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# A BILL FOR AN ACT

RELATING TO WASTEWATER SYSTEMS.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that cesspools are  
2     contaminating the State's groundwater, streams, drinking water,  
3     and coastal ecosystems. Maintaining the cleanliness of the  
4     State's waters is a matter of statewide concern that falls under  
5     the legislature's obligation to enact laws pursuant to  
6     article XI, section 7, of the Hawaii State Constitution. To  
7     address the State's cesspool pollution, Act 125, Session Laws of  
8     Hawaii 2017, required all cesspools to be upgraded or converted  
9     to a septic system or aerobic treatment unit system or connected  
10    to a sewerage system before January 1, 2050, with certain  
11    exemptions. Act 125 also directed the department of health to  
12    investigate the number, scope, and location of cesspools that  
13    required upgrade, conversion, or connection based on their  
14    impact on public health. Additionally, Act 132, Session Laws of  
15    Hawaii 2018, established the cesspool conversion working group  
16    to develop a long-range, comprehensive plan for the conversion  
17    of cesspools statewide by 2050 and commissioned a statewide



1 study of sewage contamination in nearshore marine areas to  
2 further supplement studies and reports conducted by the  
3 department of health on cesspools. The cesspool conversion  
4 working group's 2021 Hawaii cesspool hazard assessment and  
5 prioritization tool report identified three prioritization  
6 categories: priority levels 1, 2, and 3. Priority level 1  
7 cesspools have the greatest potential to impact human health and  
8 are directly adjacent to sensitive natural resources; priority  
9 level 2 cesspools pose a significant hazard to human health and  
10 may be close to sensitive natural resources; and priority level  
11 3 cesspools have an impact on human health but may be further  
12 away from sensitive natural resources.

13 The 2021 Hawaii cesspool hazard assessment and  
14 prioritization tool report also noted that the geographic  
15 coverage of their evaluation only extended across the four main  
16 Hawaiian islands. It further noted that even though the islands  
17 of Molokai, Lanai, and Niihau were also impacted by cesspools,  
18 these islands were not included in several key datasets  
19 necessary for its analysis. Thus, the authors of the 2021  
20 Hawai'i Cesspool Hazard Assessment and Prioritization Tool, 2021



1 Report and Technical Appendices, recommended that a ranking  
2 system for these islands also be established.

3 The legislature further finds that the following  
4 communities were labeled as priority level 1 areas by the 2021  
5 Hawaii cesspool hazard assessment and prioritization tool  
6 report: Haleiwa, Waimanalo Beach-Homesteads, Hauula-Kaaawa,  
7 Makua Valley, Judd Hillside-Lowery Avenue, Waimea-Kahuku, Laie,  
8 Kawaiiloa, Campbell High School, Kaena Point, Kalaheo Avenue,  
9 Waianae Kai, and Nanakuli on Oahu; Halama, Kamaole, Kahoma,  
10 Keawakapu, Kapalua, Launiupoko, and Spreckelsville on Maui;  
11 Holualoa, Kailua, and Kawaihae-Waikoloa on Hawaii island; and  
12 Haena-Hanalei, Kekaha-Waimea, and Wailua Homesteads on Kauai.  
13 In these areas where homes are not connected to wastewater  
14 systems or are too remote to be connected to existing  
15 infrastructure, new wastewater technologies and solutions are  
16 necessary to transition away from environmentally hazardous  
17 cesspools.

18 The legislature additionally finds that, according to  
19 recent shoreline erosion management plans, south Molokai has the  
20 highest concentration of Hawaiian homestead residential lots  
21 located directly on the coast, having approximately fifty lots



1 within two and a half miles of noncontiguous shoreline. For  
2 Molokai as a whole, the Molokai Health Center reports that forty  
3 per cent of the population relies on subsistence farming,  
4 hunting, and fishing, which means that having a clean and  
5 healthy reef and nearshore environment is crucial for the health  
6 of the community, especially the Native Hawaiian community. The  
7 coastal plain of south Molokai is underlain by underground  
8 rivers of fresh water flowing mauka to makai that affect the  
9 fringing reef, an important food source for Native Hawaiians  
10 residing on Molokai. A United States Geological Survey report  
11 concluded that further inquiry into the range of nutrient  
12 sources to groundwater and nutrient concentrations reaching the  
13 coast in groundwater discharge will aid in future planning and  
14 resource management. Molokai coastal homesteaders will be  
15 financially challenged to convert cesspools to more modern  
16 individual wastewater systems, as the median annual household  
17 income averaged over the three department of Hawaiian home lands  
18 coastal communities was \$42,396 in 2019, according to the  
19 American Community Survey of 2019.

