



Community Lead Response Advisory Committee  
March 3, 2020  
Meeting Minutes

**Welcome and Introductions**

In Attendance:

Israel Grey  
Jim Kelly  
Julie Barg  
Sarah Bolenbaugh  
Mora McLaughlin  
Dan Duffy

On Call:

Erin Fure  
Gina Miller  
Dimple Chaudrey  
Brittany Schacht  
Sarah Stoner  
Pete Demarco

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**2019 LSLR Program Updates:**

- 20-22 crews working five, 9-10 hours days per week.
- Moving to Upper Lawrenceville soon.
- Bloomfield and Garfield work orders are slated to start next.
- We have the most crews working that we've ever had – only contracted for 14 crews.
  - Contractors are pleased because they would normally not be working this time of year.
- Daylight has been limiting the work – this will change after next week. Will be working 10-hour days again soon.
- There has been some weekend work.
- When street restoration resumes, we will likely start working on weekends to keep up with productivity while doing the restorations we could not in cold weather.
- 75% return rate on agreements for program overall.
  - Expect the return rate to increase when moving into new work orders.
- Have worked at over 6,000 locations.
- Have completed 3,400 public side replacements, which was our original goal.



- All partials have written consent from the homeowner and the homeowner lives at the property.
- Marshall-Shadeland and Spring Hill City View have proven difficult to collect agreements.
- Many of the upcoming work orders received packets in January – our return rates are strong considering the short amount of time they’ve been notified.
- We are continuing to canvass for vacant or raised properties to better understand our return rate in a work order.
- Trenchless method continues to be very effective – we are able to do 98.7% private locations using a trenchless method.
- PWSA has opted out of 76 sites due to structural or sanitary issues.
  - Have denied some requests to replace at vacant sites – we will see that plumbing is ripped out already and are not willing to spend ratepayer dollars on the work.

**Dimple Chaudrey: What happens if, shortly after we determine something is vacant, someone moves in?**

- **We are looking for properties that are clearly vacant (boarded up windows, ceilings caving in, etc.).**
- **Marking sites as vacant helps us understand our agreement rate.**
- **If the owner opts in, we will replace as necessary as long as the structure is safe and secure.**

**Jim Kelly: How does the original work order list get determined?**

- **Use prioritization method to determine neighborhoods;**
- **Check our historic data records and CBI;**
- **Check county data to clean up list;**
- **Our team drives the street to see if properties are no longer there or are vacant.**

Opt-out report:

- Majority of people who opt out say that they’ve already replaced their private side. We will still verify pipe material. If lead is found, we will reach out to them.
- We find that even when we tell them they have lead, many still aren’t interested in the replacement.
- Dug 183 locations where people said they already replaced their private side and 168 turned out to be non-lead.

**Dimple Chaudrey: Is the “city-owned” property the structure or the service line?**

- **These are structures that have been most-often taken by the City for non-payment of taxes.**
- **A lot of them should likely be raised.**
- **It was more prevalent of an issue earlier in the program, in a couple specific work order areas.**

Outreach Efforts:



- Liaisons are canvassing between coordination meetings.
- Lead Help Desk and Liaisons have been doing night and weekend canvassing when possible in the darker, winter months. Will ramp up after it becomes lighter at night.
- Robocalls continue – are sending calls to “deadline streets” where we are about to leave as well as generally unresponsive customers.
- Unresponsive list is continuing to go to City Council
- Community meetings are ramping back up in the new year.
- Social media promotion continues.

Other General Updates:

- PUC settlement items
  - Agreed to collect water quality data from sites where we replaced the water meter to determine if meter replacement impacted lead levels.
  - Leaving test kits behind when we found lead/galvanized on either the private side or internal plumbing.
  - Ran program for 3 months and only received 11 samples.
  - Extended the program and started calling people the morning after they received the kit – still only received 10 more kits.
  - Do not think our sampling can point to anything, however, more than 10% of kits exceeded 10ppb so PWSA started leaving pitchers and filters at locations where the meter is changed and lead or galvanized is observed on either side of the meter.
  - Memo was sent out about this program on 2/24.
- Web map continues to be updated for the public.
- Pitcher and Filter offer is being sent to new CAP customers regularly.
  - 2,028 letters sent to-date.
  - 456 pitchers and 105 filters refill kits distributed to-date.

**Jim Kelly: Are these CAP customers getting pitcher and filter letters at homes with confirmed lead?**

- **Records show lead or unknown.**
- **Anyone who takes a free test kit and it exceeds 10 ppb, they will get a pitcher and filter.**

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## CEP

- At end of 2020, and based on DEP approval, we increased the eligibility threshold to 300% of FPL. New FPL was announced in February.
- Thus far, 186 sites have been verified as non-lead.
  - We are not using any DEP settlement funds for verifications.
- 203 locations with private side replacement.
- 156 locations with public side replacement.
  - We are not using any DEP settlement funds for public side replacements.
- Have spent about half of funds.



- We have until mid-November to spend rest of funds and are pushing to get more people interested.
- We are hoping to have WPXI interview a happy customer after a CEP replacement soon.
- Have targeted those who had private-only lead via the CBI's.
  - We are going to contact these people again with the updated FPL limits.
- Will target property management companies to encourage their tenants to apply.
- If we can't spend all the money, we are going to ask for an extension from DEP.

