



STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF ENVIRONMENTAL HEALTH
PO Box 47820 • Olympia, Washington 98504-7820

January 3, 2012

Gustavo Ramos
Housing Authority of Skagit County
1650 Port Drive
Burlington, Washington 98233-3106

RE: Raspberry Ridge Large On-site Sewage Systems Failure, Operating Permit #
SKG007 (IA), SKG008 (IB) and SKG010 (II)

Dear Mr. Ramos:

My staff recently discussed with you that our department believes the drainfield failure at Raspberry Ridge I is causing risk to public health and safety and the environment. I believe that Raspberry Ridge I (RR I) and Raspberry Ridge II (RR II) housing developments must be connected to sanitary sewer to eliminate those risks. This letter provides documentation to verify that it's necessary for RR I and II to connect to the Burlington sanitary sewer system to protect basic public health and safety and the environment.

On September 30, 2011, our department issued a Notice of Violation that documents our field observation and determination that the drainfield for the RR IB large on-site sewage system (LOSS) fails to provide adequate treatment of the effluent. The Notice of Violation directed you to take interim actions to ensure that there would be no further events of surfacing effluent and to propose a long term solution. The interim measure applied was to take the failing drainfield lines out of service. Recent observation has shown us that this has caused effluent to surface along the remaining lines.

Based on staff reports and file documents, I don't believe this failure can be corrected by repair or replacement of the drainfield. The surfacing effluent shows that the soil is unable to properly treat and disperse the effluent. RR I LOSS operation and maintenance (O&M) reports document that there are poor soil conditions under the drainfield that have resulted in treatment deficiencies. From our observations of the drainfield soil at the nearby RRII LOSS, we see that this type of soil is widespread in the area of both developments. Sewage strength tests indicate higher than acceptable total suspended solids and oils and grease. If not effectively treated before drainfield distribution, these contaminants can shorten drainfield life, even in favorable conditions. It will be difficult for a LOSS to successfully treat and disperse effluent of this waste strength in this type of soil for the expected long life of a LOSS.



The RR IA and RR IB LOSS serve the same development. They have the same treatment, their drainfields are right next to each other, and they were built at the same time. For purpose of determining a failure, our department considers them to be the same – both are failed LOSS and need to be connected to sanitary sewer.

The Raspberry Ridge IA and IB LOSS were first put into service in late 2002. Indications of problems began within the first three years. Your O&M provider has usually been able to minimize and correct the situation. However, repeated failures make it clear that the long term solution is to connect RR I and RR II to the City of Burlington sanitary sewer so that public health and the environment are protected.

LOSS Regulatory Background

Our determination that the LOSS has failed is based on requirements in WAC 246-272B-07450 (enclosed). That regulation also outlines potential remedies, summarized in the table below.

Remedies	Department of Health Feasibility Comments
Connect residences, structures, lots, and units that are connected to the failing LOSS to <u>another LOSS</u> with sufficient approved capacity or to a <u>sanitary sewer system</u> , if available.	There is no other LOSS nearby to which RR can connect. Connection to City of Burlington sanitary sewer appears feasible, with sewer extension.
Apply to Ecology for a National Pollutant Discharge Elimination System permit or a state waste discharge permit, if effluent will be discharged to the land surface or into surface water.	This is a lengthy process and would result in significant costs to develop a treatment plant, presumably with discharge to the Skagit River. Probably not feasible or timely.
Cease serving some or all dwellings, structures, lots, or units to reduce the risk to public health	Reduction in volume of sewage may be a temporary solution. This would result in fewer housing units able to be occupied.
Shut down and abandon the LOSS.	This is the option of last resort.

I am aware that there must be compliance with Growth Management Act when extending and connecting sanitary sewer to a development outside of the designated Urban Growth Area (UGA). Burlington will have to extend its sanitary sewer lines outside the city's UGA in order to serve your RR housing developments.

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RCW 36.70A.110 (4) contains the conditions for extending urban services, such as City of Burlington sanitary sewer, outside the UGA.

In general, cities are the units of local government most appropriate to provide urban governmental services. In general, it is not appropriate that urban governmental services be extended to or expanded in rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development. (emphasis added)

I encourage you to continue to work with the city, county planning and public health leaders, and Department of Commerce to resolve this situation. Thank you for the efforts you've already made to protect public health and the environment. We'll continue to work with you to make sure the Raspberry Ridge sewage treatment problems are resolved.

If you have questions or need additional information, please contact the following LOSS staff: Jeanne Andreasson, P.E., at jeanne.andreasson@doh.wa.gov or 360-236-3360 or Denise Lahmann, P.E. at denise.lahmann@doh.wa.gov or 360-236-3348.

Sincerely,



Maryanne Guichard
Assistant Secretary

cc: Pam Anderson, Office of the Attorney General
Corinne Story, Skagit County Public Health Department
Peter Browning, Skagit County Public Health Department
Gary Christensen, Skagit County Planning and Development Services
Melanie Corey, Housing Authority of Skagit County
Bryan Harrison, City of Burlington
Margaret Fleek, City of Burlington
Mark Henley, Department of Ecology
Anné Fritzel, Department of Commerce
Bruce Hunt, Department of Commerce
Jeanne Andreasson, Department of Health
Denise Lahmann, Department of Health
Kelly Wynn, Water and Wastewater Services, LLC

Enclosure
WAC 246-272B-07450, Failures

1. LOSS or LOSS component failures include, but are not limited to:
 - a. Sewage or partially treated sewage on the ground; (emphasis added)
 - b. Sewage backing up into a connected residence or structure caused by slow soil absorption of the treated effluent or other failure;
 - c. Sewage or partially treated sewage leaking from a septic tank, pump chamber, holding system or collection system;
 - d. Cesspools or seepage pits where evidence of groundwater or surface water quality degradation exists;
 - e. Plant growth above the drainfield that indicates the effluent is not filtering down through the soil profile;
 - f. Inadequately treated effluent contaminating groundwater or surface water; or
 - g. Non-compliance with standards stipulated in the operating permit.
2. The owner shall address and correct all failures immediately. LOSS component failures that can be corrected by repair or replacement must follow the requirements of WAC 246-272B-07400.
3. The owner of a LOSS that has a failure shall report the condition to the department by telephone or email within one business day of discovery.
4. The department may require:
 - a. Modifications, reduction in capacity, changes in operations, additional monitoring, temporary use of a holding tank, or other emergency measures in order to reduce or eliminate the risk to public health and actual or potential environmental contamination;
 - b. Residences, structures, lots, and units that are connected to the failing LOSS to connect to another LOSS with sufficient approved capacity or to a sanitary sewer system, if available;
 - c. The LOSS owner to apply for a National Pollutant Discharge Elimination System permit or a state waste discharge permit from the department of ecology, if effluent will be discharged to the land surface or into surface water; or
 - d. The LOSS to be shut down and abandoned, according to WAC 246-272B-07500.
5. When the owner is directed by the department to discontinue operation of a LOSS or to cease serving some or all dwellings, structures, lots, or units, the owner shall give department-approved written notice to all affected customers and property owners within ten business days, return receipt requested.
6. The department may direct the owner to discontinue use of the LOSS or any portion of the LOSS due to a system or component failure.