

COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET TO PERMIT NUMBER COR070000
GENERAL PERMIT FOR
DISCHARGES FROM
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)

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A. ACRONYMS

BMP	Best management practice
BPT	Best practicable control technology currently available
CDPS	Colorado Discharge Permit System
CWA	Clean Water Act
DCIAs	Directly connected impervious areas
EPA	United States Environmental Protection Agency
FWPCA	Federal Water Pollution Control Act
ICIS	Integrated compliance information system
LA	Load allocation
MEP	Maximum extent practicable
MFRCP	Municipal facility runoff control plan
MS4	Municipal separate storm sewer system
NPDES	National Pollutant Discharge Elimination System
PDD	Program description document
PGP	Pesticide general permit
SOP	Standard operating procedure
TMDL	Total maximum daily load
WLA	Wasteload allocation

B. FACT SHEET DESCRIPTION

This fact sheet will use the term “previous permit” when referring to the permit in effect from February 8, 2008 to present and “renewal permit” or “permit” will refer to the permit that is replacing the previous permit when issued.

This fact sheet’s primary purpose is to provide the rationale for permit terms and conditions and its secondary purpose is to provide permittees with information from helpful documents.

This fact sheet addresses the following statutory and regulatory requirements:

- A “fact sheet” as required by the federal Discharge Permit Regulations 40 C.F.R. §124.8 and 124.56 to “briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit” and to describe the reasons for permit terms and conditions
- A permit “rationale” as required by Colorado Discharge Permit System Regulations, 5 C.C.R. 1002-61 §61.5(2)
- A “preliminary analysis” as required by Colorado Water Quality Control Act, C.R.S. § 25-8-502(3)(b)
- A “statement of basis and purpose” as required by the federal Clean Water Act, 40 C.F.R. §124.7, to “describe the derivation of permit conditions and the reasons.” A “statement of basis and purpose” as required by SB 13-073 and incorporated into Colorado Water Quality Control Act, C.R.S. § 25-8-503.5, “explaining the need for the proposed requirements” and to “present evidence supporting the need for the proposed requirements, including information regarding pollutant potential and available controls, incidents of environmental damage, and permit violations”

C. TYPE OF PERMIT

Master General, NPDES, Non-Standard Municipal Separate Storm Sewer Systems, First Renewal, statewide. Stormwater Component.

SIC Code: 9511-Air, Water, and Solid Waste Management.

Note: several SIC codes apply to specific municipal activities (sewerage systems 4952, water supply 4941, automotive repair shops 7539, transportation services 4789). Since there is not a clear SIC code for a Municipal Separate Storm Sewer System (MS4), the 9511 code is applied.

This renewal permit is for the master general discharge permit listed below.

Stormwater Discharge Permit Name	Effective Date	Expiration Date
Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems (COR070000)	#####	####

D. MS4 PERMITTEES COVERED UNDER THIS PERMIT

As of the effective date of this permit, the 61 entities covered under this permit include Academy School District 20, Adams 12 Five Star Schools, Adams County School District 14, Adams County School District 50, Arapahoe Community College, Auraria Higher Education Center, Aurora Public Schools, Boulder Valley School District, Castle Pines Metro District, Castle Pines North Metro District, CDC, CDNR CPW, Cherry Creek School District 5, Cheyenne Mountain School District 12, Colorado Community College System, Colorado Department of Human Services, Colorado Rockies Baseball Club Ltd, Colorado Springs School District 11, Colorado State University, Colorado State University Pueblo, Community College of Aurora, Denver Health and Hospital Authority, Denver Public Schools, Douglas County School District, E470 Public Highway Authority, Fairlake Metro District/Koelbel and Co, Falcon School District 49,

Foothills Park and Recreation District, Front Range Community College Foundation, Goldsmith Metropolitan District, Grand Valley Water Users Assn, Greenwood Metro District, Greenwood South Metro District, Harrison School District 2, Heritage Hills Metro District, Highlands Ranch Metro District 1, Hyland Hills Park and Recreation District, Jefferson County Public Schools R1, Lena Gulch Metropolitan District, Lincoln Park Metro District, Littleton Public Schools, Mapleton Public Schools, Meridian Metropolitan District, Mesa County Valley School District 51, Metropolitan Football Stadium District, Orchard Mesa Irrigation District, Pikes Peak Community College, Poudre School District, Pueblo Community College, Red Rocks Community College, RTD, Southeast Metro Stormwater Authority, Southwest Plaza Metro District, St Vrain Valley School District, Stonegate Village Metropolitan District, Thompson School District R2J, University of Colorado, University of Colorado at Colorado Springs, University of Colorado Denver Anschutz Medical Cam, Weld County School District 6, Widefield School District 3.

E. BACKGROUND

This section summarizes factors explaining the need for the proposed requirements and presents information supporting the need for the revised requirements.

Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground. Stormwater can pick up debris, trash, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, or wetland. Anything that enters a storm sewer system is discharged untreated into the waterways used for swimming, fishing, and providing drinking water. Storm sewer systems are designed to drain excess stormwater or snow melt from streets, parking lots, and sidewalks. Storm sewer systems are made up of storm drains, usually cuts in curbs, which flow through underground pipes, and then to a local waterway. Storm sewer systems in Colorado do not flow to sewage treatment plants.

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people, such as the following:

- Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment can also destroy aquatic habitats.
- Excess nutrients can cause algal blooms. When algae dies, it sinks to the bottom and decomposes in a process that removes oxygen from the water. Fish and other aquatic organisms cannot exist in water with low dissolved oxygen levels.
- Bacteria and other pathogens can wash into swimming areas and create health hazards, often making swimming area closures necessary.
- Debris and trash—plastic bags, six-pack rings, bottles, cigarette butts, etc.—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish or polluted water.
- Polluted stormwater often affects drinking water sources. This in turn can effect human health and increase drinking water treatment costs.

In addition, non-stormwater discharges can occur from MS4s and also cause impacts on plants, fish, animals, and people. Non-stormwater discharges are discharges not entirely comprised of stormwater and can be caused by such activities as illegal dumping into the storm drain system or unpermitted discharges from factories.

The Clean Water Act (CWA) establishes the National Pollutant Discharge Elimination System (NPDES), which is a permitting system that regulates point sources of pollution that discharge directly to a state water or a sewage treatment plant. Point sources of pollution are pipes and drains that flow directly to a state water and typically come from industries, some agricultural facilities, and municipalities. Storm

sewer systems that discharge to a state water are point sources of pollution and require a permit. The 1987 amendments to the CWA expanded the NPDES program to cover municipal stormwater discharges.

The EPA administers the CWA. Colorado passed the Colorado Water Quality Control Act C.R.S. § 25-8 and was authorized by EPA in 1975 to administer the NPDES program. Requirements in Colorado Discharge Permit System Regulations 5 C.C.R. 1002-61 (Regulation 61), Nutrients Management Control Regulation 5 C.C.R. 1002-85 (Regulation 85), and Regulations Controlling Discharges to Storm Sewers 5 C.C.R. 1002-65 (Regulation 65) are incorporated into this permit. If more than one regulation has a similar requirement, the more stringent requirement from the applicable regulation is incorporated into this permit. Colorado calls the NPDES program the Colorado Discharge Permit System (CDPS). Colorado is authorized to issue both individual and general permits to MS4s through the CDPS regulations.

The Colorado Department of Public Health and Environment, Water Quality Control Division (division) issued the first general permit to small, non-standard MS4s permittees in 2003 under the *General Permit COR090000 for Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems (MS4S)*. Upon this permit's renewal in February 2008, the Non-standards MS4 were included in a new separate *General Permit for Stormwater Discharges Associated with Non-Standard Municipal Separate Storm Sewer Systems (MS4s)* (COR070000), which expired on March 9, 2013 and has been administratively extended.

As defined in Regulation 61.3(2)(f)(v)(A), regulated small MS4s are those that serve a population of at least 10,000 and that meet the definition of an "urbanized area" as defined by the US Census Bureau. Small MS4s also include publically-owned systems similar to separate storm sewer systems in municipalities, such as large education, hospital, or prison complexes, if they are designed for a maximum daily user population (residents and individuals who come to work or use the MS4's facilities) of at least 1,000. Regulation 61.2(63) defines municipalities as "a city, town, county, district, association, or other public body created by or under state law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes, or a designated and approved management agency under section 208 of CWA(1987)." The term "municipalities" includes more than just cities and towns and includes large colleges and schools, municipal districts, and state prisons. The US Census Bureau defines an urbanized area as an area with 50,000 or more people. Maps of urbanized areas can be found at: <http://www.census.gov/geo/reference/ua/urban-rural-2010.html>. The maps are updated every 10 years and the list of small MS4s that need to be covered under this permit reflects the 2010 census urbanized areas maps.

This general permit is being renewed to continue to provide coverage to non-standard MS4 permittees through a general permit. However, any permittee authorized by a general permit may request to be excluded from the coverage of the general permit by applying for an individual permit. The division may also require any permittee authorized by a general permit to apply for and obtain an individual permit. An example of when an individual permit might be required would be if a Total Maximum Daily Load (TMDL) was developed that identified a wasteload allocation (WLA) for a permittee that this general permit did not adequately address. In this situation, the division might require the permittee to apply for an individual permit.

The division has issued this general permit to control non-stormwater and polluted stormwater runoff from non-standard MS4s. This permit authorizes all discharges from the MS4, not just stormwater. This permit requires non-standard MS4s to develop and run a program to control stormwater discharges to the MS4. This permit does not set *numeric limits* for discharges from stormwater outfalls into state waters, except for MS4s in TMDL areas, see Part III of the permit and this fact sheet. Rather, the permit requires permittees to implement control measures (which include best management practices or "BMPs") in six program areas: public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction sites, post-construction stormwater management in new development and redevelopment, and pollution prevention/good housekeeping for permittee operations. Part III of the permit outlines additional control measure for permittees with WLAs in a TMDL.

F. SCOPE OF THE GENERAL PERMIT

The previous general permit COR070000 expired on March 9, 2013 and has been administratively extended by the division. This renewal permit is needed to continue to provide coverage for these permittees and for any newly-designated permittees.

I. Types of MS4s Covered

Discharges from the following are covered under this renewal permit:

- Regulated small MS4s that are currently covered under the existing COR070000 permit (including those permittees in the Cherry Creek Reservoir Basin), and
- Small MS4s that are required to obtain permit coverage in accordance with Regulation 61.3(2)(f)(v)(A)(II): “Publicly-owned systems similar to separate storm sewer systems in municipalities, such as systems at military bases, and large education, hospital or prison complexes, if they are designed for a maximum daily user population (residents and individuals who come there to work or use the MS4’s facilities) of at least 1000, and are located in an urbanized area.” Publicly owned systems can include systems owned by the federal government. 40 C.F.R. 122.26.b(16).

II. Types of MS4s Not Covered

- Regulated small MS4s that are currently covered under the existing COR090000 (Standard MS4) or COR080000 (Cherry Creek) general permits.
- Large and Medium MS4s. These are entities that were designated for permit coverage under the 1990 Phase 1 stormwater rule. These entities are currently covered under individual permits and were not contemplated for coverage under this general permit.
- Federal facilities. The division does not currently have NPDES delegation for federal facilities. MS4s designated by EPA for permit coverage in Colorado are currently covered under individual permits issued by EPA and are not contemplated for coverage under this general permit. However, this renewal permit may cover systems that are owned by the federal government but are operated by a non-federal public entity and are not federal facilities.
- MS4s located on Indian Lands. It is anticipated that any MS4 located on Indian Lands needing permit coverage would be permitted by EPA or a tribal authority.
- Discharges from MS4s covered by an individual permit. This includes any municipality that requests coverage under an individual permit or is notified by the division to apply for and obtain an individual permit.

III. Discharge Segments

The division reviewed the applicable stream segments to which currently permitted MS4s discharge and determined the terms and conditions that need to be included in this permit. Stream segments will be identified in the permit certification issued to each permittee under this permit. The receiving water review focused on impairment, including a review of impaired segments for which a TMDL has been completed and impaired segments for which a TMDL has not been completed.

The review of impaired segments for which a TMDL has been completed is intended to identify whether MS4 discharges were assigned WLAs or load allocations (LAs). Wasteload allocation are given to point sources, such as MS4 permittees, and load allocations are given to non-point sources. Non-point sources of pollution (i.e., overland flow) are not permitted by the division. Specifically, the review included whether discharges from permittees were identified as sources for which either controls were already in place, need to continue, or for which additional controls are appropriate to achieve additional pollutant reduction to attain the water quality standard. The completed TMDLs that were identified for consideration of permit conditions are discussed in the Part III Section of this fact sheet.

G. STATUTORY AND REGULATORY AUTHORITY

This permit is rooted in the federal CWA, 33 U.S.C. 1251 *et seq.*, and the Colorado Water Quality Control Act, 25-8-101 *et seq.*, C.R.S. The federal CWA and regulations are administered by the EPA. The Colorado Water Quality Control Act and its regulations are administered by the division. The Colorado Water Quality Control Act references the federal CWA. To the extent that the Colorado Water Quality Control Act and its implementing regulations are more stringent than the federal rules, those requirements are implemented via the Colorado Discharge Permit System. The division is responsible for developing permits that are consistent with the CWA, federal regulations, the Colorado Water Quality Control Act, and state regulations.

H. DISCUSSION OF KEY REGULATORY TERMS AND CONCEPTS

This section provides a discussion of key regulatory terms and concepts that are unique to MS4 permits.

“Maximum Extent Practicable” (MEP) Standard

33 U.S.C. 1251 *et seq.*, section 402(p)(3)(B), of the CWA requires discharge permits from municipal storm sewers. Section 402(p)(3)(B)(iii) of the CWA states that permits issued to municipalities “shall require controls to reduce the discharge of pollutants to the *maximum extent practicable* [emphasis added], including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the state determines appropriate for the control of such pollutants.” In addition, 33 U.S.C. 1251 *et seq.*, section 402 (p)(3)(B) of the CWA states that permits issued to municipalities shall “include a requirement to effectively prohibit non-stormwater discharges into the storm sewers.”

Section 61.8(11)(a)(i) of Regulation 61 states the following:

At a minimum, the MS4 permit will require that the 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) [emphasis added], 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.). The stormwater management program must include the minimum control measures described in subsection (ii) of this section, unless the small MS4 applies for a permit under 61.4(3)(c). 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.

Maximum extent practicable is a statutory standard that directs the permitting authority to establish the level of pollutant reductions that all MS4 operators must achieve and is discussed in *40 C.F.R. Parts 9, 122, 123, and 124 National Pollutants Discharge Elimination System—Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges; Final Rule; Report to Congress on the Phase II Storm Water Regulations; Notice* (December 8, 1999). This is commonly referred to as the Phase II Final Rule.

The regulatory requirements of the rule Volume 64, number 235, page 68754 of the Phase II Final Rule states that “EPA envisions application of the MEP standard as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards.” The division also envisions application of MEP as an iterative process, consistent with EPA’s discussion in the Phase II Rule. This permitting approach is unique to MS4 discharges and distinct from the direction provided for permitting other sources in the NPDES framework. How the division determines MEP is discussed below.

In determining the level of control to be required for this permit term, the division determined that the level of control should reflect the average of the best existing performance at the time of permit renewal as described further below.

In plain language the division interpreted the term “maximum extent” to mean that that standard was not intended to be the minimum, or the average, or a single maximum, but a maximum that can be achieved by permittees operating a compliant program. The division has also looked to how the term “practicable” is applied within other parts of the CWA framework, specifically within establishment of technology based controls within the ELG framework. EPA sets Best Practicable Control Technology Currently Available (BPT) for effluent limitations for conventional, toxic, and non-conventional pollutants. 33 U.S.C. 1251 *et seq.*, section 304(b)(1) of the CWA lists the factors that EPA must consider when setting BPT. The standard for BPT is defined by EPA as “the first level of technology-based standards established by the CWA to control pollutants discharges to waters of the U.S.” BPT guidelines are generally based on “the average of the best existing performance by plants within an industrial category or subcategory.” This provides practical guidance to permitting authorities on what to look for in establishing an MEP standard. This approach recognizes that there are MS4 permittees that implement programs that go beyond the MEP standard, and is consistent with the goal of establishing a standard that all municipalities can and must implement. The permitting authority is directed to establish the MEP standard, in recognition that implementation beyond that standard will be feasible and appropriate for some MS4 permittees. Permittees are not tasked with setting MEP. The division sets the requirements that make up MEP.

The routine review process implemented through permit renewal is how permitting authorities are able to iteratively refine the MEP standard through permit requirements. This provides the opportunity to continually adapt to current conditions and control measure feasibility and effectiveness.

How the Division Determines MEP

The division has used multiple sources to determine MEP for the various MS4 program areas. The documents are listed in the references section of this fact sheet. The applicable sections of the documents are listed throughout this fact sheet. The most used references are listed below:

- Applicable laws and regulations
- Other MS4 permits recently issued by the division
- Stakeholder input obtained in advance of preparing the permit
- MS4 permits in effect issued by other permitting authorities (states and EPA)
- Published studies (e.g., information on green infrastructure, etc.)

Compliance with MEP will constitute meeting the effluent limitations in accordance with Part I.E (Pollutant Restrictions, Prohibitions, and Reduction Requirements and Recordkeeping), and Part III of the renewal permit as applicable to a specific MS4 permittee. The effluent limitations are established for program areas in Part I.E covering Public Education and Outreach, Illicit Discharge Detection and Elimination, Construction Sites, Post-Construction Stormwater Management in New Development and Redevelopment, and Pollution Prevention/Good Housekeeping for Municipal Operations.

For this permit term, the division has determined that additional provisions are not necessary to result in control of pollutants beyond the MEP standard, except where TMDLs have been developed. The division has included requirements for additional control measures, and monitoring and reporting conditions for some discharges that have been assigned WLAs in a TMDL determination, and requirements to further characterize certain non-stormwater discharges that are not separately permitted.

Effluent Limitations

The Colorado Water Quality Control Act C.R.S. § 25-8-503(4) states that “no permit shall be issued which allows a discharge that by itself or in combination with other pollution will result in pollution of the receiving waters in excess of the pollution permitted by an applicable water quality standard unless the permit contains effluent limitations and a schedule of compliance specifying treatment requirements.

Effluent limitations designed to meet water quality standards shall be based on application of appropriate physical, chemical, and biological factors reasonably necessary to achieve the levels of protection required by the standards.”

Section 61.2(26) of Regulation 61 defines an effluent limitation as “any restriction or prohibition established under this article or Federal law on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into state waters, including, but not limited to, standards of performance for new sources, toxic effluent standards and schedules of compliance.” The division has defined and considers the management practices, control techniques, and system design and engineering methods to be effluent limitations. The management practices, control techniques, and system design and engineering methods required by this permit are effluent limitations in that they are restrictions or prohibitions on the quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from MS4s into state waters. This is consistent with the definition of effluent limitation contained in Regulation 61. For the purpose of this permit, the division has established effluent limitations, and has frequently referred to those as “pollutant restrictions, prohibitions, and reduction requirements” in the permit text.

Numeric Effluent Limitations vs. Practice-Based Effluent Limitations

This permit contains *practice-based* rather than *numeric* effluent limits. Stormwater and non stormwater management requirements are the controls that are used to achieve the reduction of pollutants in the stormwater discharges from MS4s in this permit. The division has determined that the terms and conditions in the permit are necessary to ensure the required compliance with the applicable regulations and meet MEP.

Scope of Permit

The division has clarified that the scope of the permit is limited to authorizing discharges from MS4s. The permit also clarifies the types of discharges that are conveyed and discharged through the MS4 that need to be separately permitted. The permit explicitly states that it does not remove the responsibility for the responsible party of a discharge to obtain separate CDPS or NPDES permit coverage or report spills when required in accordance with the Colorado Water Quality Control Act and Regulation 61. The division does not have the authority to exempt any responsible party for a point source discharge from the requirement to obtain permit coverage or the authority to modify the definitions of point source or discharge. Therefore, the determination in the permit of whether a discharge to the MS4 is an illicit discharge has no bearing on the statutory and regulatory requirements for point source discharge permitting and for reporting unpermitted discharges. The division has intentionally not required permittees to prohibit, detect, and eliminate certain discharges that are covered by the division’s Low Risk Policies. This allows the permittee to focus on discharges that have the greatest potential to cause water quality impacts. This will also promote transparency and consistency between permittees and the division in how these discharges are addressed on a day-to-day basis.

Individual vs. General Permits

This permit is a general permit. Section 61.9(2) of Regulation 61 states that “the division may issue a general permit to cover a category of discharges, except those covered by individual permits, within a geographic area which shall correspond to existing geographic or political boundaries.” The section also states that general permits shall be written to regulate stormwater point sources. A general permit must set the MEP for all of permittees, regardless of size, number of outfalls, number of active construction sites, number of staff, stormwater budget, etc.

I. PERMIT TERM

Permits are issued for a term of 5 years and can be administratively extended. Upon expiration, the division must reissue the permit to include such conditions in the renewal permit that are necessary to implement state and federal requirements. This comprehensive permit renewal acts on new information

resulting from sources including the division's compliance oversight activities, other state permits, case law, EPA guidance, and further evaluation of statutory and regulatory direction.

