TOWN OF GILL

MASSACHUSETTS



www.gillmass.org

SELECTBOARD MEETING MINUTES May 14, 2018

Called to Order: The meeting was called to order at 5:30 PM.

<u>Members Present:</u> John Ward, Randy Crochier, Greg Snedeker <u>Members Absent</u>: None <u>Others Present:</u> Ray Purington, Administrative Assistant; George Brace, Janet Masucci, Jan Ameen, and Tyler Nelson-Yarros

<u>Curbside Collection of Organics</u>: Jan Ameen, Executive Director of the Franklin County Solid Waste Management District, met with the Selectboard to present information about a possible application for a DEP grant that would fund start-up costs for a 2-year pilot program to do curbside collection of organic waste. The application deadline is June 13, 2018.

Alternative Recycling currently collects trash and recycling from the Town's residents on a weekly basis, using one truck for trash and one split-container truck for paper and containers. In order to collect organics as well, Alternative would need to purchase a new split-container truck (for trash and organics) and add one employee to the route. The added cost of collecting and hauling the organics would be \$16,284 per year. This would be offset by \$3,000 of grant funding during each of the first two years. If trash collection and organics collection were alternated weekly, the added cost would only be \$12,540, and the same \$3,000 grant funding would be available.

Ameen used figures from Brattleboro's existing curbside organics program to estimate each household generates 10 pounds of organics weekly. The Town of Gill recently surveyed residents about their interest in curbside organics, and slightly more than 50% indicated they would participate. Ameen estimated diverting organics from the trash would mean a 40% reduction in trash by weight. The reduction equates to 75 tons less trash per year, which means a savings of \$5,775 annually for the Town's trash disposal costs.

Annmarie McCune, Robyn & Gerald Hallet-Polley, and one other resident of Barney Hale Road joined the meeting at 5:55 PM.

Ameen pointed out no other town in Western Mass is currently doing curbside collection of organics. Gill could be the first! The grant application could be written for a start date in the summer of 2019, corresponding to the beginning of FY20. This would give the Town one year to plan for any financial impact from the new program. Funds the Town receives through the DEP's Recycling Dividends Program could also be used.

The Selectboard asked Ameen to flesh out the costs of the program further, and return to the May 29th Selectboard meeting for a followup discussion. Ameen left the meeting at 6:00 PM.

<u>2018 Public Gathering Permit for the Turners Falls Schuetzen Verein:</u> Randy disclosed that he is a member of the Turners Falls Schuetzen Verein Club, and recused himself from the discussion and vote. The Selectboard reviewed the Club's application for a Public Gathering Permit covering various clam bakes, car cruises, and other public events during 2018. The Board of Health, Highway Department, Police Department, Fire Department, and Building Inspector have signed off on the application, with the same conditions requested as last year: 1) All fire lanes must be kept open for access by fire & medical services; and 2) There must be a police detail for crowds over 300 people, except for the monthly car shows, which shall have a detail officer at the Route 2 entrance.

Greg made a motion, seconded by John, to approve the application for the Public Gathering Permit with the noted conditions. The motion passed by a vote of 2 in favor and 0 opposed.

<u>Utility Pole Hearing</u>: The Selectboard opened a public hearing on a joint request by Eversource and Verizon to replace one jointly owned pole in the area of 93 Barney Hale Road. The new pole will be installed approximately 38 feet to the north of the existing pole, and is requested in order to facilitate make-ready work for bringing Comcast services to that road.

There was a brief discussion about the growing number of "double poles" in Gill, and the slow speed at which wires and cables get moved from the old poles to the new poles. Eversource has supplied the Town with a list of 21 double poles in Gill. Of the 21 poles, 14 are waiting for Verizon to move their wires, 4 are waiting for MBI, and 3 are waiting for Comcast. Ray will contact the three companies and make them aware of the Town's frustration and expectations.

The four residents from Barney Hale Road who attended the hearing asked for more information about the proposed location for the new pole. Using a Google satellite image on a smartphone and a printout of the same, the location was determined. The residents were unanimous in their support of wanting Comcast's project to move forward – "We need internet and cable." Greg left the meeting at 6:20 PM due to another commitment.

John made a motion, seconded by Randy, to approve the request for the new utility pole. The motion was approved by a vote of 2-0. Nelson-Yarros and the four Barney Hale Road residents left the meeting at 6:25 PM.

<u>Review of Minutes:</u> John made a motion, seconded by Randy, to approve the minutes of 4/25/18 and 4/30/18. The motion was approved by a vote of 2-0.

<u>Gill Elementary Well:</u> Ray reported the DEP has issued its conditional approval of the treatment system for the School's well. There are 14 conditions to which the treatment system must perform and comply.

