



## Meadowbrook Road Waterline Project

*By Fred W. Castles, III, District Engineer*

You may have noticed construction has begun on Meadowbrook Road Water Line Project which will provide for the installation of new waterlines to replace the old and under-sized waterlines that currently serve Meadowbrook Road, Ferrell Avenue, and Celsey Street. In addition, the water system will be extended further out Meadowbrook Road to provide first-time water service to Nelson Road and Kelly Road residents. The contractor for the project is Tri-County Utilities, Inc. of Pacolet Mills, SC.

On July 2, 2012, Chester County received a Community Infrastructure Grant from the Community Development Block Grant Program (CDBG) in the amount of \$427,009.00. Chester County sponsored the grant application on behalf of Chester Metropolitan District to increase water service capacity, to provide water service to new customers, and to provide increased fire protection. The impetus of this project was the fact that a community well on Kelly Road was failing because of persistent drought conditions. The residents along Kelly Road contacted Representative Greg Delleney to ask for help. Rep. Delleney posed the inquiry to the Chester Metropolitan District (CMD) as to what relief was available for his constituents on Kelly Road. Chester Metropolitan District contacted the County of Chester for the purpose of having the county sponsor a CDBG grant to help with funding for the waterline project. Chester County Council approved the request to sponsor the CDBG grant. Mrs. Grazier Rhea, Community Development Director with the Catawba Regional Council of Governments, prepared and submitted the grant application for the county. The County of Chester was notified by the SC Department of Commerce in early July, 2012 that they were awarded the grant.

Chester Metropolitan District currently serves 25 residents in the Meadowbrook, Ferrell, and Celsey area. This project will increase water capacity in the water distribution system to allow 36 new, first-time customers to be served with municipal water. When the project is complete, CMD will serve about 61 residences in the Meadowbrook neighborhood. Three public meetings have been held with community members. Local representatives and officials in attendance include: County Supervisor, Carlisle Roddey, County Council members Alex Oliphant, John Wayne Holcombe, and Mary A. Guy, and Planning and Building Director, Mack Paul.

The project has been designed by CMD's in-house engineering department. CMD will provide engineering services, contract management, construction management, construction inspection services and will contribute more than \$92,000.00 towards the project. The CDBG grant will contribute \$427,009 towards the project for a total project cost of approximately \$519,000.00. The Meadowbrook Road Waterline Project has been designed and will be constructed at no cost to the County of Chester or county tax payers. Construction commenced in early May 2014 and is projected to be complete by December 2014.



*Water is made up of two elements, hydrogen and oxygen. It is comprised of two molecules of hydrogen and one oxygen molecule. Its chemical formula is H<sub>2</sub>O.*



Employee Spotlight  
*Achievements in the Field*  
**Water & Wastewater Operations Licenses**



Tim Causey	-	“C” Water Distribution
Russell Gregory	-	“D” Water Distribution
Trent Smith	-	“D” Water Distribution

Brian Hatchell	-	“B” Wastewater Collection
Jamie Jennings	-	“A” Wastewater Collection
Patrick Timms	-	“E” Water Treatment



Our Source Water Assessment Plan is available for your review at

[www.scdhec.net/environment/water/srcewtrreports.htm](http://www.scdhec.net/environment/water/srcewtrreports.htm)

If you do not have internet access, please contact our office at (803) 385-5123 to make arrangements to view this document.

**Notes from the Chester Sewer District**  
***Inflow & Infiltration (Smoke Testing)***

In a continuing effort to provide superior, reliable service to the residents of Chester County, the Chester Sewer District manages an Inflow & Infiltration (I/I) program. Inflow is the term used when water that enters the sewer lines through holes, or illegal connections such as roof gutters or other storm drainage systems. Infiltration typically comes from cracks in pipe or manhole structures. The purpose of the plan is to reduce or eliminate storm water or ground water from entering the sewer collections system, which increases wear and tear on pipes and also raises treatment costs at the Wastewater Treatment Facilities.