J. RATIONALE FOR CHANGES FROM THE PREVIOUS PERMIT

The division substantially revised the framework of the renewal permit from the previous 2008 permit. These changes stem from stakeholder input; the division's experiences with MS4 permitting, compliance, and enforcement since 2008; changes in stormwater treatment and technology; changes made since 2008 in other Colorado and EPA MS4 permits, including the CDPS Standard MS4 Permit (COR090000), and EPA's MS4 regulations and guidance.

On March 1, 2019 and May 7, 2019, the division hosted stakeholder meetings to share the division's plans for the permit renewal, to hear what challenges were being faced by those who had to implement the permit requirements, and to hear stakeholder suggestions for improvements to the permit. The invitation to both meetings was extended to all active permittees at the time, as well as consultants, and others who had expressed an interest in the permit to the division. Several stakeholders followed up the stakeholder meeting with informal written comments. All comments received were considered by the division during the development of the permit.

The rationale supporting the changes is primarily covered in each of the sections below, starting with Part I. Some global issues addressed in the renewal permit are listed below.

Jurisdictional Boundary

Regulation 61.3(2)(f)(v)(A)(II) specifies that a regulated small MS4 includes "[p]ublicly-owned systems similar to separate storm sewer systems in municipalities, such as systems at military bases, and large education, hospital or prison complexes, if they are designed for a maximum daily user population (residents and individuals who come there to work or use the MS4's facilities) of at least 1000, and are located in an urbanized area." For certifications issued under the previous permit, where the permittee had multiple campuses or locations, the jurisdictional boundary included only those campuses or locations within an urbanized area that served a maximum daily user population of 1,000 or more and were located in an urbanized area. School districts, therefore would typically have a jurisdictional boundary that included the larger high schools, but not elementary schools or ancillary operations such as transportation centers that served a lower population. Public schools are typically located on state lands, and as such, are usually not under the jurisdiction of city or county MS4 programs. While many schools work cooperatively with cities and counties, there is a gap in regulation of construction and post construction stormwater control measures at school facilities that serve populations of less than 1,000. These ancillary locations provide opportunity to prevent stormwater pollution through implementation of stormwater management programs and installation of permanent stormwater control measures. Construction at these less populated facilities, without proper oversight, creates a potential for pollutants to be discharged to state waters. In addition, these locations often have large impervious surfaces such as parking lots, basketball courts, stadiums and/or they have activities where there is a higher potential for pollutants to become entrained in runoff (e.g., vehicle maintenance).

For the renewal permit, the division will close this regulatory gap by including off-site ancillary or support facilities in urbanized areas as part of the permit area if the sum of the user population among all of a permittees' locations is greater than 1,000. At this time the division does not intend to designate off-site locations that are outside of an urbanized area, as they pose less environmental risk than those located in urbanized areas.

Clarification of the Basis for Determining Permit Terms and Conditions

The division develops permit terms and conditions as directed through federal and state statutes and implementing regulations. All NPDES permits are required to contain effluent limitations. In this case of MS4 permits, these effluent limitations are derived to meet the MEP standards, and additional requirements can be included as necessary to meet water quality standards, as previously described.

All NPDES permits are required to contain monitoring requirements under section 61.8(4) of Regulation 61. Federal and state permitting regulations require that at a minimum permits specify monitoring requirements for each pollutant limited in the permit. Permits must specify monitoring equipment, methods, intervals, and frequencies sufficient to yield data which are representative of the monitoring activity and must specify the content of records to be maintained, and records retention requirements. The section 61.8(4) of Regulation 61 establishes a threshold of “reasonableness” in directing the derivation of monitoring and recordkeeping requirements. For development of this permit, the division determined the monitoring and records logically needed to meet the threshold of representative of the monitoring activity, demonstrate that the monitoring was adequately performed, document the conditions surrounding the event and what was observed, and document findings and actions taken, while not including superfluous requirements.

In this case, the monitoring and recordkeeping requirements include the development of written procedures. The written procedures describe how to perform various operations within the permittee’s stormwater program. Policies, standards, processes, and procedures must be written down, approved, and communicated to all concerned. They provide step-by-step instructions and assure consistency, accuracy, and quality.

Recordkeeping allows a permittee to communicate accurately and effectively to staff and construction operators. Recordkeeping enables the permittee, applicable construction site operators, and others participating in the stormwater program to be timely in reporting to the division and the permittee. In addition, recordkeeping helps to minimize errors and allow for a periodic review of the success of the stormwater program. Opportunities for stormwater program improvements can also be identified through the review of records.

Incorporation of New Federal Regulations and Guidance into Permit

EPA issued the Final MS4 General Permit Remand Rule (Remand Rule) on December 9, 2016¹. The Remand Rule specified procedures for issuing general permits for small MS4s such that there is adequate public notice and opportunity for hearings and to ensure that control measures selected by MS4s meet the MEP requirement. In part, the Remand Rule emphasized that permit requirements must be expressed in “clear, specific, and measurable terms.”

During previous permit terms, the division used its approval of permittee program description documents to establish many of the requirements for control measures to determine compliance with the MEP standard. In contrast, in this permit, the division includes “clear, specific, measurable” requirements that replace much of the language previously included in a permittee’s program description documents. **Because the division’s expectations are now incorporated as permit requirements, there is no longer the need for the division to approve program description documents.** The overall clarity is expected to increase by consolidating and removing document duplication from referencing multiple documents. While the renewal permit is longer than the previous permit, the overall length of the renewal permit is shorter compared to the previous permit plus guidance under the previous term. This permit also removes the additional process of program description document submittal and review by the division, which resulted in significant workload for both the permittees and the division. These changes also ensure that stakeholders have the opportunity to review and comment on draft language, including language that was previously contained in division guidance documents or permittee program submittals.

Consistent Terminology

Where applicable the division used consistent terminology throughout the permit.

Jurisdictional Boundary and Implementation Authority

The previous permit described “permit area” as covering “all areas designated by the Water Quality Control Division (“Division”) within the *jurisdiction* [emphasis added] of the entity identified in the

¹ In response to Ninth Circuit in *Environmental Defense Center, et al. v. EPA*, 344 F.3d 832 (9th Cir. 2003).

certification that are served by, or contribute to, municipal separate storm sewers owned or operated by the entity that discharge to State waters.” The permit frequently limited applicability to areas within the permittees’ “jurisdiction,” without further description of the term “jurisdiction.” Within the context of Non-standard MS4s, “jurisdiction” can indicate the Non-standard MS4 can enact laws, ordinances, or codes, but often it means they are limited to addressing their own activities. As a result, there may be instances where the Non-standard MS4 permittee does not have “jurisdiction” within the geographical boundary of the area served by the MS4. For example, a Non-standard MS4 may own some or all of the conveyance system components (e.g., catch basins, detention ponds, etc.) and would therefore have the “jurisdiction,” or power to regulate these specific components. Conversely they might not own some of the interconnected conveyances (e.g. streets) or the privately owned land contributing stormwater runoff to the system. Because of the interconnected nature of MS4s, the MS4 service area can be difficult to portray on a map as a geographical shape area.

In attempt to separate where a permittee has responsibility, we are using the term “implementation authority” to replace the term “jurisdiction” as the latter term can incorrectly imply a simple geographical shape area in which all permit requirements apply. Additionally, the renewal permit uses the term “jurisdictional boundary” instead of “permit area” to represent the boundary of area included in the permit certification that is served by the MS4 and for which the MS4 has implementation authority over one or more MS4 components. Note that for public involvement and participation, and public education and outreach the permittee has implementation authority over its entire service area, regardless of whether it has control over private land use.

Project replaced with *site*

The term “project” was removed and replaced with the term “site.” While the terms are synonymous, the division felt it was important to use the same term throughout the permit and fact sheet.

From this point forward, the organization of the fact sheet follows the order of the renewal permit to provide clarity to the reader.

PART I

A. COVERAGE UNDER THIS PERMIT

1. Discharges Authorized Under this Permit

The discharges eligible for coverage under this permit include those formerly covered under the previous permit and additional Non-standard MS4s that the division notifies require coverage. This renewal permit authorizes discharges of stormwater from municipal separate storm sewer systems that meet the designation criteria in Regulation 61.3(2)(f)(v), including permittees in the Cherry Creek Basin.

All discharges from the MS4 within the permit area to waters of the state are authorized under this permit. This includes permit coverage for all stormwater discharges and non-stormwater discharges from the MS4. Authorized discharges also include discharges that have separate permit coverage for the discharge to waters of the state from a facility or activity from which the discharge originates.

MS4s includes roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains. In addition, MS4s also include systems and conveyances that are not typical (see 2. below). Permittees should also note that four criterion must be met in order for a system or conveyance to be considered an MS4.

1. The system or conveyance must be owned or operated by the permittee. In other words, the permittee must have implementation authority over the system or conveyance. If the permittee does not own or operate the streets or catch basins, then streets and catch basins are not part of the permittee's MS4.
2. The area must be designed or used for collecting or conveying stormwater.
3. The system or conveyance cannot be part of a combined sewer outfall system. This is uncommon in Colorado.
4. The system or conveyance cannot be part of a publically owned treatment works.

2. Limitations on Coverage

This permit does not authorize point source discharges other than the discharge from the MS4 for which the permittee is the operator of the facility or activity from which the discharge originates. This permit does not authorize the permittee to discharge stormwater associated with industrial activity or with construction activities, even when such discharge is to the permitted MS4. The permittee must obtain separate permit coverage (i.e., obtain a stormwater discharge permit for construction activities or a dewatering permit) for such discharges.

The division modified this section in the renewal permit to clarify that discharges to a receiving water designated as an "outstanding water" are not eligible for coverage under this permit. The division has determined that a more detailed analysis would be needed to determine if provisions for the control of pollutants beyond those included in this permit would be appropriate. The Water Quality Control Commission has not designated any outstanding waters in an MS4 permit area as of the issuance date of this renewal permit.

Tip for Conveyances Adjacent to State Waters

You have implementation authority in each of these scenarios!

- You have an easement **AREA** adjacent to a stream bank that is used for collecting and conveying stormwater.
- You have an **ACTIVITY** adjacent to a stream bank **and** it is within your jurisdictional boundary **and** stormwater from the site discharges to the state waters (e.g., stream bank stabilization, floodplain management).
- You have a site that discharges directly into the stream and **you own the MS4 conveyance** through which it discharges.

Permittees are only responsible for implementing the renewal permit requirements within their jurisdictional boundary over areas or MS4 components for which they have implementation authority (see discussion in Part H of this Fact Sheet).

This section was expanded from the previous permit to address confusion concerning irrigation ditches. Those conveyances for which the majority of flow is irrigation return flow and/or supplying irrigation water to irrigated land (i.e., irrigation ditches) that are identified in the permittee's application or subsequent modification as not being part of the MS4 and are denoted in the permit certification are excluded from being part of the MS4. The permittee has the flexibility to demonstrate to the division that the majority of water within the conveyance is irrigation flow. This demonstration is required prior to permit application.

In addition, section 61.3(1)(c) of Regulation 61 states that "neither the Commission nor the division shall require any permit for animal or agricultural waste on farms and ranches except as many be required by the Federal Act or regulations or be section 25-8-501.1, C.R.S., or the state act which provides that permits shall be required for housed commercial swine feeding operations." Permittees should be advised that applicable construction activities occurring at farms and ranches are covered under this permit. This coverage does not include facility operation activities like tilling fields.

If a ditch located in the permittee's jurisdictional boundary meets any one of the three criteria below, it is not part of the MS4. Note that the MS4 may still have outfalls to an excluded ditch and these would be subject to program requirements.

- **Criteria 1:** If the MS4 permittee does not own or operate the ditch, it is not part of the permitted MS4. For example, ditches that are privately owned and operated or that are owned and operated by a ditch company are not part of the permitted MS4 (unless the ditch company is also the MS4 permittee or listed on the permit certification, such is the case for a few entities in the Grand Valley). Note that an MS4 permittee may be a shareholder in a ditch company; however that does not make the MS4 permittee the actual owner.
- **Criteria 2:** If the ditch contains only flows that are excluded from permitting by the exemptions for agricultural return flow and/or agricultural stormwater, it is not part of the permitted MS4. The division has developed draft changes to the permit through a permit modification to increase clarity on this issue.
- **Criteria 3:** If the ditch is specifically listed in the permit certification as being excluded from the permitted MS4, it is not part of the permitted MS4. The reference to agricultural stormwater runoff is based on the federal exemption in Section 402(l) (1) of the 1987 amendments to the Clean Water Act. This exemption is implemented, and additional specificity is provided, through federal regulation 40 C.F.R. §122.3(e), which states that the following discharges do not require NPDES permits: "Any introduction of pollutants from non-point-source agricultural and silvicultural activities, including storm water runoff from orchards, cultivated crops, pastures, range lands, and forest lands, but not discharges from concentrated animal feeding operations..." EPA further clarifies in the NPDES Storm Water Program: Question and Answer Document - Volume 2, July, 1993, that this exclusion does not apply to activities occurring on agriculture lands that meet the description of any of the 11 categories of industrial activity at 40 C.F.R. 122.26(b) (14) (i)- (xi) (i.e., stormwater associated with industrial activities, including construction activities disturbing one acre or greater, for which a stormwater discharge permit is required). Such activities remain subject to federal NPDES, and Colorado CDPS, permit application requirements.

3. Jurisdictional Boundary

The US Census Bureau mapped 652,443 acres of urbanized area in Colorado in the 2000 census and 819,342 acres in the 2010 census. That is an increase of 166,899 acres or 20.4 percent.

- a. This renewal permit does not apply to any areas outside of the Jurisdictional Boundary.
 - i. This section has been simplified in the renewal permit.
 - ii. Section 61.3(2)(f)(v)(A)(II) of Regulation 61 states that “Publicly-owned systems similar to separate storm sewer systems in municipalities, such as systems at military bases, and large education, hospital or prison complexes, if they are designed for a maximum daily user population (residents and individuals who come there to work or use the MS4’s facilities) of at least 1000, and are located in an urbanized area.”
- b. The renewal permit states that the permittee’s stormwater program must immediately cover areas annexed or incorporated into the permittee’s permit area. For school district permittees, this permit covers schools listed in the permit certification. Schools that are expanded during the permit term and are located within an urbanized area will be covered under the next permit term. However, the division strongly advises that permittees implement their permit program requirements at these areas as many requirements are likely to be carried over to the next permit.

4. Application for New and Renewal Applicants

Section 61.8(11)(a)(i) of Regulation 61 states “The initial permit for the regulated small MS4 will specify a time period of up to 5 years from the date of permit issuance for development and implementation of the program.”

The division combined the requirements for new and renewal applicants, and provided additional clarification regarding the process if the division denies the application for coverage under the general permit.

5. Local Agency Authority

Section 61.1(1) of regulation 61 states that “Nothing in these regulations shall be construed to limit a local government’s authority to impose land-use or zoning requirements or other limitations on the activities subject to these regulations.” This section of the renewal permit has been updated to provide more clarity on local agency authority.

6. Permit Compliance

The division added this section to the renewal permit to clarify conditions that constitute a violation of the permit, such as failure to comply with the terms and conditions of the permit; failure to perform corrective actions, etc.

7. Cherry Creek Reservoir Drainage Basin Requirements

Regulation 72 is a strategy for reducing phosphorus in discharges to the Cherry Creek Basin Watershed. The regulation includes requirements to include in MS4 permits. As such, the actions taken by permittees in the Cherry Creek Reservoir Drainage Basin must comply with requirements derived from both Regulation 61 AND Regulation 72. The requirements listed in Regulation 72 are IN ADDITION to requirements listed in Regulation 61. For example, Regulation 61 requires the MS4 permittee to reduce the discharge of pollutants from the MS4, whereas Regulation 72 only requires MS4 permittees to focus on reducing phosphorus

discharges to the MS4. Permittees in the Cherry Creek Reservoir Drainage Basin may conduct activities that are above and beyond the terms and condition of either of those Regulations. No scenario has been identified that would result in a conflict where both Regulations could not be met. Permittees should contact the division if a potential conflict is identified.

B. CONTROL MEASURES

The permit includes requirements for control measures consistent with the CWA and its implementing regulations at 40 C.F.R. 122.44(k)(4). Section 402(a)(2) of the CWA states: “The administrator shall prescribe conditions for such permits to assure compliance with the requirements in paragraph (1).” Regulation 61.8(3)(r) requires “best management practices” in permits when “the practices are reasonably necessary to achieve effluent limitations and standards, or when authorized under 304(e) of the federal act for control of toxic pollutants and hazardous substances.” Regulation 61.8(11) specifies that implementation of BMPs consistent with the provisions of the stormwater management program constitutes compliance with the standard of reducing pollutants to the MEP. The division believes that requirements in this section are minimum requirements necessary to achieve the MEP standard.

Regulation 61.2(9) defines best management practices as “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of state waters.” BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.” The definition of BMP in regulation 61 is the same definition that was used in the previous permit. However, EPA has been using the term “control measure” in stormwater permits since at least the 2000 multi-sector general permit. The renewal permit uses the term “control measure” (defined in Part I.J of the renewal permit) to be consistent with the state and EPA definitions. This term has a broader range of meaning than BMP since it includes both BMPs and “other methods.” The term “control measure” better describes the range of pollutant reduction practices a permittee may implement.

1. Good Engineering, Hydrologic and Pollution Control Practices

This section of the renewal permit was added to provide additional clarification. In many instances, manufacturer’s specifications can be used to determine if the control measure is selected, designed, installed, implemented, and maintained in accordance with good engineering, hydrologic, and pollution control practices.

2. Maintenance

Maintenance is an integral part of an effective control measure. This section of the renewal permit provides additional clarification for the Control Measure Requiring Routine Maintenance section below.

3. Inadequate Control Measures

The renewal permit provides definitions of and the differences between an “inadequate control measure” and a “control measure requiring routine maintenance.” The division recommends that permittees consider both inadequate control measures and control measures requiring routine maintenance when developing enforcement response procedures. For example, the renewal permit requires the permittee to conduct a compliance inspection and inspection follow up when an inadequate control measure has been identified, but not when a control measure requiring routine maintenance has been identified. Permittees have the flexibility to determine the actions necessary after a control measure requiring routine maintenance has been identified during an inspection.

4. Control Measure Requiring Routine Maintenance

Maintenance of temporary control measures at construction sites usually includes the removal of accumulated pollutants and minor structural repairs. The permittee has the flexibility to further define routine maintenance.

5. Minimize

The division uses and defines the term “minimize” to provide the permittee with the level of performance of control measures that should be implemented to achieve effluent limitations.

C. PROGRAM DESCRIPTION DOCUMENT

1. Development and Maintenance

Section 61.8(11)(a)(i) of Regulation 61 states that “the MS4 permit will require that the 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.).” The division has determined that “develop” requires the permittee to determine which control measures they will implement to meet the requirements of the permit and then develop a written PDD to document their decisions. Permittees must develop a PDD that describes how the permittee will meet all of the requirements in the renewal permit.

The division has substantially modified this section. The previous permit framework required that the permittee develop a PDD that addressed pollutants of concern and included specific requirements to meet MEP. The division would then review and approve or reject the PDD.

The renewal permit only requires the permittee to develop the PDD and revise it as necessary. It does not require division approval of the PDD. The division also did not include the requirement that the PDD be organized to mirror the structure of the permit. The permittee has the flexibility to organize the PDD in a way that will be effective for their staff.

If a PDD is inconsistent with permit terms and conditions, the permit takes precedence and the permittee must rely on the permit. The permittee has the responsibility to ensure that the PDD is in compliance with the permit. Since the division will not approve the PDD, the permittee no longer has the assurance from the division that the PDD complies with the permit. The PDD is not a shield for liability for the terms and conditions of the renewal permit.

Tip for Your PDD

The PDD is not just a “paperwork exercise.” Use your PDD to

- organize what control measures will be/are being implemented,
- determine appropriate funding and staff needs,
- train new staff on all of the different elements of the stormwater program to help with consistency, and
- provide transparency to the public.

The PDD must be made available to the division upon request. It should be noted that the division will use the PDD and other records when inspecting or auditing the permittee’s program. As such, the PDD must be up-to-date and must reflect current information on the implementation of each control measure. This will allow for effective and efficient implementation by the permittee, oversight by the division, and meaningful public involvement.

2. Availability

Section 61.8(11)(a)(vii)(B) of Regulation 61 requires that “The permittee must make the records, including a description of the permittee's stormwater management program, available to the public at reasonable times during regular business hours (see 61.5(4) for confidentiality provision). (The permittee may assess a reasonable charge for copying. The permittee may require a member of the public to provide advance notice.)” The renewal permit requires the PDD be made available to the public via the permittees’ website. Part II.H of the permit authorizes the division to access the PDD. The division anticipates obtaining access to the PDD through the public website.

3. Modification

The renewal permit allows the permittee to tailor and modify their selection and implementation of controls as needed and modify their PDD to reflect current program implementation. Permittees no longer need division review or approval to modify their PDD. In addition, the renewal permit eliminates the requirement that the PDD receive public notice. Instead, the renewal permit includes all practice-based effluent limitations and will receive public notice and comment through the permit development process.

D. PUBLIC INVOLVEMENT/PARTICIPATION

Section 61.8(11)(a)(ii)(B) of Regulation 61 states:

Public involvement/participation. The permittee must, at a minimum, comply with state and local public notice requirements when implementing the stormwater management programs required under the permit. Notice of all public hearings should be published in a community publication or newspaper of general circulation, to provide opportunities for public involvement that reach a majority of citizens through the notification process.

