DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission REGULATION NO. 61 - COLORADO DISCHARGE

PERMIT SYSTEM 5 CCR 1002-61

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

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61.2 **DEFINITIONS**

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(20) "DESIGN CAPACITYFLOW" means the rated hydraulic component of the design capacity as (capability of a plant to meet existing effluent limitations). This rated capacity shall be given in millions of gallons per day and represents the flow at the point of discharge to waters of the state. Design flow may be portioned between applied to multiple outfalls. organic loading in pounds per day. Design capacity is defined in Regulation 22. Design flow may be portioned between among applied to multiple outfalls.

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(107) "THROUGHPUT" means the hydraulic and/or organic loading being measured prior to treatment at a domestic wastewater treatment works during a specified period of time (usually a 30-day period).

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- (111) <u>"TREATMENT CAPACITY"</u> means the design capacity of the domesticwastewater treatment works to reduce pollutant concentrations to achieve thelimitations set forth in the permit, as approved by the Division pursuant to 25-8-702.
- (1112) <u>"25-YEAR, 24-HOUR STORM"</u> means a storm of a 24-hour duration which yields a total rainfall of a magnitude which has a probability of recurring once every twenty-five years.
- (1123) "UNCONTROLLED SANITARY LANDFILL" means a landfill or open dump, whether in operation or closed, that does not meet the requirements for run-on or run-off controls established pursuant to subtitle D of the Solid Waste Disposal Act as amended by HSWA (1984).

- (1134) "UPSET" means an exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- (11<u>45</u>) <u>"VADOSE ZONE"</u> means the zone between the land surface and the water table. It includes the root zone, intermediate zone, and capillary fringe. Saturated bodies, such as perched ground water, may exist in the vadose zone, also called zone of aeration and unsaturated zone.
- (11<u>5</u>6) <u>"VEGETATED BUFFER"</u> means a narrow, permanent strip of dense perennial vegetation established parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients or pollutants from leaving the field and reaching surface waters.
- (1167) "WASTELOAD ALLOCATION" means the portion of the receiving water's assimilative capacity that is allocated to one of its existing or future point sources of pollution. Wasteload allocations constitute a type of water quality-based effluent limitation.
- (1178) "WATER QUALITY IMPACTS" means the effect of a discharge upon state waters, including, but not limited to the exceedance of permit limitations and/or stream standards or ground water standards; the occurrence of fish or other aquatic organism kills; excessive growth of organisms that affects the taste and odor of a potable water supply source and/or aesthetic quality of a recreational area; and/or the occurrence of conditions resulting in detrimental public health affects.
- (1189) <u>"WATER QUALITY STANDARD"</u> means any standard promulgated pursuant to section 25-8-204 C.R.S.
- (1<u>1920</u>) <u>"WET LOT FOR DUCKS"</u> means a confinement facility for raising ducks which is open to the environment, has a small number of sheltered areas, and with open water runs and swimming areas to which ducks have free access.
- (12<u>0</u>4) <u>"WHOLE EFFLUENT TOXICITY"</u> Whole effluent toxicity (WET) is a biological activity effect by which effluents exhibit antagonism to the aquatic organisms used in biomonitoring tests in the form of acute or chronic toxicity. WET may be caused by a variety of specific compounds or by synergistic interaction among compounds.

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61.4 APPLICATION FOR A PERMIT

61.4(1) APPLICATION REQUIREMENTS — GENERALLY

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(c) An applicant shall apply for a new permit, other than a general permit, at least one hundred eighty (180) days prior to discharge; if a person contemplates some form of construction which, in itself, will require a discharge permit, the person may apply for the permit in accordance with the provisions of these regulations and with the approval of the Division, transfer a permit to a contractor. Where the application is for a discharge from a domestic wastewater treatment works, then the application for a discharge permit may shall be preceded by an application for site approval pulsuant to regulations for site applications for domestic wastewater treatment works. Applications to be covered under a general permit shall be filed within the deadlines specified in the general permit.

