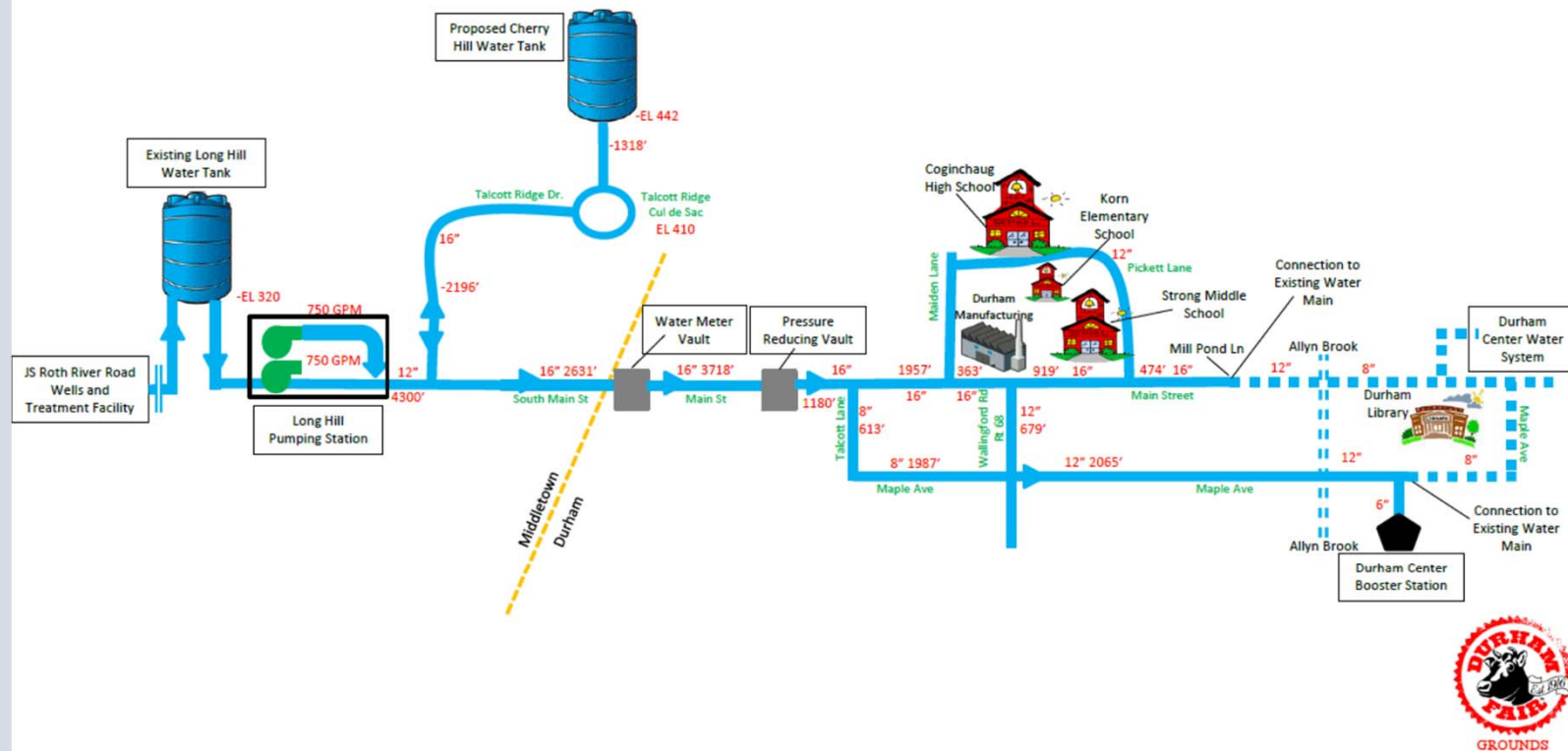


Durham Meadows Superfund Site Alternative Water Supply Project Update

March 29, 2017