Volume 64, number 235, page 68755 of the Phase II Rule gives two benefits of public participation. “First, early and frequent public involvement can shorten implementation schedules and broaden public support for a program.” “Second, public participation is likely to ensure a more successful storm water program by providing valuable expertise and a conduit to other programs and governments.”

Volume 64, number 235, page 68787 of the Phase II Rule states that:

EPA believes that an educated and actively involved public is essential to a successful municipal storm water program. An educated public increases program compliance from residents and businesses as they realize their individual and collective responsibility for protecting water resources (e.g., the residents and businesses could be subject to a local ordinance that prohibits dumping used oil down storm sewers). Finally, the program is also more likely to receive public support and participation when the public is actively involved from the program’s inception and allowed to participate in the decision making process.

The previous permit included the Public Involvement/Participation requirements (not to be confused with Public Education and Outreach requirements) within the same section that addressed programmatic practices to minimize the discharge of pollutants to the MS4. The division has moved the Public Involvement/Participation section from the Pollutant Restrictions, Prohibitions, and Reduction Requirements and Recordkeeping section, because Public Involvement/Participation activities are not practices specifically implemented to minimize the discharge of pollutants to the MS4. A requirement for the permittee to accept and respond to public information that was in the Construction Sites program has also been relocated to consolidate Public Involvement and Participation.

1. Public Involvement and Participation Process

“At a Minimum”

Regulation 61 uses “at a minimum” throughout the regulation to set a minimum standard. Permittees may incorporate additional standards into their program, but the permit outlines the minimum elements that must be met under each requirement to meet MEP.

Volume 64, number 235, page 68755 of the Phase II Rule states that “public involvement is an integral part of the small MS4 stormwater program.” The public has two opportunities to comment—they can comment on the requirements listed in this permit through the division’s public notice process and can comment on a permittee’s specific stormwater program elements, such as the regulatory mechanism and PDD.

- a. The permittee must follow their own public notice procedures (if applicable). In addition, the permittee must follow the public notice requirements required by their state or local regulatory mechanism. The requirement allows the permittee discretion to tailor the program to the permittee’s needs, as well as the state or local requirements and then adhere to the program.
- b. The first sentence of this requirement has not changed from the previous permit. The division, however, has added the second sentence as a requirement. Although a web page dedicated to the permittee’s stormwater program is not required under this permit, a statement on the permittee’s web site must be provided stating that the PDD is publically available for review and comment.
- c. Regulation 61.8(11)(a)(ii)(D)(II)(e) requires that the construction stormwater program include procedures for receipt and consideration of information submitted by the public. The renewal permit requirement requires the permittee to be able to address such complaints and concerns from their citizens.

2. Recordkeeping

Section 308(a) of the federal Clean Water Act, and 40 C.F.R. § 122.41(i) and § 122.48 require that all NPDES permits specify monitoring and reporting requirements. Regulation 61.8(4)(c) requires “to assure compliance with permit limitations, the following shall be monitored by the permittee:...(iii) Other measurements as appropriate.” This is a new section of the permit. Recordkeeping requirements in this section of the permit reflect monitoring of practices implemented in the permit and are necessary to ensure compliance with permit requirements for public involvement and participation. This section lists the records that must be maintained under this requirement. Permittees have the flexibility to keep all of the records in one location or database or have different locations and databases for different sections of the permit.

E. EFFLUENT LIMITATIONS AND RECORDKEEPING

Section 61.2(26) of Regulation 61 states that “an effluent limitation is any restriction or prohibition established under this article or Federal law on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into state waters, including, but not limited to, standards of performance for new sources, toxic effluent standards and schedules of compliance.” In addition, Section 61.8(3)(r) of Regulation 61 requires that “the permit shall include best management practices to control or abate the discharge of pollutants when numeric effluent limitations are infeasible, when the practices are reasonably necessary to achieve effluent limitations and standards, or when authorized under 304(e) of the federal act for control of toxic pollutants and hazardous substances.” Final MS4 General Permit

Remand Rule (Remand Rule) on December 9, 2016 requires that general permits for small MS4s include clear, specific, measurable requirements.

One of the division's responsibilities under section 25-8-202(7)(b)(I) of the Colorado Water Quality Control Act (25-8-202(7)(b)(I)) states that "the division shall be solely responsible for the issuance and enforcement of permits authorizing point source discharges to surface waters of the state affected by such discharges." The division's responsibility is to ensure that permittees are implementing the requirements of the permit. Without numeric data, the division is left with ensuring that all practice-based effluent limits and control measures are being met.

The previous permit required the permittee to develop a program and the division to review and approve the program prior to implementation. This framework was less transparent, resulted in highly variable implementation between permittees, caused uneven economic implications, and was not an efficient use of division staff time. The new framework under this renewal permit will define and public notice the effluent limitations that permittees need to meet in order to achieve the MEP. Permittees will now have a greater flexibility to develop and refine PDDs (that still meet the effluent limitations in the renewal permit) and not have to request and receive approval from the division.

This section of the renewal permit defines the minimum requirements required to meet the federal and state regulatory requirement to control the discharge of pollutants to the MEP and effectively prohibit non-stormwater discharges. The recordkeeping section is provided to identify most of the recordkeeping requirements associated with the effluent limitations in each program area of the permit. The permittee also will need to keep records under other sections of the renewal permit.

The renewal permit also includes a Part III, which contains requirements applicable to specific permittees. This section currently addresses additional requirements for discharges subject to TMDL WLAs.

If a permittee determines that the MEP standards in this general permit are not appropriate, the permittee has the option to apply for an individual permit.

Recordkeeping

Section 308(a) of the federal Clean Water Act, and 40 C.F.R. § 122.41(i) and § 122.48 require that all NPDES permits specify monitoring and reporting requirements. Regulation 61.8(4)(c) requires "to assure compliance with permit limitations, the following shall be monitored by the permittee:...(iii) Other measurements as appropriate." Regulation 61.8(4)(c) requires "to assure compliance with permit limitations, the following shall be monitored by the permittee:...(iii) Other measurements as appropriate." Recordkeeping requirements in Part I.E of the renewal permit reflect monitoring of practices implemented to comply with the permit and are necessary to determine compliance with practice-based effluent limitations. The recordkeeping sections under Part I.E clarify what records must be maintained and what information should be in the records. There are a variety of permittees covered under this renewal permit and not all have the same "regulatory mechanism."

Recordkeeping requirements regarding regulatory mechanisms and regulatory mechanism exemptions include the actual codes, resolutions, ordinances, contracts, policies, and other program documents that permittees are using to implement the program. Permittees must keep records to organize their stormwater program, enable their stormwater programs to be legally enforceable, and track that they have met the requirements of the permit.

1. Public Education and Outreach

Section 61.8(11)(a)(ii)(A) of Regulation 61 states the "the permittee must implement a public education program to (I) distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps

that the public can take to reduce pollutants in stormwater runoff; and (II) inform businesses and the general public of impacts associated with illegal discharges and improper disposal of waste.”

The division has made extensive changes to this program area to include requirements in the renewal permit that define the expectations for the scope and scale of the education actions implemented by the permittee. This section provides the minimum standards for targeting information to the user population, vendors, concessionaires, tenants, and contractors. The permit allows for requirements to be met through collaboration, and the division highly recommends that permittees collaborate with other non-standard permittees and standard MS4 permittees.

The renewal permit describes the minimum elements that must be addressed in the education and outreach activities. These elements include the distribution of educational materials that include information about the impacts of stormwater discharges on water bodies and the steps the user population, vendors, concessionaires, tenants, contractors and other target audiences unique to the permittee can take to reduce pollutants in stormwater runoff, and inform them of the impacts associated with illegal discharges and improper disposal of waste. Permittees can either incorporate all of these elements into each education and outreach activity or through a combination of a variety of activities. Permittees have the flexibility to conduct additional education and outreach activities.

a. The following requirements apply:

- i. Illicit Discharges: The renewal permit requires the permittee to identify at least one type of vendor, concessionaire, tenant or contractor that is likely to cause an illicit discharge or improperly dispose of waste that would result in pollutants in stormwater runoff. Although Section 61.8(11)(a)(ii)(A) of Regulation 61 states that permittees must inform businesses and the general public (user population, vendors, concessionaires, tenants, and contractors for non-standard permittees) about the impacts associated with the “improper disposal of waste,” permittees only have to conduct education and outreach activities concerning the improper disposal of waste that could result in stormwater impacts. The permittee must then develop at least one outreach activity for that type of tenant or contractor identified. The permittee can target more than one type of tenant or contractor if they deem it necessary.
- ii. Education and Outreach Activities Table: The Education and Outreach Activities Table 1 has been added to the renewal permit to allow permittees the flexibility to implement the activities that permittees determine are the most effective. Table 1 is a menu of quantifiable public education and outreach requirements which address the Phase II stipulation for clear, specific, measurable requirements. The renewal permit is requiring that the permittee conduct four activities each year and two activities must be from the Active and Interactive Outreach column. Providing the activity table in the permit also allows permittees to make changes to their programs without submitting a program modification to the division or awaiting the public notice period. The level of education and outreach required is consistent with what has been implemented by permittees in the previous permit term. The division has been implementing a process similar to what is identified in this section when reviewing permittee program descriptions for adequacy during previous permit terms. Permittees were unaware of the existence of the table or the ranking system that was used by the division. These requirements are now incorporated into the renewal permit. In addition, the division will no longer review program descriptions prior to issuing the permit certification.

The division interprets “outreach” to mean an active engagement and requires contact by the permittee and an exchange of education and information. Making information available on a website without further action or outreach is passive education and does not meet the Regulation or the permit requirements for “outreach.” The division expects

that the permittee will “reach out” to identified sources and provide information and education. Additionally, the permit includes the term “provide” in Table 1 to clarify that permittees can use existing education and outreach materials and are not required to develop new materials.

- iii. Nutrients: Section 85.5(4)(a) of Regulation 85 states that “the MS4 permittee must develop, document, and implement a public education program to reduce water quality impacts associated with nitrogen and phosphorus in stormwater runoff and illicit discharges and distribute educational materials or equivalent outreach to 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.” In addition, section 85.5(4)(a) of Regulation 85 states that “CDPS Permits shall authorize MS4 permittees to 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(s).”

The division has added nutrient outreach and education requirements to the renewal permit in accordance with the requirements for permittees in Regulation 85. A collaborative education and outreach program is allowed in Regulation 85 and the renewal permit. The division encourages and recommends that permittees collaborate on the nutrient-related requirements in the renewal permit and has provided a timeframe in the compliance schedule that would allow such collaboration.

The division has purposely not provided a minimum list of targeted sources for permittees to address through education and outreach. The renewal permits include minor additions to what is in the regulation to provide transparent and measurable permit conditions. The division will assess this decision to not include a minimum number of targeted sources over the permit term by reviewing the nutrient education and outreach activities conducted by permittees and any permittee justification for not targeting specific sources. The division may provide minimum standards for targeted sources in a future renewal permit.

The statement of basis (85.15(X)) of Regulation 85 states that the “identification should include types of sources for which a reduction in nutrient discharges are likely to be obtained through education, and *prioritization* [emphasis added] of sources for implementation of the education program.” The renewal permit allows the permittee to prioritize the targeted sources identified and to conduct outreach to those prioritized targeted sources. The permittee does not have to provide outreach to all of the identified targeted sources.

- iv. Cherry Creek Reservoir Drainage Basin Requirements: Regulation 72 is a strategy for phosphorus control in the Cherry Creek Watershed. In part, Regulation 72 specifies procedures, control measures, and other provisions that must be included in MS4 permits. This renewal permit includes new requirements that implement Regulation 72.7.

b. Recordkeeping

This is a new requirement. See discussion in section J, Part E of this fact sheet.

Tip for Education and Outreach Activities Table

You may select an activity that will simultaneously satisfy the requirements of Part I.E.1.a.ii, iii, and iv and Part III (TMDL requirements) as long as the all applicable requirements are met. Separate activities are not required to satisfy each requirement.

2. Illicit Discharge Detection and Elimination (IDDE)

Section 61.8(11)(a)(ii)(C) of Regulation 61 states that “the permittee must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 61.2) into the permittee's small MS4.”

Stormwater discharges are different from illicit discharges. Stormwater discharges include all pollutants that stormwater picks up while flowing to the MS4. Illicit discharges are NOT from precipitation events and are a result of activities such as spills and illegal dumping. Illicit discharges are an important category of effluent limitations. This permitting approach in the renewal permit is unique to MS4 discharges and distinct from the approach taken for permitting other sources within the NPDES framework. The division has taken this approach following review of the language provided in the CWA and the legislative history associated with adoption of those provisions. The division has determined that Congress established these unique provisions regarding permitting discharges from MS4s in acknowledgement that: Not all discharges from an MS4 could be anticipated, characterized, and disclosed in a permit application; that not all non-stormwater discharges from an MS4 could be prohibited or eliminated; and that not all non-stormwater discharges into an MS4 pose significant environmental problems.

The division has interpreted the statutory requirement that the MS4 “effectively prohibit non-stormwater discharges” to be less than an outright prohibition of all non-stormwater discharges. This interpretation is consistent with state and federal regulations which include allowable non-stormwater contributions for MS4 discharges. Therefore, the statutory standard to reduce the discharge of pollutants to the MEP was applied by the division in determining effluent limitations for non-stormwater discharges, included in Part I.E.2 of the renewal permit. Discharges subject to effluent limitations requiring their prohibition, detection, and elimination are referred to in the permit as illicit discharges. Discharges not requiring their prohibition, detection, and elimination are referred to in the permit as being excluded from being considered an illicit discharge.

Discharges from sources that are not considered illicit discharges may still be subject to other effluent limitations in Part I.E or Part III of the renewal permit to restrict or prohibit the quantities, rates, and concentrations of pollutants. Examples include stormwater discharges associated with construction activities, stormwater discharges associated with new development and redevelopment activities, stormwater discharges associated with municipal operations, stormwater and non-stormwater discharges from target audiences in the public education and outreach program, and dry weather discharges from MS4 outfalls to state waters.

When illicit discharges that are located in the jurisdictional boundary but do not enter the MS4 are reported, the permittee is not required to respond to such reports under this permit. Most likely, other local codes, and federal and state laws and regulations will apply to such instances. Section 25-8-601(2) of the Colorado Water Quality Control Act has requirements for the division to be notified of suspected violations and accidental discharges. The section states the following:

Any person engaged in any operation or activity which results in a spill or discharge of oil or other substance which may cause pollution of the waters of the state contrary to the provisions of this article, as soon as he has knowledge thereof, shall notify the division of such discharge. Any person who fails to notify the division as soon as practicable is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than ten thousand dollars, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.

The division has several documents regarding illegal dumping in Colorado. These documents apply to all areas of Colorado, whether inside or outside of the MS4 or jurisdictional boundary.

- *Guidance for Reporting Spills under the Colorado Water Quality Control Act and Colorado Discharge Permits*, CDPHE, March 1, 2008
- *Environmental Spill Reporting* brochure, CDPHE
- *Reporting Environmental Releases in Colorado*, CDPHE, January 2009

a. The following requirements apply:

- i. Storm Sewer Map: Section 61.8(11)(a)(ii)(C)(I)(a) of Regulation 61 states that “the permittee must develop, if not already completed, a storm sewer system map, showing the location of all municipal storm sewer outfalls and the names and location of all state waters that receive discharges from those outfalls.”

The requirements for this section have not changed from the previous permit.

- ii. Regulatory Mechanism: Section 61.8(11)(a)(ii)(C)(I)(b) of Regulation 61 states that “the permittee must to the extent allowable under state or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges into the storm sewer system, and implement appropriate enforcement procedures and actions.”

The division has added this section in order to establish the minimum elements to be addressed in the regulatory mechanism that effectively prohibits an illicit discharge. Upon discovery, permittees must prohibit non-stormwater discharges and implement appropriate enforcement procedures and actions.

The permittee’s procedures and rules must result in an illicit discharge being subject to potential enforcement procedures for both the original finding of violation, as well as during any provided timeframe to eliminate the illicit discharge. Also, note that the permit does not require, and it is not the division’s intent to imply through this summary, that the enforcement mechanism mandate or limit enforcement options to a per-day-of-violation monetary penalty calculation methodology.

The renewal permit clarifies that permittees must have a procedure to gain access to properties in the permittee’s jurisdiction, unless restricted by state or local laws outside the permittee’s control.

- iii. Regulatory Mechanism Exemptions: The division added this section to address exceptions to the permittee’s regulatory mechanism. The division understands that exemptions, waivers and variances are a legal process in the permittee’s code, ordinances, contracts, and other regulatory mechanisms and are relied on to address unforeseen circumstances without relying on revisions to regulatory mechanisms. The division has added a new requirement stating that exclusions, exemptions, waivers, and variances must be implemented in a manner that comply with the permit. A process to add discharges to the list of discharges that do not need to be considered illicit discharges has been added to the renewal permit. See discussion of Part I.E.2.v. below.
- iv. Tracing an Illicit Discharge: Section 61.8(11)(a)(ii)(C)(I)(c) of Regulation 61 states that “the permittee must develop and implement a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following three components: procedures for locating priority areas likely to have illicit discharges; *procedures for tracing the source of an illicit discharge* [emphasis added]; and procedures for removing the source of the discharge.”

The division has added new aspects to this existing requirement. The renewal permit includes a minimum standard for tracing an illicit discharge. The previous permit contained a broad requirement that the permittee to have procedures for “tracing the source of an illicit discharge.”

With the exception of TMDL requirements under Part III, the renewal permit states that permittees are not required to make special trips outside of normal day-to-day activities to inspect their jurisdictional boundary to look for illicit discharges. The division encourages permittees to actively look for illicit discharges, but this is not required under Part I or II of permit. Permittees are, however, required to respond to illicit discharges that are reported and illicit discharges that are observed by staff during normal day-to-day activities. In addition, Part I.E.2.b requires that applicable staff be trained on recognizing and appropriately responding to illicit discharges observed during typical duties. With the exception of dry weather monitoring for facilities subject to TMDLs under Part III of the permit, the division does not expect the permittee to proactively look for illicit discharges in the jurisdictional boundary or in the MS4. The division does, however, expect the permittee to respond and investigate all reports of illicit discharges in the MS4 and identified by employees during their normal day-to-day activities. The renewal permit requires the permittee to begin procedures as soon as possible, within normal working hours, and within 72 hours at the latest. The division expects that 72 hours is sufficient to allow for investigation to begin within normal working hours.

This section of the renewal permit also requires the permittee to have tools and written procedures to trace the source of reported illicit discharges. Common tools used for tracing an illicit discharge include storm sewer maps, dye tracers, cameras, and aerial maps. The permittee must select the tools that will be used and then have the tools available to trace an illicit discharge. Common procedures for tracing an illicit discharge include screening through visual inspections, opening manholes, using mobile cameras, using field tests of selected chemical parameters as indicators of discharge sources, and collecting and analyzing water samples.

Before responding to a report of an illicit discharge, the permittee must first determine the following:

- Is the source of the illicit discharge or the spilled material in the MS4? Under this permit, the permittee does not have to respond to reports of illicit discharges outside of the MS4. As stated above, under other federal, state, and local laws, regulations, and codes, permittees must still respond to spills inside the jurisdictional boundary, but not in the MS4.
- Does the permittee consider the spilled material an illicit discharge? Under this permit, the permittee does not have to respond to discharges that are listed in Part I.E.2.a.v. and also listed in the permittee’s regulatory mechanism.
- Are any other federal, state, or local law, regulations, or ordinances applicable to this illicit discharge? As stated above, permittees must still respond to spills under other federal, state, and local laws, regulations, and codes.

The requirements to respond to and document illicit discharges in Part I.E.2 of the permit apply to those discharges identified by, or reported to, the permittee. The permit does not include requirements for the permittee to respond to or document illicit discharges reported to entities not under the control of the permittee for which the permittee is not informed or aware of. Note that when the permittee becomes aware of an illicit discharge, they become responsible for complying with the terms and conditions of the permit associated with responding to and documenting the discharge. If the permittee chooses to rely on a separate legal entity (e.g., a fire

district) to respond to illicit discharges on the permittee's behalf, the permittee or separate legal entity must still comply with the record keeping requirements for that illicit discharge, and ensure that the permit conditions are met, including for removing an illicit discharge, enforcement, etc. Also, note that if a separate legal entity such as a fire district is creating an illicit discharge through their clean up procedures (e.g., washing spills into storm sewers), then the permittee would have to respond in accordance with their IDDE program if they were aware of this practice.

Permittees should effectively communicate with all other departments and entities that respond to illicit discharges in their jurisdictional boundary to ensure that the other departments and entities are responding to the illicit discharges in accordance with this renewal permit. Note that this reference is to “entities” that are responding to illicit discharges on behalf of the permittee, and would not apply to a separate legal entity acting independently to respond to a discharge that the permittee was not aware of. See part I.F.7 of the permit, which discusses requirements for implementation by other parties.

- v. Discharges that could be Excluded from being Considered an Illicit Discharge: Section 61.8(11)(a)(ii)(C)(II) of Regulation 61 lists categories of non-stormwater discharges or flows that may be excluded from the illicit discharge detection and elimination program unless the permittee identifies them as significant contributors of pollutants to the permittees' MS4. Permittees may either reference each type of discharge in their regulatory mechanism or reference that the discharges are listed in the permit in their regulatory mechanism. With some exceptions discussed below, this list is retained from the previous permit.