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## Funding Update

- Recently received \$65M PennVEST loan at 1% interest to replace small diameter water mains.
  - Have historically done 1-2 miles
  - 15 miles are slated in 2020, 2021 (18-month contract)
  - Eventually ramping up to 26 miles per year.
  - Only replacing lead service lines is bad for the overall distribution system because we are reattaching new services to old mains.
  - Have received bids for contractors.
  - Will likely begin in late April/early May.
  - Majority of sites are within LSLR areas, in category 4 or 5 lead areas.
  - Have ID-ed 2,200 public residential service lines to be replaced – when we find private lead when we replace the public side, we will replace at no cost like the 2019 LSLR program.
  - We are anticipating higher rate of partials – we cannot skip over a lead line when replacing the entire water line. We will stress this point in messaging ahead of work.
- Applied for PA DCED \$20M grant – this money would replace an equal amount of the recent PENNVEST award.

**Gina: Appreciate the work you are doing; other utilities are looking to you for guidance.**

**Pete Demarco: How are you going to emphasize the risk of partials?**

- **Stress it in the agreement materials and continue to follow up with customers.**
- **Set up community meetings where we can speak to people in-person.**

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## Inventory Update

- Residential inventory due to DEP on December 31, 2020.
- Original approach in Consent Order in 2017 used CBI data to confirm inventory.
  - CBI was not as accurate in identifying non-lead because of past curb stop replacements with non-lead material.



- Are now required to report the absence of a lead line – all “unknown” sites are considered lead.
- Going forward, will use multiple sources of data to get the best understanding of inventory.
  - Meter replacements – operations team sees private side of service line during work.
    - Operations team has replaced about 15,000 meters and are currently ahead of schedule.
    - 5,000 sites where material was identified but not part of the meter replacement program..
    - 8,000 more location to be done before the end of the year.
  - LSLR and Water Main Replacement programs
    - 2,800 remaining locations to replace or verify material as part of 2019 PENNVEST work.
    - 2,200 locations are to be replaced/verified private as part of the upcoming Small Diameter Water Main construction.
    - Operations team will continue to replace leaking public service lines.
  - Curb Box Inspections.
    - Sending Michael Baker Intl. sites where there is conflicting information between Pitt’s model prediction and our records.
    - 5,500 total sites planned.
  - Collect data from PWSA, City of Pittsburgh, and ACHD records.
    - This method of scouring records is ultimately more cost-effective than digging the site.
    - Records:
      - Old Mylar as-build drawings.
      - Operations work records from 2003 – 2016
      - Review of historic record database with recent verification data.
      - ACHD private inspection records (2003 – 2020).
      - County build data.
  - Machine learning predictive model created by University of Pittsburgh.
    - PWSA Objectives: add to inventory and avoid costly excavations to find copper. A verification costs about \$1,500.
    - Pitt’s Objectives: provide probability that public and private service line is lead for residential customers. Predict lead or non-lead and private service lines materials for these customers.
      - Uses other sources of data including excavation verifications, CBI, historic record, meter replacement data, tap water samples, property characteristics, etc.
      - Some sampling and spatial bias exists since training data relies on excavations; only locations with non-lead are excavated, and neighborhoods with a lot of lead are selected for LSLR programs.
        - CBI program will get more spatial data in areas that are currently not represented in our work. This data will help a future model run.
    - PWSA “historical” non-lead and lead data provided is composed of:
      - Drill sheets



- As-built water main replacement records
- Calc books
- PWSA Operations service line replacements.
- Verifications.
- Replacements.

**Jim Kelly: Is the model working? How do they test the model to ensure accuracy?**

- **Yes – all that is left to do is create the report.**
- **Dan cannot speak to the more specific details.**
- **Jim is interested because this model could be used for other public health programs like asbestos, lead paint, etc.**
- **We can ask Mike Blackhurst and his team at Pitt to come in to give presentation.**

**Gina Miller: How do they get household characteristics like roof material? Is that coming from us?**

- **They didn't just use our data, pulled from other county data as well.**
- **Not everything they tried to use helped output meaningful data.**

Machine Learning Model - Process:

- If model identifies lead and no other non-lead record exists → location will be excavated.
- If non-lead is identified and no other non-lead record exists → CBI will be completed. If model and CBI indicate non-lead, inventory will be updated.
  - Meter replacement data will be factored in as well.
  - We are waiting to see if our methodology will be in line with new EPA Lead and Copper Rule revisions.
- Going to set up a meeting with DEP to go over our methodology. Everything will be completed by end of the year.

LCR Compliance Results:

- Last round of testing came in at 10ppb, below the EPA action limit of 15ppb.
- Want to continue to lower the results.
  - pH and orthophosphate dose adjustments.
  - Targeted flushing of hydrants in system.
  - Continue monitoring PRS stations (sites that mimic household plumbing) and RTCR sites (lead plates), and selected hydrants.
  - Home visits and water profiles taken at sites with particularly high lead results.
  - Continued scale analysis to understand the scale developing within lead pipes.

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## Housekeeping



- Next updates:
  - Inventory
  - Small diameter water mains
  - Pitt team to speak to model

Israel Grey – week of June 8<sup>th</sup> and 22<sup>nd</sup> are bad.

**Brittany Schacht: Low Income Advisory Committee is scheduled for May 8**