20 The legislature additionally finds that new wastewater  
21 management solutions could greatly improve public health.



1 Technologies that are reaching a commercial scale for the first  
2 time include solutions for individual homes, as well as multi-  
3 unit dwellings, apartment buildings, and entire communities.  
4 Large wastewater management systems can remove sewage from  
5 multi-unit dwellings and apartment buildings. At the municipal  
6 scale, these technologies can effectively treat sewage from  
7 entire communities for a small fraction of the cost of existing  
8 technology now employed in Hawaii. Self-contained, self-  
9 powered, and self-cleaning toilets can be used in homes that do  
10 not have the capacity to connect to the existing sewer  
11 infrastructure. For example, the Puu Opaie Kuleana Homestead  
12 Settlement Plan, which will offer two hundred fifty homestead  
13 lots in Waimea, Kauai, does not include a centralized wastewater  
14 service or public water system, and the nearest wastewater  
15 treatment plant is more than four miles away and thus could  
16 benefit from new wastewater solutions. The Anahola Kuleana  
17 Homestead Settlement Plan, which will offer one hundred fifteen  
18 homestead lots in Kawaihau, Kauai, will similarly benefit from  
19 new wastewater solutions.

20 The purpose of this Act is to:



- 1 (1) Repeal the mandatory upgrade, conversion, or
- 2 connection of cesspools in the State by 2050;
- 3 (2) Establish and appropriate funds to implement a three-
- 4 year new wastewater system and individual wastewater
- 5 system technology demonstration and implementation
- 6 pilot program within the university of Hawaii water
- 7 resources research center to review, examine, and
- 8 demonstrate new wastewater technology systems;
- 9 implement those technologies in wastewater system
- 10 demonstration projects; and establish prioritization
- 11 categories similar to those established in the Hawaii
- 12 cesspool hazard assessment and prioritization tool for
- 13 the islands of Molokai, Lanai, and Niihau; and
- 14 (3) Appropriate funds for positions within the department
- 15 of health's wastewater branch.

16 SECTION 2. Section 342D-72, Hawaii Revised Statutes, is  
17 repealed.

18 [~~"§342D-72 Cesspools; mandatory upgrade, conversion, or~~  
19 ~~connection.~~ (a) Before January 1, 2050, every cesspool in the  
20 State, excluding cesspools granted exemptions by the director of  
21 health pursuant to subsection (b), shall be:



1       ~~(1) Upgraded or converted to a director-approved~~  
2               ~~wastewater system; or~~  
3       ~~(2) Connected to a sewerage system.~~  
4       ~~(b) The director of health may grant exemptions from the~~  
5 ~~requirements of subsection (a) to property owners of cesspools~~  
6 ~~that apply for an exemption and present documentation showing a~~  
7 ~~legitimate reason that makes it infeasible to upgrade, convert,~~  
8 ~~or connect the cesspools. For the purposes of this subsection,~~  
9 ~~a legitimate reason shall include but not be limited to:~~  
10       ~~(1) Small lot size;~~  
11       ~~(2) Steep topography;~~  
12       ~~(3) Poor soils; or~~  
13       ~~(4) Accessibility issues.~~  
14       ~~(c) As used in this section, "cesspool" means an~~  
15 ~~individual wastewater system consisting of an excavation in the~~  
16 ~~ground whose depth is greater than its widest surface dimension,~~  
17 ~~that receives untreated wastewater, and retains or is designed~~  
18 ~~to retain the organic matter and solids discharged into it, but~~  
19 ~~permits the liquid to seep through its bottom or sides to gain~~  
20 ~~access to the underground geographic formation." ]~~



1 SECTION 3. (a) There is established a three-year new  
2 wastewater system and individual wastewater system technology  
3 demonstration and implementation pilot program within the  
4 university of Hawaii water resources research center.

5 (b) The university of Hawaii water resources research  
6 center, in coordination with the university of Hawaii sea grant  
7 college program and in consultation with the department of  
8 health, department of Hawaiian home lands, university of Hawaii  
9 college of engineering, and all appropriate county agencies,  
10 shall:

11 (1) Examine and demonstrate new wastewater and cesspool  
12 technology systems, ranging from individual toilets to  
13 significantly larger multi-unit systems and options  
14 for community-scale solutions as appropriate, and  
15 review and evaluate the affordability, feasibility,  
16 and efficiency of the treatment technologies;

17 (2) Administer no less than four cesspool system  
18 demonstration projects implementing new toilet and  
19 sewage treatment technologies; provided that each  
20 project shall include a cesspool in an area designated  
21 as priority level 1 by the 2021 Hawaii Cesspool Hazard



