

TOWN OF GILL

MASSACHUSETTS



www.gillmass.org

SELECTBOARD MEETING MINUTES

August 25, 2014

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

Members Present: Randy Crochier, John Ward, and Greg Snedeker

Members Absent: none

Others Present: Ray Purington, Admin. Assistant; Janet Masucci, David Detmold, Steve Connell, Rick Couture, Sharon Howell, Peter Boemig

NMH Main Road Pedestrian Crossing: Rick Couture (Director of Plant & Facilities at the Northfield Mount Hermon School), Sharon Howell (NMH Associate Head of School), and Peter Boemig, P.E. (SVE Associates) presented a proposed design for a crosswalk on Main Road in the area of the driveway to the lower athletic fields and boathouse. The project is intended to address concerns for pedestrian and vehicle safety in the area. A conceptual drawing prepared by SVE Associates was reviewed, as was a list of recommendations. The School has already discussed the conceptual plan with Gill's Police Chief and Highway Superintendent and received their support.

It was discussed that Main Road has good sight distance on both approaches to the crosswalk, but the barrier, or hedge, proposed by NMH that would direct students to the crosswalk might be improved in regard to vehicle sight-lines if installed further away from the road. The proposed crossing was moved slightly to the north from the area students currently cross in order to help to consolidate students to one area and to provide room to adjust the slope of the path leading to the crosswalk.

Members of the Selectboard commented that installing the crosswalk could have a beneficial effect on calming traffic on Main Road, and spoke in favor of having a consistent 35 mph speed limit on that road.

The representatives from NMH affirmed that the cost of the project would be borne by the School. The Selectboard raised no objections to the project, and approved the conceptual plan by consensus. Couture, Howell, and Boemig left the meeting at 5:45 PM.

Minutes: John made a motion, seconded by Greg, to approve the minutes of 8/11. The vote was unanimous in the affirmative.

Green Community Grant: The Selectboard reviewed a spreadsheet showing potential savings if the Town purchased 48 streetlights and 4 poles from WMECO and installed Town-owned LED streetlights. The Town currently pays approximately \$5,500 annually to WMECO for street lighting. The buyout of the poles and fixtures would cost \$15,943. Once LED lights are installed, it is thought that annual electricity costs would be around \$1,716 – a savings of almost \$3,800 from the WMECO-owned lights. Costs to purchase, install, and maintain LED streetlights are still being researched by the Energy Commission, with an eye toward the possibility of having this project funded by the Green Community grant.

Four Winds School Lease Renewal: Steve Hussey, Director of the Four Winds School, joined the meeting at 5:55 PM. He noted that the School's enrollment for the 2014-15 school year is currently 11 students, and that the school will be in session 5 days a week. The FY14 expenses for the building's heat and electricity were discussed. While electricity was fairly constant between FY13 and FY14, oil costs increased nearly \$1,900 from \$5,359 to \$6,957.

Reasons for the increase in oil costs were discussed. The extra cold winter and returning to a 5-day week for the 2013-14 school year were major factors. A number of the window inserts failed last year – Hussey is in the process of repairing them and will keep them in place for this winter. A clause in the current lease calls for the School to cover any heating fuel costs in excess of \$6,426. Hussey offered to make good on the \$530 excess if need be. It was felt that last winter should be treated as a one-year aberration, and that if costs are high again this winter, then

the Town should be reimbursed. However, it is expected that the new heating system will substantially lower the cost to operate the building in the wintertime.

Greg made a motion, seconded by John, to approve the lease renewal with Four Winds School and authorize Randy to sign the lease on behalf of the Selectboard. The vote was unanimous in the affirmative. Hussey left the meeting at 6:15 PM.

Naloxone & Epinephrine: Fire Chief Gene Beaubien and Firefighter Kyle Kendall joined the meeting at 6:15 PM to discuss the Fire Department's request to the Department of Public Health for permission to carry nasal naloxone and epinephrine. Kendall explained that the request will also cover Gill's Police Department. In March 2014, the Governor declared a public health emergency due to a growing epidemic of opioid addiction. One result from that declaration was a mandate that first responders be trained in administering epinephrine auto-injector devices and naloxone. It was pointed out that it is training that is mandated, and that emergency services departments are not mandated to carry either medication.

Two members of the Fire Department – Kendall and Captain Jason Edson – have received the training, and are qualified to train the rest of the department. There was a discussion about what could happen if the Selectboard doesn't authorize the request to DPH. Potentially it could increase the Town's liability if its first responders are trained to use naloxone, but not allowed to carry it.

A \$300 application fee for the request to DPH will be covered within the Fire Department budget as a medical supplies expense. (Later in the meeting it was determined that DPH is waiving the fee as part of the declared public health emergency.)

Kendall suggested that, ideally, the Fire Department would carry one unit of naloxone for each of their eight medical bags. Initially, however, it makes sense to start with the two medical bags that are most likely to respond to a medical call – the bags carried on the Rescue Van and Engine 2. If there is a cost for the medication, it will come from their medical budget, but it is hoped that there will be some no-cost arrangement with Baystate Franklin Medical Center. The shelf life of epi-pens is thought to be 2 years, and 1 year for naloxone. It was suggested that the Brush Truck would be a logical place to carry an epi-pen.

Implementation may be more difficult for the Police Department, as both medications need climate controlled storage, and cruisers parked outside in the summer and winter experience extreme temperatures.

The DPH application form was not immediately available, and could not be quickly found online. Beaubien will return later with a copy. John made a motion, seconded by Greg, to authorize Ray to sign the DPH application as long as there were no overriding concerns. The vote was unanimous in the affirmative. Beaubien and Kendall left the meeting at 6:48 PM. Beaubien returned with the form later in the meeting – no authorizing signatures are needed.

Sewer I&I: Nothing to report.

Community Solar: Until there are new developments to report, this topic will be removed as a recurring agenda item.

Safety Complex Roof: The RFQ for the roof project's architect/designer will be published in the Recorder and the Central Register on 8/27. The timeline for the project has been made as tight as possible, but a December or January installation of the roof is as early as it likely can happen. The architect will be asked to advise on the wisdom of an early-winter installation versus waiting until spring. It was recommended that ice melt cables be set in place before winter begins, to better prevent any ice-related leaks, should the new roof be delayed until spring.

