

About IRAC

Interagency Resource for Achieving Cooperation

Mission Statement

...to provide the forum and structure for governmental agencies to coordinate regulations that protect human health, safety and the environment.

Vision Statement

Governmental agencies speak with one voice to provide clear environmental and regulatory direction that meets business and citizen needs.

For more information about IRAC

Call us at 206-263-3087 or visit our website at www.govlink.org/irac

This material is available in alternate formats by calling 206-263-3050.

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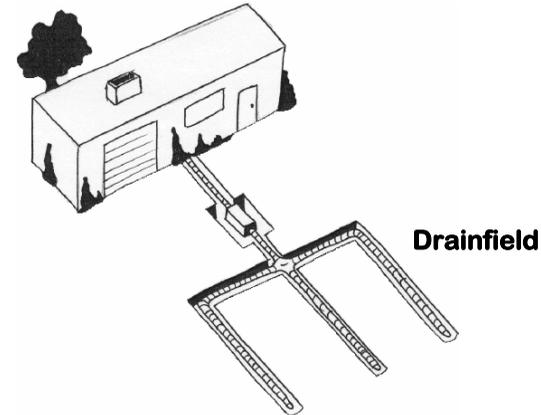
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Non-Residential Septic Tank Systems: Information for Business Users and Property Owners

Interagency Resource for Achieving Cooperation (IRAC)

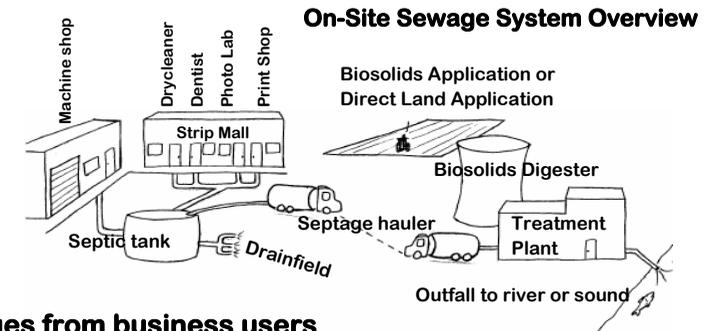
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Many areas in urban and rural King County—and much of Western Washington—are not served by public sewer systems that convey wastewater to sewage treatment plants.

Instead, liquid wastes are discharged into onsite septic systems. Such systems were adequate when the land was used primarily for rural residential housing and farms. But recent high density development, including strip malls, in these areas means that more and more business, commercial and industrial dischargers rely on septic systems to receive liquid wastes. This can pose a problem.

The septic tank was never intended for business process waste.



How do discharges from business users differ from domestic sewage?

Domestic sewage typically consists of wastewater from the toilet, shower, kitchen and other sinks. Biologically, these wastes are easy for bacteria to digest.

In addition to domestic sewage, businesses and industrial enterprises often discharge “process wastes” from their activities. Common commercial examples include mercury in dental office wastewater (from the amalgam fillings), silver in photo processor wastewater, inks and solvents from printing businesses, pharmaceuticals from veterinary and medical clinics. Industrial users, such as electroplaters, may discharge heavy metals.

Because the chemicals and metals in process wastewater are often difficult, or impossible, for bacteria in the septic system to break down, process wastewater is not allowed in septic systems under Washington State water quality law.

In addition, the Code of the King County Board of Health and the Washington State Board of Health Regulations prohibit the discharge of industrial wastes or commercial wastes with non-domestic characteristics (that is, waste that is different from domestic sewage) into onsite septic systems.

Non-Residential Septic Tank System Information

My business is on a septic system. What are the risks of putting my wastewater into the septic system?

Liability for contamination and responsibility for its cleanup rests with both the property owner and with those “operators” at the property responsible for creating the contamination under the Model Toxic Control Act.

Cleanup is often very costly and, as the contamination ‘travels,’ litigation can involve many parties. As mentioned above, both the property owner and the user of the property can be liable.

Legal issues may be raised if those ‘downstream’ who drink water contaminated by the septic system become involved due to illness or health problems.