Durham Public Library

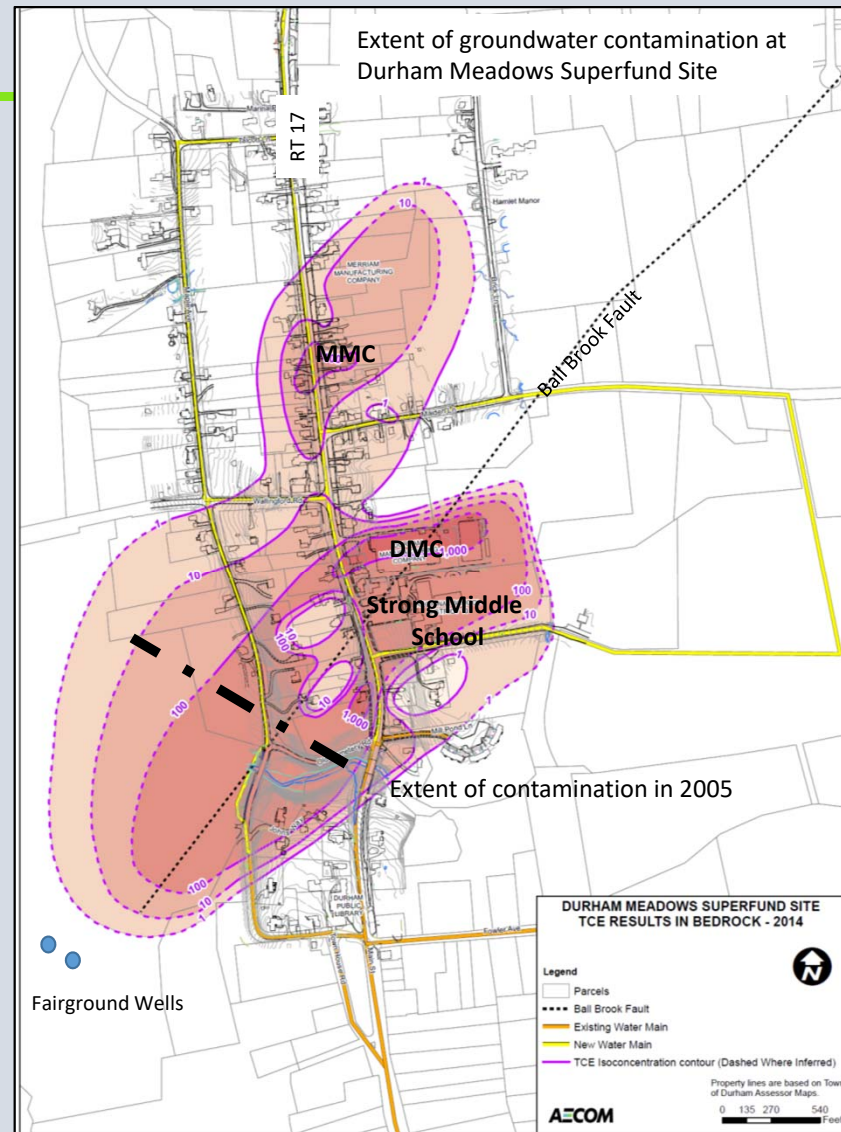
Durham Meadows Superfund Site Alternative Water Supply



