



Colorado Discharge Permit System (CDPS)
Fact Sheet to Permit Number COG860000
General Permit for Discharges from Applications of Pesticides to State Surface Waters
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I. FACT SHEET DESCRIPTION

The National Pollutant Discharge Elimination System (NPDES) permit was created by Congress as the implementation tool under the Clean Water Act (CWA) for the regulation of the quantity, rate, and concentration of pollutants that the point sources may discharge into water. The division, as the delegated authority for development and issuance of NPDES permits for the State of Colorado, is obligated to develop and issue NPDES permits in a manner that meets federal statutory requirements (the Clean Water Act, 33 U.S.C. § 1251 et seq.), state statutory requirements (the Colorado Water Quality Control Act, 25-8-101 et seq.) and state and federal regulations.

Routine review is an integral aspect of the NPDES and the Colorado Discharge Permitting System (CDPS) program. The Clean Water Act incorporates a finite term for NPDES permits in order to allow for routine review of permit terms and conditions; the Colorado Water Quality Control Act similarly recognizes that the periodic renewal of permits is required. Routine review of CDPS permits provides a mechanism for the division and the public to scrutinize the existing conditions of the permit; to upgrade the permit requirements to reflect changing knowledge, law, or advances in science and technology; to ensure that the permit limits are protective of the most recent water quality classifications, standards, and antidegradation designations established by the Water Quality Control Commission; and, if necessary, to protect against human error introduced into previous permits. Routine review often results in the incorporation of new or different permit limitations or approaches.

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 to aid in compliance with the permit.

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". Where requirements are retained from the previous permit, the division has determined that the requirements remain appropriate and that their removal may result in an increase in pollutants discharged.

II. TYPE OF PERMIT

General Permit, NPDES/CDPS, Discharges from Applications of Pesticides, renewal, statewide. This permit renewal is for the general discharge permit listed below, and the associated discharges are authorized statewide to state waters of Colorado.

Discharge Permit Name	Effective Date	Expiration Date
Discharges from Applications of Pesticides (COG860000)	ONE MONTH AFTER ISSUANCE	FIVE YEARS AFTER ISSUANCE



III. BACKGROUND

The Water Quality Control Division (division) is reissuing the Colorado Discharge Permit System (CDPS) pesticide general permit (PGP) which authorizes the point source discharges of biological pesticides and chemical pesticides that leave a residue, to state waters. Colorado has delegated authority to implement the NPDES program within the state of Colorado, except for federal facilities and tribal lands. All other applications of pesticides that discharge to surface water, including application of pesticides on privately held lands (fee lands) within a Reservation, and fall within one of the use patterns described in the permit are within the scope of the Colorado PGP.

The permit primarily relies upon practice-based effluent limitations (Pest Management Measures) to meet the effluent limitations in the permit and requires operators to conduct visual monitoring, mapping and record keeping. For decision-makers required to submit an annual report, the permit requires the development and implementation of a pesticide discharge management plan (PDMP).

The permit also requires operators to comply with components of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). When EPA approves a pesticide for a particular use, the Agency imposes restrictions through labeling requirements governing such use. The restrictions are intended to ensure that the pesticide serves an intended purpose and avoids unreasonable adverse effects. It is illegal under Section 12(a)(2)(G) of FIFRA to use a registered pesticide in a manner inconsistent with its labeling.

There is no application process for coverage under the Colorado PGP, as operators that meet the eligibility requirements of Part I.A.1 are automatically authorized to discharge under the General Permit. Table 2 describes which decision-makers are required to submit an annual report. In the previous permit term, the division received between 38 - 41 annual reports per year:

Year	# of Annual Reports
2020	38
2021	41
2022	39
2023	41

The division offers the following overview with respect to the use patterns of chemical pesticides covered by the Colorado PGP.

A. APPLICATION OF A PESTICIDE OVER STATE WATERS

If the application of a chemical pesticide is made over state waters to control pests over the water, any amount of the pesticide that falls into state waters is “excess” pesticide and would require coverage by an NPDES permit. Based on field studies of pesticide applications, the division expects that some portion of every application of a pesticide made over state waters will fall directly into such waters and thus assumes that applications will trigger the requirement for an NPDES permit.

