



COLORADO

Division of Water Resources

Department of Natural Resources

Board of Examiners of Water Well Construction
and Pump Installation Contractors

February 3, 2020

Policy 2020-3

SHORT-TERM DISCHARGES TO GROUNDWATER FROM WATER WELL ACTIVITIES

Definitions

- 1) **Hazardous Materials and Waste Management Division (HMWMD):** The Hazardous Materials and Waste Management Division within the Colorado Department of Public Health and Environment (CDPHE).
- 2) **Water Quality Control Division (WQCD):** The Water Quality Control Division within the CDPHE.
- 3) **Potentially Contaminated Discharge** is any of the following:
 - Groundwater pumped from a formation identified by a state or federal agency as non-compliant with water quality standards.
 - The Division of Water Resources does not have complete information about the locations of such non-compliant groundwater in Colorado. A list of non-compliant groundwater location data sources, provided by state and federal agencies, is contained in a separate document titled, “[Guidance on Non-Compliant Groundwater Locations](#)” with instructions on how to access the information.
 - or
 - Fluid mixed with additives that are not included on the Board of Examiners (BOE) lists of “[Approved Drilling Fluid Additives](#)” and “[Approved Well Development and Rehabilitation Chemicals](#)” (Approved Lists). The BOE will include on these lists only chemicals certified as meeting the *NSF/ANSI/CAN Standard 60: Drinking Water Treatment Chemicals - Health Effects*, or those that have received separate written approval from the WQCD to be included on these lists.
 - or
 - Fluid mixed with additives on the Approved Lists in concentrations or otherwise handled contrary to the guidance in the NSF/ANSI/CAN Standard 60.
 - or
 - Any discharge from well cleaning and rehabilitation operations with the use of additives to dissolve scale, even if such additives are on the Approved Lists. Such operations can result in high concentrations of dissolved elements and compounds in discharge water.



Objective

Establish under what conditions short-term discharges to groundwater are authorized to occur by land application of fluid from water wells during water well construction, development, testing, disinfection, and rehabilitation.¹ This policy does not apply to discharges to surface water.

Background

Senate Bill 1989-181 was enacted to recognize the relationship between agencies that regulate and administer water quality in Colorado and to require that State agencies with water quality responsibilities avoid duplicative and inconsistent regulations. The State Engineer is classified as an “implementing agency” in section 25-8-202(7), C.R.S. In recognizing the State Engineer, which includes the BOE, as an implementing agency, the WQCD may not require permits for or otherwise regulate activities that are subject to the jurisdiction of the implementing agency unless certain conditions are met, including a public hearing. No such hearing has occurred for activities under the jurisdiction of the State Engineer.

The State Engineer has authority to issue water well construction and use permits and the BOE has authority to regulate the safe construction of water wells. The State Engineer’s Senate Bill 1989-181 Rules describe the State Engineer’s well permitting and the BOE’s well construction requirements as activities where the State Engineer has water quality authority under a statute other than the Water Quality Control Act, citing the following statutes and rules: 37-90-137(2), 37-91-101, 37-91-104(1), and 37-91-110, C.R.S, and the Water Well Construction Rules (2 CCR 402-7).

This policy was developed with the concurrence of CDPHE staff. BOE staff will continue to meet with CDPHE staff pursuant to Senate Bill 1989-181 and will propose policy modifications to the BOE in the future as necessary.

Policy

Contractors must investigate mapping and data sources listed in the [Guidance on Non-Compliant Groundwater Locations](#). Please note this guidance is not comprehensive and licensed contractors must reasonably investigate whether groundwater might be contaminated as required by Rule 10.1.2, even if potential contamination is not shown on the provided maps. Licensed contractors are solely responsible for determining when fluid contains Potentially Contaminated Discharge.

For fluids containing Potentially Contaminated Discharge, licensed contractors must determine proper means of disposal, consistent with the Water Well Construction Rules (Rule 6.8). Contractors seeking to dispose of Potentially Contaminated Discharge to land must obtain written permission from HMWMD or another appropriate division of CDPHE.

¹ This policy does not cover discharges to groundwater via land application from general construction dewatering, groundwater remediation, and structure and foundation dewatering, which are regulated activities by WQCD as part of their Dewatering General Permit Program.

Discharges of fluid to groundwater via land application that occur during water well construction, development, testing, disinfection, and rehabilitation are authorized when all of the following provisions are adhered to:

- The discharge of fluid does not contain Potentially Contaminated Discharge.
and
- The discharge is to groundwater only by land-application and does not have the potential to reach water conveyance systems or surface waters. Conveyance systems include curbs and gutters, streets, storm sewers, open channels, or ditches.
and
- The discharge of fluid must be controlled to prevent erosion of the land surface such that there is no present or subsequent potential for pollution of surface water. Signs of visible erosion that have the potential to cause pollution without downstream control measures implemented include the formation of rills or gullies on the land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing flow velocity (such as hose attachments and erosion controls) may be necessary to prevent erosion.
and
- No contaminants are added to the water through intervening processes prior to discharge.

Nothing in this Policy affects licensed contractors' requirements pursuant to Water Well Construction Rules 6.9.2, 10.1.2, and 10.2, which each include contractor requirements related to contaminated water.

Approval

This policy may only be modified or revoked in writing by the Board of Examiners of Water Well Construction and Pump Installation Contractors.

Approved 2-3-2020



Keith Branstetter, Chairperson
Board of Examiners of Water Well Construction
and Pump Installation Contractors