

2023 Subdivision Training

Montana Ground Water Pollution Control System

November 16, 2023



Agenda

Authority

- Statute
- Rule

What systems require a permit?

- Domestic vs. industrial
- Domestic threshold

What if a permit isn't required?

- US EPA R8 Class V UIC

Application requirements: what to expect

How to characterize receiving water

- Hydrogeology: GW flow direction, gradient, transmissivity
- Receiving water quality

Questions

Authorities

Statute: 75-5-401 MCA

- DEQ authority to create GW permitting program
- Identifies activities not subject to permit requirements

Regulations: ARM 17.30.10

- Rules governing MGWPCS program
- Application requirements, review timelines, public notice process, exclusions from permit requirements*

Related Rules

Fees: ARM 17.30.2

- Application fees, annual fees, renewal fees, nondeg fees
- Fee schedule determined by domestic vs. industrial wastewater
- Scaled by discharge volume

Mixing Zones: ARM 17.30.5

- Standard, source-specific, department-modified
- Applicant must request a MZ

Nondegradation: ARM 17.30.7

- ARM 17.30.715: criteria for determining nonsignificant changes*

Type of wastewater

~~Domestic strength~~

- This is not relevant for MGWPCS permits

Domestic wastewater

- Bathrooms, kitchens, and laundry

Industrial wastewater

- “resulting from a process of business or industry”

Domestic



Industrial



Permitting thresholds

No threshold for industrial wastewater

- Any discharge of industrial wastewater, no matter the size, is subject to MGWPCS permit requirements

Domestic wastewater (current)

- Systems <5,000 gallons per day

Domestic wastewater (proposed)

- Systems discharging <1 pound per day total nitrogen

Current rulemaking

Proposed changes to ARM 17.30.10

- Revise the permit exclusion threshold from 5K gpd to 1 lb/day TN
- Clarify that the exclusion is cumulative to the whole development
- Update and modernize public notice procedures
- Administrative cleanup

Public comment is open now on DEQ site

- Comment period closes tomorrow, November 17

What if it's still not clear?

Contact DEQ Water Protection Bureau

- DEQ staff will determine whether a permit is necessary
- Is it a discharge of pollutants to state groundwater?

May refer to US EPA R8

- EPA Region 8 maintains a Class V UIC inventory

US EPA R8 Class V UIC

[Environmental Topics](#) [Laws & Regulations](#) [Report a Violation](#) [About EPA](#)

Underground Injection Control (UIC)

[CONTACT US](#)

[Underground Injection Control Home](#)[Class I Industrial and Municipal Waste Disposal Wells](#)[Class II Oil and Gas Related Injection Wells](#)[Class III Injection Wells for Solution Mining](#)[Class IV Shallow Hazardous and Radioactive Injection Wells](#)[Class V Wells for Injection of Non-Hazardous Fluids into or Above Underground Sources of Drinking Water](#)[Class VI Wells Used for Geologic Sequestration of CO2](#)

Class V Inventory Form (for EPA Region 8 only)

The inventory form is designed to collect basic information for all systems/wells to determine which are used for underground disposal of waste fluids.

- If your business has more than one location within our primacy enforcement authority, please complete this form for each facility.
- If this is your residence, and your commercial facility is located elsewhere, provide the information for your commercial facility. However, if you work out of your home, please complete and submit this form.
- If you lease or rent the space for your business, as the operator of the business, you are responsible for submitting the inventory information form.

If you have any questions regarding this form, please contact:

Omar Sierra-Lopez (303) 312-7045

please complete and submit this form to: sierra-lopez.omar@epa.gov

- [Well Inventory Form \(for EPA Region 8 only\) \(pdf\)](#) (154.24 KB)

US EPA R8 Class V UIC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY SHALLOW WASTE DISPOSAL SYSTEM/WELL INVENTORY REQUEST FORM - (Form adapted from OMB No. 2040-0042)

Shallow waste disposal systems/wells release waste fluids into or above shallow ground water and include: commercial septic systems, sumps, drain fields, French drains, cesspools, abandoned drinking water wells, dry wells and infiltration galleries. EPA's Underground Injection Control (UIC) regulations require inventory information for all disposal systems/wells and additional information for certain types of systems/wells.

This form is designed to collect basic information for all systems/wells to determine which are used for underground disposal of waste fluids.