B. APPLICATION OF A PESTICIDE INTO STATE WATERS

If the application of a chemical pesticide is made into state waters to control a pest in such waters, once the pesticide no longer provides any pesticidal benefit, any amount of the pesticide that remains in those waters is a “residual” and requires coverage by an NPDES permit. Additionally, the residual is discharged at the time of a pesticides initial application. Based on field studies of pesticides applied into water, the division expects that some portion of every application of a pesticide made into state waters will leave a residual in those waters and thus assumes every application will trigger the requirement for an NPDES permit. The division expects that an entity applying pesticides with a discharge to state surface waters who wishes to dispute this assumption would be expected to provide scientific data supporting such a determination. Such data should show what level of the pesticide can be detected in water, and at what level in water the pesticide provides a pesticidal benefit. Such data should address the properties of the chemical pesticide under different water conditions (e.g.,



different pH, organic content, temperature, depth, etc.) that might affect the pesticide's properties. A permit would not be necessary if it is determined that a residual did not enter state waters.

C. INDIRECT APPLICATION OF A PESTICIDE TO STATE WATERS

This permit authorizes discharges associated with four categories of pesticide application activities: mosquito and other flying insect pest control, weed and algae pest control, animal pest control, forest canopy pest control. As noted above, only point source discharges of pollutants to state waters require a permit, and it is beyond the scope of this Fact Sheet to identify all specific activities that do or do not require a permit. However, to the extent that activities that fall within the four covered categories require a permit, they can be authorized by this general permit if all eligibility requirements are met. For example, discharges to control pests in or near areas that are state waters, even when these areas are dry for much of the year, may be covered by this permit, if one is required. This would include discharges on forest or range lands that include dry washes and ephemeral streams, to control pests that may be found in these occasionally wet areas, including pests that may also be found in upland areas. For two of the categories, weed and algae pest control and animal pest control, the permit specifies that covered activities include applications to control pests "in water and at water's edge." The division intends for the phrase "at water's edge" to allow coverage of activities targeting pests that are not necessarily "in" the water but are near the water such that control of the pests may unavoidably involve a point-source discharge of pesticides to state waters. The category, "forest canopy pest control," is for applications to a forest canopy. The division intends that this can include both mature and immature forest canopies, including canopies that may not be continuously connected, where control of pests associated with the canopy (i.e., branches and leaves of the trees) may unavoidably involve point source discharges of pesticides to state waters.

IV. LEGAL AUTHORITY FOR TECHNOLOGY AND WATER QUALITY BASED PERMIT LIMITS

Effluent limits are defined in CWA Section 502(11) as "any restriction on the quantity, rate, and concentration of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance." Effluent limits are among the permit conditions and limits prescribed in NPDES permits issued under Section 402(a) of the Act, 33 U.S.C. §1342(a). 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." Regulation 61.2(26) then 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."

A. TECHNOLOGY BASED EFFLUENT LIMITATIONS

The CWA requires that discharges from existing facilities, at a minimum, meet technology based effluent limitations reflecting, among other things, the economically achievable technological capability of permittees to control pollutants in their discharges. These requirements are incorporated into Regulation 61.8(2)(a). The division determines it is infeasible at this time to develop new technology-based limits for the renewal permit, and continues to include relevant technology-based permit limits including reliance on EPA's 2021 Pesticide General Permit (PGP) (EPA, 2021). The technology-based effluent limitations in the general permit require the Operator to minimize the discharge of pesticides to state surface waters from the application of pesticides. Consistent with the control level requirements of the CWA, the term "minimize" means to reduce and/or eliminate



pesticide discharges to state waters through the use of Pest Management Measures/Integrated Pest Management to the extent technologically available and economically achievable and practicable for the category or class of point sources covered under this permit taking into account any unique factors relating to the Operators to be covered under the permit.

Technology-based effluent limitations in this permit are presented specific to each pesticide use pattern to reflect the variations in procedures and expectations for the use and application of pesticides. Pest Management Measures can be actions (including processes, procedures, schedules of activities, prohibitions on practices and other management practices). However, all applicators are required to do the following, for example:

- Use only the amount of pesticide and frequency of pesticide application necessary to control the target pest, using equipment and application procedures appropriate for this task.
- Maintain pesticide application equipment in proper operating condition, including requirement to calibrate, clean, and repair such equipment and prevent leaks, spills, or other unintended discharges.
- Assess weather conditions (e.g., temperature, precipitation, and wind speed) in the treatment area to ensure application is consistent with all applicable federal requirements.

If Operators find their Pest Management Measures are not minimizing discharges of pesticide adequately, the Pest Management Measures must be modified as expeditiously as practicable.

B. WATER QUALITY BASED EFFLUENT LIMITATIONS

Water quality based effluent limitations (WQBELs) are required under the conditions set by CWA Section 301(b)(1)(C) and Regulation 61.8(2)(b). Regulation 61.8(3)(r) requires inclusion of best management practices, or practice-based limitations in permits “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.”

