

Section VI:

6.3.7 – Supplemental Information

Getting the Most Out of Your AMI and Meter Replacement Investment

Value-Add Services for the Township's Consideration

Similar to the Township, Veolia has implemented several AMI conversion projects in the recent past, including those at several of our New Jersey utility operations, Bergen and Hudson counties and Toms River, totaling over 250,000 meters.

Through our history of work in New Jersey, Veolia has developed a solid working relationship with the contractor that performed the meter replacement project for the Township, In-Line Services.

We also have similar strong working relationships and experience with other installation and testing companies.

For the Township's consideration, we are offering some thoughts on potential Value-Added Services to help you to leverage the most features and optimal performance out of your AMI investment.

Should the Township be interested in pursuing these services, we would offer you an initial Site Visit to view our AMI system and metering operations at Toms River. This will allow you to see first-hand the industry-leading AMI practices that we have put-in-place for that operation.

These include practices such as continuous meter performance review, and building a culture of reducing Non-Revenue Water (NRW) in our field and office-based teams.

Assistance with Water Loss Reduction Strategies

The development of a Water Loss Reduction Program is now within the Township's sights, following the implementation of your metering and AMI upgrades.

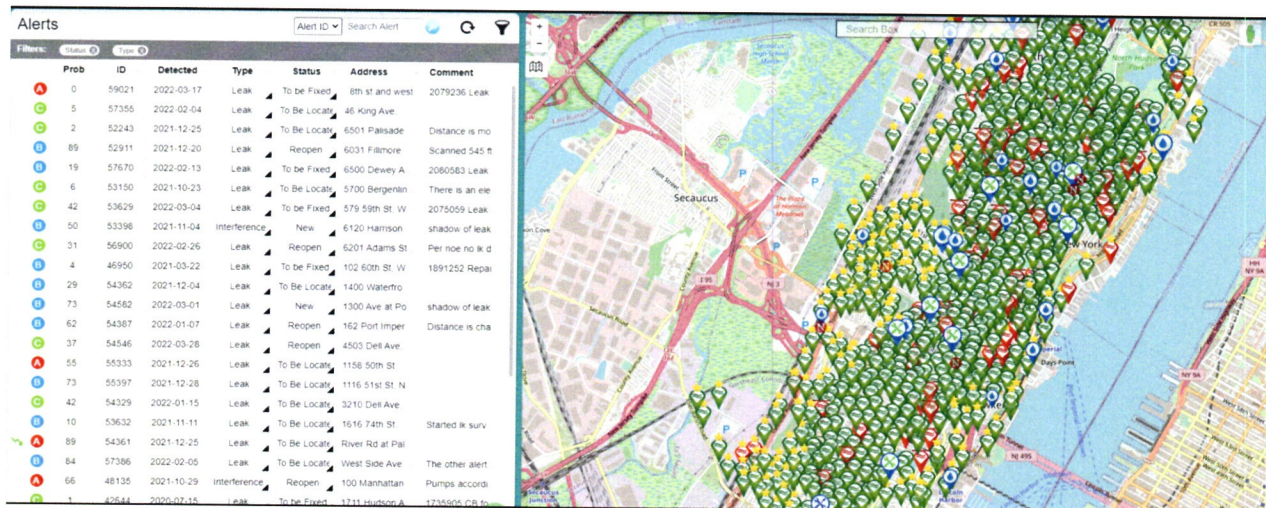
Developing this program will benefit both your customers and your infrastructure, as more treated water will be delivered to the end user rather than lost as non-revenue water.

Veolia has experience in developing and implementing these types of programs across our other projects in New Jersey, and there are several areas we can focus on in collaboration with the Township and your engineering consultants, including:

- Reviewing your water treatment plant metering strategy.
We can assist you in optimizing the integration of your in-plant meters with your AMI system, thereby automating water loss calculations and allowing Veolia's water production operations to have better visibility into the water loss strategy development. The more "hands on deck", the better.
- Evaluating options for a district metering approach.
As an example, we can consider subdividing the distribution system into say six District Metered Areas (DMAs), where delivered and metered water is tracked by area to better identify and locate network leaks.
- Analyzing sources of "apparent" water loss.
Veolia's experience has shown that apparent water loss can arise from wear and tear of aged compound meters. We would investigate this possibly through data analysis, and integrate these findings with the Large Meter Replacement Program, as discussed in our Technical Approach (Section V, Part 2), in order to inform the replacement strategy for existing compound meters.