<u>Gill 225th Anniversary:</u> By consensus the Gillbilly Paddle, a water parade of sorts comprised of canoes, kayaks, rowing shells and boats, was approved to be included in the Town's certificate of insurance that is issued to the Northfield Mount Hermon School. The Paddle, to be held on July 21st, will use the NMH docks as the launching point. In accordance with a request from the Town's insurance company, participants will be required to sign liability waivers.

<u>Selectboard Liaisons to Fire, Highway, and Police Departments:</u> The topic was held over to May 29th so all three members of the Selectboard could participate in the discussion.

<u>Lease for 2018 Use of Mariamante Field:</u> Ray reported that Brian Peila has declined the offered lease for the agricultural use of the Mariamante field. By consensus it was decided to seek new bids rather than award the lease to last year's second-highest bidder.

<u>Longevity Bonuses for Non-Full-Time Employees:</u> The topic was held over to May 29th so all three members of the Selectboard could participate in the discussion.

<u>Tick Testing</u>: Discounted tick testing is again available for Gill residents. A federal grant will subsidize the lab costs for tick tests, so the cost to residents is only \$15 per tick. Once the grant funding runs out, funds from the Gill Board of Health will be used to subsidize another 40 tests. Randy spoke of the importance of having attached ticks tested – it gives the person knowledge about what diseases they may have been exposed to, and it gives Public Health officials valuable information about the prevalence of disease-carrying ticks.

<u>FRCOG Highway Bids:</u> Randy disclosed he is an employee of the FRCOG in a grant-funded position related to public health. It was determined there was no conflict of interest to prevent him voting on this matter. John made a motion, seconded by Randy, to authorize the FRCOG to contract on behalf of the Town for various bids and contracts for Highway Products and Services, and to duly appoint the FRCOG for those bids. The motion was approved by a vote of 2-0.

George Brace left the meeting at 6:40 PM.

Warrant: The Selectboard reviewed and signed the FY 2018 warrant #24.

The meeting adjourned at 7:15 PM.

Minutes respectfully submitted by Ray Purington, Administrative Assistant.

Signed copy on file. Approved on 05/29/2018

Greg Snedeker, Selectboard Clerk

Gill curbside calculations May 2018

National average = 20#/bag Trash 200 tpy # households lbs/week/hshld lbs/week tons per week 580 13.26 7692 3.85 Organics # households lbs/week/hshid lbs/week tons per week net trash/week 300 10 3000 1.50 2.35 39% reduction

Trash & Organics weekly is additional \$1357/month or \$16,284/year DEP implementation grant = \$3,000 (\$10/hshld) 2 years

Net: \$13,284

Trash & Organics alternating weeks is additional \$1045/month or \$12,540/year

DEP implementation grant = \$3,000 (\$10/hshld) 2 years

Net: \$9,540

12 gallon carts 300 x \$30 = \$9000 - \$6000 grant = \$3000 net cost (\$10 participant fee?)

Sticker fee loss: If 300 hslds generate only 3.26 lbs/week the potential sticker loss is 35,000 (300 x $3 \times 52 = 46,800$ 3.26 lbs x 300 x 52/13.26 lbs x 33 = 11,736

RDP funds approx. \$10,000 by FY19; \$15,000 in FY20

Potential trash disposal savings: 75 tons/year x \$77 = \$5,775

TOWN OF GILL

The Board of Selectmen, Town of Gill, received an application for a Public Gathering

Permit from Turners Falls Schuetzen Verein

on <u>April 18, 2018</u>_____.

A public hearing is scheduled to be held on <u>May 14, 2018</u>,

at <u>5:30 PM</u> at the <u>Gill Town Hall</u>_____

A copy of this application has been submitted to the following departments for review

and comment:

Health	(Х)	
Highway	(Х)	
Police	(Х)	
Fire	(Х)	
Inspection	(Х)	

Returned (X)

As a result of a Public Hearing and comments received, this application is hereby:

Approved	()
Denied	()

Subject to the following:

_- All fire lanes must be kept open at all times for access by fire & medical services

____- Per past practice (a police detail for crowds over 300 people), except the monthly car show

shall have a detail officer at Route 2 entrance.

Date: May 14, 2018

Gill Selectboard



memorandum

To: Building Inspector, Board of Health, Highway, Police and Fire Departments

From: Ray Purington, Administrative Assistant

Date: April 18, 2018

Re: Public Hearing on Gathering Permit Application

The attached application requires your review per Town bylaw. Please indicate conditions that may be applicable, endorse and return to the Selectboard before the public hearing, scheduled for Monday, April 30, 2018.