Changes from the previous permit were made in response to new information available about specific types of discharges, including their potential pollutant levels and feasibility of control.

(A) *Landscape irrigation*: No changes to this discharge have been made.

(B) *Lawn watering*: No changes to this discharge have been made.

(C) *Diverted stream flows*: No changes to this discharge have been made.

(D) *Irrigation return flow*: No changes to this discharge have been made.

(E) *Rising ground waters*: No changes to this discharge have been made.

(F) *Uncontaminated ground water infiltration*:

The text from 40 C.F.R. § 35.205(2) has been added to the permit for clarity.

It is important to note that infiltration of stormwater is not considered “ground water infiltration.” For example, stormwater runoff that is captured in structures or infiltrates and then is dewatered still meets the definition of stormwater. Therefore, where the source water for a dewatering activity is composed entirely of stormwater runoff, the requirement for the operator to obtain separate permit coverage is typically based on whether the point source discharge of stormwater is required to have permit coverage in accordance with Regulation 61.3(2) (i.e., is stormwater associated with industrial activities, which includes construction). If an industrial stormwater discharge permit certification is already held by a facility where dewatering of infiltrated stormwater-only is conducted, the dewatering

discharge must be consistent with the terms and condition of the industrial stormwater permit.

Likewise, single family residential structure subterranean dewatering is presumed to be in direct response to precipitation events and composed entirely of stormwater (e.g., single family home sump pump discharges). However, dewatering discharges from large residential structures such as multi-family complexes with underground structures where the dewatering source water includes groundwater may require coverage under a dewatering general permit or individual permit.

- (G) *Uncontaminated pumped groundwater*: The previous permit and section 61.8(a)(ii)(C)(II) of Regulation 61 listed “uncontaminated pumped groundwater.”

The permittee is not required to consider pumped groundwater an illicit discharge where such a discharge is made in compliance with a CDPS discharge permit or in compliance with the division's Water Quality Policy (WQP) 27 - Low Risk Discharges and supporting guidance.

Discharging stormwater comingled with surface and/or groundwater requires coverage under a CDPS discharge permit or the division's Water Quality Policy (WQP) 27 - Low Risk Discharges and supporting guidance. A dewatering discharge includes groundwater and is, therefore, not composed entirely of stormwater runoff when the discharge is drawn from below a groundwater table, including as a result of seasonal or precipitation-driven increases in the groundwater table elevation.

See Foundation Drains, Water from Crawl Space Pumps, and Footing Drains below.

- (H) *Springs*: No permit changes regarding this discharge have been made.
- (I) *Flows from riparian habitats and wetlands*: No permit changes regarding this discharge have been made.
- (J) *Water line flushing*: The previous permit included “discharges from potable water sources,” and “potable water line flushing.” These sources are now addressed under the division's low risk guidance for potable water. Water line flushing could include discharges not covered under the potable water low risk guidance, however, the discharges that are not potable have increased pollutant potential and are addressed by the division's established permitting program for hydrostatic testing of pipelines that results in permit coverage being a practicable approach.
- (K) *Discharges from potable water sources*: The previous permit and section 61.8(11)(a)(II)(C)(II) of Regulation 61 list discharges from potable sources. The renewal permit lists discharges from potable water source with a requirement that the discharge has to meet the division's Low Risk Discharge Guidance: Potable Water. The previous permit included “discharges from potable water sources,” and “potable water line flushing.” These sources are now addressed under the low risk guidance for potable water. Water line flushing could include discharges not covered under the potable water low risk guidance, however, the discharges that are not potable do have increased pollutant potential and must be addressed by the division's established permitting program for hydrostatic testing of pipelines.

- 1) The *Low Risk Discharge Guidance: Potable Water* lists conditions that must be met and the control measure that must be implemented. For example,

the potable water shall not be used in any additional process, such as but not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines not associated with treated water distribution systems. Discharges of potable water DO NOT include discharges from power washing. Discharges from power washing are covered under the division's *Low Risk Discharge Guidance: Surface Cosmetic Power Washing Operations to Land*.

- (L) *Foundation drains*: This discharge was listed under the renewal permit and has been included in the renewal permit with a requirement for the permittee to verify that any new discharges from foundation drains into the MS4 from a commercial or multi-family property without a CDPS or NPDES permit would meet the water quality standards for the receiving stream. CDPS permits issued and administered by the division for foundation drains from commercial or multi-family properties ensure that the discharge meets stream standards before it enters the permittee's MS4.
- (M) *Air conditioning condensation*: No changes regarding this discharge have been made.
- (N) *Water from crawl space pumps*: This discharge was listed under the renewal permit and has been included in the renewal permit with a requirement for the permittee to verify that any new discharges from crawl space pumps into the MS4 from a commercial or multi-family property without a CDPS or NPDES permit would meet the water quality standards for the receiving stream. CDPS permits issued and administered by the division for water from crawl space pumps from commercial or multi-family properties ensure that the discharge meets stream standards before it enters the permittee's MS4.
- (O) *Footing drains*: This discharge was listed under the renewal permit and has been included in the renewal permit with a requirement for the permittee to verify that any new discharges from footing drains into the MS4 from a commercial or multi-family property without a CDPS or NPDES permit would meet the water quality standards for the receiving stream. CDPS permits issued and administered by the division for water from footing drains from commercial or multi-family properties ensure that the discharge meets stream standards before it enters the permittee's MS4.
- (P) *Individual residential car washing*: No changes regarding this discharge have been made.
- (Q) *Dechlorinated swimming pool discharges in accordance with the division's Low Risk Discharge Guidance: Swimming Pools*: No changes regarding this discharge have been made.
- (R) *Water incidental to street sweeping*: No changes regarding this discharge have been made.
- (S) *Dye testing in accordance with the manufacturers recommendations*: This discharge has been added to this section. Dye testing is a tool for detecting and tracing illicit connections to a storm sewer system. Dyes used for this purpose are non-toxic.
- (T) *Stormwater runoff with incidental pollutants*: This discharge has been added to this section. Section 65.2(3) of Regulation 65 states that "the prohibition in section

65.2(1), above, does not apply to pollutants that are incidentally deposited and are mobilized by waters that only flow as a result of a storm event.” This includes discharges of stormwater for which pollutants may be present. For example, stormwater runoff from surfaces for which anti-icing or deicing materials have been added remains stormwater runoff and is a source that does not have to be considered an illicit discharge. In this regulation the word “incidental” is key, as runoff into the storm sewer of deicer material is liable to happen as a consequence of applying deicer and fits with the definition of “incidental.”

- (U) *Discharges resulting from emergency fire fighting activities:* No changes to this discharge have been made. Only the discharge during emergency fire-fighting activities can be discharges to the MS4 without the permittee responding to it as an illicit discharge. However, Section 61.8(11)(a)(ii)(C)(II) of Regulation 61 exempts fire fighting activities from stormwater program requirements only if the permittee does not identified this activity as significant sources of pollutants to state waters. After the fire has been put out, any remaining discharge from fighting the fire and the associated chemicals in stormwater ponds or other control measures cannot be discharged to the MS4 and the permittee must ensure that it is disposed of properly.

Tips on AFFF and PFAS

The division strongly recommends that permittees coordinate with local fire departments to determine conditions under which AFFF containing PFAS would be used and consider alternatives to their use. For additional information on the storage and use of AFFF permittees should refer to the Interstate Technology Regulatory Council (ITRC) AFFF fact sheet, available at https://pfas-1.itrcweb.org/wp-content/uploads/2018/10/pfas_fact_sheet_fff_10_3_18.pdf and/or the division’s website at <https://www.colorado.gov/pacific/cdphe/pfcs>

Certain types of aqueous fire fighting foam (AFFF) contain perfluoroalkyl substances (PFAS). PFAS are persistent in the environment and human body and some are linked to adverse human health effects such as increased cholesterol levels, liver damage or changes in liver function, decreased fertility in women, low birth weight in infants and other health effects. There is also some evidence that these substances may be linked to kidney or testicular cancer. Because of these concerns, the division expects permittees to make the determination that the discharge of AFFF containing PFAS to their MS4 could result in a significant source of pollutants to state waters. The division strongly recommends that permittees coordinate with local fire

departments to determine conditions under which AFFF containing PFAS would be used and consider alternatives to their use. For additional information on the storage and use of AFFF permittees should refer to the Interstate Technology Regulatory Council (ITRC) AFFF fact sheet, available at https://pfas-1.itrcweb.org/wp-content/uploads/2018/10/pfas_fact_sheet_fff_10_3_18.pdf and/or the division’s website at <https://www.colorado.gov/pacific/cdphe/pfcs>

- (V) *Discharges authorized by a CDPS or NPDES permit:* No changes regarding this discharge have been made.
- (W) *Agricultural stormwater runoff:* This discharge has been added to this section as this type of discharge is not regulated under the CDPS stormwater program.
- (X) *Discharges that are in accordance with the division’s Low Risk Policy guidance documents and other division policies:* Although some Low Risk Discharge Guidance policies are listed in other discharges, discharges that are in accordance with the division’s Low Risk Policy guidance

documents have been added to the renewal permit. As stated above, the division has intentionally not required permittees to prohibit, detect, and eliminate certain discharges that are covered by the division's current or future Low Risk Policy guidance documents. This allows the permittee to focus on discharges that have the greatest potential to cause water quality impacts. This will also promote transparency and consistency between permittees and the division in how these discharges are addressed on a day-to-day basis.

The division has developed the Low Risk Policy, WQP-27, to address discharges with the lowest potential risk to water quality and additional permit language to provide a mechanism for the permittee to assess the potential for certain discharges to contain pollutants. Discharges associated with snow melting, swimming pools, potable water, uncontaminated groundwater to land, and surface cosmetic power washing operations to land are currently addressed by guidance under the division's Low Risk Discharges.

In addition, a provision was added to the permit to allow for the permittee to incorporate new discharges covered by future division's low risk policy guidance documents into their list of discharges that are not considered illicit discharges. These discharges would be public noticed by the division during the development of new low risk policy guidance documents.

(Y) *Other discharges that the permittee will not treat as an illicit discharge and approved by the division:* The division has made substantial changes from the process in the previous permit for addressing occasional, incidental non-stormwater discharges. The division has improved transparency regarding these non-stormwater discharges and has included more expectations and criteria for making determinations. There was a lack of clarity in division expectations in what non-stormwater discharges must be controlled and what constitutes adequate response and enforcement expectations. In the previous permit, the permittee could make a determination that a discharge is not reasonably expected to be a significant contributor of pollutants to the MS4. This process has been enhanced.

Permittees have the flexibility to exclude additional discharges from being considered an illicit discharge. In addition, permittees have the flexibility to consider the discharges listed in this section an illicit discharge if they determine that the discharge is a significant contributor of pollutants.

The division has identified that it is not MEP for permittees to detect and eliminate some discharges, in addition to those listed in the permit. Therefore, the renewal permit includes a process for permittees to incorporate new sources into the list of sources that do not have to be effectively prohibited. For discharges with low potential for pollution, the permit includes basic considerations and criteria for the evaluation. The criteria that the discharges with proper management are not expected to contain pollutants in concentrations that are toxic or in concentrations that would cause or contribute to a violation of a water quality standard is consistent with division practices for evaluating sources for coverage under the Low Risk Policy. The division also understands that some discharges may not be practicable to prohibit based on the absence of sufficient permitting options and existing discharge practices. The division understands that permittees have historically accepted certain discharges (e.g., charity car washes, discharges from fire suppression systems) and the division is uncertain about their impact to receiving water quality and their practicability to control. The renewal permit includes an option for discharges to be removed from being effectively prohibited without causing permittees to be in non-compliance over discharges in this category. The renewal permit requires public notification of non-stormwater discharges. The renewal permit provides a

process and timeframe for submitting discharges that are identified both before and after the effective date of this permit. The permit also includes a process for the division to review the new sources. If the division denies the discharge, the permittee may prohibit the discharge, apply for a permit modification, or request a Low Risk Policy determination for a category of discharges not meeting the permit criteria to not be effectively prohibited.

Permittees' legal authority must reflect the types of discharges that will not be detected or eliminated (effectively prohibited) in accordance with their Illicit Discharge Detection and Elimination program. Permittees may at any time determine that any of the discharges listed in this section are a significant source of pollutants and implement their illicit discharge response program. Again, permittees must update their regulatory mechanism to reflect the categories of non-stormwater discharges that will not trigger their illicit discharges response and enforcement program. Adding "and any other discharges that are determined following the procedures in the permit" to the regulatory mechanism would enable the permittee not to have to update their regulatory mechanism every time a new type of discharge is added.

- vi. Removing an Illicit Discharge: Section 61.8(11)(a)(ii)(C)(I)(c) of Regulation 61 states that "the permittee must develop and implement a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following three components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; and *procedures for removing the source of the discharge.*" (Emphasis added).

In the previous permit, removal of illicit discharges was required under the broad requirement to "...eliminate illicit discharges..." The division has added new aspects to this existing requirement. The renewal permit includes a minimum standard and provides clarity for removing an illicit discharge to ensure that all permittees are meeting a minimum standard for illicit discharge response procedures.

This section of the permit requires the permittee to remove the source of the discharge. The division has clarified that the source of an illicit discharge is the source from which the illicit discharge originates and the spilled material, if feasible. As discussed above, this permit only requires the permittee to respond to illicit discharges in the MS4. The source must be stopped. However, the spilled material itself, if any portion of the source of the illicit discharge or the spilled material are in the MS4, must be cleaned up only if feasible.

The MS4 includes roads with drainage systems, curbs, and gutters. So, if an illicit discharge occurs in a curb and gutter or on a roadway with a drainage system, then the illicit discharge source needs to be removed. In addition, the associated material, both in and out of the MS4 and in the permitted area, needs to be removed, if feasible.

On the other hand, spills and dumped material outside of the MS4 but still in the jurisdictional boundary do not have to be removed under this program, but need to be addressed under the division's *Reporting Environmental Releases in Colorado*.

- vii. Coordination with Surrounding MS4: Illicit discharges may cross over jurisdictional boundaries of MS4s. The renewal permit includes a new requirement that is necessary to meet the requirements in Section 61.8(11)(a)(ii)(C)(I)(B) and (c) of Regulation 61 with respect to cross-jurisdictional illicit discharges. The division believes that 72 hours allows for sufficient time to notify other MS4s during normal business hours.

- viii. Enforcement Response: Section 61.8(11)(a)(ii)(C)(I)(b) of Regulation 61 states that “the permittee must to the extent allowable under state or local law, effectively prohibit, through ordinance or other regulatory mechanism, non-stormwater discharges into the storm sewer system, and *implement appropriate enforcement procedures and actions* [emphasis added].” Illicit discharges that are reported to the permittee and/or identified by staff during day-to-day normal work activities must be included in the enforcement response.

This is a new requirement in the renewal permit. The permittee must determine all of the applicable informal, formal, and judicial enforcement mechanisms that will be used to enforce the IDDE program. The division is also clarifying that similar violations should be responded to in a uniform manner by the permittee and enforcement procedures should be transparent. The renewal permit does not pair violations with required responses. The permit requires that permittees address findings of a similar nature consistently.

Permittees must prohibit illicit discharges and must have the ability to enforce against them immediately. This gives the permittee enforcement discretion to immediately enforce on a responsible party at any time. Permittees, however, can require the responsible party to immediately remove an illicit discharge and re-inspect at some later time. In addition, if the responsible party does not remove the illicit discharge, then the permittee can legally enforce on the responsible party and potentially assess a penalty starting from the date of the inspection.

- ix. Priority Areas: Section 61.8(11)(a)(ii)(C)(I)(c) of Regulation 61 states that “the permittee must develop and implement a plan to detect and address non-stormwater discharges, including illicit discharges and illegal dumping, to the system. The plan must include the following three components: *procedures for locating priority areas likely to have illicit discharges* [emphasis added]; procedures for tracing the source of an illicit discharge; and procedures for removing the source of the discharge.”

Locating priority areas is a new permit requirement that is an important part of a stormwater program and is specifically required by Regulation 61. When identifying priority areas, the division recommends that permittees, at a minimum, consider areas with a history of illicit discharges or illegal dumping, as priority areas.

- x. Training: Section 61.8(11)(a)(ii)(C) of Regulation 61 states that “the permittee must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at 61.2) into the permittee’s small MS4.” This requirement is retained from the previous permit. The division considers training those responsible for the identification and/or response to reports of illicit discharges part of “developing and implementing” an IDDE program.

b. Recordkeeping:

This is a new section of the permit. This section lists the records that must be maintained under this requirement. The division has added requirements for documenting incidents of illicit discharges to clarify the requirements for maintaining records. In addition, the renewal permit requires a centralized recordkeeping of illicit discharge be maintained that allows permittees to identify repeat occurrences and identify priority areas. The renewal permit allows several centralized recordkeeping systems by different departments, such as police and fire departments. Permittees should effectively communicate with all other departments and entities that respond to illicit discharges in their jurisdictional boundary to ensure that the other departments and entities are responding to the illicit discharges in accordance with this renewal permit. Note that this reference is to “entities” that are responding to illicit discharges on behalf of the permittee, and would not apply to a separate legal entity acting

independently to respond to a discharge that the permittee was not aware of. See part I.F.5 of the permit, which discusses requirements for implementation by other parties.

3. Construction Sites

Section 61.8(11)(a)(ii)(D)(I) of Regulation 61 states

[T]he 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** [emphasis added] 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.

Permittees should note that the requirement is for construction activities that result in a land disturbance of greater than or equal to one acre. Regulation 61 also uses the terms “would disturb.” Since that section of the Regulation was written in March 2, 2001, construction activities that are part of a larger common plan of development or sale that disturbed one acre or more following March 2, 2001 and that have not been finally stabilized are covered under the applicable construction site definition.

The division has made substantial changes to this program area to increase transparency of division expectations, incorporate clear, specific, and measurable requirements in accordance with the Phase II Remand Rule, and clarify that the construction sites program must be proactive in ensuring that pollutants are reduced in any stormwater runoff flowing to the MS4. In addition, the permit includes language consistent with that in the Stormwater Discharges Associated with Construction Activity general permit (currently, the COR400000).

The previous permit included procedures for modifying the program description document. These procedures have been deleted from the renewal permit. Instead, permittees are authorized to modify their current program description document until the applicable date in the compliance schedule renewal permit. The program document must be consistent with the renewal permit.

Renewal permittees: Permittees have a compliance schedule in order to meet the requirements of the renewal permit. Permittees will continue to implement their program developed under the previous permit until the new program developed under this renewal permit is developed in accordance with the compliance schedule. Permittees have the flexibility to revise their programs to meet the requirements of this renewal permit before the compliance schedule. Construction activities started under the previous permit must follow the requirements of the previous permit. Construction activities started under the previous permit include construction activities that have started the permittee’s site plan approval or permitting or approval process. Simply adding a development to the land records is *not considered* a construction activity that has been started under the previous permit.

- a. Renewal Permittees. This section was added to the renewal permit instruct renewal permittees on transitioning program implementation to include new requirements.
- b. Exclusions:

Jurisdictional Exclusion: Regulation 61.8(11)(a)(ii)(D)(II)(a) requires the permittee’s construction program develop, implement at a minimum “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** [emphasis added].” The previous permit limited applicability of construction program requirements to permittee-owned operations. The permittee was not required to implement the program for construction on land that was not under the implementation authority of the permittee. The renewal permit emphasizes the limited applicability of the program by including it under the new exclusions section. The permittee’s MS4 may not include all areas within the jurisdictional boundary. For example private land served by the MS4 drains into the MS4 conveyances (streets, curbs, gutters, catch basins, etc.), however this private land might not be within the implementation authority of the construction program (i.e., the Non-standard MS4 does not have authority to regulate private land use). Conversely, wherever the Non-standard owns or operates an area they are expected to have implementation authority. This includes situations where the Non-standard’s construction activity is within an area for which it has an easement.

Construction Activities with R-Factor Waiver: Section 61.8(11)(D)(l) allows the MS4 to exclude from its construction program any sites for which the division has granted R-factor waiver. This requirement is similar in both the previous permit and the renewal permit

c. Requirements for Applicable Construction Sites:

- i. *Regulatory Mechanism:* Section 61.8(11)(a)(ii)(D)(II)(a) of Regulation 61 states that the program must include the development and implementation of “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.” The division recognizes that a “regulatory mechanism” is very different from a city or town covered under the COR090000 or COR080000 general permits and a “regulatory mechanism” for a non-standard MS4. For the purposes of this permit and considering the wide variety of permittees, a regulatory mechanism can include ordinances, codes, contracts, standard operating procedures, policies and similar tools. The division has added new aspects to this existing requirement by adding the minimum elements to be addressed in the regulatory mechanism. The permittee must ensure that their regulatory mechanisms are in compliance with this permit or are changed appropriately.

Permittees are advised that Regulation 61 specifically requires a regulatory mechanism for Illicit Discharges Detection and Elimination program [Section 61.8(11)(a)(ii)(C)(l)(b)] **and** the Construction Sites program [Section 61.8(11)(a)(ii)(D)(II)(a)]. Although the two programs can share the same regulatory mechanism, the permittee must ensure that the regulatory mechanism(s) contains the legal authority for the permittee to conduct all actions associated with the two programs. Permittees may have some actions in other parts of their regulatory mechanism, such as the right of entry. Permittees must document the applicable sections/parts of their regulatory mechanism(s) that allows them the legal authority to conduct all activities under this program.

