Stormwater runoff occurs when precipitation flows over the ground. Impervious surfaces like driveways, sidewalks, streets, and rooftops prevent stormwater from naturally soaking into the ground. To manage this, communities have storm sewers that help to carry stormwater away from homes and businesses. When it rains, the stormwater runoff is carried away by pipes and ditches or our storm sewers. These pipes and ditches are different than our regular sewers because the water goes directly into our streets, rivers, and lakes. Unlike sewages, stormwater runoff does not drain to a treatment plant. As it flows, stormwater picks up debris, chemicals, dirt, and other pollution and carries it into our waterways where it can harm fish, frogs, and other aquatic life. This is the same water we use for swimming, fishing, and drinking. Communities like Henderson are facing new federal regulations to reduce pollution. These regulations focus on improving the quality of our waterways by reducing the pollution in stormwater runoff.

What can you do?
1. Don’t dump anything down storm drains
2. Use pesticides and fertilizers sparingly
3. Collect yard waste & keep it out of storm drains/street gutters

For more information on stormwater, visit these websites:
www.epa.gov/tpds/stormwater
www.epa.gov/owow/nps
www.epa.gov/owow/nps/kids
www.waterky.gov

Questions & Answers

Sewer Backups in Homes or Businesses

A sewer backup in your home or business can be a frustrating situation. The Henderson Water Utility staff takes care to prevent the possibility of a backup, but occasionally a line blockage or other circumstance can cause a backup to occur in a home or business.

How do I prevent a backup?
If your home or business is at risk of a backup, to prevent a backup from happening and possibly causing damage to your home or business, HWU strongly suggests you install a sump pump or a backwater valve. A backwater valve may be required under city ordinance Section 23-18. A sump pump is the most reliable alternative; but it is the most expensive. At the bottom of this page you will find specific information about a backwater valve including installation and maintenance information. You should contact your plumber for cost information and other details on the installation of a backflow valve or sump pump.

What if I do trust in your home or business line the main line in the street, call your plumber. If you believe the backup is in HWU’s line call us at 282-6242. This number is answered 24 hours a day, seven days a week. If you have a backup and need to contact a common carrier, punch the area in your water supply where the backup occurred, below is a list of some companies that do this type of clean-up. For current contact information, you may also check in the phone yellow pages under “Water Damage Restoration”, “Water Damage Emergency Service”, “Fine & Water Damage Restoration”.

Will my homeowner’s insurance cover a sewer backup?
Every homeowner’s insurance policy is different. Check with your insurance company to see if you’re covered.

Gravity Backwater Valve Specifications, Installation, & Inspection/Maintenance

The gravity backwater valve should be a PVC Valve part number 375 Per 3”, 475 Per 4”, and 675 Per 6”, or an approved equal.

Installation
The backwater valve should be installed in the sewer line either outside the house or in the basement. The backwater valve should be accessible for maintenance. If it is installed at a depth of 30” or less below the ground floor, a meter box or 1” pipe is adequate for the access. If the ground below or floor elevation is greater than 30”, a concrete, PVC or polyethylene pipe manifold of 30” diameter or larger should be installed around the valve to allow access using a proper size hook.

Inspection and Maintenance
After significant rainfall events or at least once every 6 months the backwater valve should be inspected. The cleanout top should be opened and the flapper in the valve of electricity per month. Before replacing the flapper the inside of the backwater valve should be inspected and the area cleaned as necessary. After replacing the flapper, the cleanout top should be replaced.

How to Specify

<table>
<thead>
<tr>
<th>Valve Size</th>
<th>Part #</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>3”</td>
<td>375P</td>
<td>1.5”</td>
<td>7.5”</td>
<td>5.5”</td>
</tr>
<tr>
<td>4”</td>
<td>475P</td>
<td>2.0”</td>
<td>10.5”</td>
<td>7.0”</td>
</tr>
<tr>
<td>6”</td>
<td>675P</td>
<td>2.25”</td>
<td>15.5”</td>
<td>8.2”</td>
</tr>
</tbody>
</table>

II. Backwater Valve Box, Pipe or Concrete

Access to Valve

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valve Box</td>
<td>4”</td>
</tr>
<tr>
<td>Pipe or Concrete</td>
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III. Backwater Valve Maintenance

- If your home or business is at risk of a backup, to prevent a backup from happening and possibly causing damage to your home or business, HWU strongly suggests you install a sump pump or a backwater valve. A backwater valve may be required under city ordinance Section 23-18. A sump pump is the most reliable alternative; but it is the most expensive. At the bottom of this page you will find specific information about a backwater valve including installation and maintenance information. You should contact your plumber for cost information and other details on the installation of a backflow valve or sump pump.

