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**Select Committee on  
Environmental Health**

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**SSB 6620**

**Brief Description:** Regarding biological remediation technologies for on-site sewage disposal systems.

**Sponsors:** Senate Committee on Water, Energy & Telecommunications (originally sponsored by Senators Pridemore, Oemig, Hatfield, Fraser, Rasmussen and Shin; by request of Lieutenant Governor).

**Brief Summary of Substitute Bill**

- Authorizes use of biological remediation technology in failed drainfields of on-site sewage disposal systems.
- Authorizes use of biological remediation technology in preventing clogged infiltrative surfaces when an on-site sewage disposal systems is not in a state of failure.
- Requires manufacturers of biological remediation technologies to provide documentation to the local health jurisdiction that there has been verified performance of the technology.
- Requires the Board of Health to adopt rules regarding verification of biological remediation products performance and certification, monitoring and use of such products.

**Hearing Date:** 2/25/08

**Staff:** Ashley Pedersen (786-7303).

**Background:**

The Department of Health (DOH) protects public health by promoting the safe treatment and disposal of domestic and other non-industrial wastewater in areas of Washington not served by municipal sewage treatment works. Rules and standards have been adopted to prevent, control,

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and abate health hazards and nuisances related to the disposal of wastes, including on-site sewage disposal systems.

On-site septic systems or on-site sewage systems are the most common methods of wastewater treatment for homes, commercial establishments, and other places that are not connected to a public sewer system. An on-site sewage system consists of a network of pipes, a septic tank, and a drainfield, and provides subsurface soil treatment and dispersal of sewage.

The DOH regulates the location, design, installation, operation, maintenance, and monitoring of on-site sewage disposal systems. The DOH develops standards and guidance to assist local health officers in permitting different types of sewage treatment and distribution technologies, including public domain treatment technologies, proprietary treatment products, public domain distribution technologies, and proprietary distribution products. Manufacturers of proprietary treatment products must register their product with the DOH before the local health officer may permit their use.

The DOH does not currently recognize any testing protocol for use in the repair or recovery of failed drainfields of on-site sewage disposal systems. When an on-site sewage system fails, usually the primary reason is the infiltrative surface at the bottom of the bed or trench of the system is plugged or clogged. This can be caused by solids in wastewater or fine sand in the gravel, compacted surface during installation, masses of microorganisms collected at the surface, and waste products of microbiological metabolism.

#### **Summary of Substitute Bill:**

##### **Biological Remediation Technology**

Biological remediation technology may be used in the recovery of failed drainfields of on-site sewage disposal systems. In addition, biological remediation technology may be used for the purpose of preventing clogged infiltrative surfaces when an on-site sewage disposal system is not in a state of failure.

Biological remediation is a process that uses microorganisms to return a contaminated environment, including a drainfield or soil dispersal component, to a state of non-failure. Biological remediation can also involve a process that uses microorganisms to sufficiently increase the infiltration rate through and into the soil below the infiltrative surface of a clogged infiltrative surface on-site sewage disposal system.

##### **Reimbursement to Purchaser**

If an on-site sewage disposal system with a biological remediation product does not remedy a clogged infiltrative surface within three months, the local health jurisdiction must require system repairs to meet on-site sewage disposal system requirements as found in chapter 246-272A of the WAC. If the product fails to make significant improvements and certain conditions are found, the on-site professional who installed the biological remediation device must reimburse the purchaser for the direct cost of the product and installation.

##### **Authorized Installers of Biological Remediation Products**

The following individuals are authorized to install biological remediation products:

- on-site wastewater treatment system designers licensed under Chapter 18.210 of the RCW;
- installers approved by the local health officer to install on-site sewage disposal systems or components; and
- professional engineers licensed under law.

In addition, when an on-site sewage disposal system is not in a state of failure, licensed on-site wastewater treatment system operation and maintenance professionals are authorized to install biological remediation products.

### **Manufacturers Must Verify Product Performance**

Manufacturers of biological remediation technologies must provide documentation to the local health jurisdiction that there has been verified performance of the technology. Product performance must be verified through:

- product testing using the International Association of Plumbing and Mechanical Officials Guide criteria, standard 180-2003, or an equivalent standard; or
- third-party field testing, accredited by the American National Standards Institute, university testing data, or a DOH approved entity, showing remediation of a failed drainfield within 90 days.

In addition, manufacturers must show that:

- the biological component of the product meets the conditions in statute relating to additive regulation;
- the biological remediation technology is used solely for the purpose of remedying or fixing a clogged infiltrative surface in a failed on-site sewage disposal system; and
- the product performance is verified through product testing conducted by a testing facility conforming with the American National Standards Institute.

### **Board of Health Must Adopt Rules**

By July 1, 2010, the Board of Health must adopt rules for verification of biological remediation products performance and for use of products in failing on-site sewage disposal systems. The rules must set requirements regarding permitting, certification, monitoring and using the products in failed systems, as well as in systems not in a state of failure.

After July 1, 2010, products used for installation in on-site sewage disposal systems not in a state of failure must be on the state list of approved biological remediation products.

### **Permitting by Local Health Jurisdiction**

When an on-site sewage disposal systems is in a state of failure, a local health jurisdiction may issue a permit. When an on-site sewage disposal system is not in a state of failure, a permit is not required for the installation or use of biological remediation devices. However, a local health jurisdiction may require registration for tracking purposes and charge a reasonable fee. Each permit must include:

- inspection, monitoring, and maintenance requirements;
- a plan with a time frame for correcting any public health concern and the means to protect public health until the concern is addressed;

- a plan for operation and maintenance that is filed with the local health jurisdiction;
- a schedule for maintenance and operation reports;
- a contract with the owner of the on-site sewage disposal system with a biological remediation product for inspection and monitoring by a certified inspector or local health officer; and
- information for the owner of an on-site sewage disposal system with a biological remediation product.

Prior to issuing a permit for a biological remediation product, the local health officer or on-site wastewater treatment system designer licensed under law must perform an assessment. The assessment must take into account: (1) site and effluent-specific characteristics of the on-site sewage disposal system; and (2) whether the biological remediation technology will adversely impact the environment or public health by increased wastewater flows.

Purchasers of biological remediation devices for use in on-site sewage disposal systems not in a state of failure must maintain an operation and maintenance contract with a licensed on-site professional. Local health jurisdiction may require yearly reporting of data collected from an operation and maintenance inspection by a licensed on-site professional.

Each permit must include a signed document from the homeowner allowing the local health officer to enter the property to determine if a biological remediation product has remedied a failed drainfield.

**Appropriation:** None.

**Fiscal Note:** Similar fiscal note is available using HB 3014.

**Effective Date:** The bill takes effect 90 days after adjournment of session in which bill is passed.