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- (j) Unless the Division determines that certain item(s) are unnecessary, a complete application, must contain as a minimum:
 - (i) Description of the activities conducted by the applicant which require it to obtain a permit;
 - (ii) Identification of the facility name; location; and telephone number;
 - (iii) The owner(s) and the operator(s) name, mailing address and telephone number;
 - (iv) Up to four SIC codes which best reflect the principal products or services provided by the facility;
 - (v) General legal description, map location, and site diagram of the treatment facility and discharge locations;
 - (vi) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area.
 - (vii) Identification of the type of discharge, and the receiving waters for each discharge point;
 - (viii) A listing of all active permits or construction approvals received or applied for the site under any of the following programs:
 - (A) Hazardous Waste Management program under RCRA.
 - (B) UIC program under SDWA.
 - (C) NPDES program under CWA.
 - (D) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.
 - (E) Nonattainment program under the Clean Air Act.
 - (F) National Emission Standards for Hazardous Pollutants (NESHAPS) under the Clean Air Act.
 - (G) Dredge or fill permits under Section 404 of CWA.
 - (H) Other relevant environmental permits, including state permits,
 - (ix) For domestic wastewater treatment works, the following additional information:
 - (A) Raw and effluent wastewater flow and quality characteristics to and from the treatment works related to each discharge proposed for the duration of the permit;
 - (B) Description of unit processes and activities related to treatment, including assessments of contributions of both pretreated and untreated industrial wastewater, land application plans and/or

- practices, biosolids treatment and handling, flow measurement, and underground percolation and/or injection;
- (C) Design documents and engineering analysis detailing hydraulic and organic design treatment capacity, interceptor capacity;
- (D) Map(s) and description delineating service area and interceptor location(s), including a description of the population to be served:
- (E) Copies of sewer and other ordinances governing discharges to the sewer system.
- (x) For all facilities, whether the facility is located in Indian lands.

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61.5(2) PUBLIC NOTICE AND COMMENT - DRAFT PERMITS

- (a) The Division shall prepare a preliminary analysis and tentative determination to issue or deny the permit and advise the applicant of that analysis.
- (b) If the analysis is to issue a permit, the Division shall prepare a draft permit with terms and conditions. Public notice of the Division's draft permit shall be given as provided in paragraph (e) of this section. Such draft permit and permit rationale shall be available to the public for inspection and copying and shall include at least the following:
 - (i) Proposed effluent limitations for each discharge point for those pollutants proposed to be limited;
 - (ii) Delineation of the service area based on population and design floweapacity of the treatment and sewer system for domestic permits and delineation of the maximum expected production rate for industrial permits;
 - (iii) A proposed schedule of compliance, including interim dates and requirements, for meeting the proposed effluent limitations if the permittee is not presently doing so;
 - (iv) All monitoring requirements under section 61.8(4);
 - (v) All terms and conditions under sections 61.8 through 61.8(10) of these regulations; and all applicable terms and conditions under sections 61.8(11) and 61.8(12) of these regulations; and
 - (vi) For major facilities, any additional information which may be required pursuant to 40 C.F.R. 124.8 or 40 C.F.R. 124.56.

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61.8(2) DEFINITION OF EFFLUENT LIMITATIONS

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- (f) Production-based limitations.
 - (i) In the case of POTWs, permit effluent limitations, standards, or prohibitions shall be calculated based on design flow with the following exceptions:

- (A) When a facility is a treater for reclaimed water, as defined in Regulation
 84, the Division can establish permit effluent limitations, standards, or
 prohibitions by subtracting the reclaimed water flow capacity, the
 minimum reclaimed water treated, or a lower amount from the design
 flow of the plant.
- (B) When a domestic wastewater treatment works includes flow equalization that affects the maximum month average daily discharge (or other measure deemed appropriate by the Division), the Division may establish permit effluent limitations, standards, or prohibitions using the flow as measured after all flow equalization rather than the design flow.—
- Where the facility design flow and actual flow are significantly different, the Division may implement a tiered approach to setting water-quality-standard-based effluent limitations, provided that one of the sets of effluent limitations reflects the design flow and the permittee demonstrates the ability to meet effluent limitations at the design flow rate. Where such demonstration cannot be made, the permit shall contain a compliance schedule to allow such demonstration within a reasonable time not to exceed the life of the permit (i.e., five years).

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(I) The "Colorado River Salinity Standards" state that "the objective for discharges shall be a no-salt return policy whenever practicable." This is the policy that shall be followed in issuing CDPS permits for all new discharges, and upon reissuance of permits for all existing discharges. All CDPS permits for discharges to surface waters within the Colorado River Basin shall contain limitations and monitoring conditions consistent with those specified below.

