicit discharges, and the limited industrial component of unincorporated El Paso County (i.e., the MS4 area), no priority areas for illicit discharges have been identified for the El Paso County MS4 area.

Tracing the Source of an Illicit Discharge

Due to the limited industrial component in El Paso County, a “common sense” approach to tracing an illicit discharge back to its source is used on a case-by-case basis. When a concern of an illicit discharge is communicated, an EPC inspector will inspect the location for evidence of an illicit discharge. When evidence suggesting an illicit discharge is found, the request is passed onto the EPC Stormwater Quality Coordinator for follow up investigation.

The EPC Stormwater Quality Coordinator will systematically move upstream from the identified illicit discharge point to identify an obvious source or at a minimum bracket an area of the storm sewer system from the known point of discharge to an area immediately upstream to the beginning of evidence of the illicit discharge.

The Environmental Services Division maintains a contract with an analytical laboratory which is used when sampling and analysis are needed to identify the make up of an illicit discharge. Sampling results are compared to known industrial sources in the collection system area of the discharge. When a possible correlation exists between the illicit discharge sample and a potential source, the EPC Stormwater Coordinator will contact the potential source. Based on preponderance of available evidence a determination will be made on the identity of the source of the discharge.

Removal of an Illicit Discharge

The EPC Illicit Discharge Ordinance contains several provisions to address and remove illicit discharges. The Ordinance provides for a Notice of Violation which indicates EPC will work with violators to clean up an illicit discharge prior to the commencement of enforcement proceedings. The Ordinance also provides for the use of both criminal prosecution and civil enforcement to prevent, enjoin, abate or remove a violation. It is the policy of EPC to reserve the use enforcement proceedings for recalcitrant or repeat offenders.

After a Notice of Violation, and in the event an owner of the violation fails to clean up or abate a violation, and if the Director of EPC Department of Transportation deems it necessary to utilize county resources to clean up an illicit discharge, the Ordinance provides for county clean up of an illicit discharge at the owner’s expense. For extreme cases administrative entry and seizure warrants can be obtained for the clean up of an illicit discharge.

Response to illicit discharges occurring within the El Paso County MS4 Permit area are coordinated by the Stormwater Quality Coordinator (SQC). Removal of an illicit discharge can be initiated multiple ways:

1. Citizen call into the DPW Dispatch (719 520 6460), email (DOTWEB@elpasoco.com) use Citizen Connect through El Paso County website; or walk in to DPW. Illicit discharge concerns are also sometimes called into PCD.
2. The DPW Dispatcher, customer services supervisor or PCD staff person receiving the concern contact the Stormwater Quality Coordinator and provide information obtained about the incident. The SQC will perform field investigation. Small spills that pose no immediate threat to the MS4 subsurface system or waters of the state will be handled administratively through use of a Notice of Violation. Clean up of the spill will be required within a specified time period in the NOV.
3. The Public Works Dispatcher or On-call Supervisor may request assistance directly from the OEM Hazmat Coordinator in the event of an active spill/leak when:
 - a. The SQC cannot be contacted.

- b. Delayed response would significantly contribute to additional release or spread of a release/contamination or additional environmental damage.
4. Citizen call to State Spill Hotline. Reports to the State Spill Hotline are received by the SQC. SQC determines if the spill is within El Paso County jurisdiction or not. When in jurisdiction, SQC will perform a field investigation. For large spills within the El Paso County jurisdiction, SQC will request assistance with mitigation from the Office of Emergency Management (OEM) On-Call Hazmat Coordinator at (719) 575 8422. In the event there is no response from this number call the non-emergency El Paso County Sheriff's Dispatcher at (719) 390 5555 and request they page the On Call Hazmat Coordinator.
5. Field observation by El Paso County staff. In the event of possible illicit discharge, field staff are directed to contact the Public Services Department Dispatcher. The Dispatcher on duty will contact the SQC and request response. SQC will perform field investigation and request assistance accordingly to the degree of discharge, similar to #2 above.

Removal of the illicit discharge is typically performed by the responsible party and overseen by the SQC. In the event a responsible party is not identified; or the responsible party request clean up assistance from EPC, contact clean up support will be requested. El Paso County currently maintains a cleanup "on-call" contract for such events.

Staff Training on Illicit Discharges

An Illicit Discharge training module has been developed. This training presentation will be provided to all EPC Department of Public Works employees annually. New employees to the department are provided illicit discharge training with new employee orientation provided by the department. The training module defines what an illicit discharge is, and provides staff with strategies to use in the field to identify potential illicit discharges while performing their normal duties. Staff is instructed to document (with photos if available) basic information about the discharge (i.e. location, date and time of observation, physical characteristics of the discharge, and observed possible sources). Upon documentation of a possible illicit discharge staff is instructed to contact the EPC Stormwater Coordinator for additional follow up of the incident.

Training on illicit discharges is provided annually. All Public Works Department staff that drive county vehicles are required to attend this training. The training effort reaches approximately 100 staff that are routinely in the field and available to observe instances of illicit discharges. Annual training is provided to inspectors and code enforcement staff at PCD. All DPW new hires are required to attend a DPW specific new employee orientation, which includes an overview of illicit discharge ordinance.

Prevention

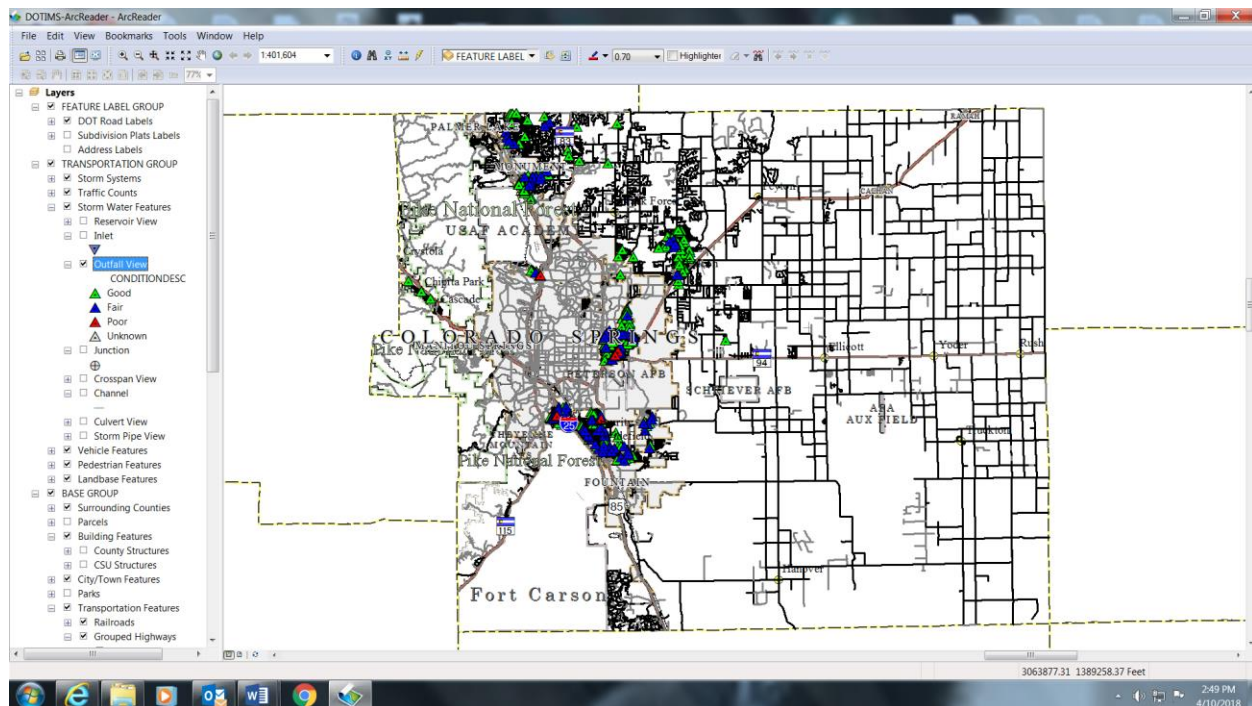
El Paso County operates a free, permanent Household Hazardous Waste (HHW) collection facility and program. The program is free to all citizens of El Paso and Teller Counties. Services include collection services of most household hazardous wastes including medical "sharps." Home-pickup for the elderly and home-bound residents is available. HHW staff attends numerous events with information on HHW and recycling/disposal options for citizens. Although limited to only accepting residential waste, HHW staff often provides outreach presentations at businesses.

The subject of illicit discharge is included in the media outreach campaign annually. New radio, television and print ad material related to illicit discharges is developed and airs on local radio and television stations and billboards during the summer months. Refer to the El Paso County Stormwater Education and Outreach Strategy document for more information.

Mapping

The El Paso County storm sewer system map is maintained in the El Paso County Geographical Information System (GIS). Employees access the map using ARCTReader, which is installed on appropriate staff desktop computers. A screen capture of the system map is indicated in Figure 1.

Figure 1. El Paso County Storm Sewer Outfalls



Appendix 3: Construction Oversight Procedures

Contents

Introduction	50
Purpose of Document	51
Section 1: Regulatory Mechanisms (Part I.E.3.a.ii)	51
Exemptions and Exclusions (Part I.E.3.a. i and iii)	52
Section 2: Standards and Requirements (Part I.E.3.a.iv)	52
Section 3: Site Plans (Part I.E.3.a.v)	54
Site Plan Review (Part I.E.3.a.v(C))	55
Site Plan Review Documentation (Part I.E.3.b.v)	56
Section 4, Stormwater Inspection Procedures (Part I.E.3.a.vi.; Part I.E.3.c.vi.)	56
Frequency of Inspections (Part I.E.3.c.vi(A))	57
Scope of Inspections (Part I.E.3.c.vi (B)	57
Documentation of Inspections (Part I.E.3.c.vi (C)	57
Section 5, Enforcement (Part I.E.3.a.vii and Part I.E.3.c.vii)	57
Section 6, Training (Part I.E.3.a.viii)	58
Section 7, Overlapping Permit Areas (Part I.E.3.a.ix)	59

Introduction

Protecting the quality of stormwater runoff is required by the Colorado Discharge Permit System (CDPS) Regulations. The procedures described in this document detail compliance with requirements of the Municipal Separate Storm Sewer System (MS4) Permit issued by the Colorado Department of Public Health and Environment (CDPHE). The CDPHE, Water Quality Control Division (WQCD), through the MS4 permit issued to the Permittee, requires the Permittee to control and reduce the discharge of pollutants to protect stormwater quality and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act and the Colorado Discharge Permit Regulations (Colorado Regulation 61). Specifically, 61.8(11) Conditions for Phase II Municipal Stormwater Permits states:

(a) An individual permit or general stormwater permit certification issued to a regulated small MS4 shall contain the following requirements, at a minimum:

(i) ...regulated small MS4 develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act (25-8-101 et seq., C.R.S.). ...Implementation of BMPs consistent with the provisions of the stormwater management program required pursuant to this section and the provisions of the permit required pursuant to subsection (ii) constitutes compliance with the standard of reducing pollutants to the MEP...

(ii) Minimum control measures (management programs).

(D) Construction site stormwater runoff control.

(I) The permittee must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the Division waives requirements for stormwater discharges associated with a small construction activity in accordance with 61.3(2)(f)(ii)(B), the permittee is not required to develop, implement, and/or enforce its program to reduce pollutant discharges from such a site.

(II) The program must be developed and implemented to assure adequate design, implementation, and maintenance of BMPs at construction sites within the MS4 to reduce pollutant discharges and protect water quality. The program must include the development and implementation of, at a minimum:

- (a) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or local law;
- (b) Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;

- (c) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- (d) Procedures for site plan review which incorporate consideration of potential water quality impacts;
- (e) Procedures for receipt and consideration of information submitted by the public, and
- (f) Procedures for site inspection and enforcement of control measures.

Purpose of Document

This procedure documents the process for complying with the Construction Sites Program in the MS4 Permit.

The procedure may change without notice if it is found to no longer be effective and/or compliant with the MS4 permit requirements. Unless significant changes warrant, this document is reviewed annually and updated as necessary.

Section 1: Regulatory Mechanisms (Part I.E.3.a.ii)

This section, titled Regulatory Mechanisms, documents the regulatory mechanism for ensuring compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.ii Regulatory Mechanism *...to the extent allowable under state or local law, implement a regulatory mechanism to meet the requirements in Part I.E.3.a., including the following:*

- (A) The ability to implement sanctions against entities responsible for applicable construction activities.*
- (B) Require control measures to be implemented for all applicable construction activities from initial disturbance until final stabilization.*

El Paso County uses three primary mechanisms to require stormwater control measures:

For development and redevelopment construction sites that disturb greater than or equal to one (1) acre of land:

- A Grading and Erosion Control Plan is required prior to start of construction. Authorized by El Paso County Land Development Code Chapter 6, Section 6.3.5 and El Paso County Engineering Criteria Manual (ECM) Chapter 3, Section 3.4.
- An Erosion and Stormwater Quality Control Permit (ESQCP) is also required for land disturbances of greater than or equal to one (1) acre of land. Authorized by El Paso County Land Development Code Chapter 6, Section 6.2.6 and El Paso County Engineering Criteria Manual (ECM) Chapter 5, Section 5.6; and ECM Appendix I. A site specific Storm Water Management Plan is required by the ESQCP.

- A Builder's Erosion and Stormwater Quality Control Permit (BESQCP) is used to require stormwater control measures for individual, residential lot development. Authorized by the El Paso County Engineering Criteria Manual (ECM) Chapter 5, Section 5.6 and Appendix I.

The ability to implement sanctions against entities responsible for applicable construction sites is authorized by Chapter 11 of the Land Development Code: Chapter 1, Section 1.16.5; and Appendix I of the ECM.

Exclusions and Exemptions (Part I.E.3.a. i and iii)

This section, titled Exemptions and Exclusions, documents the requirements for sites exempted or excluded from the Construction Sites Program to ensure all exclusions meet the requirements of the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.i. Exclusions: The following construction activities are not subject to the requirements of this section (I.E.3.)

A) Construction Activities with R-Factor Waiver

B) Activities for County Growth Areas:

- 1) Construction activities on sites that began as part of a plan of development prior to the effective date of this permit.
- 2) Large lot single family development...

C) Activities for Non-Urban Areas:

- 1) Facilities associated with oil and gas ...

