

DEPARTMENT OF HEALTH - WASTEWATER BRANCH
INDIVIDUAL WASTEWATER SYSTEM (IWS)
APPLICATION INFORMATION SHEET
Please Print or Type

Engineer: _____

Owner: _____

Owner's Mailing Address: _____

Project Location: _____
(Street Address, Subdivision Name and General Area):

Project Tax Map Key (TMK) Number: (_____) _____ - _____ - _____ : _____

Lot Size: _____

Projected Flow (gallons per day) or Number of Bedrooms: _____

Proposed Treatment Unit (Manufacturer, Model, Design Capacity):

Proposed Disposal System: _____

Design Percolation Rate: _____ min/in

Existing IWS on lot: NO YES Type: _____

Existing potable drinking water well within 1,000 ft of the proposed disposal system? NO YES

Existing structure on lot: NO YES Type: _____

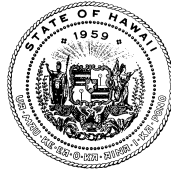
LCC upgrade? NO YES

FOR DEPARTMENT USE ONLY:

Date Received: _____ Project Engineer: _____ File No. _____

Filing Fee (\$100 _____ \$25 _____) Check Date: _____ Check No. _____

Notes: _____



**STATE OF HAWAII
DEPARTMENT OF HEALTH**

P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:
EMD / WB

**DEPARTMENT OF HEALTH - WASTEWATER BRANCH
REQUIREMENTS FOR REVIEW PROCESS OF
INDIVIDUAL WASTEWATER SYSTEMS (IWS)**

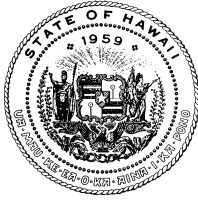
The following items must be submitted to the Department of Health, Wastewater Branch for the review of building permit applications (BPAs):

1. Completed Application Form;
2. Construction plans of the IWS prepared by a licensed engineer;
3. Site plan;
4. Floor plans for the dwelling unit(s);
5. Owner's Certification Form;
6. Site Evaluation Form;
7. Operation and Maintenance manual;
8. Sludge Disposal Plan; and
9. Maintenance contracts for aerobic units.
10. Application Fee of \$100 - check payable to **STATE OF HAWAII**.

The review process could take approximately two days to two weeks, depending on the completeness of the submitted paperwork. You will be informed in writing of the approval of your system.

Should you have any questions, please call the Wastewater Branch's Planning & Design Section Engineer at telephone (808) 586-4294. We are located at:

919 Ala Moana Blvd. Room 309
Honolulu, Hawaii 96814-4920
Phone (808) 586-4294 Fax (808) 586-4300



**DEPARTMENT OF HEALTH - WASTEWATER BRANCH
INDIVIDUAL WASTEWATER SYSTEM (IWS)
OWNER'S CERTIFICATION FORM**

Subject: Individual Wastewater System for _____

Tax Map Key (TMK) Number: (____) ____ - ____ - ____ : _____

Mailing Address: _____

I, _____, hereby certify that I am the owner (s) of the
(please print name)
subject property and that I have read the following and shall comply with all provisions. Failure to comply with any or all of the provisions can lead to imposition of the penalties and remedies as provided for in Administrative Rule, Title 11, Chapter 62, Section 11-62-72, Penalties and remedies.

1. I certify that as the owner of the Individual Wastewater System (IWS) serving the subject property, the IWS will be inspected, operated and maintained in accordance with the operation and maintenance manual developed by my IWS design engineer section (section 11-62-31.1(e)(2)).

Furthermore, if an aerobic unit is utilized for wastewater treatment, an active service contract for the proper operation and maintenance shall be maintained at all times (section 11-62-33.1.(b)(3)).

2. I understand and shall comply with the provision of section 11-62-08 (g) which requires that the IWS be constructed by a licensed contractor with a license type of: **A, C-9, C-37, C-37a or C-43.**
3. I understand and shall comply with the provisions of section 11-62-31.(f) which states that the IWS must be inspected and approved of by the Department prior to use.

Furthermore, I shall instruct and require my contractor to leave uncovered for inspection, various parts of the IWS system. These parts include manhole/access openings, distribution boxes, ends of trenches to visually see gravel, pipe and geotextile fabrics used and/or seepage pit openings. I understand that I will be required to re-expose these areas if at the time of inspection they are not visible.