BOARD OF HEALTH Revie	Date:						
Are there any licenses or permits required to be issued by you for this gathering. ($$) Yes $$ ($$) No							
Have any licenses or permits be	en applied for and is	sued?	() Yes	() No			
Are sanitary facilities adequate?	()Yes ()No	I					
Recommendations/comments:							
HIGHWAY DEPARTMENT Rev	ewed by			Date:			
Recommendations/comments: _							
				Date:			
Is parking adequate?	() Yes) No				
Crowd Control	() Yes	() No				
Security	() Yes	() No				
Recommendations/comments: _							
FIRE DEPARTMENT Review	ed by			Date:			
Is fire protection adequate) No				
			,				
BUILDING INSPECTOR Rev	iewed by			Date:			
Do the proposed structures, encl							
Recommendations/comments:							

APPLICATION FOR PUBLIC GATHERING PERMIT

1) Name of Applicant/s- Turners Fall Schuetzen Verein
Address55 Barton Cove Road, Gill MaPhone413-863-4768
2) Name of Sponsoring Organization _TFSV
AddressSAMEPhone #SAME
3) Purpose of GatheringClambake (05-20-18), Clambake (09-16-18), Riverside Car Shows (May thru September on the 3 rd Thursday of each month.) Seasonal rentals (May thru October)
4) Date/s of Gathering Clambake (05-20-18), Clambake (09-16-18), Riverside Car Shows (May thru September on the 3rd Thursday of each month.) Seasonal rentals (May thru October)
5) Location of GatheringFacility grounds.
6) Gathering Start Time12:00 P.M Ends10:00 P.M
7) Is entertainment provided? Yes () No (X) If yes, describe in detail the entertainment and equipment to be used:
8) Number of people expected: 500 Are tickets being sold? Yes (X) No ()
If Yes, where are they being sold?By SVC members.
How many have been printed?500
9) Describe sanitary facilities to be usedmen's and women's separate facilities and one handicapped porta potty
10) Is food to be provided or sold? Yes (X) No () If Yes, described the food and kitchen facilities
to be used to provide safe and sanitary storage and preparation of all foods: _Commercial grade kitchen and storag on premises
11) Describe all buildings, tents or other structures to be used, including whether the buildings,
etc. are fire resistant, number of exits and seating capacity: _Canopy (350), tent (250) all outside seating
12) Describe proposed parking siteThree acre field.
How many vehicles can be parked safely?250 What precautions will be taken to ensure vehicles
park only in designated locations?Parking attendants

Will there be any off road parking? Yes () No (X)

What are the main points of access to and from the site: __Route 2, Barton Cove. _____

13) Who will provide crowd control and security coverage: __Detail Officer and members.____

14) Are alcoholic beverages to be sold or furnished Yes (X) No () If Yes, Describe_Full liquor license on premises.

15) Other information needed to completely describe the proposed activity and its effect on the public's health,

safety and welfare: _____N/A _____

The undersigned hereby applies to the Selectboard of the Town of Gill, 325 Main Road, Gill, MA 01354 for a Public

Gathering Permit pursuant to the provisions of the Town bylaw as follows:

PUBLIC GATHERING

Passed October 24, 1978 Amendment Passed May 12, 1979 Amendment passed November 6, 1989 Amendment passed April 10, 1990 Amendment passed June 7, 2004

No individual, group of people, or corporation shall conduct or participate in any gathering of more than three hundred people unless a permit for such gathering has been obtained from the Board of Selectmen. A written application for a permit shall be made at least thirty (30) days prior to the proposed gathering on a form provided by the Selectmen. Payment of Thirty-Dollars (\$30.00) shall accompany the application.

The Selectmen may send a copy of the application to the Board of Health, Highway Superintendent, Fire Department, Police Department and Building Inspector for their review and comment. The Board of Selectmen shall hold a public hearing on the application within 21 days of the receipt thereof and shall grant the permit unless it determines that the proposed gathering would threaten the public health, safety or welfare.

The Selectmen shall given written reasons for any permit application that is denied by them and shall have the right to revoke any permit if the applicant does not abide with the conditions attached to it or if the application failed to completely and accurately describe the proposed activity and its effect on the public health, safety, and welfare. Whoever violates any provisions of this bylaw shall be punished by a fine of \$200.00 for each offense. Each day that an individual, group of people, or corporation violates this bylaw shall constitute a separate offense.

The Select Board shall have the authority to issue a permit to an applicant which authorized the applicant to conduct a limited or unlimited number of gatherings during a period up to but not to exceed twelve (12) months in duration.