Part I.E.3.a.iii. Regulatory Mechanism Exemptions, *Procedures must be implemented to ensure that any exemptions, waivers or variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.*

El Paso County developed a checklist to determine when a construction activity is to be considered an Applicable Construction Activity. Please refer to the Stormwater Permit Applicability Evaluation Form found in the Appendix of this Program Description Document. This form will be to determine and document when stormwater construction permitting is excluded consistent with Part I.E.3.a.i. of the permit. Completed evaluation form will be kept with other project specific documentation.

For applicable construction sites, El Paso County does not provide exemptions from its regulatory mechanisms. The El Paso County Engineering Criteria Manual (ECM) Chapter 1, Section 1.9 contains provisions for "Deviations from Standards," to provide for alternatives to the construction standards provided in the ECM. However, deviations do not provide exemption to the regulatory mechanisms.

Section 2: Standards and Requirements (Part I.E.3.a.iv)

This section, titled Standards and Requirements, documents the standards used for ensuring compliance with the Construction Sites Program. It also documents the requirements for submittals.

MS4 Permit Requirement:

Part I.E.3.a.iv. (A), Appropriate control measures must be implemented prior to the start of construction activity, must control potential pollutants during each phase of construction, and must be continued through final stabilization. Appropriate structural control measures must be maintained in operational condition.

El Paso County developed a checklist to assist in the development and review of Grading and Erosion Control Plans submitted for review and approval. The checklist is to be used by applicants (i.e. Engineer of Record) to ensure the submitted Grading and Erosion Control Plan contains all the required elements. The same checklist is used by El Paso County Project Engineers to guide the review of submitted plans. A copy of a completed review checklist is signed and dated by the Project Engineer upon completion of a submittal review. The signed and dated checklist is kept with all other project documents in an electronic database. A copy of the Grading and Erosion Control Plan Checklist template is found in Appendix E of the ECM.

Included in the application requirements for an Erosion and Stormwater Quality Control Permit (ESQCP) is the requirement for the applicant to develop and submit for review a Stormwater Management Plan (SWMP). El Paso County also developed a checklist to guide the development and review of Stormwater Management Plan to ensure all the required elements are included in the SWMP. Given that SWMPs are intended to be dynamic documents to reflect onsite conditions at all times, El Paso County does not approve the submitted SWMP. Rather it performs a completeness review to ensure the applicant has at the time of project commencement a SWMP on site that addresses all the required elements of Part I.E.3.a.iv.B of the MS4 permit. A completed SWMP Checklist is signed and dated by the Project Engineer and is included with other project records in an electronic database (EDARP for Planning and Community Development projects and on a shared network file located [\\chinook\dot\dot_projects\ Engineering\ projects.](#)

The template for the Stormwater Management Plan Checklist is found in Appendix E of the ECM.

Standards for the development of control measures may be taken from the following sources for both structural and non-structural control measures:

- El Paso County Engineering Criteria Manual (ECM);
- Standards adopted by reference in Chapter 1, Section 1.5 of the ECM (i.e., those standards applicable at the time of advertisement for construction of Capital Improvement projects, as defined in contract documents.);
- City of Colorado Springs Drainage Criteria Manual 2014 Update: Chapter 6 and Section 3.2.1 of Chapter 13.
- The Urban Drainage and Flood Control District's Urban Storm Drainage Criteria Manual: Volume 3, Chapter 7, Construction BMPs (version applicable at time of project design).

MS4 Permit Requirement:

Part I.E.3.a.iv.(B) *Control measures must be selected, designed, installed, implemented, and maintained to provide control of all potential pollutants, such as but not limited to sediment, construction site waste, trash, discarded building materials, concrete truck washout, chemicals, sanitary waste, and contaminated soils in discharges to the MS4. At a minimum pollutant sources associated with the following activities (if part of the applicable construction activity) must be addressed:*

- 1) *Land disturbance and storage of soils*
- 2) *Vehicle tracking*
- 3) *Loading and unloading operations*
- 4) *Outdoor storage of construction site materials, building materials, fertilizers, and chemicals*
- 5) *Bulk storage of materials*
- 6) *Vehicle and equipment maintenance and fueling*
- 7) *Significant dust or particulate generating processes*
- 8) *Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, and oils*
- 9) *Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment*
- 10) *Dedicated asphalt and concrete batch plants.*
- 11) *Other areas or operations where spills can occur.*
- 12) *Other non-stormwater discharges including construction dewatering not covered under the Construction Dewatering Discharges general permit and wash water that may contribute pollutants to the MS4.*

All the required elements listed above except #7 are included in the SWMP Checklist provided in Appendix E of the ECM. Significant dust or particulate generating process are addressed in the “Joint Policy Statement on Grading, Erosion Control and Dust” found in Appendix E of the ECM; and Chapter 6, Section 6.2.7.(B) of the El Paso County Land Development Code.

Section 3: Site Plans (Part I.E.3.a.v)

This section, titled Site Plans, documents the requirements for site plans to ensure compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.v.(A) *Renewal Permittees: For the time period between the effective date of this permit and the date by which a renewal permittee meets the conditions in Parts I.E.3.a.v (B) through (C), the renewal permittee must continue to implement requirements for construction site operators to implement appropriate erosion and sediment control as documented in the permittee’s CDPS Stormwater Management Plan Description developed in accordance with the terms and conditions of the previous permit.*

MS4 Permit Requirement:

Part I.E.3.a.v.(B) Site Plans, ...require operators to develop site plan(s) that locate (if applicable) and identify all structural and non-structural control measures for the applicable construction activities. The site plan(s) must contain installation and implementation specifications or a reference to the document with installation and implementation specifications for all structural control measures. A narrative description of non-structural control measures must be included in the site plan(s).

Included in the application requirements for an Erosion and Stormwater Quality Control Permit (ESQCP) is the requirement for the applicant to develop and submit for review a Stormwater Management Plan (SWMP).

Site Plan Review (Part I.E.3.a.v(C))

This sub-section, titled Site Plans Reviews, documents the requirements for site plans to ensure compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.v(C) Initial Site Plan Review, site plan review for all applicable construction activities prior to the start of construction activities...Initial site plan review shall include the following: 1) Confirmation that the site plan includes appropriate control measures for all stages of construction, including final stabilization. 2) Confirmation that the control measures meet the requirements in Part I.E.3.a.iv.

Site Plan Review Procedures, General are included in Chapter 1, Section 1.12 of the ECM. Additional Construction Permit review and acceptance requirements are described in Chapter 5, Section 5.3.8 and 5.9 of the ECM.

El Paso County developed a checklist to assist in the development and review of Grading and Erosion Control Plans submitted for review and approval. The checklist is to be used by applicants (i.e., Engineer of Record) to ensure the submitted Erosion Control Plan contains all the required elements. The checklist is used by El Paso County Project Engineers to guide the review of submitted plans for capital projects. A copy of a completed review checklist is signed and dated by the Project Engineer upon completion of a submittal review. The signed and dated checklist is kept with all other project documents in an electronic database. The template for the Grading and Erosion Control Plan Checklist is found in Appendix E of the ECM.

Included in the submission requirements for an Erosion and Stormwater Quality Control Permit (ESQCP) is the requirement for the applicant to develop and submit for review a Stormwater Management Plan (SWMP). El Paso County also developed a checklist to guide the development and review of Stormwater Management Plan to ensure all the required elements are included in the SWMP. Given that SWMPs are intended to be dynamic documents to reflect onsite conditions at all times, El Paso County does not approve the submitted SWMP. Rather it performs a completeness review to ensure the applicant has at the time of project commencement a SWMP on site that addresses all the required elements of Part I.E.3.a.iv.B of the MS4 permit.

Upon review of site plans El Paso County Project Engineers sign and date the SWMP and Grading and Erosion Control Plan Checklists. The signed and dated review checklists are included with other project records in an electronic database (EDARP for Planning and Community Development projects and for capital improvement projects performed by El Paso County records are kept on a shared network file located:

\\chinook\dot\dot_projects\ Engineering\ projects.

Site Plan Review (Part I.E.3.a.v(D))

This sub-section, titled Site Plans Reviews, documents the requirements for site plans to ensure compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.v(D): Confirmation that the control measures meet the requirements in Part I.E.3.a.v(A).

For applicable construction projects reviewed by the El Paso County Planning and Community Development Department, as part of the final approval of the site plans, the owner or permittee must sign within the signature block verifying that they have reviewed and accept the site plans. The El Paso County Engineer (or designee) approves final site plans by signature. For applicable construction projects reviewed and approved by the El Paso County Planning and Community Development Department, plan approval is delegated via a policy memo to the Engineering Review Manager. Final site plans are scanned and stored within the County's EDARP database.

For applicable construction projects initiated and/or reviewed by the Department of Public Works, the El Paso County Engineer signs and approves the Grading and Erosion Control Plan included in the project bid plan set. Copies of final approved plan sets are scanned and stored in the project file(s) located:

\\chinook\dot\dot_projects\ Engineering\ projects.

Site Plan Review Documentation (Part I.E.3.b.v)

This sub-section, titled Site Plan Review Documentation, details the documentation of site plan reviews to ensure compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.b.v. Site Plans, *Copy of the final site plan reviewed to meet the initial site plan review requirement, and confirmation of the permittee's review and acceptance.*

For applicable construction projects reviewed by the El Paso County Planning and Community Development Department, as part of the final approval of the site plans, the owner or permittee must sign within the signature block verifying that they have reviewed and accept the site plans. The El Paso County ECM Administrator (or designee) approves final site plans by signature. The final site plans are scanned and stored within the County's EDARP database.

For capital improvement projects initiated and reviewed by the Department of Public Works, the El Paso County ECM Administrator (or designee) signs and approves the Grading and Erosion Control Plan included in the project bid plan set. Copies of final approved plan sets are scanned and stored in the project file(s) located:

\\chinook\dot\dot_projects\ Engineering\ projects.

Section 4, Stormwater Inspection Procedures (Part I.E.3.a.vi.; Part I.E.3.c.vi.)

This section, titled Stormwater Inspection Procedures, details the stormwater inspection procedures for compliance with the Construction Sites Program.

Frequency of Inspections (Part I.E.3.c.vi(A))

MS4 Permit Requirement:

Part I.E.3.c.vi. Site Inspection: *Permittee has written procedures for conducting site inspections, including the citation(s) and location(s) of supporting documents that describe the following:*

(A) The process for determining, implementing, and documenting the inspection frequencies.

Construction Site Inspections conducted by El Paso County inspectors are documented on a Stormwater Field Inspection Report. Copies of completed inspection reports are included with other project documentation. Construction Site Inspection types, frequencies and procedures are discussed in the El Paso County Engineering Criteria Manual (ECM) Appendix I, Section I.5. This section will be updated by July 1, 2019, to reflect inspection types, frequencies and procedures required in the latest permit certification of the COR090000 General Permit.

Scope of Inspections (Part I.E.3.c.vi (B))

MS4 Permit Requirement:

Part I.E.3.c.vi. Site Inspection: *Permittee has written procedures for conducting site inspections, including the citation(s) and location(s) of supporting documents that describe the following:*

(B) The process for inspection follow-up, including determining, implementing, and documenting the nature of the follow-up action.

Follow up inspections are discussed in ECM Appendix I, section I.5.2.F.

Documentation of Inspections (Part I.E.3.c.vi (C))

MS4 Permit Requirement:

Part I.E.3.c.vi. Site Inspection: *Permittee has written procedures for conducting site inspections, including the citation(s) and location(s) of supporting documents that describe the following:*

(C) The process and tools used for documenting inspections.

El Paso County Construction Site Inspection procedures are in El Paso County Engineering Criteria Manual (ECM) Appendix I, Section I.5.

El Paso County uses a Field Inspection Report to document inspections. Completed Inspection reports are saved electronically and kept with other project specific files.

Section 5, Enforcement (Part I.E.3.a.vii and Part I.E.3.c.vii)

This section, titled Enforcement, details the stormwater enforcement procedures for compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.vii. Enforcement Response: *Implement appropriate enforcement procedures and actions to meet the requirements of Part I.E.3.*

(A) The permittee must have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements.

(B) The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. Enforcement procedures must include informal, formal, and judicial enforcement responses.

Part I.E.3.c.vii Enforcement Response: *A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for enforcement response. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place, including as a minimum:*

(A) Construction commencing without site plan review in accordance with I.E.3.a.v.

(B) Control measures not maintained in operational condition at time of permittee inspection, including sites that have temporarily shut down construction activities.

(C) Uncorrected finding(s) from previous inspections.

(D) Failure to implement a control measure for a pollutant source or inadequate control measure resulting in a discharge of pollutants from the applicable construction site or to the MS4.

Construction Site Stormwater Enforcement is discussed in ECM Appendix I, Section I.6. Specific Enforcement mechanisms include: Stop Work Order; Notice to Proceed, Letter of Noncompliance, Performance or Contracting of Remedial Work.

Section 6, Training (Part I.E.3.a.viii)

This section, titled Training, details how operators are informed of the requirements for controlling pollutants, including trash, for compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.viii. Training: *The permittee must provide information to operators of applicable construction activities as necessary to ensure that each operator is aware of the permittee's applicable requirements, including controlling pollutants such as trash. The training must also include information on trash as pollutant source.*

As Part of its Education and Outreach Plan, El Paso County provides up to four (4) stormwater educational seminars to members of the Housing and Building Association of Colorado Springs. Topics include overview of

El Paso County Stormwater Permitting Requirements, Inspection Program, Illicit Discharge Ordinance and other stormwater compliance assistance topics (e.g., dewatering, nutrients, etc.).

Section 7, Overlapping Permit Areas (Part I.E.3.a.ix)

This section, titled Overlapping Permit Areas, details the stormwater procedures in cases of overlapping permit areas for compliance with the Construction Sites Program.

MS4 Permit Requirement:

Part I.E.3.a.ix. For Applicable Construction Activities that Overlap Multiple Permit Areas, when a written agreement is in place with a co-regulating MS4 permittee:

(A) Control measure requirements may be imposed on the operator in accordance with the requirements of a co-regulating MS4 permittee pursuant to the written agreement.

(B) Site plan review/acceptance and site inspection actions may be conducted by a co-regulating MS4 permittee to meet the requirement of the permit.

As a matter of routine course, El Paso County will not be utilizing this part of the permit. However in the event of a multijurisdictional project may benefit from this provision, El Paso County may enter into a co-regulating written agreement on a case by case basis. As such, no formal process is defined here.

Appendix 4: Stormwater Permit Applicability Evaluation Form

This form is to be used by El Paso County Project Engineers and the Engineer of Record to determine and document when a proposed construction project is an “applicable construction activity,” and if any exclusions to permitting apply. The Engineer of Record shall complete this form and include with plan submittal.