In general, based on the data included in the record and the additional requirements in this permit in addition to FIFRA, the division expects that compliance with the technology-based effluent limitations and other terms and conditions in this permit will meet applicable water quality-based effluent limitations. In accordance with Part I.C of the permit, “Operators must control discharges as necessary to meet applicable numeric and narrative state water quality standards, for any discharges authorized under this permit, with compliance required upon beginning such discharge.” Furthermore, the general permit excludes coverage of pesticide applications that result in discharges of any pesticide to waters impaired for that pesticide or by a substance which is either an active ingredient in that pesticide or is a degradate of such an active ingredient. The permit also requires routine visual inspections (described below) to be conducted as part of the pest control activity and/or as part of post-application pest surveillance, and calls for records of the pesticide discharge volume to be kept. The division may impose additional water quality-based limitations on a site-specific basis, or require the Operator to obtain coverage under an individual permit, if information in required reports, or from other sources indicates that, after meeting the technology-based limitations in this permit, the discharges are not controlled as necessary to meet applicable water quality standards.

However, if at any time, the Operator or the division determines that the discharge causes or contributes to an excursion of applicable water quality standards, the Operator must take corrective actions as required in Part I.F, and document and report the excursion(s) to the division as required in Part I.G.

Regulation 61.8(3)(b)(G)(II) requires that water quality-based effluent limits developed to protect narrative or numeric water quality standards be consistent with the assumptions and requirements of any available wasteload allocation (WLA) prepared by the division. The division currently does not have any approved or established TMDLs with WLAs for pesticide application. If a WLA in a TMDL is



established, the division will review to determine whether any more stringent numeric or narrative requirements are necessary to be consistent with the wasteload allocation (WLA), whether compliance with the existing permit limits is sufficient, or, alternatively, whether an individual permit application is necessary.

C. Antidegradation

1. Outstanding Waters

In accordance with Regulation 31.8(1)(a) that all outstanding waters “shall be maintained and protected at their existing quality.” In 1988, the Water Quality Control Commission adopted the “shall be maintained and protected at their existing quality” language and deleted previous “no degradation” language. These changes were made to clarify, as EPA had done through a change to the federal water quality standards rule, that activities affecting outstanding waters which result in only temporary or short-term changes in water quality may be allowed. In 2016, the commission retained the requirement for outstanding waters to be maintained and protected at their existing quality, while adding additional flexibility in Regulation 31.8(1)(a) that allows “short-term degradation of existing quality ... for activities that result in long-term or ecological or water quality benefit or clear public interest.”

Currently Regulation 31.8(1)(a) states ... “these waters, which are those designated outstanding waters pursuant to section 31.8(2)(a), shall be maintained and protected at their existing quality. Short-term degradation of existing quality is allowed for activities that result in long-term ecological or water quality benefit or clear public interest.” The division expects that compliance with the conditions of this permit will result in discharges being controlled to the extent that all receiving waters will be maintained and protected at their existing quality as required by Regulation 31.8(1)(a). A map of Colorado’s outstanding waters is available online at: <https://www.colorado.gov/pacific/cdphe/clean-water-gis-maps>.

As noted above, Regulation 31.8(1)(a) allows for short-term degradation for activities that are for ecological or water quality benefit or in the public interest. The Water Quality Control Commission’s statement of basis and purpose in Regulation 31.53(III)(B) stated regarding temporary impacts in outstanding waters, that short-term should mean “...weeks and months, not years. In some cases, projects may need to extend over multiple work seasons ... “Additionally, it directs that in “...all cases the impacts of a project over time must be considered.” The general permit requires that decision-makers that discharge to an outstanding water submit an annual report in accordance with Part I.G.6. The division continues to determine that permitted sites under this permit meet the outstanding waters requirements of being short term (“months”). The division has included clarifying language that projects to outstanding waters need to be short-term and have a long-term ecological or water quality benefit or clear public interest.

2. Reviewable & Use Protected Waters

As stated in Regulation 31.8, The Basic Standards and Methodologies for Surface Water, an antidegradation analysis is required for all discharges to waters designated “reviewable” which includes significance determination tests (Regulation 31.8(3)(c)(ii)). The division’s [antidegradation policy](#) further explains the antidegradation review process for reviewable waters. The policy states on pg. 8 that, “This antidegradation guidance document is focused on the significance tests for new or renewed Individual CDPS Permits. The significance tests for General Permits are not specifically described herein due to the nature of the classes of discharges which are addressed by General Permits.”

This permit authorizes discharges to state surface waters from the application of pesticides and includes the protection of water quality standards through the implementation of Pest Management Measures. The Antidegradation policy’s significance determination guidance is more focused on the implementation of numeric effluent limitations. The permittee must implement Pest Management



Measures that minimize the discharge of pesticides to state waters from the application of pesticides and conduct visual monitoring to assess the area for possible and observable adverse incidents caused by the pesticide application. Large entities, as defined in the permit, must prepare a pesticide discharge management plan (PDMP), which must document the evaluation of pest management options and response procedures to spills and other adverse incidents.

