



WHAT ARE LARGE ON-SITE SEWAGE SYSTEMS?

Large on-site sewage systems (LOSS) are an integrated system of components, located on or nearby the property they serve, that convey, store, treat, and provide subsurface soil treatment and disposal of domestic sewage, with design flows of 3,500 gallons/day (gpd) up to and including 100,000 gpd.

Design flow is the maximum amount of sewage estimated to be produced by customers (and infiltration and inflow) in 24 hours.

A LOSS consists of a collection system, a treatment component such as a septic tank or treatment sequence, and a drainfield (the subsurface treatment and dispersal component of LOSS).

LOSS also refers to a holding tank sewage system or other system that does not have a drainfield. A holding tank that discharges to a sewer is not a LOSS.

LOSS are permitted and regulated by Department of Health, Office of Environmental Health and Safety, Wastewater Management Section.

Regulatory authority: chapter [70.118B RCW](#), chapters [246-272B](#) and [246-272 WAC](#).

LOSS may also include:

- Lagoons with a drainfield,
- Systems with mechanical treatment (such as a membrane bioreactor), and
- Treatment systems with nearby, off-site drainfields.

A LOSS generally serves from 10 to 370 homes, or an equivalent mix that includes commercial development that produces residential strength sewage.

Department of Health regulates about 600 LOSS. Smaller on-site sewage systems (less than 3,500 gpd) are regulated by local health agencies.

Department of Ecology regulates wastewater treatment with discharge to ground if the peak daily flow exceeds 100,000 gallons. Ecology also regulates treated waste discharging directly to waters of the state or ocean, and all industrial wastewater treatment.

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