Part I. Project Information	
Project Name:	Project Number
Project Location:	Project Located in MS4 Permit Area (Y/N):
Project Description:	
If Project is located within MS4 permit area, provide copy of this completed form to Stormwater Quality Coordinator for reporting purposes; and save completed form in project file.	

Part II. Determination of Applicable Construction Activities (Refer to Part I.E.3 of MS4 Permit for definitions then check appropriate <i>Yes</i> or <i>No</i> boxes)			
Questions:	Yes	No	Notes:
1. Does project meet definition of Construction Activity in MS4 permit?			
2. Does the project disturb ≥ 1 acre of land?			
3. Is project part of a larger common plan of development?			
4. Does the project disturb < 1 acre of land but discharges to a sensitive area? (refer to ECM Table I-2 for guidance)			
5. Is Project Applicable Construction Activity? If: “Yes” to all questions; or “Yes” to 1 and 2; or “Yes” to 1 and 3; or “Yes” to 1 and 4; Then project <u>is an Applicable Construction Activity</u>			

If Part II #5 is yes, then continue on to Part III.

Part III. Evaluation of Stormwater Permit Exclusions (check <i>Yes</i> or <i>No</i> boxes)			
Questions:	Yes	No	Notes:
1. Does project qualify for R-Factor Waiver? (see requirements in permit, Part I.E.3.a.i (A)) Waiver application available here: https://www.colorado.gov/pacific/sites/default/files/RWAIVER%20app.pdf			If Yes, must submit waiver application to CDPHE for approval
2. Is project a large single-family residential lot, or agricultural zoned land larger than 2.5 acres with total site imperviousness ≤ 10 percent?			
3. Is project associated with oil and gas exploration, production, processing, treatment or transmission in Non-Urban Areas?			see MS4 permit Part I.E.3.a.i (C)
4. Do exclusions apply to this project?			

Appendix 5: Post Construction Oversight Procedures

Contents

Introduction	63
Purpose of Document	63
Section 1: Post Construction Regulatory Mechanisms (Part I.E.4.a.ii)	64
Section 2: Exemptions and Exclusions (Part I.E.4.a. i and iii)	66
Section 3: Control Measure Requirements – Design Standards (Part I.E.4.a.iv)	67
Section 4: Site Plan Requirements (Part 1.E.4.a.v)	67
Site Plan Review (Part I.E.4.a.v (B and C))	69
Section 5: Construction Inspection and Acceptance (Part I.E.4.a.vi)	70
Section 6: Long-Term Operation and Maintenance and Post Acceptance Oversight (Part I.E.4.a.vii)	70
Post Acceptance Oversight (Part I.E.4.a.vii(B))	71
Section 7: Enforcement Response (Part I.E.4.a.viii)	71
Section 8: Tracking (Part I.E.4.a.ix)	72
Section 9: Training (Part I.E.4.a.x)	72
Section 10, Overlapping Permit Areas (Part I.E.4.a.xi)	74

Introduction

Protecting the quality of stormwater runoff is required by the Colorado Discharge Permit System (CDPS) Regulations. The procedures described in this document detail compliance with requirements of the Municipal Separate Storm Sewer System (MS4) Permit issued by the Colorado Department of Public Health and Environment (CDPHE). The CDPHE, Water Quality Control Division (WQCD), through the MS4 permit issued to the Permittee, requires the Permittee to control and reduce the discharge of pollutants to protect stormwater quality and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act and the Colorado Discharge Permit Regulations (Colorado Regulation 61). Specifically, 61.8(11) Conditions for Phase II Municipal Stormwater Permits states

(a) An individual permit or general stormwater permit certification issued to a regulated small MS4 shall contain the following requirements, at a minimum:

(i) ...regulated small MS4 develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act (25-8-101 et seq., C.R.S.). ...Implementation of BMPs consistent with the provisions of the stormwater management program required pursuant to this section and the provisions of the permit required pursuant to subsection (ii) constitutes compliance with the standard of reducing pollutants to the MEP...

(ii) Minimum control measures (management programs).

(E) Post-construction stormwater management in new development and redevelopment

(I) The permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the small MS4. The program must ensure that controls are in place that would prevent or minimize water quality impacts.

(II) The permittee must:

(a) Develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community;

(b) Use an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment projects to the extent allowable under State or local law; and

(c) Ensure adequate long-term operation and maintenance of BMPs.

As required in the MS4 general permit (COR-090000) Post Construction Stormwater Management in New Development and Redevelopment Program, a program to reduce the discharge of pollutants to the MS4 from applicable public and private development sites must be implemented.

Purpose of Document

This procedure, titled *Stormwater Post-Construction Program Procedures*, documents the process for complying with the Post-Construction Stormwater Management in New Development and Redevelopment Program in the MS4 Permit.

The procedure may change without notice if it is found to no longer be effective and/or compliant with the MS4 permit requirements. Unless significant changes warrant, this Document is reviewed annually and updated as necessary.

Section 1: Post Construction Regulatory Mechanisms (Part I.E.4.a.ii)

This section, titled Post Construction Regulatory Mechanism, documents the regulatory mechanism used to meet the requirements of the Post-Construction Stormwater Management in New Development and Redevelopment Program.

Permit Requirement:

Part I.E.4.a.ii. Regulatory Mechanism: *To the extent allowable under state or local law, implement a regulatory mechanism to meet the requirements in Part I.E.4.a., including:*

(A) Require control measures to be implemented for all applicable development sites.

(B) Enforce the conditions of the exclusions above if applicable.

(C) Require the long-term operation and maintenance of control measures

(D) Ensure that mechanisms are in place as necessary to meet this requirement for control measures used to meet the requirements of this permit by an applicable development site in the permit area that are located outside of the jurisdictional control of the permittee.

(E) Implement sanctions against entities responsible for applicable development sites and for the long-term operation and maintenance of the control measures.

The following regulatory mechanisms are the stormwater quality requirements to reduce the discharge of pollutants to the MS4 from applicable development sites.

For the review of all applicable construction sites the El Paso County Project Engineer uses the El Paso County Engineering Criteria Manual (ECM), El Paso County/City of Colorado Springs Drainage Criteria Manuals Volume 1, Volume 2, and Volume 1 Update (DCM1, DCM2, and DCM Update) and El Paso County Land Development Code (LDC). The sections of County codes and criteria applicable to water quality requirements include the following:

ECM: Chapter 3; Chapter 5, section 5.6; Appendix G and Appendix I, section I.7 and I.8

DCM1: 1.6, 1.7, 2.6, and 4.8 (as superseded by ECM Appendix I and DCM Update)

DCM2: 4.0 (as amended by ECM Appendix I and DCM Update)

DCM Update: 6.7.1, Chapter 13 portions (full-spectrum detention)

LDC: 6.2.5(C)(2)(i), 6.3.2, and 6.3.5

DCM2 is adopted as the County's stormwater quality design criteria with ECM Appendix I as an Addendum that provides additions and revisions as applicable to the County in order to expand its scope to cover rural areas and other situations specific to the County.

ECM Appendix I, Section I.7. provides requirements for permanent water quality BMPs (control measures). For the purposes of MS4 Permit compliance, only projects meeting the “applicable development sites” definition in the permit are required to implement the requirements.

City of Colorado Springs Drainage Criteria Manual 2014 Update: Chapter 6 and Section 3.2.1 of Chapter 13, as adopted January 27, 2015.

The Urban Drainage and Flood Control District’s Urban Storm Drainage Criteria Manual: Volume 3, Chapter 7, Construction BMPs (version applicable at time of project commencement).

El Paso County requires maintenance agreements and easements for privately owned permanent stormwater control measures in accordance with ECM Section I.7.7. A copy of the agreement templates are found in Appendix G of the ECM.

Section 2: Exemptions and Exclusions (Part I.E.4.a. i and iii)

This section, titled Exemptions and Exclusions, documents the requirements for sites that can be exempted or excluded from the Post-Construction Stormwater Management in New Development and Redevelopment Program to ensure all exclusions meet the requirements of the Post-Construction Stormwater Management in New Development and Redevelopment Program.

MS4 Permit requirement:

Part I.E.4.a.i. Excluded Sites: Permittees may exclude the following from the requirements of an applicable development site:

- A) *Pavement Management Sites;*
- B) *Excluded Roadway Redevelopment;*
- C) *Excluded Existing Roadway Areas for Roadway Redevelopment;*
- D) *Aboveground and underground utilities;*
- E) *Large Lot Single Family Sites;*
- F) *Non-Residential and Non-Commercial Infiltration Conditions;*
- G) *Sites with Land Disturbance to Undeveloped Land that will Remain Undeveloped;*
- H) *Stream Stabilization Sites;*
- I) *Trails;*
- J) *Oil and Gas Exploration;*
- K) *County Growth Areas*
 - 1) *Construction activities on sites that began as part of a plan of development prior to July 1, 2019;*
 - 2) *Agricultural facilities and structures on agricultural zoned lands (e.g., barns and stables);*
 - 3) *Residential development site or larger common plans of development for which associated construction activities results in a land disturbance of less than or equal to 10 acres and have a proposed density of less than 1,000 people per square mile.*
 - 4) *Commercial or industrial development site or larger common plans of development for which associated construction activities results in a land disturbance of less than or equal to 10 acres.*

Part I.E.4.a.iii. Regulatory Mechanism Exemptions: *Procedures must be implemented to ensure that any exclusions, exemptions, waivers, and variances included in the regulatory mechanism are applied in a manner that complies with the terms and conditions of this permit.*

El Paso County developed a checklist to aide in the determination of when a permanent stormwater management facility will be required. The Engineer of Record shall use this checklist to determine and document: the need for a permanent water quality control measure; or if an applicable development site is eligible for any of the exclusions provided in Part 1.E.4.A.iii. of the permit; and the base design standard used.

The template of the checklist used is included in the Appendix of the El Paso County MS4 Program Description Document. The checklist can also be found on the stormwater page(s) of the Planning and Community Development and Public Works Departments websites.

The completed checklist is signed and dated by the El Paso County review engineer or project manager in the case of capital improvement projects. Completed checklists are included with the project file documentation (EDARP for

Planning and Community Development; and for Department of Public Works projects, on shared network file located at: \\chinook\dot\dot_projects\ Engineering\ Projects.

Section 3: Control Measure Requirements – Design Standards (Part I.E.4.a.iv)

This section, titled Design Standards, documents the standards used for ensuring compliance with the Post-Construction Stormwater Management in Development and Redevelopment Program. It also documents the requirements for submittals to ensure procedures to determine the design standard are documented.

MS4 Permit Requirement:

Part I.E.4.a.iv. Control Measure Requirements: *The permittee’s requirements and oversight for applicable development sites must be implemented to address the selection, installation, implementation, and maintenance of control measures in accordance with requirements in Part I.B. The “base design standard” is the minimum design standard for new development and redevelopment.*

Part I.E.4.b.iv. Control Measure Requirements: *Procedures to determine which design standard applies to each applicable development site and the design specifications for each design standard (if applicable).*

The process used in El Paso County to determine when permanent stormwater quality control measures are required and the selection process for appropriate control measures are discussed in ECM Appendix I, Section I.7 and I.7.2. El Paso County uses the “Four Step Process” to determine BMP (control measure) selection. A process flow diagram has been developed to aid in this process and is found as Figure I-1, in the ECM.

Standards for the development of control measures may be taken from the following sources for both structural and non-structural control measures:

- El Paso County Engineering Criteria Manual (ECM);
- Standards adopted by reference in Chapter 1, Section 1.5 of the ECM (i.e., those standards applicable at the time of advertisement for construction of Capital Improvement projects, as defined in contract documents.);
- City of Colorado Springs Drainage Criteria Manual 2014 Update: Chapter 6 and Section 3.2.1 of Chapter 13.
- The Urban Drainage and Flood Control District’s Urban Storm Drainage Criteria Manual: Volume 3, Chapter 7, Construction BMPs (version applicable at time of project design).

Section 4: Site Plan Requirements (Part 1.E.4.a.v)

This section, titled Site Plan Requirements, documents the requirements for site plan submittals to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.v. (A) Site Plans, Site Plan Requirements, *Site plans that include control measures for the applicable development sites must include the following:*

- 1) Design details for all structural control measures implemented to meet the requirements of Part I.E.4.*
- 2) A narrative reference for all non-structural control measures for the site, if applicable. "Non-structural control measures" are control measures that not structural control measures, and include, but are not limited to; control measures that prevent or reduce pollutants being introduced to water or that prevent or reduce the generation of runoff or illicit discharges.*

For the review of project documents, the EPC Project Engineer checks the site plan, grading and erosion control plan, drainage report and stormwater management plan to ensure that all structural control measures included therein have design details provided. The approved design details are checked to be in compliance with the Engineering Criteria Manual or other referenced criteria source therein.

The EPC Project Engineer checks the stormwater management plan as well as the grading and erosion control plan with the El Paso County checklists to ensure that non-structural control measures are shown on site. Upon completion of County review, the EPC Project Engineer signs and dates each checklist used during the review and they are kept with other project documentation.

MS4 Permit Requirement:

Part I.E.4.a.v. (A) Site Plans, Site Plan Requirements, *Site plans that include control measures for the applicable development sites must include the following:*

- 3) Documentation of operation and maintenance procedures to ensure the long term observation, maintenance, and operation of the control measures. The documentation shall include frequencies for routine inspections and maintenance activities.*

Permanent stormwater control measures that are to be privately owned and maintained may be reviewed by PCD or DPW Project Engineers. The Project Engineer ensures that the appropriate operation and maintenance manual as well as a signed maintenance and access agreement has been submitted and that it is filled out by the applicant accurately for each permanent stormwater management facility included in the project. . The Operations and Maintenance Manual for privately owned and maintained permanent stormwater management facilities is included with a maintenance and access agreement and is recorded with El Paso County Clerk and Records Office. Upon completion of a project the structures are included in the El Paso County Inventory as "private" structure for MS4 tracking purposes.

For permanent stormwater control measures that are to be owned and maintained by El Paso County the Project Engineer ensures that an appropriate operations and maintenance (O&M) manual is developed for each permanent stormwater management facility included in the project. Upon completion of the project and acceptance of the structure(s) into the El Paso County inventory, a Work Order is created for inspections and routine maintenance. The O&M manual is transferred to the El Paso County Operations Division along with the Work Order creation.

For both types of projects (i.e., private and public maintained) the frequency of inspections and maintenance are documented in the site specific O&M Manual(s).

