

DRAFT #3

~~SEPTEMBER 30, 2011~~ NOVEMBER 2, 2011

**COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL COMMISSION**

5 CCR 1002-85

REGULATION #85

NUTRIENTS MANAGEMENT CONTROL REGULATION

85.1 AUTHORITY

The Water Quality Control Commission is authorized by section 25-8-205 C.R.S., to promulgate control regulations to describe prohibitions, standards, concentrations, and effluent limitations on the extent of specifically identified pollutants that any person may discharge into any specific class of state waters.

Materials incorporated by reference are available for public inspection during normal business hours, or copies may be obtained at a reasonable cost, from the Administrator, Water Quality Control Commission, 4300 Cherry Creek Drive South, Denver, Colorado 80246. Unless expressly stated otherwise, materials incorporated by reference are those editions in existence as of the date this regulation is promulgated or revised by the Water Quality Control Commission and references do not include later amendments to or editions of the incorporated material. All material incorporated by reference may be examined at any state publications depository library.

85.2 APPLICABILITY

This regulation applies to point sources and nonpoint sources of nutrients as identified in this regulation.

85.3 SEVERABILITY

The provisions of this regulation are severable, and if any provisions or the application of the provisions to any circumstances is held invalid, the application of such provision to other circumstances, and the remainder of this regulation shall not be affected thereby.

85.4 DEFINITIONS

See the Colorado Water Quality Control Act and the Water Quality Control Commission codified regulations for additional definitions.

- (1) "BEST MANAGEMENT PRACTICE (BMP)" means 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.
- (2) "DISADVANTAGED COMMUNITY" – means a community with a population less than 5,000 and an average household income of less than 80% of the State median household income.

- (3) "LOCAL GOVERNMENT" means 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 the federal Clean Water Act.
- (4) "MS4" means a municipal separate storm sewer system.
- (5) "MUNICIPAL SCREENER" means the total annualized cost of water pollution control at the DWWTW, including the cost of meeting the effluent limitations at 85.5, divided by the median household income, on a percentage basis [ie (annualized cost of treatment / median household income)*100].
- (6) "NONPOINT SOURCE" means any activity or facility other than a point source from which pollutants are or may be discharged. For the purposes of this regulation, nonpoint source includes all runoff that is not subject to the requirements provided under Regulation #61, section 61.3(2)(e), (f), or (g), including those designated by the Division under section 61.3(2)(f)(iii), whether sheet flows or collected and conveyed through channels, conduits, pipes or other discrete conveyances.
- (7) "STORMWATER" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

85.5 SPECIFIC LIMITATIONS FOR DISCHARGERS OF NUTRIENTS

The effluent limitations and stormwater management practices in this section shall be implemented in the CDPS permit authorizing the discharge.

- (1) Numeric Limitations for Domestic Wastewater Treatment Works (DWWTW)
 - (a) Domestic Wastewater Treatment Works Discharging Prior to May 31, 2012 or That Have Submitted a Complete Request For Preliminary Effluent Limits To the Division Prior to May 31, 2012
 - (i) Exclusions

The numeric limits in subsections (iii)(a) and (b) below will not be included in preliminary effluent limitations for Site Location and Design Approvals or in effluent limitations in CDPS permits for the following categories of dischargers:

 - (A) Any DWWTW with a design capacity of less than or equal to 1.0 million gallons per day that uses waste stabilization pond technology as its means of treating wastewater.
 - (B) Any DWWTW owned by a disadvantaged community.
 - (C) Any DWWTW with a design capacity of less than or equal to 0.45 million gallons per day.
 - (ii) Facilities Subject to Other Nutrient Control Regulations

The numeric limits in subsections (iii)(a) and (b) below will not be included in preliminary effluent limitations for Site Location and Design Approvals or in effluent limitations in CDPS permits prior to May 31, 2022 for existing, permitted DWWTW subject to Watershed Protection Control Regulations 71-74 (5 CCR 1002-71, 5 CCR 1002-72, 5 CCR 1002-73, and 5 CCR 1002-74).

(iii) All Others

For all Domestic Wastewater Treatment Works not identified in subsections (a)(i) or (ii) above and discharging prior to May 31, 2012 or for which a complete request for preliminary effluent limits has been submitted to the Division prior to May 31, 2012, the following numeric limits shall apply:

PARAMETER	PARAMETER LIMITATIONS	
	Annual Median ¹	95 th Percentile ²
(a) Total Phosphorus	1.0 mg/l	TBD 2.5 mg/l
(b) Total Inorganic Nitrogen as N ³	10 mg/l	TBD 20 mg/l

- 1 Running Annual Median: The median of all samples taken in the most recent 12 calendar months.
- 2 ~~TBD~~ The 95th percentile of all samples taken in the most recent 12 calendar months.
- 3 Determined as the sum of nitrate as N, nitrite as N, and ammonia as N.

