



## **Best Management Practices (BMP) For Protecting Ground Water**

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### **For Facilities Using Shallow Industrial Waste Disposal Wells**

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EPA recognizes that certain industrial waste disposal practices using drainage wells may pose unacceptable risks to Underground Sources of Drinking Water. These operations allow the discharge of various wastes to a drainage system neither designed for nor capable of treating them. Accordingly, BMPs for Industrial Disposal Wells focus on well closure and alternative disposal methods. We have also included BMPs for waste minimization to help facilities reduce waste disposal costs, regardless of the disposal method they use. See Fact Sheets 2A - 2I for BMPs for Industrial Disposal Wells used by specific industries. In addition local, county, and State regulations may prohibit use of these wells. Note these practices are recommendations only.

#### Well Closure (if so directed)

- \* Submit closure plan if so directed; temporarily plug well with cement or plumbers plug until plan is approved
- \* After sampling well contents, clean pipes and drains leading to well if so directed, using, for example, plastic pigs
- \* Remove liquid and sludge from well if so directed; dispose of in compliance with federal, State, and local laws
- \* Fill well with clean inert material, seal pipes and well sides with cement or concrete, and plug and cap well opening; seal cap and floor
- \* Remove and dispose of visibly contaminated soil in compliance with federal, State, and local laws
- \* After removing visibly contaminated soil collect and analyze soil and fluid samples; send results to the Chief of the appropriate State or Region Section

#### Alternative Disposal

- \* If floor drain(s) are required, connect drain(s) disposal system(s) to sanitary

sewer if allowed by appropriate federal, State and local regulations

- \* If floor drain(s) are required, connect drain(s) to holding tank; periodically pump out tank and have licensed hauler transport wastes to an approved treatment or disposal facility
- \* Use waste exchange services and recycle as much waste as practical
- \* Apply for a permit to continue injecting if so directed

### Waste Minimization

- \* Provide employee training as part of an overall commitment to pollution prevention
- \* Provide incentives for developing new pollution prevention ideas
- \* Maximize batch sizes and production runs where applicable
- \* Clearly label, inventory, and monitor the use of all raw materials and waste
- \* Handle raw materials and wastes carefully to minimize spills and contamination
- \* Install collection devices, such as drip trays and splash guards, to contain spilled wastes, product, and raw materials
- \* Segregate waste streams to facilitate disposal and recycling
- \* Collect spilled materials manually (for example, with a wet vac) before using non-reusable absorbent materials
- \* Use biodegradable cleaning agents and safe alternatives to hazardous materials
- \* Recycle wastes when possible; use recirculating solvent sinks, solvent recovery units, and multiple counterflow rinse tanks
- \* Use foam or plastic pigs to clean lines rather than using solvents
- \* Minimize traffic through raw materials storage area to reduce potential for contamination and dispersal of materials

- \* Standardize raw materials, solvents, and cleaning agents where practical
  
- \* Use recirculating solvent sinks to reduce waste volume
  
- \* Minimize use of chlorinated solvents

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Note: These BMPs are adapted from a May 1991 EPA report titled “Class V Well BMP Guidance - Phase I and Phase II” and have been modified in response to comments by EPA Regions. For a copy of the EPA report, please contact the Underground Injection Control Branch of the Office of Ground Water and Drinking Water, U.S. EPA