DRINKING WATER PROGRAM

REGISTRATION OF DISCHARGES TO THE GROUND FROM PUMP HOUSES AND OTHER PUBLIC WATER SYSTEM FACILITIES INCLUDING DISCHARGES FROM IN-LINE ANALYZERS

1. Purpose

This Fact Sheet is intended to help determine when a discharge from a public water system (PWS) facility is exempt from a Groundwater Discharge Permit and instead requires registration with the Underground Injection Control (UIC) Program. It also defines conditions required to obtain this exemption.

2. Applicability

This fact sheet applies to all public water systems.

3. Rationale

PWSs in most cases are not required by MassDEP to obtain a Groundwater Discharge Permit for discharging wastewater produced from the operation of in-line analyzers (e.g. chlorine analyzers) and other activities at pump stations facilities. However, the effluent from the in-line analyzers must be discharged into a registered UIC Class V well[1]. The effluent from the in-line analyzer cannot be discharged onto the ground surface. In a cooperative effort, the UIC program and the Wastewater Program (WWP) reviewed the information provided by water suppliers and determined that the nature and concentration of the chemicals (reagents) from commonly used analyzers that are currently discharged to the subsurface are not a threat to public health and the environment.

It has been determined that a Groundwater Discharge Permit is not required for such discharges if the PWS implements the best management practices listed below and they register the discharge as a UIC Class V well. Discharge to a dry well is an "authorized by rule"[2] activity (no permit is required provided the UIC well is registered with MassDEP).

4. Procedures

- A PWS is required to register UIC wells by submitting inventory information to the UIC program in MassDEP's Drinking Water Program using registration form BRP WS06 available through MassDEP's eDEP electronic filing system. A MSDS for all reagents used in the in-line analyzers with dosage rate and concentration must be attached to the UIC application form. For most PWSs this will be a one-time registration. Updates/modifications are needed only if the required information changes (e.g. owner, location, number of wells or type of discharge(s)).
- Other liquids from pump stations may often be discharged to a UIC Class V Well including water from sample sinks, non-contact cooling water (MSDS for any additives must be submitted with the application), condensate from pipes, ground water infiltration into the building, and water from an emergency water cooling system or shower/eye wash station.
- Discharges from PWS pump houses and other related facilities to a UIC Class V well must pass through a neutralization crock (or other pH neutralization system) prior to discharge if the discharge includes sample reagents or condensate from a high efficiency boiler. The PWS must implement the following procedures:

    1. Do not store chemicals unrelated to water supply treatment or distribution in the pump house.

2. Store water supply treatment chemicals located in the pump house in a bermed area, which can hold at least 110% of the stored chemicals (for remote stations a level alarm is highly recommended).
3. Store chemicals in a pump house away from floor drains that discharge to a UIC Class V well.
4. Install the UIC Class V well (drywell) outside the Zone 1 if possible (exceptions must be requested in the UIC application submittal) but at least 100 feet from the well.
5. Install berms around all areas with pumps or engines that require periodic oil/fluid changes.
6. Temporarily isolate and secure all floor drains during work that uses potential contaminants within the drainage area.
7. Strictly maintain and clean all existing oil/grease/sediment traps (i.e. MDC trap).
8. Immediately clean all potential contaminant spills/leaks to the pump house floor and properly manage and dispose of the material as per MassDEP regulations.

- A separate UIC Class V well registration form is required for each site where effluent is discharged to a drywell. If there are multiple drywells at one site receiving the same type of discharge they may be registered on one form. The form is available through MassDEP's eDEP electronic filing system. Information regarding on-line (eDEP) UIC registration applications may be obtained at the following web page: https://www.mass.gov/underground-injection-control-uic MassDEP exempts municipally owned public water systems from all UIC Class V well registration fees.

5. Contact Information

If you are completing a UIC registration application for the first time using MassDEP's eDEP electronic filing system it is recommended that you first send an email to ask.UIC@mass.gov to request additional information regarding how to apply and what must be included with your application.

If you have additional questions on the UIC program please contact:

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Email: joseph.cerutti@mass.gov or ask.UIC@mass.gov

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1. UIC Class V wells are defined broadly to include: boreholes, sumps, drywells, drain fields, and other subsurface disposal structures used to put fluids into the ground.

2. Authorized by Rule basically means that a Class V well may be operated without a permit as long as two primary conditions are met. First, the Class V well must be inventoried, i.e., a registration form must be submitted to the UIC program (WS-06 a, b, and c). This provides MassDEP with information about the injection well - such as address of the owner/operator, physical location of the injection well, type of fluid disposed, and number of injection wells used. Second, the Class V well must be constructed, installed, operated, maintained, and/or closed in a manner that protects groundwater quality. If these two primary conditions are met by the owner/operator of a Class V well, a Groundwater Discharge Permit is not needed.