It is the division's expectation that compliance with the conditions of this permit will result in pesticide discharges being controlled to the extent that all receiving waters will be maintained and protected at their existing quality as required by Regulation 31.8(1)(a), including segments classified as use protected and reviewable. This means that all applicable water quality standards and antidegradation requirements will be met.

V. SUMMARY OF CHANGES

This table summarizes the various types of changes the division is proposing with more in depth discussion on larger topics below.

Change	Summary of the Changes	Part(s) Where Change Appears
New Items	Eligibility requirements for discharges to streams with threatened and endangered species or designated critical habitat.	Parts I.A.1.b.iv
	Annual reporting requirements for outstanding waters	Part I.G.6.a.iii
Changes for Clarity	Consistent use of "state waters" or "state surface waters"	Throughout
	Coverage under the permit	Parts I.A and I.I
	Clarified that if there is evidence water is no longer impaired for a particular pesticide/active ingredient, residue or degradate, then operators may submit this information and request coverage under the permit.	Part I.A.1.b.i
	Outstanding waters requirements	Part I.A.1.b.ii
	Pest management options for Animal Pest Control	Part I.B.3.c.ii
	Effect of corrective action	Part I.F.3
Other Changes	Updated formatting, typographical errors, and references	Throughout
	Removed references to tribal lands and water quality standards	Throughout
	Definitions	Part I.I
	Abbreviations and acronyms	Part I.I

A. NEW ITEMS

1. Eligibility Requirements for Discharges to Receiving Waters with Threatened and Endangered Species or Critical Habitat

The division added limitations on coverage to Part I.A.2.b.iv of the permit. Coverage under this permit is available only for discharges of pollutants and discharge-related activities that are not likely to result in any unauthorized short or long term adverse effects to species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or federally-designated critical habitat under the ESA.

A static map of receiving waters with occurrences of listed species or critical habitat is available [here](#). Additional information is available on the website of the U.S. Fish & Wildlife Service (<https://www.fws.gov/office/colorado-ecological-services-field-office/species>) and Colorado Department of Parks & Wildlife (<https://cpw.state.co.us/threatened-and-endangered-wildlife>).



2. Annual Report Requirements for Outstanding Waters

The division added a requirement to Part I.G.6.a.iii that eligible discharges to outstanding waters must be identified as a separate treatment area for each outstanding water. Therefore, the information required in Part I.G.6.a.iii.(a-i) must be completed separately for each treatment area discharging to an outstanding water.

B. CHANGES FOR CLARITY

The division included a number of relatively minor changes that focus on improving the clarity where permittees or other stakeholders have raised questions. These changes generally do not change the underlying requirement from the previous permit, but rather are to make the division's original intent clearer. It is the division's intention that these clarifications improve the overall understanding.

Changes include the following:

1. Consistent Use of "State Waters" or "State Surface Waters"

"State waters" is the term defined in statute at CRS 25-8-103(19) and Regulation 31 (5 CCR 1002-31) at 31.5(39). The division replaced use of the terms "waters of the state" and "surface waters of the state" with "state waters" and "state surface waters," respectively.

2. Coverage under the Permit

The division added clarity that an Operator is considered the permittee during the period of time that the Operator is covered under the permit. The division also included this clarity in Part I.I.(25). These words are used interchangeably throughout the permit.

3. Waters Impaired for Pesticides or Residue

Discharges from a pesticide application to state surface waters that are impaired by a substance which either is an active ingredient in that pesticide or is a degradate of such an active ingredient are not permitted under the general permit. The division modified Part I.1.a.b.i of the permit to clarify if there is evidence that demonstrates that the water is no longer impaired, an Operator may submit that information to request coverage under the general permit. Pesticide residue is defined in Part I.I.(34) of the general permit.

4. Outstanding Waters

The division modified language in the general permit increase consistency with Regulation 31.8(1)(a), which states that permit coverage for sites that discharge to outstanding waters must be short-term and have a long-term ecological or water quality benefit or clear public interest. Eligible discharges to Outstanding Water(s) must be identified as a separate treatment area for each Outstanding Water and included in the annual report along with the basis for determining that the discharge to Outstanding Water(s) are short-term and have a long-term ecological or water quality benefit or clear public interest. Additionally, to assist permittees, the division included a link to a geographic information system or GIS map of the state's outstanding water segments.

5. Pest management options for Animal Pest Control

The division added cultural methods to the list of pest management options for animal pest control under Part I.B.3.c.ii of the Permit to clarify that cultural methods can be used as a pest management option for animal pest control.

