Focus on **Sewage Management**

from Ecology's Water Quality Program

Which state agency is responsible for sewage management?

Both the Department of Ecology (Ecology) and the Department of Health (Health) have roles and expertise in the management of sewage in the state. Generally, smaller systems are regulated by local health authorities under state Board of Health rules; medium to large sized systems are regulated by Health; and very large systems are regulated by Ecology.

Each agency is committed to proper sewage treatment that protects public health and the environment, even though each operates under different statutory requirements and authorities.

How are the agencies working to avoid duplication of work?

The roles of Ecology and Health are not duplicative, but rather complementary. Each of the agencies has a distinct role to play in ensuring proper sewage management. The agencies are currently engaged in a regulatory improvement project that recognizes the Governor's demand for an effective and efficient government. The agencies are committed to this improvement and are focused on achieving results, not creating more paperwork.

Does the current regulatory structure allow for new technologies?

The current regulatory structure allows the permitting of new technology. Ecology and Health are working with project proponents on promising technologies that are new to Washington State, such as membrane bioreactor (MBR) technology. Our permitting process needs some refinement for some new treatment approaches like MBR technology because when the regulatory process was developed, there were typically only two options: a traditional onsite septic system or a larger wastewater treatment plant. Smaller scale treatment wasn't an option, like it is now.

New technologies have differences between manufacturers, limited operational experience, and don't have a long term track record. Long-term operation and maintenance requirements may not be well understood. Therefore, careful permitting and approval considerations are critical.

How does sewage treatment affect the marine environment?

In Washington State, recent fish kills and low dissolved oxygen in Hood Canal have focused more attention on the marine environment and the importance of nitrogen removal. Nitrogen is in all sewage. Nitrogen can be a problem when it enters a water body and causes more algae to grow in the water. Too much algae causes aesthetic problems and reduces oxygen levels in the

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water when the algae rots. Aquatic life needs dissolved oxygen in order to breathe. Making sure sewage is appropriately treated for nitrogen is a current issue.

What progress is being made in sewage management?

There is a lot of progress happening in the sewage arena, particularly around Puget Sound:

- Ecology is reviewing a permit for the largest membrane bioreactor treatment plant in the nation for the Brightwater Reclaimed Water plant in King County.
- The Puget Sound Action Team is testing three different nitrogen treatment technologies that can be added to existing septic systems.
- The state's revised rules on small septic systems (under 3,500 gallons per day) went into effect in July 2005. They make several improvements to the process of locating, installing, operating, and maintaining septic systems. Included for the first time are standards for nitrogen.

For more information:

For more information from the Department of Ecology, please visit our web site at http://www.ecy.wa.gov/programs/wq/wqhome.html or contact:

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