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## Low Risk Discharge Guidance

### Discharges from Pools, Fountains and Other Similar Type Facilities that are *Fed by Natural Hot Springs*

January 2015

This discharge guidance has been developed in accordance with Water Quality Policy-27, Low Risk Discharges. **This guidance is only applicable to discharges meeting the low risk discharge criteria identified below.**

The division has not developed a general permit for this category of dischargers, and is instead managing the discharge through the development of guidance. When the criteria and provisions of this guidance are met, the division will not actively pursue permitting or enforcement for discharges from swimming pools, hot tubs, decorative fountains, and other similar type facilities that are fed by natural hot springs, 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.

Discharges from flow-through pools/spas fed by natural hot springs that meet the criteria outlined in this guidance 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. A large number of these types of discharges occur state-wide every year, which requires a resource-intensive effort to permit, without resulting in a clear general benefit to environmental quality in the vast majority of situations.

The implementation of this guidance document does not constitute a water right. Questions regarding water rights should be directed to the State Engineers office at: (303)866-3581.

The criteria provided in this guidance must be met, and all of these conditions must be followed, by anyone claiming to discharge under this low risk guidance.

#### ➤ Definitions

- ❖ **Control measures:** “Control measures” are any best management practice or other method used to prevent or reduce the discharge of pollutants to waters of the state. Control measures include, but are not limited to best management practices.
- ❖ **HS Facilities:** In this document, “HS Facilities” is limited to flow-through recreational swimming and bathing pools, hot tubs, decorative fountains, and other similar type recreational or decorative facilities fed by natural hot springs.
- ❖ **Natural hot springs:** Natural hot springs are waters that are expected to surface in the vicinity of the HS Facility under natural conditions, regardless of the presence of the HS Facility or the activities conducted by the facility. A discharge will be considered to be “in



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the vicinity” of the natural outflow if it is to the same stream that would have received the hot spring flow under natural conditions and in the same general area that would have been affected by the natural flow of the hot springs. Note that waters that are abstracted (pumped or drawn) from wells (as defined below) are not surfacing under natural conditions and do not meet the definition of natural hot springs.

- ❖ **Potable water:** Water suitable for human consumption in accordance with Colorado Primary Drinking Water Regulations (5 CCR 1002-11), or water intended for human consumption from a public or private supply system not subject to 5 CCR 1002-11.2.
- ❖ **Wastewater:** In this document, “wastewater” refers to any water discharged by a HS Facility where pollutants are being introduced or added through the facility’s operations.
- ❖ **Wells:** In this document, the definition of “well” is based on the definition provided in the Code of Colorado Regulations, Article 91. Water Well construction and Pump Installation Contractors (CRS 37-91-102, Part 16(a); Part 16(b)(I), and Part 16 (b)(II)). As described therein, “well” means any test hole or other excavation that is drilled, cored, bored, washed, fractured, driven, dug, jetted, or otherwise constructed for the purpose of location, monitoring, dewatering, observation, diversion, artificial recharge, or acquisition of ground water for beneficial use or for conducting pumping equipment or aquifer tests. “Well” does not include a naturally flowing spring or springs where the natural spring discharge is captured or concentrated by installation of a near-surface structure or device less than ten (10) feet in depth located at or within fifty (50) feet of the spring or springs’ natural discharge point and the water is conveyed directly by gravity flow or into a separate sump or storage, where the owner obtains a water right for such structure or device as a spring.

## ➤ Low Risk Discharge Criteria

This guidance is applicable to point source discharges that meet the following criteria:

- ❖ **Description of the Water Discharged.** The discharge must consist of one or a combination of the following:
  - **Normal HS Facility operation wastewater:** Wastewater generated from operation of a HS Facility.
  - **HS Facility draining wastewater:** The division anticipates that HS Facility draining wastewater has similar characteristics to normal HS Facility operation wastewater. In this case, the discharge is generated by the partial or complete draining of a HS Facility that contains water from the continuous flow of natural hot springs source water.
  - **Diverted source water.** Wastewater generated by physically diverting (e.g., through a constructed water diversion or conveyance) natural hot springs source water around a



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HS Facility for either commingled or direct discharge to the receiving stream. Diverted source water cannot receive direct chemical addition.

- **Potable water fed pool/spa wastewater.** Wastewater from pools/spas and other similar type facilities where the discharge meets the requirements of the *Low Risk Discharge Guidance: Discharges from Pools, Fountains and Other Similar Type Facilities that are Fed Solely by Potable Water* prior to commingling with one or more of the discharges listed above.
- ❖ **Source Water.** The source waters for the discharges listed above in the “Description of the Water Discharged” section are natural hot springs or potable water.
- ❖ **No Filter Backwash to Surface Waters:** The discharge of filter backwash water to surface water is not allowed under this guidance. Wastewater discharges associated with filter backwash may be land-applied in a manner that prevents runoff to surface water, sent to the sanitary sewer with permission of the local wastewater treatment facility, or otherwise collected and legally disposed of.
- ❖ **For Flow-through HS Facilities, No Direct Addition of Chemical Disinfectants:** For flow-through hot springs facilities that cannot be contained prior to discharge to allow the dissipation of disinfection chemicals (including but not limited to chlorine, bromine, and algaecides), such chemicals may not be added to the source water or pool water. Note that the *direct addition of chemical disinfectants* is allowed where the pool water can be contained prior to discharge and the control measures provided below are implemented as applicable. Note also that the use of *cleaning chemicals* is allowed only where the water can be contained and control measures provided below are implemented as applicable.
- ❖ **Description of the Discharge:** The discharge may be to surface water and/or to land. Discharges solely to ground water are not covered under this low risk discharge guidance if such discharge is to an impoundment subject to regulation under Section 9 of the Colorado Solid Waste regulations (6 CCR 1007-2) or is to an underground injection well subject to regulation by the EPA through underground injection control program.

