

# STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department  
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and Environment

## **LOW RISK DISCHARGE GUIDANCE:**

### **DISCHARGES FROM POTABLE WATER MONITORING DEVICES**

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This discharge guidance has been developed in accordance with WQP-27, Low Risk Discharges. Discharges from potable water monitoring devices associated with monitoring public water systems that treat and distribute potable water are typically directed to sanitary sewer or other permitted wastewater facilities. In some cases, sanitary sewer or other permitted wastewater facilities are not available to receive discharges from potable water monitoring devices. These situations have been identified in public water system design reviews and sanitary surveys (drinking water system inspections) conducted by the Division. This guidance address discharges from potable water monitoring devices, and the water discharge in most cases is not actually potable water. Discharges of potable water are covered by a separate Low Risk Discharge Guidance for Potable Water. In many cases, discharges from potable water monitoring devices will not meet the provisions of that separate Low Risk Discharge Guidance for Potable Water because of the addition of testing reagent or because the water has not yet been disinfected at that stage of the process and therefore is not yet “potable water.”

When the provisions of this guidance are met, the Division will not actively pursue permitting or enforcement for the discharge of water from potable water monitoring devices, unless on a case-by-case basis the Division finds that a discharge has resulted in an adverse impact to the quality of any state waters receiving the discharge.

Potable water monitoring devices have a relatively small (e.g., 300 ml/min) continuous flow of water intended for potable use. The two most common potable water monitoring devices are chlorine analyzers and turbidimeters. Chlorine analyzers direct filtered or potable water through the monitoring device. Turbidimeters direct filtered water intended for potable use that has not yet been disinfected through the monitoring device. Discharges of water intended for potable use from potable water monitoring devices are a type of industrial activity with short term infrequent discharges that with proper management are not expected to contain pollutants in concentrations that are toxic or in concentrations that would cause or contribute to a violation of a water quality standard. The typical pollutant of concern in waters discharged from chlorine analyzers is total residual chlorine and small concentrations of a testing reagent that has reacted with the disinfectant and is used for periodic automatic analysis at concentrations with no potential to exceed water quality standards at the concentrations used in the analysis. Water discharged from turbidimeters typically has minimal

chlorine and does not typically have added testing reagents. Depending on how a discharge from potable water monitoring devices occurs, total suspended solids and oil and grease may become pollutants of concern. These pollutants can be handled using dechlorination techniques, filters, oil booms, and other best management practices (BMPs).

There are a large number of discharges from potable water monitoring devices. These discharges have typically occurred without permit coverage. These types of discharges may occur at all times of the year, and require a resource intensive effort to permit, without resulting in a clear general benefit to environmental quality.

The following conditions must be followed by anyone discharging water from potable water monitoring devices:

- Discharges from potable water monitoring devices should be managed in accordance with one of the following practices wherever practicable before considering the low-risk discharge alternative.
  - Discharge from the potable water monitoring device should be directed to a permitted wastewater management system (e.g., sanitary sewer, impoundment, permitted surface water discharge, underground discharge authorized under EPA Underground Injection Control program) if available at the facility and practical given the location of the monitoring equipment.
  - Discharge from turbidimeters should be directed to and managed with filter backwash water in systems with filter backwash where the location of the monitoring equipment is relatively close to the backwash waste stream.
- The discharge of cleaning materials or chemicals associated with potable water monitoring devices, including dyes other than the small concentration of testing reagent, is not allowable in accordance with this low risk guidance. Such discharges should be sent to the sanitary sewer, with permission of the local wastewater treatment facility, discharged in accordance with a CDPS permit, or otherwise collected and disposed.
- The water from the potable water monitoring device shall not be used in any additional process. Processes include, but are not limited to, any type of washing, heat exchange, manufacturing, and hydrostatic testing of pipelines.
- The discharge shall be from the potable water monitoring device that is being operated to monitor water directed to potable water distribution.
- The method of discharge shall not result in erosion of a land surface prior to discharge
- The discharge shall not contain solid materials in concentrations that can settle to form bottom deposits detrimental to the beneficial uses of the state waters or form floating debris, scum, or other surface materials sufficient to harm existing beneficial uses.
- All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, ditch owners, and other local agencies regarding any discharges to storm drain systems, conveyances, ditches or other water courses under their jurisdiction.

- The guidance included in this document in no way reduces the existing authority of the owner of a storm sewer, ditch owner, or other local agency, from prohibiting or placing additional conditions on the discharge.
- If the discharge is directly to a State surface water (any stream, creek, gully, whether dry or flowing), it must not contain any residual chlorine. The operator is responsible for determining what is necessary for removing chlorine from the discharge. If the discharge is to a ditch, chlorine content may be limited by the owner of the ditch. However, if the ditch returns flow to classified state waters, it must not contain any residual chlorine at the point where it discharges to the classified state water.

BMPs should be implemented as necessary to meet the conditions above, by anyone discharging water from potable water monitoring devices. These BMPs have been developed by the Division to help ensure that the discharge will not negatively affect water quality.

- For discharge to the ground, the water should not cause any toxicity to vegetation. When discharging, direct water so that it soaks into the ground as much as possible.
- Removal of any residual chlorine must be done for any direct discharge to state surface waters, or for any discharge to a storm sewer or conveyance where the chlorine will not dissipate prior to reaching a state surface water. Dechlorination, if necessary, may be achieved by allowing water to stand uncovered until no chlorine is detected, or by dechlorination using a portable dechlorinator or activated carbon column.