Annual Town Reports Position: Greg and Ray reported that Ann Banash has been hired to compile the FY2011, 2012, and 2013 annual town reports. She will be paid \$300 to organize and inventory all the existing reports for those years and contact committees and departments for the missing information. She will be paid \$1,000 each for producing the publication-ready reports.

Gas Pipeline Resolution: The Selectboard reviewed a "Resolution to Ban Fracked Gas Pipelines and to Champion Sustainable Energy." The resolution was discussed at their 8/11 meeting and is based on one signed by the Montague Selectboard. Greg made a motion, seconded by John, to accept and sign the resolution. The vote was unanimous in the affirmative.

Appointments: Acting on a request from the Town Clerk, John made a motion, seconded by Greg, to appoint Betsy Burnham and Colleen Lilly as Election Workers through June 30, 2015. The vote was unanimous in the affirmative.

Police Correspondence: The Selectboard discussed a letter from Police Chief David Hastings in which he recommended closing Riverview Drive to through traffic between Pine and Oak Streets during next year's Christmas in July event. There was consensus that the Chief's idea makes sense from a safety standpoint, but that the closure should not create an additional cost to the Town. Questions about how local traffic will be handled (for homes along the closed section), and whether the closure points would need to be manned will be presented to the Chief for his consideration.

Mass DEP & Manganese in Gill Elementary Well: The Selectboard reviewed a letter from the Massachusetts Department of Environmental Protection regarding elevated manganese levels in the well at the Gill Elementary School. The well is a public water supply, and was tested twice this year for manganese. The average of the two tests was 0.34 mg/L, which is above the DEP's allowable threshold of 0.30 mg/L. Because of this, the Town must take a number of actions, including notification of the well's consumers, quarterly testing and notification until levels are consistently below the threshold, and development of a plan of how reduced levels will be achieved.

The letter from DEP suggests several ways to reduce the levels, but it was felt that a treatment system is the most likely and reasonable solution. Drilling a new well is expensive, and there is no guarantee that it won't have (or develop) similar elevated levels of manganese. Connecting to other existing public water supplies is theoretically possible, but the closest ones are in Bernardston and on the NMH campus, and the distance makes the cost prohibitive. Trucking in large quantities of water was not felt to be practical, either.

Ed Wilkins, the Gill-Montague Regional School District's Facilities Manager is leaving for a new job on September 1st. Because of the seriousness of this manganese issue, Ray will take the lead on the Town's action plan and exploring treatment system options. It was suggested that the DEP letter be forwarded to the District's Food Services Manager, as the letter mentions possible concerns with manganese being concentrated when water is boiled.


BOH Trash Memo: As a member of the Board of Health, Randy reported on a recent audit of trash put out for curbside collection. Because of the number of bags and containers found exceeding the weight and size limits in Gill's regulations, a memo will be sent to all Gill mailing addresses. The Town's trash hauler will begin enforcing the regulations on September 19th.

David Detmold and Janet Masucci left the meeting at 7:20 PM.

Warrant: The Board reviewed and signed FY 2015 warrant #5.

The meeting adjourned at 7:35 PM.

Minutes respectfully submitted by Ray Purington, Administrative Assistant.



Greg Snedeker, Selectboard Clerk

SVE Associates

SVE

Engineering
Planning
Landscape Architecture
Surveying

March 24, 2014

Mr. Richard Couture, Director of Plant Facilities
Northfield Mount Hermon
One Lamplighter Way
Mount Hermon, MA 01354

RE: Main Road Pedestrian Crossing

Dear Rich,


Attached is a report and sketch plan of proposed improvements to the pedestrian crossing of Main Road that access the playing fields and boathouse east of the main campus.

The report is based upon discussions with you, information provided by Franklin Regional Council of Governments, information on the campus in our files, and observation at the site and along Main Road. Design criteria referenced include Massachusetts Highway Department, American Association of State Highway and Transportation Officials, Manual on Uniform Traffic Control Devices, and Institute of Transportation Engineers.

Our suggestions include a minor relocation of the crossing, construction of a more defined crossing, and improved signage. If you have any questions please do not hesitate to contact us.

Very truly yours,

SVE Associates



Peter R. Boemig, PE

www.sveassoc.com

P.O. Box 1818
439 West River Road
Brattleboro, VT 05302
Tel. 802 257-0561
Fax 802 257-0721

377 Main Street
Greenfield, MA 01301
Tel. 413 774-6698
Fax 413 773-0875

47 Marlboro Street
Keene, NH 03431
Tel. 603 355-1532
Fax 603 355-2969

P.O. Box 337
White River Jct., VT 05001-0337
Tel. 802 359-6000
Fax 802 359-6004

Mount Hermon Campus

Gill, MA

Pedestrian Crossing at Main Road

Pedestrians from the Mount Hermon Campus cross Main Road in Gill to access athletic facilities (Spear Boathouse, Peller family, Compton family, Fung and Lower fields) east of Main Road. Mount Hermon is concerned that crossing should be improved to provide additional safety.

Existing Conditions

The present crossing at Main Road is not well defined, but extends from the termination of several paths on the west side of the road and the main campus to the roadway leading to the athletic facilities east of Main Road. School crossing and advance school crossing signs do exist at or near this location.

Main Road is classified as a Rural Major Collector and is under Town of Gill jurisdiction. Traffic studies conducted by Franklin Regional Council of Governments at the Gill/Northfield town line indicate average daily traffic at 1170 vehicles per day with buses 1% of total and trucks 7%. The speed limit in the area of the crossing is 40 mph. It is noted that the speed limits on Main Road both north and south of the area of concern are 35 mph. Sight distances at the crossing location are about 550 feet to the south and over 750 feet to the north. Stopping sight distance for design speed of 40 mph on level roadway, per American Association of State Highway and Transportation Officials (AASHTO) and Mass Highway, is 330 feet.

With the exception of the noted pedestrian crossing signs, there is no appearance to the driver that a pedestrian crossing exists at this location. On the east side of Main Road pedestrians use the existing roadway for access to the athletic field and therefore there is no defined area for pedestrians on that side of the road.

Issues

To achieve a safer pedestrian crossing the following issues need to be addressed:

- Drivers on Main Road need to be made more aware that there is a pedestrian crossing at this location (make the crossing highly visible).
- The crossing needs to be better defined for both drivers and pedestrians (pedestrians cross from a wide path to a paved roadway with no clearly defined location).
- A conflict exists with pedestrians on the access road to the athletic fields and vehicles. This is especially a concern at the intersection with Main Road.

