

US EPA ARCHIVE DOCUMENT



Ban on Large-Capacity Cesspools to Protect Public Health in Hawaii

Nationwide Restrictions for Large-Capacity Cesspools: The U.S. Environmental Protection Agency (EPA) promulgated Underground Injection Control (UIC) regulations on December 7, 1999 which prohibit the construction of new large-capacity cesspools, effective April 5, 2000. **Existing large capacity cesspools must be upgraded or closed by April 5, 2005.** Cesspool owners are required to find a waste disposal alternative, such as connection to a municipal sewer, or installation of an onsite wastewater treatment unit (such as a septic system).

New cesspool
construction
prohibited as of
April 5, 2000

Existing cesspools
must be closed
by April 5, 2005

Large capacity cesspool owners must notify EPA and the Hawaii Department of Health (DOH) Underground Injection Control (UIC) programs of the existence of these cesspools and their intent to close them. To obtain an inventory form, EPA Form 7520-16, contact the Ground Water Office at (415) 972-3540 or download it from www.epa.gov/safewater. If you have questions about the ban, contact Laura Tom Bose or Shannon FitzGerald, toll-free at 1-866-EPA-WEST (1-866-372-9378) or by email at bose.laura@epa.gov, or fitzgerald.shannon@epa.gov. To register a cesspool with DOH, contact the UIC program at (808) 586-4258.

Why is EPA banning large Cesspools? Cesspools allow untreated sewage to percolate directly to soil and ground water. They are a public health and environmental concern. They are banned because of their likelihood of releasing disease-causing pathogens and other contaminants, such as nitrate, to ground water. The sewage moves through the ground and can contaminate ground water, streams (sources of drinking water) and the ocean.

What is large-capacity? Single-family homes are not subject to the Underground Injection Control (UIC) regulations.

- Non-residential cesspools, septic systems or similar waste disposal systems are covered under the UIC program if they are used for the disposal of sanitary waste and have the capacity to serve 20 or more persons per day, such as a cesspool at a visitor center, business or school.
- Residential large-capacity cesspools are covered by this regulation if they serve a multiple dwelling, community or regional system. For example, multiple homes plumbed into a single cesspool or a series of cesspools (gang cesspool(s)).

If cesspools are banned, how will we get rid of sewage? If municipal sewer lines are accessible, sewage should be disposed to the municipal sewer for treatment before its release to the environment. If a sewer line is not accessible, replacing or upgrading cesspools so that they are part of a conventional septic system (or enhanced onsite wastewater treatment system) is acceptable, and can reduce the risk of contamination.

Cesspool owners should consult with the DOH Waste Water Branch and the County Wastewater Program to learn what alternatives are allowable and what regulations or codes apply to their situation. The type of waste treatment required may vary based on an area's vulnerability to contamination, population density, soils, hydrogeology, and climate.

Failure to close or upgrade a large-capacity cesspool by April 5, 2005 could result in enforcement by the EPA, including a fine of \$32,500 per day per large capacity cesspool.

The federal regulations can be found at 40 CFR part 144, Subpart G, which was published on December 7, 1999. For a copy, see the EPA Underground Injection Control (UIC) website at www.epa.gov/safewater, see Class V.

Technical information regarding treatment technologies can be found at www.epa.gov/owm/mtb/decent, see Toolbox.

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The statements in this document are intended solely as technical assistance. This document is not intended, nor can it be relied upon, to create any rights enforceable by any party in litigation with the United States.

Regulatory Terms

The following definitions are provided to assist you with understanding the regulatory requirements and are taken from the federal regulations at 40 CFR part 144.3 and Hawaii Administrative Rules (HAR), Title 11, Chapters 23 and 62.

Cesspool means a “drywell” that receives untreated sanitary waste containing human excreta, and which sometimes has an open bottom and/or perforated sides. [CFR] Further, it is an individual wastewater system which is designed to receive no more than 1000 gallons per day of domestic wastewater. [HAR]

Drywell means a well, other than an improved sinkhole or subsurface fluid distribution system, completed above the water table so that its bottom and sides are typically dry except when receiving fluids. [CFR]

Individual Wastewater System means a facility which is designed to receive and dispose of no more than 1000 gallons per day of domestic wastewater. [HAR]

Sanitary waste (domestic waste) means liquid or solid wastes originating from human activities, such as wastes collected from toilets, showers, wash basins, sinks used for cleaning domestic areas, food preparation, clothes or dish washing operations. [CFR]

Seepage pit means an excavation in the ground which receives the discharge from treatment units and permits the effluent to seep through its bottom or sides to gain access to the underground formation. [HAR]

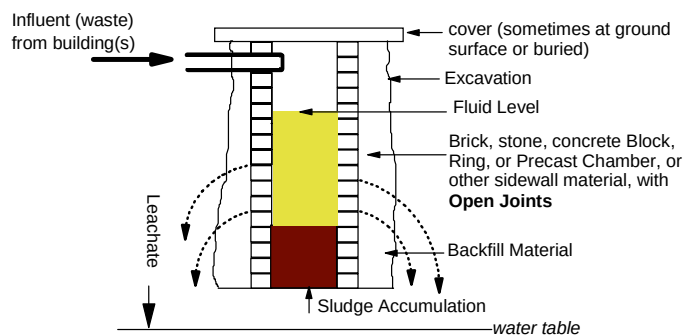
Septic system means a “well” that is used to emplace sanitary waste below the surface and is typically comprised of a septic tank and subsurface fluid distribution system or disposal system, e.g. seepage pit. [CFR]

Subsurface fluid distribution system means an assemblage of perforated pipes, drain tiles, or other similar mechanisms intended to distribute fluids below the surface of the ground. [CFR]

Well means a bored, drilled, or driven shaft whose depth is greater than the largest surface dimension; or, a dug hole whose depth is greater than the largest surface dimension; or, an improved sinkhole; or, a subsurface fluid distribution system. [CFR]

Other questions about Cesspools:

What does it mean “have the capacity to serve more than 20 persons per day?” Any cesspool that is being used or has been used by 20 persons in a single day meet the federal definition of a large capacity cesspool.



Typical Cesspool Design

What if my cesspool disposes of more than just sanitary waste or domestic wastewater? A cesspool receiving a combination of sanitary waste and/or a commercial waste, such as a cesspool serving a hospital, laundromat or supermarket is an industrial well. It is subject to federal and DOH UIC regulations as well as DOH Wastewater regulations. If the cesspool serves or has served 20 or more persons, it must be closed by April 2005. In addition, under state law, cesspools and other individual wastewater systems receiving less than 1000 gallons per day (gpd) cannot be used for industrial wastewater disposal, are in violation of state law, and must upgrade. Cesspools receiving flows of greater than 1000 gpd and all injection wells must apply for a permit from the DOH UIC program.

What if my cesspool is not a drywell by the federal definition? The term “drywell” is used in the regulation to cover the most common type of construction. Some areas may use other designs. Some areas may also experience changes in water table levels, so that a cesspool is in the saturated zone. Cesspools that intersect the water table are banned by DOH and must be upgraded. Discharge of untreated sewage directly into the water table may be an even greater risk than discharge to soil above the water table, particularly in the transport of viruses.

How do I close my cesspool? The DOH UIC program has specific backfilling requirements that are issued to the facility after an abandonment application is submitted by the facility. Backfilling should not occur unless backfilling instructions are issued. For information, contact the UIC program at (808) 586-4258.

How do I replace my system? Plans must be prepared by a professional engineer for all new or replacement wastewater systems and must be submitted to the DOH Wastewater Branch for review and approval prior to construction. For information, contact the Wastewater Branch at (808) 586-4294.