## ➤ Requirements

The following items must be followed by anyone discharging wastewater in accordance with this guidance:

- ❖ During cleaning operations, the discharge of cleaning materials or chemicals is strictly prohibited, with the exception of residual chlorine and bromine that is below detection levels. Wastewater from cleaning operations must be contained as necessary to meet this requirement. Discharges associated with cleaning operations that cannot meet this requirement must be sent to the sanitary sewer, with permission of the local wastewater treatment facility, or otherwise collected and legally disposed of.



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- ❖ All discharges must comply with the lawful requirements of federal agencies, municipalities, counties, drainage districts, and other local agencies regarding any discharges to storm drain systems, conveyances, or other water courses under their jurisdiction. In addition, if the discharge is to a storm sewer, prior to discharge the owner/operator must notify the owner of the conveyance system of the date, approximate time, location, and duration of the discharge(s). The guidance included in this document in no way reduces the existing authority of the owner of a storm sewer, or other local agency, from prohibiting or placing additional conditions on the discharge.
- ❖ The discharge shall not result in flooding of neighboring property, streets, gutters or storm sewers. The discharge must be diverted from building foundations or other areas that may be damaged from ground settling or swelling.
- ❖ The discharge must be visibly clear and not contain floating or solid materials.
- ❖ A visible sheen must not be evident in the discharge.
- ❖ The discharge must not contain residual chlorine or bromine above detection levels.

## ➤ Implementation of Control Measures

Control measures should be implemented as necessary to meet the conditions above, by anyone discharging swimming pool wastewater or other similar type water. The following control measures have been developed by the division to help ensure that the discharge will not negatively affect water quality.

- ❖ **Control Measures Associated with Chemical Disinfection:**  
The direct addition of chemical disinfectants is allowed only where the pool water can be contained prior to discharge and the control measure provided below can be implemented as applicable:
  - Remove any solid chlorine or bromine tablets or pucks from the filtration system and disconnect automatic disinfecting devices well in advance of draining a pool, hot tub or other similar facility. Allow water to stand uncovered until no chlorine or bromine residual is detected, and any heated pool water cools to ambient temperatures.
- ❖ **Control Measures associated with Additional Facility-Operations**
  - Standing water or accumulated rain and/or pool water from the previous season or other pool water with settled solids, should be pumped from the top so as not to disturb settled solids. Solids on the pool bottom should not be discharged. After the water has been pumped, solids should be cleaned out manually and disposed of properly.



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- A filter bag or similar filtration device should be used to remove suspended solids, hair or other debris. This device should be used and maintained in accordance with the manufacturers specifications.
  - An absorbent oil pad, boom or similar device should be used to eliminate any oil from the discharge water.
- ❖ **Control Measures associated with Cleaning Operations:**  
Wastewater associated with cleaning operations, including facility water that comes into contact with residual chemicals from cleaning operations, must be contained prior to discharge and the control measures provided below should implemented as applicable:
- Cleaning operations at HS Facilities may include, but are not limited to, acid cleaning, pressure washing, resurfacing, grouting, and painting. Cleaning operations have the potential to contribute residual chemicals to wastewater, including muriatic acid, chlorine, or particulate matter. Control measures must be implemented to prevent the discharge of chemicals, cleaning residuals, and/or cleaning materials in cleaning wastewaters. The use of cleaning chemicals is allowed only where the control measures provided below can be implemented as applicable:
    - Contain and allow cleaning wastewater to stand uncovered until no chlorine or bromine residual is detected prior to discharge.
    - Contain and prevent the discharge of wastewater with cleaning chemicals other than chlorine and bromine.
    - Use a filter bag or similar filtration device to remove suspended solids, hair or other debris. The discharge of cleaning wastewater must be visibly clear and not contain floating or solid materials.
    - Use an absorbent oil pad, boom or similar device to eliminate any oil from the discharge of cleaning wastewater. A visible sheen must not be evident in the discharge.
- ❖ **Additional Control Measures:** The following control measures associated with daily operations should be implemented to meet the requirements above. It is highly recommended that the control measures be documented in a pollution control plan or incorporated in existing operational documents:
- Pollutant control practices may include, but are not limited to, scheduling of activities, prohibitions of practices, maintenance procedures (such as use of filter bags, inlet protection, and/or wet vacuums to capture, collect and dispose of particulates), handling and disposal practices, and other management practices necessary to prevent the discharge of chemicals to the receiving stream.



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- All discharges and associated runoff should be routed to avoid causing erosion.
- If the discharge is to a sanitary sewer, contact the local wastewater treatment facility or owner of the storm sewer prior to discharge. This must be done to ensure that the facility is able to accept the discharge. Not all facilities are able to accept such discharges. Note that additional restrictions or local guidelines may apply.
- If the discharge is to a storm sewer, notify the owner of the conveyance system of the date, approximate time, location, and duration of the discharge(s) prior to discharge. This guidance in no way reduces the existing authority of the owner of a storm sewer, or other local agency, from prohibiting or placing additional conditions on the discharge.
- All pool and related facility maintenance and cleaning chemicals should be stored in a secure area where spills are contained and cannot enter the drainage or the sanitary sewer system. Old cleaning, maintenance and treatment chemicals may require special disposal. Follow the manufacturer's directions for disposal of these products. For further disposal information, contact the Colorado Department of Public Health and Environment's Hazardous Materials and Waste Management Division at 303-692-3320.