Potential Improvement Design

Design improvements need to incorporate pedestrian and driver behavior. Pedestrians will cross to get to their destination directly and conveniently. Properly designed and visible crossing needs to warn drivers of pedestrians. The crossing should protect pedestrians.

Several design alternatives were examined:

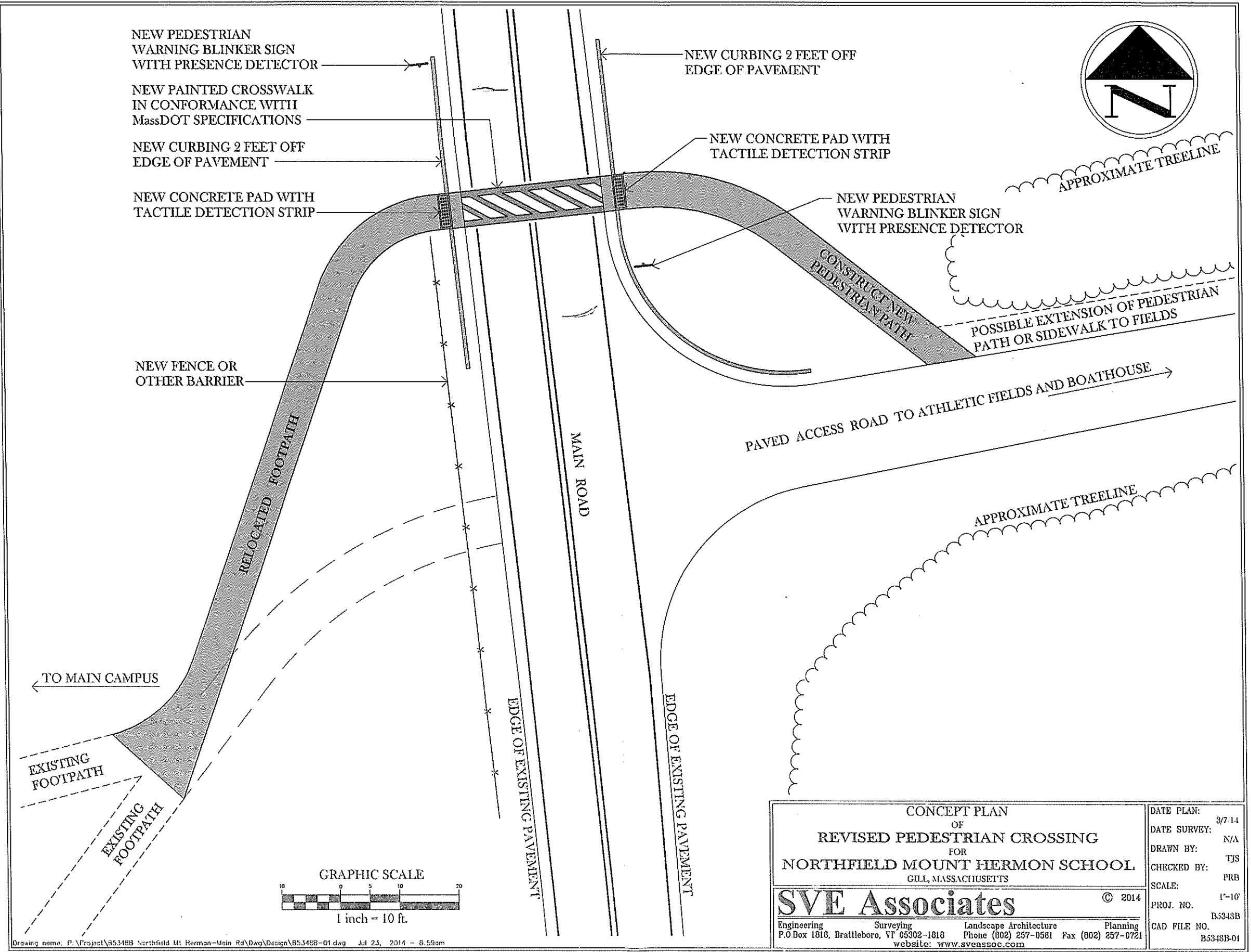
- A bridge or tunnel crossing Main Road is possible and would be the safest design if designed to require pedestrians to use it. With low traffic and pedestrian volumes a solution of this magnitude is not warranted.
- Relocation of crossing could be considered. The most convenient pedestrian crossing has been determined by the continued use of the path from the main campus and the roadway to the athletic fields. A major relocation may be unused as it is likely that pedestrians would continue to use the most convenient route. A minor relocation to shepherd pedestrians to a more defined location should be considered.
- Solutions that visually alert the drivers of crossing should be included. Possible solutions include:
 - ❖ Crosswalk Markings. At a minimum the crossing should have a painted crosswalk marking on the pavement in conformance with the Manual on Uniform Traffic Control Devices (MUTCD) and Mass Highway.
 - ❖ Raised Curb/Curb Extensions. This item would include constructing curbing near the crossing location. It could provide ADA warnings and also be constructed to shepherd pedestrians to a crossing location. It would provide a visual alert to drivers that there is a change in roadway conditions (pedestrian crossing).
 - ❖ Medians and Crossing Island. This would involve constructing a raised island in the middle of the lanes. The advantages would be a visible presence in the roadway that indicates to drivers of a changed condition (pedestrian crossing) and would cause drivers to be more alert and slow down. It provides pedestrians with a resting/stowage place when crossing the roadway. The disadvantage of the island is snow plowing is more difficult and they can give a false sense of security to pedestrians.
 - ❖ Speed Hump Raised Crossing. When constructed they are conspicuous to the drivers and require reduced speeds thereby improving pedestrian crossing safety. Speed humps are probably not appropriate for this location because design speed in the area is greater than 25 mph.
 - ❖ Warning Blinker Sign System. This system could include blinker signs, beacons, and in pavement LED markers that are activated by approaching pedestrians. This system would definitely alert drivers of pedestrians and could be very effective. To work, the pedestrians need to cross at a defined location as sensors need to be activated by the pedestrians.