(b) For New Domestic Wastewater Treatment Works which submit a complete request for preliminary effluent limits to the Division on or after May 31, 2012, the following numeric limits shall apply:

PARAMETER	PARAMETER LIMITATIONS	
	Annual Median ¹	95 th Percentile ²
(a) Total Phosphorus	0.7 mg/l	TBD 1.75 mg/l
(b) Total Inorganic Nitrogen as N ³	7 mg/l	TBD 14 mg/l

- 1 Running Annual Median: The median of all samples taken in the most recent 12 calendar months.
- 2 ~~TBD~~ The 95th percentile of all samples taken in the most recent 12 calendar months.
- 3 Determined as the sum of nitrate as N, nitrite as N, and ammonia as N.

(2) Numeric Limitations for Non-Domestic Wastewater Treatment Works

- (a) Non-Domestic Wastewater Treatment Works Discharging Prior to May 31, 2013. The provisions of section 85.5(1)(a)(iii) apply to non-domestic wastewater treatment works where the Division has determined, based on credible information that the facility is expected, without treatment for nutrients, to discharge total inorganic nitrogen or total phosphorus concentrations in excess of the respective effluent limitations identified in section 85.5(1)(a)(iii).
- (b) Non-Domestic Wastewater Treatment Works Which Begin Discharging On Or After May 31, 2013. The provisions of section 85.5(1)(b) apply to non-domestic wastewater treatment works where the Division has determined, based on credible information that

the facility is expected, without treatment for nutrients, to discharge total inorganic nitrogen or total phosphorus concentrations in excess of the respective effluent limitations identified in section 85.5(1)(b).

(3) Additional Provisions Applicable to Domestic and Non-Domestic Wastewater Treatment Works

(a) Compliance Schedules

A permit shall not be issued which allows a violation of the provisions of this control regulation unless it contains a schedule of compliance requiring specific steps needed to modify or install treatment facilities, operations or other measures and deadlines for completion of those steps. Factors that the Division shall consider in developing the deadlines to be included in a compliance schedule, based on information that may be provided by the permittee or is otherwise known, shall include:

- (i) Availability of resources needed to modify or install treatment facilities, adjust operations or other measures, including any in-house resources, the availability of consultants and contractors in the area with the appropriate expertise, and the availability of financing for any identified facility construction or other capital project, including the Water Pollution Control Revolving Fund;
- (ii) Current conditions at the site, including existing treatment processes, the physical characteristics of the property, and the layout of the facility on the property;
- (iii) Sufficient time for operational startup, new plant optimization, and operator training;
- (iv) Factors identified by the permittee that might significantly affect the time necessary to complete one or more of the steps necessary to attain compliance; and
- (v) Other site specific factors affecting the cost and timing of construction activities.

(b) Exceptions

The numerical effluent limitations set forth in sections 85.5(1)(a)(iii), 85.5(1)(b), and 85.5(2) shall not apply under the following circumstances:

- (i) Where a discharger demonstrates to the satisfaction of the Division that its discharge is unlikely to cause or contribute to ambient nutrient concentrations in its receiving waters that exceed the relevant numeric levels for total phosphorus and total nitrogen set forth in section 31.17 of Regulation #31;
- (ii) Where noncontact cooling water discharges contain nutrients (phosphorus or nitrogen) and 100 percent of the nutrients in the discharge originate from the receiving water as intake water; or
- (iii) Where discharges consist solely of ground water that is pumped for the purpose of dewatering a construction site or for building sumps so long as no phosphorus or nitrogen is added to the ground water being discharged.