MS4 Permit Requirement:

Part I.E.4.a.v. (A) Site Plans, Site Plan Requirements, *Site plans that include control measures for the applicable development sites must include the following:*

4) Documentation regarding easements or other legal means for access of the control measure sites for operation, maintenance, and inspection of control measures.

For all permanent stormwater management control measures that are to be maintained by a private entity (i.e. not the County) the ECM Appendix I, Section I.7.7, presents the requirement to include easements in the Private Detention Basin/Stormwater Quality Control Best Management Practice Maintenance Agreement and Easement (Maintenance Agreement). The Project Engineer makes sure that the site plan contains all easements, including access and maintenance easements for any permanent stormwater management facility. Additionally; the project engineer makes sure that the maintenance agreement is submitted with the information filled in appropriately for all structures associated with the project. The maintenance agreement contains legal means for the county to access, inspect, and maintain the control measures, when not done by the owner.

For all permanent stormwater management control measures that will be maintained by El Paso County the project engineer ensures all easement and/or right of way identified in proposed construction plans are obtained prior to construction. Right of Way and easements are approved by the Board of County Commissioners and recorded by the El Paso County Clerk and Records Offices. Easements and/or right of way are identified in the County GIS system, and copies kept with project documentation located: [\\chinook\dot\dot_projects\ Engineering\ Projects](#).

Site Plan Review (Part I.E.4.a.v (B and C))

This sub-section, titled Site Plan Review, documents the requirements for site plan review to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.v (B) Site Plan Review: *The permittee shall implement a site plan review process for applicable development sites. The site plan review shall include the following minimum requirements designed to prevent inadequate control measures from being implemented or modified:*

- 1) Confirmation that control measures meet the requirements of Part I.E.4.*
- 2) Confirmation that site plans meet the requirements of Part I.E.4.a.v.*

(C) The permittee must meet the requirements of Part I.E.4.a.v.(A) and (B) before approving any modifications to the site plan.

The EPC Project Engineers use standard checklists for the review of both the Grading and Erosion Control Plan and Stormwater Management Plan (SWMP). These checklists can be found in the El Paso County ECM in Appendix E. For Permanent Stormwater Management Facilities, a Post-Construction Stormwater Management Applicability Evaluation form is used to determine if an applicable development site is eligible for an exclusion included in Part I.E.4.a.i of the MS4 permit; and for documenting which base design standard is used.

Section 5: Construction Inspection and Acceptance (Part I.E.4.a.vi)

This section, titled Construction Inspection and Acceptance, documents the requirements for site inspections to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.vi. Construction Inspection and Acceptance: *The permittee must implement inspection and acceptance procedures to ensure that control measures are installed and implemented in accordance with the site plan and include the following:*

(A) Confirmation that the completed control measure operates in accordance with the approved site plan.

(B) All applicable development sites must have operational permanent water quality control measures at the completion of the site. In the case where permanent water quality control measures are part of future phasing, the permittee must have a mechanism to ensure that all control measures will be implemented, regardless of completion of future phases or site ownership. In such cases, temporary water quality control measures must be implemented as feasible and maintained until removed or modified. All temporary water quality control measure must meet one of the design standards in Part I.E.4.a.iv.

For the purpose of this section, completion of a site or phase shall be determined by the issuance of a certificate of occupancy, use of the completed site area according to the site plan, payment marking the completion of a site control measure, the nature of the selected control measure or equivalent determination of completion as appropriate to the nature of the site.

Throughout the construction process, El Paso County Inspectors perform routine inspections to ensure applicable development projects are proceeding according to approved plans. Sections 1.12 and 5.10.6 of the ECM require the submission of Engineering Record drawings, (also known as “as-builts”) for all projects that included public improvements or common development improvements (e.g., private stormwater management facilities).

The ECM Chapter 5, Section 5.3.15 provides the policies and procedural guidelines for providing an acceptable guarantee of performance and compliance with County and State codes and acceptance of public improvements. At the completion of a project the EPC inspector evaluates permanent stormwater management facilities for general conformance with the approved plans. The inspector uses criteria presented in ECM Appendix I, Section I.5.2.G, and the approved project site plans to determine if the permanent stormwater management structures are constructed consistent with approved plans and are in acceptable condition (e.g., no obvious maintenance or repairs required).

Section 6: Long-Term Operation and Maintenance and Post Acceptance Oversight (Part I.E.4.a.vii)

This section, titled Long-Term Operation and Maintenance and Post Acceptance Oversight, documents the requirements for site inspections to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.vii. Long-Term Operation and Maintenance and Post Acceptance Oversight:

(A) Procedures to enforce the requirements for the owner or operator to implement and maintain control measures when necessary.

Enforcement of the requirements to implement and maintain permanent stormwater quality control measures (BMPs) is explicitly stated within the content of each Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement document. The templates for the agreements are found in Appendix G of the El Paso County ECM.

For permanent stormwater control measures that are to be maintained by a private entity (i.e., not El Paso County), the Maintenance Agreement(s) are submitted for recordation with the Final Plat or upon approval of the site development plan. All Maintenance Agreements and the performance thereof become a covenant running with the land on which it is located.

Post Acceptance Oversight (Part I.E.4.a.vii(B))

MS4 Permit Requirement:

Part I.E.4.a.vii. Long-Term Operation and Maintenance and Post Acceptance Oversight:

(B) Oversight shall include inspections of field conditions and control measures to confirm conformity with the site plan, identify any inadequate control measures, and identify control measures requiring routine maintenance, such as trash removal. All functional elements of control measures shall be inspected at a frequency determined by the permittee. Inspections of each control measure shall occur at least once during the permit term except when inspections for oversight of control measures on individual residential lots serving only the individual lot shall occur as determined by the permittee and may rely on alternative oversight process.

Upon Final Acceptance, permanent stormwater quality management facilities are entered into an El Paso County MS4 Permanent BMP Inventory. Upon entry into the inventory, a work order is created in the Department of Public Works to include an inspection once every five (5) years for privately owned and maintained structures; and once a year for county owned and maintained structures. Inspection forms, specific for each type of permanent BMP are used to guide and document the inspection process for all structures. Completed Inspection forms are kept with other structure specific documents in the El Paso County MS4 Permanent BMP Inventory.

For county maintained structures, work orders for maintenance and repair are created upon completion of an inspection indicating the need for maintenance. For privately owned and maintained structures, when a County oversight inspection indicates the need for maintenance and repair, the owner will be notified consistent with the process included in the Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement.

Section 7: Enforcement Response (Part I.E.4.a.viii)

This section, titled Enforcement Response, documents the requirements for enforcement to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.viii. Enforcement Response: Implement appropriate written enforcement procedures and actions to meet the requirements of Part I.E.4. The permittee must escalate enforcement as necessary based on the severity of violation and/or the recalcitrance of the violator to ensure that findings of a similar nature are enforced upon consistently. The permittee must have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements. Written enforcement procedures must include informal, formal, and judicial enforcement responses.

Part I.E.4.c.vii. Enforcement Response: A list of citation(s) and location(s) of applicable documents that demonstrate that the permittee has written procedures for enforcement response. The document(s) must detail the types of escalating enforcement responses the permittee will take in response to common violations and time periods within which responses will take place.

Enforcement of the requirements to implement and maintain permanent stormwater quality control measures (BMPs) is explicitly stated within the content of each Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement document. The templates for these agreements are found in Appendix G of the El Paso County ECM. Project specific agreements approved by the Board of County Commissioners are kept with other project specific documentation.

Section 8: Tracking (Part I.E.4.a.ix)

This section, titled Tracking, documents the tracking requirements for control measures to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.ix. Tracking: Implement and document procedures and mechanisms to track the location of and adequacy of operation of control measures implemented in accordance with the program.

For privately maintained facilities, all structure specific documents including: Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement; Engineering Record Drawings; Operation and Maintenance Manual, inspection reports and enforcement documentation are entered in to the El Paso County MS4 Permanent BMP Inventory for recordkeeping and tracking. Locations of structures are identified in the Maintenance Agreements.

Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement are not used for county owned facilities. Instead DPW Work Orders are created that contain the facility information including location, and are used to schedule routine inspection and maintenance.

Section 9: Training (Part I.E.4.a.x)

This section, titled Training, documents the training requirements for review, inspection, and enforcement of control measures to ensure compliance with Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.x. Training:

Train applicable municipal staff to inspect the control measures in accordance with the permittee's procedures in Part I.E.4.a.vi and vii. The permittee must identify those who will be likely to inspect the control measures and provide training to those individuals. The training must also include information on trash and its effects on water quality.

County Inspectors inspect permanent stormwater quality control facilities. Staff are trained using regionally recognized training program(s) specific to Post Construction Stormwater Management Facilities. Copies of staff training registrations and certification are kept in MS4 compliance documentation maintained by the El Paso County Stormwater Quality Coordinator. Training records are located: [\\chinook\dot\dot_data\doe\doe_copy\NPDES\CDPHE-MS4 Permit\Permit 2016 to 2021\Compliance Docs\Training](#)

Section 10, Overlapping Permit Areas (Part I.E.4.a.xi)

This section, titled Overlapping Permit Areas, details the stormwater procedures followed in cases of overlapping permit areas for compliance with the Post-Construction Stormwater Management in Development and Redevelopment Program.

MS4 Permit Requirement:

Part I.E.4.a.xi. For Applicable Development Sites that Overlap Multiple Permit Areas co-regulating MS4 permittee), when a written agreement is in place with a co-regulating MS4 permittee the following is required:

(A) Control measure requirements may be imposed on the operator in accordance with the requirements of a co-regulating MS4 permittee pursuant to the written agreement. This requirement does not apply to applicable development sites in the permit area of the Colorado Department of Transportation.

(B) Site plan review/acceptance and site inspection actions may be conducted by a co-regulating MS4 permittee to meet the requirement of the permit.

As a matter of routine course, El Paso County will not be utilizing this part of the permit. However in the event a multijurisdictional project may benefit from this provision, El Paso County may enter into a co-regulating Memorandum of Agreement on a case by case basis. As such, no formal process is defined here.

Appendix 6: Post Construction Stormwater Management Applicability Evaluation Form

This form is to be used by the Engineer of Record to evaluate applicable construction activities to determine if the activities are eligible for an exclusion to permeant stormwater quality management requirements. Additionally Part III of the form is used to identify and document which allowable control measure design standard is used for the structure.

Part I. Project Information	
1. Project Name:	
2. El Paso County Project #:	3. ESQCP #:
4. Project Location:	Project Location in MS4 Permit Area (Y or N):
5. Project Description:	
If project is located within the El Paso County MS4 Permit Area, please provide copy of this completed form to the Stormwater Quality Coordinator for reporting purposes; and save completed form with project file.	

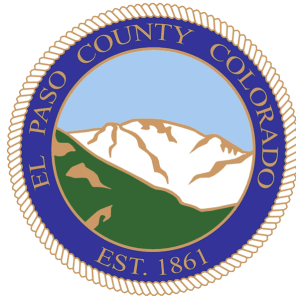
Part II. Exclusion Evaluation: Determine if Post-Construction Stormwater Management exclusion criteria are met. Note: Questions A thru K directly correlate to the MS4 permit Part I.E.4.a.i (A) thru (K). If Yes, to any of the following questions, then mark Not Applicable in Part III, Question 2.				
Questions	Yes	No	Not Applicable	Notes:
A. Is this project a "Pavement Management Site" as defined in Permit Part I E.4.a.i.(A)?				This exclusion applies to "roadways" only. Areas used primarily for parking or access to parking are not included.
B. Is the project "Excluded Roadway Development"?				
• Does the site add less than 1 acre of paved area per mile?				
• Does the site add 8.25 feet or less of paved width at any location to the existing roadway?				
C. Does the project increase the width of the existing roadway by less than 2 times the existing width?				For redevelopment of existing roadways, only the area of the existing roadway is excluded from post-construction requirements when the site does not increase the width by two times or more. <i>This exclusion only excludes the original roadway area it does NOT apply to entire project.</i>
D. Is the project considered an aboveground and Underground Utilities activity?				Activity can NOT permanently alter the terrain, ground cover or drainage patterns from those present prior to the activity

E. Is the project considered a “Large Lot Single-Family Site”?				Must be a single-residential lot or agricultural zoned land, ≥ 2.5 acres per dwelling and total lot impervious area < 10 percent.
--	--	--	--	--

Questions (cont'd)	Yes	No	Not Applicable	Notes
F. Do Non-Residential or Non-Commercial Infiltration Conditions exist? Post-development surface conditions do not result in concentrated stormwater flow or surface water discharge during an 80 th percentile stormwater runoff event.				Exclusion does not apply to residential or commercial sites for buildings. A site specific study is required and must show: rainfall and soil conditions; allowable slopes; surface conditions; and ratios of imperviousness area to pervious area.
G. Is the project land disturbance to Undeveloped Land where undeveloped land remains undeveloped following the activity?				Project must be on land with no human made structures such as buildings or pavement.
H. Is the project a Stream Stabilization Site?				Standalone stream stabilization projects are excluded.
I. Is the project a bike or pedestrian trail?				Bike lanes for roadways are not included in this exclusion, but may qualify if part of larger roadway activity is excluded in A, B or C above.
J. Is the project Oil and Gas Exploration?				Activities and facilities associated with oil and gas exploration are excluded.
K. Is the project in a County Growth Area?				Note, El Paso County does not apply this exclusion. All Applicable Construction Activity in El Paso County must comply the Post-Construction Stormwater Management criteria.

Part III. Post Construction (Permanent) Stormwater Control Determination		
Questions	Yes	No
1. Is project an Applicable Construction Activity?		
2. Do any of the Exclusions (A-K in Part II) apply?		
<p>If the project is an Applicable Construction Activity and no Exclusions apply then Post-Construction (Permanent) Stormwater Management is required. Complete the applicable sections of Part IV below and then coordinate signatures for form and place in project file.</p> <p>If the project is not an Applicable Construction Activity, or Exclusion(s) apply then Post-Construction (Permanent) Stormwater Management is NOT required. Coordinate signatures for form and place in project file.</p>		

Appendix 7: Municipal Operations Procedures



El Paso County Municipal Operations Stormwater Manual

Revised:

October 2018

Contents

Introduction	79
Section 1: Applicable Facilities and Requirements (Part I.E.5.a.ii and Part I.E.5.c.i.(A)).....	79
Section 2: Facilities with NPDES or CDPS Permit Coverage (Part I.E.5.c.i.(B))	80
Section 3: Inspections (Part I.E.5.a.i.(C))	80
Section 4: Municipal Operations and Maintenance Procedures (Part I.E.5.a.iii)	81
Section 5: Nutrient Source Reductions (Part I.E.5.a.iv)	82
Section 6: Outdoor Bulk Storage (Part I.E.5.a.v)	82
Section 7: Training (Part I.E.5.a.vi)	84
Attachment A: Standard Operating Procedures	85

Introduction

The Phase II MS4 Permit issued to El Paso County by the Colorado Department of Public Health and Environment (CDPHE), Water Quality Control Division (Division) requires the County to implement a program for Pollution Prevention/Good Housekeeping for facilities and operations that they own, operate, or perform within the MS4 permit area. In the County, the MS4 permit area is a patch work of urban areas surrounding and contained within the City of Colorado Springs. The implemented program must prevent or reduce water quality impacts from pollutants being discharged to the MS4 from municipal facilities and operations. MS4 is defined in the MS4 permit as a publicly owned conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is designed or used for collecting stormwater.