Risk because of chemicals and hazardous substances in the septic sludge may be posed to personnel who periodically pump out the septic tank.

More risk, due to chemicals in the sludge, is placed upon personnel at the wastewater treatment plant that accepts the pumped sludge and, at smaller treatment plants, the substances could affect the biological processes of the plant and pose the threat of permit violations.

My business is on a septic system. What should I do?

Segregate wastewater that contains chemicals and other hazardous substances from your domestic sewage. Place these wastes in a holding tank until they can be picked up by a licensed hazardous waste hauler and/or treatment facility. Do not discharge them into sinks, toilets, floor drains or storm drains.

Contract with licensed companies to dispose and/or treat the segregated wastewater.

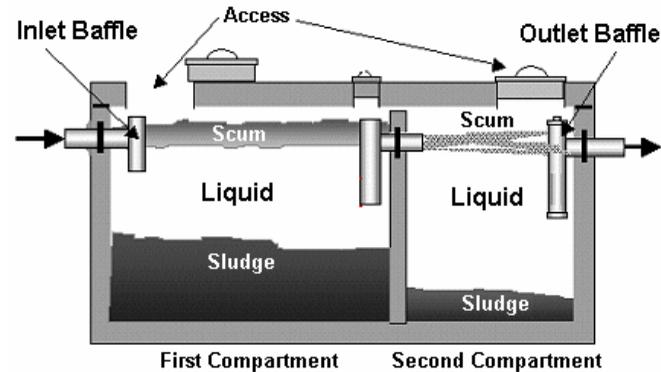
Local governments have created “best management practices” for many business sectors, and these often include information about handling process wastewater. Contact the small quantity generator and/or technical assistance to business programs within your county government or go to the websites listed here for more examples.

Property owners can protect themselves and their investments by educating tenants and demanding that they run a clean business. Adherence to regulatory requirements can be a condition of the lease. Since the property owner is ultimately responsible for maintaining property value and for any contamination caused by a tenant, periodic inspections are also a good idea.

What problems can occur with septic systems?

In Western Washington the water table is often close to the surface of the ground, making it possible for septic tank contaminants to enter the groundwater if not adequately treated. While septic systems are designed to receive and treat domestic sewage, the addition of chemicals and toxic substances can cause problems.

For example, chemicals can disrupt the bacteria in the septic tank, preventing proper treatment of the waste, and the substances can contaminate surrounding soils and groundwater. In some cases, contaminated groundwater has traveled across property boundaries, resulting in the subsurface contamination of neighboring property or drinking water wells.



Side cross-section of a septic tank

What, exactly, is a septic system, and how does it work?

A septic system consists of an underground holding tank that receives liquid waste. Bacteria inside the tank break down the waste anaerobically (without oxygen), and the resulting wastewater is discharged to a drain field. From here the wastewater leaches through the soil and percolates down to the groundwater. The solids in the tank settle and require pumping on a periodic basis. This pumped sludge is usually taken to a municipal sewage treatment plant.

Resources

Septage Haulers: Look in your local yellow pages or contact the Washington On-Site Sewage Association at www.wossa.org/

Hazardous Waste Vendors: Look under “environmental” in your local yellow pages or check King County’s Waste Directory at <http://www.govlink.org/hazwaste/business/wastedirectory/>

Best Management Practices: Call your local wastewater district, public health department or hazardous waste management program for information about your business.

For more best management practices :
<http://www.ecy.wa.gov/biblio/>
<http://www.govlink.org/hazwaste/business/>
<http://www.metrokc.gov/HEALTH/wastewater/index.htm> or call 206-296-3976.

The information in this brochure was developed by IRAC’s On-Site Sewage Workgroup. Agencies and organizations represented include the Washington Department of Ecology Toxics Cleanup and Biosolids Programs, Public Health—Seattle & King County, King County Industrial Waste, King County South Treatment Plant, King County Department of Development and Environmental Services, King County Biosolids Program, and the Local Hazardous Waste Management Program in King County.