"Cultural control methods can include physical removal or make the habitat unsuitable for a pest. Cultural methods vary depending on the target pest and may involve tactics that overlap with preventative and mechanical methods. Some examples of cultural methods to manage aquatic animal pests include draining and rinsing boats prior to relocation, using underwater sounds that deter fish, drawdown of water, and managing vegetation." (2021 EPA PGP Fact Sheet, p. 70)

This clarification is consistent with the 2021 EPA Pesticide General Permit (EPA PGP).

**6. Effect of Corrective Action**

The division removed reference to enforcement actions in Part I.F.3 of the permit.

C. OTHER CHANGES**1. Formatting, Typographical Errors, and References**

The division updated the formatting for consistency with other CDPS permit, including replacing the section labeled Appendix B with Part II to align with standard permit language. As part of this formatting, the section entitled “Severability” and “Division Notifications” were moved to Parts II.Q and II.R, respectively.

The division also corrected internal references, website links, and typographical errors throughout the permit.

2. References to Tribes & Tribal Water Quality Standards

The division removed references to tribal water quality standards throughout the document to reflect that tribal lands are under tribal or federal jurisdiction, and that tribal water quality standards do not apply in this permit. Where a treatment area is controlled by a federal agency or tribe, the EPA PGP should be obtained through EPA and applicable rules for acquiring that permit shall be adhered to (e.g., submission of an Annual Report). All other applications of pesticides that discharge to surface water, including application of pesticides on privately held lands within a Reservation, and fall within one of the use patterns described in the permit are within the scope of the Colorado PGP.

3. Definitions

The division removed the definition of the following terms that are not used within the permit:

- Director
- Federal Facility
- Water Quality Impaired
- Wetlands

The division included the following definition:

- Water Quality Control Division or Division

The division modified the following definitions:

- Discharge: The division included a reference to 5 CCR 1002-61.2(22)
- Discharge of a pollutant: The division removed reference to discharges to the ocean to improve clarity for discharges in Colorado and included a reference to CRS 25-8-103(3).
- Large entity: The division modified the definition to improve specificity.
- Outstanding waters: The division modified the definition of outstanding waters to improve consistency with 5 CCR 1002-31.8.
- Person: The division modified the definition for consistency with 5 CCR 1002-61.2(73).
- Pesticide residue: The division modified the definition for consistency with EPA’s pesticide general permit.
- Point Source: The division modified the definition for consistency with 5 CCR 1002-61.2(75).
- Pollutant: The division included reference to 5 CCR 1002-61.2(76).
- State surface waters: The division modified the definition to remove reference to subsurface waters.
- State: Updated this definition to clarify that for the purposes of this permit, “state” means the State of Colorado.
- Water quality standards: The division modified the definition for consistency with 5 CCR 1002-31.5(37).

**4. Abbreviations and Acronyms**

The division removed the following abbreviations that do not appear in the permit.

- CERCLA
- IPM
- NEPA
- NOT
- SARA
- WQS

VI. COMPLIANCE WITH PROCEDURAL REQUIREMENTS**A. COMPLIANCE WITH SECTION 25-8-503.5 OF THE WATER QUALITY CONTROL ACT (COST-BENEFIT ANALYSIS)**

Section 25-8-503.5(1) of the Colorado Water Quality Control Act requires the division to do the following for general permits:

- 1) Prepare a statement of basis and purpose explaining the need for the proposed requirements;
- 2) Present evidence supporting the need for the proposed requirements, including information regarding pollutant potential and available controls, incidents of environmental damage, and permit violations;
- 3) Before implementing the proposed requirements, provide public notice of, and consider comments received from affected parties about the proposed requirements; and
- 4) Upon request by an affected party, consider and give due weight to a cost-benefit analysis:
 - a) Received by the division during the comment phase set forth in paragraph (c) of this subsection (I);
 - b) Concerning one or more proposed requirements that are not already required by federal or state statute or rule;
 - c) Prepared by a third party chosen from an approved list of analysts, as developed by the division in consultation with representatives of the industries that are subject to general permitting; and
 - d) Paid for by the affected party.

The division complied with Section 25-8-503.5(1)(a) and (b) as follows. In accordance with Section 25-8-503.5(1)(a), this final fact sheet and responses to comments together constitutes the final statement of basis and purpose explaining the need for the proposed requirements.

The division complied with Section 25-8-503.5(c) by providing public notice of the draft permit and fact sheet, establishing a public comment period, and considering and responding to the comments received during the public comment period.

The division complied with Section 25-8-503.5(d) by considering and giving due weight to any cost benefit analysis submitted to the division during the public comment period meeting the criteria established by Section 25-8-503.5(d); however, no cost benefit analyses were received during the public comment period.