Durham Meadows Waterline RD
Schematic Drawing
Not to Scale

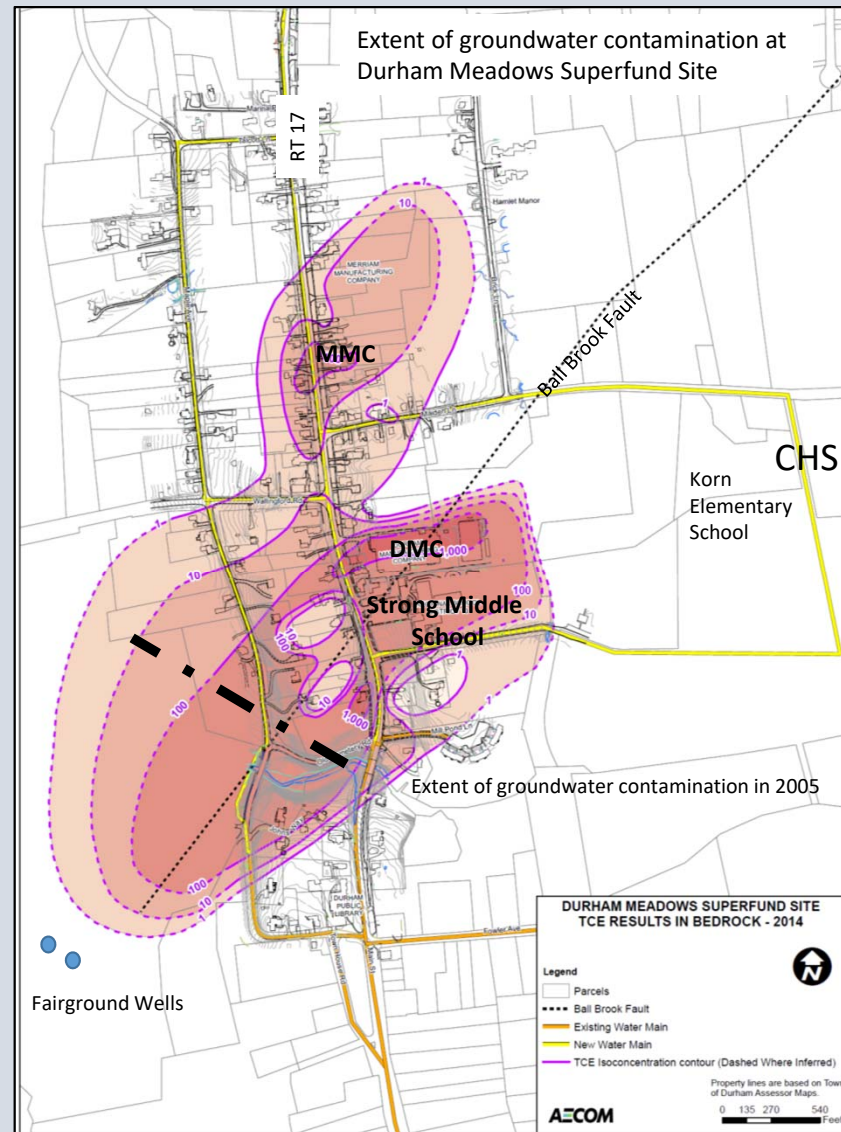
Background

- EPA designated the contamination associated with the DMC and MMC facilities the Durham Meadows Superfund Site in 1989.
- 50 wells, serving 54 locations (mostly residential homes), have contamination requiring use of carbon filters. 10 of these locations are also receiving bottled water for drinking water use due to 1,4-dioxane contamination.
- The major contaminant is trichloroethylene or TCE. The federal drinking water standard is 5 parts per billion. The CTDPH Drinking Water Action level is 1 part per billion.
- Concentrations detected in private wells in 2016 were as high as 1,400 parts per billion (280 times the safe level).



