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Scholarship Essay

Water is an important resource and essential for living. Water being a necessary resource for life requires that it be clean and safe. Unfortunately, water can come into contact with harmful chemicals and substances making it unsafe to use or consume. A top priority of the EPA (Environmental Protection Agency) is to provide and protect the water we use (EPA, “Safe Drinking Water Act”). The EPA first “established the Lead and Copper Rule (LCR) in 1991 to protect public health and reduce exposure to lead in drinking water” (EPA, “Understanding the Lead and Copper Rule”). The new LCCR (Lead and Copper Rule Revisions) that went into effect on December 16, 2021, is the “biggest regulatory update in decades, and will be a huge undertaking for water systems” (120Water). It is important for everyone to participate in this implementation to further make our water safe, especially here in Bryan County. For the people of Bryan County to help implement the new Lead and Copper Rule Revisions, they first must understand what the rule means and how it will change, understand how it personally affects them, and understand the necessity of their involvement through participation and cooperation through this process.

First, it is important to understand the Lead and Copper Rule. The Lead and Copper Rule is a federal regulation established by the EPA “to control lead and copper in drinking water” (EPA, Lead and Copper Rule). This “treatment technique for the rule requires systems to monitor drinking water at customer taps” (Utah Department of Environmental Quality). According to The

Water Research Foundation, lead and copper are commonly found in service lines and plumbing where if found brings concern. Lead is more commonly found in older plumbing appliances where it then can filter into the drinking water (Utah Department of Environmental Quality). However, lead and copper may be found, it is top priority to keep water clean and safe for the public. Since the implementation of the Lead and Copper Rule “action level exceedances have decreased by over 90%” (EPA, Understanding the Lead and Copper Rule). The revisions that have been made to the EPA’s Lead and Copper Rule

better protects children and communities from the risks of lead exposure by better protecting children at schools and child care facilities, getting the lead out of our nation’s drinking water, and empowering communities through information. Improvements under the new rule include: Using science-based testing protocols to find more sources of lead in drinking water. Establishing a trigger level to jumpstart mitigation earlier and in more communities. Driving more and complete lead service line replacements. For the first time, requiring testing in schools and child care facilities. Requiring water systems to identify and make public the locations of lead service lines. (EPA, Revised Lead and Copper Rule)

The overall purpose of the Lead and Copper Rule and recent revisions to the rule are to better support and protect the community with clean and safe water. The mission of the EPA and the Bryan County Rural Water District #2 are similar as they both want to strive to provide clean and safe water to the community.

Secondly, it is important to understand how the Lead and Copper Rule affects you and your family. Lead and copper, like other elements can hurt you.

Exposure to lead and copper may cause health problems ranging from stomach distress to brain damage. Both lead and copper are harmful when ingested, but lead is more toxic because it can accumulate in the body. Lead damages the brain, nervous system, kidneys, reproductive system, and red blood cells. It is more toxic to children than to adults, and it can harm their mental and physical development. Copper is much less toxic than lead; however, elevated levels of copper for 14 days or more can cause permanent kidney and liver damage in infants under the age of one year and it can cause nausea, vomiting, and diarrhea in people of all ages. (Utah Department of Environmental Quality)

The contact with lead and copper has the chances of being harmful but can also be prevented. There are test samples that you can have conducted to test your water for harmful elements such as lead and copper. These tests are usually collected from the kitchen and bathroom taps of buildings (Utah Department of Environmental Quality). As lead is harmful to everyone in the community, but especially children, by testing your water for harmful elements you are protecting the children you love. There are certain restrictions to lead and copper levels that are monitored for the community's safety, those being that if

lead concentrations exceed an action level of 15 ppb or copper concentrations exceed an action level of 1.3 ppm in more than 10% of customer taps sampled, the system must undertake a number of additional actions to control corrosion (EPA, Lead and Copper Rule).

The rules and revisions that have been put into place are all there to further protect people. The rules and revisions are continuing to protect water so that it can continue to be safe to drink and use.

Lastly, it is important to understand the need for the public's involvement by participation and cooperation to effectively implement the revised Lead and Copper Rule. It takes a village or a community to get information out to everyone. In this day and age, the task of sharing information is easier with technology and social media. It is important for people to know what the Lead and Copper Rule is and what revisions have been made. If anyone cares about the health and wellbeing of others or at least their self, they should share about the LCR. The EPA has done their job and updated the Lead and Copper rules to best benefit the health and the wellbeing of people. At some point, people must take some initiative for themselves and do their part. The community can help participate and cooperate to effectively implement the revised Lead and Copper Rule by sharing the changes that have been made and making sure that their water is being tested (Utah Department of Environmental Quality). To further help participate and cooperate with the LCRR (Lead and Copper Revisions) you should monitor your water and report if anything seems wrong or unsafe. The Bryan County Rural Water District #2 is "Committed to Providing Clean, Safe Water for All Our Residents" (Bryan County Rural Water District 2).

In conclusion, there has been some big changes to the water regulations, especially within the Lead and Copper Rule. The newest changes that are in affect are to better our water for the community. Specifically in Bryan County, we want to help implement the new Lead and Copper Rule Revisions, by making sure the community understands what the rule means and how it will change, understands how it personally affects them, and understands the necessity of their involvement through participation and cooperation through this process. It takes a community to work together to implement change. The new LCR revisions has the United States and specifically Bryan County Oklahoma on its way to continuing to make water clean and safe.

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