The process the CSD uses to test for these holes and illicit connections is simple. A blower machine is set up over manholes and liquid smoke manufactured specifically for sewer systems is poured in. As the machine heats the liquid it produces a brightly colored, non-toxic smoke which is forced into the pipes. The smoke will escape through cracks and holes in the pipe and rise from the ground, which marks the location of the problem. Illegal connections will cause smoke to rise from gutters and drainage systems. Any place where smoke is spotted is recorded and repaired.

Customers also benefit from this program. If smoke enters a home or building, this lets the owner know there is a problem in the plumbing system that needs to be repaired.

Annually the employees of the Chester Metropolitan and Sewer Districts vote on their choice for the "Outstanding Employee Of The Year". Employees are asked to base their selection on leadership in the workplace, work ethic, attitude, professionalism, and the employee's contributions to the overall team effort of the CMD/CSD work force.

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## Chester Sewer District



The Chester Sewer District held its annual employee appreciation dinner at the Chester County War Memorial Building on December 13<sup>th</sup>, 2013. During the dinner Mr. Chuck Sanders was named the Chester Sewer District Employee of the Year for 2013. As in years past this distinction is presented to the Chester Sewer District employee who displays outstanding team contributions, technical knowledge and dedication to the overall mission of Chester Sewer District and is selected by a poll of all employees. Mr. Sanders has been an employee of Chester Sewer District for over 13 years. He is currently a Wastewater Treatment Plant Operator at the Rocky Creek Wastewater Treatment Plant, located at 663 Ecology Lane, Chester, SC. Mr. Sanders resides in Chester, South Carolina. Mr. Sanders was also voted "Operator of the Year" for 2013 through the Water Environment Association of South Carolina's Catawba District.

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## Chester Metropolitan District



The Chester Metropolitan District held its annual employee appreciation dinner at the Chester County War Memorial Building on December 13<sup>th</sup>, 2013. During the dinner Mr. Bradley L. Trout Sr., was named the Chester Metropolitan District Employee of the Year for 2013. As in years past this distinction is presented to the Chester Metropolitan District employee who displays outstanding team contributions, technical knowledge and dedication to the overall mission of Chester Metropolitan District and is selected by a poll of all employees. Mr. Woods has nearly 3 years of employment with the Chester Metropolitan District. He is currently a Water Treatment Plant Operator at the Chester Metropolitan District water treatment plant located at 6144 Hwy 9, Fort Lawn, SC. Mr. Trout, along with his wife Brenda, reside in Chester, South Carolina.

Employee  
of  
the  
Year



## 2013 Water Quality Report



We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. If you have any questions about this report or concerning your water utility, please contact our Lab Director and Lead Operator at (803) 872-4418.

The Chester Metropolitan District routinely monitors for constituents in your drinking water according to Federal and State laws. The table on the next page shows the results of our monitoring for the period of January 1—December 31, 2013. As you can see by the table, our system had no violations in 2012. This is in part due to the professionalism of our operators. We are proud that your drinking water meets or exceeds all Federal and State Requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

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. CMD 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 it for drinking or cooking. Information on lead in drinking water is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead.html>.



### For Your Health

*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 infection. 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 microbiological contaminants are available from the*

**Safe Drinking Water Hotline  
1-800-426-4791**

## **Water Works!**

- You can refill an 8 oz glass of water approximately 15,000 times for the same cost as a six-pack of soda.
- In 1974, Congress passed the Safe Drinking Water Act to ensure that drinking water is safe for human consumption. The Act requires public water systems to monitor and treat drinking water for safety.
- Most people around the world have access to clean drinking water but it is a major problem in poorer areas of the world. Water pollution and low quality water can lead to dangerous bacteria, disease and viruses such as E coli and Cryptosporidium.
- Ten inches of melted snow equals about one inch of water.