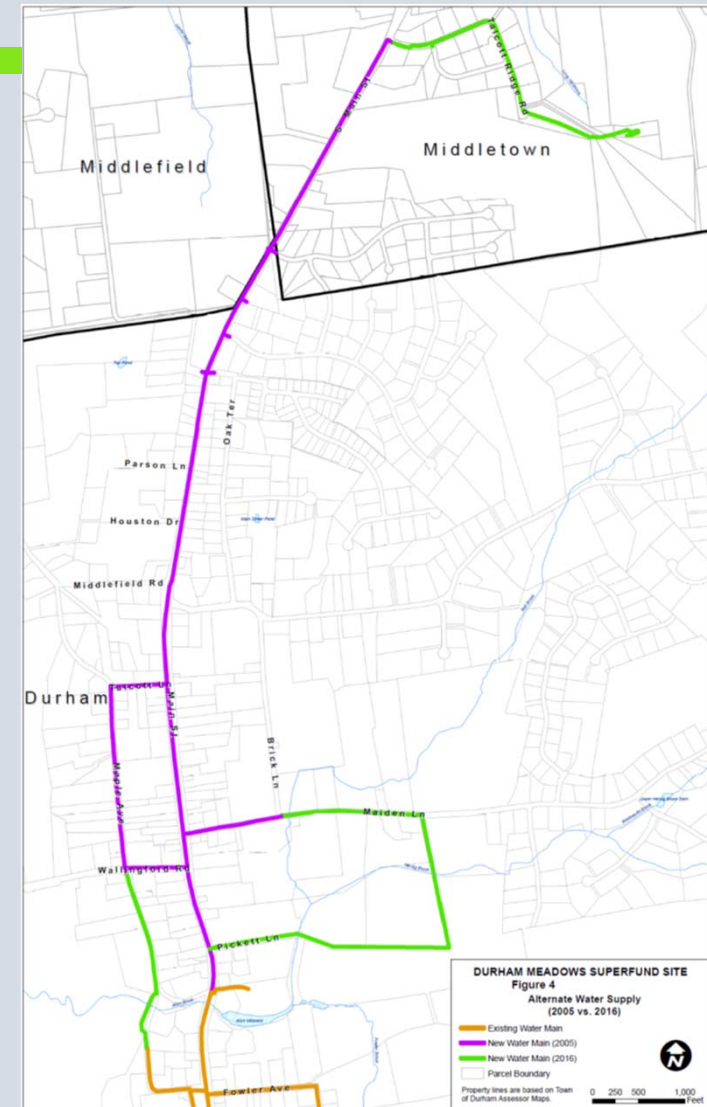
Background

- EPA, after a public comment period, finalized a cleanup plan in 2005. The 2005 cleanup plan includes:
 - Provision of a public water supply for those impacted by the contamination by connecting to the City of Middletown water supply.
 - Excavation of contamination associated with Durham Manufacturing Company and Merriam Manufacturing Company.
 - Long-term monitoring and groundwater use restrictions.



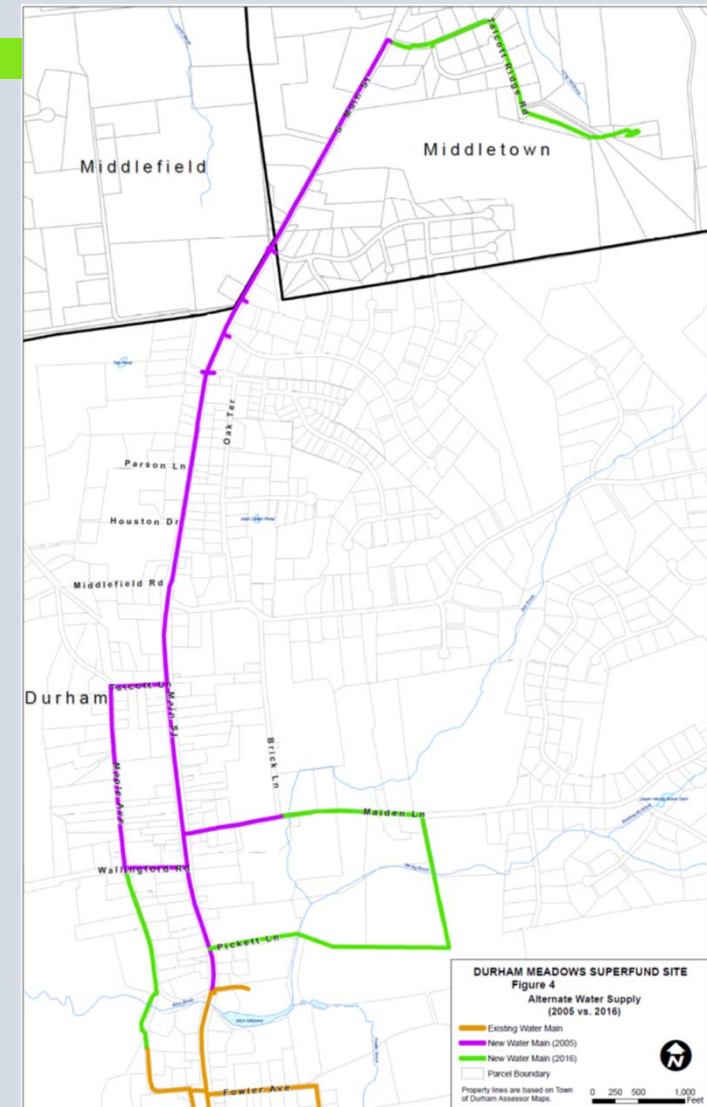
Alternative Water Supply Design

- In 2013, EPA began the design for the alternative water line. Several revisions to the initial 2005 design concept were required:
 - The water tank was included to provide the volume of water and to be a more reliable water supply. This resulted in inclusion of Talcott Ridge Drive and Watch Hill Drive in Middletown.
 - The lower portion of Maple Ave was included.
 - The Fairground Wells will be taken off-line and the Fairground and existing Durham Center Water Service will be served by the new water main and tank.
 - The RSD#13 schools (Korn Elementary School, Strong Middle School, and Coginchaug High School) have been included in the design.
 - The entire water main will achieve fire protection standards (fire hydrants and volume)