Approved by Attorney General January 12, 1979

Amendment approved by Attorney General July 3, 1979

Amendment approved by Attorney General February 6, 1989

Amendment approved by Attorney General June 8, 1990

Amendments approved by Attorney General July 19, 2004

By signing this application, the applicant states that the information supplied is true and complete and accurately described the proposed activity.

Print name Date RAYMON & ZUKOWSKI @ GHAIL-COM Email address Signatuxe/s 181 -6 Email address Telephone #

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Revised 5/2/2017

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To the Board of Selectmen of the Town of Gill, MA.

Under the provisions of Chapter 166 of General Laws and any additions thereto or amendments thereof, a public hearing <u>IS NECESSARY</u> on the attached petition. When adopted, please forward to the Town Clerk for recording.

Town Clerk, please forward recorded orders to:

Eversource 55 Russell St. Hadley, MA 01035

Attn: Caplette/Rosenburg

NOTE: On questions pertaining to this order, please call Mike Rosenburg at 413-787-9462.

REASON FOR PETITION: <u>93 Barney Hale Rd.</u> Relocate one (1) jointly owned pole.

<u>Reason</u>: To facilitate Comcast third party make ready work. The proposed new location provides better access and reliability.

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PETITION FOR JOINT OR IDENTICAL POLE LOCATIONS

To the Board of Selectmen of the Town of Gill, Massachusetts

EVERSOURCE AND VERIZON NEW ENGLAND, INC.

request permission to locate a line of poles, wires, cables and fixtures, including the necessary sustaining and protecting fixtures to be owned and used in common by your petitioners, along and across the following public way:

REASON FOR PETITION: <u>93 Barney Hale Rd.</u> Relocate one (1) jointly owned pole.

<u>Reason</u>: To facilitate Comcast third party make ready work. The proposed new location provides better access and reliability.

Wherefore they pray that after due notice and hearing as provided by law, they be granted joint or identical locations for and permission to construct and maintain a line of poles, wires and cables, together with such sustaining and protecting fixtures as they may find necessary, said poles to be erected substantially in accordance with the plan field herewith and made a part hereof marked - 6A720576.

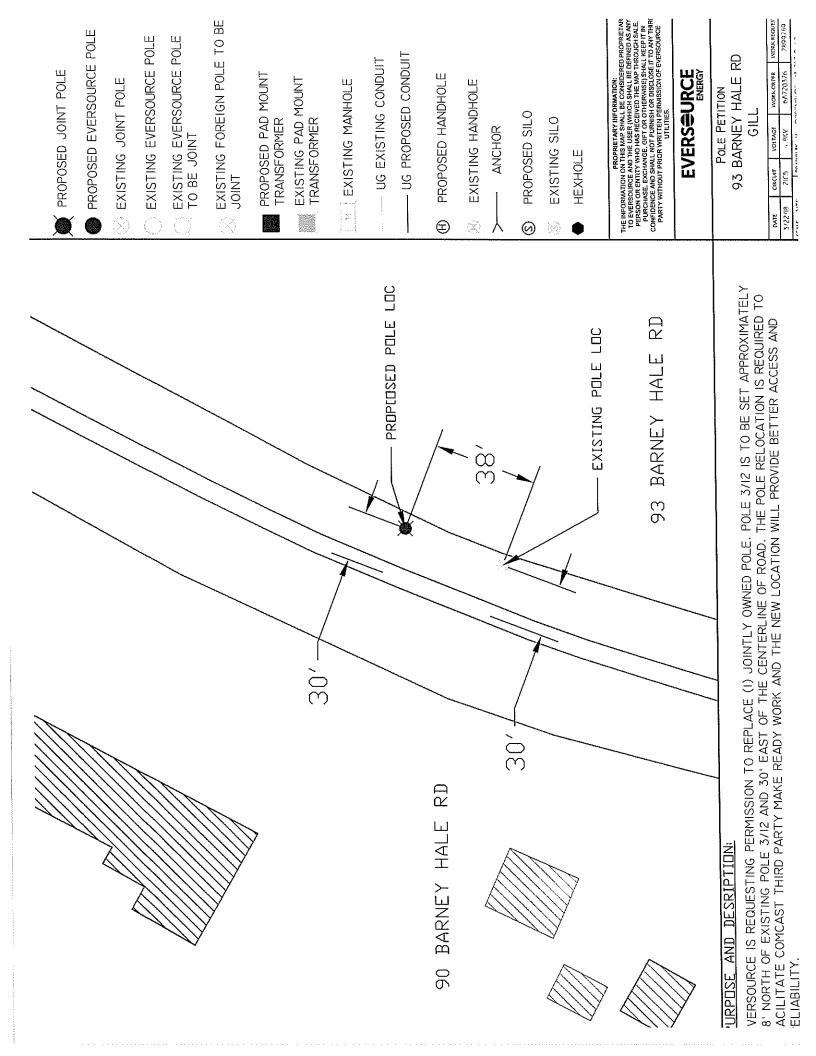
Also for permission to lay and maintain underground laterals, cables and wires in the above or intersecting public ways for the purpose of making connections with such poles and buildings as each of said petitioners may desire for distributing purposes.