- If your business has more than one location within our primary enforcement authority, please submit an Inventory Request Form for each facility.
- If this is your residence, and your commercial facility is located elsewhere, provide the information for your commercial facility. However, if you work out of your home, please complete and submit this form.
- If you lease or rent the space for your business, as the operator of the business, you are responsible for submitting the inventory information for this facility.

I. IDENTIFICATION OF DISCHARGE/DISPOSAL SYSTEM/WELL

Please circle YES or NO to all items that pertain to the way your business or facility disposes of waste fluids. Waste fluids include wash water, storm water, sanitary waste and spills. If you need assistance completing this form, call Omar Sierra-Lopez at 800-227-8917, extension 312-7045 or 303-312-7045.

- | | | |
|--|-----|----|
| 1. - Is your facility connected to a public sewer system? | YES | NO |
| 2. - Excluding kitchen and bathroom waste, does your facility dispose of any fluids through a connection to septic system with a drain field, including floor drains and utility sinks? | YES | NO |
| 3. - A self-contained holding tank is one that has no overflow line. Are waste fluids from your facility discharged into a self-contained holding tank which is pumped periodically? | YES | NO |
| 4. - Are there any floor drains or sinks in a processing or shop area, engine service or maintenance bay, or vehicle/equipment washing area? | YES | NO |
| 4a. If yes to question 4, do the floor drains or sinks ever receive fluids? | YES | NO |
| 4b. If yes to question 4, are the floor drains or sinks connected to a septic system, drain field, French drain, abandoned drinking water well, dry well, or tank with an overflow line? | YES | NO |
| 5. - Is your facility run as a dry shop (no running water, no sewer, or no septic connection)? | YES | NO |
| 6. - Are waste fluids from your facility discharged to a lagoon or pond? | YES | NO |
| 7. - Are waste fluids from your facility discharged to surface waters, lakes, rivers, streams or wetlands? | YES | NO |
| 8. - Are waste fluids from your facility stored and recycled or hauled away? This includes wash water, oil, fuel, solvents, antifreeze, etc. Please list: _____ | YES | NO |
| 9. Does your disposal/septic system have the physical capacity to treat sanitary waste fluids generated by more than 20 people per day? | YES | NO |
| 9a. What is the designed flow rate of your disposal/septic system? _____ | | |
| 10. Are there any cesspools within the property boundary (typically a concrete cylinder with an open bottom and/or perforated sides)? | YES | NO |
| 10a. If yes, what is the designed flow rate or size of the cesspool? _____ | | |
| 11. Are there any drainage systems (such as dry wells, French drains) within the property boundary that collect storm water or surface runoff and discharge it underground? | YES | NO |
| 12. If you are a veterinary facility, do you use direct x-ray equipment? | YES | NO |

SEE OTHER SIDE

II. BASIC INVENTORY INFORMATION

Inventory all disposal systems (such as septic tanks, dry wells, French drains) separately. You may copy this form and use a copy for each system. If more space is needed, attach a separate sheet.

Disposal System # _____	Operating Status: AC =Active, AN =Abandoned, UC =Under Construction, TA =Temporarily Abandoned
Disposal System # _____	Please attach a diagram of the system and include the construction design. Latitude and Longitude of Location: _____
Disposal System # _____	Date of Construction: _____
Disposal System # _____	Depth of Disposal System/Well: _____
Disposal System # _____	Average Maximum Volumes of Disposed Fluids: _____ gallons/day
Disposal System # _____	Source and Nature of Disposed Fluids (For example, solvents, waste oil, paint, brake fluid, antifreeze, wash water, snow melt, cooling or boiler blow down water, industrial process waste, miscellaneous spills, bathroom wastes): _____
Disposal System # _____	Depth of Groundwater (if known): _____

III. CERTIFICATION

I CERTIFY, UNDER PENALTY OF LAW, THAT THIS DOCUMENT WAS PREPARED UNDER MY GUIDANCE AND SUPERVISION, AND THAT I AM ASSURED THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION REPORTED HERE. TO THE BEST OF MY KNOWLEDGE, THE INFORMATION PRESENTED ABOVE IS TRUE, ACCURATE AND COMPLETE.

Signature: _____ Date: _____

Name: _____ Title: _____ Phone: _____

Name of Facility: _____ Type of Business Facility: _____

Address of Facility: _____ County: _____

Mailing Address (if different than above): _____

Property Owner (if different): _____ Phone: _____

Property Owner Address: _____

Additional Information: _____

More information about EPA and the UIC Class V program can be found at:

- Protecting Underground Sources of Drinking Water from Underground Injection (UIC): <http://www.epa.gov/uic>
- Septic Systems: <http://www.epa.gov/septic>
- EPA Home: <http://www2.epa.gov>

RETURN FORM TO:

US Environmental Protection Agency
Agency Mail Code 8WD-SDJ
Attn: Omar Sierra-Lopez
1595 Wynkoop Street Denver, CO 80202-1129



Preparing an MGWPCS application

Contact DEQ WPB first!