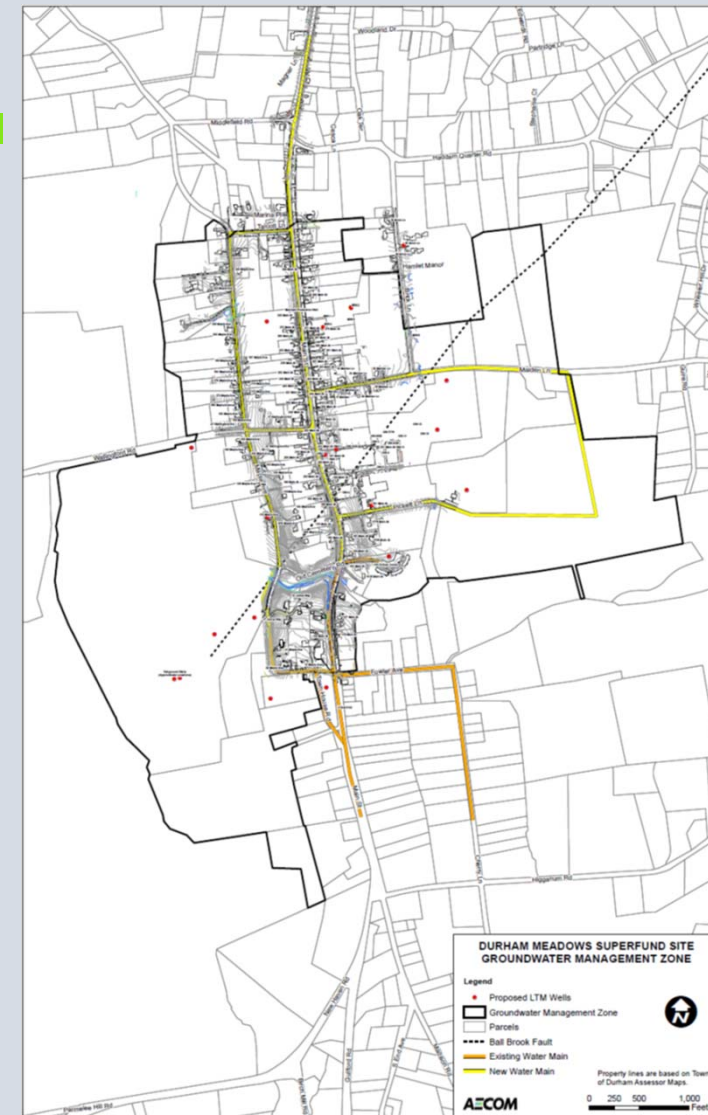
Alternative Water Supply Design

- The CTDEEP, CTDPH, Town of Durham, and City of Middletown all participated in the development and review of the design.
- The Design for the Alternative Water Supply was completed in 2015.
- EPA secured funding to move forward with the implementation of the water main and water tank in 2015.
 - Note: EPA pays for all of the design work and 90% of the construction and testing. CTDEEP pays for 10% of the construction and testing. Durham and Middletown would each own and operate the infrastructure within each community.
- EPA and CTDEEP completed the State Superfund Contract to document the 90/10 cost share for the project.
- CTDEEP secured the funding to pay 10% of the anticipated costs for the cleanup actions associated with the Durham Meadows Superfund site.



Alternative Water Supply Implementation


- In 2015, the Town of Durham enacted a Groundwater Ordinance, with an effective date of January 1, 2016. The Groundwater Ordinance restricts the use of groundwater within the Groundwater Management Zone, as defined in the Ordinance. The Groundwater Ordinance can be found at: <http://www.ecode360.com/30752082>.
- In 2015, EPA retained the US Army Corps of Engineers (USACE) to manage the procurement of the contractor and management of construction.
- During 2015 and 2016, the USACE also performed a detailed technical review of the design.
- In 2016, the project was approved by the CTDPH.
- EPA developed a Public Information Fact Sheet in August 2016 and placed on EPA website.



Alternative Supply Implementation

- During September/October 2016 EPA sent letters to about 180 property owners either seeking access for water connection, curb stop installation, or access for water tank work.
 - EPA has received permission from 100 of the 115 property owners designated to receive a water line connection.
 - EPA has received permission from 26 of 67 properties where a curb stop was to be installed.
 - **Please note: if you do not provide a signed access agreement, we cannot install the water line connection beyond the Town or CTDOT right of way.**
- EPA performed archaeology test pits on 17 properties as required to comply with the National Historic Preservation Act.
- 38 additional properties are within the water line installation area, and 41 where curb stops may be installed, require test pits are scheduled for June/July 2017.
 - **Please note: if your property was identified as requiring an archaeological test pit and you decline, we cannot install the water line or curb stop on your property.**

Permits and Approvals from City of Middletown



- Two approvals were required from Middletown for the water main extension and water storage tank. If approved, the project would be put out for bid.
- The Inland Wetlands and Watercourse Agency (IWWA) hearings were held on December 7, 2016 and January 4, 2017. The IWWA approved the permit after that hearing.
- 8-24 is a State of CT statute that requires municipal projects to be reviewed by the Planning and Zoning Commission. The 8-24 review meetings were held on January 11, 2017 and January 25, 2017.