Suggested Design:

At this rural high-speed location with limited (not continuous) pedestrian crossing, we would recommend the following:

- Reduce the speed limit on Main Road in this area to 35 mph. This would make it consistent with Main Road both north and south of crossing locations.
- Reconstruct the pathway from the Main Campus to a crossing point north of this present location, across from the north side of the roadway to athletic fields.
- Provide a barrier (fence, hedge, etc.) along the west side of Main Road to shepherd the pedestrians to this specific crossing location noted above.
- Construct curbed area at crossing location on the both sides of Main Road as both a visual indicator to drivers of the crossing and provide some traffic calming.
- The curb landing area on the east side of Main Road and at the northwest corner of the access roadway to the athletic fields be constructed for a pedestrian crossing point
- Construct/paint crossing markings on Main Road in conformance with MUTCA and Mass Highway criteria.
- As an additional measure construct a warning blinker sign system.

We have attached a sketch of the suggested crossing improvements.



Lamp Size	Lumens	Unit	Watts	Annual kWhrs	Annual Distribution Rate	Annual Pole Charge/Unit	Annual Fixture Charge/Unit	Annual Delivery Trackers/Unit	Annual Delivery Cost/Unit	Number Installed Units	WMECo Delivery Cost	Energy Supply Cost*	Total Annual Cost
<u>S-1 Rate</u>													
HPS - 70W lamp	6300	1	84	349	\$ 56.64			\$ 8.65	\$ 65.29	39	\$ 2,546.13	\$ 982.13	3528.26
HPS - 70W lamp	6300	1	84	349	\$ 56.64	\$ 42.24		\$ 8.65	\$ 107.53	3	\$ 322.58	\$ 75.55	398.12
HPS - 100W lamp	9500	1	118	490	\$ 90.48	\$ 42.24		\$ 12.14	\$ 144.86	1	\$ 144.86	\$ 35.38	180.24
HPS - 250W lamp	27500	1	311	1291	\$ 100.68		\$ 2.63	\$ 32.01	\$ 132.69	3	\$ 398.06	\$ 279.71	677.77
HPS - 400W	50000	1	472	1959	\$ 175.08		\$ 2.63	\$ 48.58	\$ 223.66	2	\$ 447.32	\$ 283.01	730.32
													\$ 5,514.72
<u>S-2 Rate</u>													
HPS - 70W lamp	6300	1	84	349	\$ 16.80			\$ 8.65	\$ 25.45	42	\$ 1,068.70	\$ 1,057.68	2126.38
HPS - 100W lamp	9500	1	118	490	\$ 24.24			\$ 12.14	\$ 36.38	1	\$ 36.38	\$ 35.38	71.76
HPS - 250W lamp	27500	1	311	1291	\$ 61.56			\$ 32.01	\$ 93.57	3	\$ 280.70	\$ 279.71	560.41
HPS - 400W	50000	1	472	1959	\$ 93.72			\$ 48.58	\$ 142.30	2	\$ 284.60	\$ 283.01	567.60
													\$ 3,326.16

Total Annual Cost = Annual Delivery Cost + Annual Energy Supply Cost

Assumes that WMECO rates for customer-owned LED fixtures & poles are the same as S-2 rates.

[illegible]

Simple payback: Buyout \$ / Annual savings	4.20 years
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TOWN OF GILL

MASSACHUSETTS



www.gillmass.org

RESOLUTION TO BAN "FRACKED GAS" PIPELINES AND TO CHAMPION SUSTAINABLE ENERGY

Whereas a proposed high-pressure pipeline carrying natural gas obtained through hydraulic fracturing may come through communities neighboring the Town of Gill, bringing said fuel en route to Dracut, Massachusetts to be used for electricity generation; and,

Whereas said pipeline goes against current Commonwealth of Massachusetts commitments to renewable energies and combating global climate change; and,

Whereas said pipeline would destroy unknowable amounts of forest, conservation land and farmland; and,

Whereas a high-pressure gas pipeline, by its nature, carries the potential for leak, rupture or devastating explosion causing untold damage to property and lives; and,

Whereas the cost of said pipeline may require Massachusetts citizens and businesses to pay a utility bill tariff as well as environmental costs not required by law for Tennessee Gas Pipeline Company, L.L.C. (a subsidiary of Kinder Morgan Energy Partners, L.P.), thereby making individual ratepayers bear financial risk for the endeavors of a private corporation; and,

Whereas, we the Selectboard, speaking for the citizens of Gill, Massachusetts, choose not to participate in such encumbrances upon the lives, vibrancy, economic stability, and general wellbeing of our neighbors in New York and elsewhere, wherever hydraulic fracturing is occurring and the pressurized pipeline is running.

Now, therefore, be it Resolved, that the Selectboard of Gill, Massachusetts:

1. Oppose said pipeline, and any new pipeline carrying natural gas obtained through hydraulic fracturing, within the borders of our Commonwealth; and
2. Hereby instruct our state and federal legislators and executive branch officials to enact legislation and take such other actions as are necessary to disallow such projects that go against our commitments to life, the environment, our economic wellbeing and our bodily safety, and, instead, to legislate more stringent energy efficiency and further exploration of and subsidies for renewable energy sources.

Signed this 25th day of August, 2014

Gill Selectboard:

Randy P. Crochier, Chair

John R. Ward

Greg Snedeker

Telephone 413-863-9347

325 Main Road, Gill MA 01354

Fax 413-863-7775

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Gill Police Department

David W. Hastings
Chief of Police
196B Main Rd
Gill MA 01354

Emergency 911
Fax (413) 863-0157
Station (413) 863-9398
Email GillPolice@aol.com

August 12, 2014

Honorable Board of Selectmen,

As we have recently completed another year of the Christmas in July event taking place in the Barton Cove Recreational Area, the police department along with the support of the Highway Department would like you to consider the idea of closing off Riverview Drive at Pine Street on the West side and Oak Street on the East side.

There are a number of safety concerns we believe regarding motor vehicles traveling thru the Riverview Drive area both with lights on and with operating with only parking lights on during events.

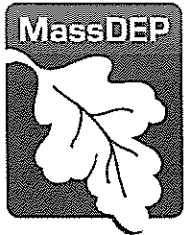
Emergencies vehicles would still be capable of getting down the roadway if required.

We realize it is 11 months away from happening again but would like to address the issue while it is fresh in all parties minds.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David W. Hastings", with a long horizontal stroke extending to the right.

