

**Minutes for a Ticonderoga Town Board Water/Sewer Workshop on
September 29, 2020 commencing at 2:00 p.m.**

Present: Joseph Giordano, Supervisor
Mark Russell, Councilman
Tom Cunningham, Councilman
Joyce Cooper, Councilwoman
Dave Woods, Councilman
Tonya M. Thompson, Town Clerk

Others: Mark Wright, Frank Basile, Derrick Fleury, and presentations by Greg Swart, Jocelyn Racette, Nate Bull, Erin Allison from AES

Greg Swart started the meeting introducing Nate Bull and Erin Allison. Mr. Bull will be going over the presentation of the ventilation project at the Treatment Plant.

Re: WWTP Ventilation Project & Building Evaluation Services Meet & Greet
2020-09-28

Town, AES (Greg Swart, Jocelyn Racette, Nathan Bull (MEP Partner), Erin Allison (Architecture Associate)

Liza Kilcoyne (Architecture Partner was not able to attend this meeting)

WWTP Ventilation Report

Background & Funding

- An evaluation of the WWTP's heating and ventilation was reviewed. Almost no work has been completed since the plant was constructed in the 1970's.
- Basis of the report was an EFC engineering planning grant. This sets us up for potential funding through EFC. We had completed all work previously covered under reports. We needed this baseline report to be able to apply for funding. It at least sets the Town up for grants should they come through.
- We are working with EFC to tie in your upcoming your phosphorus requirement and the requirements under the long-term control plan to gain the points required for good funding.
- There may be some funding through NYSERDA for the heating/ventilation upgrades.

Technical Discussion

- Majority of existing ventilation system equipment has reached end of operational life
- Majority of existing facilities ventilation system does not meet current standards:

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- Office area: insufficient outdoor air, pressure control, needs air conditioning
- Diversion Room: insufficient outdoor air/exhaust, pressure control
- Work Area: pressure control, air delivery performance
- Sludge/Grit Handling: insufficient outdoor air/exhaust, poor air delivery performance
- Sludge Pipe Galley: insufficient outdoor air/exhaust, poor air delivery performance
- Poor ventilation performance confirmed with air quality testing
- Recommended Solution – replace aging ventilation system equipment - sized/ designed for current standards while taking advantage of effluent wastewater heat recovery
 - Existing boiler plant cannot accommodate added heating load to temper ventilation. Ventilation heating load approximately– 860 Mbtu on design day
 - Air to air heat recovery would provide approximately 580 Mbtu, while the remaining 280 Mbtu would be supplied by an alternative method (effluent wastewater heat recovery).
 - Proposed option would include water-to-water heat pumps, fixed plate heat exchangers, glycol solution, buffer tank, pumps, piping, and controls
 - Heat pumps would use a closed loop refrigerant for energy transfer to closed-loop heating fluid
 - Anticipated 170 gpm of effluent water (40 degree F) on design day
 - Heating hot water from heat pumps circulated through heating coils on the various AHU's.
 - No impact to existing boiler plant.

Temporary Ventilation Project

- Project included ventilation upgrades to Diversion Room, Sludge Handling, and Office area to achieve current codes/standards.
- System and equipment in Office area would remain in upcoming effluent recovery project.
- Do we move forward?

Building Systems Evaluation Kickoff and Meet & Great

AES has worked on numerous municipal buildings

- Fire Stations - Ausable Keeseville Chesterfield, Ausable Forks
- Police Station - South Burlington, VT
- Town Halls/Government Centers - Essex County, Dannemora, Whitehall, Moriah, Enosburgh, VT

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- DPW Facilities – Ausable, Malone
- Salt Storage Facilities - Keene, Beekmantown, Dannemora
- Community Center - currently working with the Town of Keene on a Preliminary Design for a Community Center which will include: Town Offices, Town Library, Meeting spaces, Recreation Center, and Multi-Generational Center for Seniors and Children.

For Ticonderoga, AES has worked on or currently working on

- Structural Evaluation of Police Station and Highway Garage
- Accessibility Improvements at Community Building and Armory
- Community Building Renovations
- Planning phase for French Sawmill Reconstruction

Proposal

- Similar to Water, AES can provide the Town with a service contract to provide guidance and advice if a Building committee is formed.
- AES can provide proposals for evaluations of individual buildings/an overall plan review
- If Town elects to move forward with Fire Department, AES can provide technical review on behalf of the Town

Funding

- Often US RD can provide low interest loans (with longer terms) and some small grants (minimal amounts)
- AES can assist with these once plans are known
- Reports/evaluations are needed

Much discussion was held about air quality and the safety of the employees. Project must be prioritized to be brought back to the Town Board. Try to implement the parts of the temporary plan that was brought forth a while back. Parts of that temporary plan are actually permanent.

Mr. Swart also explained that their firm is available to help with any building concerns that the Town has. They understand the discussion that has been happening when it comes to the Fire Department/Police Shared Services Project and also the Highway garage issues. They are familiar with most of the buildings that the town owns. There are shared services opportunities that are available. They are happy to help.

Meeting adjourned at 3:00 p.m.

Respectfully submitted, Tonya M. Thompson, Town Clerk