SUBMETERING FOR IRRIGATION

City and County of Honolulu
Department of Environmental Services
July 2, 2012

Residential users (single family and duplex; multi-family) and non-residential users currently receive an automatic 20% irrigation credit on their sewer service bill. On the average, a household uses 20% of incoming water for landscape irrigation or other outdoor purposes which does NOT enter our City's sewer system.

For customers who use substantially more than 20% of their water consumption on irrigating plants and lawns, it may be cost-effective to install a **submeter** to measure the actual volume of irrigation water, report the required readings to us, and receive a credit adjustment on their sewer service billing.

You will need to consider the following factors to determine if it is cost-effective to submeter your irrigation water:

- **Submetering will result in elimination of the 20% irrigation credit. (Refer to Chapter 14, Revised Ordinance of Honolulu, as amended Appendix 14-B, Sewer Service Charge Schedules.);**
- The cost of the submeter;
- The cost of hiring a plumbing contractor or a contractor licensed to perform subclassification C-37b, Irrigation and Lawn Sprinkler Systems, to install and segregate the water lines in accordance with Hawaii Administrative Rules, Title 16, Chapter 77;
- The irrigation submeter shall be installed on the irrigation system side (downstream) of a plumbing code compliant irrigation backflow preventer;
- The time involved in monitoring and submitting the submeter readings;
- The actual savings to you; and
- The amount of time it would take for you to recover the submeter costs.

The following example illustrates whether or not you should install a submeter.

Volume of incoming water measured by Board of Water Supply (BWS) – 21,000 gallons
Approximate volume of irrigation water – 11,000 gallons
Monthly base charge - $63.23

Calculated Sewer Charge without a submeter:

Monthly base charge = $63.23
Volume charge = 21,000 gallons X 80% = 16,800 (rounded up to 17,000)
= 17 X $3.77 per thousand gallons
= $64.09

Total monthly sewer charge = $127.32 (A)

Calculated Sewer Charge with a submeter

Monthly base charge = $63.23
Volume charge = 21,000 – 11,000 = 10,000
= 10 X $3.77 per thousand gallons
= $37.70

Total monthly sewer charge = $100.93 (B)
Total savings to submeter = $26.39 per month {(B) subtract from (A)}

If your cost of installing a submeter and appurtenances using a licensed plumber or contractor is $5,000.00, it would take approximately 16 years to recover the installation cost. You will need to decide whether you are willing to accept a payback period of 16 years. Of course, sewer fees will most likely increase in the future and you may be able to recover the installation cost in a shorter time.

If you have any questions or need further information, please call the Department of Environmental Services, Customer Service Section, at 768-3330.

SINGLE FAMILY AND DUPLEX RESIDENTIAL USERS SUBMETERING APPROVAL AND IMPLEMENTATION PROCEDURES

A. APPROVAL:

All plans shall be prepared by or under the supervision of a Plumbing Contractor, Engineer, or Architect, and be at least 8 1/2" x 11" in size. Two (2) copies of the plan(s) shall be submitted to the Department of Environmental Services, Customer Investigation Section, for review and approval. The plan(s) shall contain the following information:

1. Address, TMK, and Cross Street information.

2. Location and layout of water lines and plumbing fixtures, including the primary water meter(s) with the BWS account number(s) noted.

3. Entire layout of structures, identifying what is on the property.

4. Location and layout of the proposed submeter(s).

   (a) Submeters shall be installed at a location that is readily accessible and free of hazards.
   (b) No submeter shall be installed between the BWS meter and the BWS required backflow preventer.
   (c) Submeter(s) shall be installed downstream (irrigation system side) of the irrigation backflow preventor.

5. The make, model number, and size of the proposed submeter(s).

6. The following statement signed and dated by the Plumbing Contractor, Engineer, or Architect, shall be made a part of the plans:

   "I certify that all the information shown has been personally verified and is true and accurate." (Engineer or Architect Stamp or Plumber's License number is required on the plans.)

   Any required changes and clarifications should be incorporated and resubmitted. Upon approval, one (1) set of the signed plans will be returned.

B. IMPLEMENTATION:

1. Submeter readings shall be submitted by the service holder on a timely basis and monitored by the City investigators (if deemed necessary).

2. Sewer service charge shall be based on the submeter readings, the BWS meter readings, and the current sewer service charge for residential customers with submeters.