David W. Hastings
Chief of Police



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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

DEVAL L. PATRICK
Governor

MAEVE VALLELY BARTLETT
Secretary

DAVID W. CASH
Commissioner

August 14, 2014

Mr. Ray Purington, Administrative Assistant
Gill Select Board
325 Main Road
Gill, MA 01354-9758

Re: Gill
Gill Elementary
PWS ID# 1106004
Water Quality - Manganese

Re: Manganese Results Greater than 0.30 mg/L

Dear Mr. Purington,

This letter records, and adds to, your June 25, 2014 meeting with representatives of MassDEP's Drinking Water Program, regarding elevated manganese levels within the public water system serving the Gill Elementary School ("the School").

The Massachusetts Department of Environmental Protection (MassDEP) is in receipt of the School's latest manganese results. The test results confirm that the manganese level in the School's finished water is greater than 0.30 mg/L, MassDEP's Office of Research and Standards Guidance Level (ORSGL) for manganese. MassDEP recommends that people drink water with manganese levels less than 0.30 mg/L over a lifetime and also recommends that people limit their consumption of water with levels over 1.0 mg/L, primarily to decrease the possibility of adverse neurological effects. ***Infants up to one year of age should not be given water with manganese over 0.30 mg/L, nor should formula for infants be made with that water for more than a total of 10 days throughout the year.*** See MassDEP's website for more information about manganese in drinking water

<http://www.mass.gov/eea/agencies/massdep/water/drinking/manganese-in-drinking-water.html>.

Initial sample(s):

Mn concentration 0.370 mg/l; Date April 28, 2014; Location or Source(s) Well #1 Point of Entry

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Confirmatory sample(s):

Mn concentration 0.314 mg/l; Date June 3, 2014; Location or Source(s) Well #1 Point of Entry

Average:

Mn concentration 0.345 mg/l; Location or Source(s) Well #1 Point of Entry

As discussed during the meeting, MassDEP is requiring you to take the following actions:

1. **Notify your local public health official(s)** of these results in accordance with 310 CMR 22.03(8) as soon as possible but not to exceed (30) days from the date of this letter.
2. **Notify your consumers of these results** in accordance with 310 CMR 22.03(8) and 310 CMR 22.16 (1) (a) 3 e and 310 CMR 22.15(3)(b) as soon as possible but not to exceed thirty (30) days from the date of this letter.
 - a) You may use the attached public advisory to inform your consumers (parents and guardians of the School children, as well as staff), about the potential health concerns of exposure to elevated concentrations of manganese in drinking water to certain sub-populations. If you choose to use a different notice or to add any system specific information to the attached public advisory you must receive written approval from your MassDEP regional office. The public advisory requires the addition of system specific information; please provide this office with the information for the highlighted portions and MassDEP will prepare the public advisory for distribution.
 - b) **Continue to notify your customers quarterly, including new consumers, until MassDEP determines that the level is reliably and consistently below 0.3 mg/L.**
3. Use the attached certification form to report your completion of the required public health and consumer notification.
4. If MassDEP provides you with a Consumer Confidence Report (CCR) in accordance with 310 CMR 22.16, you are required to post it.
5. Submit a plan to reduce the level of manganese at the location(s) specified to a level reliably and consistently below 0.3 mg/L (preferably below the SMCL of 0.05 mg/L) by January 1, 2015 and a Final Plan by July 1, 2015 in accordance with 310 CMR 22.03(8) and 310 CMR 22.03(14)(a). Attached is a template form (*Manganese Compliance Action Plan (CAP)* form) for you to complete and return to MassDEP with the details of your plan.

The plan must indicate how you plan to bring the levels below 0.30 mg/L, preferably reliably and consistently below 0.30 mg/L.

- We encourage you to consult with your regional MassDEP DWP representative for compliance assistance in developing a plan to manage and address the

manganese levels in your system. The following actions/approaches should be discussed in your plan:

- ✓ Education and notification to inform sensitive sub-populations;
- ✓ Monitoring additional parameters. It is generally recommended that you routinely monitor and gather enough information to assess levels in affected sources that may account for fluctuations in concentrations above the SMCL, including pumping rates, blending patterns, periodic/seasonal use, and variations in seasonal water quality;
- ✓ Monitoring in the distribution system;
- ✓ Optimization of existing treatment processes (greensand, ion exchange, softeners etc);
- ✓ Managing the use of the source(s) with elevated manganese levels;
- ✓ Use of another source, (please note: new sources must reduce levels below 0.05 mg/L);
- ✓ Blending the source(s) with elevated manganese levels with other source(s);
- ✓ Connection to another PWS with manganese level reliable and consistently below 0.30 mg/L;
- ✓ Treatment options to remove elevated manganese levels including POU/POE for clearly separate distribution systems. (Please note: sequestration treatment is not an acceptable option because it masks but does not remove manganese); and
- ✓ Other options.

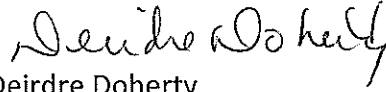
- 6. Continue to monitor for manganese quarterly** until MassDEP determines that the level is reliably and consistently below 0.30 mg/L at the entrance point to your distribution system in accordance with *310 CMR 22.03(2)*, *310 CMR 22.03(10)*, *310 CMR 22.07D*, and *310 CMR 22.03(8)*.

Note: It is recommended that you consider also monitoring for iron when you conduct manganese monitoring. Iron is commonly found with manganese and can interfere with manganese removal. Knowing the background concentration of iron will help your system to determine appropriate corrective action for water quality treatment/management considerations.

During the meeting you discussed the installation of a filtration system which would be effective at reducing both manganese and arsenic levels. Your certified water operator indicated that he would investigate possible manufactures that may provide the necessary equipment. MassDEP will also be available to discuss treatment options and the appropriate permitting requirements, with Dan Laprade at (413) 755-2289, serving as the Department's point of contact for those discussions.

Please contact me at Deirdre.doherty@state.ma.us or (413) 755-2148 or Douglas Paine at Douglas.Paine@state.ma.us or (413) 755-2281 if you would like to schedule a compliance and technical assistance meeting or to discuss this information.

Respectfully,

A handwritten signature in black ink, appearing to read "Deirdre Doherty". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

Deirdre Doherty
Drinking Water/Municipal Services Chief
Bureau of Resource Protection

Attachments: Public Advisory Instruction and Template
Manganese Fact Sheet
Manganese Public Advisory Certification Form
Manganese Compliance Action Plan (CAP) Form

W:\brp\ws\Manganese 2014\Gill Elementary\Gill Elementary Mn Next Steps 2014-07

- ✓ Treatment options to remove elevated manganese levels including POU/POE for clearly separate distribution systems. (Please note: sequestration treatment is not an acceptable option because it masks but does not remove manganese); and
- ✓ Other options.