## 2013 Water Quality Report

**MCL's are set at very rigid levels. In order to have a ONE IN A MILLION chance of health risks associated with these Contaminants, you have to drink 2 LITERS of water EVERY DAY for a LIFETIME.**

<b>TEST RESULTS</b>						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
<b>Chester Metropolitan, 2013</b>						
Fluoride	N	0.54	PPM	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer
Nitrate	N	.67	PPM	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Mercury	M	.20	PPB	2	2	Naturally present in the environment, discharge from metals processing facilities
Chloramines	N	HQA 1.59 Range 1.07-1.59	PPM	MRDL= 4	MRDLG= 4	Water additives used to control microbes
Haloacetic Acids (HAAs)	N	RAA Range 4.4-45	PPB	0	60	By-product of drinking water chlorination
TTHM (Total Trihalomethanes)	N	RAA Range 27.1-43.3	PPB	0	80	By-product of drinking water chlorination
Total Organic Carbon	N	AVG % of removal 47.34 Range 40.6-56.7	TT	35% Removal Required	TT	Naturally present in the environment
Turbidity	N	HLD 0.32 Avg. .041	TT	N/A	TT	Soil Runoff
<b>LEAD AND COPPER TEST RESULTS</b>						
Contaminant	Violation Y/N	90th Percentile	Unit Measurement	Action Level/Goal	Sites over Action Level	Likely Source of Contamination
Copper, Free	N	0.079	PPM	1.3	3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	N	4	PPB	15	3	Corrosion of household plumbing systems; erosion of natural deposits

**Non-Detects (ND)** - laboratory analysis indicates that the constituent is not present

**Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts Per Billion (PPB)** - Equivalent to 1 penny in 1,000,000 pennies.

**Nephelometric Turbidity Units (NTU)** - a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person

**Action Level (AL)** - The level where action must be taken by treatment or other requirements.

**Treatment Technique (TT)** - A required process intending to lower a contaminant level.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant allowed in drinking water.

**Maximum Contaminant Level Goal (MCLG)** - The contaminant level under which there is no known or expected health risks.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected health risk.

**Total Organic Carbon (TOC) Removal** - The percent removal must be at least 1 or the system is in violation.

# Richburg #2 Pump Station Project



The Chester Sewer District strives to provide the best possible service to all of our customers. With the recent growth in the Lando/Richburg area, the CSD has been working hard to keep up with the growing demand. The most pressing need came with the recent expansion of Guardian Industries.

To accommodate increased flows from Guardian as well as continue to adequately serve the Richburg area, the CSD has extended a new 14" wastewater collection main parallel to the existing line down Hwy 9. A new pump station is being installed which will handle increased flows from both

existing, recently upgraded, and new industrial customers as well as residents of the area.

This project is being paid for through a combination of grants from the US Economic Development Association (EDA), Fairfield Electric, Cooperative, Duke Energy, and TruVista Communications, as well as local funds.

This project is scheduled for completion Summer 2014.



Chester Metropolitan District's water supply is the Catawba River. Our Surface Water Assessment Plan is available for your review at [www.scdhec.net/environment/water/srcewtrreports.htm](http://www.scdhec.net/environment/water/srcewtrreports.htm). If you do not have internet service, or if you have any questions or concerns regarding the Water Quality Report for 2009, please contact

**David Sloan, Chester Metropolitan District  
Water Filtration Plant  
at (803) 872-4418.**

For questions regarding the service or quality of your water, please call the CMD office at

**(803) 385-5123**

To report a water leak, sewer back-up, or disruption of service, please call our office at

**(803) 385-5123**

You can visit us on the web at  
[www.cmdcsd.com](http://www.cmdcsd.com)



## Did You Know

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals, and radioactive substances. All 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 the water poses a health risk. More information about contaminants and possible health effects can be obtained by calling the