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- (vi) Municipal Discharges
 - (A) Municipal discharges to any portion of the Colorado River stream system shall be allowed an incremental increase in salinity of 400 mg/l or less above the flow weighted averaged salinity of the intake water supply. The maximum incremental increase requirement, and the requisite demonstration that it is not practicable to meet the incremental increase requirement, may be waived in those cases where the salt load reaching the mainstem of the Colorado River is less than one ton per day or 366 tons per year, whichever is more appropriate. Evaluation will be made on a case-by-case basis. The following addresses additional cases where meeting the incremental increase requirement for municipal discharges may be deemed not to be practicable.
 - (I) The Division may permit a discharge in excess of the 400 mg/l incremental increase, at the time of issuance or reissuance of a CDPS discharge permit, upon satisfactory demonstration by the permittee that it is not practicable to attain the 400 mg/l limit Demonstration by the applicant for a new permit must include information on the following factors relating to the potential discharge. Applicants for reissuance of a permit shall either submit a statement that their previous demonstration is still applicable or submit new information consistent with the following list describing any changed circumstances.
 - (a) A description of the municipal entity and facilities.

- (b) A description of the quantity and salinity of intake water sources.
- (c) A description of significant salt sources to the municipal wastewater collection system and identification of entities responsible for each source, if available.
- (d) A description of water rights, including diversions and consumptive use quantities.
- (e) A description of the wastewater discharge, covering location, receiving waters, quantity, salt load, and concentration of TDS.
- (f) Alternative plans for minimizing the salt contribution from the municipal discharge. Alternative plans should include:
 - A description of collection system salt sources and alternative means of control.
 - (ii) The cost of alternative plans, in dollars per ton, of salt removed from discharge.
- (g) Such other information pertinent to demonstration of non- practicability as the Division may deem necessary.
- (B) In determining what permit conditions shall be required, the Division shall consider the following criteria including, but not limited to:
 - (I) The practicability of achieving the 400 mg/l incremental increase.
 - (II) Where the 400 mg/l incremental increase is not determined to be practicable:
 - (a) The impact of the total proposed salt input of each alternative on the lower mainstem in terms of tons per year and concentration.
 - (b) The costs per ton of salt removed from the discharge for each alternative plan.
 - (c) The capability of minimizing the salt discharge.
- (C) If, in the opinion of the Division, the database for the municipal wastewater discharge is inadequate, the permit will contain the requirement that the permittee monitor the water supply and the wastewater discharge for salinity. Such monitoring program shall be completed within 2 years and the discharger shall then present the information as specified above.
- (D) All new and reissued CDPS permits for municipalities shall require monitoring of the concentration of the TDS of the intake water supply and the wastewater treatment plant effluent in accordance with the

following guidelines:

Treatment Plant Design FlowCapacity	Monitoring Frequency	Type of Sample
<1.0MGD	Quarterly	Grab
1.0 - 5.0MGD	Monthly	Composite
5.0 - 50.0 MGD	Weekly	Composite
> 50.0 MGD	Daily	Composite

Analysis for salinity may be either as total dissolved solids (TDS) or by electrical conductivity where a satisfactory correlation with TDS has been established. The correlation should be based on a minimum of five different samples. Monitoring of the intake water supply may be at a reduced frequency where the salinity of the water supply is relatively uniform as demonstrated by a minimum of two years' worth of samples.

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61.8(7) TERMS AND CONDITIONS APPLICABLE TO DOMESTIC WASTEWATER TREATMENT WORKS