MGWPCS permits are individual

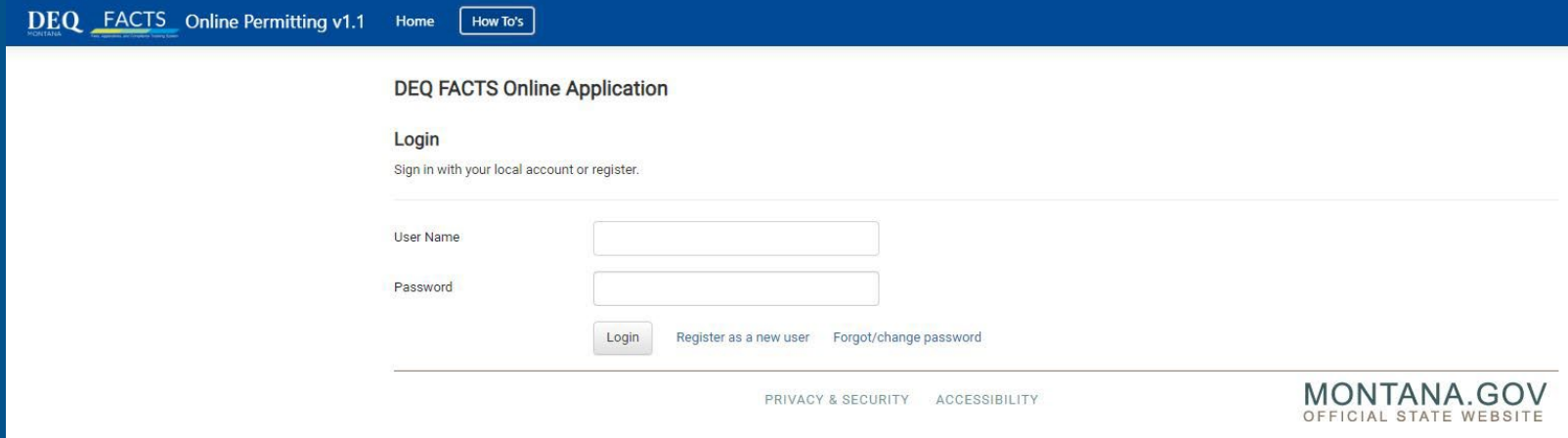
- Each permit is unique to the system and setting
- Contact a permit writer early to identify data needs

Reasonable expectations

- 3 quarters of GW monitoring from ~3 locations to identify seasonal changes in GW elevation and direction
- Representative understanding of site hydrogeology
- Representative characterization of effluent quality
- Plan for a 6-month process

Contact DEQ WPB first!

WPB staff can assist with the online portal



The screenshot shows the 'DEQ FACTS Online Application' login page. At the top, there is a navigation bar with the DEQ logo, 'FACTS Online Permitting v1.1', and links for 'Home' and 'How To's'. The main content area is titled 'DEQ FACTS Online Application' and features a 'Login' section. Below the title, it says 'Sign in with your local account or register.' There are two input fields: 'User Name' and 'Password'. Below these fields are three buttons: 'Login', 'Register as a new user', and 'Forgot/change password'. At the bottom of the page, there are links for 'PRIVACY & SECURITY' and 'ACCESSIBILITY', and the 'MONTANA.GOV OFFICIAL STATE WEBSITE' logo.

DEQ FACTS Online Application

Login

Sign in with your local account or register.

User Name

Password

[Register as a new user](#) [Forgot/change password](#)

[PRIVACY & SECURITY](#) [ACCESSIBILITY](#)

MONTANA.GOV
OFFICIAL STATE WEBSITE

Typical Permit Conditions

Issued for a 5-year term

Effluent monitoring & sampling

- Monthly, quarterly, or semi-annually

Groundwater monitoring & sampling

- Monthly, quarterly, or semi-annually
- Upgradient and downgradient

Effluent limitations

- Generally expressed as a load: TN and TP

Contact DEQ WPB first!

Tatiana Davila

Water Protection Bureau Chief

- Tatiana.Davila@mt.gov
- 406-444-0420



Questions