



**STATE OF HAWAII  
DEPARTMENT OF HEALTH**

P.O. BOX 3378  
HONOLULU, HAWAII 96801

In reply, please refer to:  
EMD / WB

August 13, 2004

To: Consulting Engineers  
From: Wastewater Branch  
Subject: Large Capacity Cesspools

On December 7, 1999, the U.S. EPA promulgated Underground Injection Control (UIC) regulations which as of April 5, 2000, prohibits the construction/use of new large capacity cesspools (LCC). The regulations also require owners to upgrade or close existing LCCs by April 5, 2005.

As a consulting engineer engaged in the design of on-site wastewater systems, the federal rules on LCCs may impact your clients and the type of wastewater system you choose to design for them.

**A. Definitions:**

- **Large capacity cesspool (LCC):** is a cesspool serving multiple (two or more) dwellings, a community or regional development: or any non single family residential building/business that generates sanitary wastes, containing human excreta from 20 or more persons per day.

The UIC requirements **do not** apply to a cesspool serving a single family residential dwelling or to a cesspool serving a non-residential building generating solely sanitary waste containing human excreta and having the capacity to serve fewer than 20 persons per day. Cesspools connected in series are considered a system and will be evaluated as a single cesspool when determining capacity to serve.

- **Sanitary Waste (aka domestic waste):** means liquids 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.

**B. Examples of LCCs:**

- A cesspool is considered an LCC if it receives sanitary waste from multiple dwellings. Examples include but are not limited to a cesspool serving a duplex, an apartment building, a residential condominium, a townhouse development, a cluster development or multiple single family dwellings. (*The quantity of flow and/or the number of persons served by the cesspool does not matter for residential usages.*)

- A cesspool serving a non residential building is considered an LCC if it receives sanitary waste containing human excreta from 20 or more persons in a single day. Examples include but are not limited to schools, churches, visitor centers, golf course clubhouses/restrooms, park restroom facilities, retail businesses, restaurants/food establishments, hotels, motels, dormitories and commercial, industrial and food processing activities. (*Wastewater quantity does not play a factor in this determination, only the number of people served or potentially served by the cesspool does.*)
- A cesspool is considered an LCC if it serves a single family dwelling and a commercial/industrial business which generates sanitary waste containing human excreta from 20 or more persons in a single day is considered a LCC. (*The single family dwelling is incidental to this determination.*)

**C. Major Conflicts between federal rules on LCCs and Hawaii Admin. Rules (HAR), Chapter 11-62, Wastewater Systems:**

- Chapter 11-62 allows a new cesspool to be constructed in non-critical wastewater disposal areas and serve a maximum of two (2) dwellings provided that the total number of bedrooms or bedroom like rooms in the two dwellings does not exceed five (5).

*Constructing and using a new cesspool to serve two dwelling units immediately places the owner in violation of EPA's rules and subjects the owner to enforcement by EPA, including fines of up to \$32,500 per day. This provision of the rule became effective on April 5, 2000.)*

- Chapter 11-62 allows a new cesspool to be constructed in a non-critical wastewater disposal area and serve a building other than dwelling provided that wastewater do not exceed 1000 gallons per day per cesspool, wastewater is domestic or domestic like, and various design and siting requirements are met.

*Constructing and using a new cesspool under these circumstances places the owner in immediate violation of EPA's rule and subjects the owner to enforcement by EPA, including fines of up to \$32,500 per day if the cesspool serves or has the capacity to serve 20 or more persons a day.*

- Chapter 11-62 allows a new dwelling to connect into an existing cesspool that is serving an existing dwelling provided that a number of conditions are met (see sections 11-62-06(l) and 11-62-31.1(b)(1) )

*Once the new dwelling is connected to the existing cesspool, the owner of the dwelling or property is immediately in violation of EPA's rules and subject to enforcement by EPA, including fines of up to \$32,500 per day.*

In the examples cited above, there are no violations of Chapter 11 62, Wastewater Systems. However, the wastewater systems cited in the above examples are in violations of federal UIC rules. As the processing of building permit applications is a State-County function, the Wastewater Branch has no alternative but to sign a building permit application which is in compliance with State rules.

However, we are cooperating with EPA, and in an effort to get voluntary compliance, we will notify the building permit applicant of the potential federal rule violation and recommend that the wastewater system be revised. Additionally, we will forward information to EPA regarding any building permit application we sign which we suspect violates the new LCC rules. EPA has sole discretionary authority in determining if a cesspool is a LCC and in taking enforcement action against violators of the federal UIC rules.