Recently, for one of our local NY/NJ project, we were able to identify a source of water loss. Under this approach, Veolia created a series of smaller, more localized areas (DMAs), in the distribution system. This enabled us to identify specific water theft down to the neighborhood-level. It was found that tanker trucks were taking water during night-time hours from unmetered hydrants without permission.



Networked Acoustic Leak Logging Software takes the latest in leak sensing technology, and delivers its findings in a practical, easy-to-use interface so field technicians can accurately locate and fix leaks in the system .

- Integrating the Latest Technology. This would enable our operation team to effectively locate and remediate leaks in the system. Our firm has had great success recently with networked acoustic leak loggers installed in valve boxes under street level. These devices listen to the water flowing through the system in order to pinpoint high probability leak areas.

We have specific experience with regard to the performance of the leading system, as we use that system at our Bergen County and Hudson County utility operations in New Jersey.

Metering System Optimization

In considering approaches for the optimization of your metering system, the following are some other suggested topics to explore as part of that process:

- As we progress through this 20-year O&M partnership with the Township, Veolia would propose to periodically review your metering software version, and to develop plans for future upgrade, if necessary. This process would include the following steps:
 - Reviewing the level of support being provided by the system manufacturer, both now and into the near-term future, so you are well-informed ahead of time about software becoming unsupported.
 - Assisting with development of business cases and performing cost-benefit analyses of current systems vs. new software offerings as they hit the market - for example, we can evaluate items such as:
 - Improvements in reporting and analytical capabilities that can positively impact operations, increase revenue and reduce NRW.
 - System “flags” when conditions go outside of set parameters. This would involve reviewing configuration and responsibilities for reviewing flag reports.
 - The software’s ability to analyze AMI network to confirm if signal coverage is sufficient.
- In the area of Workflow Management, Veolia can assist with the alignment of the Township’s water customer service staff and work processes, as outlined on [Figure 1.6-1](#) (next page). This could be done, for example, by:
 - Allocating revenue management and review tasks. This would involve a periodic review of your Customer Information System (CIS) and Neptune reports to create work management activities.

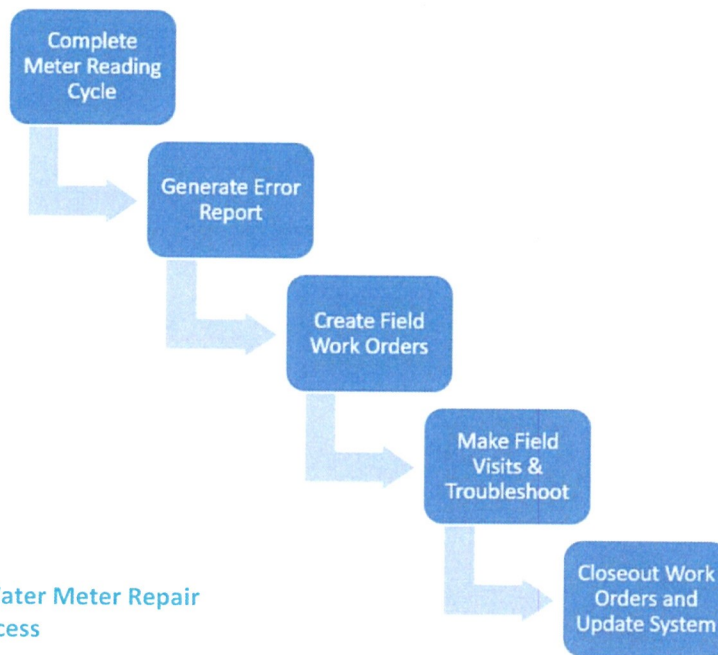


Figure 1.6-1 Water Meter Repair Workflow Process

A meter repair work flow process allows for optimization opportunities at each step of the process.

- Optimizing the Workflow Process.
From “flags” in the system to executing field repairs.
- Reviewing the Interface between the Metering and the Edmunds systems.
Veolia frequently finds that correcting data mis-matches between AMI and CIS systems can increase revenues. These are two areas that we typically prioritize for review, as they impact the configuration of water rates/tariffs and customer classes across both systems.