(c) Variances

- (i) Variances from the numerical effluent limits set forth in sections 85.5(1)(a)(iii), 85.5(1)(b) and 85.5(2) of this control regulation may be granted by the Division where it is demonstrated by the permittee to the Division's satisfaction that the nutrient reduction benefits of meeting the section 85.5 effluent limitations do not bear a reasonable relationship to the economic, environmental, or energy impacts resulting from meeting those effluent limitations. Meeting the effluent limitations in section 85.5 shall be presumed not to bear a reasonable relationship to the associated economic, environmental, or energy impacts where:
- (A) 50% or more of the median annual TN or TP-incremental load within the 8-digit Hydrologic Unit Code (HUC) watershed results from permitted process wastewater point source discharges, if
- for public sector entities, the Municipal Screener value is 2 or greater.
 - for private sector entities, the required increase in treatment will cause more than 10 percent changes in the entity's level profitability, or similar effect on liquidity, solvency, and leverage.
- (B) 20-49% of the median annual TN or TP incremental load of the 8-digit HUC watershed results from permitted process wastewater point source discharges if:
- for public sector entities, the Municipal Screener value is 1.5 or greater.
 - for private sector entities, the required increase in treatment will cause ~~65~~ to 20~~10~~ percent changes in the entity's level profitability, or a similar effect on liquidity, solvency, and leverage.
- (C) <20% of the median annual TN or TP incremental load of the 8-digit HUC watershed results from permitted process wastewater point source discharges if:
- for public sector entities, the Municipal Screener value is 1 or greater.
 - for private sector entities, the required increase in treatment will cause less than 5 percent changes in the entity's level profitability, or a similar effect on liquidity, solvency, and leverage.
- (ii) A request for a variance shall be accompanied by proposed alternate effluent limits that represent the highest degree of nutrient removal that is consistent with the reasonable relationship test.
- (iii) Variances shall be granted, denied, or revised as appropriate at the time of permit issuance or renewal.
- (d) Nutrient Trading

(i) Point Source to Point Source Nutrient Trading. The numerical effluent limitations set forth in sections 85.5(1)(a)(iii), 85.5(1)(b) and 85.5(2) may be modified for individual discharge permits pursuant to a trade of nitrogen or phosphorus between point sources where the Division has determined that the trade will result in equal or better instream water quality for that parameter at all locations and at all times.

(ii) Nonpoint Source to Point Source Nutrient Trading. RESERVED-The numerical effluent limitations set forth in sections 85.5(1)(a)(iii), 85.5(1)(b) and 85.5(2) may be modified for individual discharge permits pursuant to a trade of nitrogen or phosphorus credits from a nonpoint source to a point source on a stream segment or watershed basis where the Division has determined that the trade achieves a net water quality or environmental benefit and does not cause adverse localized impacts.

(4) MS4 Permit Requirements for Nutrient Source Reductions

The following requirements, at a minimum, shall be incorporated into a CDPS Permit for discharges from a Municipal Separate Storm Sewer System (MS4) required to obtain a CDPS Permit pursuant to Regulation #61.

(a) Public education and outreach on stormwater impacts associated with nutrients. 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.

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).

(b) Pollution Prevention/Good Housekeeping for Municipal Operations associated with nutrients. The permittee must develop and implement a municipal operations program that has the ultimate goal of preventing or reducing nitrogen and phosphorus in stormwater runoff associated with the MS4 permittee's operations.

Written procedures for an operation and maintenance program to prevent or reduce nitrogen and phosphorus in stormwater runoff associated with the MS4 permittee's operations shall be developed. The program must specifically list the municipal operations (i.e., activities and facilities) that are impacted by this operation and maintenance program.

CDPS Permits shall authorize MS4 permittees to meet the requirements of this section through contribution to a collaborative program to evaluate, identify, and target sources state-wide or within the specific region or watershed that includes the receiving waters impacted by the MS4 permittees discharge(s).

(5) Nonpoint Source Discharges

(a) Best Management Practice Implementation

(i) Governmental entities, individuals, corporations, partnerships, associations, agencies, and other entities with responsibility for activities or facilities that cause

or could reasonably be expected to cause nonpoint source nutrient pollution of waters are encouraged to adopt and implement/install BMPs to the maximum extent practicable to reduce nutrient loads from such sources.

- (ii) Agricultural operations that apply supplemental nutrients as part of crop production activities are encouraged to develop and implement nutrient management plans to the maximum extent practicable to reduce nutrient loads from such sources. Nutrient planning should be based on current soil, manure, and plant tissue test results developed in accordance with guidance or industry practice, such as that developed or recognized by Colorado State University.
 - (iii) The choice of which type of voluntary nonpoint source control measures shall be made by the entities identified in paragraphs (i) and (ii) above.
 - (iv) The Division shall collaborate with owners/operators of agricultural operations in pursuing incentive, grant, and cooperative programs to control nonpoint source pollution related to agricultural and silvicultural practices.
- (b) Public Information and Education
- (i) The Division and entities identified in Section 85.5(5)(a)(i) are encouraged to develop and implement a public information and education program. This program will focus on the prevention of pollution from sources that could be mobilized from present and future activities as well as measures that could abate known nonpoint source pollution. Areas for abatement include, but are not limited to, general agricultural and silvicultural practices, landscaping activities, and other nonpoint sources of nutrients.
 - (ii) The program will be consistent with the voluntary, incentive-based approach and focus on the general public, and agricultural and local government sectors.
- (c) Additional Nonpoint Source Actions
- (i) During the triennial review of this control regulation, the Division shall report to the Commission on the progress implementing the activities addressed under this section.
 - (ii) If voluntary nonpoint source BMPs are not effective in managing nutrients by May 31, 2022, the Commission may consider the adoption of prohibitions or precautionary measures to further limit nutrient concentrations.
 - (iii) Pursuant to section 25-8-205(5), C.R.S., after May 31, 2022 the Commission may consider adopting, in consultation with the commissioner of agriculture, control regulations specific to agricultural and silvicultural practices if the Commission determines that sufficient progress has not been demonstrated in agricultural nonpoint source nutrient management.