1 Assessment and Prioritization Tool, 2021 Report and  
2 Technical Appendices; provided further that there  
3 shall be no less than one project in each county;  
4 provided further that there shall be no less than one  
5 project on the island of Molokai;

6 (3) Document, validate, and summarize the various tests,  
7 research, and outcomes of each cesspool system  
8 demonstration project; and

9 (4) Establish a ranking system similar to the  
10 prioritization categories established in the 2021  
11 Hawaii Cesspool Hazard Assessment and Prioritization  
12 Tool, 2021 Report and Technical Appendices, for the  
13 islands of Molokai, Lanai, and Niihau.

14 (c) The university of Hawaii water resources research  
15 center shall submit an annual interim report to the legislature  
16 no later than twenty days prior to the convening of each regular  
17 session for the duration of the pilot program and a final report  
18 to the legislature no later than twenty days prior to the  
19 convening of the regular session of 2028. The reports shall  
20 include:



- 1 (1) Information on the new wastewater and cesspool
- 2 technology systems reviewed and implemented;
- 3 (2) The number of cesspools converted pursuant to the
- 4 pilot program;
- 5 (3) The costs incurred to convert each cesspool;
- 6 (4) Recommendations on how to improve the efficiency of
- 7 the pilot program;
- 8 (5) Whether the pilot program should be made permanent;
- 9 and
- 10 (6) Any other recommendations that the university of
- 11 Hawaii water resources research center deems
- 12 appropriate.
- 13 (d) The pilot program shall cease to exist on June 30,
- 14 2027.

15 SECTION 4. In accordance with section 9 of article VII, of  
 16 the Constitution of the State of Hawaii and sections 37-91 and  
 17 37-93, Hawaii Revised Statutes, the legislature has determined  
 18 that the appropriations contained in this Act will cause the  
 19 state general fund expenditure ceiling for fiscal year 2024-2025  
 20 to be exceeded by \$ , or per cent. The reasons  
 21 for exceeding the general fund expenditure ceiling are that the



1 appropriations made in this Act are necessary to serve the  
2 public interest and to meet the needs provided for by this Act.

3 SECTION 5. There is appropriated out of the general  
4 revenues of the State of Hawaii the sum of \$ or so much  
5 thereof as may be necessary for fiscal year 2024-2025 to  
6 implement the new wastewater system and individual wastewater  
7 system technology demonstration and implementation pilot program  
8 established pursuant to this Act.

9 The sum appropriated shall be expended by the university of  
10 Hawaii for the purposes of this Act.

11 SECTION 6. There is appropriated out of the general  
12 revenues of the State of Hawaii the sum of:

13 (1) \$ or so much thereof as may be necessary for  
14 fiscal year 2024-2025 to fund full-time  
15 equivalent ( FTE) engineer V (SR-26) position  
16 within the department of health's wastewater branch;  
17 and

18 (2) \$ or so much thereof as may be necessary for  
19 fiscal year 2024-2025 to establish full-time  
20 equivalent ( FTE) engineer IV (SR-24) position  
21 within the department of health's wastewater branch,



1 to support the approval of individual wastewater systems  
2 applications and the new wastewater system and individual  
3 wastewater system technology demonstration and implementation  
4 pilot program established pursuant to this Act.

5 The sum appropriated shall be expended by the department of  
6 health for the purposes of this Act.

7 SECTION 7. Statutory material to be repealed is bracketed  
8 and stricken.

9 SECTION 8. This Act shall take effect on July 1, 3000.



**Report Title:**

UH; Water Resources Research Center; Cesspool Upgrade, Conversion, Connection Mandate Repeal; New Wastewater System and Individual Wastewater System Technology Demonstration and Implementation Pilot Project; Reports; Positions; Appropriations; Expenditure Ceiling

**Description:**

Repeals the mandatory upgrade, conversion, or connection of cesspools in the State by 2050. Establishes a 3-year new wastewater system and individual wastewater system technology demonstration and implementation pilot program within the University of Hawaii Water Resources Research Center to examine and demonstrate new wastewater and cesspool technology systems; implement those technologies in demonstration projects in areas across the State that are identified as priority level 1 in the 2021 Hawaii Cesspool Hazard Assessment and Prioritization Tool, 2021 Report and Technical Appendices; and establish similar prioritization categories for the islands of Molokai, Lanai, and Niihau. Requires the University of Hawaii Water Resource Research Center to submit annual interim reports and a final report to the Legislature. Establishes positions. Makes appropriations. Effective 7/1/3000. (HD2)

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