Your petitioners agree to reserve space for one crossarm at a suitable point on each of said poles for the fire and police telephone signal wires belonging to the municipality and used by it exclusively for municipal purposes.

By	EVERSOURCE Mille Rosenburg proc
· _	Company Representative
	VERIZON NEW ENGLAND, INC.
Βγ	alle C. 1. Don 11)
-	Manager Right-of-Way

TOWN

Dated this 12TH_day of April, 2018.



ORDER FOR JOINT OR IDENTICAL POLE LOCATIONS

By the Board of Selectmen of the Town of Gill, Massachusetts.

Notice having been given and a public hearing held, as provided by law, IT IS HEREBY ORDERED:

that EVERSOURCE and VERIZON NEW ENGLAND INC. be and they are hereby granted joint or identical locations for and permission to construct and maintain a line of poles and their respective wires and cables to be placed thereon, together with such sustaining and protecting fixtures as said Companies may deem necessary, thereon, together with such sustaining and protecting fixtures as said Companies may deem necessary, in the public way hereinafter referred to, as requested in petition of said Companies dated the 12th day of April, 2018.

All construction under this order shall be in accordance with the following conditions: Poles shall be of sound timber, and reasonably straight, and shall be set substantially at the points indicated upon the plan marked - 6A720576 filed with and made a part of said petition. There may be attached to said poles by said EVERSOURCE not to exceed 18 wires and 2 cables, and by VERIZON NEW ENGLAND INC. not to exceed 40 wires and 4 cables, and all of said wires and cables shall be placed at a height of not less than 18 feet from the ground at highway crossings, and not less than 8 feet from the ground elsewhere.

The following is the public way along which the poles above referred to may be erected, and the number of poles which may be erected thereon under this order:

REASON FOR PETITION: <u>93 Barney Hale Rd.</u> Replace one (1) jointly owned pole.

<u>Reason</u>: To facilitate Comcast third party make ready work. The proposed new location provides better access and reliability

Also that permission be and thereby is granted to each of said Companies to lay and maintain underground laterals, cables and wires in the above or intersecting public ways for the purpose of making connections with such poles and buildings as each may desire for distributing purposes.



I hereby certify that the foregoing order was adopted at a meeting of the Board of Selectmen of the Town of Gill, Massachusetts held on the _____ day of _____, 2018.

Clerk of Selectmen

We hereby certify that on ______ 2018, at ______ o'clock, at ______ a public hearing was held on the petition of the EVERSOURCE and VERIZON NEW ENGLAND INC. for permission to construct the line of poles, wires, cables, fixtures and connections described in the order herewith recorded, and that we mailed at least seven days before said hearing a written notice of the time and place of said hearing to each of the owners of real estate (as determined by the last preceding assessment for taxation) along the way upon which the Companies are permitted to construct the line of poles, wires, cables, fixtures and connections under said order. And that thereupon said order was duly adopted.

Selectmen of the Town of _____

Massachusetts.

CERTIFICATE

I hereby certify that the foregoing is a true copy of a joint location order and certificate of hearing with notice adopted by the Board of Selectmen of the Town of **Gill**, Massachusetts, on the _____ day of _____ 2018, and recorded with the records of location orders of said town, Book _____, Page _____. This certified copy is made under the provisions of Chapter 166 of General Laws and any additions thereto or amendments thereof.

Attest:

