

Meeting Minutes - **DRAFT**

Special Meeting of the Board of Commissioners: Workshop Session

Emerald Lake Village District

District Office

5 Main Street, Hillsborough, NH

June 23, 2014 at 5:00 pm

Present: John Dahood, Commissioner & Chair (in person)

Martha Caron, Commissioner (in person)

Denise Deforest, Commissioner (in person)

Joe Damour, Water System Operators, Inc.

Scott Osgood, Administrator

Public: No Appearances

The purpose of the workshop meeting was to come up to discuss the scope and financing for a next phase, as well as compliance issues centered around the District's submittal of a Water Conservation Plan in December 2013, and related requirements.

Materials under discussion included the December 2013 Water Conservation Plan submitted by the District with further conditions to approval issued by DES February 20, 2014; the DES Drinking Water Sanitary Survey of our water system with citations issued November 21, 2012; Chapter Env-Dw 500 et seq on Operation and Maintenance of Water System with requirements, of the New Hampshire Code of Administrative Rules, and correspondence from DES concerning AWWA recommended testing schedules for source meters.

It became evident through discussion that the District needs to meet with WSO on a regular schedule to discuss status of the system and compliance. At this meeting, WSO tendered invoices for 5 more leaks. However, there has been only 1 prior leak in 2014, and Mr Damour reported that the incidence of leaks has declined dramatically since we have done the improvements to date. Mr Damour confirmed that WSO is maintaining a leak log as required by DES.

Testing and monitoring functions were also discussed. DES wants the source meters calibrated with certificates sent to them by January 1, 2015, as a condition of approval. This was last done in 2011 but then the recommended standards forwarded by DES based on meter sizes of less than one inch only require calibration every ten years.

DES also wants a leak survey of the entire system. This should only be done after installation of the dataloggers which will provide leak/flow information in the areas already having replaced lines. For any other streets, which contain nonmetal (plastic) piping, testing has to be done by acoustical means which involves listening for flow sounds very 10 feet or so over the entire system. There is a new grant available for 2015 for leak surveys through DES; the application is due by July 11 and the District will pursue it. DES then contracts outs the actual work.

Based on the DES Sanitary Survey callouts, reconfiguration of the treatment flow at the treatment facility for Meeting House and Mary Rowe wells was also discussed. However, the current method of blending was approved by DES in approving the treatment plant originally. At issue is the order of administering chemicals through filters which could be replumbed to prevent an incorrect flouride reported figure. However, it would cost at least \$10,000 and even the artificially higher flouride readings are still within acceptable limits.

The possibility of tying the Hummingbird well output into this treatment facility at the beach in lieu of the current configuration of pumping it up to the Patten Hill treatment facility at the pumphouse was also discussed, as the Hummingbird well does not produce any arsenic in its flow and thus would reduce the overall arsenic readings and treatment measures required for Meetinghouse and Mary Rowe wells. This should not be an expensive project.

In terms of the overall system maintenance, Mr Damour indicated that there is constant replacement of mains and/or pumps etc needed which should be budgeted through reserves at a minimum of \$50,000 annually, but recommended to be higher.

General requirements of the NH code which could be implemented by WSO include developing an operations and maintenance manual as described by Env-Dw 503.07. WSO already has production and treatment logs in compliance with Env-Dw 503.10 which document chemical treatment; and WSO regularly inspects the system under Env-Dw 503.15. Mr Damour also believes that an emergency plan was developed for ELVD under Env-Dw 503.21 but that has not been located yet.

The discussion then turned to further capital improvements to the system and the scope of Phase 2. Using the map with the 2009 Master Plan, Mr Damour indicated that the preferred priority replacement of lines should complete a loop complementing the existing Phase 1 going up Huntington and part of Melody to complete that loop. He also pointed out that Moccasin Trail at Sunrise and Turtle Bridge could be tied into the new mains; all of which could be less expensive and more efficient overall for the system in lieu of the Tata & Howard contract designations of Autumn, Huntington and Old Lantern. He indicated that Hemlock Street lines were redone.

Mr Damour also provided an opinion that the District could go from 2 inch line to only 4 inch line on branch streets, and most likely be fine. The engineers dictated an 8 inch line in the replacement around the lake but 8 inch is not necessarily required or recommended for the branch streets.

Mr Damour reported that the pump for well #11 has been replaced but that now the pump for well #6 needs replacement as well.

He also pointed out that wells 6, 7 & 8 go through the Patten Hill pumphouse and although there is no problem contamination at the source of these wells, they do get chlorinated through the main feed at the pumphouse.

Mr. Damour also indicated that while replacement of Pine Glen lines in Phase 1 left out some of the mains that would be required, he recommended considering doing Autumn as part of a "Phase 3" because of its proximity in that it could be used to run the output of Meetinghouse and Mary Rowe up to the Patten Hill site to centralize treatment and eliminate the maintenance and cost of a second facility now used at Meetinghouse beach.

The meeting also included review of the daily responsibilities of WSO. Each well has a flow meter and hour meter to record gallons per minute which are records kept; and chemical levels are also monitored, with filter changes and backwash if necessary, annually. The pumps average 10-12 hours a day now producing 50,000-70,000 gallons.

Leak detection comes not only from resident reports of drop in water pressure or accumulation of water in the roads, but also by extrapolation from an increase in monitored flows on the meters.

Lastly, the Patten Hill pumphouse situation was discussed. WSO has not finalized the situation including wiring the flow meter pending a District decision on choosing a type of remote (automated) system, which it should do.

There being no further business at this time, the meeting was adjourned at approximately 7:20 pm.

Prepared by: Martha L Caron
6/30/14