Long-Term Plan

Check one: Preliminary_____, Final _____

Please identify whether or not in Long-Term Corrective Action Plan:

Possible Corrective Action Plan Topics	In the CAP		
	Yes	No	N/A
Education and notification to inform the sensitive sub-population.	Yes	No	N/A
Monitoring additional parameters. It is generally recommended that you routinely monitor and gather enough information to assess levels in affected sources that may account for fluctuations in concentrations above the SMCL, including pumping rates, blending patterns, periodic/seasonal use, and variations in seasonal water quality.	Yes	No	N/A
Monitoring in the distribution system.	Yes	No	N/A
Optimization of existing treatment processes (greensand, ion exchange, softeners etc).	Yes	No	N/A
Managing the use of the source(s) with elevated manganese levels.	Yes	No	N/A
Use of another source, (please note: new sources must reduce levels below 0.05 mg/L).	Yes	No	N/A
Blending the source(s) with elevated manganese levels with other source(s).	Yes	No	N/A
Connection to another Public Water Supply with manganese level reliably and consistently below 0.3mg/L.	Yes	No	N/A
Treatment options to remove elevated manganese levels. (Sequestration treatment is not an acceptable option because it masks but does not remove manganese).	Yes	No	N/A
Other options.	Yes	No	N/A

Long- Term Narrative:

In the long-term, my system plans to undertake the following action to address the issue
[Please include a description of the plans you intend to take]:

Planned schedule and date of completion *[Please include a timeline for the actions outlined above]:*

August 14, 2014

Mr. Ray Purington, Administrative Assistant
Gill Select Board
325 Main Road
Gill, MA 01354-9758

Re: Gill
Gill Elementary School
PWS ID# 1106004
Water Quality - Manganese

RESPONSE REQUIRED

Re: Compliance Action Plan for addressing manganese levels above the ORSG Level of 0.3 mg/L

Instructions: Please sign, date and return this document to the Department of Environmental Protection, Drinking Water Program, at 436 Dwight Street, Springfield, MA 01103 by January 1, 2015 for the preliminary long term plan, and again by July 1, 2015 for the final long term plan.

This plan is non-binding but will provide the basis for further documentation of your actions to address manganese levels over the ORSG Level.

In addition to the required notification of public health officials and consumers, a long term corrective action plan must be submitted to MassDEP. When developing a plan, you must consider and include discussion of the following areas and any actions you plan to take to reduce your manganese levels reliably and consistently below 0.3 mg/L:

- ✓ Education and notification to inform sensitive sub-populations;
- ✓ Monitoring additional parameters. It is generally recommended that you routinely monitor and gather enough information to assess levels in affected sources that may account for fluctuations in concentrations above the SMCL, including pumping rates, blending patterns, periodic/seasonal use, and variations in seasonal water quality;
- ✓ Monitoring in the distribution system;
- ✓ Optimization of existing treatment processes (greensand, ion exchange, softeners etc);
- ✓ Managing the use of the source(s) with elevated manganese levels;
- ✓ Use of another source, (please note: new sources must reduce levels below 0.05 mg/L);
- ✓ Blending the source(s) with elevated manganese levels with other source(s);
- ✓ Connection to another PWS with manganese level reliable and consistently below 0.3 mg/L;

Technical Assistance Requested: *(Please fill in your contact information if requesting assistance)*

- ☐ I would like to schedule a meeting with a MassDEP staff person to discuss my system's plans
Please contact _____ at (phone #), (email address) to schedule a meeting
OR
- ☐ I would like to receive a visit from a technical assistance (TA) provider to discuss my system's plans. I can be reached at (phone #) (email address) to set up a TA visit
Please contact _____ at (phone #), (email address) to schedule a TA visit or mentoring session.

I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best of my knowledge and belief.

Name:

Title:

Signature of responsible party:

Date:



MassDEP Fact Sheet

Manganese in Drinking Water: Questions and Answers for Consumers

Introduction

This fact sheet is intended to inform you about manganese in drinking water, typical concentrations, its contribution to overall manganese exposure in humans, especially infants, and provide guidance on health protective limits in drinking water.

What is manganese and where does it come from?

Manganese is a common naturally-occurring mineral found in rocks, soil, groundwater, and surface water. It is a natural component of most foods and is necessary for proper nutrition. It is also present in infant formulas.

How are people exposed to manganese?

Manganese exposures can come from air, food or water. This fact sheet focuses on water. The majority of manganese exposure in the general population comes from the diet. Grains, beans, nuts and teas in particular are rich in manganese. It is an essential trace mineral for the body to function, however excess manganese exposure has potential health implications.

In situations where manganese levels in drinking water are elevated, the contribution from drinking water can increase the overall intake of manganese.

In a residential setting, breathing in manganese is an unlikely route of concern for exposure, in contrast to certain occupational settings where workers may be exposed to manganese particles in the air (*e.g.*, steel welding). Manganese is poorly absorbed through the skin, thus, skin contact with food or liquid containing manganese is an unlikely exposure route of concern.

What health effects are associated with exposure to manganese?

Manganese is necessary for normal immune system function, digestion and bone strength. At elevated levels, manganese could produce neurological effects with some variation in sensitivity between individuals.

Infants and children younger than 12 years old are potentially most susceptible to excess manganese exposure because of their developing neurological and gastrointestinal systems. Infants appear to absorb more manganese than older age children and adults, but excrete less.

If infant formulas are prepared with water that also contains manganese at concentrations greater than our guideline levels (see below), the infant may get a higher amount of manganese than necessary. This represents a greater potential for exposure and adverse effects in the very young. Thus, it is very important to know what the levels in drinking water are when using it to make baby formula.

What are the levels of concern?

The United States Environmental Protection Agency (US EPA) and MassDEP currently list manganese as a secondary contaminant because of aesthetic concerns including unacceptable taste, staining of fixtures and dark, cloudy water at levels greater than 0.05 milligrams per liter (mg/L).

MassDEP recommends that infants up to 1 year of age should not be given water with manganese concentrations greater than 0.3 mg/L for more than a total of 10-days in a year, nor should the water be used to make formula for more than a total of 10-days in a year.