B. ECONOMIC REASONABLENESS DETERMINATION AND EVALUATION

Section 25-8-503(8) of the Colorado Water Quality Control Act requires the division to "determine whether or not any or all of the water quality standard based effluent limitations are reasonably related to the economic, environmental, public health and energy impacts to the public and affected



persons, and are in furtherance of the policies set forth in sections 25-8-102 and 25-8-104." These statutory factors are referred to herein as the "economic reasonableness" factors.

Note this provision specifically applies to water quality standards-based effluent limitations, not technology based limits, monitoring requirements, benchmarks, special studies, recordkeeping requirements, control regulation requirements, antidegradation requirements or other permit terms and conditions that are not water quality standard based effluent limitations.

During classification and standards rulemakings, the Water Quality Control Commission (Commission) conducts this kind of analysis in assigning water quality standards. Specifically, Regulation 31.7(2) provides that when adopting new or revised standards for pollutants, the Commission must take the following into consideration:

- 1) The need for standards which regulate specified pollutants;
- 2) Such information as may be available to the WQCC as to the degree to which any particular type of pollutant is subject to treatment; the availability, practicality, and technical and economic feasibility of treatment techniques; the impact of treatment requirements upon water quantity; and the extent to which the discharge to be controlled is significant;
- 3) The continuous, intermittent, or seasonal nature of the pollutant to be controlled;
- 4) The existing extent of pollution or the maximum extent of pollution to be tolerated as a goal;
- 5) Whether the pollutant arises from natural sources;
- 6) Beneficial uses of water; and
- 7) Such information as may be available to the WQCC regarding the risk associated with the pollutants including its persistence, degradability, the usual or potential presence of the affected organism in any waters, the importance of the affected organisms, and the nature and extent of the effect of the pollutant on such organisms.

The Colorado Discharge Permit System Regulations, Regulation 61.11 then provides that the division may rely upon the Commission's evaluation and presume that permits written to meet the Commission's standards already take into consideration the statutory "economic reasonableness" factors. Specifically, Regulation 61.11(a) states that "Where economic, environmental, public health and energy impacts to the public and affected persons have been considered in the classifications and standards setting process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

- 1) A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or
- 2) In the case of a continuing discharge, additional information or factors have emerged that were not anticipated or considered at the time of the classification and standards rulemaking."

The division interprets the "additional information or factors" not anticipated or considered at the time of the classification and standards rulemaking discussed in Regulation 61.11(a)(ii) to refer back to the Commission's required considerations in Regulation 31.7(2).

The effluent limits in this permit are based on the Basic Standards and Methodologies for Surface Water, Regulation No. 31; Basic Standards and Methodologies for Ground Water, Regulation No. 41; Classifications and Numeric Standards for Arkansas River Basin, Regulation 32; Classifications and Numeric Standards for Upper Colorado River Basin and North Platte River (Planning Region 12), Regulation 33; Classifications and Numeric Standards for San Juan River and Dolores River Basins, Regulation 34; Classifications and Numeric Standards for Gunnison and Lower Dolores River Basins, Regulation 35; Classifications and Numeric Standards for Rio Grande Basin, Regulation 36; Classifications and Numeric Standards for Lower Colorado River Basin, Regulation 37; and Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin, Regulation 38. In those proceedings, the Commission adopted numeric standards to protect classified uses in accordance with Regulation 31.7(2), including treatability limitations or other



situations where attaining standards would not be “reasonably related to the economic, environmental, public health and energy impact to the public and affected persons.”

This is a renewal permit, meaning the exception at Regulation 61.11(a)(i) does not apply. Nor at this time does the division have evidence that additional information or factors like those described in Regulation 31.7(2) have emerged that were not anticipated or considered at the time of the classification and standards rulemaking. Therefore, based on currently available information, the division determines that the water quality standard-based effluent limitations included in this permit are reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104.

During the public comment period on the draft permit, no evidence was submitted to the division pursuant to Regulation 61.11(b) as to whether the water quality standard-based effluent limitations of this permit are reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104.

C. OPPORTUNITIES FOR ADMINISTRATIVE ADJUDICATION

1. Opportunity for Administrative Adjudication

Once the final permit is issued, the applicant or any other person affected or aggrieved by the division's final determination may request an adjudicatory hearing within 30 calendar days of the date of issuance, under 5 CCR 1002-61 (Colorado Discharge Permit System Regulations), Regulation 61.7. Any request must comply with the Water Quality Control Act, 24-4-101, C.R.S., et seq. and the Water Quality Control Commission's regulations, including Regulation 61.7 and 5 CCR 1002-21 (Procedural Rules), Regulation 21.4(B). Failure to contest any term and condition of the permit in this request for an adjudicatory hearing constitutes consent to the condition by the permittee.

