

CITY OF ABERDEEN

Sump Pump Discharge Inspection Program





Background

The South Dakota Department of Environment and Natural Resources is responsible for enforcing South Dakota's water quality requirements to the U.S. Environmental Protection Agency and the general public. Over the last few years, the City of Aberdeen has had several serious issues with its wastewater collection and treatment system. Extraneous clean water has entered the sanitary sewer system through either ground water (Infiltration) or direct flow (Inflow) such as sump pumps. This excess volume of clean water into the sanitary sewer adds considerable cost to treatment, in addition, under extreme rainfall flow situations the City has been forced to release untreated and partially treated wastewater into Moccasin Creek.

As a result of the significant past rainfall events of 8" on May 5, 2007, 3.5" on June 16, 2009, and the snow melt event on March 16, 2010, the City of Aberdeen was determined to have had an excessive rate of flow to Waste Water Plant clearly exceeding its peak flow allocation. As a result of this exceedance, the South Dakota of Department of Environment and Natural Resources ordered the following corrective actions to be taken by the City.

1. The City must identify problems with the collection system and prioritize projects to reduce the infiltration and inflow.
2. Aberdeen must implement and enforce a program to eliminate excess flows from sump pumps into the collection system.

The Kline Trunk Storm Sewerline which is a major collection pipe within the storm sewer system has been identified as a priority project as a corrective measure. The governing body of the City has committed \$7.874 million dollars for the reconstruction of the Kline Trunk Storm Sewerline from Railroad Avenue to a point south of Northern University Campus over the next four years. However, to meet the second condition of the improvement order the City will also need to inspect home sump pump connections for current ordinance compliance.

The City of Aberdeen has in effect an ordinance that allows residential sump pump discharges into the sanitary sewer system during the winter months. The same ordinance also provides residential connections are to be "turned to the outside" typically from April 1st to November 1st. The City will need to inspect 5% of the properties in Aberdeen on an annual basis to make certain there is compliance with the ordinance. No property can discharge in the sanitary sewer during the full calendar year. If property owners should choose to ignore the seasonal drainage period to the outside the City may be forced to eliminate any type of discharge into the sanitary sewer system regardless of the time of the year.

Lynn Lander
City Manager

Program

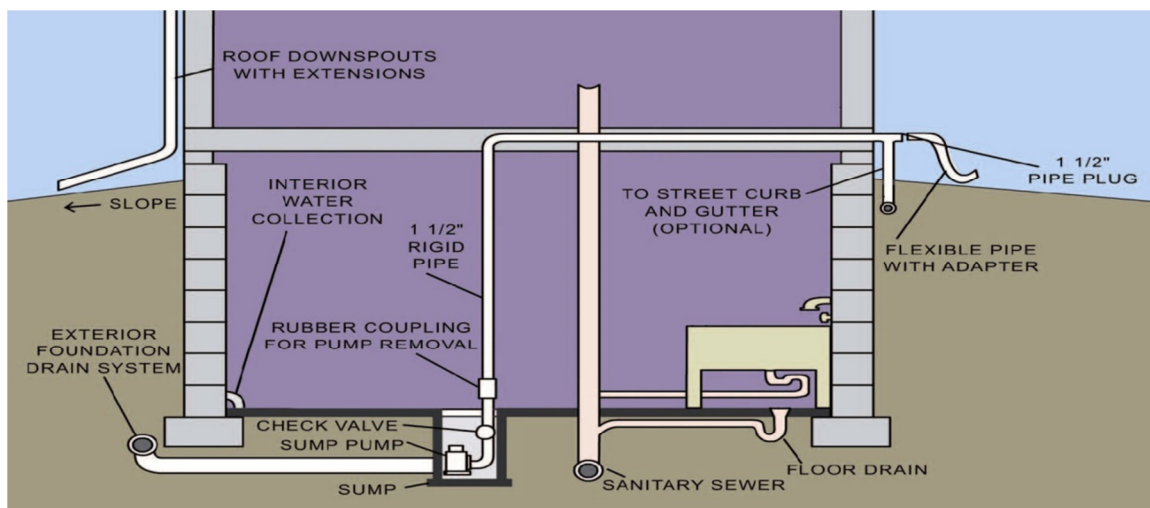
The private property inspection program is commonly referred to as “Sump Pump Discharge Inspection Program”. This program will take multiple years to complete on a citywide basis. It requires the personal inspection of a private property’s internal sewer plumbing. This inspection typically takes up to 1 hour to perform and requires that an adult resident be present at all times. A copy of the inspection report identifying any non-compliant issues will be left with the resident upon completion of the inspection. Corrective Work Orders will be sent to the property owner/occupant informing them of the required corrective work for those lacking a diversion system which directs sump pump water to the exterior of the building during spring, summer, and fall months. A corrective work order must be completed within 60 days. Upon satisfactory completion of the Corrective Work, a Certificate of Compliance will be issued by the City.