The recommended water concentration limit for lifetime exposures to manganese is 0.3 mg/L. People may also want to limit consumption of waters containing greater than 1 mg manganese/L. See the MassDEP Advisory at: <http://www.mass.gov/eea/docs/dep/water/drinking/alpha/i-thru-z/mangorsg.pdf>. Individual requirements for, as well as adverse effects from manganese can be highly variable. The general population water concentration exposure limits of 0.3 and 1 mg/L have been set based upon typical daily dietary manganese intake levels not known to be associated with adverse health effects. This does not imply that intakes above these levels will necessarily cause health problems. As a precaution, the general population should consider limiting their consumption of drinking water with high levels of manganese to decrease their exposures and to decrease the possibility of adverse neurological effects.

Should I be concerned if I am pregnant or am breastfeeding my child if the manganese levels are above 0.3 mg/L?

No. There is no correlation between manganese levels in water and manganese levels in breast milk and hence, if you are healthy and breastfeeding you should continue to do so. If you are pregnant, have significant health issues and/or are concerned, you should talk to your health care provider and bring a copy of this fact sheet with you.

How does manganese get into my drinking water?

Water that is used as a source of drinking water invariably has some natural manganese in it. In addition, minerals such as manganese can settle out and build up as fine sediment in water pipes as water flows through the distribution system of water mains to your tap. When there is a disturbance in the system, such as a water main break, use of fire hydrants, or a flushing operation to clean the pipes, sediment may get stirred up and drawn into home plumbing. This water may temporarily have higher than normal levels of manganese and may appear visibly discolored.

Can I cook with the water?

You may reduce your potential exposure to manganese by limiting use of this water and substituting bottled water or water from another low manganese source for preparing dried foods (e.g., pasta, rice, hot oatmeal, etc.) that absorb considerable water and for soups made with added water.

Can I brush my teeth with the water?

Yes. You are unlikely to ingest enough manganese to be of concern.

Can I bathe, shower or wash my hands with the water? Can I bathe my infant in this water?

Yes. Manganese is poorly absorbed through the skin.

Can I use it to wash dishes?

Yes.

Can I use ice made with the water?

Occasional use of ice for use in drinks represents only a fraction of water consumed daily and will not greatly increase your manganese intake. If you use ice frequently in drinks and your water has high manganese concentrations, you may choose to use bottled water or water from another low manganese source to make ice or you may just purchase ice.

I have already been using the water for some time for cooking, making ice and drinks. Should I be concerned? Is this something I should go to the doctor about?

See answers to concerns about these uses above. If you have still have concerns or have significant health issues, you should talk to your health care provider. When you meet with them, provide a copy of your manganese sampling results and this fact sheet.

I have used this water to make formula for my baby. Should I be concerned? Is this something I should go to the doctor about?

If you have concerns, you should speak to your health care provider. When you meet with them, provide a copy of your manganese sampling results and this fact sheet.

Can I give the water to my pets?

No information is available on the effect of elevated manganese in drinking water on pets.

How can I find out about manganese in my water?

If you get your water from a public water system you should contact them for this information. For a contact list for all public water systems in the Commonwealth you may visit:

<http://www.mass.gov/eea/agencies/massdep/water/drinking/health-and-safety.html#3> then under "Contacts" click on "MA Public Water Supplier Contacts Sorted By Towns".

For private well owners, MassDEP recommends that a baseline sample be taken to determine the manganese concentration in their well water. Thereafter, the well owner should follow the: "Private Wells - Testing Parameters and Frequency Guidelines", which can be found on the MassDEP website

<http://www.mass.gov/eea/agencies/massdep/water/drinking/private-wells.html>. First click on "Water Quality and Testing", and then scroll down to "Private Wells—Testing Parameters and Frequency Guidelines".

What options are available when manganese in drinking water is elevated?

- You may use:
 - ✓ Bottled water. Bottled water sold in Massachusetts must meet all federal drinking water quality standards and if originating in Massachusetts must also meet state drinking water quality requirements. For manganese, the recognized standard is 0.05 mg manganese/L.
 - ✓ Water from another MassDEP approved public water system that does not have elevated levels of manganese.
 - ✓ A water pitcher filter or a home water filter unit that is capable of removing dissolved metals (using a water softener employing cation exchange technology or reverse osmosis; activated carbon units alone have poor manganese removal capabilities). For more information on these types of filter units please visit National Sanitation Foundation (NSF) at NSF Consumer Information (<http://info.nsf.org/Certified/DWTU/>) or call 1-800-673-8010 or visit MassDEP's website (<http://www.mass.gov/eea/agencies/massdep/water/drinking/health-and-safety.html#2>) for Consumer Information on home water treatment .
- Do not:
 - ⊗ boil the water as boiling will not destroy manganese. If boiled too long, the manganese will be concentrated in the water.
 - ⊗ freeze or try to filter the water through paper filters to remove manganese as neither will reduce its concentrations.
 - ⊗ try to reduce manganese concentrations by letting the water stand overnight since it is not volatile but stays in the water

Please note: Only a Massachusetts state certified laboratory or another party who complies with Massachusetts General Law Chapter 111, Section 160D should test your water for manganese.

<http://www.mass.gov/eea/docs/dep/water/drinking/alpha/i-thru-z/reqdiscl.doc>

Where can I get more information on manganese?

For more information on manganese in public drinking water please visit the MassDEP webpage at <http://www.mass.gov/eea/agencies/massdep/water/drinking/manganese-in-drinking-water.html>. You may also contact the MassDEP Drinking Water Program at program.director-dwp@state.ma.us.

For questions related to manganese exposure and health you may contact MassDEP's Office of Research and Standards (Michael.Hutcheson@state.ma.us). You may also contact your Local Board of Health and/or your healthcare provider.

DRINKING WATER ADVISORY



Gill Elementary School has Important Information about Manganese in Your Drinking Water

-- Translate it or speak with someone who understands it --

What happened?

Water sample results collected on April 28, 2014 and June 3, 2014 showed confirmed an average manganese level of 0.345 milligrams per liter (mg/L) which is in excess of the Massachusetts Department of Environmental Protection (MassDEP) advisory level. While manganese is necessary for proper nutrition, an excess could adversely affect health.

What should I do?