Town Clerk

MADA

Ticket Nu	umber	Created On	Pole Owner	Joint Pole Owner	Remediation Party	Next To Go Member	Telco Pole Num	Elco Pole Num	Status	Street Name
3525142	2	5/9/2018 2:44:55 PM	WMEHAD	VZWST1	WMEHAD	VZWST1	5	3/2	Open	BARNEY HALE RD
3525240)	5/9/2018 3:31:27 PM	WMEHAD	VZWST1	WMEHAD	CMCTWM	10	16/10	Open	FRANKLIN RD
3171888	8	6/6/2017 11:21:42 AM	WMEHAD	VZWST1	WMEHAD	VZWST1	64	17/72	Open	French King Hwy
3171891	-	6/6/2017 11:27:22 AM	WMEHAD	VZWST1	WMEHAD	VZWST1	3	17/11	Open	French King Hwy
3525291	-	5/9/2018 4:15:29 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		45/2	Open	FRENCH KING HWY
3525354	Ļ	5/9/2018 4:19:52 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		45/3	Open	FRENCH KING HWY
3525372	2	5/9/2018 4:22:11 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		45/4	Open	FRENCH KING HWY
3314062	2	10/31/2017 5:25:47 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		6/9	Open	Green Hill Rd
3314075	5	10/31/2017 5:29:36 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		6/9-1	Open	Green Hill Rd
3488160)	4/10/2018 3:08:20 PM	WMEHAD	VZWST1	WMEHAD	VZWST1	5	21/5	Open	Hoe Shop Rd
2454045	5	6/5/2015 3:32:17 PM	WMEHAD	VZWST1	WMEHAD	VZWST1	110	110	Open	MAIN RD
3139322	2	5/3/2017 9:50:26 PM	WMEHAD	VZWST1	WMEHAD	VZWST1	148	125	Open	MAIN RD
3478893	5	4/2/2018 2:40:50 PM	WMEHAD	VZWST1	WMEHAD	VZWST1	148	23/125	Open	MAIN RD
3524882	2	5/9/2018 1:37:41 PM	WMEHAD	VZWST1	WMEHAD	CMCTWM	64 1/2	23/34M	Open	MAIN RD
3525053	5	5/9/2018 1:59:19 PM	WMEHAD	VZWST1	WMEHAD	MB123W	144	23/121	Open	MAIN RD
3525099)	5/9/2018 2:23:22 PM	WMEHAD	VZWST1	WMEHAD	MB123W	175	23/152	Open	MAIN RD
3525112	2	5/9/2018 2:30:36 PM	WMEHAD	VZWST1	WMEHAD	MB123W	173	23/150	Open	MAIN RD
3525119)	5/9/2018 2:35:35 PM	WMEHAD	VZWST1	WMEHAD	MB123W	174	23/151	Open	MAIN RD
2753334	Ļ	4/15/2016 11:28:55 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		14	Open	MOUNTAIN RD
3506527	,	4/24/2018 3:59:51 PM	WMEHAD	VZWST1	WMEHAD	VZWST1		50/2	Open	TAYLOR PL
3525259)	5/9/2018 3:37:15 PM	WMEHAD	VZWST1	WMEHAD	CMCTWM		45/25	Open	W GILL RD

Municipality	Updated On
Gill	5/9/2018 2:53:55 PM
Gill	5/9/2018 8:18:13 PM
Gill	6/6/2017 11:22:23 AM
Gill	1/8/2018 2:48:21 PM
Gill	5/9/2018 5:57:45 PM
Gill	5/9/2018 5:57:30 PM
Gill	5/9/2018 5:57:06 PM
Gill	11/10/2017 1:10:09 PM
Gill	11/10/2017 1:09:08 PM
Gill	4/16/2018 5:16:48 PM
Gill	3/8/2016 7:05:56 PM
Gill	3/28/2018 4:26:20 PM
Gill	4/27/2018 2:10:44 PM
Gill	5/9/2018 2:00:55 PM
Gill	5/9/2018 2:11:02 PM
Gill	5/9/2018 2:35:19 PM
Gill	5/9/2018 2:39:15 PM
Gill	5/9/2018 2:39:27 PM
Gill	6/29/2016 7:26:03 PM
Gill	4/30/2018 3:27:41 PM
Gill	5/9/2018 4:09:40 PM



Department of Environmental Protection

Western Regional Office • 436 Dwight Street, Springfield MA 01103 • 413-784-1100

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

May 9, 2018

Mr. Ray Purington, Administrator Town of Gill 325 Main Road Gill, MA 01247

Re:

Gill-DWP Gill Elementary School PWS ID# 1106004 BRP WS 34-Chemical Addition Retrofit Conditional Permit Approval Transmittal #X273490

Mr. Purington:

The Massachusetts Department of Environmental Protection (MassDEP) received the initial submittal for the above referenced permit application on July 21, 2017. The application was compiled initially by Shawn Kimberley, P.E. MassDEP issued a Technical Deficiency notice on September 28, 2017. Supplemental information pursuant to the Technical Deficiency notice was received by MassDEP on April 27, 2018. MassDEP authorized an Administrative Consent Order pertaining to this permitting activity on May 1, 2018. The permit timeline was placed on Hold pending the outcome of this enforcement when the Order was authorized. MassDEP held a phone conference call with you on May 3, 2018 to discuss the pending conditions to be issued with this approval.

The conditions cited in the attached document must be met or the permit is void. Note that the signature on this cover letter indicates formal issuance of the attached document. If you have any questions regarding this matter, contact Jim Bumgardner at 413-755-2270 or james.bumgardner@state.ma.us.