- ii. *Regulatory Mechanism Exemptions:* The division added this section to address exceptions to the permittee’s regulatory mechanism. Section 61.8(11)(a)(ii)(D)(II)(a) of Regulation 61 does not allow any exemptions, waivers, or variances within the regulatory mechanism. Whether the site is a

Tip for Construction Program Oversight

The COR400000 permit requires both owner and operator be listed as the permittee. Under the renewal permit, Non-standard MS4 permittees must continue to provide oversight through the construction program. This includes requirements that go beyond the COR400000 permit, such as

- Site Plan Review
- Receipt and consideration of information by the public
- Enforcement Response

The Non-standard MS4 permittee must ensure that the requirements of the renewal permit are addressed.

grading only site or public improvement site, all applicable construction sites are covered under this renewal permit.

The division understands that exemptions, waivers, and variances are a legal process in the permittee's regulatory mechanism under a variety of programs and are relied on to address unforeseen circumstances without relying on revisions to regulatory mechanisms. However, the division has added clarity that exclusions, exemptions, waivers, and variances cannot be implemented in a manner that violates Regulation 61.

- iii. Control Measure Requirements: Section 61.8(11)(a)(ii)(D)(II) of Regulation 61 states that "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." Section 61.8(11)(a)(ii)(D)(II)(b) of Regulation 61 states that the program must include the development and implementation of "requirements for construction site operators to implement appropriate erosion and sediment control BMPs." Section 61.8(11)(a)(ii)(D)(II)(c) of Regulation 61 states that the program must include the development and implementation of "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."

Volume 64, number 235, page 68758 of the Phase II Rule, EPA states:

Over a short period of time, storm water runoff from construction site activity can contribute more pollutants, including sediment, to a receiving stream than had been deposited over several decades (see section I.B.3). Storm water runoff from construction sites can include pollutants other than sediment, such as phosphorus and nitrogen, pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed.

The previous permit had no minimum requirements for control measures. The division has determined that minimum requirements are needed in order to implement 61.8(11)(a)(ii)(D)(II) of Regulation 61; therefore, the permit establishes minimum requirements for control measures for all permittee-owned construction activities.

This section has requirements to address the selection, installation, implementation, and maintenance of different types of control measures. The permittee is required to determine if the control measure is adequate. The renewal permit *does not* prescribe a specific control measure or the exact wording of design specifications. Permittees must ensure that the construction operator selects, installs, implements, and maintains control measures tailored to the specific construction site.

It is important for the permittee to ensure that applicable construction sites have appropriate control measures. Permittees must consider many factors when requiring construction operators to install control measures at an applicable construction site. Appropriate control measures should cover all of the phases of the construction site, treat all sources of pollutants at the construction site, address specific activities at the construction site, and be included on the site plan. The minimum requirements of this section may be met by referencing the construction sites program

Tip for Appropriate Control Measures

In-stream control measures do **NOT** satisfy requirements of Part I.E.3.c.iii of the permit. Regulation 61 requires that pollutant discharges be reduced from the construction activities **to the MS4**. In other words, pollutants must be reduced from discharges from the applicable construction site **before they are discharged to the MS4**; whereas in-stream facilities reduce pollutants **after** the discharge has entered a water of the state.

of a city or county MS4 permittee(s), and ensuring that the permittees regulatory mechanism makes the referenced program requirements applicable to all applicable construction activities. Many of these requirements overlap the site plan requirement discussed below.

(A) Appropriate control measures must be implemented prior to the start of “construction activity” or phase, and continued through final stabilization. This section provides requirements for the timing of control measures. The timing of control measures is important in reducing pollutant discharges and protecting water quality. Permittees must ensure that construction operators select, install, implement, and maintain control measures prior to the start of construction through final stabilization. Some applicable construction sites will be short term and the same control measures might be able to be used (if installed and maintained properly) throughout the project duration. Other, longer term, applicable construction sites will need different control measures during the different phases of the project.

Tips for Alternatives to Vegetation to Achieve Final Stabilization

Note that the permittee should take measures to avoid noxious weeds as local regulations might require their removal. Once removed plant density could then drop below the required 70 percent of pre-disturbance levels that is required for “final stabilization.”

(B) Control measures must be selected, designed, installed, implemented, and maintained to provide control for all potential pollutant sources associated with each construction activity to reduce pollutant discharges from the applicable construction site. Permittees should evaluate the applicable construction site’s potential pollutant sources and ensure that the control measures are selected, installed, implemented, and maintained to reduce any discharges of pollutants, such as but not limited to sediment, construction site waste, trash, discarded building materials, concrete truck washout, chemicals, sanitary waste, and contaminated soils.

(C) This section lists the minimum activities that must be addressed by control measures. The MS4 program must ensure that these control measures are implemented at all applicable construction activities. The list of control measures was developed based on the divisions’ experience with implementing the construction permit program. As follows, these minimum requirements are similar to those required in the *Master General Permit for Stormwater Discharges Associated with Construction Activities* (currently, the COR400000). This section does not provide design specifications for control measures. The requirements of this section do not apply to control measures that evaporate, evapotranspire, or infiltrate stormwater. These requirements apply to control measures that reduce pollutant discharges from sites with applicable construction activity.

As discussed in section H of this fact sheet, the division believes the minimum requirements are necessary to implement Regulation 61.8(11)(a)(ii)(D) and constitutes MEP as required in Regulation 61.8(11)(a)(i). The renewal permit includes new requirement that control measures must be maintained. The division considers proper maintenance as MEP.

- iv. Site Plans: Section 61.8(11)(a)(ii)(D)(II)(d) of Regulation 61 states that the program must include the development and implementation of “procedures for site plan review which incorporate consideration of potential water quality impacts.” The previous permit required the permittee to develop, implement, and document procedures for site plan review which incorporated consideration of water quality impacts. The previous permit did not provide any minimum requirements for the contents of a site plan or the permittee’s site plan review process.

The division has made substantial changes to this section by clarifying minimum requirements for site plans and the permittee's site plan review process. It should be noted that all applicable construction sites need site plans (also known as stormwater management plans) under the Stormwater Discharges Associated with Construction Activity general permit. This renewal permit requires that a site plan include the control measures that will be used and the corresponding installation and implementation specifications for each control measure. The renewal permit requires that an initial review be performed prior to the start of construction. Site plans are an important control measure and it helps the construction operator budget for the control measures that will be needed to comply with this renewal permit and helps the construction operator and staff locate, install, and maintain control measures to protect water quality.

This section of the renewal permit outlines several items that permittees must include in their site plan review for applicable construction sites.

- v. Site Inspection: Section 61.8(11)(a)(ii)(D)(II)(f) of Regulation 61 states that the program must include the development and implementation of "procedures for *site inspection* [emphasis added] and enforcement of control measures."

The previous permit simply required that the permittee conduct site inspections and provided no minimum requirements for the inspections. The division has added requirements to the site inspection section of the renewal permit. With the exception of the initial inspection and the recalcitrant compliance inspection the minimum inspection frequencies were determined during development of the COR090000 permit based on a review of annual report data and observations of inadequate control. The initial inspection is necessary to ensure that control measures are in place prior to the start of construction. The initial inspection establishes a proactive, rather than reactive approach to addressing the construction site operator's conformance to the site plan. The division determined that recalcitrant inspections were necessary to prevent chronic non-compliance.

Construction owners and operators must conduct site inspections in accordance with their permit coverage under the Stormwater Discharges Associated with Construction Activity general permit. These inspections *are not* considered site inspections under this renewal permit. Regulation 61 specifically requires that the MS4 permittee conduct site inspections and this renewal permit clarifies the frequency and scope of the MS4 inspections.

Permittees should understand that they do not have the legal authority to conduct compliance assurance activities for the Stormwater Discharges Associated with Construction Activity general permit. The division conducts all compliance assurance activities associated with this statewide general permit. The permittee can, however, develop a regulatory mechanism to give them the legal authority and standard operating procedures to implement requirements similar to the Stormwater Discharges Associated with Construction Activity general permit.

Although the renewal permit lists the minimum inspection frequencies, permittees are responsible for reducing pollutant discharges from applicable construction sites to protect water quality. Permittees should note that in some cases, more frequent inspections will be required to ensure that adequate control measures are implemented.

Most significant changes from the previous permit are discussed below:

Renewal Permittees: The previous permit did not have specific requirements for site inspections. This section of the permit provides clarity to permittees to continue to implement their current PDDs (even if there is no site inspection frequency established) until an updated Construction Sites program has been developed in accordance with the Compliance Schedule in Part I.H.

Site Inspection Frequency Exclusion: This is a new section to the renewal permit that excludes several types of sites from the site inspection frequency. Permittees will not have to inspect individual homes in a housing development if the permittee is inspecting the entire development. Inspection frequency exclusions are also allowed during winter conditions, which likely would only exist in high elevation portions of some permittee's permit area.

Reduced Site Inspection: The renewal permit allows for the inspection frequency to be reduced for inactive sites, sites within the Stormwater Management System Administrator's Program, staff vacancies, and indicator inspections. Permittees have the flexibility to not allow these reduced site inspections and require routine inspections for all applicable construction sites to reduce the discharge of pollutants and protect water quality.

The permit also includes a reduction in frequency for construction activities operated by a participant in a division designated Stormwater Management System Administrator's Program to address statutory direction in accordance with Article 8 of title 25, Colorado Revised Statutes, and to recognize the high level of compliance observed by the division at participant sites. Regardless of a construction operator's participation in the Stormwater Administrator's Program, the MS4 remains responsible for ensuring the control measure requirements are met.

- vi. *Enforcement Response:* Section 61.8(11)(a)(ii)(D)(II)(f) of Regulation 61 states that the program must include the development and implementation of "procedures for site inspection and *enforcement* [emphasis added] of control measures." The division has determined it is practicable and necessary for permittees to develop and implement an enforcement response program that allows escalated responses when necessary. The program must be able to obtain proactive compliance from chronic violators that repeatedly violate the construction sites program requirements. The program must also include sanctions adequate to obtain compliance from recalcitrant violators. All of these elements are essential to effectively requiring that controls be implemented. The previous permit allowed the permittee wide flexibility in developing and implementing procedures for enforcement of control measure. The permittee's enforcement response processes must convey that construction sites are expected to be in compliance and the permittee cannot allow a site to oscillate in and out of compliance without escalating enforcement.

Tip for Stormwater Management System Administrator Program

A list of operators that meet the criteria for reduced level inspections is posted under the header "Qualified Companies," on

<http://www.agccolorado.org/safety/stormwater.html>.

Operators listed under "participating" DO NOT qualify for the reduced site inspection frequency by the permittee. This page is maintained by the Association of General Contractors of Colorado. Only construction sites for which the Qualified Company holds a CDPS construction stormwater permit are covered by the Association of General Contractors' Stormwater Management System Administrator's Program and therefore qualify for the reduced level inspection.

The permittee has the flexibility to develop and implement procedures to escalate enforcement when it is determined that corrections to MS4 program noncompliance are not made in a timely manner. The permittee, however, cannot provide a “grace period” from potential enforcement liability for the time period that it takes to correct inadequate control measures and control measures requiring routine maintenance. For example, the permittee can require the inadequate control measures or control measures requiring routine maintenance to be corrected immediately, and establish enforcement escalation criteria that allow timely returns to compliance to not be escalated to formal enforcement procedures.

This section of the permit requires permittees to have processes and sanctions to minimize the occurrence of, and obtain compliance from, chronic and recalcitrant violators of control measure requirements. In situations where the Non-standard MS4 is the owner, but not the operator, the Non-standard MS4 permittee must have enforcement response procedures to address a contractor’s non-compliance with the MS4 program. In situations where the Non-standard MS4 permittee is both the owner and operator of a construction activity, the Non-standard MS4 program must have internal enforcement response procedures.

The permit does not pair violations with required responses. The renewal permit requires permittees to address findings of a similar nature in a consistent manner. Permittees have the flexibility to determine how each finding or types of findings will be addressed.

The renewal permit requires that enforcement procedures include informal, formal, and judicial enforcement responses. The permittee has the flexibility to determine the difference in a “finding,” “enforcement action,” and “corrective action” or use other terms.

- vii. *State or EPA Inspection Notifications:* Regulation 61.8(11)(a)(ii)(D)(II)(f) requires procedures for site inspections with the overarching purpose of assuring “...adequate design, implementation, and maintenance of BMPs at construction sites within the MS4 to reduce pollutant discharges and protect water quality.” In order to ensure that the permittee’s site inspections are thorough enough to assure adequate design, implementation and maintenance of BMPs, the permittee is required to resolve and document discrepancies between State or EPA inspections and the permittees’ inspections.
- viii. *Training:* Section 61.8(11)(a)(ii)(D)(I) of Regulation 61 states that “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.” In addition, section 61.8(11)(a)(ii)(D)(II)(b) of Regulation 61 states that the program must include the development and implementation of “requirements for construction site operators to implement appropriate erosion and sediment control BMPs.”

The division has determined that providing information to construction operators is an important part of a transparent and successful construction sites program. The requirements have not changed from the previous permit. Permittees have flexibility on the format of the training, which can be information on the permittee’s web site, a packet of information given to the construction operator, and/or a pre-construction meeting with permittee staff and the construction operator to explain the permittee’s construction sites program and the construction operator’s responsibilities.

- ix. *For Applicable Construction Activities that Overlap Multiple Permit Areas:* Section 61.1(1)(c) in Regulation 61 states “Nothing in these regulations shall be construed to limit a local government’s authority to impose land-use or zoning requirements or other

limitations on the activities subject to these regulations.” The division has expressly allowed co-regulating MS4 permittees to enter into an agreement for oversight of sites that overlap multiple permit areas. The language in the renewal permit is intended to allow arrangements between co-regulating MS4 permittees for overlapping sites as long as an agreement between the entities is in place for one or more MS4 permittees. The agreement must clearly identify the construction sites standards that will be applicable to the site and that each co-regulating MS4 permittee has the authority to inspect and enforce the selected standards within its permit area to allow another permittee’s construction sites standards to be implemented.

x. Receipt and consideration of public comments

This is a new requirement in the renewal permit. See discussion under Part J.D.c of this Fact Sheet.

xi. Cherry Creek Reservoir Drainage Basin Requirements

The requirements in Regulation 72—Cherry Creek Reservoir Drainage Basin Requirements (Part I.E.3.a.xi) are IN ADDITION TO the requirements in Parts I.E.3.a.i-x. The requirements in Parts I.E.3.a.i-x are designed to address all stormwater pollutants, whereas the requirements in Parts I.E.3.a.xi are focused on the primary pollutant of concern for the Cherry Creek Basin, phosphorus. Permittees in the Cherry Creek Basin must comply with BOTH Parts I.E.3.a.i-x AND Part I.E.3.a.xi. Permittees that only comply with Part I.E.3.a.xi will be in violation with this permit. This fact sheet will explain some of the similarities and differences between Parts I.E.3.a.i-x and Part I.E.3.a.xi.

Regulated Activities. This is an example where permits developed from Regulation 61 differs from Regulation 72. This section of the permit only lists several construction activities that must comply with the Cherry Creek Reservoir Drainage Basin Requirements. The MS4 permits under Regulation 61 define construction activity as “ground surface disturbing and associated activities (land disturbance), which include, but are not limited to, clearing, grading, excavation, demolition, installation of new or improved haul roads and access roads, staging areas, stockpiling of fill materials, and borrow areas. Activities that include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility are not considered construction activities. Activities to conduct repairs that are not part of regular maintenance and activities that are for replacement are considered construction activities and are not considered routine maintenance. Repaving activities where underlying or surrounding soil is cleared, graded, or excavated as part of the repaving operation are construction activities unless they are an excluded site under Part I.E.3.a.i. Construction activity occurs from initial ground breaking to final stabilization regardless of ownership of the construction activities.” Note that the definition of construction activity applies to more construction activities than Regulation 72, such as demolition, installation of new or improved haul road and access road, staging areas, stockpiling of fill materials, and borrow areas. The requirements of Part I.E.3.a.i-x would still apply to these construction activities. All other construction activities must comply with Part I.E.3.a.i-x in addition to Part I.E.3.a.i-xi. See Table I-A for additional information on regulated activities.

Exclusions. These automatic, authorized, and additional exclusions apply to Part I.E.3.a.xi only. These three types of exclusions DO NOT apply to Parts I.E.3.a.i-x. For example, emergency operations are automatically exempted from the requirements under the Cherry Creek Regulation, but ARE NOT exempt from installing a temporary control measures, site plan requirements, inspection requirements, enforcement requirements, and the other requirements of Parts I.E.3.a.i-x.

- 1) *Automatic Exclusions.* Part I.E.3.a.i-x also excludes agricultural activities and routine maintenance activities. However, Parts I.E.3.a.i-x DO NOT exclude land disturbance at residential or commercial subdivisions that already have adequate construction and post-construction control measure and emergency operations projects. These projects may be exempt from Part I.E.3.a.xi, but still need to comply with Parts I.E.3.a.i-x.
- 2) *Authorized Exclusions.* Underground utility construction projects may be exempt from Part I.E.3.a.xi, but still need to comply with Parts I.E.3.a.i-x. Note that underground utility projects are exempt from Post-Construction controls in Parts I.E.4.a.-k., but still need to comply with the Construction Site requirements in Parts I.E.3.a.i-x.
- 3) *Additional Exclusions.* To date, the division has not allowed any additional exclusions. Permittees must receive approval from the division before applying any additional exclusions.

Submittal Requirements. Cherry Creek provisions in Part I.E.3.a.xi require an erosion and sediment control plan submittal similar to the site plan requirements of Parts I.E.3.a.iv.; however, Part I.E.3.a.iv, includes elements beyond the Cherry Creek requirements that the permittee must require in site plans and address in site plan reviews.

Required Construction Control Measures. Cherry Creek requirements in Part I.E.3.a.xi (F) of the permit are very different than requirements in Part I.E.3.a.iv of the permit. Regulation 61 focuses on all stormwater pollutants, whereas Regulation 72 focuses on reducing the inflow of total phosphorus. Phosphorus adsorbs to sediment, therefore, Part I.E.3.a.xi(F) focuses on sediment and erosion control measures that non-excluded construction projects must implement.

- d. *Recordkeeping.* This is a new section of the permit. This section lists the records that must be maintained under this requirement. See discussion in section J, Part E of this fact sheet. The previous permit did not require permittees to document and report construction program requirements when they utilized a surrounding MS4 to implement the program. The renewal permit now requires permittees report their program documentation, regardless of whether another entity implements the program. Self-documentation is necessary because there are differences in the requirements of this renewal permit versus the Small MS4 general permit and individual Phase I MS4 permits.

Site Inspection: The division has added requirements for documenting oversight and response for construction activities to clarify the requirements under the previous permit for maintaining records. Minimum standards for inspection documentation have been added to the renewal permit. The lack of minimum requirements for inspection documentation is a barrier to a compliant construction sites program and potential enforcement.

Permittees do not have to verify that the site conditions match the approved site plan during each inspection. Permittees may, however, choose to do so as this provides documentation that may be necessary for legally defensible enforcement actions.

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

Section 61.8(11)(a)(ii)(E)(I) of Regulation 61 requires that “the permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment sites that disturb greater than or equal to one acre, including sites 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.

The Post-Construction Stormwater Management in New Development and Redevelopment program requires control measures after construction is completed to prevent or minimize water quality impacts associated with the long-term use of the areas that have undergone new development and redevelopment. Examples of control measures include permanent water quality ponds at housing developments, vegetated swales designed to increase infiltration and remove pollutants from runoff from new roads, minimizing impervious area or encouraging infiltration at new commercial developments, etc.

The division has made significant changes to this program area in the renewal permit. The renewal permit defines and focuses on controls from applicable development sites. In addition, the renewal permit offers the permittee the flexibility to exempt some types of applicable development sites from installing post-construction control measures.

Permittees should note that this CDPS permit is independent of water rights administered by the Division of Water Resources. Although the permit allows the retention, reuse, evapotranspiration, and evaporation of stormwater to prevent or minimize pollutants from stormwater, this permit in no way administers the water rights. Some permittees have allowed the retention or reuse of stormwater, but only after acquiring a water right through the Division of Water Resources. Permittees must comply with the Division of Water Resources before approving control measures that retain, reuse, or provide for infiltration, evapotranspiration, or evaporation of water. This process with the Division of Water Resources might require an augmentation plan and associated water right.

The renewal permit provides clarification of applicability through the definition of “applicable development sites.”

