



Best Management Practices (BMP) For Protecting Ground Water

For Medical Services Facilities Using Shallow Industrial Waste Disposal Wells

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. In addition local, county, and State regulations may prohibit use of these wells. Note: these practices are recommendations only.

The BMPs listed below apply to medical service facilities. Fact Sheet Number 2 in this series lists BMPs that are applicable to Industrial Disposal Wells in general (including those used by medical services facilities), particularly for closure and alternative disposal.

Waste Minimization

- * Install water demand zone valves to control water use
- * Use reverse osmosis water supply equipment, where technically feasible, to minimize cleaning requirements for dialysis machines
- * Use a closed-cycle system to enhance recovery of silver
- * Renew photo processing chemicals using replenisher concentrates and regenerators
- * Recycle developer using, for example, an ion exchange system or an electro dialysis system
- * Recover silver from photographic equipment using metallic replacement, electrolytic recovery, chemical precipitation, ion exchange, reverse osmosis, and/or evaporation
- * Replace instruments containing mercury with electronic instruments

- * Segregate and properly label radioactive wastes
- * Use less hazardous isotopes where possible; for example, use iridium-192 or cesium-137 needles in place of radium-226 needles
- * Dispose of infectious wastes and low-level radioactive wastes in accordance With federal, State, and local regulations

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