Section 1: Applicable Facilities and Requirements (Part I.E.5.a.ii and Part I.E.5.c.i.(A))

The permittee must implement a program for Pollution Prevention/Good Housekeeping for facilities and operations that they own, operate, or perform within the permit area. The program must prevent or reduce water quality impacts from pollutants being discharged to the MS4 from municipal facilities and operations. “Applicable municipal operations and facilities” are municipal operations and facilities that are not authorized by a separate CDPS or NPDES discharge permit.

Part I.E.5.a.ii. Municipal Facility Runoff Control Measures, of the MS4 permit, states, “(A) *The permittee shall implement control measures to prevent or reduce potential discharges of pollutants to the MS4 from the applicable municipal facilities listed below. New written procedures shall be developed and implemented for any new applicable municipal facilities prior to associated pollutant sources being present.*

- 1) *Vehicle maintenance facilities*
- 2) *Asphalt and concrete batch plants which are not already authorized by a separate CDPS or NPDES discharge permit*
- 3) *Solid-waste transfer stations where waste and recyclables are briefly held before further transport*
- 4) *Outdoor storage yards with exposed stockpiles of materials, including stockpiles of road deicing salt, salt and sand, sand, and rotomill material*

El Paso County facilities meeting the applicable municipal facility definition include the following:

- Chuck Brown Public Work Maintenance Facility
- Household Hazardous Waste Collection Facility
- Bear Creek Park Maintenance Facility
- Mark Dabbling Fleet Maintenance Facility
- Sheriff's Office Fleet Maintenance Facility

When new pollutant sources associated with operation activities conducted by the County at an applicable facility, the activities are reviewed to ensure new procedures are not necessary. If a new procedure is necessary, it is developed before the pollutant sources are present onsite.

Part I.E.5.a.ii. (B) of the MS4 permit, states *"The permittee shall implement the following categories of control measures as necessary to prevent or reduce the pollutant sources present:*

- 1) Preventive maintenance*
- 2) Good housekeeping*
- 3) Spill prevention and response procedures*
- 4) Structural control measures*
- 5) Evaluation of non-stormwater discharges*
- 6) Employee training"*

At this time, there are five applicable municipal operations and facilities within the El Paso County MS4 Permit area (see above). The referenced categories of control measures are implemented as appropriate through the Facility Runoff Control Plan(s).

Each applicable municipal operation and facility listed above has a Facility Runoff Control Plan that documents the following:

- Facility identification
- Description of all pollutant sources
- Control measures implemented, including installation and implementation specifications and information
- Staff (position title) responsible for implementation of control measures and associated documentation
- Description of control measures implemented for bulk storage structures.

Section 2: Facilities with NPDES or CDPS Permit Coverage (Part I.E.5.c.i.(B))

The County does not own or operate any facilities subject to separate CDPS or NPDES permit coverage under the state's general stormwater permits for discharges of stormwater associated with industrial activity. However El Paso County Facilities and Strategic Infrastructure Management Department maintains a CDPS Permit for Powerwashing of Outdoor Structures Permit (COG 607011)

Section 3: Inspections (Part I.E.5.a.i.(C))

Part I.E.5.ii. Municipal Facility Runoff Control Measures in the MS4 permit states, (C) *The permittee shall implement written municipal facility inspection procedures, which must at a minimum include the following:*

- 1) An annual visual inspection of each applicable municipal facility.*
- 2) A verification that the written procedures and documentation reflect current conditions.*

- 3) Observation of locations and areas where stormwater from municipal facilities are discharged off-site; or discharged to waters of the state, or to a storm sewer system that drains to waters of the state.*
- 4) Observation of facility conditions, including pollutant sources and control measures, to identify inadequate control measure and control measure requiring maintenance.*

The Public Works Department staff or their designee will make annual visual inspection of all applicable municipal facilities in the County. The scope of the annual inspection includes observation of stormwater discharge locations and areas. These areas are displayed on the facility map. The scope of the inspection also includes observation of facility conditions, including pollutant sources and control measures, to identify inadequate control measure and control measure requiring maintenance.

Inspection records are filed in the stormwater files on the Public Works shared drive and a copy is given to the Public Works Director and/or the Operations Manager. The following information is documented on the inspection report for all inspections conducted:

- 1) Inspection date
- 2) Name of inspector
- 3) Applicable facility identification
- 4) Inspection findings including, when present: inadequate control measures, control measures requiring routine maintenance, and if there was any evidence of polluted discharges from the facility
- 5) Confirmation and documentation that the control measures are adequate or a list of follow up actions.

If follow up actions are necessary, it is indicated on the report and a follow up date is noted to ensure corrective action is taken.

Section 4: Municipal Operations and Maintenance Procedures (Part I.E.5.a.iii)

The MS4 permit requires implementation of procedures that prevent or reduce stormwater pollution from the following operations conducted by the County:

- 1) Operation and maintenance of streets, roads, highways
- 2) Operation and maintenance of municipal parking lots
- 3) Operations at maintenance and storage yards
- 4) Operations at maintenance shops with outdoor storage areas
- 5) Operation and maintenance of snow dumps/snow disposal areas
- 6) Operation and maintenance of sites used for temporary storage of sweeper tailings or other waste piles
- 7) Park and open space maintenance
- 8) Building maintenance
- 9) New construction of municipal facilities
- 10) Application of pesticides, herbicides, and fertilizers
- 11) Large outdoor festivals and events
- 12) Construction activities not subject to the requirements of Part I.E.3

- 13) Maintenance, replacement, and construction of utilities and the storm system, including operations, such as storage, dewatering, or disposal, associated with removal of sediment, debris, and other pollutant sources from the MS4, including removal of materials, such as trash, from control measures implemented in accordance with Part I.E.4, unless covered by a separate CDPS or NPDES permit.

This program requirement is applicable to all County operations. The County has developed standard operating procedures for activities associated with each of the operations listed above. Standard operating procedures are located on the Public Works drive shared by and accessible to all Public Works employees. A list of the County's standard operating procedures for stormwater pollution prevention is located as Attachment A to this Municipal Operations Stormwater Manual.

When new pollutant sources associated with operation activities conducted by the County are identified, the activities are reviewed to ensure new procedures are not necessary. If a new procedure is necessary, it is developed before the pollutant sources are present onsite.

Section 5: Nutrient Source Reductions (Part I.E.5.a.iv)

The MS4 permit requires the County to *"evaluate, identify, and document the municipal operations and facilities that are and/or have the potential to contribute nitrogen and phosphorus to the waters receiving the discharge authorized under this permit (identified municipal operations nutrient sources)."* The MS4 permit also requires that the County include the storage and application of fertilizer, including subsequent stormwater or irrigation runoff from areas where fertilizer has been applied, as an identified municipal operations nutrient source if these operations were not covered under the municipal facility plan or standard operating procedures.

Municipal operations have been evaluated to determine if there is potential to contribute nitrogen and phosphorus to discharges under the MS4 permit. The following municipal operations have been identified as municipal operations nutrient sources:

- Herbicide Pesticide and Fertilizer Application and Storage
- Parks Management

These operations are covered under the municipality facility plan and/or standard operating procedures. El Paso County Parks Department maintains a Parks Maintenance Manual that address herbicide, pesticide and fertilizer application along with overall park maintenance procedures. The El Paso County Parks Maintenance Manual is maintained by El Paso County Parks Division.

Section 6: Outdoor Bulk Storage (Part I.E.5.a.v)

Per the MS4 permit, outdoor bulk storage structures, of more than 55 gallons, for petroleum products and any other liquid chemicals located at applicable municipal facilities must have control measures implemented that provide secondary containment or equivalent protection that contains all spills and prevents any spilled material from entering state waters. For the scenario of a single containment system serving multiple tanks, the containment system must have sufficient capacity to contain 10% of the volume of containers, or the volume of the largest container plus 10%, whichever is greater. Bulk storage on mobile refuelers that are subject to the authority and control of the U.S. Department of Transportation, as defined in the Memorandum of Understanding between the Secretary of Transportation and the Administrator of EPA, dated November 24, 1971 are not subject to these requirements. Before the implementation of such controls, the permittee shall

implement practices, such as spill prevention and response, to prevent or reduce pollutants in runoff associated with bulk storage structures.

The County owns several fuel tanks. The tanks are all double walled and contained within a secondary containment structure. The tanks meet the MS4 permit requirements for “secondary containment.” El Paso County Environmental Services Division, routinely inspects all fuel and oil storage tank and provides annual Spill Prevention Containment and Countermeasure Training consistent 40 CFR part 112.

The County also owns and operates several bulk storage tanks for liquid deicer (e.g., magnesium chloride solution). Bulk liquid deicer storage tanks are all contained within a secondary containment structure meeting the requirements of Part I.E.5.a.v. These structures are identified in the Facility Runoff Control Plans as appropriate.

Section 7: Training (Part I.E.5.a.vi)

Applicable municipal staff are trained on facility plans and standard operation procedures related to the operations they perform. Training is provided to staff at facilities with Facility Run off Control Plans annually. All of the Department of Public Works operations staff are provided with an overview of Facility Runoff Control Plan and Illicit Discharge requirements annually.

Employees that conduct municipal facility inspections are trained on how to inspect the control measures present at the facility.

Training informs employees responsible for operations with the potential to result in an illicit discharge about the prohibitions against, and potential impacts associated with, illicit discharges from municipal operations. The training includes information on trash and its effects on water quality.

Name and title of each individual trained, date of training, the type of training, and a list of topics covered are documented for each training on the PW Training log located at:

\\chinook\dot\dot_data\doe\doe_copy\NPDES\Stormwater – Pollution Prevention and Goodhousekeeping\training.

Employee Type/Job Responsibilities	Training Type	Documentation
Staff Performing Public Works Operations	Municipal Facility Plan, All Municipal Operation SOPs, IDDE training	Name, title, date of training, type of training, and list of topics covered
Staff Performing Facility Stormwater Inspections	Municipal Facility Plan, All Municipal Operation SOPs	Name, title, date of training, type of training, and list of topics covered

Attachment A: Standard Operating Procedures

Standard Operating Procedures- Operations

A copy of the Standard Operating Procedures used for municipal operations can be found in the El Paso County Municipal Operations SOPs, revised October 2018.

- 1) Operation and maintenance of streets, roads, highways
 - Bridge Washing
 - Outdoor Vehicle Maintenance
 - Spill Prevention and Response Procedures
 - Street Sweeping
 - Street, Curb and Gutter Replacement and Construction
 - Street, Curb and Gutter Maintenance
- 2) Operation and maintenance of municipal parking lots
 - Street, Curb and Gutter Maintenance
 - Spill Prevention and Response Procedures
 - Street Sweeping
- 3) Operations at maintenance and storage yards
 - Spill Prevention and Response Procedures
 - Street Sweeping
 - Outdoor Material Storage
- 4) Operations at maintenance shops with outdoor storage areas
 - Outdoor Material Storage
 - Spill Prevention and Response Procedures
 - Street Sweeping
- 5) Operation and maintenance of snow dumps/snow disposal areas
 - Snow and Ice Control
 - Snow Storage
- 6) Operation and maintenance of sites used for temporary storage of sweeper tailings or other waste piles
 - Street Sweeper Cleaning and Waste
- 7) Park and open space maintenance
 - *Parks Maintenance Manual
 - Spill Prevention and Response Procedures
- 8) Building maintenance
 - Building Maintenance
 - Powerwashing
 - Spill Prevention and Response Procedures
- 9) New construction of municipal facilities
 - New Construction of municipal facilities
 - Outdoor Vehicle Maintenance
 - Spill Prevention and Response Procedures
- 10) Application of pesticides, herbicides, and fertilizers

*Fertilizer, Herbicide, Pesticide Application and Storage
Spill Prevention and Response Procedures

11) Large outdoor festivals and events
Large Outdoor Festivals and Events
Spill Prevention and Response Procedures

12) Construction activities not subject to the requirements of Part I.E.3
New Construction of municipal facilities
Outdoor Vehicle Maintenance
Street, Curb and Gutter Replacement and Construction
Street, Curb and Gutter Maintenance
Spill Prevention and Response Procedures

13) Maintenance, replacement, and construction of utilities and the storm system, including operations, such as storage, dewatering, or disposal, associated with removal of sediment, debris, and other pollutant sources from the MS4, including removal of materials, such as trash, from control measures implemented in accordance with Part I.E.4, unless covered by a separate CDPS or NPDES permit.
Hydrant and Potable Water Maintenance
Utility and Storm Sewer Replacement and Construction
Water Line Breaks

* SOP addresses nutrients as required in Regulation 85



El Paso County Municipal Operation SOPs

Revised September 2018

For More Information

John Chavez
3275 Akers Dr.
Colorado Springs, CO 80922
719 520 6826; 719 238 7114
johnchavez@elpasoco.com

Contents

Introduction	88
Bridge Cleaning	89
<i>Type 2: Maintenance Washing</i>	89
<i>Type 3: Preparatory Washing</i>	90
Building Maintenance	91
Equipment and Vehicle Maintenance.....	91
Fertilizer, Herbicide, and Pesticide Application and Storage.....	93
Hydrant Maintenance and Testing/ Potable Water Discharges	94
Large Outdoor Festivals and Events.....	96
New Construction Activities.....	97
Outdoor Material Storage.....	98
Power Washing	99
Parking Lot Maintenance	101
Parks and Open Space Maintenance	101
Spill Prevention and Response.....	102
Snow and Ice Control	104
Snow Storage	105
Street, Curb, and Gutter Maintenance/Replacement /Construction	105
Street Sweeper Cleaning and Waste.....	107
Street Sweeping	107
Utility and Storm Sewer Replacement and Construction	108
Water Line Breaks.....	109

Introduction

El Paso County is regulated by Colorado Discharge Permit System (CDPS) General Permit COR090011, Stormwater Discharges Associated with Municipal Separate Storm Sewer System (MS4) permit. Part I.E.5. of the permit requires El Paso County to implement a program for Pollution Prevention/Good Housekeeping for facilities and operations we own, operate or perform within the permit area. The program must prevent or reduce water quality impacts from pollutants discharged to the MS4 from municipal facilities and operations. “Applicable municipal operations and facilities” are municipal operations and facilities that are not covered by a separate CDPS or NPDES discharge permit.