- **Infant formula should be prepared with bottled water** or made with water from an alternate source with manganese levels below 0.3 mg/L.
- **Use bottled water for infants less than 1 year of age** or water from a source with a manganese level below 0.3 mg/L.
- **Others using water from this system may continue to use the water** because they do not get all of their daily drinking water from this source. Also remedial measures being taken will lower manganese concentrations before long-term exposures occur.
- **Do not boil the water.** Boiling can make the manganese more concentrated, because manganese remains behind when water evaporates.
- **If you have health related concerns about manganese**, contact your health care provider.
- **For more information on manganese** including treatment options see attached "MassDEP Manganese Fact Sheet -Typical Questions and Answers for Consumers". This Fact Sheet is also located at:
<http://www.mass.gov/eea/agencies/massdep/water/drinking/manganese-in-drinking-water.html>.

What does this mean?

Drinking water may naturally have manganese which is necessary for proper nutrition, but an excess could adversely affect health. **MassDEP advises that people drink water with manganese levels less than 0.3 mg/L over a lifetime, and also advises that people limit their consumption of water with levels over 1 mg/L, primarily to decrease the possibility of adverse neurological effects. Infants up to 1 year of age should not be given water with manganese over 0.3 mg/L, nor should formula for infants be made with that water for more than a total of 10 days throughout the year.** *The general population water concentration exposure limits of 0.3 and 1 mg/L have been set based upon typical daily dietary manganese intake levels not known to be associated with adverse health effects. This does not imply that intakes above these levels will necessarily cause health problems. Individual requirements for, as well as adverse effects from manganese can be highly variable.*

What is being done?

We will continue to monitor for manganese, work to lower the manganese concentrations and work with the MassDEP to keep you informed of all current information on this issue. We are planning to install a treatment system to reduce the manganese levels in our drinking water to acceptable levels. We will inform you when the treatment is in place. Other actions?

If you have questions contact [name of contact] at [phone number] or [email address] or [mailing address] .

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly.

This advisory is being sent to you by Gill Elementary School PWS ID# 1106004

Date distributed: [date]



Massachusetts Department of Environmental Protection
Bureau of Resource Protection – Drinking Water Program

Public Health Advisory: Manganese

Levels greater than 300 µg/L

CERTIFICATION

Make sure to send your MassDEP regional office Drinking Water Program and local board of health a copy of each type of notice and a certification that you have met all the public notice requirements within ten days after issuing the notice (310 CMR 22.15(3)(b)). When you certify, you are also stating that you will meet future requirements for notifying new units of the manganese public health advisory.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



PWS ID# _____

City/Town _____

PWS Name _____

☐ Community

☐ Non-community

Date(s) water level exceeded 300 µg/L for manganese: _____

Date _____

The public water system indicated above hereby affirms that public notice has been provided to local health officials and consumers in accordance with 310 CMR 22.16 including: delivery, content, format requirements, notification deadlines, and that the public water system will meet future requirements for notifying new billing units and new customers of the exceedance.

Date of MassDEP notification: _____

Date _____

☐ Notice to local health official distributed by _____

Method _____

on _____

Date _____

Name of health official _____

☐ Notice to consumers distributed by _____

Method(s) _____

on _____

Date(s) _____

I certify under penalty of law that I am the person authorized to fill out this form and the information contained herein is true, accurate, and complete to the best of my knowledge and belief.

Signature of owner or operator _____

Date _____

Printed name of owner or operator _____

TOWN OF GILL

MASSACHUSETTS



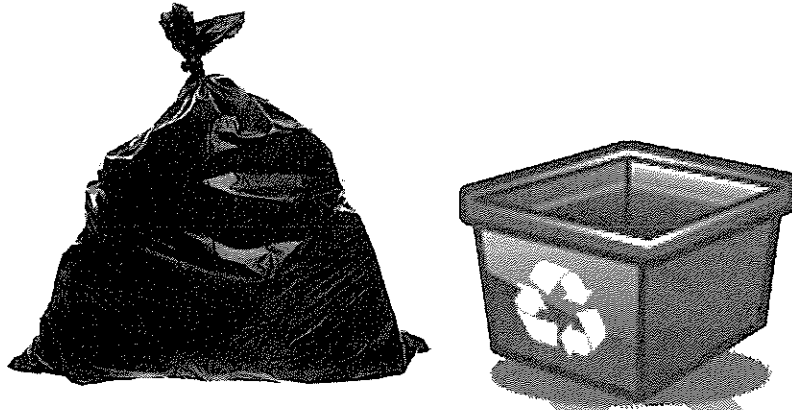
www.gillmass.org

TO: All Gill Residents
FR: Gill Board of Health
DATE: September 2, 2014
RE: Reminder about trash stickers & trash containers

A recent audit of trash put out for curbside collection identified a number of problems with trash bags that were too heavy, trashcans that were too large and/or too heavy, and trash that didn't have one of Gill's \$3.00 green trash stickers.

The reverse side of this memo explains our simple rules for curbside trash collection. Please save it for future reference.

We have instructed our trash hauler to step up their enforcement of the rules beginning with the collection on Friday, September 19th. Your cooperation in this matter is appreciated.



TOWN OF GILL

TRASH & RECYCLABLES PICK UP

Trash & recyclables must be placed curbside by 7:00 a.m. on Fridays.

35 pounds is the maximum weight for any bag of trash. A **town-issued trash sticker** must be placed on the outside of the bag, near the tied end. Use trash bags that are designed to store refuse and are strong enough to not rip or break when picked up by the top or bottom.

Trash may also be placed in a plastic, metal, or fiberglass trashcan **no larger than 35 gallons**. The trashcan must have a tight fitting lid and sturdy handles for lifting. The total weight of the trashcan & trash **shall not exceed 60 pounds**. If using a trashcan, a **town-issued trash sticker** must be placed inside, on the top of the trash, visible to the hauler when he/she removes the lid. **Do not attach the sticker to the lid or trashcan itself.**

Trash bags or trashcans that are overweight, too large, or without stickers will not be collected.

Trash & recyclables collection is only affected by a holiday if the holiday falls on a Friday. In the case of a Friday holiday, the rescheduled collection date will be announced in the local newspapers and on the town website.

Trash stickers are \$3.00 each and are available at the Wagon Wheel Restaurant, Upinngil Farm, Town Hall, and Scotty's in Turners Falls.

Questions or complaints are handled directly through the curbside hauling company, Alternative Recycling Systems, at (413) 587-4005.