**Safe Drinking Water Hotline  
1-800-426-4791**



## Chester Sewer District

### *Prohibited Discharges*



The following information is provided as public service notice and as a means to enlighten you, our most valued and appreciated customer, of substances which are prohibited from being introduced into the Chester Sewer District (CSD) system. The South Carolina Department of Health and Environmental Control (DHEC) has issued a regulation against certain substances which are considered harmful to the environment and to Publicly Owned Treatment Works (POTW's) such as CSD. Prohibited Discharges are as follows:

- Any liquids, solids, or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction with other substances to cause fire or explosion or be injurious in any way to the POTW or to the operation of the POTW. Prohibited materials include (but are not limited to) gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketone, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides, and sulfides, and any other substances which are a fire hazard to the system.
- Solid or viscous substances which may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater treatment facilities such as (but not limited to) grease, garbage with particles greater than one-half inch in any dimension, animal guts or tissues, paunch manure, bones, hair, hides or fleshing, entrails, whole blood, feather, ashes, cinders, sand, spent lime, stone or marble dust, metal, glass, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastics, gas, tar, asphalt residues, residues from refining or processing of fuel or lubricating oil, mud, glass grinding, or polishing wastes.
- Any wastewater having a pH of less than 5.0 or greater than 10.0.
- Any wastewater containing toxic pollutants in sufficient quantity, either singly or by interaction with other pollutants, to injure or interfere with any wastewater treatment process, constitute a hazard to humans or animals, create a toxic effect in the receiving waters of the POTW, subject to the Water Quality Standards.
- Any noxious or malodorous liquids, gases, or solids which either singly or by interaction with other wastes are sufficient to create a public nuisance or hazard to life or are sufficient to prevent entry into the sewers for their maintenance and repair.
- Any substance which may cause the POTW's effluent, or any other product of the POTW such as residues, sludges, or scums *to be unsuitable for any reclamation or reuse process or program.*
- Any substance which will cause the POTW to violate its NPDES and/or State Disposal System Permit or the receiving water quality standards.
- Any wastewater with objectionable color not removed during treatment process, such as (but not limited to) dye wastes and vegetable tanning solutions.
- Any wastewater having a temperature which will inhibit biological activity in the POTW resulting in interference, but in no case, wastewater with a temperature which exceeds 150 Degrees F (66C) for which causes the influent to the treatment plant to exceed 104 Degrees F.
- Pollutants, including oxygen-demanding pollutants (BOD, etc), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference to the POTW. In no case shall a slug load have a flow rate or contain concentration of quantities of pollutants that exceed for any time period longer than fifteen minutes more than five times the average twenty-four hour concentration quantities, or during normal flow operation.
- Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as may exceed limits established by the Commission in compliance with applicable State and Federal Regulations.
- Any wastewater which poses a substantial present or potential hazard to human health or to the environment when improperly treated, stored, transported, disposed of, or otherwise managed or creates a public nuisance.
- Any substance or flow quantity which causes a violation of the Permit to Discharge or the terms of a contract between the Commission and the discharger.
- Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass-through.

*Again, this information is being provided as a means to educate, to protect the environment, and to comply with CSD, State of South Carolina, and United States Federal pollution prevention rules and regulations. If you would like more detail on prohibited discharges, please contact us at (803) 385-5123 or stop by and visit us at 155 Wylie Street in Chester.*

## Want to Get Involved?

The Chester Metropolitan District holds regular board meetings on the second Wednesday of each month beginning at 6:00 pm. These meetings are open to the public. Meeting dates for the remainder of the year are:

July 9, 2014  
August 13, 2014  
September 10, 2014  
October 8, 2014  
November 12, 2014  
December 10, 2014

The Chester Sewer District holds regular board meetings on the third Tuesday of each month beginning at 6:00 pm. These meetings are open to the public. Meeting dates for the remainder of the year are:

July 15, 2014  
August 19, 2014  
September 16, 2014  
October 21, 2014  
November 18, 2014  
December 16, 2014

CHESTER METROPOLITAN DISTRICT  
CHESTER SEWER DISTRICT  
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