



**Colorado Discharge Permit System (CDPS)  
 Fact Sheet for Modification 3  
 Permit Number COS000005  
 COLORADO DEPARTMENT OF TRANSPORTATION**

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**I. TYPE OF PERMIT**

- A. Type of Modification:** Modification 3
- B. Discharge To:** Surface Water

**II. FACILITY INFORMATION**

- A. SIC Code:** 9511-Air, Water, and Solid Waste Management. Several SIC codes apply to specific municipal activities (sewerage systems 4952, water supply 4941, automotive repair shops 7539, transportation services 4789). Note that there is not a clear SIC code for a Municipal Separate Storm Sewer System (MS4), therefore the 9511 code is applied.
- B. Facility Location:** Various Locations - See Part I.A.3 of the Permit

**III. SCOPE OF MODIFICATION REQUEST**

The permittee requested modifications to several requirements in the permit.

**IV. CHANGES MADE AS A RESULT OF THE MODIFICATION**

- Construction Sites Program, Part I.E.1.a.v(B). The permittee requested that the routine site inspection frequency be changed from 30 days to 45 days. This change has been made to the permit based on the following: On October 23, 2008, CDOT received a Compliance Order on Consent. The consent order required the permittee to “At least once per month, each CDOT Water Pollution Control Manager shall perform an audit/inspection at each project in his/her region that results in a land disturbance of equal to or greater than one acre, or is part of a larger common plan of development that will ultimately disturb equal to or greater than one acre, to ensure that the project is implementing the requirements of the site-specific SWMP, that the SWMP and associated BMPs are effective in controlling pollutants, and that the project is in overall compliance with the Permit.” The consent order required the permittee to conduct inspections “monthly.” The term “monthly” was translated to “every 30 days” in the permit. However, the term “monthly” could mean conducting an inspection on the 1<sup>st</sup> of one month and on the 31<sup>st</sup> on the next month, thus, the inspections could be up to 61 days apart and still be considered “monthly.” An inspection frequency of every 45 days is





consistent with the Phase II permit and is more stringent than the “monthly” frequency included in the current CDOT MS4 permit. Therefore, changing the routine inspection frequency to once every 45 days is reasonable and would not be considered backsliding. Construction Sites Program, Part I.E.1.a.v(C)(3) and (4). The permittee has requested that the Moderate Risk and Low Risk inspection frequencies be removed from their permit. The division has removed these two inspection frequencies.

- Construction Sites Program, Part I.E.1.a.v(D)(2)(c). The permittee requested that the term “owner” be replaced to “operator, “which is defined in the permit and is more applicable to their construction sites. The division has changed the term “owner” to “operator” in this section of the permit.
- Permanent Water Quality Management, Part I.E.2. The permittee requested that arsenic and ammonia nitrogen be removed from the definition of roadway pollutants of concern. Arsenic was included in the permittee’s Wet Weather Monitoring Literature Review, December 23, 2009. Upon further review of the American Association of State Highway and Transportation Officials’ *State -of-the-Practice Report: Source Control* (May 2011) and the U.S. Department of Transportation, Federal Highway Administration’s *Evaluation and Management of Highway Runoff Water Quality* (June 1996), the division found that arsenic was *not listed* as a possible pollutant of concern from highways. The division has, therefore, removed arsenic as a roadway pollutant of concern.

Also, in accordance with section 61.8(8), the division may modify a permit when the division has received information that was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance.” By referencing these documents, the permittee submitted new information that the division must consider. Upon consideration of the new information, the division is adding three pollutants of concern cited in both American Association of State Highway and Transportation Officials’ *State -of-the-Practice Report: Source Control* (May 2011) and the U.S. Department of Transportation, Federal Highway Administration’s *Evaluation and Management of Highway Runoff Water Quality* (June 1996)—iron, lead and nickel.

After reviewing the new documents, the division has determined that total inorganic nitrogen is a more appropriate parameter to monitor for nitrogen instead of ammonia-nitrogen. (See further discussion below.)