This document contains all of the Standard Operating Procedures (SOPs) identified in the MS4 permit as a “minimum requirement.” The SOPs provided herein are intended to be a supplement to existing SOPs in place by the Fleet Management, Facilities Management, Park Maintenance and Household Hazardous Waste Division.

These SOP can and should be revised periodically to reflect current facilities, operations and best management practices. Please ensure staff are aware and trained in these procedures. When revisions are needed please inform the Stormwater Water Quality Coordinator of such need and he will make the needed changes.

Bridge Cleaning

Description

The cleaning of bridges, if not conducted properly, can contribute to stormwater pollution. This SOP was created to provide guidance to those conducting bridge cleaning activities. Bridge cleaning is considered an occasional incidental non-stormwater discharge that will not be addressed as an illicit discharge provided the following SOP (conditions) is followed. Discharges from bridge cleaning is not reasonably expected (based on the information referenced in Additional Resources) to be a significant source of pollutants to the MS4 because the nature of the discharge. These activities occur infrequently and would not be expected to contribute significant amounts of pollutants to the MS4. Any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to the MS4 is prohibited. Washing bridges containing lead-based paints is prohibited.

For the purposes of this SOP, bridge cleaning is broken into 3 types. Additional SOPs such as Spill Prevention and Response and Outdoor Material Storage may be relevant and should be referenced if needed.

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Type 1: Spot Cleaning

Bridges are periodically inspected and may be spot cleaned with water to prepare the structure for inspection. This activity involves the following steps:

- Establish work area and traffic control if necessary
- Identify the areas to be cleaned
- Where possible, construct a containment system to capture dirt or debris generated from the cleaning process
- Remove dirt and debris using dry methods including vacuuming if possible. All debris that is collected should be disposed of properly.
- No soaps or detergents are to be used.

Spot cleaning activities are performed during high flows in order to reduce the potential impact on receiving water. No water or minimal water is typically used during spot cleaning.

Type 2: Maintenance Washing

Structures are washed approximately every 5 years as needed to remove dirt and other material to extend the life of the paint and bridge. The type of maintenance washing entails low pressure/high volume washing. Little to no containment is used during this activity to filter the water or catch debris. Potential pollutants include: minor amounts of sediment/dirt, bird nests, and small amounts of bird feces.

- Establish work area and traffic control if necessary. Avoid removal of riparian vegetation while working.

- Identify the areas to be cleaned.
- Where possible, construct a containment system to capture dirt or debris generated from the cleaning process.
- Remove as much dry debris, such as dust, bird nests, bird feces, etc as possible by hand using dry methods.
- All debris that is collected should be disposed of properly.
- Wash bridge using a high-volume, low pressure system, directing spray towards vegetated areas, away from the water.
- No soaps or detergents are to be used.

Maintenance washing activities are performed during high flow to reduce the potential impact on receiving water. Typically, less than 100 gallons of water is used to clean a bridge structure in El Paso County.

Type 3: Preparatory Washing

Bridge painting occurs when needed, usually greater than every 15 years. Potential pollutants include: loose paint, rust, dust, bird nests, and small amounts of bird feces.

- Establish work area and traffic control if necessary. Avoid removal of riparian vegetation while working.
- Identify the areas to be cleaned.
- Where possible, construct a containment system to capture dirt or debris generated from the cleaning process.
- Remove as much dry debris, such as loose paint, dust, bird nests, bird feces, etc as possible by hand using dry methods.
- Wash structure with a low-volume, high pressure (3200 psi) system directing wastewater away from waterways and to vegetated areas as often as possible.
- Avoid over spraying any pretreatment/primers used before painting.
- No soaps or detergents are to be used.

Bridges are painted during low flow to reduce the potential impact on receiving water. Typically, less than 200 gallons of water is used to prep a bridge structure in El Paso County for painting.

Additional Resources:

Colorado Department of Public Health and Environment, *Discharge of Process Wastewater from Power Washing Operations*, No Date.

ODFW Bridge Washing Guidance (Appendix F). September 12, 2003.

http://www.oregon.gov/ODOT/HWY/GEOENVIRONMENTAL/docs/research-roadside_maintenance_manual.pdf

Ocean and Fisheries Canada: *Operational Statement Bridge Maintenance*, Version 3 2007, http://www.pac.dfo-mpo.gc.ca/habitat/os-eo/pdfs/bridge_maintenance_e.pdf

Discharge of Bridge Washing Waters: Maine DEP, May 20, 2011. <http://www.maine.gov/mdot/community-programs/csd/documents/bridgewashingletter.pdf>

Maine DOT's Best Practices for bridge cleaning and washing, No Date.

<http://www.maine.gov/mdot/community-programs/csd/documents/BridgeCleaningBMP.pdf>

Building Maintenance

Description

This SOP is designed to control the maintenance and construction activities that take place in municipal buildings and their surrounding grounds by promoting procedures to help eliminate the potentially contaminated debris, trash, and water runoff from reaching our stormwater system. This includes the disposal of debris caused by window washers, painters, and building contractors

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- Remove paper, trash and other debris from building grounds, (parking lots, landscaped areas, detention ponds and waterways).
- Standard cleaning of buildings and windows generate sediment, chemicals and debris. Collect material and dispose of properly.
- When maintenance operation requires wash water such as power washing of buildings, wash water must be collected and disposed of in the sanitary system or directed to landscaping so it does not reach the storm sewer system. For further information, refer to the [Powerwashing SOP](#).
- At no time shall chemicals be allowed to be washed into the storm sewer system.
- Sediment collected from walkways and parking areas needs to be collected, removed and disposed, and not swept or power-washed into stormwater drains.

Debris Handling

- Conduct regular clean-up of property grounds of all trash and debris,
- If a spill should happen, refer to the [Spill Prevention & Control SOP](#) for proper procedures.
- Contractors such as landscapers, painters and any others are expected to follow proper clean-up procedures to ensure that chemicals, runoff, debris, and excessive sediment will not enter the stormwater system.

Employee Training

Provide applicable employees who are involved in building maintenance this written procedure.

Equipment and Vehicle Maintenance

Description

Regular maintenance of municipal vehicles and equipment prolongs the life of the municipality's assets and prevents the leaking of hazardous fluids commonly associated with normal wear and tear of vehicles and equipment. Potential pollutants generated at vehicle maintenance facilities include oil, antifreeze, brake fluid and cleaner, solvents, batteries and fuels.

Procedures

Maintenance activities should be performed inside a maintenance building unless the equipment is too large to fit inside or temporary repairs need to be made before the equipment can be moved to the maintenance building.

Vehicle Storage

- Monitor vehicles and equipment closely for leaks and use drip pans as needed until repairs can be performed.
- When drip pans are used, check frequently to avoid overtopping and properly dispose of fluids.
- Drain fluids from leaking or wrecked vehicles and from motor parts as soon as possible. Dispose of fluids properly.

Vehicle Maintenance

- Conduct routine inspections of heavy equipment and vehicles to proactively identify potential maintenance needs.
- Perform routine preventive maintenance to ensure heavy equipment and vehicles are operating optimally.
- Recycle or dispose of all wastes properly and promptly.
- Do not dump any liquids or other materials outside, especially near or in storm drains or ditches. Sweep and pick up trash and debris as needed.

Material Management

- Store maintenance materials and waste containers (e.g., used oil and antifreeze) in labeled containers under cover or in secondary containment (e.g., double-walled tanks). Chemicals should not be combined in containers.
- All hazardous wastes must be labeled and stored according to hazardous waste regulations.
- Carefully transfer fluids from collection devices to designated storage areas as soon as possible. Do not store the transferred fluids adjacent to the containers (for example, oil drip pans with used oil in them should not be placed next to the used oil tank).
- Store new batteries securely to avoid breakage and acid spills.
- Store used batteries indoors or in secondary containment to contain potential leaks. Recycle used batteries.
- Conduct periodic inspections of storage areas to detect possible leaks.
- Do not wash or hose down storage areas except where wash water will enter the sanitary sewer as an approved discharge. Use dry clean-up methods whenever possible.
- Keep lids on waste barrels and containers, and store them indoors or under cover to reduce exposure to rain.
- Periodically inspect and maintain all pretreatment equipment, including sumps, separators, and grease traps to ensure proper functioning.

Parts Cleaning

- Use designated areas for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors.
- When steam cleaning or pressure washing, only discharge wastewater to an oil/water separator connected to the sanitary sewer.
- When using solvents to clean parts, rinse and drain parts over the designated solvent tank so that fluids will not drip or spill onto the floor. Use drip boards or pans to catch excess solutions and divert them back to the tank. Allow parts to dry over the hot tank.

- Recycle cleaning solution when it becomes too dirty to use. Never discharge cleaning waste to the sanitary sewer or storm sewer.

Vehicle and Equipment Washing

- Vehicles should be washed in the vehicle and equipment wash area/bay.

Employee Training

Provide applicable employees who perform heavy equipment and vehicle maintenance this written procedure.

Fertilizer, Herbicide, and Pesticide Application and Storage

Description

It is important to properly store, handle, apply, and clean up all fertilizers, herbicides, pesticides, and other landscaping chemicals. These chemicals can cause water pollution. Excessive fertilizer application can also contribute to algae blooms and deplete oxygen from waterways.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- Follow label directions when applying, storing, handling, mixing, recycling, and disposing of chemicals and empty containers.
- Use care to transfer, mix or dispose of chemicals. Never perform these activities near storm drains or drainage areas.
- Have spill cleanup materials available in case of a spill and clean up chemical spills promptly with dry methods, if possible. Refer to the Spill Prevention and Response procedure.

Application

- Staff performing chemical applications should wear all appropriate protective garments.
- All chemicals shall be used strictly in accordance with their labels and all applicable federal, state, and local laws, regulations, and ordinances.
- Always follow the manufacturer's recommendation on handling and applying the chemicals.
- Chemicals should not be applied right before or during rain storms or while the area is being irrigated.
- Chemicals should not be applied right before or during high-wind events.
- Apply only the recommended amounts of chemicals to avoid chemicals being picked up by irrigation or stormwater runoff.
- Be careful not to overspray chemicals onto an impervious surface, such as a sidewalk or roadway. These chemicals will wash into the storm drain inlet during the next rainstorm.
- Clean up all over-sprayed chemicals.
- Do not apply landscape chemicals to frozen ground.

Chemical Storage

- Materials shall be stored in accordance with all current federal, state and local laws, regulations and ordinances.
- Chemicals should be stored inside when not in use.
- Recycle or dispose of all spent or excess chemicals properly and promptly.

Application Equipment

- Sprayers shall be used to apply only materials that are suitable for spraying.
- Spreaders shall be used to apply only materials that are available in granular forms.
- Fertilizers and pesticides should be loaded into application equipment over impervious surfaces, so that any spills can be easily cleaned.
- Properly calibrate application equipment to ensure the proper amount of chemical is applied.
- Keep application equipment clean; do not allow chemical buildup.
- Maintain (including washing) all equipment by following the Heavy Equipment and Vehicle Maintenance procedure.

Employee Training

It is recognized that additional training and certifications exist that describe procedures for chemical application, handling, and storage. The appropriate employees and supervisors must have this certification.

Provide applicable employees who are involved with fertilizer, herbicide, and pesticide application and storage this written procedure.

Hydrant Maintenance and Testing/ Potable Water Discharges

Description

Hydrant Maintenance, Testing, and the discharge of Potable Water, if not conducted properly, can contribute to stormwater pollution. This SOP was created to provide guidance to those conducting Hydrant Flushing and Testing activities. Hydrant Flushing and Testing is considered an occasional incidental non-stormwater discharge that will not be addressed as an illicit discharge provided the following SOP (conditions) is followed. Discharges from hydrants are not reasonably expected to be a significant source of pollutants to the MS4 because the nature of the discharge. These activities occur infrequently. Any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to the MS4 is prohibited.

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

Hydrant Testing and Flushing

The testing and flushing of fire hydrants is critical to determining the readiness of the hydrants to provide water at fire emergencies. Hydrants are periodically tested and flushed in the City. This activity involves the following steps:

- Establish work area and traffic control if necessary.

- Schedule sweeping, if necessary, along curb and gutters.
- No soaps or detergents are to be used.
- Use diffuser baskets for hydrant testing when needed. Diffuser baskets are outfitted with nylon mesh covers that contain pockets in which large "industrial strength" chlorine neutralizing tablets are placed. Enough material from these tablets dissolves during testing, to render chlorine residues in test water non-harmful to fragile plants and wildlife. Chloramine testers can be used to check the neutrality of water discharged through the diffusers.
- Due to the volume of water used during hydrant flushing, all hydrant flushing should be conducted with the diffuser baskets in place.

General Potable Water Discharges

- The potable water shall not be used in any additional process. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines not associated with treated water distribution systems.
- The discharge shall be from a potable water distribution system, tank or storage that has been maintained for potable water distribution use. Discharges from a distribution system, tank or storage that is used for conveyance or storage of materials other than potable water is not authorized without a separate permit.
- The discharge shall not cause erosion.
- The discharge shall not contain solid materials in concentrations that can settle to form bottom deposits in state waters or form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses.
- If the discharge is directly to a "State surface water" (any stream, creek, gully, whether dry or flowing), it must not contain any residual chlorine.
- BMPs should be implemented as necessary to meet the conditions above, by anyone discharging potable water. These BMPs will help ensure that the discharge will not negatively affect water quality. Removal of any residual chlorine must be done for any direct discharge to state surface waters, or for any discharge to a storm sewer or conveyance where the chlorine will not dissipate prior to reaching a State surface water. De-chlorination, if necessary, may be achieved by allowing water to stand uncovered until no chlorine is detected, or by de-chlorination using a portable de-chlorinator.
- The discharge should be conducted to minimize the potential to pick up additional suspended solids. When possible, a best management practice, or combination of practices, for filtering or settling suspended solids and other debris, or a combination of practices, should be used to remove suspended solids or other debris. Examples of suspended solid removal practices include, but are not limited to check dams, filter bags, and inlet protection. These devices should be used and maintained in accordance with the manufacturers specifications.
- The discharge should be conducted to minimize the potential that it will not pick up any oil and grease. When possible, an absorbent oil pad, boom or similar device should be used to eliminate oil from the discharge.

