Dear Ms. LaMond,

On behalf of the City of Newport, Department of Utilities Water Division, I am writing to formally request approval to implement predictive statistical modeling as part of our efforts to comply with the U.S. Environmental Protection Agency's (EPA) Lead and Copper Rule Revisions (LCRR) and the State of Rhode Island's Lead Poisoning Prevention Act.

The predictive modeling approach, specifically Random Forest Classification, offers a robust and accurate method to classify unknown service line materials, enabling us to:

- Identify service lines likely made of copper with over 95% confidence, focusing our resources on addressing known or suspected lead lines.
- Significantly reduce the reliance on physical inspections, which are time-consuming, costly, and disruptive.
- Expedite compliance efforts by up to three years while minimizing customer inconvenience.

The methodology outlined in the attached Report leverages EPA's **Guidance for Developing and Maintaining a Service Line Inventory** (August 2022), which recognizes predictive modeling as a viable tool for estimating service line materials and prioritizing replacement efforts. Additionally, the EPA's recommendations for using machine learning and statistical methods to streamline compliance are incorporated throughout our approach, ensuring alignment with federal best practices.

Key highlights of our approach include:

- Use of historical data, GIS integration, and installation records to develop a comprehensive inventory of service lines.
- Improved public health outcomes through faster identification and replacement of lead service lines.

This data-driven approach aligns with the EPA's guidance and supports RIDOH's mission to protect public health while addressing the operational challenges of achieving full compliance within mandated timelines.

We respectfully request your review and approval of this methodology to advance our compliance efforts. We would be happy to provide further details or meet to discuss this request if additional information or clarification is required.

Thank you for your attention and consideration. We look forward to collaborating with RIDOH to implement innovative solutions that ensure the safety and reliability of Newport's drinking water.

Respectfully,

Rob

Robert C. Schultz, Jr.
General Manager & Chief Engineer
City of Newport, Department of Utilities