85.6 MONITORING REQUIREMENTS

- (1) Monitoring requirements are established by this Control Regulation to evaluate the effectiveness of this control regulation and to determine the sources and load of nutrients at selected locations, and eventual implementation of appropriate and necessary source controls.
- (2) Point Source Monitoring - Process Wastewater Dischargers

- (a) Applicability. The requirements of this section apply to all DWWTW, and to any non-DWWTW dischargers identified by the Division pursuant to section 85.5(2). This requirement applies to all such discharges whether or not they are subject to effluent limits. Facilities that discharge to lakes or groundwater may have modified monitoring requirements.
- (b) Nutrient Monitoring Program: Facilities identified in subsection (2)(a), above, shall develop, implement, and document a routine water quality monitoring program. The monitoring program shall be designed to characterize the load (coincident flow and concentration) of nutrients in the discharge, the concentrations in the receiving water above the discharge, and the load of nutrients at selected locations in the rivers and streams below the discharge. The monitoring program shall include the following information:
- (i) Effluent Monitoring:
- (A) Locations: Sampling for nutrients is required in the effluent before it is discharged into the receiving water body at the location where monitoring is performed to satisfy other CDPS permit requirements.
- (B) Parameters: At a minimum, sufficient data shall be collected to calculate TN, TIN, and TP load. Samples of treated effluent shall be analyzed for total nitrogen (or the components to calculate total nitrogen such as total Kjeldahl nitrogen plus nitrate-nitrite) and total phosphorus (or the components to calculate total phosphorus). Daily average effluent discharge shall be collected at the same time as the nutrient concentrations are measured.
- (C) Frequency: Samples shall be collected a minimum of six times a year (every two months) for minor discharges and monthly for major discharges.
- (ii) Stream Nutrient Monitoring:
- (A) Locations: Sampling for nutrients is required in the receiving water body:
- upstream of the discharge; and
 - at the closest active Colorado Division of Water Resources or United States Geological Survey (USGS) gaging station with daily flow available throughout the year downstream of the discharge's mixing zone; or
 - In lieu of the closest downstream Division of Water Resources or USGS gaging station, facilities may take part in collaborative watershed-based monitoring efforts if the parameters and frequency follow sections (B) and (C) below.
- (B) Parameters: At a minimum, samples shall be analyzed for total nitrogen (total Kjeldahl nitrogen plus nitrate-nitrite, or the components to calculate total nitrogen) and total phosphorus (or the components to calculate total phosphorus). Daily streamflow record will be collected where an established gaging station is present. Where an established gaging

station is not available, an alternative streamflow calculation methodology may be approved by the Division.

(C) Frequency: Samples shall be collected a minimum of six times a year (every two months) for minor discharges and monthly for major discharges.

(iii) Lake/Reservoir Monitoring: RESERVED

(iv) Timing: Entities shall commence data collection no later than March 1, 2013.

~~(3) Point Source Monitoring—Municipal Separate Storm Sewer System Dischargers~~

~~[THIS SECTION WILL BE FURTHER REVISED AFTER CONTINUING DISCUSSION WITH STAKEHOLDERS]~~

~~(a) Applicability: The requirements of this section apply to all cities, towns, counties, and city and counties that are required to have a CDPS discharge permit pursuant to Regulation #61 for stormwater discharges from a Municipal Separate Storm Sewer System (MS4) and for which coverage was obtained prior to March 1, 2012.~~

~~(b) Wet Weather Discharges: The MS4 Permittee shall develop and implement a program to collect data to determine the relative annual and seasonal nitrogen and phosphorus contribution to state waters in wet weather discharges from the MS4 outfalls. Data must be adequate to support the analysis required by Part 85.6(3)(g). Data shall be representative of current conditions, including land uses, impervious areas, and water quality BMPs. Existing data, new monitoring data, or a combination of the two shall be used. To meet this requirement, the MS4 permittee shall comply with the requirements of either Option 1 in accordance with subsection (i) or Option 2 in accordance with subsection (ii), below.~~