- (a) If the permitted discharge is from a domestic wastewater treatment works, whenever deemed necessary to assure compliance with the Federal Act, the Act or State regulations, the Division shall include the following as permit conditions:
 - (i) The permittee shall require pretreatment (if pretreatment standards are promulgated by the State or EPA) of effluent from industrial, governmental, or commercial activities before such effluent is received into the gathering and collection system of the permittee as required in the Pretreatment Regulations;
 - (ii) The permittee shall include specified terms and conditions of its permit in all contracts for receipt by the permittee of any effluent not required to be received by the domestic permittee;
 - (iii) The permittee shall initiate engineering and financial planning for the expansion of the domestic wastewater treatment works whenever throughput and treatment reaches eighty (80) percent of the treatmentdesign capacity;
 - (iv) The permittee shall commence construction of such domestic wastewater treatment works expansion whenever throughput and treatment reaches ninety-five (95) percent of the treatmentdesign capacity or, in the case of a municipality, either commence such construction or cease issuance of building permits within such municipality until such construction is commenced; except that building permits may continue to be issued for any construction which would not have the effect of increasing the input of wastewater to the sewage treatment works of the municipality involved. Throughput and treatment capacity shall be determined by the Division;
 - (v) Where unusual circumstances (e.g. extraordinary storm event, broken sewer line, unanticipated or unapproved loading) result in throughput and treatment exceeding 80% of treatmentdesign capacity, the permittee may, in lieu of initiating planning for expansion of the domestic wastewater treatment works, submit a report to the Division that demonstrates to the Division's satisfaction that it is extremely unlikely that the event will reoccur, or even if the event were to reoccur, 95% of the treatmentdesign capacity would not be exceeded.
 - (vi) Where unusual circumstances (e.g. extraordinary storm event, broken sewer

line, unanticipated or unapproved loading) result in throughput <u>and treatment</u> exceeding 95% of treatmentdesign capacity, the permittee may, in lieu of initiating construction of expansion of the domestic wastewater treatment works, submit a report to the Division that demonstrates to the Division's satisfaction that the domestic wastewater treatment works was in compliance at all times during the event and that it is extremely unlikely that the event will reoccur.

- (vii) Where the permittee submits a report pursuant to (v) or (vi), above, and the Division, upon review of such report, determines in writing to the permittee that the report does not support the required findings, the permittee shall initiate planning and/or construction of the domestic wastewater treatment works, as appropriate.
- (viii) Inclusion of the requirement authorized by paragraph (iii) above shall be presumed unnecessary to assure compliance upon a showing that the area served by a domestic wastewater treatment works has a stable or declining population; but this provision shall not be construed as preventing periodic review by the Division should it be felt that growth is occurring or will occur in the area.
- (ix) The permittee shall install a flow measuring device(s) to determine the throughput and effluent quantities of the wastewater system. The flow measuring device(s) must comply with the requirements for the State effluent limitations adopted in 5 CCR 1002-62, Regulation No. 62.

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61.14 GROUND WATER

61.14(1) APPLICABILITY

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- (b) The following facilities are specifically exempted from coverage under the ground water discharge provisions of this regulation:
 - (i) Any impoundment subject to regulation under the Uranium Mill Tailings Radiation Control Act, 42 U.S.C., Section 7901, et seq. as amended.
 - (ii) Any impoundment used in the treatment, storage or recharge of raw or potable water.
 - (iii) Any stormwater retention or detention impoundment.
 - (iv) Any impoundment or land application system for which a currently valid certificate of designation has been obtained pursuant to the Solid Waste Disposal Sites and Facilities Act, C.R.S. 1973, 30-20-101, et seq. as amended, and other impoundments or land application systems subject to regulation under that Act which are not part of a wastewater treatment system for which a Colorado Discharge Permit System (CDPS) permit for a discharge to surface waters is required.
 - (v) Any tank which does not result in a discharge to ground water.
 - (vi) Any beneficial use of biosolids through land application pursuant to the "Biosolids Regulation," Regulation 64 (5 CCR 1002-64), or the beneficial use of septage through land application pursuant to 40 CFR 503.
 - (vii) Any facility operating under a permit issued pursuant to the

- Underground Injection Control provisions of the Safe Drinking Water Act, 42 U.S.C. 300f, et seq.
- (viii) Any on-site wastewater treatmentindividual sewage disposal system with a design capacity of 2,000 gallons per day or less, if designed and constructed in accordance with requirements pursuant to the On-site Wastewater Treatment Systems ActIndividual Sewage Disposal System Act, section 25-10-101 C.R.S., et. seq.
- (ix) Any onsite landscape irrigation system located on a domestic wastewater treatment plant site using treated effluent that is applied at an agronomic rate.
- (x) Any graywater treatment works with a design <u>capacity</u>flow of 2,000 gallons per day or less, if designed and constructed in accordance with Regulation 86 (5 CCR 1002-86).