Respectfully,

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Deirdre Doherty, Section Chief Drinking Water Program Bureau of Water Resources

Cc: Jim Bumgardner, MassDEP Bob Flagg, East National Water, 81 Beech St, Palmer, MA 01069 Gill Board of Health DEP DWP- Boston

WERO File Location: w:\brp\ws\permits\treatment\gill elementary school mn removal\gill elementary conditional permit approval.docx

Electronic File Location: Y:\DWP Archive\WERO\Gill-1106004-System Modification-2018-05-09 This Information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751. TTY# MassRelay Service 1-800-439-2370 MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

Manganese Treatment Proposal – Gill Elementary School Conditional Permit Approval BRP WS-34 Proposal to Install Iron and Manganese Water Treatment

Background

This treatment installation is required due to persistent and confirmed detections of Total Coliform bacteria in the Gill Elementary School well water source. The well was installed under the MassDEP new source approval permitting process, however, the bacteria problems in the well have been persistent since its installation. Gill Elementary School has been hand chlorinating monthly for a period of years while the permitting process has continued. Due to elevated levels of both Iron and Manganese, removal of those contaminants is required. Disinfection using ultra-violet radiation (UV) is selected as the preferred means of disinfection. Ion Exchange treatment is selected as the preferred means of Iron and Manganese removal. Installing Iron and Manganese removal will greatly increase the service life of the UV unit.

Gill Elementary School proposes to install a Trojan Series Pro20 for disinfection. The Pro20 is capable of providing a UV dose of 40 mJ/cm² with a flow rate of 20 gallons per minute. The Pro20 unit is equipped with a flow restrictor to 20 gpm and a flow meter that allows UV dosage to be monitored in real time. The Pro20 unit comes equipped with Trojan "Lightwise" technology that will reduce the lamp power use under "no flow" conditions, while maintaining the lamp temperature so that the UV unit can immediately apply the required dose when water demand is initiated. The Pro20 unit optional components are a UV intensity meter and a solenoid that will shutdown the water delivery whenever the UV dose falls below the required setpoint. The application did not indicate that the optional intensity meter and solenoid would be selected. The optional intensity meter and solenoid are required by the MassDEP Guidelines for Public Water Systems (5.4.6.6.i.). The Pro20 unit comes standard with audible and visual alarms in the case that the UV dosage are a MassDEP requirement.

The application indicates that a spare reference UV sensor will not be provided. Spare reference sensors are a requirement so that the performance of the active duty sensor can be validated on-site.

The Iron and Manganese removal system selected is a WaterSoft/Chandler Systems CAT75-12WS-BA softener with Aldex C-800 soft resin media. The media is certified to conform to NSF 44 and 61 standards by Water Quality Association (WQA). The unit is capable of treating combined Iron and Manganese levels below 5 mg/L which are expected in the raw water based on review of the sampling results. The expectation that combined raw water Iron and Manganese is usually below 5 mg/L is made by the vendor on behalf of the applicant and excludes the single outlying sample result of 8.67 mg/L.

Iron and Manganese removal treatment using Ion Exchange performs best when the raw water pH is 7.0 or greater. The Gill Elementary School well water pH readings reported in the application are above 7.0. However, these pH results were analyzed by the lab and are outside the holding time limits for pH samples.

The Iron and Manganese unit is designed to backwash with raw water. Backwash water discharges to a residuals holding tank which discharges (overflows) to a leaching trench. The leaching trench is registered by the MassDEP UIC program (UIC Registration ID#MAS11A106301-5A23).

The schematic supplied by the applicant indicates that a bypass around the Iron and Manganese softener units is provided. Bypasses plumbed around critical components such as this Iron and Manganese softener are not allowed.

The schematic submitted by the applicant indicates that a cartridge filter (WSFCT-2005-SWMB) will be installed downstream of two hydropneumatic storage tanks. This arrangement would allow particulate matter to build-up in the storage tanks.

The schematic submitted by the applicant did indicate the location of a raw water sampling tap, however, a system check valve necessary to insure that a raw water sample is being taken when the well is running was not specified. The system check valve must be installed upstream of the hydropneumatic storage tanks and downstream of the raw water tap.