~~(i) Option 1, Assessment of MS4 Discharges: The MS4 permittee shall implement a program to collect data on nitrogen and phosphorus contributions in MS4 discharges from monitoring of MS4 discharges or monitoring of flows within MS4s. The data must be representative of wet weather discharges from the permitted MS4.~~

~~(A) Data shall be collected that is representative of rainfall and snowmelt events. Data shall be included that is representative of all land uses significantly present within the area contributing runoff to the permitted MS4.~~

~~(B) Where new monitoring data is used to meet the requirements of this section, the MS4 permittee shall implement a monitoring program to collect all necessary data.~~

~~(ii) Option 2, Assessment of Receiving Water(s): The MS4 permittee shall implement a program to collect data that documents nitrogen and phosphorus concentrations in one or more of the MS4's receiving waters. Data must be adequate to support the analysis required by Part 85.6(3)(g).~~

~~(A) The monitoring data must result from multiple grab samples during a storm runoff event (e.g., using an automatic sampler) analyzed for nitrogen and phosphorus concentrations when the flow in the receiving~~

~~water(s) is under the influence of precipitation-driven discharges. Associated and relevant storm event data over the contributing watershed shall be determined, including duration (in hours) of the rainfall event, and magnitude (in inches).~~

- ~~(B) Additional monitoring shall be conducted, or existing representative information collected, reviewed and analyzed, as necessary to characterize base flows conditions and probable contributions of nitrogen and phosphorus during the monitored events from stormwater runoff from non-point sources and in-stream sources associated with increased stream energy from storm flows (e.g., re-suspension, stream scour, bed erosion, bank erosion).~~
- ~~(C) Where new monitoring data is used to meet the requirements of this section, the MS4 permittee shall implement a monitoring program to complete collection of all necessary data.~~
- ~~(D) Data shall be from receiving waters for which a measurable storm hydrograph associated with discharges from permitted MS4s is present.~~
- ~~(c) Dry Weather Discharges: The MS4 Permittee shall develop and implement a program to collect data that assesses annual and seasonal nitrogen and phosphorus contribution to state waters in dry weather discharges from the MS4 that are substantially influenced by residential, commercial, and/or municipal land use area irrigation contributions, to the extent the sources are present. Existing data, new monitoring data, or a combination of the two shall be used.~~
 - ~~(i) Where new monitoring data are used to meet the requirements of this section, the MS4 permittee shall implement a monitoring program to complete collection of all necessary data.~~
- ~~(d) General Monitoring Requirements: The following requirements apply to all monitoring required by 85.6(3)(b) and (c).~~
 - ~~(i) All data required by this section shall include, at a minimum, the water chemistry parameters of total nitrogen (total kjeldahl nitrogen plus nitrate-nitrite) and total phosphorus (or components).~~
 - ~~(ii) Monitoring shall be conducted using automated samplers and other methods adequate to characterize pollutant variability during the runoff event.~~
 - ~~(iii) Information shall be provided on characteristics relevant to the hydrology and land uses of the areas contributing runoff to the MS4 outfalls being targeted by the monitoring, including imperviousness, surface areas, and land use characterization.~~
 - ~~(iv) Monitoring locations shall be chosen to minimize influences on storm hydrograph from nonpoint source runoff.~~
 - ~~(v) For runoff events, the monitoring shall be representative of the runoff event targeted to the extent practicable. Evaluation shall be based on consideration of factors such as duration, intensity, variations in nutrient concentrations during the period of the event, duration since the previous event, and if the event was a~~

~~result of rainfall or snowmelt. Associated storm event data shall be collected for each sampling event, including duration (in hours) of the rainfall event, and magnitude (in inches).~~

~~(vi) MS4 permittees may meet the requirements for implementation of a monitoring plan through coordination with monitoring activities conducted by a separate entity.~~

~~(e) Collaborative Monitoring Program Authorization: To comply with the requirements of subsection (b), (c) and (d) above, MS4 permittees may take part in collaborative stormwater monitoring programs to obtain data that is representative of the discharges from the MS4 and/or the combined MS4s. Monitoring conducted as part of a Collaborative Discharge Assessment Plan may be from locations that are not proximate outfalls from every participating MS4 and/or receiving water(s) within each MS4's municipal boundary.~~

~~(f) Discharge Assessment Plan:~~

~~(i) The MS4 permittee shall develop, document, and implement a Discharge Assessment Plan that documents the program and process for meeting the requirements of subsections (b), (c) and (d) above. The Discharge Assessment Plan shall be submitted to the Division, and implementation of the plan shall commence, by June 1, 2014.~~