- If you suspect the backup is in your line between the home or business and the main line in the street, call your plumber. If you believe the backup is in HWU’s line call us at 282-6242. This number is answered 24 hours a day, seven days a week. If you have a backup and need to contact a common carrier, punch the area in your water supply where the backup occurred, below is a list of some companies that do this type of clean-up. For current contact information, you may also check in the phone yellow pages under “Water Damage Restoration”, “Water Damage Emergency Service”, “Fine & Water Damage Restoration”.

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The Henderson Water Utility Commission and staff are proud to report that your water supply meets or exceeds all established water quality standards. Thanks to a dedicated staff of professionals, HWU is able to provide area homes and businesses quality water service at an affordable price. Each week, your water supply undergoes thousands of tests, checking for more than 100 different impurities, to insure that your drinking water is free from known contaminants. All of this is done while maintaining careful cost controls, allowing us to provide customers with the most value for their dollar. HWU takes pride in the fact that it has and will continue to provide the highest level of water service at rates that are among the lowest in the state.

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**Your Water and Chromium-6 (Hexavalent Chromium)**

Currently, HWU is required to test for Total Chromium and included in this total spectrum are Chromium-0, Chromium-3, and Chromium-6. Chromium-3 is a known carcinogen and is naturally essential. Chromium-0 and Chromium-6 are produced by industrial processes such as chrome-plating, dyes and pigments, leather and wood preservation and are considered to be potential carcinogens.

The Maximum Containment Level for Total Chromium is 0.1 mg/L, or 100 parts per billion. Until a MCL can be determined for Chromium-6, EPA is treating Total Chromium as 100% Chromium-6 and therefore using 0.1 mg/l as the interim MCL.

**Cryoprotostudy**
Cryptosporidium may cause serious illness in immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplant surgery, or those who have acquired immune deficiency syndrome (AIDS) or other immune system disorders. These people should seek advice from their healthcare providers. We are required to monitor the source of your drinking water. Our water system has sampled for a series of unregulated contaminants. These contaminants do not yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether they should have standards. As our customers, you have a right to know that this data is available upon request.

**Available for Monitoring Data for Unregulated Contaminants**
Our water system has sampled for a series of unregulated contaminants. These contaminants do not yet have a drinking water standard set by USEPA. The purpose of monitoring for these contaminants is to help EPA decide whether they should have standards. As your customers, you have a right to know that this data is available upon request.

**Your Right To Know**
If you have any questions regarding this report or your water utility, please contact Kevin Roberts (606-649-4879). We want you to be informed about your water utility. You can also access our website at www.hwuwaterv.org.

**Type & Location of Your Water Source**
The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water source is the Ohio River. 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 certain materials, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Inorganic Contaminants** such as viruses and bacteria, which can come from sewage treatment plants, septic systems, livestock operations, and wildlife.

HWU Management & Staff

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Where does HWU stand regarding the presence & removal of Cr6+?

Results from eight separate samples, representing our full distribution system, showed an average level of < 0.0065 mg/l (or 0.65 parts per billion). That's more than 660 times below the MCL.

**Your Water and Chromium-6 (Hexavalent Chromium)**

The Maximum Containment Level for Total Chromium is 0.1 mg/L, or 100 parts per billion. Until a MCL can be determined for Chromium-6, EPA is treating Total Chromium as 100% Chromium-6 and therefore using 0.1 mg/l as the interim MCL.

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**Maximum Contaminant Level (MCL)** - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the effects of the use of disinfectants to control microbial contaminants.

**Variances & Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

**Nephelometric Turbidity Unit (NTU)** - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a measure of biological growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Oral Toxicity (OT) (mg/kg)** - a required process intended to reduce the level of a contaminant in drinking water.

**Avian Toxicity (AT) (mg/kg)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Nephelometric Turbidity Unit (NTU)** - medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

**Parts per billion (ppb)** - or micrograms per liter, (µg/L). One part per billion corresponds to one minute in two years, or a single penny in $10,000.

**Parts per trillion (ppt)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

**Parts per quadrillion (ppq)** - one part per quadrillion corresponds to one minute in 2,000,000,000,000 years, or a single penny in $10,000,000,000,000,000.

**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 the EPA’s Safe Drinking Water Hotline (800-426-4791).**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons 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 people 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).