The Post-Construction Stormwater Management in New Development and Redevelopment program must be implemented at “applicable development sites.” These are new development and redevelopment areas that are greater than one acre. The area of land that encompasses the “applicable development site” and the resulting land disturbance are the same and include all areas where land disturbance occurs as a result of the applicable development site activities, unless an area is excluded in Part I.E.4.a.i of the permit. Areas that do not have land disturbance are not part of the applicable development site. This would include staging and access areas located on existing impervious areas, like a parking lot or road surface, where that impervious area is not disturbed as part of the development activities. Note that staging areas that do disturb land may also be excluded if they meet the exclusion in Part I.E.4.a.i(G) for an area of land disturbance to undeveloped land that will remain undeveloped. Even though a staging area may be excluded from being part of an applicable development site, it would not be excluded from being part of “applicable construction activities” for the purposes of determining compliance with the Construction Sites permit requirements. It should be noted that “land disturbance” and “land disturbing activities” are two different terms. The land disturbing activities must result in actual land disturbances to be included in the area of the applicable development site. “Land disturbing activity” is any activity that results in a change in the existing land (both vegetative and non-vegetative). Land disturbing activities include, but are not limited to clearing, grading, excavation, demolition, installation of new or improved haul roads and access roads, staging areas, stockpiling of fill materials, and borrow areas. Compaction that is associated with stabilization of structures and road construction must also be considered a land disturbing activity. “Land disturbance” is therefore the changes in the existing land (both vegetative and non-vegetative) that results from the “Land disturbing activity.”

Applicable development sites also include all sites meeting the criteria of the previous MS4 permit for renewal permittees. The intent of this clarification is to ensure the continuity of the program and the ongoing applicability of the long term operation and maintenance requirements to control measures implemented in accordance with the previous permit term.

- a. Excluded Sites: The previous permit did not exclude any types of new development and redevelopment sites from post-construction control measure requirements. The renewal permit includes exclusions in Parts III.E.4.a. The exclusions are consistent with the COR080000 and COR090000 general permits. The exclusions are intended to allow relief for certain sites where implementation of permanent control measures is either unnecessary and/or currently presents challenges. The division believes that the flexibility resulting from these exclusions will allow a permittee to more efficiently and therefore effectively implement the overall program at this time.
- b. Regulatory Mechanism: Section 61.8(11)(a)(ii)(E)(II)(b) of Regulation 61 requires that “the permittee must use an ordinance or other regulatory mechanism to address post construction runoff from new development and redevelopment sites to the extent allowable under state or local law.” The renewal permit includes new minimum elements to be addressed in the regulatory mechanism. Local laws or contracts that the permittee has authority to change will not be considered constraints.
- c. Regulatory Mechanism Exemptions: The previous permit did not allow for any exemptions, such as waivers for grading only projects, roadway projects, and public improvement projects. The renewal permit, rather, allows for several types of exemptions. The division has added language to clarify that exclusions, exemptions, waivers and variances cannot be implemented in a manner that creates a non-compliance with the renewal permit. In addition, the permittee must ensure that their standard operating procedures comply with the renewal permit.
- d. Control Measure Requirements: Section 61.8(11)(a)(ii)(E)(II)(a) of Regulation 61 requires that “the permittee must develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community.” EPA published a document entitled, *Post-Construction Performance Standards and Water Quality-Based Requirements: A Compendium of Permitting Approaches*, which states the following:

Tip for Regulatory Mechanism

All required control measures do not need to be located within the permittee’s jurisdictional boundary; however, the permit requires an intergovernmental agreement if the control measure is located outside the permittee’s boundary.

For example, if stormwater from a development site at the edge of one permittee’s jurisdictional boundary will be treated by a control measure within another permittee’s jurisdictional boundary, an IGA or MOU should be in place to clarify which permittee (or how each permittee) will fund and provide the applicable staff and equipment to perform any necessary maintenance.

Many states have developed performance and/or design standards to control post-construction stormwater discharges from newly developed and redeveloped sites. MS4 permits in 33 states have conditions implementing numeric performance standards.

In addition, the document also states that

Many states have implemented numeric, retention-based performance standards for newly developed and redeveloped sites. These standards typically require or encourage using infiltration, evapotranspiration, or harvest practices to control a specified volume of stormwater. Volume retention is critical to reduce pollutant loads of all water quality parameters and to reduce erosion of the receiving waterbody. It also provides multiple community benefits by treating stormwater as a resource. Retention-based performance standards have been expressed in various ways. Some retention standards have been expressed as a volume of rainfall, a percentile storm event, or a ground water recharge volume that must be retained.

The renewal permit has seven base design standards—water quality capture volume standard, pollutant removal standard, runoff reduction standard, applicable development site draining to a regional WQCV control measure, applicable development site draining to a regional WQCV facility, constrained redevelopment sites standard, and prior permit term standard. These options were developed based on review of the Urban Flood Control District’s Urban Storm Drainage Criteria Manual, Volume 3, EPA guidance documents, permittee discussion, and stakeholder input during development of the COR090000 permit. The menu of design standards serve as clear, specific, measurable requirements which adhere to the Phase II Remand Rule (see Part J of this fact sheet).

Tip for Permanent Control Measures

Permittees have the flexibility to require all or a combination of the seven base design standards. Permittees also have the flexibility to prohibit some of the seven standards. The division recognizes that treatment must be tailored to the land development site and the renewal permit provides several options for post-construction requirements.

The renewal permit specifies a minimum drain time of 12 hours for post construction design standards in Part I.E.4.d.i.(B). This requirement is based on recommendations in the Urban Flood Control District’s Storm Drainage Criteria Manual, Volume 3.

The prior permit term standard allows for the continuation of the requirements from the previous permit terms. Permittees must ensure the long-term operation and maintenance of controls implemented in accordance with those permits. Permittees are not required to retrofit these existing controls to meet the new standards in the renewal permit. The prior permit term standard is also applicable to sites that have begun the permittee’s site plan approval process. Since each permittee has a different site plan approval process, the permittee has the flexibility to document this process and implement this design standard accordingly.

Some infiltration systems have underdrains installed to mitigate where soil permeability is insufficient. Underdrains will typically daylight and may re-introduce runoff to the MS4 system. Part I.E.4.d.(iii) adds additional restrictions to the runoff reduction standard in order to ensure that stormwater is infiltrated without re-introduction to the MS4 via underdrains or a seasonally high ground water table.

- e. Post-construction Site Plans: Section 61.8(11)(a)(ii)(E)(II)(a) of Regulation 61 requires that “the permittee must develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community.” In addition, section 61.8(11)(a)(ii)(E)(I) of Regulation 61 requires that “the permittee must develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment sites that disturb greater than or equal to one acre, including sites 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.”

The previous permit required the permittee to “develop, document, and implement procedures to review post-construction BMP plans and designs prior to construction to ensure compliance...” The division has determined that reviewing all site plans is necessary in order for the permittee to ensure that adequate control measures that prevent or minimize water quality impacts are installed. Plan review is a basic oversight step that the permittee must implement to prevent inadequate site plans from being implemented. Additionally, the cost of permanent control measures and difficulty of correcting mistakes after the site is completed and the control measure installed warrant this minimum standard of oversight.

The renewal permit includes requirements for site plan review. The renewal permit includes requirements for site plans and site plan reviews for all applicable development sites. Similar to the Construction Sites Program, the term “site plan” is used in Regulation 61 and in this renewal permit. The other terms used for a “site plan” are included in the definitions section of the renewal permit.

The division has also added language regarding site plan modifications. This section regarding site plan modifications is different than the site plan requirements in the Construction Sites program. The division understands that approved site plans may change during the course of construction or require modification to the operation and maintenance procedures during long-term operation and maintenance. The renewal permit allows the permittee to create a process for plan modifications and provides the minimum standards of modified plans or portions of plans to meet the same review standard as initial plans. The renewal permit also provides a requirement that plans must be modified before changes are implemented on the ground.

The division has only applied this requirement to newly implemented control measures after the deadline in Part I.H. At this time, the division has made the determination that it is not practicable to develop or modify plans for existing control measures. The division will evaluate the permittees’ effectiveness at ensuring the long-term operation and maintenance of existing control measures in the absence of a requirement to modify plans for existing control measures. The division will then reevaluate this determination for the next permit term.

- f. Construction Inspection and Acceptance: Section 61.8(11)(a)(ii)(E)(II)(a) of Regulation 61 requires that the permittee must “[d]evelop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community.” The division believes that new requirements in Part I.E.4.f are necessary to implement this regulation.

An important part of a successful structural control measure is inspections during construction and the permittee’s acceptance that the control measure was built and installed per the approved site plan. The previous permit required that the permittee develop, implement, and document procedures to determine that the control measures “are being installed according to specifications.” The renewal permit requires that the permittee confirm that the “completed control measure meets the approved site plan in accordance with Part I.E.4.d.” The permittee has the flexibility to develop their own procedures to ensure that this requirement is met.

The previous permit required confirmation that control measures had been installed. The permit, however, did not state the timeframe that permanent water quality control measures had to be operational after completion of a construction site or require an inspection prior to accepting the control measure. The renewal permit requires an inspection to confirm that the control measure was constructed in accordance with the approved site plan. The completed control measures must operate in accordance with the approved site plan.

The division also recognizes that some sites are completed in phases and that the control measure might be completed during a subsequent phase. The previous permit did not prevent or address the potential scenario of the control measure never being constructed or being delayed significantly if the subsequent site phases were abandoned or delayed. This scenario would create the potential for a completed phase of a new or redevelopment site without a control measure to prevent or minimize water quality impacts. The renewal permit allows temporary control measures, but they must still meet the design standards set in this section.

- g. Long-Term Operation and Maintenance and Post Acceptance Oversight: Section 61.8(11)(a)(ii)(E)(II)(c) of Regulation 61 requires that the permittee must “ensure adequate long-term operation and maintenance of BMPs.”

The previous permit required that the permittee develop, implement, and document procedures to “ensure adequate long-term operation and maintenance” of control measures. Although the previous permit required that the permittee develop and implement a long-term operation and maintenance program, the permit did not require field inspection at a minimum frequency nor did it include a minimum standard for inspection oversight. The renewal permit establishes the scope and minimum inspection frequencies for post-construction control measures. Permittees have the flexibility to inspect the control measures more often. All functional elements of control measures in the inspection requirement, include but are not limited to: drainage infrastructure, inlets, outlets, vegetation, filter media, etc.

- h. Enforcement Response: Section 61.8(11)(a)(ii)(E)(II)(c) of Regulation 61 requires that the permittee must “ensure adequate long-term operation and maintenance of BMPs.” Enforcement is an important part of ensuring the long-term operation and maintenance of control measures. The previous permit did not specifically require an enforcement program. The renewal permit adds more clarification to this requirement. Similar to other program areas, the division is not prescribing a specific enforcement action in response to a specific finding, but is requiring the permittee to develop and document the different types of common violations and the actions that will be taken to ensure that adequate post-control measures are installed, operated, and maintained to ensure that they prevent or minimize water quality impacts. The division includes a measurable trigger for when escalated enforcement is required. If non-compliance continues for more than two inspections, the permittee must invoke escalation procedures or must document the reason why they did not take enforcement actions.
- i. Tracking: Section 61.8(11)(a)(ii)(E)(II)(c) of Regulation 61 requires that the permittee must “ensure adequate long-term operation and maintenance of BMPs.” An important part of adequate long-term operation and maintenance is tracking each post-construction control measure. Tracking is especially important if the permittee uses the applicable development site draining to a regional WQCV control measure or facility design standards. These WQCV facilities and control measures must be tracked, inspected, and maintained to ensure that they are still preventing or minimizing water quality impacts as designed.
- j. Training: Section 61.8(11)(a)(ii)(E)(I) of Regulation 61 requires that the permittee must “develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment sites that disturb greater than or equal to one acre, including sites 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.” The renewal permit includes a new requirements for training under the Post-Construction Stormwater Management in New Development and Redevelopment program. Training applicable permittee staff on implementing the applicable sections of this program is an important part of implementing a successful program. Permittees have the flexibility to design a training program tailored to their staff. Permittees can train applicable staff via one-on-one meetings, their web site, handouts, sending the staff to other helpful trainings, etc.
- k. For Applicable Development Sites that Overlap Multiple Permit Areas: Section 61.1(1)(c) in Regulation 61 states “Nothing in these regulations shall be construed to limit a local government’s authority to impose land-use or zoning requirements or other limitations on the activities subject to these regulations.”

The division is allowing co-regulating MS4 permittees to enter into an agreement for oversight of sites that overlap multiple permit areas. The language in the renewal permit is intended to allow such arrangements between co-regulating MS4 permittees for overlapping sites as long as an agreement between the entities is in place for one or more MS4 permittees to allow another permittee's post-construction site program to be implemented. The renewal permit does not require any MS4 permittees to enter into such agreement.

Large MS4 permittees (Phase I MS4 permittees) are held to a different MEP standard and some do not currently have post-construction exemptions in their permits. Phase I permittees may not be able to utilize the exemptions from Part I.E.4.a unless the applicable development site overlaps the permit area of a Non-standard MS4. For example, the Colorado Department of Transportation cannot use the roadway exemption to the post construction standards because its permit has a different post-construction control measure framework.

If the permittee has an applicable development site that will meet the applicable development site draining to a regional WQCV facility or control measure design standards, and the regional WQCV facility or control measure is located outside of the permittee's permit area, then the permittee has to ensure that the other permittee will maintain the regional WQCV facility or control measure. Having a formal agreement concerning the regional WQCV facility or control measure is strongly recommended. In addition, the permittee cannot use it to meet the requirements in this permit if the regional WQCV facility or control measure does not meet the design standards in this renewal permit.

l. Cherry Creek Reservoir Drainage Basin Requirements

The requirements in Regulation 72—Cherry Creek Reservoir Drainage Basin Requirements (Part I.E.4.a.xii) are *in addition to* the requirements in Parts I.E.4.a.i-xi. The requirements in Parts I.E.4.a.i-xi are designed to address all stormwater pollutants, whereas the requirements in Parts I.E.4.a.xii are focused on the primary pollutant of concern for the Cherry Creek Basin, phosphorus. Permittees in the Cherry Creek Basin must comply with *both* Parts I.E.4.a.i-xi *and* Part I.E.4.a.xii. Permittees that only comply with Part I.E.4.a.xii will be in violation with this permit. This fact sheet will explain some of the similarities and differences between Parts I.E.4.a.i-xi and Part I.E.3.a.xii.

- i. Regulated Activities. This section of the permit requires post-construction control measures.
- ii. Provisions for Specific Control Measures or Equivalent Protection. This section of the permit acknowledges that Regulation 72 is more specific than Regulation 61, but permittees should note that the resulting permit sections applicable to each Regulation are both similar and different. In some cases, the sections of the permit based on Regulation 61 are more stringent than this section of the permit that is based on Regulation 72. Permittees are advised to pay special attention to the differences between Parts I.E.4.b -k and Part I.E.4.l and comply with the more stringent permit requirement. The division includes language beyond Regulation 72 to clarify that the requirements of Part I.E.4.l only applies to control measures to address Regulation 72 requirements for the reduction of phosphorus.
- iii. Individual Homes. This section of the permit exempts the development of an individual home (with conditions) that disturbs less than one acre. The individual home could be part of a larger common plan of development and still be exempt from Part I.E.4.l Individual homes that disturb less than one acre, but are part of a larger common plan of development or sale that disturbs more than one acre **must still comply** with Parts I.E.4.b-k and will still require a permanent control measure in compliance with Part I.E.4.a.iv. The exemption under Part I.E.4.l only applies to control measures to address phosphorus.

- iv. Exclusions. These automatic, authorized, and additional exclusions apply to Part I.E.4.l only. Some of these three types of exclusions **do not** apply to Parts I.E.4.b-k. For example, emergency operations are automatically exempted from the requirements under the Cherry Creek Regulation, but **are not** exempt from installing a temporary control measures, site plan requirements, inspection requirements, enforcement requirements, and the other requirements of Parts I.E.3.b-k
 - (A) *Automatic Exclusions.* Part I.E.4.l also excludes agricultural activities, routine maintenance activities, land disturbance to undeveloped land that will remain undeveloped, large lot single family development, underground utility construction. Permittees should note that some of these exclusion in Part I.E.4.a has conditions that are different from Part I.E.4.l. However, Parts I.E.4.a **does not** exclude land disturbance at residential or commercial subdivisions that already have adequate construction and post-construction control measure (although the project might be compliant with Part I.E.4.a.v or vi and emergency operations projects. Some roadway projects are excluded under Part I.E.4.l, but **are not** excluded under Part I.E.4.a. Permittees must carefully consider each roadway project to determine if parts of or the entire project is excluded from both Parts I.E.4.b-k. **and/or** Part I.E.4.l. In addition, projects exempted from Part I.E.4.l may still need to comply with Parts I.E.4.b-k.
 - (B) *Authorized Exclusions.* These projects may be exempt from Part I.E.4.l, but still need to comply with Parts I.E.4.b-k. Construction of a sidewalk, driveway, or a rural road (in the permit area) that disturbs one acre or more, or less than one acre but are part of a larger common plan of development or sale that disturbs one acre or more still **will require** post-construction control measures in accordance with Parts I.E.4.d.
 - (C) *Additional Exclusions.* Regulation 72 allows for additional exclusions, however, these are subject to division approval. The division reserves the right to not allow any additional exclusions.
- v. *Submittal Requirements.* Permittees must receive approval from the division before applying any additional exclusions.
 - (A) *Post-Construction Control Measure Plan.* Similar to the Post-Construction Sites program, permittees must review site plans for compliance with Part.I.E.4.l.
 - (B) *Inspection and Maintenance.* Permittees must ensure that the approved site plan has both inspection and maintenance protocols and easements for access to the control measure.
- vi. *Post-Construction Control Measures.* This section incorporates language from Regulation 72. The requirements in Part.I.E.4.l could be different than the permit requirements that implement Regulation 61 (Parts I.E.4.b-k).
 - (A) *Installation, operation, and maintenance of post-construction control measures.*
 - 1) *Tier 3 Development and Redevelopment.* Tier 3 development and redevelopment projects result in any land disturbance greater than one acre, or which results in more than 5,000 square feet of imperviousness for new development or 5,000 square feet of increased imperviousness for redevelopment, including disturbances of existing impervious areas. Part I.E.4.d does **not consider the imperviousness** of the project (only the acreage of the land disturbance) and allows for seven types of design standards. Whereas, Part I.E.4.l considers the land disturbance **and** the resulting imperviousness of the project when determining if the project must meet

a WQCV design standard for a post-construction control measure. The Approved Control Measures section below allows for 11 types of control measures to meet the WQCV, some of which are not allowed under Part I.E.4.d. Permittees must review plans for both land disturbance and imperviousness to determine if Parts I.E.4.b-k and/or Part I.E.4.l apply.

- 2) *Tier 2 Development and Redevelopment.* Tier 2 development and redevelopment projects result in any land disturbance less than one acre that is developed independently of a larger common plan of development or sale, and which results in more than 500 square feet but less than 5,000 square feet of imperviousness for new development, or more than 500 square feet and less than 5,000 square feet of increased imperviousness for redevelopment, including disturbances of existing impervious areas. Since the projects are less than one acre and not part of a larger common plan of development or sale, then Parts I.E.4.b-k will not apply.
- 3) *Tier 1 Development and Redevelopment.* Tier 1 development and redevelopment projects result in any land disturbance less than one acre that is developed independently of a larger common plan of development or sale, and which results in less than 500 square feet of imperviousness for new development or 500 square feet of increased imperviousness for redevelopment. Since the projects are less than one acre and not part of a larger common plan of development or sale, then Parts I.E.4.b-k will not apply.

(B) *Approved Control Measures.* This section of the permit lists 11 approved control measures. Note that “alternate control measures” are not allowed under Parts I.E.4.a.i-xi and Tier 1 projects must comply with the control measures listed in Part I.E.4.a.iv.

(C) *WQCV Alternatives.* Permittees may allow alternative BMPs that do not use the WQCV approach or are in combination with the WQCV, with conditions. Note that “WQCV alternatives” are not allowed under Parts I.E.4.b-k and Tier 1 projects must comply with the control measures listed in Part I.E.4.d. Stream bank stabilization projects are exempt from Parts I.E.4 b-k and stream bank stabilization **cannot be used** as a control measure for a development or redevelopment project under Parts I.E.4 b-k.

(D) *Operation and Maintenance.* Similar to Part I.E.4.g, this section of the permit also requires the permittee to ensure long-term operation and maintenance of control measures.

vii. *Additional Control Measure Requirements.* These requirements only apply to facilities engaging in “industrial activities” as defined in section 61.3(2)(e)(iii) of Regulation 61 and have an applicable development project under Part I.E.4.l. These additional control measures can also be applied to commercial facilities designated by the permittee.

(A) *Designate Commercial Facilities.* Permittees must develop a program to designate commercial facilities with certain conditions.

(B) *Additional Control Measures.* The commercial facilities designated by the permittee must then comply with the additional control measures.

(A) *Stream Preservation Areas.* This section of the permit defines the stream preservation area.

- 1) through 4) *Additional Control Measure Requirements.* Additional control measure are required for Tier 2 and 3 development and redevelopment projects in stream preservation areas.

- 5) Authorized Exclusions. This section of the permit lists exclusions to the additional control measure requirements for certain types of projects in stream preservation areas. Note that the some roadway projects will still need to comply with Parts I.E.4.a-k.
- m. Recordkeeping: This is a new section of the permit. See discussion in section J, Part E of this fact sheet. This section lists the records that must be maintained under this requirement.