~~(ii) Collaborative Discharge Assessment Plan: The Plan must demonstrate that the collaborative program will provide representative data required in this section. The determination must include, as applicable, an analysis of land uses, imperviousness, watershed hydrology, precipitation data, and irrigation practices within the area for which the monitoring is intended to represent.~~

~~(iii) Independent Discharge Assessment Plan Review: An independent review shall be conducted for all Discharge Assessment Plan's unless excluded in accordance with subsection (A), below. The independent reviewer must be approved by the Division. The third party review shall be completed and all identified deficiencies corrected prior to submittal of the plan to the Division by June 1, 2014.~~

~~(A) Applicability: The requirements of this section do not apply to MS4 permittees that participate in a Collaborative Discharge Assessment Plan that covers at least 75% of MS4 permittees that are cities, towns, counties, and city and counties within the Target Watershed. Target Watersheds for the purpose of this section shall be The Arkansas River Watershed in Pueblo and Fremont counties, The Colorado River Watershed within Mesa and Montrose County, The Fountain Creek Watershed in El Paso County, and one or more watersheds of major tributaries to, or the main stem of, the South Platte River.~~

~~(iv) The Plan shall include the following information:~~

~~(A) An evaluation and identification of the availability of existing data and monitoring programs that will be used in developing and implementing the Plan. Where the permittee will use existing data, documentation of the information sources (e.g., studies, databases, monitoring plans, etc) that will be used, the process that will be implemented to select and analyze the data and supporting information.~~

- ~~(B) — An evaluation and identification of the need for additional data where existing data is determined not to be adequate to meet all requirements of subsections (b), (c) and (d) above. Where new monitoring data is necessary to meet the select requirements, a description of all new or existing monitoring plans that will be implemented to obtain the necessary data, including specific outfalls and/or in-system locations to be monitored and the frequency.~~
- ~~(C) — Milestone dates for completion of tasks, including but not limited to the completion of monitoring activities, to ensure complete collection of all necessary data as necessary to perform the required analysis and report in accordance subsection (g), below.~~
- ~~(D) — Documentation of which Option (i.e., 1 or 2) the permittee will comply with for wet weather discharge assessment.~~
- ~~(E) — Documentation of the basis for the determination that the approach will provide representative data for analysis to characterize nutrient loads/concentrations in the discharge from the permitted MS4.~~
- ~~(F) — Documentation of the basis for the determination that the monitoring program will meet the requirements of subsections (d)(iv) and (v), above.~~
- ~~(v) — The Division shall notify the permittee If the Division determines that a Data Analysis Report is not adequate to meet one or more of the requirements of this section and/or the purposes set forth in section 85.6(1), the Division shall notify the permittee. Such notification shall identify which provisions of the submittal, if any, require modification. Within 60 days of such notification from the Division, or a later date agreed to by the Division, the permittee shall make the required changes and re-submit the program or report.~~
- ~~(vi) — The MS4 permittee shall amend the Plan whenever there is a change in the documented data collection procedures or sources.~~
- ~~(g) — Data Collection, Analysis, and Reporting~~
 - ~~(i) — Wet Weather Discharges: The MS4 permittee will fully implement the Discharge Assessment Plan to collect and document the data and supporting information required by subsection (c), above, and submit to the Division a Wet Weather Data Analysis Report. The report shall include a summary of the analysis performed by the MS4 permittee on the data collected, that includes, but is not limited to an estimate of stormwater runoff flows and associated concentrations of total nitrogen and total phosphorus in discharges from the MS4. Estimates are not required to be provided for individual outfalls, and may be provided for the cumulative discharges from the MS4 to a specific receiving water(s) or watershed(s). The estimate shall take into account and document land uses, imperviousness, watershed hydrology, and precipitation data within the permitted area. Analysis shall include both annual and seasonal or monthly estimates. The Wet Weather Data Analysis Report shall be submitted to the Division in accordance with the following applicable deadline:
 - ~~(A) — Where two or more years of new monitoring is included in the Discharge Assessment Plan for wet weather discharges, and the new monitoring data that will be significant relied on to perform the required data~~~~

~~analysis, the Wet Weather Data Analysis Report shall be submitted to the Division by December 31, 2017.~~

~~(B) — All other data analysis plans shall be submitted to the Division by December 31, 2015.~~