2. Opportunity to Request a Stay of Terms and Conditions of Final Permit

If an applicant for a renewal permit files a request for an administrative hearing in accordance with Section 24-4-105, C.R.S., the applicant may also request that the division stay the contested terms and conditions of the renewal permit. This request must be made within 30 days of issuance of the final permit.

VII. REFERENCES

U.S. Environmental Protection Agency (2021). National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for Discharges from the Application of Pesticides. Accessible at: <https://www.epa.gov/npdes/pesticide-permitting-2021-pesticide-general-permit>.

U.S. Environmental Protection Agency (2021). National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for Discharges from the Application of Pesticides Fact Sheet. Accessible at: <https://www.epa.gov/npdes/pesticide-permitting-2021-pesticide-general-permit>

VIII. PUBLIC NOTICE COMMENTS

The public comment period was originally scheduled from February 13, 2025 through March 17, 2025. An extension of the public comment period was requested by Colorado Parks and Wildlife, extending the public comment period until April 16, 2025. During this comment period, comments were accepted by the following parties: Chris Manley (Northern Water) and Melynda May (Colorado Parks and Wildlife).

Additionally, the division made the following correction to the permit:

- Part I.A.1.b.i: Removed “consistent with Table 2 in Part I.G.6,” because it is not applicable to this part of the permit.



Verbatim Comments and the response of the division are provided below:

A. NORTHERN WATER**1. Comment 1:**

In the summary of changes it lists a new eligibility requirement where impacts to endangered species may occur. The table in the Fact Sheet lists Parts I.A.1.b.iv, I.E.1.e, & I.G.6 as the locations where these changes appear. I see the new section in I.A.1.b.iv, but the other two references don't appear to be related to endangered species or critical habitat.

I.E.1.e requires a signature from decision-makers on the PDMP, and I.G.6 includes the new reporting for outstanding water, but nothing related to endangered species.

DIVISION RESPONSE 1: The correction has been made to the Fact Sheet. The references to I.E.1.e and I.G.6 were removed from the Summary of Changes table in Section V.

B. COLORADO PARKS AND WILDLIFE**1. Comment 2:**

Colorado Parks and Wildlife (CPW) appreciates the opportunity to comment on the draft permit for applying pesticides to state waters (COG860000) and granting a 30-day extension of the comment period to provide these comments. CPW has a statutory responsibility to detect, prevent, contain, control, monitor, and, wherever possible, eradicate aquatic nuisance species (ANS) from state waters (SB08-223). CPW focuses on preventing the introduction and spread of ANS, primarily through boat inspections and decontamination. Despite CPW's prevention efforts, in late 2022, CPW's early detection monitoring program detected zebra mussels in Highline Lake.

In early 2023, CPW was formulating a rapid response plan to attempt to eradicate zebra mussels in Highline Lake. CPW planned to draw-down Highline to deadpool to dry out or freeze as many mussels as possible and then treat the deadpool with a copper-based molluscicide called Earth Tec QZ. CPW's target copper concentration for the first application was 240 ug/L, which was ten-times greater than the applicable acute copper standard but about one-quarter the maximum concentration allowed by the label (1000 ug/L copper). By definition, aquatic pesticides must exceed water quality standards to cause mortality of the target species. However, CPW was concerned this plan might violate the pesticide permit, which stated:

All Operators must control discharges as necessary to meet applicable numeric and narrative state or tribal water quality standards, for any discharges authorized under this permit, with compliance required upon beginning such discharge. If at any time an Operator becomes aware (e.g., through self-monitoring or by notification from the state or tribe), or the division determines, that the Operator's discharge causes or contributes to an excursion of any applicable water quality standard, the Operator must take corrective action as required in Part 6 and Appendix B, Section B.3, up to and including the ceasing of the discharge, if necessary.

CPW immediately reached out to WQCD for assistance in interpreting this language, and WQCD quickly responded:

In 2021, EPA reissued their Pesticide General permit which includes the following language in Appendix A of the Fact Sheet and addresses your issue directly: "For chemical pesticides, the discharges covered under this permit are the residues after the pesticide has performed its intended purpose. Thus, the residue will be no higher than, and in many instances, lower than, the concentration of the pesticide as applied."



WQCD has remained closely aligned with EPA throughout the lifetime of the PGP and as such, will include this new language at the next renewal. Thus, when interpreting the permit language in part 3 of the Colorado PGP, this condition is applied only to the residual concentration of a chemical pesticide. Proper application should leave a residual below standards, and the fact that the standard will be exceeded when the pesticide is applied to the lake is understood. Therefore, permit compliance is determined after the application and any violation would be based on effects from pesticide residuals which would be noted upon required, post-application visual monitoring for adverse effects.

