

Agenda Summary
April 8, 2026

Agenda Item No. A-8

Drinking Water PFAS Response Plan – Well Drilling, Construction, Development and Testing

Summary: Public Works has advanced Source Development and Permitting efforts associated with our Stowe Alternate Waterworks project. In general, this includes well field design and source development (well location) approval. The proposed well field is proximate to the existing Percy well. Rehabilitation and reuse of the existing Percy well and the drilling, construction, development and yield testing of two additional 8” diameter wells is proposed. Recent VTDEC Rules mandate a Discharge Permit for “Discharges from Potable Water Infrastructure Activities”. Discharges associated with well drilling, development and yield testing, if directly discharged to the waters of the State, are considered Potable Water Infrastructure and thus are so regulated. Unfortunately, the effluent limitations in the General Permit promulgated for these discharges exceed Drinking Water standard. There is also a prohibition from using chemicals making temporary filtration infeasible. An Individual Discharge Permit may be possible but long-term and seasonal monitoring of various physical, chemical and biological assimilation capacities of the downstream waters would be required. This is not practicable given the time limitations of our Purchase and Sales Agreement. Staff has developed, and VTDEC has approved an alternate approach of using spray fields to eliminate a point source discharge. In general, this will include temporary systems to provide for sediment management, high head pumping and large capacity spray devices.

N.A. Manosh, Inc are believed to be the only Contractor in the state with the required equipment and capacities to undertake this work and in conjunction with our Geo-hydraulic consultant, we have developed a 3-phase progressive program of construction and testing to undertake this effort. The phasing is conceived to allow opportunities to discontinue efforts if disqualifying results are obtained. For instance, a raw water sample will be secured and tested for PFAS after the Preliminary Step Test and if PFAS is detected or, if the anticipated yield capacity is not considered likely, subsequent phases and efforts would be terminated. In general, the anticipated program for each phase with approximate cost estimates for each are as follows:

PHASE 1

SCOPE ITEM	ESTIMATED COST
BRUSH CLEAN AND REDEVELOP EX. PERCY WELL	\$10K - \$15K
PRELIMINARY STEP (YIELD) TEST OF EX. PERCY WELL	\$15K - \$20K
DRILL AND INSTALL FULL LENGTH 8” CASING FOR WELL #2 (Dual Rotary drilling with aquifer soil sampling for well screen design)	\$40K - \$50K
TOTAL ESTIMATED COST PHASE 1	\$65K - \$85K

PHASE 2

SCOPE ITEM	ESTIMATED COST
DRILL AND INSTALL FULL CASING FOR WELL #3	\$40K - \$50K
INSTALL SS SCREENS AND CONSTRUCT WELLS #2 AND #3	\$50K - \$60K
DEVELOP WELLS #2 AND #3	\$30K - \$40K
TOTAL ESTIMATED COST PHASE 2	\$120K - \$150K

PHASE 3

SCOPE ITEM	ESTIMATED COST
RENTAL, MOBILIZATION AND DEPLOYMENT OF YIELD TEST DISCHARGE MANAGEMENT EQUIPMENT (DUAL FRAC TANKS, HIGH HEAD PUMPS AND LARGE CAPACITY SPRAY HEADS)	\$100K - \$125K
RENTAL, MOBILIZATION AND DEPLOYMENT OF YIELD TEST EQUIPMENT (TEMP 50HP WELL PUMPS, GENERATOR, MISC.)	\$80K - \$100K
120 HOUR YEILD TEST OF EACH WELL	\$60K – \$90K
REMOVALS AND DEMOBILIZATION	\$30K+/-
TOTAL ESTIMATED COST PHASE 3	\$270K - \$345K

Town Plan & Policy Impact: N/A

Fiscal and Human Resource Impacts: Estimated total cost if all phases are implemented = \$455,000 – \$580,000, Say +/- **\$500K**, to be paid out of Water Fund reserves. The actual final cost will be billed on a time and material basis based upon the final quantities for the conditions encountered to achieve the objective. If successful, the primary source permits will be obtained and the primary construction-related source infrastructure for the proposed Alternate Waterworks will be accomplished. Significant staff efforts estimated at over 1000 hours have been put into this endeavor since authorization of the Purchase and Sales Agreement.

Recommendation: Move to waive bid requirements of the Purchasing Policy and authorize staff to retain N.A. Manosh, Inc. for the source development construction and testing efforts associated with the Stowe Alternate Waterworks project.