- Permanent Water Quality Management, Part I.E.2.a.iii(A)(2). The permittee requested that “...60% of what the calculated WQCV would be if all impervious area...” be changed to ““...60% of what the calculated WQCV would be if all *new* impervious area...” The division has made the change to this design standard.
- Permanent Water Quality Management, Part I.E.2.a.iii(A)(3). The permittee requested that the pollutant removal standard design standard be changed from “2-year, 1-hour peak runoff flow” to “80<sup>th</sup> percentile storm event.” This language is consistent with the COR090000 and COR080000 general permits for the pollutant removal standard. The division has made this modification in the permit.
- Wet Weather Monitoring, Part I.F.6.a.i(C). The permittee requested that “total suspended soils” be replaced with “total suspended solids.” The division has made this modification in the permit.
- Compliance Schedule, Part I.H. The permittee requested that the opening paragraphs be revised to clarify that the permittee must implement the current program in accordance with the previous permit until a new program is implemented in accordance with the current permit and delete the requirement that the plans be submitted to the division by a certain date. These changes were incorporated into modification 2 effective on May 10, 2017.
- Definitions, Part I.J. The permittee requested that arsenic be removed from the definition of roadway pollutants of concern. The division has modified the definition to remove arsenic from roadway pollutants of concern.

#### V. REQUESTED CHANGES NOT MADE TO THE PERMIT

- Construction Sites Program, Part I.E.1.a.v(D). The permittee requested that the inspection frequency for compliance follow-up inspections for inactive sites be changed from 14 days to 30 days. This modification





request has not been made in the permit. A compliance follow up inspection is only required if 1) there is a failure to implement a control measure or 2) there is an inadequate control measure. In these instances, sites need prompt attention, regardless whether they are active or inactive sites. The division has determined that the follow up inspection frequency of 14 days is reasonable and consistent with the COR090000 and COR080000 general permits.

Please note that Part I.B. defines the difference between an inadequate control measure and a control measure requiring routine maintenance. The permit does not specify a compliance follow up inspection frequency if there are control measures needing routine maintenance.

The permittee should also note that the permit already has a reduced inspection frequency of 90 days for inactive sites. The permittee should note that there is no *follow up* inspection frequency in the COR030000 general permit.

- Permanent Water Quality Management Part I.E.2. The permittee requested that ammonia-nitrogen be removed from the definition of roadway pollutants of concern. Ammonia-nitrogen was included in the permittee’s Wet Weather Monitoring Literature Review, December 23, 2009. Upon further review of the American Association of State Highway and Transportation Officials’ *State -of-the-Practice Report: Source Control* (May 2011) and the U.S. Department of Transportation, Federal Highway Administration’s *Evaluation and Management of Highway Runoff Water Quality* (June 1996), both documents which were submitted with this modification request, the division found that both documents listed nitrogen as a possible roadway pollutant. In addition, the Regulation 85 Data Gap Analysis Report also states that an average of 2.4 mg/L of total kjeldahl nitrogen and 1.8 mg/L of nitrate plus nitrite runs off freeways via stormwater. The division has not removed nitrogen completely from the list of roadway pollutants of concern. However, the division has changed the parameter to be sampled from ammonia-nitrogen to total inorganic nitrogen, which includes nitrate, nitrite and ammonia.

Section 61.4(3)(c)(ii)(D) states that a Phase I permittee must have a program that reduces “the discharge of pollutants.” The permittee should note that the goal of the MS4 permit is to reduce the discharge of pollutants from MS4s and *not to* reduce the discharge of pollutants that are only typically generated by roadways. Pollutants conveyed by roadways into a permittee’s MS4 originate from a variety of sources, including vehicle-related sources, road and right-of-way sources, and atmospheric sources. Atmospheric deposition on a roadway and fertilizers applied to a roadway’s right-of-way are typically the source of nitrogen in roadway stormwater runoff.