With this in mind, WQCD believes that as long as the residual from the pesticide application does not exceed water quality standards, DNR will remain in compliance with Part 3 of the permit in accordance with both EPA and WQCD interpretations of the Fact Sheet language and intent of the permit. It is understood that during the time when the pesticide is being applied and in the process of acting on the targeted species that an exceedance of the standard may occur.

CPW greatly appreciated WQCD's rapid response and support of its efforts to control or eradicate zebra mussels. As a result of that support, CPW applied Earth Tec QZ to Highline in Lake in 2023 and 2024.

While CPW generally supports the revisions to the pesticide permit, CPW believes that similar language in the new permit at Part I.C., particularly with the added emphasis, could confuse permit holders and the public without additional language explaining that compliance with the permit applies to the residues. CPW recommends replacing this language with the EPA's regarding compliance with residues after the pesticide has performed its intended purpose.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS All Operators must control discharges as necessary to meet applicable numeric and narrative state water quality standards, for any discharges authorized under this permit, **with compliance required upon beginning such discharge.**

If at any time an Operator becomes aware (e.g., through self-monitoring or by notification from the state), or the division determines, that the Operator's discharge causes or contributes to an excursion of any applicable water quality standard, the Operator must take corrective action as required in Part I.F and Part II.C, up to and including the ceasing of the discharge, if necessary.

DIVISION RESPONSE 2: Part 61.8(1)(e) of Regulation 61 prohibits the issuance of a permit that will allow for pollution of the receiving water in exceedance of a water quality standard:

"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 or applicable antidegradation requirement unless the permit contains effluent limitations and a schedule of compliance specifying treatment requirements or the Division has granted a variance from the water quality standard. (61.8(1)(e))"

Part I.A.1 of the Permit specifies that the permit "is available to Operators who discharge to state surface waters from the application of (1) biological pesticides or (2) chemical pesticides that leave a residue (collectively called pesticides ..."

Part III of the Fact Sheet provides clarity that permit coverage for chemical pesticides applies only to the residue:

"If the application of a chemical pesticide is made into state waters to control a pest in such waters, once the pesticide no longer provides any pesticidal benefit, any amount of the pesticide that remains in those waters is a 'residual' and requires coverage by an NPDES permit. Additionally, the residual is discharged at the time of a pesticides initial application. Based on field studies of pesticides applied into water, the division expects



that some portion of every application of a pesticide made into state waters will leave a residual in those waters and thus assumes every application will trigger the requirement for an NPDES permit.”

Note that the draft language of Part I.C, including the bold text, has not changed from the previous permit. Additionally, the language is nearly identical to Part 3.0 of the 2021 EPA Pesticide General Permit. In the final permit, the division has removed the bold emphasis from “with compliance required upon beginning such discharge” in Part I.C. of the permit. The division disagrees that additional clarification is needed.

No other changes were made to the permit as a result of this comment.

2. Comment 3:

CPW has utilized pesticides in waters containing species covered under the ESA after consulting with the United States Fish and Wildlife Service and will likely need the ability to do so in the future. In those instances, CPW would consult with the USFWS, which may grant the take of federally listed species. CPW recommends that the language in Part 1.A.b.iv. be revised to allow for the take of listed species if authorized by the USFWS.

iv. Threatened and Endangered Species and Critical Habitat Protection

Coverage under this permit is available only for activities that are not likely to result in any short or long term adverse effects to species that are federally-listed as endangered or threatened (“listed”) under the Endangered Species Act (ESA) or habitat that is federally-designated as critical under the ESA (“critical habitat”).

DIVISION RESPONSE 3: The division has modified Part I.A.b.iv of the Permit and Section V.A.1 of this fact sheet to clarify that coverage is available only for activities that are not likely to result in any unauthorized short or long term adverse effects to species that are federally-listed as endangered or threatened (“listed”) under the Endangered Species Act (ESA) or habitat that is federally-designated as critical under the ESA (“critical habitat”).

3. Comment 4

Similarly, CPW recommends revising the language in Part I F.4.d. to say that USFWS will be notified if the take exceeds the take authorized by USFWS through a Section 7 or Section 10 consultation.

d. Adverse Incident to Endangered or Threatened Species or Critical Habitat

The U.S. Fish and Wildlife Service shall be immediately notified of any adverse incident involving a protected species and/or habitat that may have resulted from Operator’s pesticide application or associated discharge(s).

DIVISION RESPONSE 4: The division has modified Part I.F.4.d. to clarify that notification is required for any adverse incident that has not been authorized.