Conditional Approval

The decision herein is based on the permit application submittal and all relevant information received by MassDEP to date. MassDEP, acting under the authority of Chapter 111, Section 17 of the Massachusetts General Laws and pursuant to MassDEP's authority under 310 CMR 22.04(7) to require that each supplier of water operate and maintain its system in a manner that ensures the delivery of safe drinking water to consumers, grants conditional approval for the proposed permanent chlorination system at the Gill Elementary School subject to the following conditions:

- 1. MassDEP requires that Gill Elementary School conduct 12 months of monthly water quality monitoring of manganese, pH, and iron in the raw and finished water. Upon collection of 12 months of raw and finished water quality data, Gill Elementary School must submit a final report evaluating the effectiveness of the manganese treatment. MassDEP may modify the Gill Elementary School water quality sampling schedule upon request at the end of the 12 month sampling period.
- 2. MassDEP requires that Gill Elementary School provide the optional equipment available for the Trojan Pro20 unit that provides a real-time UV intensity meter and a solenoid valve to shutdown the water in the event that the UV dose falls below 40 mJ/cm².
- 3. MassDEP requires that Gill Elementary School provide a reference sensor as a backup for the duty sensor and to be used in validating the duty sensor performance.
- 4. MassDEP requires that Gill Elementary School provide a cartridge filter upstream of all storage tanks to prevent build-up of particulate matter and sediment inside the tanks.
- 5. MassDEP requires that Gill Elementary School provide a system check valve upstream of the storage tanks and downstream of the raw water tap to insure that the well is running whenever a raw water sample is necessary (monthly).
- 6. MassDEP requires that Gill Elementary School not install any bypasses around its Iron and Manganese softener units. Compliance with this condition will be verified at the time of the final inspection.

- 7. MassDEP requires that Gill Elementary School provide notification when the installation is complete and ready to be placed in service so that a final inspection may be conducted. The treatment units shall not be placed in service until a final inspection is conducted.
- 8. MassDEP requires that bacteria samples (routine or special samples) be collected from the raw and finished locations at the time it is placed in service, and that those bacteria samples indicate that the installation is free from contamination. MassDEP will issue an updated Coliform Sampling Plan that reflects the bacteria sampling requirements of the Revised Total Coliform Rule.
- 9. MassDEP requires that Gill Elementary School maintain records of the residuals holding tank pumping by a certified hauler, and to make those records to MassDEP on request.
- 10. MassDEP requires that Gill Elementary School create and maintain an Operations and Maintenance manual and submit a written copy of that manual within 60 days of system activation. The Gill Elementary School Operations Manual shall include daily, weekly, monthly, quarterly, bi-annual, and annual maintenance tasks as follows:
 - A. Daily visual check of the units
 - B. Weekly read and record the UV intensity, observe the salt level in brine tank

C. Monthly – submit monthly UV transmittance readings on the MassDEP UV form (attached)

D. Quarterly or Bi-annually - cartridge filter replacement (may be more frequent), test the duty UV sensor using the reference UV sensor, visually check the residuals holding tank, manually clean the quartz sleeve as required by the manufacturer.

F. Annually – replace the UV bulb and discard to an approved hazardous waste handling location. Obtain another spare replacement bulb.

- 11. MassDEP requires that Gill Elementary School track the performance of any maintenance activities in written logs, signed by person or persons conducting the maintenance.
- 12. MassDEP requires that Gill Elementary School update its Emergency Response Plan to include situations where the solenoid valve is engaged due to low UV dosage and whenever the Iron and Manganese units are failing to remove those chemicals to below 0.2 mg/L combined.
- 13. Installation of treatment requires Gill Elementary School to return to standard monitoring under the Lead and Copper Rule (310 CMR 22.06B). Following installation, Gill Elementary School must prepare a new lead and copper sample plant for MassDEP review and approval.
- 14. MassDEP requires that Gill Elementary School provide an updated notice to its customers that the above referenced treatment is installed in response to bacteria and manganese contamination following installation of the treatment.

This approval is valid for two years and does not constitute an approval with other State and local requirements and procedures related to public bidding and contract laws.

Any questions regarding this decision should be directed to Jim Bumgardner at 413-755-2270

Attachments:

UV monthly reporting form

Ultraviolet Disinfection Treatment Report

UV-A

PWS INFORMATION

PWS ID #:1106004 PWS Name: Gill Elementary School UV Reactor Manufacturer and Model: Date UV Reactor first went on-line: PWS Town:Gill

Reporting Period:

Trojan Pro 20

	Volume of Water	UV Intensity	Comments and
Date	Through UV Unit (gal)	(mJ/cm ² or %)	Daily Record of Maintenance ⁽¹⁾
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Signature of Certified Operator

Date

(1) Examples: lamp replacement, quartz sleeve cleaning, periodic checks, meter calibration, leak repairs, ballast replacement, etc. In accordance with MassDEP Guidelines & Policies (Section 5.4.6(9)(c)) the sensor(s) shall be checked every 6 months, the quartz shall be checked/cleaned every other month, lamp(s) shall be replaced yearly, quartz sleeve(s) repleced every 5 years.