Employee Training

Provide applicable employees who perform testing and flushing of hydrants this written procedure.

Large Outdoor Festivals and Events

Description

Large outdoor festivals and events operated and controlled by the regulated municipality have the potential to impact stormwater quality. Potential contaminants may include trash, septage, and organics.

A large event would meet all of the following criteria:

- Portable toilets
- Trash receptacles
- Food and beverage vendors
- Street closures

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

Trash Collection and Removal

- Provide adequate trash receptacles for vendors and guests.
- Monitor and respond to leaking waste containers.
- Empty trash receptacles to prevent overflow.
- Store waste containers under cover or on grassy areas, if possible.
- Do not wash out trash receptacles unless wash water will be discharged to the sanitary sewer.
- Walk the outdoor festival and event area during and after every large event to pick up loose trash and debris. Properly dispose of this material.
- Sweep the roadway and parking lots after the large festival or event.
- Follow the Spill Prevention and Response procedures. Have spill kits available and ensure that vendors understand that it is prohibited to dump any pollutants into the storm sewer system.

Portable Toilet Service

Portable toilets are used at most large outdoor festivals and events. All portable toilet waste is classified as septage. The municipality will use a licensed waste hauler to dispose of their waste for any large outdoor festival or event that has portable toilets. The units will be removed as soon as the festival or event is completed so that they do not become a nuisance or vandalized.

Food and Beverage Vendor Waste

Waste generated by food and beverage vendors is regulated by the Colorado Retail Food Rules and Regulations.

Employee Training

Provide applicable employees who perform trash collection and street sweeping and issue leases/permits for large outdoor festivals and events this written procedure.

New Construction Activities

Description

This SOP addresses new construction activities conducted by the City disturbing less than one acre not subject to a CDPS Construction permit. New construction includes, but is not limited to buildings, structures, capital improvements, roadways, and recreational components such as trails, restrooms, bus stops and other structures. Procedures provided are general in nature and can be applied to any scale or type of municipal construction.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- For new municipal facilities, refer to the Municipal Operations Stormwater Manual for control measure requirements including secondary containment, indoor storage, and permanent post construction water quality controls.
- Obtain all applicable federal, state, and local permits for construction projects.
- The Colorado Stormwater Construction General permit applies to construction sites disturbing one acre or more, or less than one acre but part of a larger common plan of development.
- A larger common plan of development is defined as a **contiguous area** where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
- A dewatering permit may be required if construction activities require the removal and discharge of groundwater offsite.
- A U.S. Army Corp of Engineers (USACE) Section 404 Permit may be needed if the work will be conducted in or impact waters of the United States, including wetlands, washes, drainages, ditches, creeks, streams, and rivers.
- Applicable sediment and erosion controls may be installed, such as inlet protection, silt fence, sediment traps, erosion control logs, check dams, and vehicle tracking control. Sediment and erosion controls will be installed and maintained in accordance with approved design criteria and/or industry standards.
- Material stockpiles will not be stored in stormwater flow lines. Temporary sediment control will be used during temporary, short-term placement while work is actively occurring.
- Where feasible, grading activities should be scheduled during dry weather.
- Best management practices will be periodically inspected and maintained as necessary.
- Waste containment for concrete washout, masonry, paint, trash and other potential pollutants will be available when these activities are being conducted.
- Where practicable, non-structural controls will be used, such as phased construction, dust control, good housekeeping practices, and spill prevention and response.

Employee Training

Provide applicable employees who are involved in new construction activities this written procedure.

Outdoor Material Storage

Description

The responsible management of automotive products, fertilizers, pesticides, paints, chemicals, and other materials during municipal operations can significantly reduce polluted stormwater runoff. All materials should be handled properly including unloading, use, storage, and disposal. Proper management of materials can also reduce the likelihood of accidental spills or releases.

Procedures

General

- Periodically inspect the outdoor material storage areas to ensure that all materials are being stored properly when not in use.
- Clean the material storage area when necessary using dry clean up methods.
- Properly dispose of unneeded materials.
- Store materials in a manner that reduces the potential for transport in stormwater flows.

Materials Stored in Containers

- Whenever possible, containerize and cover stored materials to prevent stormwater from coming in contact with materials.
- Secondary containment is required for liquid bulk storage located outside (55 gallon drums or greater).
- Store containers in a location where they will not be accidentally damaged by equipment or vehicles.
- Provide tight-fitting lids for all containers.
- Follow the [Spill Prevention and Response](#) procedure to respond to and clean up any spills or leaks.
- Inspect storage containers regularly for signs of leaking or deterioration.
- Replace or repair leaking storage containers.
- Use care to avoid spills when transferring materials from one container to another.
- Use powered equipment or get assistance when moving bulk materials to and from a storage area. Handle containers appropriately and get help if needed. Use care to prevent punctures in the containers from equipment.

Loose Materials

- Consolidate loose material (gravel, mulch, etc.) and berm where needed to prevent contaminated run-off of stormwater.
- Large inert materials such as piping and road signs can be stored outside without a protective covering. These materials do not impact stormwater quality.

Hazardous Materials

- Identify all hazardous materials stored at the facility.
- Maintain a Material Safety Data Sheet (MSDS) for each hazardous chemical.
- Clearly label all containers with the name, chemical, unit number, expiration date, handling instructions, and health and environmental standards.
- Provide special handling, storage (e.g., metal lockers), and disposal for all hazardous materials.

Employee Training

Provide applicable employees this written procedure.

Power Washing

Description

Wastewater from power washing must not be allowed to enter the storm sewer system and must be disposed of properly. Power washing combined with proper wastewater collection can prevent or reduce fine-grained sediment particles, anti-freeze, oil, paint, or trash from polluting stormwater.

Facilities Management Division maintains a Colorado Discharge Permit System Permit for this activity. The Permit Number is COG 607011. All discharges associated with power washing shall be in compliance with the conditions of this permit.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- Notify City of Colorado Springs Stormwater Program prior to discharge of powerwashing wastewater into the City of Colorado Springs Municipal Separate Storm Sewer System (MS4).
- Use dry methods for surface pre-cleaning, such as using absorbent on small oil spots and sweeping up trash, debris, dirt, and used absorbent before power washing.
- Minimize the amount of water used during power washing activities.
- Use no chemical additives for washing.
- Complete a BMP Compliance Record for each cleaning activity. Provide one copy to the City of Colorado Springs when discharge into their system.
- Avoid using cleaning products that contain hazardous substances (e.g., hydrofluoric acid, muriatic acid, sodium hydroxide, bleach) that can turn wastewater into hazardous waste.
- Wastewater Collection
 - Identify the locations of all storm drains in the area and place inlet protection or drain covers at all locations, as needed.
 - Locate high and low spots on the property to determine the area where wastewater will be pooled for collection.
 - Equipment to contain and collect wastewater generated by power washing includes: vacuum pumps, booms, berms, portable containment areas, weighted storm drain covers, inflatable plumber's plugs, oil and water separators, holding tanks, portable sump pumps, hoses, and absorbent pads.

- Avoid mixing non-hazardous wastewater with wastewater known to contain hazardous substances or hazardous levels of pollutants. Mixing these wastes may increase the characteristic and/or total volume of waste, resulting in more expensive disposal and additional regulatory requirements.
- Place an oil-absorbent mat or pad on top of collected wastewater to help reduce the amount of oil re-deposited on the surface of the collection area.
- Wastewater can be filtered through an oil absorbent boom or oil/water separator and a filter to decrease the concentration of oil in the liquid and the amount of solids in the wastewater.
- Once wastewater has been collected, visible solids remaining in the collection area after liquids have evaporated must be swept up and properly disposed to prevent future discharges to the storm sewer system.

Wastewater Disposal

- Do not dispose of power washing wastewater into the storm sewer system.
- Power washing wastewater may be disposed of in an inside drain connected to the sanitary sewer system with the permission of the wastewater treatment plant (may require a permit) and the facility owner where the work is being performed. Collected wastewater can also be discharged to the sanitary sewer system at the power washer's place of business with the permission of the wastewater treatment plant, or can be taken directly to a wastewater treatment plant.
- Do not remove sewer manhole covers to dispose of wastewater to the sanitary sewer system without prior approval.
- Power washing wastewater may be discharged to landscaped areas if it is not harmful to vegetation, there is no ponding, and there is no runoff from the site to the storm sewer system.

Employee Training

- Train applicable employees who perform power washing activities on this written procedure. Information regarding how to avoid and report spills will be presented during the training.
- Periodically conduct refresher training on the SOP for applicable employees who perform power washing.

Records

The following records could be used to document activities performed:

- Records of employee training with sign-in sheet.
- List of power washing activities and departments responsible for conducting power washing.

References

City of Fort Collins, Regulatory and Government Affairs Division, *Power Washing Guidance*, No Date.

City of Golden, *BMPs for Pressure Washing*, January 2004.

Partners for a Clean Environment, *Water Protection Guide: Pressure Washers*, No date.

Colorado Department of Public Health and Environment, *Discharge of Process Wastewater from Power Washing Operations*, No Date.

Parking Lot Maintenance

Description

The operation and maintenance of parking lots, if not conducted properly, can contribute to stormwater pollution. This SOP applies to municipal parking lots, sidewalks and other municipally owned large outdoor-paved surfaces.

Procedures

- Schedule a cleaning anytime storm drains have debris blocking the water flow to storm sewers or excessive debris is being carried into the stormwater sewers.
- Schedule more frequent cleanings in areas that have high pollutant loadings.
- Immediately treat spills of any pollutants, large or small, such as oil, diesel, and transmission fluids,
- Review parking lot cleaning and maintenance schedule (i.e., sweeping, crack filling and overlaying) annually to ensure priority areas are properly maintained, and new areas of development are incorporated in master schedule.

Employee Training

Provide applicable employees who perform parking lot maintenance this written procedure.

Parks and Open Space Maintenance

Description

Parks and open space maintenance activities involve the operation of equipment such as mowers and tractors; disposal of waste from mowing, planting, weeding, raking, pruning and trash collection; application of pesticides, herbicides and fertilizers, cleaning and maintenance of park amenities such as play equipment, restrooms, and structures; and snow removal.

When services are contracted, this written procedure should be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- Repair damage to landscaped areas as soon as possible. Mulch or vegetate bare areas to minimize erosion.
- Remove (sweep or shovel) materials such as soil, mulch and grass clippings from parking lots, streets, curbs, gutters and sidewalks.
- Collect and dispose of trash.
- Do not attempt to clean up any unidentified or possibly hazardous materials found on or around landscaped areas during maintenance; notify the supervisor immediately upon discovery of hazardous materials.
- Refer to the Fertilizer, Pesticide, and Herbicide Application and Storage procedure for information on the application of landscape chemicals.

Maintenance

- Wastewater from power washing signs, structures, or bleachers cannot be discharged into the storm sewer system.

- When painting park equipment, use a drop cloth and clean up any spills immediately. Do not leave open containers on the ground where they may accidentally tip over.

Mowing

- Remove paper, debris, and trash from the landscaped and surrounding areas prior to mowing.
- Collect grass clippings and leaves that are on the walks and other hard surfaces. Do not blow or wash them into the street, gutter or drainage ways.
- Properly recycle or dispose of organic wastes after mowing, weeding, and trimming.

Irrigation

- Repair broken sprinkler heads as soon as possible.
- Only irrigate at a rate that can infiltrate into the soil to limit run-off.

Landscape Equipment

- Brush off mowers (reels and decks) and tractors over grassy areas or in contained washout areas.
- Leave clippings on grassy areas or dispose of in trash or by composting. Do not hose off mowers over paved areas that drain to the storm drain system.
- Maintain (including washing) all equipment by following the Equipment and Vehicle Maintenance procedure.
- Do not allow grease from the grease zirks on mowers to fall onto areas where they can be washed into the storm drain.

Snow Removal

- Conduct snow and ice removal operations using the Snow and Ice Control procedure.\
- Store all salt or sand that will be used on walks inside or under a roof or in a covered container.

Other Activities

- Utilize pet waste stations with bags and trash receptacles.
- All portable toilets should be located on flat, secure locations where they are less likely to be knocked or blown over. All portable toilets should be in a location that would retain any spillage opposed to washing into storm sewer or waterway. Ensure routine maintenance and cleaning is conducted.

Employee Training

Provide applicable employees who are involved with parks and open space maintenance activities this written procedure.

Spill Prevention and Response

Description

Due to the type of work and the materials involved, many activities that occur either at a municipal facility or as part of municipal operations have the potential for accidental spills. Proper spill response planning and preparation enables employees and contractors to effectively respond to problems and minimize the discharge of pollutants to the storm sewer system.

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

Spill Prevention

- Keep work areas neat and well organized.
- Maintain a Material Safety Data Sheet (MSDS) for each hazardous chemical. Follow the Outdoor Material Storage procedures.
- Provide tight fitting lids for all containers.
- Keep containers clearly labeled. Labels should provide name and type of substance at a minimum.
- Store containers, drums, and bags away from direct traffic routes to prevent accidental spills.
- Inspect storage containers regularly for signs of leaking or deterioration.
- Replace or repair leaking storage containers.
- Use care to avoid spills when transferring materials from one container to another.
- Use powered equipment or get assistance when moving bulk materials to and from a storage area. Use care to prevent puncturing containers with the equipment.
- Do not wash down or hose down any outdoor work areas or trash/waste container storage areas except where wash water is captured and discharged into the sanitary sewer (if approved).
- Conduct periodic inspections to ensure that materials and equipment are being handled, disposed/recycled, and stored correctly.
- Spill kits are to be kept in DPW Operations Foreman and Superintendents and Inspectors vehicles. Inspect each spill kit regularly and after each spill response. Replace any spent supplies or repair any equipment that is worn or not suitable for service. Notify Storm water staff for additional spill kits or refill of materials.
- Stock adequate personal protective equipment.

Spill Response

Safety

Consider safety at all times. Anticipate and avoid all likely hazards. Never approach, contact, or sample an unknown substance. If a highly toxic or flammable substance is discovered, staff should leave the immediate area and contact the appropriate identified response authority, such as the fire department and EPC HazMat staff. If there is any question about a substance, contact the EPC HazMat Coordinator.