~~(ii) — Dry Weather Discharges: The MS4 permittee shall fully implement the Discharge Assessment Plan to collect and document the data and supporting information required by subsection (d), above, and submit to the Division a Dry Weather Data Analysis Report. The report shall include a summary of the analysis performed by the MS4 permittee on the data collected, that includes, but is not limited to an estimate of dry weather flows from irrigation areas in residential, commercial, and municipal land use areas and the associated concentrations of total nitrogen and total phosphorus in these discharges from the MS4. Estimates are not required to be for individual outfalls, and may be provided for the cumulative discharges from the MS4 to a specific receiving water(s) or watershed(s). Although in most cases the actual data collected will include contributions from other sources, the estimate shall to the extent possible be for contributions from the irrigation sources targeted. Analysis shall include both annual and seasonal or monthly estimates. The Dry Weather Data Analysis Report shall be submitted to the Division in accordance with the following applicable deadline:~~

~~(A) — Where two or more years of new monitoring is included in the Discharge Assessment Plan for dry weather discharges, and the new monitoring data that will be significant relied on to perform the required data analysis, the Dry Weather Data Analysis Report shall be submitted to the Division by December 31, 2017.~~

~~(B) — All other data analysis plans shall be submitted to the Division by December 31, 2015.~~

~~(iii) — Collaborative Reports: MS4 permittees may submit reports summarizing the results of collaborative data and analysis for multiple permittees. The report must demonstrate that the analysis provides information representative and inclusive of the contribution of nutrients in individual or the cumulative discharge from each participating MS4 permittees.~~

~~(iv) — The Data Analysis Reports shall include a summary of methodologies used and assumptions made in the analysis.~~

~~(v) — The Division shall notify the permittee if the Division determines that a Data Analysis Report is not adequate to meet one or more of the requirements of this section and/or the purposes set forth in section 85.6(1). Such notification shall identify which provisions of the submittal, if any, require modification. Within 60 days of such notification from the Division, or a later date agreed to by the Division, the permittee shall make the required changes and re-submit the program or report or demonstrate to the Division's satisfaction that the requirement has been met.~~

85.6(3) Point Source Data Collection – Municipal Separate Storm Sewer System Dischargers

(a) Applicability: The requirements of this section apply to all MS4s owned or operated by cities, towns, counties, and city and counties that are required to have a CDPS discharge permit pursuant to Regulation #61 for stormwater discharges from a Municipal Separate Storm Sewer System (MS4) and for which coverage was obtained prior to March 1, 2012.

(b) Purpose: The purpose of this section is to identify information that exists, and the need for additional monitoring to be conducted in the future, to determine the approximate nitrogen and phosphorus contribution to state waters due to discharges from MS4.

(c) Discharge Assessment Data Report: The MS4 permittee shall develop, document and submit to the Division a Discharge Assessment Data Report (Data Report) by October 31, 2014, that: documents the availability of existing data, and a "Gap Analysis" that identifies the need for additional information (e.g., monitoring data or studies), in accordance with the requirements of this section. .

(i) Objectives: The Data Report must provide information on existing data and identify additional information necessary that would allow for future analysis to meet all of the following objectives:

(A) Allow for the determination of representative estimates that quantify MS4 discharge flows and associated concentrations, and loads of total nitrogen and total phosphorus from the permittee's MS4. This shall include representative annual or seasonal information to define significant nutrient loads from different land uses due to rainfall events, snowmelt events, and/or dry weather flows. The Information used for making the determination must be from one or more of the following sources:

1. monitoring data collected at the discharge from the MS4, at a location within the MS4, or in state waters downstream of the discharge from the MS4;
2. monitoring data collected by one or more different entities that is shown to provide information that supports the evaluation in (A), above;
3. land use-based model(s) developed to predict nutrient concentrations in discharges from MS4s that is(are) shown to provide information that supports the evaluation in (A), above; and
4. land-use type-based runoff nutrient concentration/load values in published studies, manuals, or literature shown to provide information that supports the evaluation in (A), above.

(B) Estimates determined in accordance with (A), above:

1. are not required to be provided for individual outfalls, and may be provided for the cumulative discharges from the MS4 to a specific receiving water(s) or watershed(s);
2. are not required to address point source discharges specifically authorized by CDPS permits other than for discharges from an MS4; and
3. as necessary to provide representative information that takes into account the land uses, imperviousness, watershed hydrology, and precipitation data and other appropriate factors within the permitted area under the MS4 permit.