4. I understand and shall comply with the provisions of section 11-62-31.1.(e)(2) which required me to certify upon sale or transfer of the subject property, that the appropriate transfer or sales documents and provisions shall bind the new owners to the operation and maintenance provisions referenced in item 1 above.
5. I understand and shall submit any and all changes made to my IWS plans to the Department (section 11-62-08(b)) for review and approval. Changes to the approved IWS plans that need to be submitted to the Department include but are not limited to the following - changes in location of any component of the wastewater system, changes in the type of products used, changes in the disposal system methods, changes in the dwellings/buildings location or size and changes in the design engineer for the IWS.

Signed: _____ Dated: _____

**DEPARTMENT OF HEALTH - WASTEWATER BRANCH
INDIVIDUAL WASTEWATER SYSTEM (IWS) - SITE EVALUATION / PERCOLATION TEST**

Date / Time: _____ Test Performed by: _____

Owner: _____ TMK: (____) ____ - ____ - ____ : _____

Elevation: _____ feet

Depth to Groundwater Table: _____ feet below grade

Depth to Bedrock (if observed): _____ feet below grade

Diameter of Hole: _____ inches

Depth to Hole Bottom: _____ feet below grade

<u>Depth, inches below grade</u>	<u>Soil Profile (color, texture, other)</u>
_____	_____
_____	_____
_____	_____

PERCOLATION READINGS:

Time 12 inches of water to seep away: _____ minutes

Time 12 inches of water to seep away: _____ minutes

Check one:

____ Percolation tests in sandy soils, recorded time intervals and water drops at least every 10 minutes for at least 1 hour.

____ Percolation tests in no-sandy soils, presoaked the test hole for at least 4 hours. Recorded time intervals and water drops at least every 10 minutes for 1 hour of time for the first 6 inches to seep away in greater than 30 minutes record time intervals and water drops at least every 30 minutes for 4 hours or until 2 successive drops do not vary by more than 1/16 inch.

<u>Time Interval</u>	<u>Drop in Inches</u>	<u>Time Interval</u>	<u>Drop in Inches</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Percolation Rate (time/final water level drop): _____ minutes/inches

As the engineer responsible for gathering and providing site information and percolation test results, I attest to the fact that above site information is accurate and that the site evaluation was conducted in accordance with the provisions of Chapter 11-62, "Wastewater Systems" and the results were acceptable. I also attest that three feet of suitable soil exist between the bottom of the soil absorption system and the groundwater table or any other limiting layer.

Engineer's Signature/Stamp

Date

**DEPARTMENT OF HEALTH - WASTEWATER BRANCH
INDIVIDUAL WASTEWATER SYSTEM**

FALLING HEAD TEST PROCEDURE

1. Preparing Percolation Test Hole(s)
 1. Dig or bore a hole, four to twelve inches in diameter with vertical walls to the approximate depth of the soil absorption system (bottom of trench or bed).
 2. Scratch the side wall and bottom to remove any smeared soil and remove loose material.
 3. Place one inch of coarse sand or gravel on bottom.

- B. Determine Percolation Rate
 1. Place twelve inches of water in hole and determine time to seep away. Record this time on the site evaluation form.
 2. Repeat step B.1. above. Also record this time on the site evaluation form.
 3. If the time of the second test is less than 10 minutes go to Step C, if not skip to Step D.

- C. Sandy (granular) Soils
 1. Establish a fixed reference point, add water to six inches above gravel and measure water level drops every ten minutes for 1 hour.
 2. Use a shorter time interval if first six inches seeps away in ten minutes or less.
 3. Refill when necessary, do not exceed six inches of water.
 4. Record time intervals and water drops on site evaluation form.
 5. Use final water level drop interval to calculate percolation rate. (Step E)

- D. Other Soils (non-granular, e.g. silt, loams & clays)
 1. Maintain at least twelve inches of water in the hole for at least four hours to presoak soil.
 2. Do not remove water remaining after four hours.
 3. Permit soil to swell at least 12 hours. (Dry clayey soils should be soaked and permitted to swell for longer periods to obtain stabilized percolation rates).
 4. After swelling, remove loose material on top of gravel.
 5. Use fixed referenced point, adjust water level to six inches above gravel and measure water level drop.
 6. If the first six inches of water seeps away in less than 30 minutes, measure water level drops every ten-minutes and run for one hour.
 7. If the first six inches of water takes longer than 20 minutes to seep away, use 30 minute time intervals for four hours or until two successive drops do not vary by more than one-sixteenth inch (stabilized rate).
 8. Refill with water only when necessary, but no adjustment during last three readings except to the limit of the last drop. Do not exceed six inches of water.

- E. Use final drop interval to calculate percolation rate and record on site evaluation form:

$$\frac{\text{Time Interval}}{\text{Water Level Drop}} = \text{Percolation Rate}$$