Procedures

- Stop the leading edge of the spill. Block or divert the spill to avoid discharge to the storm sewer system and to minimize the area requiring cleanup.
- Contact the DPW Stormwater Coordinator for spill reporting and notification requirements and initial guidance on spill response.
- DPW Stormwater Coordinator will contact EPC Environmental Services staff as appropriate.
- Determine the source of the spill and stop the spill at its source by closing a valve, plugging a leak, or setting a container upright. Transfer material from a damaged container.
- Identify the material and volume spilled. Contact the DPW Stormwater Coordinator or EPC HazMat staff if you cannot identify the material and its properties.
- Refer to the MSDS to determine appropriate personal protective equipment, such as gloves and safety glasses and appropriate cleanup methods.

- Clean up spills immediately to prevent spreading of wastes by wind, rain, and vehicle traffic and potential safety hazards.
- Use sand absorbents or socks, pillows, or pads to quickly capture spilled liquid and properly dispose of all clean-up materials. Use dry clean-up methods only.
- Containers of spill clean-up wastes may be delivered to EPC Environmental Services for disposal. In the event of large spills requiring a tandem axle dump truck for material removal a Manifest is required for disposal to a local landfill, contact the EPC Environmental Services to obtain a waste manifest and for additional guidance for disposal.
- Complete all necessary reports.

Spill Reporting

- A spill of any chemical, oil, petroleum product, or sewage that enters waters of the state of Colorado (that include surface water, ground water, and dry gullies and storm sewers leading to surface water) must be reported immediately to the Colorado Department of Public Health and Environment. (1-877-518-5608)
- Release of a substance into a storm drain, or onto a parking lot or roadway that drains to a storm sewer leading to surface water, is reportable. However, if the material can be contained and cleaned within the storm sewer system to the degree that a subsequent flow in the storm sewer will not flush the substance to waters of the State, it may not need to be reported.
- Contact the appropriate identified response authority within the municipality or other designated representative and be prepared to provide details needed to report the spill to the necessary agencies- see the IDDE Plan for additional information.
- Detailed spill reporting guidance can be found at <http://www.cdphe.state.co.us/op/wqcc/Resources/Guidance/spillguidance.pdf> and <http://www.cdphe.state.co.us/hm/spillsandreleases.htm>

Employee Training

Provide applicable employees who perform spill prevention and response this written procedure.

Snow and Ice Control

Description

Deicers can contaminate surface and ground water and damage vegetation adjacent to roadways. Salt will change the chemical balance of local waterways and sand can be picked up by stormwater resulting in higher dissolved and suspended sediment loads in waterways. Sand also presents an air quality concern.

Procedures

Plowing

- Inspect plowing equipment for leaks prior to use.
- Take care when connecting or releasing snow plows and clean up any hydraulic fluid that may leak onto the pavement.
- Wash snow removal equipment in the wash bay.
- Do not pile snow in front of storm sewer inlets to allow inflow of snowmelt runoff.

Deicer Application

- Apply only the recommended amount of deicer to roadways.

- Spreaders should be inspected at the beginning of each season and any needed maintenance or repair should be conducted after each storm.
- As soon as weather conditions allow, follow-up with street sweeping to remove remaining deicer from roadways.

Employee Training

Provide applicable employees who are involved in snow and ice control this written procedure.

Snow Storage

Description

Snow may have to be stored during major winter storms to increase street accessibility. It is possible for pollutants such as sediment, organics, oil, and grease to be concentrated at snow storage locations and to impact stormwater quality.

Procedures

Snow Storage

- Snow should be stored away from storm sewer inlets and waterways.
- When possible, snow should be stored on a pervious surface to allow infiltration. Do not store snow in water quality ponds or rain gardens.
- Sweep or vacuum impervious snow storage areas once snow has melted.

Employee Training

Provide applicable employees who are involved with snow storage this written procedure.

Street, Curb, and Gutter Maintenance/Replacement /Construction

Description

Street, curb, and gutter activities include concrete and asphalt installation, maintenance, repair, and replacement; bridge maintenance; and painting and striping. Procedures involving the maintenance of streets/parking lots, curbs, and gutters have the potential to impact stormwater quality. Materials involved in these activities should be used efficiently and disposed of properly.

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- Obtain all applicable federal, state, and local permits for construction projects.
- The Colorado Stormwater Construction General permit applies to construction sites disturbing one acre or more, or less than one acre but part of a larger common plan of development.
- A larger common plan of development is defined as a **contiguous area** where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
- A dewatering permit may be required if construction activities require the removal and discharge of groundwater offsite.

PDD information must be maintained to reflect current implementation.

- A U.S. Army Corp of Engineers (USACE) Section 404 Permit may be needed if the work will be conducted in or impact waters of the United States, including wetlands, and creeks.
- Applicable sediment and erosion controls may be installed, such as inlet protection, silt fence, sediment traps, erosion control logs, check dams, and vehicle tracking control. Sediment and erosion controls will be installed and maintained in accordance with approved design criteria and/or industry standards.
- Wash out mixers, delivery trucks, or other equipment in the designated washout areas only.
- Locate concrete washout, portable toilets, and material storage away from storm drain inlets.
- Material stockpiles will not be stored in stormwater flow lines. Temporary sediment control will be used during temporary, short-term placement while work is actively occurring.
- Best management practices (BMPs) shall be implemented as appropriate and they will be periodically inspected and maintained as necessary.
- Where practicable, non-structural controls will be used, such as phased construction, dust control, good housekeeping practices, and spill prevention and response procedures.
- Protect storm drain inlets and drains with curb socks, rock berms, inlet protection, or drain covers/mats prior to any maintenance activity.
- When saw cutting ensure that no slurry enters the storm drain, let the slurry dry, sweep it up, and properly dispose of the sweepings.
- Do not perform concrete or asphalt patch work during wet conditions whenever possible.
- Leaking material containers should be properly discarded and replaced.
- Store materials in containers under cover when not in use and away from any storm drain inlet.
- Monitor equipment for leaks and use drip pans as necessary.
- Sweep or vacuum the roadway once maintenance activities are complete.

Bridge Maintenance

- Do not transfer or load any materials directly over waterways.
- Secure lids and caps on all containers when on bridges.

Concrete Maintenance

- Minimize the drift of chemical cure on windy days by using the curing compound sparingly and applying it close to the concrete surface.
- Ensure there is a concrete truck washout area available or require the contractor to wash out at the batch plant.
- Whenever possible, recycle concrete rubble; otherwise, dispose of it as solid waste.

Asphalt Maintenance

- Sweep to minimize sand and gravel from new asphalt from getting into storm drains, streets, and creeks.
- Do not allow concrete grindings, pieces, or chunks to enter any storm drain or watercourses.
- Whenever possible, recycle broken asphalt. If impossible, dispose of as solid waste.
- Drainage inlet structures shall be covered with inlet protection during application of seal coat, tack coat, slurry seal, and/or fog seal.

Painting and Striping

- If possible, schedule painting and striping projects during dry weather.

Employee Training

Provide applicable employees who perform street, curb, and gutter maintenance/replacement/construction this written procedure.

Street Sweeper Cleaning and Waste

Description

The operation and maintenance of street sweepers, if not conducted properly, can contribute to stormwater pollution. In addition, all sweeper waste must be disposed of properly. All sweeper waste must be taken directly to a permanent disposal site or to a secure temporary storage area at the municipal yard.

Procedures

Sweeper Debris Disposal

- Do not empty sweeper hoppers, even temporarily, onto areas near storm drains or surface water bodies or where wind or rain could wash the debris into the storm sewer system or scatter the debris.
- Dispose of sweeper debris at the designated dump site or at the designated area at the municipal facility. The temporary storage area for debris is protected from wind, rain, and surface runoff.
- If unusual sweeping materials are identified, bring the issue to the attention of a supervisor for evaluation and proper disposal.

Sweeper Wash Out

Sweepers must be washed in the designated municipal wash bay. The wash bay is connected to the sanitary sewer system and the debris should be left in the wash bay to dry. The debris should be properly disposed of when dried.

Employee Training

Provide applicable employees who perform street sweeping this written procedure.

Street Sweeping

Description

Street sweeping gives the County an overall clean appearance, and aids in helping reduce traffic accidents and air pollution caused by fine dust particles. Street sweeping can prevent pollutants such as sediment particles, organics, oil, grease, trash, road salt, and trace metals from entering and plugging the storm sewer system.

Procedures

General

- Operate all sweepers according to manufacturer's recommended settings and standards.
- Do not conduct street sweeping during or immediately after heavy rainstorms.
- Conduct regular maintenance of sweepers in accordance with the master schedule or as needed.
- Prior to operating the sweeper, perform a routine inspection, including checking for leaks. Follow procedures outlined in the Spill Prevention and Response procedure if a leak is observed.

- Do not wash down any streets or curbs for routine cleaning.
- Immediately contain and properly clean up all spills (see the [Spill Prevention and Response](#) procedure).
- Handle sweeper debris as detailed in written procedure [Street Sweeper Cleaning and Waste](#).

Frequency

- Streets are swept needed based upon conditions.
- Increase the frequency of street sweeping in areas prone to litter and dust/dirt accumulation and areas that have a history of storm drain plugging.
- Schedule additional sweeping, where feasible, due to the following conditions.
 - Construction conducted by the municipality where there is temporary storage of construction materials like dirt, sand, and road base along the roadway.
 - Median grass cutting.
 - Landscape planting.
 - After heavy rainstorms in which sediment is present on the streets.
 - After snows melt where large coarse sediments and garbage have been left behind.
 - In the fall when deciduous trees are losing their leaves.

Employee Training

Provide applicable employees who perform street sweeping this written procedure.

Utility and Storm Sewer Replacement and Construction

Description

Procedures involving the replacement and construction of utilities and storm sewers have the potential to impact stormwater quality. Materials involved in these activities should be used efficiently and disposed of properly.

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

General

- Obtain all applicable federal, state, and local permits for construction projects.
- The Colorado Stormwater Construction General permit applies to construction sites disturbing one acre or more, or less than one acre but part of a larger common plan of development.
- A larger common plan of development is defined as a **contiguous area** where multiple separate and distinct construction activities may be taking place at different times on different schedules under one plan.
- A dewatering permit may be required if construction activities require the removal and discharge of groundwater offsite.
- A U.S. Army Corp of Engineers (USACE) Section 404 Permit may be needed if the work will be conducted in or impact waters of the United States, including wetlands, washes, drainages, ditches, creeks, streams, and rivers.

- Applicable sediment and erosion controls may be installed, such as inlet protection, silt fence, sediment traps, sediment control logs, check dams and vehicle tracking control. Sediment and erosion controls will be installed and maintained in accordance with approved design criteria and / or industry standards.
- When saw cutting, ensure that no slurry enters the storm drain. Let the slurry dry, sweep it up, and properly dispose of the sweepings or vacuum while saw cutting.
- Where feasible, grading activities will be scheduled during dry weather.
- Do not perform concrete or asphalt paving work during wet conditions whenever possible.
- Monitor construction equipment for leaks and use drip pans as necessary.
- Leaking material containers should be properly discarded and replaced.
- Store materials in containers under cover when not in use and away from any storm drain inlet.
- Wash out mixers, delivery trucks, or other equipment in the designated concrete washout area only.
- Locate concrete washout, portable toilets, and material storage away from storm drain inlets.
- Material stockpiles will not be stored in stormwater flow lines. Temporary sediment control will be used during temporary, short-term placement while work is actively occurring.
- Sweep or vacuum the roadway as needed, during construction and once construction is complete.
- Best management practices will be periodically inspected and maintained as necessary.
- Where practicable, non-structural controls will be used, such as phased construction, dust control, good housekeeping practices, and spill prevention and response procedures.
- When cleaning our storm sewer infrastructure, including catch basins, pipes, and ponds, dispose of materials in the appropriate bay at the Public Works Facility. If necessary, decant into the washbay and allow water to enter the sanitary sewer before loading the dry debris into the bay.

Emergency Repair and Replacement

Emergency Discharges are defined as situations in which it is not possible to implement all of the available BMPs due to the uncontrolled nature of the discharge. The primary focus during these events is to identify and mitigate the cause as soon as possible. Clean up of resulting sediment or other pollutants will be performed as soon as practicable following the emergency. Refer to the [Spill Prevention and Response](#) procedure for reporting requirements.

Employee Training

Provide applicable employees who perform utility and storm sewer replacement this written procedure.

Water Line Breaks

Description

Water Line Breaks happen unexpectedly. When a water line break occurs, the first priority is to protect public health. This SOP was created to provide guidance to those responding to a water line break. Water line breaks are considered an occasional incidental non-stormwater discharge that will not be addressed as an illicit discharge provided the following SOP (conditions) are followed. Discharges from water line breaks are not reasonably expected to be a significant source of pollutants to the MS4 because the nature of the discharge. These activities occur infrequently and are most often a far enough distance from a state water to allow for dechlorination and sediment to drop out before reaching a state water. Any individual non-stormwater discharge that is determined to be contributing significant amounts of pollutants to the MS4 is prohibited.

When services are contracted, this written procedure may be provided to the contractor so they have the proper operational procedures. In addition, the contract should specify that the contractor is responsible for abiding by all applicable municipal, state, and federal codes, laws, and regulations.

Procedures

Observation, Containment, and Clean-Up

The repairing of water line breaks is critical to providing water service to citizens and businesses in the community. This activity involves the following steps:

- Upon site inspection, document the following information:
 - Actual release location and estimated volume of the release.
 - Whether the release has entered or will result in a release to a waterway (stream, creek, ditch, pond, etc) within .25 miles of the break.
- Beware of buried utilities! May need to request emergency locates.
- Stop release at the source as soon as possible.
- Protect any storm sewer drains with curb inlet protection.
- If able, contain sediment with control devices (pigs, dikes, earth), especially on sloped areas.
- Perform necessary repairs- all dewatering must have a dewatering bag affixed to the end of the hose. Minimize the potential that the discharged water will pick up any oil or additional sediment.
- Begin clean up operations. Dispose of sediment in the proper Public Works storage location.

Reporting a Water Line Break

If the discharge is to a “State Water” (any stream, creek, gully, whether dry or flowing; or to the MS4), it must not contain any residual chlorine or sediment. If it contains sediment or chlorine, it must be reported to Colorado Department of Public Health and Environment- 24-hour Spill Reporting number 303-686-1925.

Employee Training

Provide applicable employees who respond and/or repair water line breaks this written procedure.