- (ii) The Data Report shall document the following, at a minimum:
- (A) The source(s) of the existing data, including, or providing a reference to general information available for Division review. Where monitoring data are provided, it shall include a description of the methods used for sample collection, field, and laboratory analysis. All existing data used to meet the requirements of this section shall have been obtained from sources using quality assurance/quality control protocols and standards in general accordance with accepted good monitoring and analysis procedures.
 - (B) For discharge data identified in the Data Report that is associated with rainfall or snowmelt events: available documentation of associated and relevant storm event data over the contributing watershed during the monitored event(s), including duration (in hours) of the rainfall event, and magnitude (in inches).
 - (C) For receiving water monitoring data identified in the Data Report: available quantitative or qualitative information associated with the monitoring plan or study that generated the data that determines, or could be used to determine, the probable contributions of nitrogen and phosphorus during the monitored events from the MS4 discharges, as compared to the overall contributions associated with the event from additional sources.
 - (D) A summary of the Gap Analysis, including either:
 - 1. Information to support a determination that the existing data provided in accordance with subsection (A), above, fully or partially meets the objectives subsection in 85.6(3)(c)(i), above); and
 - 2. Identification of the “data gaps” for which additional information is determined necessary to meet the objectives in subsection 85.6(3)(c)(i).
- (iii) Collaboration with Other MS4 Permittees: To comply with the requirements of subsection 85.6(3)(c) MS4 permittees may collaborate in the development and documentation of a report with other MS4 permittees that identifies data and the required supporting information that is shown to be meet the objectives of 85.6(3)(c)(i) for each participating MS4. Data do not have to be collected from each MS4 so long as they are shown to be representative of the quality of the stormwater being discharged. Data must be representative of land uses, imperviousness, watershed hydrology, precipitation, and irrigation practices within the area which the data are intended to represent.
- (d) The Division shall notify the permittee if the Division determines that the Data Report is not adequate to meet one or more of the requirements of this regulation. Such notification shall identify which provisions of the submittal, if any, require modification. Within 60 days of such notification from the Division, or a later date agreed to by the Division, the permittee shall make the required changes and re-submit the Data Report or demonstrate to the Division’s satisfaction that the requirement has been met.
- (e) An MS4 permittee shall furnish to the Division, within a reasonable time, information which the Division indicates is necessary to determine compliance with the requirements of section 85.6(3).

(4) Data Quality Requirements

- (a) The entities collecting the samples will document, and make publically available the sampling methods, analytical methods, method detection limits, required field condition and physical parameters to be recorded at each sampling event, and quality control and quality assurance protocols in a sampling and analysis plan.
- (b) The information required under subsection (a) above, may be evaluated by the Division for compatibility with the objectives of this section. Where the Division identifies deficiencies in the protocols/methods being used to meet the objectives of subsection (a) above, the entities shall make appropriate revisions such that the Division-identified deficiencies are addressed.
- (c) All sampling and analysis shall be performed by the entities according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division. The analytical method for all monitoring conducted in accordance with this regulation shall be capable of quantifying reporting results at or below the following method detection limits (MDL):

Total Phosphorus	0.01 mg/L
Nitrate + Nitrite	0.02 mg N /L
Total Kjeldahl Nitrogen	0.1 mg N /L
Total Nitrogen	0.1 mg/L

All results above the MDL must be reported.

- (d) The permittee shall submit a certification to the Division that the sampling and analysis plan is in place and that monitoring is taking place by March 1, 2013.

(5) Nonpoint Source and Unpermitted Point Source Monitoring

- (a) Entities responsible for nonpoint sources and unregulated point sources of nutrients are encouraged to monitor and assess surface water resource quality as identified in Section 85.6(2) to determine the extent and magnitude of nutrient impacts. In addition, the Commission recognizes state water conservation, water conservancy, and special irrigation districts as entities that monitor and assess surface water resource quality and encourages making this data publically available for use in nonpoint source management efforts.
- (b) The Division shall collaborate with these entities in developing and implementing a nutrients nonpoint source monitoring program to meet the requirements of this control regulation.
- (c) Future monitoring activities are encouraged to coordinate with point source nutrient monitoring, the Colorado Agricultural Chemicals Program, and other relevant local, state, and federal monitoring efforts.
- (d) The responsible entities are encouraged to identify potential funding sources and pursue options for monitoring in areas that do not have a current or future nutrient monitoring program.

(6) Availability and Reporting of Data

All data collected under Section 85.6 shall be maintained in an electronic form. All Data collected pursuant to this control regulation shall be submitted to the Division by April 15th of each year. The submission shall include geographic location of sampling, CDPS permit number (if appropriate), name and identification of the stream flow gage, as follows:

- (a) In electronic data deliverable as specified for receipt by the Division; or
- (b) Electronic submission to an alternative publically available data repository. If this option is selected, the Division must be notified by April 15 of each year and all relevant data must be accessible to the public.

85.7-85.14 **RESERVED**