INTRODUCTION

This report describes the quality and source of the City of Vader’s drinking water, testing requirements, and results for 2010. This year’s report is presented to you by Lewis County because of the overlapping management and operation responsibilities that occurred in November through December 2010 due to the State Receivership process. During that period, the City operated the system; but Lewis County managed the system. Then Lewis County assumed full management and operation of the water system on January 1, 2011.

SOURCE OF OUR WATER

Our water comes from the Cowlitz River and is pumped to the Water Treatment Plant where it is treated for turbidity and chlorinated. Routine monitoring is done at the Plant and throughout the system to ensure water quality is in compliance with Federal and State regulations. The provided table lists the results of our monitoring for 2010. It’s important to remember that the presence of contaminants at a low level does not necessarily pose a health risk.

PROTECTING YOUR WATER

Our water source is from a surface water body. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and can pick up substances resulting from the presence of animals or human activity. Some contaminants that may be present before it is treated are:

- Microbial contaminants such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants such as salts and metals which can be naturally occurring or from urban storm water runoff, industrial or domestic wastewater discharges, petroleum based products, mining, and farming.
- Pesticides and herbicides which may come from agricultural and residential uses.
- Radioactive contaminants which are naturally occurring.
- Organic chemical contaminants including synthetic and volatile organic chemicals which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff and septic systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling EPA’s Safe Drinking Water Hotline at 800-426-4791.
To ensure that tap water is safe to drink, the EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as cancer patients undergoing chemotherapy, individuals who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These individuals should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the EPA’s Safe Drinking Water Hotline at 800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Vader Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from EPA’s Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

**EPA’s Safe Drinking Water Hotline**

800-426-4791

www.epa.gov/safewater

**WATER QUALITY DATA TABLE**

The table below lists all of the drinking water contaminants we detected that are applicable for the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

In the table, you will find many terms and abbreviations that you might not be familiar with. To help you understand these terms, some definitions have been provided.

- **AL** – Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **MCLG** – Maximum Contaminant Level Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- **MCL** – Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close as feasible using the best available treatment technology.
- **NA** – Not applicable.
- **ppb** – Parts per billion, or micrograms per liter.
- **ppm** – Parts per million, or milligrams per liter.
<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Action Level</th>
<th>Amount Detected</th>
<th>Range (Low-High)</th>
<th>Sample Date</th>
<th># of Sites Above AL</th>
<th>Likely Source(s) of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>1.3 ppm</td>
<td>15 homes</td>
<td>0.002-0.304 ppm</td>
<td>2010</td>
<td>0</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits.</td>
</tr>
<tr>
<td>Lead</td>
<td>15 ppb</td>
<td>15 homes</td>
<td>1-2 ppb</td>
<td>2010</td>
<td>0</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contaminants</th>
<th>Unit</th>
<th>MCLG</th>
<th>MCL</th>
<th>Level Detected</th>
<th>Sample Date</th>
<th>Violations</th>
<th>Likely Source(s) of Contaminant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cyanide</td>
<td>ppb</td>
<td>200</td>
<td>200</td>
<td>20</td>
<td>Aug. 2008</td>
<td>No</td>
<td>Discharge from steel/metal factories; Discharge from plastic and fertilizer factories.</td>
</tr>
<tr>
<td>Nitrate</td>
<td>ppm</td>
<td>10</td>
<td>10</td>
<td>0.16</td>
<td>2010</td>
<td>No</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural disposits.</td>
</tr>
<tr>
<td>TTHM</td>
<td>ppb</td>
<td>NA</td>
<td>80</td>
<td></td>
<td></td>
<td>Yes*</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
<tr>
<td>HAA5</td>
<td>ppb</td>
<td>NA</td>
<td>80</td>
<td></td>
<td></td>
<td>Yes*</td>
<td>Byproduct of drinking water disinfection</td>
</tr>
</tbody>
</table>

*VIOLATION*

The system had a violation because of an oversight in 2010. Our water system, PWS #90900E, is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. The system failed to conduct monitoring for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) during the month of warmest temperature: the period from July to August 2010. Due to the failure to sample we cannot be sure what the levels were at that time. Currently, no action is necessary by the customers. Samples will be collected in the future as required. Lewis County has developed a monitoring schedule to prevent this type of oversight from re-occurring.

**CONTACT INFORMATION**

Lewis County is dedicated to providing quality water to every customer, and to managing the system responsibly and efficiently. We thank our customers for their assistance, and ask for your continuing support of the Vader Water System which we recognize is a vital resource of the community.

Please call Lewis County at 1-855-858-2843 if you have questions about the water system.

The Lewis County Board of County Commissioners holds regularly scheduled meetings every Monday at 10:00 AM at the County Courthouse located at 351 NW North Street, Chehalis, WA.