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61.73 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE – MARCH 9, 2020 RULEMAKING HEARING; APRIL 13, 2020 FINAL ACTION; EFFECTIVE DATE MAY 30, 2020

The provisions of 25-8-202(1)(d) and (2), 25-8-401, 25-8-501, and 25-8-502, C.R.S., provide the specific statutory authority for the amendments to this regulation adopted by the Water Quality Control Commission (Ceommission). The Ceommission has also adopted, in compliance with 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

As part of the hearing on Regulation #22, the Site Location and Design Approval for Domestic Wastewater Treatment Works, the Ceommission made changes to a few terms in section 61.2, "Definitions". The Commission made changes to the definitions of 'design capacity', 'throughput' and 'treatment capacity' to remove conflicts with definitions in Regulation #22 and to provide better alignment with the federal permitting framework terms.

The Division's proposal changes the term 'design capacity' to 'design flow' in Regulation #61 since the term 'design capacity' in Regulation #22 already aligns to the statute and since Regulation #61 incorporates the term 'design flow' in order to align with the Federal Clean Water Act Regulations, which use that term in describing the threshold for development of pretreatment programs and calculating permit conditions. The Division further proposes to add language to Regulation #61 to clarify that, when an equalization basin, reuse, or reclaimed water exist, the design flow may not accurately represent a facility's effluent discharge flows, and a lower value may be used in calculating permit conditions. When there are multiple outfalls, portions of the design flow or the entire design flow may be designated to specific outfalls in certain circumstances. The added language related to these circumstances does not change the threshold for development of a federal pretreatment program under 40 CFR § 403.8 or the applicability of any federal pretreatment requirements. Following this rulemaking, the Division plans to work with stakeholders to develop guidance that will further address design flow and design capacity issues, particularly circumstances where tiers or multiple design capacities may be appropriate.

The Commission also approved a change to Regulation #61.4(1) (permit application requirements) that, consistent with the approved redefinition of PELs to Water Quality Planning Targets in Regulation 22.2, would allow new permittees to elect to first obtain a permit, and then to obtain site approval. Together, the proposed changes to Regulations #22.2(25) and #61.4(1) would allow permittees in some situations to use an existing or new permit as the Water Quality Planning Target for site approval. These situations would not include instances where site approval or the information contained in a site application is needed first in order to determine whether the imposition of permit conditions can, per Regulation 61.8(1), ensure compliance with the applicable water quality requirements of all affected States or prevent violations of control regulations. The &Division anticipates this may be the case for some

groundwater permits. Reliance on an existing permit would also not be appropriate for site approval for a facility change that, standing alone, is likely to affect the facility's existing permit limits or the facility's ability to meet those its limits.

The term throughput, within this regulation, specifically relates to domestic wastewater treatment works. The term 'throughput' was modified to remove the phrase "/or" to ensure that both hydraulic and organic loadings were considered since hydraulic residence or flow rate directly impacts the treatment capability of organics through the treatment process. Additionally, a domestic wastewater treatment works must often treat for more than organic constituents. Unit treatment processes targeting non-organic pollutants are also impacted by hydraulic residence or flow rate. In most cases, the organic strength is a representative indicator of the overall strength of the domestic wastewater, including non-organic pollutants.

The Commission deleted the term 'treatment capacity' to more clearly align with Colorado Water Quality Control Act. As previously defined, the term 'treatment capacity' was linked to the Regulation #22 term 'design capacity'. With the potential for 'design capacity' (Regulation #22) to not equal 'treatment capacity' in all cases, the Commission more correctly aligned the term 'treatment capacity' to the term 'throughput' since these two terms function jointly in the evaluation of and triggering actions related to planning and construction of domestic wastewater treatment plant expansions. This change means that the planning and expansion requirements will trigger when throughput and treatment meets specific thresholds relative to the design capacity. The design capacity represents the treatment capability of the domestic wastewater treatment works. The throughput and treatment represent the amount of loading and treatment being utilized based on current loading conditions. "Treatment capacity" werewas removed in order to align the language of the construction trigger provisions with the language of the WQCA as part of the Commission's goal to harmonize the use of the terms design capacity/design flow across the Commission regulations, the Colorado Water Quality Control Act, and the federal regulations.

The Commission revised or replaced these terms throughout the remainder of Regulation #61.

The Commission modified section 61.14(1)(b)(viii) from "individual sewage disposal systems (ISDS)" to "on-site wastewater treatment systems (OWTS)" to reflect the change resulting from the 2012 modifications to the governing statutes in the Colorado On-site Wastewater Treatment Systems Act, C.R.S., 25-10-101, et seq.