**D. Abandonment of existing cesspools:**

Under the provisions of Chapter 11-62, there are no requirements for abandoning cesspools. However, there are procedures under Chapter 11-23, Underground Injection Control, for the abandonment of any cesspool that is considered an injection well (cesspool receiving more than 1000 gallons per day of domestic wastewater OR a cesspool receiving non domestic wastewater). EPA also has criteria for abandoning LCCs which receive less than 1000 gallons per day of sanitary wastes.

As part of reviewing building permit applications and wastewater system plans, the Wastewater Branch will initially determine if a cesspool to be abandoned is a LCC, whether or not it receives flows greater than 1000 gallons per day or whether or not it receives non domestic wastewater. Once this determination is made, the engineer will be asked to do one of the following:

- **LCCs receiving 1000 gallons per day or less of domestic or domestic-like wastewater:**

The engineer shall place the following note on the wastewater plan and all sets of building permit site plans:

*The contractor shall abandon the cesspool by first removing any excess liquid and solids and then filling the cesspool with earth, sand, gravel, concrete or rubble. If the cover is removed, the final three (3) feet of fill shall be with soil which is compacted to prevent surface contaminants from gaining access to underground sources of water. Any liquids or solids removed from the cesspool shall be taken to a municipal wastewater treatment plant which accepts such materials.*

Engineers are asked to warn their clients that any liquid or solids from the cesspool which is discharged onto the ground as a result of abandoning the cesspool is a violation of HAR, section 11-62-06(g) and subjects the owner/contractor to State enforcement action including fines and penalties of up to \$25,000 per day per violation.

- **Cesspools receiving more than 1000 gallons per day of domestic or domestic like wastewater: OR**
- **Cesspools receiving non-domestic, and or industrial wastewater:**

In both cases, the cesspool is considered an injection well under Chapter 11-23, Underground Injection Control (UIC). The engineer shall place the following note on the wastewater plan and all sets of the building permit site plans:

*ATTENTION: Do not backfill the injection well (cesspool) until specific written Underground Injection Control (UIC) instructions are issued to the engineer/contractor. Call the UIC program at 586-4258 to apply for injection well abandonment.*

*WARNING: An injection well/cesspool that is backfilled and abandoned without instruction and authorization from the UIC program is subject to penalty and corrective action under HRS 340E.*

The engineer should allow for sufficient time for the application to, the processing of and reply from the UIC program.

**E. Variances from Hawaii Administrative Rule, Chapter 11-62:**

Your attention is directed to the following provisions of Chapter 11-62 when designing a new IWS to replace a LCC:

- A septic tanks and household aerobic units cannot exceed a design flows of more than 1000 gallons per day unless it serves a school, church, park or other facility with highly variable flows.
- Minimum setback distances contained in Table II of Chapter 11-62, must be maintained between buildings, property lines, the ocean, water wells, other features and components of the IWS unless otherwise directed by the Director.

In some situations, the above provisions will make it difficult to design an IWS to replace an existing LCC. Your client may need a variance from these provisions before the Wastewater Branch can approve your IWS plans. In anticipation of such variance requests, we have simplified our variance application form to be more of a fill in the blank or check the appropriate box type of application.

All variance requests will be handled by our office in Honolulu. Applicants for variances from provisions of Chapter 11-62 are still required to pay an application fee of \$200 to the State of Hawaii, and are still responsible for paying for and publishing a public notice. Please advise your clients that there is no assurance that a variance will be granted if one is applied for, and that the variance process will take a number of months to complete.

As we review each variance application, if we determine that a variance is not needed, the applicant will be informed and the variance application fee returned.

**F. Additional information:**

- For additional information on cesspools, alternative wastewater systems and building permit application processing, contact the Wastewater Branch's engineer nearest you at the following phone numbers:

Hilo	Jerry Nunogawa	933-0401
Kauai	Joe Tateyama	241-3323
Kona	Dane Hiromasa	322-1507
Maui	Roland Tejano	984-8232
Oahu	Johnny Ong	586-4294

- For additional information on variance applications, status of variances, processing, and the latest revised forms, please contact Lori Morikami at telephone no. 586-4294 on Oahu or call toll-free from Hawaii 974-400, Maui 984-2400, Kauai 274-3141, then press ext. 64294.
- For information on injection well abandonment, registration and permitting, contact Chauncey Hew of the Safe Drinking Water Branch's UIC program at telephone no. 586-4258 on Oahu or call toll-free from Hawaii 974-400, Maui 984-2400, Kauai 274-3141, then press ext. 64258.
- For information on the federal UIC rules, large capacity cesspools, inventory and compliance, contact EPA representative Laura Bose or Shannon FitzGerald, toll free at 1-866-372-9378 or by email at [bose.laura@epa.gov](mailto:bose.laura@epa.gov) or [Fitzgerald.Shannon@epa.gov](mailto:Fitzgerald.Shannon@epa.gov).