Permits and Approvals from City of Middletown

- On January 25th, 2017 the Planning and Zoning Commission issued a unfavorable review of the project citing five reasons which are presented below.
 - The proposed water tower, as designed, does not incorporate site concealment techniques, which, if employed, could potentially minimize adverse visual impacts on the immediate neighborhood.
 - Vistas and views shall be adversely impacted since the water tower, as proposed, extends above the tree-line.
 - The project, as proposed, especially what is perceived as the physically prominent appearance of the water tower, will generally degrade views for several houses in the immediate area, which may, in turn, lower property values.
 - The project designers did not present alternative water tower designs.
 - The partial re-paving of the road after construction site work, as proposed, will adversely impact the appearance of the neighborhood as a whole, which can adversely impact property values.
- The effect of the unfavorable review is that the City of Middletown Common Council must approve the project by a 2/3 majority for the project to proceed.

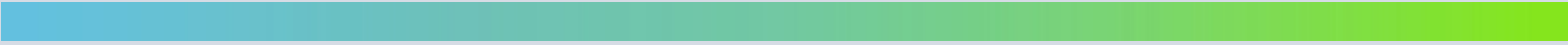
Permits and Approvals from City of Middletown

- The basis for the Planning and Zoning Commission review was input received from property owners near the location of the proposed water tank who objected to the project and cited their reasons at the IWWA and Planning and Zoning Commission. A letter with comments was also submitted to the Planning and Zoning Commission.
- Following the unfavorable review, EPA participated in a workshop with the City of Middletown Common Council on February 13, 2017 to present the project. It was also a forum for the Common Council to hear from the property owners with concern and asked questions themselves.
- At workshop, the Common Council reinforced the issues identified by the Planning and Zoning Commission and the property owners and requested a response to the questions and issues along with the developments of an alternative to the in-home individual booster pumps.

Permits and Approvals from City of Middletown

- EPA held meetings with the property owners on February 21, 2017 and February 28, 2017 to receive further input.
- EPA assembled a list of the questions and issues that were identified by the Planning and Zoning Commission, City of Middletown Common Council, and property owners.
- EPA is finalizing a document which provides the responses to the questions and issues.
- EPA will provide the document to the City of Middletown Common Council and will make the document available on the EPA Durham Meadows Superfund Site web page.
- EPA anticipates attending another workshop with the Common Council prior to a final vote. The vote will likely occur in May or June 2017.
- **Without approval from the Common Council, the alternative water supply cleanup cannot be implemented.**

Permits and Approvals from City of Middletown



- The major issues that were identified include:
 - Water pressure
 - There are 8 properties where the water pressure after installation of the water tank will drop and they will require a booster pump. The pump installation would be fully paid by EPA.
 - The property owners do not want to be responsible for the maintenance of a booster pump.
 - The Common Council requested that EPA seek an alternative solution.
 - Tank Height
 - The tank, as designed, may extend 10-15 above the tree line.
 - Several property owners object to the visual impact and potential property value impact of the water tank.
 - Benefits of project to Middletown (cost/revenue analysis)
 - The property owners and Common Council requested a more specific documentation of the benefit of the project to the City of Middletown.
 - The City of Middletown and Town of Durham are working to finalize the water sale agreement.

Current Status

- EPA is working with its engineering consultant along with the City of Middletown, Town of Durham, CTDEEP, CTDPH, and the US Army Corps to evaluate options to address issues raised by City of Middletown Planning and Zoning Commission, Common Council, and property owners near the tank site.
- EPA will present a response to comments and recommended design changes at a Common Council workshop which has not yet been scheduled.
- The Town of Durham and City of Middletown are working to finalize the water sale agreement before the workshop as well.
- Provided the Common Council is satisfied with the changes and approves the project, the project will proceed to bid as soon as possible after the approval.

Contact Information and More Information

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