

## **Preliminary Effluent Limitations (PEL) For Domestic and Industrial Discharges**

The Water Quality Control Division (Division) offers a fee-based service to identify the preliminary (anticipated) effluent limitations for a discharge to state waters and this information is provided in the PEL document. This information may be used by entities to plan and design the wastewater management and treatment processes to meet these objectives.

**Domestic Discharges.** A PEL is mandatory for domestic wastewater discharges as part of the Division's Site Application process. In accordance with Site Location and Design Approval Regulations for Domestic Wastewater Treatment Works (Regulation No. 22) Section 22.4(1)(b)(iii) and Section 22.5(2)(B), PELs developed in coordination with the Division must be addressed and/or included in an application for site location approval for any proposed new or expanded domestic wastewater treatment works.

**Industrial Discharges.** A PEL is optional for industrial wastewater dischargers since the Site Application process does not apply. Permit applications for industrial dischargers can be accepted without the completion of a PEL. It is anticipated that some entities may request a PEL (or several PELs) during the planning process to aid in the selection of treatment and design to include in the application for a discharge permit.

**Process.** The information provided below is for existing and planned dischargers who want to request a PEL.

- **Cost.** The categorical fees (Table 1) are based on size of discharge. Also, there are fees for review of a PEL prepared by a third-party, discharges to more than one water body, and PEL modification. The Division will provide limited assistance to third-party preparers but does not have the resources to train these entities in PEL preparation. Work on a PEL cannot start until the fee is paid. Payment may be made at the time the application is submitted or made after the Division's invoice is received.
- **Application.** A request for a PEL is provided to the Division as a completed application. This form is provided at the end of this document and includes information needed to determine pollutants of concern, receiving water(s), and flow rates.
- **Schedule.** The Division's intent is to prepare the PEL within 45 days, beginning with receipt of a complete application and receipt of payment.
- **Content.** The content of a PEL is provided in Table 2.
- **Contact.** Division contact information is also provided in Table 2.

**Table 1****Discharge Categories and Fees for PEL Preparation**(Reference: *Colorado Revised Statutes 25-8-502*)

<b>Discharge Category and Subcategory</b>	<b>Flow in Gallons per Day</b>	<b>Fee (\$) Effective July 1, 2007</b>
<b>Category 40. PELs for Individual Permits</b>		
Subcategory 1	Less than 100,000	2,100
Subcategory 2	From 100,000 up to 999,999	4,200
Subcategory 3	From 1,000,000 up to 9,999,999	6,300
Subcategory 4	Equal to or more than 10,000,000	8,400
<b>Category 41. PELs for General Permits *</b>		
	From 0 up to 1,000,000	1,050
<b>Category 42. PELs for Discharges to Groundwater**</b>		
Subcategory 1	Minor facilities (less than 1,000,000)	525
Subcategory 2	Major facilities (at least 1,000,000)	840
<b>Category 43. Review of PELs for Individual Permits (professionally prepared by others)</b>		
Subcategory 1	Less than 1,000,000	1,575
Subcategory 2	At least 1,000,000	3,150
<b>Other fees</b>		
	PEL request includes discharges to a second or additional receiving water bodies	additional 75% of original fee
	Requested modification of Division-approved PEL	25% of original fee

\* This category includes minor facilities that discharge to: unclassified waters, class 2 (aquatic life) streams with a zero low flow; or class 2 (aquatic life) streams with a low flow greater than zero.

\*\* Certain types of groundwater discharges are not permitted by the Water Quality Division and are under the jurisdiction of the Hazardous Materials and Waste Management Division, the Division of Reclamation Mining and Safety, or the Colorado Oil and Gas Conservation Commission. After review of the PEL request, the Division will notify the requestor if the Division does not have jurisdiction to authorize the identified discharge. Also, this regulatory approach applies to groundwater discharges that are included in PEL requests for facilities with a surface water discharge.

## Table 2

### Contents of PEL

The effluent limits for a discharge are based on the more stringent of limits required by federal Effluent Limitation Guidelines (ELG), state Regulations for Effluent Limitations (Regulation No. 62), and water-quality-based-effluent-limits (WQBELs). The latter includes concurrent limits that may be required after antidegradation review.

#### General Outline

- I. Introduction
  - Receiving water description
  - General characterization of facility and industrial processes
  - Description of discharge practice and outfall location
- II. Development of Water-Quality-Based Effluent Limits
  - Receiving water classification and standards
  - Ambient receiving water quality
  - Low flow analysis
  - Determination of pollutants of concern
  - Determination of WQBELs
  - Determination of ADBACs/NILs
- III. Determination of Applicable Federal ELGs
  - Review of federal regulations and standards
- IV. Application of State Effluent Limitations
- V. Selection of Final Effluent Limits
  - Determination of applicable limits

*For additional information on PEL process*

*Website:* <http://www.cdphe.state.co.us/wq/PermitsUnit/PolicyandGuidance/PEL.PDF>

*Mail:* Colorado Department of Public Health and Environment  
Water Quality Control Division, Permits Section, P-B-2  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

*Fax:* 303-782-0390

*Phone:* Permits Section 303-692-3500



Any Additional Discharge Locations (additional fees may apply):

Receiving Stream: \_\_\_\_\_

Lat/Long: \_\_\_\_\_

Additional Discharge Flow Rates (mgd) (additional fees may apply): \_\_\_\_\_  
\_\_\_\_\_

Pollutants of Concern (check all that apply):

- |   |  |
|---|--|
| <input type="checkbox"/> BOD  | <input type="checkbox"/> CBOD                    |
| <input type="checkbox"/> <i>E. coli</i>   | <input type="checkbox"/> Total Residual Chlorine |
| <input type="checkbox"/> Temperature  | <input type="checkbox"/> Nitrate / Nitrite       |
| <input type="checkbox"/> Cyanide  | <input type="checkbox"/> Metals (all inclusive)  |
| <input type="checkbox"/> Ammonia (if upgrade to facility, include most recent CAM/AMMTOX results) |  |
| <input type="checkbox"/> Radionuclides (ex. radium, list specific radionuclides below)            |  |
| <input type="checkbox"/> Organics (list specific organics below)                                  |  |

List Radionuclides (or note all inclusive)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List Organics (or note all inclusive)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

List any other Pollutants of Concern or Additional Information:

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