3. Submeter shall be maintained in accordance with the manufacturer's instructions. If required by the City, the user will calibrate the submeter. All maintenance and calibration expenses are the responsibility of the user.

4. To receive credit for submetered water usage, the readings must be reported in a timely manner. Failure to report the submeter readings within five (5) working days of the designated reporting date, will result in the sewer charges being based on the actual BWS consumption. Past due readings will not be honored for credit adjustments. Non-submittal of your submeter reading does not relieve the service holder from full payment of your BWS water and sewer bill.

   Failure by the service holder to report submeter readings for two (2) consecutive billing periods will result in the removal from the submeter program. If there are any non-compliant sources that are hooked up to the submeter, we will back-charge for all submeter adjustments made on the BWS account.

5. Access to the submeter(s) shall be allowed to City investigators upon request.

6. The Service holder shall notify the City of any changes to the premises that affect the approved submetering layout and submit amended copies of plan(s) for approval.

7. Submeter readings shall be reported by phone to 768-3330, faxed to 768-3341, or emailed to envsubmeters@honolulu.gov. A submeter report form is available on our website. Include name, phone number, address of the property, designated WWM Account Number, date submeter was read, and the name as it appears on the water bill.

MULTI-FAMILY RESIDENTIAL AND NON–RESIDENTIAL USERS SUBMETERING APPROVAL AND IMPLEMENTATION PROCEDURES

Multi-Family Residential Users apply to three (3) or more living units, town-houses, and condominiums.

Non-Residential Users apply to all industrial, commercial, agricultural, governmental, and miscellaneous services. (As defined in Chapter 14, Revised Ordinance of Honolulu, Article 6 Sec. 14-6.3.)

A. APPROVAL:

All plans shall be prepared by or under the supervision of a licensed Mechanical Engineer or Architect, and be at least 8 1/2" x 11" in size. Three (3) copies of the plan(s) shall be submitted to the Department of Planning and Permitting, Mechanical Code Section for review and permit approval. The plan(s) shall contain the following information:

1. Address, TMK, and Cross Street information.

2. Location and layout of water lines and plumbing fixtures, including the primary water meter(s) with the Board of Water Supply (BWS) account number(s) noted.

3. Entire layout of structures, identifying what is on the property.

4. Location and layout of the proposed submeter(s).

    (a) Submeters shall be installed at a location that is readily accessible and free of hazards.
    (b) No submeter shall be installed between the BWS meter and the BWS required backflow preventer.
    (c) Irrigation submeter(s) shall be installed downstream (irrigation system side) of the irrigation backflow preventor.

5. The make, model number, and size of the proposed submeter(s).

6. The following statement, signed and dated by the Plumbing Contractor Engineer, or Architect, shall be made a part of the plans:

   "I certify that all the information shown has been personally verified and is true and accurate." (Engineer or Architect Stamp or Plumber's License number is required on the plans.)

   Any required changes and clarifications should be incorporated and resubmitted. Upon approval, one (1) set of the signed plans will be returned.

B. DEPARTMENT OF PLANNING AND PERMITTING APPROVAL

The applicant shall be responsible for obtaining a building permit from the Department of Planning and Permitting (DPP) for installation of the submeter and related work. Plans will be required by DPP and compliance with plumbing code will be verified by DPP inspector.

C. IMPLEMENTATION:

1. Submeter readings shall be submitted by the service holder on a timely basis and monitored by the City investigators (if deemed necessary).

2. Sewer service charge shall be based on the submeter readings, the BWS meter readings, and the current sewer service charge for residential customers with submeters.

3. Submeter shall be maintained in accordance with the manufacturer's instructions. If required by the City, the user will calibrate the submeter. All maintenance and calibration expenses are the responsibility of the user.

4. To receive credit for submetered water usage, the readings must be reported in a timely manner. Failure to report the submeter readings within five (5) working days of the designated reporting date, will result in the sewer charges being based on the actual BWS consumption. Past due readings will not be honored for credit adjustments. Non-submittal of your submeter reading does not relieve the service holder from full payment of your BWS water and sewer bill.

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the submeter, we will back-charge for all submeter adjustment credits made on the BWS account.

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6/29/12

Executive Assistant Date
Office of Administrative Support