

AN OVERVIEW OF THE MONTANA GROUNDWATER POLLUTION CONTROL SYSTEM

WHAT IS MGWPCS?

The Montana Ground Water Pollution Control System (MGWPCS) is a program administered by the Department of Environmental Quality (DEQ) to issue groundwater discharge permits to owners of potential sources of pollutants to state groundwaters. Typical permitted facilities include large residential wastewater treatment systems, metal ore mills, lumber mills, wood product manufacturers, breweries, and community water treatment plants.

IS A MGWPCS THE SAME AS AN INJECTION WELL?

While a facility utilizing one or more injection wells may be subject to MGWPCS permitting requirements, a permit is not required for all uses. The term “injection well” refers to a method to transport materials below ground and is not specific to a particular industry or use. The materials being transported (injected), the type of the facility, and the location all determine whether a MGWPCS permit would be required. Several types of facilities that commonly utilize injection wells are exempt from MGWPCS requirements under MCA 75-5-401, including those involved in oil and gas operations. In addition, the US Environmental Protection Agency (EPA) has jurisdiction over and regulates many types of injection wells in Montana.

DOES MY FACILITY NEED A MGWPCS PERMIT?

The Montana Water Quality Act (MCA 75-5-605) requires a valid permit to discharge sewage, industrial wastes, or other wastes into state waters, including groundwater. A valid permit is also required to construct, modify, or operate a system that discharges wastes to state waters. In general, unless the facility meets one or more of the exclusions from permit requirement outlined in MCA 75-5-401, or ARM 17.30.1022, a permit will likely be required.

However, MGWPCS permits are not applicable to discharges within the boundaries of federally recognized Indian lands and may not be applicable for sources located near state surface waters. Contact the department if either of these situations is applicable to the facility.

WHAT IF MY FACILITY DISCHARGES LESS THAN 5000 GALLONS/DAY?

An important change to the criteria used to determine whether certain types of systems require a MGWPCS permit became effective in February 2024. Previously, centralized wastewater systems discharging less than 5000 gallons per day of residential strength wastewater were not required to obtain a MGWPCS permit. Under the new rules, both individual and phased facilities that discharge one pound or more of nitrogen per day are required to obtain a MGWPCS permit, regardless of how many gallons per day of wastewater are discharged. This change was made to provide a more focused approach to controlling pollutants discharged to groundwater and better accounts for the more advanced wastewater treatment technologies in use at many facilities. In general, facilities discharging industrial wastes will require MGWPCS permit coverage, regardless of the amount being discharged.

IS ALL GROUNDWATER THE SAME AS FAR AS PERMITTING IS CONCERNED?

There are four different classes of groundwater in Montana determined by the natural level of specific conductance in the receiving aquifer (ARM 17.30.1006). Each class has a set of beneficial uses associated with it, partially dictating what water quality standards are applicable. For example, many groundwaters in Montana are considered Class I and suitable for drinking water, which has the most protections and includes standards to protect human health.

Water quality standards establish the maximum allowable changes to groundwater quality that will protect the beneficial uses associated with a given class of groundwater (ARM 17.30.1005). As an example, human health standards for toxic parameters like nitrate are set to the Maximum Concentration Level (MCL) – the maximum amount of a given pollutant allowable in drinking water (DEQ circular 7). Class III and IV waters may exceed the nitrate ground water standard under special conditions because drinking water is not a beneficial use of those aquifers.

In addition, facilities considered either new or increased sources under the Montana nondegradation policy (75-5-303 MCA) are subject to additional criteria for determining the maximum allowed changes to groundwater quality, which may be more stringent than limits found in either the MCLs or Circular 7.

WHAT DOES THE MGWPCS PERMITTING PROCESS INVOLVE?

Given the robust nature and scope of each MGWPCS permit, the process to obtain a permit involves several steps. Broadly, these steps can be separated into: preapplication discussions and information gathering, application review, permit development, public notice, and final issuance. There are many components to each of these individual steps, helping to ensure the result is a scientifically and legally defensible permit package. Due to the complexity and highly individualized nature of each new permit, expect the entire process to take more than a year to complete.

Often one of the most time-consuming steps is the preapplication phase. Before an application may be submitted and deemed complete, information about the site and proposed facility must be collected to help ensure that the permit can be written to ensure compliance with applicable laws and regulations. Some of the required information will include:

- At least three calendar quarters of ambient water quality monitoring from the receiving groundwater.
- A characterization of the hydrological conditions at the site (flow direction, hydraulic conductivity, gradient, etc.).
- Information about the proposed facility and the proposed type, volume, and concentration of pollutants to be discharged.

Because of the amount of information required, we strongly recommend applicants begin the application process early by contacting the department to schedule a formal preapplication meeting once they have formulated a solid project proposal. Preapplication meetings are especially important to identify if additional materials or information may be needed due to unique challenges of the site or proposed facility.

Once the application and supporting documentation has been submitted, it will be reviewed to ensure there is sufficient information for a permit to be developed. The applicant will be notified in writing whether additional information is required or whether the permit application is complete and ready for development.

After the draft permit has been written, it will go through several steps of internal review before being published for public comment. After the public comment period closes, the department will need to respond in writing to any comments received. Depending on the nature of any comments received, it may be necessary to revise the requirements or limitations within a draft permit. In these cases, the applicant will be notified that adjustments need to be made to the draft permit before final issuance.

What are the components of a MGWPCS permit?

Once a project has gone through the MGWPCS process, and a final permit is issued, it will include several important elements. Some of the individual parts of the permit include:

- Permit cover page – contains information on the facility & permittee, and the actual authorization to discharge.
- A description of the discharging facility.
- A list of the discharge limits, and the monitoring & compliance requirements.
- Special conditions that apply to the facility in addition to standard permit requirements.

There are several supporting documents that accompany a permit package. One of these is the Fact Sheet, which is the detailed technical rationale that serves as the basis for permitting decisions. The Fact Sheet contains information about the geology and hydrology of the site, the proposed facility, applicable water quality standards, and other information used to develop the conditions and limits described in the permit.

Another document that accompanies a permit is an Environmental Assessment (EA). Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The purpose of an EA is to examine the proposed permitting action and alternatives to the proposed action and disclose potential impacts that may result. DEQ will determine whether additional environmental review is required based on consideration of the criteria set forth in ARM 17.4.608.

HOW LONG WILL IT TAKE TO GET A MGWPCS PERMIT?

Because every project is different, there is no fixed timeline for how long the entire process to obtain a permit will take. However, the more thorough and complete an application is, the easier it typically is for staff to review and move the project through the permitting process. As noted above, once an applicant has developed a solid project proposal, we strongly recommend arranging a preapplication meeting with the department to see if additional information may be necessary as part of the application package.