- Permanent Water Quality Management Part I.E.2. The permittee requested that the roadway pollutants of concern be removed from the permit so the list could be modified in the future without modifying the permit. The division’s MS4 permits must be clear, specific, and measurable. In addition, the permittee’s permanent water quality management program is unique to any other MS4 permits (and the country). Specifically, the roadway pollutants of concern drive when a permanent control measure must be installed at the end of a project. Without this clear and specific list of roadway pollutants of concern, the permit would be unclear as to when permanent control measures are required to be installed at the end of a project. The roadway pollutants of concern have not been removed from the permit because it provides a clear, specific, and measurable requirement for this very new permanent water quality management program framework.
- Permanent Water Quality Management, Part I.E.2.a.iv(A)(2). The permittee requested that the requirement to “ensure that at least 80 percent of the pool shall be **spent** on a 3-year rolling average” be changed to “ensure that at least 80 percent of the pool be **encumbered** on a 3-year rolling average.” Encumbered funds are only set aside to pay for future projects, with no time period to actually install the control measure. The term “spent” was intentionally used to ensure that the control measure was actually installed in a timely manner. Instead, the division added a specific compliance schedule item to start the 3-year rolling average on September 1, 2019. This will allow CDOT more time to “spend” encumbered monies on permanent water quality control measures.
- Compliance Schedule, Part I.H. The permittee requested additional time to meet Part I.E.2.a.iv(A)(2). This change is unnecessary because the compliance schedule requires that the requirement to “ensure that at least 80 percent of the pool shall be spent on a 3-year rolling average” start on September 1, 2016. Meaning that





the first 3-year rolling average will be between September 1, 2016 and September 1, 2019.

- Definitions, Part I.J. The permittee requested that ammonia-nitrogen be removed from the definition of roadway pollutants of concern. Please see the discussion above on ammonia-nitrogen and roadway pollutants of concern.

## VI. PUBLIC NOTICE COMMENTS

The public notice period was from June 9, 2017 to July 9, 2017. Comments were received from the Colorado Department of Transportation. Topical summaries of the comments and the response of the Division are given below.

- Permanent Water Quality Management, Part I.E.2. The permittee requested the following:
  - The permittee agrees that iron should be included in the list of POCs and parameters monitored under the Wet Weather Monitoring Program. No change to the permit is required.
  - The permittee agrees that lead should be included in the list of POCs and parameters monitored under the Wet Weather Monitoring Program. The permittee requests that the division consider removing lead from both the list of POCs and parameters monitored under the Wet Weather Monitoring Program if lead concentrations continue to decrease. No change to the permit is required. The division will review all sample data when reissuing the permit and will consider changes to the list of roadway pollutants of concern and parameters to be monitored under the Wet Weather Monitoring Program.
  - The permittee requests that nickel be removed from the list of POCs. The permittee agrees that nickel should be included in the list of parameters monitored under the Wet Weather Monitoring Program. No change to the permit has been made.

The goals of the Wet Weather Monitoring Program are different from the goals of the Permanent Water Quality Management Program. The Wet Weather monitoring program is used to “assess wet weather impacts from highways and facilities and the performance of control measures used to control discharges.” Whereas, the Permanent Water Quality Management program goal is to reduce or eliminate the discharge of pollutants to the MS4. Specifically, the Permanent Water Quality management program uses the list of pollutants of concern to determine priority development projects and their applicable design standards. In contrast, the Wet Weather Monitoring program includes all the roadway pollutants of concern but also other parameters used to evaluate water quality (e.g., flow, conductivity). Therefore, the list of the roadway pollutants of concern and the list of parameters to monitor under the Wet Weather Monitoring program are similar, but different due to the different goals of the two programs. Nickel is listed as a roadway pollutant of concern in both American Association of State Highway and Transportation Officials’ *State -of-the-Practice Report: Source Control* (May 2011) and the U.S. Department of Transportation, Federal Highway Administration’s *Evaluation and Management of Highway Runoff Water Quality* (June 1996) and therefore, must be included on the list of roadway pollutants of concern for the Permanent Water Quality Management program.

- Permanent Water Quality Management, Part I.E.2.a.iv(A)(2). The permittee agrees to the compliance schedule change, but points out that the actual text in Part I.E.2.a.iv(A)(2) is inconsistent with the changes proposed in the Compliance Schedule. The division recognizes the inconsistency of the bullet above in this fact sheet that erroneously states that the 3 year rolling average was to start September 1, 2019. This bullet is inconsistent with the permit modification. The division made no changes to the permit in Part I.E.2.a.iv(A)(2), but added an additional compliance schedule item to clarify that the rolling average should have started on September 1, 2016.