If either an inspection is not scheduled or required corrective work is not completed within the required time frames, a fine may be imposed upon the property owner’s utility bill.

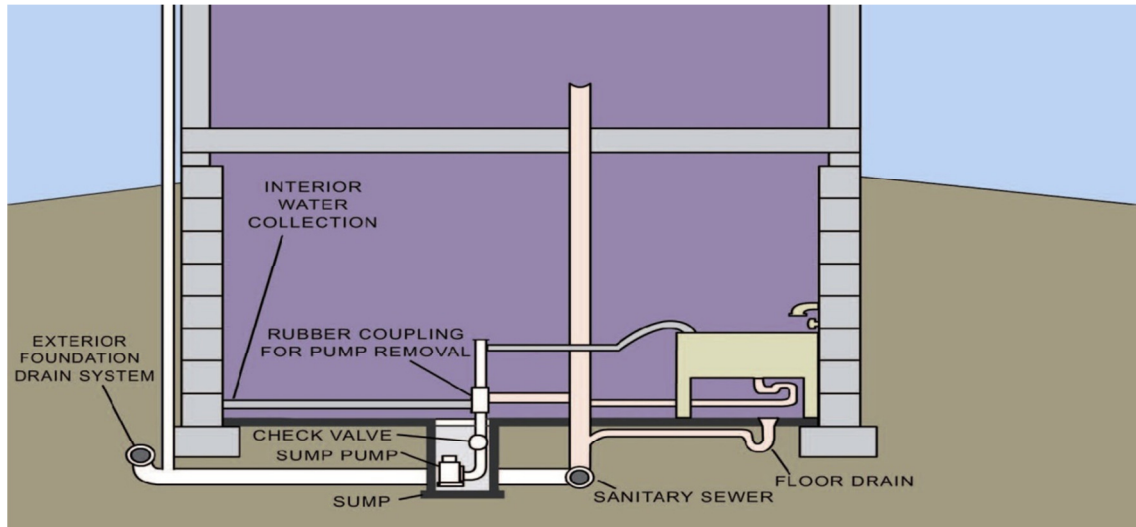
How Do We Fix Our I/I Problem?

It’s a big challenge. The City has identified and corrected I/I problems with City-operated systems, such as sewer lines, manholes and lift stations, but that reflects only 40% of the total system. The privately owned portion accounts for the majority (60%) of the system.

Inspection of residential and commercial properties is necessary to locate the other sources of the environmental problem. City trained inspectors will arrange with property owners to enter private homes and businesses to identify potential sources of the I/I problem.



A properly connected property.



An improperly connected property.

Why do I have to have this inspection done and why now?

In 2012, the South Dakota Department of Environment and Natural Resources fined the City of Aberdeen for earlier sanitary sewer bypasses from the City's wastewater system into Moccasin Creek. They believe the City is experiencing problems that are not common or acceptable with a collection system. As part of the settlement agreement with the South Dakota Department of Environment and Natural Resources in order to continue operations, it is necessary for the City to address current deficiencies or be exposed to additional fines, which would have to be imposed into the wastewater rates. Additionally, failure to correct the problems could lead to the South Dakota Department of Environment and Natural Resources officials to ban Aberdeen from getting future development/redevelopment approvals.