Excluded Sites: The previous permit did not list any exclusions, whereas, this renewal permit lists several types of exclusions that permittees can choose to use. The division has determined that the use of the exclusions must be closely tracked. In order for permittees to make use of the exclusions, they must have the resources to track and report the use of the exclusions. The use of the exclusions could result in a significant amount of developed area being excluded from being treated by control measures that would prevent or minimize water quality impacts. The permittee will need this information to demonstrate compliance to the division, EPA, or the public. The division will also need this information in future permit terms to evaluate the potential for water quality impacts and the practicability of additional requirements. Future options include incorporating requirements for a permittee to implement controls to address discharges for which no controls are in place or anticipated based on redevelopment requirements to reduce pollutant discharges to the MS4 or the removal of one or more exclusions from future renewal permits.

Enforcement Response: The division has added requirements for documenting oversight and response for covered development sites to clarify the requirements under the previous permit for maintaining records. The renewal permit provides the minimum inspection documentation requirements in the corresponding recordkeeping section.

5. Pollution Prevention/Good Housekeeping for Permittee Operations

The renewal permit separates the requirements into facility runoff control measures and permittee operations and maintenance procedures. The renewal permit has different standards for facilities because permittees can develop plans for a permittee facility and facilities have fixed pollutant sources and can sometimes be constrained.

- a. The following requirements apply:

Control Measure Requirements: Section 61.8(11)(a)(ii)(F)(I) of Regulation 61 requires that:

The permittee must develop and implement an operation and maintenance program that includes an employee training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must also inform public employees of impacts associated with illegal discharges and improper disposal of waste from municipal operations. The program must prevent and/or reduce stormwater pollution from facilities such as streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by the permittee, and waste transfer stations, and from activities such as park and open space maintenance, fleet and building maintenance, street maintenance, new construction of municipal facilities, and stormwater system maintenance, as applicable.

This section consists of an overarching requirement for the permittee to implement control measures appropriately. In addition, the renewal permit categorizes the pollution prevention/good housekeeping requirements into facility runoff control measures and permittee operations and maintenance procedures. The division has revised this section to add new aspects to this existing requirement to provide the minimum requirements for facilities that must be addressed by the permittee. The renewal permit contains additional

details on the types of facilities and operations that must be addressed. The additional detail supports the use of clear, specific, measurable requirements, as required by the Phase II remand rule and are consistent with requirements in the division issued COR080000 and COR090000 permits. This increased specificity is included because the division intends for the permittee to examine each facility and ensure that control measures are appropriate for the specific facility. The division determined that the categories in the previous permit were too general and potentially created a scenario where activities would be combined and specific control measures could be overlooked or not documented in SOPs. This section of the permit does not require the permittee to create new procedures or plans. Existing SOPs can be used to meet the requirements of this section, and modified if necessary, to address any requirements not previously addressed. The control measure specifications are the divisions interpretation of MEP. Highlighted changes are discussed below.

Permittee facility inspection procedures: The renewal permit includes inspection procedures that are consistent with the current CDPS COR900000 industrial stormwater permit, with the exception of visual inspections. The division determined through compliance oversight activities and review of other permits and permit guidance, that an annual inspection is appropriate for permittee facilities. Minimum inspection procedures have been paired with minimum inspection documentation requirements in the corresponding recordkeeping section.

Nutrients: The renewal permit includes new requirements to limit nutrient pollution, including incorporating Regulation 85 requirements. For instance, the renewal permit requires reporting of the phosphorus applied through deicers. The Colorado Department of Transportation conducted research on phosphorus containing deicers and has developed specifications for chemical content (see the division's website at <https://www.codot.gov/travel/winter-driving/assets/granular-deicing-standards>). The specifications include a maximum phosphorus concentration of 25 parts per million. The renewal permit requires permittee's report the amount of phosphorus applied through deicers when the concentration is in excess of this amount. This information will support the division's efforts to control phosphorus to be protective of water quality standards.

Tip for Fertilizer Use

According to Colorado State University Extension most established lawns in Colorado do not need additional phosphorus. Prior to selecting a fertilizer you can use a soil test kit to determine which nutrients are necessary. See <https://extension.colostate.edu/docs/pubs/garden/xcm222.pdf>

Regulation 85 allows permittees to participate in a collaborative program and apply the program in the permittee's jurisdiction. The division encourages and recommends that permittees collaborate on the nutrient-related requirements in the renewal permit and has provided a timeframe in the compliance schedule that would allow such collaboration.

Bulk Storage: This section includes new requirements for outdoor bulk storage structures that are more than 55 gallons. The division has determined that requiring bulk storage in the permit is practicable based on the long-term inclusion of this requirement in stormwater discharge permits for industrial activities in Colorado. The division has determined that secondary containment for the outdoor storage of bulk storage structures that are more than 55 gallons of petroleum products and other chemicals is practicable because many of the audited Phase II Small MS4 permittees were able to provide secondary containment for petroleum products and other chemicals. In addition, this is an existing requirement in industrial activities in division stormwater discharge permits. Bulk storage is defined in the permit and pertains to the primary source storage (i.e. containment to be drawn from or added to) of material. Bulk fuel storage or "silos" of magnesium chloride is an example of bulk storage. Electrical, operating, or manufacturing equipment, motive power containers, a

tank of magnesium chloride on an application truck, and ancillary product piping, are not considered bulk storage.

The containment in direct contact with the bulk material is the primary containment. Secondary containment is the back-up containment to the primary containment. The permit requires secondary containment or equivalent controls that are adequate to contain all spills and to prevent spilled material from entering state waters. Examples of secondary containment or equivalent controls include impervious bermed areas, double walled tanks, storage lockers and buildings with built in containment, discharges to a sump with a controlled discharge, and structural or non-structural control measures. A compliance schedule was added for the bulk storage requirements. Prior to the due date in the compliance schedule, the permittee remains responsible for complying with previous permit requirements to implement practices, such as spill prevention and response, in order to prevent or reduce pollutants in runoff from bulk storage containers.

Use of Fire Fighting Foam in Training Activities and Emergencies: The renewal permit includes new pollution prevention/good housekeeping program requirements for fire fighting operations. As described in Part I.E.2.a.iv(U) of this fact sheet, perfluoroalkyl substances, commonly found in fire fighting foams, may cause water quality impacts if they become entrained in stormwater. House Bill 19-1279 prohibits the use of Class B firefighting foam, containing intentionally added perfluoroalkyl and polyfluoroalkyl substances, for training purposes or testing. The bill was signed on June 4, 2019 and becomes effective on August 2, 2019. For emergency use the renewal permit requires the permittee, as part of its program, to evaluate whether a Class B fluorine-free foam can provide the required performance for the specific hazard. The division believes these control measures are practicable based on recommendations in the Interstate Technology Regulatory Council (ITRC) Fact Sheet on Aqueous Film-Forming Foam (AFFF) (October 2018) and the National Academies of Sciences, Engineering, and Medicine 2017 “Use and Potential Impacts of AFFF Containing PFASs at Airports.”

Tip for Permittee’s Fire Fighting Operations

Additional information on health impacts and control measure for perfluoroalkyl substances and fire fighting foams is available on the division’s website at:
<https://www.colorado.gov/pacific/cd/phe/pfcs>

b. Training: Section 61.8(11)(a)(ii)(F)(I) of Regulation 61 requires that:

The permittee must develop and implement an operation and maintenance program that includes an employee training component [emphasis added] and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. The program must also inform public employees of impacts associated with illegal discharges and improper disposal of waste from municipal operations.

The previous permit required permittees to develop and implement procedures to provide training for employees and contractors as applicable. The renewal permit retains this requirement from the previous permit, but adds additional detail for clarification.

c. Recordkeeping

This is a new section of the permit. See discussion in section J, Part E of this fact sheet. This section lists the records that must be maintained under this requirement. The renewal permit requires documentation of information necessary to determine compliance with new control measure requirements in Part I.E.5.a. Records include information

associated with facility runoff control measures, facility operation and maintenance procedures, nutrient source reduction methods, and training records.

Existing standard operating procedures can be used to meet many of these requirements. However, some permittees may need to supplement additional documents to meet the new record keeping requirements.

The permittee must either document confirmation that control measures were adequate, or must document a list of follow-up actions. Note that a record is required of the field conditions where stormwater is discharged from the site. The division has added this requirement because the previous permit did not include minimum standards for inspection documentation. This minimum level of information is similar to the recordkeeping requirements for the Illicit Discharge Detection and Elimination, Construction Sites, and Post Construction Stormwater Management in new Development and Redevelopment program areas.

F. OTHER TERMS AND CONDITIONS

The conditions for Resources for Non-Standards MS4s have been deleted. The following identifies changes made from the previous permit.

1. General Limitations

There are minor changes to this section from the previous permit. The prohibition of chemical additions is an important requirement of the permit. For example, chemical flocculants could be added to discharges from construction sites to cause sediment to settle. The chemical additives are considered a pollutant and are prohibited by this permit.

2. Releases in Excess of Reportable Quantities

There are no changes to this section from the previous permit.

3. Records Availability

There are minor changes to this section from the previous permit.

4. Resources

This section has been removed from the permit. Permittees are expected to provide adequate resources to run their programs.

5. Identification of Receiving Waters and Impairment Status

In a September 24, 2018 Permit Quality Review, EPA Region 8 recommended adding a requirements to the Stormwater Discharges from Municipal Separate Storm Sewer Systems (COR090000) that would require the identification of receiving water bodies or water quality status (impaired, TMDLs). In response, the renewal permit includes a new requirement for permittees to identify and report discharges through the permittees' outfalls to impaired waters or water where TMDLs apply. Part III of the permit establishes new requirements to address impairments and TMDL requirements. The permittee must therefore be aware of Part III requirements that may apply.

6. Total Maximum Daily Loads (TMDLs)

There are several changes to this section from the previous permit to streamline and clarify the requirements. See Part III of the fact sheet.

7. Implementation by Other Parties

Section 61.8(11)(a)(vi) states that:

A permittee may rely on another entity to satisfy its CDPS permit obligations to implement a minimum control measure, or component thereof, if:

(A) The other entity, in fact, implements the control measure;

(B) The particular control measure, or component thereof, is at least as stringent as the corresponding CDPS permit requirement; and

(C) The other entity agrees to implement the control measure on behalf of the permittee. In the reports that the permittee submits under subsection (viii)(C) of this section, it must also specify that the permittee relies on another entity to satisfy some of its permit obligations. The permittee remains responsible for compliance with its permit obligations if the other entity fails to implement the control measure (or component thereof).

Permittees may use another entity to implement part or all of the requirements in this permit and must meet the requirements of this section. Using another entity, including a participant in the storm water management system administrator program, does not reduce or transfer the responsibility of meeting all requirements in this permit from the permittee. The permittee is responsible for meeting all requirements in this permit.

A written acceptance between the parties is required and the other entity must be impartial. Because the permittee ultimately is responsible for complying with the permit, a separate implementing entity must be impartial in order to represent the permittee's interest, which is compliance with the permit. Permittees must take care to select other entities that do not have financial or other interests that do not align with the permittee. The permittee has the flexibility to determine the criterion for a written acceptance.

The requirement in 25-8-803(2) of the Colorado Water Quality Control Act cannot be waived or removed. This section of the Colorado Water Quality Control Act allows permittees to be supported by storm water management system administrator program and does not waive the requirements of Part I.F.7. of the permit. In fact, this section of the Colorado Water Quality Control Act requires one further activity in addition to the requirements of Part I.F.7. of the permit—the permittee must implement procedures to demonstrate and report to the division that the administrator's program is meeting the requirements for third party audits. The procedures must be available upon request from the division. The renewal permit specifies permittees are ultimately liable for compliance with permit terms.

8. Monitoring

Regulation 61.8(4) states that “any discharge authorized by a discharge permit may be subject to such monitoring, record-keeping, and reporting requirements as may be reasonably required in writing by the division.”

The permit includes the language in the previous permit that allows the division the option of addressing monitoring on an individual permittee case-by-case basis. With this requirement, the division may include monitoring in individual permittee certifications as reasonably required.

9. General Monitoring and Sampling Requirements

The monitoring requirements in this section are consistent with federal requirements in 40 Part C.F.R. 136. This section has been added and is paired with the monitoring requirements that have been added to Part III of the renewal permit.

G. PROGRAM REVIEW AND MODIFICATION

The EPA Phase II Remand Rule (2016) provided options for issuing permits. Under one option, the minimum program requirements to establish MEP are incorporated into the body of the permit. Under other options only a portion of the program requirements are included in the body of the

permit and the division separately approves and provides public notices for program documents with additional practices to establish MEP. This section of the renewal permit has been substantially edited to incorporate minimum program requirements, following the first option described. The requirements related to division Review of Programs and Reports and Demonstration of Adequacy in the previous permit have been removed and the aspects of program review and approval is now limited to the Annual Program Review conducted by the permittee.

Because the permit includes minimum requirements to establish MEP, permittees no longer have to submit any information to the division when they modify their PDD. Permittees can modify their PDD anytime. Permittees must ensure that all modifications comply with all permit requirements.

H. COMPLIANCE SCHEDULE

Renewal permittees must implement their current programs until they have developed a new program in compliance with this renewal permit or the compliance schedule deadline, whichever is sooner.

Compliance schedules are provided in the permit for renewal permittees and a schedule of milestones is provided for new permittees. There are two different schedules—new and renewal permittees. New permittees receive more time to complete the permit requirements. This reflects the time for new permittees to become permitted the first year. In many instances, a milestone schedule item for new permittees reflects an expansion of current program requirements and is not a completely new requirement. Compliance schedule dates are included in a separate table to address different dates for new and renewal permittees. Many of the permit requirements are not effective immediately. A compliance schedule consolidates the information regarding the compliance dates for permit requirements.

The compliance schedule only requires the permittee to notify the division in the next annual report that a requirement has been completed and does not require the submittal of actual reports, SOPs, or other documentation. The renewal permit includes an extra column titled “ICIS Codes” so that compliance elements can be internally coordinated better with the EPA’s Integrated Compliance Information System (ICIS) reporting.

The overall approach of the new permit is that the permit effluent limits identifying requirements for pollutant restrictions, prohibitions, and reduction are included directly in Part I.E of the permit. However, the new permit requires that permittees continue to implement their existing programs in the CDPS Stormwater Management Plan Description or PDD in accordance with the previous permit term until the new permit conditions are met.

I. REPORTING REQUIREMENTS

Section 61.8(11)(a)(vii)(A) of Regulation 61 requires that “the permittee must evaluate program compliance, the appropriateness of its identified BMPs, and progress towards achieving its identified measurable goals. A summary of this evaluation shall be included in the permittee’s annual report.”

Reporting requirements were revised to address new terms and conditions and to include a requirement for an annual certification by the permittee. The division intends to continue to provide an annual report form. The intent of the annual report is to provide a representative summary to the division that allows the division to gain a basic understanding of the permittee’s program status and implementation. The annual report also includes requirements to provide basic quantities of certain elements (e.g., number of construction sites and inspections) that allow the division to gain insight on the scope and scale of a program area. The division has attempted to limit the basic reporting items and includes a focus on any exceptions or exclusions implemented by the permittee. For

example, the annual report requires the permittee to provide information on the applicable development sites that were excluded from being required to install a post-construction control measure. If the permittee does not implement the mechanisms in the permit that allows the exclusion, then the permit has a reduced reporting requirement. The annual report items are expected to be reported based on when the program area is required in the compliance schedule. Prior annual reports do not have to include the status of this activity and the updated PDD does not have to be submitted to the division, unless requested.

J. DEFINITIONS

Many definitions have been added to the renewal permit to increase clarity about the intent of terms in the context of the permit and align with new permit language.

K. GENERAL REQUIREMENTS

1. Signatory Requirements

Section 61.4(1) of Regulation 61 lists the signatory requirements. This section has been modified to reflect the requirements in Regulation 61. The previous permit did not include the complete language in Regulation 61, which resulted in unclear expectations regarding the signatory authority and duly authorized representative. The duly authorized representative is required to have responsibility for the overall operation of the regulated facility.

2. Retention of Records

This section has been updated to reflect changes in required recordkeeping and program description documentation. Section 61.8(11)(a)(vii)(B) of Regulation 61 requires that

The permittee must keep records required by the permit for at least three (3) years. The permittee must submit their records to the division only when specifically asked to do so. The permittee must make the records, including a description of the permittee's stormwater management program, available to the public at reasonable times during regular business hours (see 61.5(4) for confidentiality provision). (The permittee may assess a reasonable charge for copying. The permittee may require a member of the public to provide advance notice.)

The renewal permit identifies retention requirements for records in accordance with the Recordkeeping subsection as “the effective period of the permit and three years following.” This retention requirement removes the ambiguity with determining the time for which a record “is no longer being actively utilized for stormwater management,” which was the basis for the overall retention of records requirement in Part I.K.2.

PART II

Part II of the permit has been updated with new or revised standard language that is in all permits issued by the division.

A. NOTIFICATION REQUIREMENTS

The Program Modification section was deleted because these procedures are no longer necessary.

Many of these requirements were included in the section entitled Permittee Responsibilities in the previous permit. The renewal permit now contains the following subsections:

1. Notification to Parties: updated contact information for oral and written notification
2. Change in Discharge or Wastewater Treatment: new section
3. Special Notifications Definitions: new section

4. Non-Compliance Notification: updated language
5. Other Notification Requirements: new section
6. Bypass Notification: new section
7. Upsets: no new requirements from pervious permit. Permittees should note that this section of the permit applies to upsets to the permittee's stormwater program. This section does not apply to upsets for individual control measures on construction sites.
8. Discharge Point: new section
9. Proper Operation and Maintenance: updated language
10. Minimization of Adverse Impact: updated language
11. Removed Substances: new section
12. Submission of Incorrect or Incomplete Information: updated language
13. Bypass: new section
14. Reduction, Loss, or Failure of Treatment Facility: new section

B. PERMITTEE RESPONSIBILITIES

Many of these requirements were included in the section entitled Permittee Responsibilities in the previous permit. The renewal permit now contains the following subsections:

1. Inspections and Right to Entry: updated language
2. Duty to Provide Information: no new requirements from pervious permit
3. Transfer of Ownership or Control: new section
4. Availability of Reports: updated language
5. Modification, Suspension, Revocation, or Termination of Permits By the division: updated language
6. Oil and Hazardous Substance Liability: no new requirements from pervious permit
7. State Laws: no new requirements from pervious permit
8. Permit Violations: new section
9. Property Rights: no new requirements from pervious permit
10. Severability: no new requirements from pervious permit
11. Renewal Application: new section
12. Confidentiality: new section
13. Fees: updated language
14. Duration of Permit: new section
15. Section 307 Toxics: new section
16. Effect of Permit Issuance: new section

The renewal permit incorporates new federal requirements from the electronics reporting rule, published in the Federal Register on October 22, 2015. The rule requires that applications and annual reports be submitted electronically as of December 31, 2021. The rule also requires the state to use a system compatible with the Integrated Compliance Information System (ICIS), which is the system currently used by EPA. The division is developing a compliant gateway referred to as Colorado Environmental Online Services (CEOS). Until the division notifies permittees CEOS is available, they are required to submit applications and reports in paper format.

PART III

A. TMDL Requirements

Section 61.8(11)(a)(iv) of Regulation 61 requires that "The permittee must comply with any more stringent effluent limitations in the permit, including permit requirements that modify, or are in addition to, the minimum control measures , based on an approved TMDL or equivalent analysis. The division may include such more stringent limitations based on a TMDL or equivalent analysis that determines the limitations are needed to protect water quality."

As required by 40 C.F.R. 122.44(d)(1)(vii)(B) the permit must contain effluent limits consistent with the assumptions of any available wasteload allocation in a TMDL. While these limits are typically numeric, In the November 26, 2014 Memorandum “Revisions to the November 22, 2002 Memorandum “Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs,” EPA recognizes that control measures, BMPs, and other practices that are clear, specific, and measurable are an effective means for reducing pollutants in discharges as a means of implementing WLAs.

The following are examples of small MS4 permits issued by other states that implement TMDL WLAs in permits through a combination of targeted control measures and monitoring.

- California Phase II Small MS4 General Permit, incorporation of the NAPA River Pathogens TMDL and the Tomales Bay Pathogens TMDL and other TMDLs.
- Western Washington Phase II Municipal Stormwater General Permit
- Arlington County Virginia Individual MS4 permit

The renewal permit contains a new Part III that addresses additional requirements applicable to specific permittees with discharges subject to TMDL wasteload allocations or that discharge to state waters that are listed as impaired under Regulation 93.

For implementing wasteload allocations, EPA recommends permits include numeric limits where feasible and non-numeric (BMPs) where infeasible. The division has determined numeric limits are currently infeasible for Non-standard MS4 permittees. Storm water discharges are due to storm events that are highly variable in frequency and duration and are not easily characterized. In addition, stormwater discharges from MS4s are complex as they often have interconnected MS4 components and/or shared outfalls. This is further complicated when a single WLA is assigned to MS4 dischargers as a whole. Furthermore, non-standard MS4s have limited resources compared to other small, medium or large MS4s, thereby reducing their ability to install treatment technologies for achieving numeric limits.

The objectives of the renewal permit approach is to establish quantifiable control measure requirements. The additional control measures are necessary for when the standard permit requirements are insufficient to achieve pollutant reductions.

