
From: Smith, Austin
Sent: Friday, February 19, 2016 6:54 PM
To: Haley, Nikki; Patel, Swati; Godfrey, Rob; Baker, Josh; Veldran, Katherine; Symmes, Brian
Subject: FW: Drinking Water Information from DHEC
Attachments: Public Water System Data.pdf

DHEC's efforts re: lead and drinking water

By the numbers:

- **695** – The number of public water systems (PWSs) that DHEC works with to sample and test drinking water for lead.
- **667 (or 96%)** – The number of public water systems that have not had any lead exceedances in the last five years (2011-15).
- **28 (or 4%)** – The number of public water systems that have had a sampling round that exceeded the EPA's lead action level of greater than 15 parts per billion in the last five years.
 - **24** are small, rural PWSs (serving fewer than 3,300 customers).
 - **4** are medium, rural PWSs (serving between 3,301 and 50,000 customers).
 - No large public water systems (serving more than 50,000 customers) have exceeded the EPA's lead action level in the last five years.
- **59** – The number of FTEs dedicated to DHEC's drinking water program.
- **\$5.26M** – The agency's annual budget for the drinking water program.

Overview:

- DHEC administers and enforces drinking water quality standards for public water systems in South Carolina.
- Water systems are typically required to sample for lead every 3 years, but may be on a shorter schedule if lead has been detected over the action level or on a longer schedule if lead has not been detected.
- Typically lead is not in the source water, but can be released from lead pipes or copper piping with lead solder in older homes if the water is corrosive (i.e., has a low pH balance).
 - Many water sources do not need additional treatment as their pH level means they are not naturally corrosive.
 - 185 PWSs (or 27%) – including all large PWSs (those serving more than 50,000 customers) – use some form of corrosion control, including adjusting the pH of their water or adding protective treatments to the water.
- If a PWS has an exceedance, DHEC requires that they take the following steps:
 - Provide public education to every person served by their system (and proof that they did so to DHEC within 30 days).
 - Collect and distribute additional samples to DHEC within 30 days.
 - Conduct source water monitoring.

- Complete an “optimal corrosion control treatment evaluation” that must be submitted to DHEC.

Why what happened in Flint, MI, would not happen here:

South Carolina has procedural safeguards and quality control measures in place that Michigan did not, including:

- Any change in a public water system’s water source, such as what occurred in Flint, would have to be reviewed, evaluated and approved first by DHEC.
- As part of our state’s checks and balance process, DHEC contracts with a certified lab to conduct analyses under the U.S. Lead and Copper Rule, determines when sampling is required, and makes sure the appropriate number of bottles is supplied by the lab to the public water system. Sample results are sent directly to the department from the laboratory.
- Any changes in treatment would have to be permitted through DHEC. Our technical review would ensure that changes to the treatment process do not adversely affect treatment for other water quality standards.
- In South Carolina, all large public water systems currently add corrosion control treatment to minimize leaching from lead pipes.

What DHEC is doing to help rural water systems moving forward:

DHEC has reviewed our internal lead and copper monitoring procedures and is taking quality improvement measures to help strengthen our drinking water program. As part of these ongoing efforts, we are:

- Setting up an Office of Rural Water within the next four weeks, which will be dedicated to studying the challenges facing rural water systems and working with these PWSs and the communities that they serve to improve technical support and help them identify additional resources.
- Conducting an in-depth study of the geographical areas and PWSs that have experienced exceedances to identify trends and better target our technical assistance and public education efforts.
- Partnering with the South Carolina Rural Water Association to assist the small and medium water systems with action level exceedances to lower their lead levels.
- Conducted an in-depth analysis to compare reported elevated blood lead level test results submitted to DHEC to the areas (census tracts) located near the 28 water systems which had samples above the action level in the past five years.
 - **Based on our analysis, we concluded that there is no correlation between reported elevated blood levels and these water systems.**

List of the PWSs that had exceedances at some point between 2011 and 2015 (full list including PWSs with no exceedances attached):

- 3250024 AAA Hilton Sound – Population 50 (small)
- 3250105 AAA Ridge Point S/D – Population 85 (small)
- 3810004 Town of Bowman – Population 1298 (small)
- 4660009 Cedar Valley MHP – Population 290 (small)
- 1450007 Clarendon Co W&SA – Population 240 (small)
- 4630061 CM Steel Inc – Population 94 (small)

- 0170104 Cold Springs School – Population 41 (small)
- 3250047 CWS Cedarwood – Population 307 (small)
- 4650008 CWS Foxwood – Population 520 (small)
- 1550002 Fishing Creek POA – Population 102 (small)
- 4060032 Lakewood MHP – Population 147 (small)
- 4060012 Lower Richland MHP – Population 31 (small)
- 4670106 Blessed Hope School – Population 231 (small)
- 1070256 Oyster Park – Population 40 (small)
- 4060021 Percival Estates MHP – Population 18 (small)
- 3260157 Pine Ridge MHP – Population 100 (small)
- 0150003 Pinehurst S/D – Population 101 (small)
- 4060052 Piney Lane MHP – Population 24 (small)
- 4630003 Supermetal Holdings USA – Population 90 (small)
- 3260049 Triple Acres MHP – Population 38 (small)
- 1270103 Edgemoor Headstart – Population 100 (small)
- 3810005 Town of Branchville – Population 1293 (small)
- 3260183 Sand Mountain MHP – Population 40 (small)
- 4320005 Shiloh Water System – Population 645 (small)
- 4650006 CWS River Hills S/D – Population 8566 (medium)
- 4650005 City of Tega Cay #2 – Population 3850 (medium)
- 0310001 Town of Allendale – Population 4070 (medium)
- 1820008 DCWS Ashley Phosphate- Population 18,956 (medium)

This information is also available online, at

<http://www.scdhec.gov/HomeAndEnvironment/YourHomeEnvironmentalSafetyConcerns/DrinkingWaterConcerns/LeadandDrinkingWater/>