Monitoring for TMDLs and Impaired waters is limited to dry weather conditions in this permit. Dry weather monitoring represents a more continuous flow contribution to target versus short term wet weather contributions. Dry weather is also a good first step to targeting pollutants sources. It addresses illicit discharges which are the more easily controllable sources. Considering the limited resources of some Non-standard MS4 permittees, the division is not requiring wet weather monitoring at this time. Effluent monitoring data may be used by the division to track progress towards meeting the WLAs, measure effectiveness of control measures, and verify elimination of illicit discharges, in accordance with Section 61.8(4)(e) of Regulation 61. The associated reporting requirements in Part III of the renewal permit allow the division to determine compliance with the control measure requirements in accordance with Section 61.8(4)(e) of Regulation 61.

The division recognizes that the requirements for this general permit may not be appropriate in all cases, based on community specific conditions or that it is possible that the requirements contain additional flexibility for more effective or efficient practices. In such cases, the permittee may apply for coverage under an individual permit that includes determinations specific to their MS4. However, to allow for a more efficient approach when it is identified that the renewal permit only needs minor revisions to requirements to address the needs of a community, the permittee may request a modification of this permit in accordance with Part II.B.5 of the renewal permit that identifies the requested MS4-specific terms and conditions. If determined appropriate, the division will modify the renewal permit to include the proposed MS4-specific terms and conditions in Part III of the renewal permit, following the required provisions of Regulation 61.10, including public notice and comment.

The division remains responsible for ensuring the proposed terms and conditions meet the statutory and regulatory framework and are appropriate for inclusion in a general permit, and may deny such modification request in accordance with the Regulation 61 or require application for an individual permit.

The state has developed several TMDLs that are not implemented in the renewal permit. Such requirements are not included because the Non-standard MS4s were not identified under the TMDL's scope and there are no WLAs assigned to the Non-standard MS4 permittee. For example, the South Platte River Segment 15 *E. coli* TMDL did not identify any Non-standard MS4 permittees discharging to this segment and as a result no WLAs were assigned. There are Non-standard MS4 permittees that discharge to tributaries to segment 15; however, the TMDL included these contributions as part of the load allocation. These discharges would be addressed in any future TMDLs for *E. coli* in the tributary segments. In the interim, monitoring requirements for impaired waters in Part III.A.5 also apply.

Permit certifications will specify which TMDLs apply and the associated requirements. If new permittees are identified as being subject to a TMDL they will be notified by the division.

1. *E. coli* TMDLs

- i. Total Maximum Daily Load for *E. coli* - Boulder Creek, Segment 2b (Boulder Creek TMDL)
The Boulder Creek TMDL was completed by the division on August 23, 2011. It became effective upon EPA approval on September 27, 2011. The TMDL includes wasteload allocations for the University of Colorado at Boulder (COR070028) and Boulder County School District (COR070029). Separate wasteload allocations are established for varying flow conditions, expressed as cfu/day as shown below:

Table 1` Boulder Creek TMDL Wasteload Allocations for MS4 Permittees

Permittee	Wasteload Allocations (cfu/day) by Flow Conditions				
	High Flows	Moist Conditions	Mid-Range Flows	Dry Conditions	Low Flow
University of Colorado	6.85E+10	1.33E+10	4.34E+09	1.28E+09	4.02E+08
Boulder Valley School District	5.53E+09	1.07E+09	3.50E+08	1.03E+08	3.24E+07

Wright Water Engineering developed the *Colorado E. coli Toolbox: A Practical Guide for Colorado MS4s²* (*E. coli* Toolbox) on behalf of the Urban Drainage and Flood Control District and City and County of Denver. The toolbox provides information on controlling *E. coli* and serves as a resource for local MS4s. The renewal permit has included control measure requirements in Part III.A.2.a.i.(A) and (B) that target common *E. coli* sources, as identified in the *E. coli* Toolbox. The division believes these control measure requirements, along with other permit requirements in Parts I and II are reasonable actions that will reduce sources of *E. coli* for all WLA flow conditions.

Part III A.1.a.ii requires monitoring of outfalls containing dry weather discharges to state waters (see Part III.B of this Fact Sheet). The division requires monitoring results to be reported in annual reports as individual outfall results (concentration), the highest 61-day geometric mean concentration, and the seasonal geometric mean concentration. The permit requires DMR reporting of individual *E. coli* concentrations as well as the combined daily loading from all the permittees' outfalls. The combined daily loading from all the permittee's outfalls is based on the permittee's percent contribution to the

outfall because outfalls may contain drainage from sources outside the permittee’s jurisdictional boundary. The percent contribution listed in the renewal permit is from the TMDL and reflects the portion of the permittees’ drainage area that contributes to the outfall. The different reporting formats allow the division to comprehensively evaluate the MS4 discharge quality with respect to water quality standards and the wasteload allocation.

The renewal permit requirements for specific control measures along with monitoring and reporting are consistent with the assumptions of the Boulder Creek TMDL WLAs.

ii. Big Dry Creek TMDL

The Big Dry Creek TMDL was completed by the division in August 2016. It became effective upon EPA approval on September 28, 2016. The TMDL includes a wasteload allocation for MS4s as a category. Separate wasteload allocations are established for varying flow conditions, expressed as giga cfu/day as shown in Table 2:

Table 2. Big Dry Creek TMDL Wasteload Allocations for MS4 Permittees

Permittee	Wasteload Allocations (giga cfu/day) by Flow Conditions				
	High Flows	Moist Conditions	Mid-Range Flows	Dry Conditions	Low Flow
MS4s Upper Reach	201.59	55.61	13.90	6.95	4.17
MS4s Middle Reach	149.14	36.23	4.29	1.60	1.94
MS4s Lower Reach	43.78	18.32	10.20	6.41	0.99

The only Non-standard MS4 permittee identified in the TMDL is Front Range Community College (COR070049), located in the upper reach. The TMDL provided reserve capacity WLAs for future MS4s identified as contributing to the COSPBD01 segment. This reserve capacity will serve as the basis for monitoring and reporting requirements for any future identified Non-standard MS4s that are subject to the TMDL.

The renewal permit has included control measure requirements in Part III.A.1.b.i.(A) and (B) that target common *E. coli* sources, as identified in the *E. coli* Toolbox (see Part III.A.1.i of this Fact Sheet). The division believes these control measure requirements, along with other permit requirements in Parts I and II are reasonable actions that will reduce sources of *E. coli* for all WLA flow conditions.

Part III.A.1.b.ii requires monitoring of outfalls containing dry weather discharges to state waters (See Part III.B of this Fact Sheet). The division requires monitoring results to be reported in annual reports as individual outfall results (concentration), the highest 61-day geometric mean concentration, and the seasonal geometric mean concentration. The permit requires DMR reporting of individual *E. coli* concentrations as well as the combined daily loading from all the permittees’ outfalls. The combined daily loading from all the permittee’s outfalls is based on the permittee’s percent contribution to the outfall because outfalls may contain drainage from sources outside the permittee’s jurisdictional boundary. The division calculated the percent contribution listed in the renewal permit as the ratio of the permittee’s jurisdictional boundary to the total MS4 area draining to the appropriate reach of Big Dry Creek. This reflects the portion of the permittees’ drainage area that contributes to the receiving water segment. The different formats allow the division to comprehensively evaluate the MS4 discharge quality with respect to water quality standards and the assigned wasteload allocation.

The renewal permit requirements for specific control measures along with monitoring and reporting are consistent with the assumptions of the Big Dry Creek TMDL WLAs.

- iii. TMDL for *E. coli* in the South Platte River, Segment 14, Bowles Avenue to the Burlington Ditch Diversion (South Platte River Segment 14 *E. coli* TMDL)

The South Platte River Segment 14 *E. coli* TMDL was completed by the division in October 2007. It became effective upon EPA approval on October 30, 2007. The TMDL includes density-based wasteload allocations for Small MS4s, including Non-standards, equal to 126 cfu/100 ml, as shown in Table 3.

Table 3. South Platte River Segment 14 *E. coli* TMDL Wasteload Allocations for Non-standard MS4 Permittees

Permittee	Permit Number	WLAs for Low Flow (cfu/day)
Arapahoe Community College	COR070023	126 cfu/100 ml
Auraria Higher Education Center	COR070048	126 cfu/100 ml
Colorado Rockies Baseball Club	COR070090	126 cfu/100 ml
Denver Health and Hospital Authority	COR070080	126 cfu/100 ml
Denver Public Schools	COR070081	126 cfu/100 ml
Littleton Public Schools	COR070086	126 cfu/100 ml
Metropolitan Football Stadium District	COR070067	126 cfu/100 ml
Regional Transportation District	COR070098	126 cfu/100 ml

The renewal permit has included control measure requirements in Part III.A.1.c.i.(A) and (B) that target common *E. coli* sources, as identified in the *E. coli* Toolbox (see Part III.A.1.i of this Fact Sheet). The division believes these control measure requirements, along with other permit requirements in Parts I and II are reasonable actions that will reduce sources of *E. coli*.

Part III A.1.c.ii requires monitoring of outfalls containing dry weather discharges to state waters (see Part III.B of this Fact Sheet). The division requires monitoring results to be reported in annual reports as individual outfall results (concentration), the highest 61-day geometric mean concentration, and the seasonal geometric mean concentration. The permit requires DMR reporting of individual *E. coli* concentrations and a flow weighted *E. coli* rolling geometric mean. The flow weighted geometric mean gauges the Non-standard MS4's overall contribution to *E. coli* density in the South Platte River. The different formats allow the division to comprehensively evaluate the MS4 discharge quality with respect to water quality standards and the wasteload allocation.

The renewal permit requirements for specific control measures along with monitoring and reporting are consistent with the assumptions of the South Platte River Segment 14 *E. coli* TMDL WLAs.

- 2. Total Maximum Daily Load Assessment Nitrate, South Platte River, Segment 14, Bowles Ave. to the Burlington Ditch Diversion (South Platte River Segment 14 Nitrate TMDL)

The South Platte River Segment 14 Nitrate TMDL was completed by the division in April 21, 2004. It became effective upon EPA approval on June 4, 2004. The TMDL focused on a low flow scenario as this was determined to be critical conditions associated with exceedances of the nitrate water quality standard. The TMDL indicates that “[s]tormwater runoff typically contains less than 1 mg/L nitrate (as nitrogen)” and that “stormwater dilutes rather than increases the concentrations of nitrate in Segment 14” (pp 8 and 14, South Platte River *E. coli* TMDL). As follows, the division assumes only dry weather discharges would occur during low flow conditions.

As indicated in the TMDL, stormwater containing nitrate at concentrations of 20 mg/L or greater may be indicative of an illicit connection. Permittees subject to the TMDL are listed in Table 4.

Table 4. Permittees Subject to the South Platte River Segment 14 Nitrate TMDL.

Permittee	Permit Number	WLAs for Low Flow (mg/L, as Nitrogen)
Regional Transportation District	COR070023	0 mg/L ³
Arapahoe Community College	COR070048	0 mg/L ³
Colorado Rockies Baseball Club	COR070090	0 mg/L ³
Auraria Higher Education Center	COR070080	0 mg/L ³
Denver Health and Hospital Authority	COR070081	0 mg/L ³
Denver Public Schools	COR070086	0 mg/L ³
Littleton Public Schools	COR070067	0 mg/L ³
Metropolitan Football Stadium District	COR070098	0 mg/L ³⁵

The renewal permit has included a requirements in Part III.A.2.a.i to implement control measures as necessary to reduce the nitrate concentration in dry weather discharges to 20 mg/L (as nitrogen). Although the division anticipates that implementation of the illicit discharge detection and elimination program would be the most effective first step to control nitrate from the MS4, the permit includes an additional requirement to implement control measures as necessary to reduce the nitrate concentration to below 20 mg/L. This allows the permittee flexibility to select control measures that can target the source of nitrate in dry weather discharges. The division believes this provision, along with other permit requirements in Parts I and II are reasonable actions that will reduce nitrate in the MS4 discharge.

Part III.A.2.a.ii requires monitoring of outfalls containing dry weather discharges to state waters (See Part III.B of this Fact Sheet). The division requires nitrate monitoring results to be reported in annual reports and DMRs as daily maximum results (mg/L as nitrogen). These data allow the division to comprehensively evaluate the MS4 discharge quality with respect to water quality standards and the wasteload allocation.

The renewal permit requirements for specific control measures along with monitoring and reporting are consistent with the assumptions of the South Platte River Segment 14 *E. coli* TMDL WLAs.

3. Total Maximum Daily Load Assessment for Barr Lake and Milton Reservoir, COSPMS04, pH (Barr Lake/Milton Reservoir TMDL)

The Barr Lake/Milton Reservoir TMDL was completed by the Barr-Milton Watershed Association and AECOM (hereafter collectively referred to as the Association) in May 2013. It became effective upon EPA approval on June 27, 2013. The TMDL assigns a 20 percent reduction in phosphorus from MS4 discharges as part of a strategy to achieve pH water quality standards. The target loads and TMDL are shown in Table 5.

Table 5. Summary of Allowable MS4 Loads for Barr and Milton

Source Wasteload	Target Load (kg/yr)	Daily Mean Target Load (kg/day)	Total Max. Daily Load (kg/day)
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³ Compliance with the zero WLA is demonstrated by implementation of Part III.A.3.a.i through iv and elimination of illicit discharges with nitrate concentrations of 20 mg/L or higher, where monitoring is required under Part III.B.

Barr Lake	1,751	7.3	19.3
Milton Reservoir	362	2.2	4.8

The Association developed an adaptive implementation plan which provided information on how the Association intended MS4s to achieve this reduction. The Implementation plan discusses the Association's general efforts to work with MS4s to conduct cost benefit studies, evaluate existing stormwater data, and conduct additional stormwater monitoring. Non-standard MS4s were not specifically identified in the TMDL document. As a result, it is unclear whether they are assigned portions of the WLAs for MS4s or whether they are included as a component of non-point sources. Therefore, the renewal permit does not include new requirements for control measures that target phosphorus. The division anticipates that new permit requirements in Part I.E that implement Regulations 85 will also provide phosphorus reduction within the Barr-Milton watershed (the watershed is the watershed area addressed in the TMDL). However, the renewal permit also requires dry weather monitoring to support TMDL implementation efforts. The division used GIS maps and a watershed boundary overlay to develop a list of permittees in Table 6 (Table III-8 in the renewal permit) of the permit that are currently located within the Barr-Milton watershed. These permittees are subject to the requirements of Part III.A.3 of the renewal permit.

Table 6. Permittees Subject to Requirements to Support the Barr Lake-Milton Reservoir TMDL.

Permittee	Permit Number	TMDL Water Body
Adams 12 Five Star Schools	COR070026	COSPB01
Adams County School District 14	COR070043	COSPUS16a
Adams County School District 50	COR070074	COSPCL18b
Arapahoe Community College	COR070048	COSPUS14
Auraria Higher Education Center	COR070080	COSPCH03
Aurora Public Schools	COR070059	COSPUS16a
Colorado Department of Corrections	COR070097	COSPUS16a
Colorado Community College System	COR070046	COSPS16c
Colorado Rockies Baseball Club Ltd	COR070090	COSPUS14
Community College of Aurora	COR070047	COSPUS16c
Denver Health and Hospital Authority	COR070081	COSPCH03
Denver Public Schools	COR070086	COSPUS16c
E470 Public Highway Authority	COR070205	COSPUS16c
Fairlake Metro District	COR070072	COSPCH04
Falcon School District	COR070065	COSPUS16c
Foothills Park and Recreation District	COR070092	COSPUS16c
Highlands Ranch Metro District 1	COR070053	COSPUS16c
Hyland Hills Park and Recreation District	COR070221	COSPUS16c
Littleton Public Schools	COR070067	COSPUS16c
Mapleton Public Schools	COR070036	COSPCH03
Metropolitan Football Stadium District	COR070098	COSPUS16c
Red Rocks Community College	COR070045	COSPUS16c
RTD	COR070023	COSPUS14
Southwest Plaza Metro District	COR070091	COSPUS16c
University of Colorado Denver Anschutz Medical Cam	COR070075	COSPCH03

The renewal permit has included a requirements in Part III.A.3.a to public education and outreach that targets phosphorus. Part III.A.3.b requires monitoring of outfalls containing dry weather discharges to state waters (See Part III.B of this Fact Sheet). The division requires phosphorus monitoring results to be reported in annual reports and DMRs as daily maximum and seasonal average concentrations. These data allow the division to comprehensively evaluate the MS4 discharge quality with respect to water quality standards and the wasteload allocation.

The requirements for monitoring and reporting along with requirements in Part I of the renewal permit are consistent with the assumptions of the South Platte River Segment 14 *E. coli* TMDL WLAs.

4. Permittees Discharging Pollutants Identified as Causing Impairments

Section 303(d) of the CWA requires states submit to EPA a list of impaired waters. Impaired waters are those not meeting water quality standards for a designated use. Several state waters are listed as impaired for one or more pollutants. The division must have adequate discharge and water quality data for TMDL development. Monitoring data is necessary to characterize pollutant sources and establish reductions that are necessary to restore water quality to meet water quality standards. In addition, MS4 permittees that have an awareness of local impairments can make more informed decisions on selecting and designing permanent control measures. Part III.4 of the renewal permit therefore requires permittees to monitor for pollutants causing impairments. As provided in Part III.B of the renewal permit monitoring is required only for MS4 discharges through outfalls to state waters. Monitoring is not required when a permittee's MS4 discharges to another MS4 or conveyance between two MS4s.

B. Dry Weather Outfall Inspection and Monitoring

The dry weather outfall inspection and monitoring requirements in Part III.B are intended to address dry weather sources of *E. coli*. Wasteload allocations under the low flow scenario reflect dry weather conditions. Pollutant concentrations or loading under the low flow scenario gauges the MS4's contribution during dry weather. Only permittees with outfalls to state waters are required to conduct dry weather monitoring under this permit. The definition of outfalls does not include indirect discharges to state waters via another MS4. The division's intent is to focus on the discharge water quality at the outfall. If data collected during this permit term indicates further source identification is necessary, then subsequent permits or other MS4 permits may include conditions to trace sources within the MS4 systems.

The renewal permit allows for exclusions in order to avoid unnecessary sampling efforts. The division considers discharges of less than 5 gpm as insignificant. Dry weather discharges can be intermittent and therefore difficult to catch. The permit requires a reasonable amount of repeated visual inspections to verify the existence of a dry weather discharge; however, acknowledges that the discharges may cease for unknown reasons during an investigation. In some instances, dry weather discharges are comprised of allowable non-stormwater discharges as defined in Part I.E.2.v. These sources are either effectively controlled through a separate permit, are not considered to be significant sources of pollutants, or do not fall under the scope of the CDPS point source permitting program. Similarly, if the MS4's monitoring results demonstrate that the discharge is below water quality standards and/or wasteload allocations, relief from monitoring requirements can allow the permittee can more effectively allocate resources to other areas of their program.

Permittees that have more than six outfalls are provided relief in that they are required to inspect only 20 percent of their outfalls each year. For outfalls that have dry weather discharges permittees are required to collect samples at frequencies specific to the type of TMDL. Concentrations of *E. coli* in discharges and the receiving waters is likely to be higher from May 1 through October 31, thus sample collection is limited to this critical period. For nitrate, phosphorus and other pollutants quarterly monitoring throughout the year is appropriate to characterize pollutant concentrations.

K. REFERENCES

- A. Code of Federal Regulations (40 CFR Parts 9, 35, 122, 123, 124 and 136), Office of the Federal Register, Government Printing Office
- B. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective June 30, 2015.
- C. Colorado Department of Public Health and Environment, Water Quality Control Division, stakeholder input following stakeholder meetings, March 1, 2019 and May 7, 2019.
- D. Colorado Department of Public Health and Environment, Water Quality Control Division, General Permit for Stormwater Discharges Associated with Construction Activity, effective April 1, 2019.
- E. Colorado Department of Public Health and Environment, Water Quality Control Division, General Permit for Stormwater Discharges Associated with Municipal Separate Storm Sewer Systems (MS4s), effective July 1, 2016.
- F. Colorado Department of Public Health and Environment, *Low Risk Discharges Policy (WQP-27)*, Colorado Department of Public Health and Environment, effective June 13, 2003.
 1. Low Risk Discharge Guidance: Potable Water Monitoring Devices, January 8, 2014
 2. Low Risk Discharge Guidance: Potable Water, January 15, 2016
 3. Low Risk Discharge Guidance: Snow Melting, June 2008
 4. Low Risk Discharge Guidance: Surface Cosmetic Power Washing Operations to Land, July 2010
 5. Low Risk Discharge Guidance: Swimming Pools Fed by Potable Water, January 2015
 6. Low Risk Discharge Guidance: Swimming Pools Fed by Natural Hot Springs, January 2015
 7. Low Risk Discharge Guidance: Uncontaminated Groundwater to Land, Revised August 8, 2017
- G. Colorado Department of Public Health and Environment, Water Quality Control division, Total Maximum Daily Load for:
 1. COSPBD01: Big Dry Creek *E. coli*
 2. COSPBO02: Boulder Creek from North Boulder Creek to South Boulder Creek. *E. coli*2.
 3. COSPMS04: Barr Lake and Milton Reservoir, Dissolved Oxygen
 4. COSPMS04: Barr Lake and Milton Reservoir, pH TMDL
 5. COSPMS04: Barr Lake and Milton Reservoir, Implementation Plan for pH TMDL
 6. COSPUS14: South Platte River Bowles Avenue to Burlington Ditch, *E. coli* TMDL
 7. COSPUS14: South Platte River Bowles Avenue to Burlington Ditch, Nitrate TMDL
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