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SHERBORN BOARD OF HEALTH

November 27, 2017

David Williams
Town Administrator
Sherborn Town Hall
19 Washington Street
Sherborn, Massachusetts 01770

Subject: Review of July 2017 GCC Monitoring Report Review and Associated Meeting and Recommendations

Dear Mr. Williams:

This letter presents TRC Environmental Corporation's (TRC's) review of the July 2017 groundwater monitoring event at General Chemical Corporation (GCC), and the associated meeting attended by TRC's Drew Smyth at the City of Framingham and associated recommendations.

Please contact me at 978-758-2809 if you would like to discuss any aspect of our report or if we can be of further service to the Town of Sherborn.

Sincerely,
TRC

David M. Sullivan, LSP
Sr. Project Manager

July Monitoring Report Review / Notes from Meeting / Recommendations
General Chemical Corporation (GCC) Site
November 27, 2017

November 16 Meeting

On behalf of the Town of Sherborn, Andrew Smyth of TRC Environmental Corporation (TRC) participated in a meeting on November 16, 2017 in the City of Framingham at the Executive Conference Room at the municipal offices regarding the General Chemical Corporation (GCC) site. The Massachusetts Department of Environmental Protection (MassDEP) discussed their July groundwater sampling and updated status of their oversight efforts since their prior meeting. Other attendees representing the Town of Sherborn included the following:

- Sean Killeen – Director of Community Maintenance and Development (CM&D)
- Lisa Campe – Board of Health
- Brian Moore – Groundwater Commissioner
- Charles Yon – Selectman
- Roger Demler – Water Commissioner
- Ethan Mascoop – Health Agent (by telephone)

Presenting for the MassDEP were the following:

- Eric Worrell
- Rodene Lampkin
- Steve Johnson

A total of 25 persons were present at the meeting, with the remaining attendees representing a cross-section of Framingham municipal government, school persons, neighbors and a local news reporter.

Meeting Notes

Remedy

Among the more important developments from the meeting were MassDEP expressing full commitment to establishing thermal remediation as the most effective remedy (previously recommended by TRC).

MassDEP has approximately $1.85 million to spend on the remedy. They will do as much thermal remediation as possible, although they noted that these funds may not be enough to fully remedy the impacts to groundwater. MassDEP plans to focus on the core of the groundwater contaminant plume in the most contaminated section near the GCC buildings. MassDEP acknowledged that the remedy will extend towards the wetlands that also have elevated contamination. Once the remedy is implemented the area is likely to become re-contaminated by the surrounding area that was not addressed (but at a lower level).

MassDEP has consulted with the United States Environmental Protection Agency (EPA) and MassDEP believes the work can be done safely. TerraTherm, Incorporated (TerraTherm) is their selected contractor. [Note that TRC had previously invited TerraTherm experts to a Town of Sherborn Board of Selectmen meeting to discuss their remedial technology. At the time, MassDEP was inclined toward nonthermal approach.] So far the MassDEP is implementing the strategy TRC requested and has engaged a reputable contractor for implementation, albeit at what appears to be an inadequate level of funding for a complete remedy.

MassDEP plans to begin the remedy in June 2018 by starting to heat the ground. The remedy will run for approximately 150 days. TRC asked, and MassDEP agreed, to leave the anodes in place so that they could be reused if needed in the future. MassDEP's plans include collecting the gases and liquids needed to contain the contamination (e.g., offgassing) while the remedy is underway. TRC requested that MassDEP monitor the amount of contamination they collect so we can know approximately what percent of the contamination was recovered. MassDEP will use a mobile laboratory to monitor air/water conditions on a real-time basis during remedy implementation. MassDEP does not plan to prepare a report describing the upcoming remedy because they feel it would detract from the amount of money they have to spend. Carol Bois of the City of Framingham Health Department is concerned about this aspect because she feels it would be necessary to document that the remedy is only partial and without it may be difficult to recover costs from responsible parties.

Community

Around approximately April 2018, MassDEP will hold a meeting with the neighbors and other interested parties to their plans, the sequencing of the remedy, and monitoring program. Some neighbors mentioned that it would be helpful to have Spanish and Portuguese translators available. MassDEP also plans to prepare a written Fact Sheet that could be passed around in the neighborhood. One citizen mentioned that they thought that a public health study should be done for neighbors to look at frequency of cancer, etc., but that was determined to be Massachusetts Department of Public Health (MassDPH) responsibility and would be difficult considering transitory nature of the residents. One of the neighbors asked that the old vacant houses on the property be demolished. MassDEP did not object, but noted that it was a City of Framingham decision. One neighbor thought that some of the information presented to the community historically was ineffectual. City of Framingham School and Board of Health representatives rebutted, noting that the school presentations and studies to protect the neighborhood were on point. The discussion evolved to note that GCC did not providing the right level of information to neighbors.

Funding

TRC has long commented that the GCC closure cost reserves were significantly underfunded, with the much greater amount committed by MassDEP of $1.85 MM still falling short of the need. Nevertheless, MassDEP has switched the funding source of monitoring to their 21E bond fund which will allow all the money recovered from GCC to be spent on the remedy. The

potential to designate the site as a Superfund site failed because the Superfund Hazard Ranking System (HRS) criteria score was too low (24.5 versus a threshold of 28.5).

MassDEP mentioned that they had issued Notices of Responsibility (NORs) to Chemcycle and Clean Ventures to recover costs for the remedy. TRC inquired about pursuing generators that had sent waste to GCC. MassDEP replied that it was under consideration by MassDEP. TRC further asked about breaking the corporate veil and going after additional GCC holding and sister company assets. MassDEP noted that they were also pursuing that approach. MassDEP mentioned that they had performed a file review at Clean Ventures and had researched files in the City of Framingham regarding historical records. TRC asked whether MassDEP could impose treble charges for cleanup to the PRPs and MassDEP answered in the affirmative.

July and Next Round of Groundwater and Surface Water Monitoring

The next round of monitoring should happen soon. There was a discussion about whether the Town of Sherborn would be allowed comment on which wells should be monitored and it was unclear whether they would allow it. MassDEP mentioned that they do not have access to any of GCC property and can only monitor offsite. It is not certain when or if that will change by the next monitoring round.

TRC also discussed the prior round of monitoring and the new detections of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) contaminants in 2 of 2 wells checked. TRC also discussed how the contaminant levels exceeded guidelines. Lisa Campe and TRC challenged MassDEP to do more sampling for PFOA/PFOS in groundwater especially in bedrock near the Town of Sherborn or in Sherborn itself. MassDEP agreed to do more sampling in the direction of Sherborn in the upcoming sampling round (at least 3 more deep wells to be sampled including 202D and 115R and one other).

TRC noted to MassDEP that the proposed land developments in Sherborn could have a dramatic effect on water levels and gradient if they move forward with development. TRC noted that Coolidge Crossing and The Villages at Sherborn developments would each require a minimum of about 55 gallons per minute (gpm) in order to meet the Sherborn requirement of 300 gallons per day per bedroom over the approximately 88 units that are anticipated for both sites. TRC mentioned that the drawdown from the Sherborn development parcel extraction wells would be profound considering the bedrock source water and fracture flow. TRC further noted that development parcels are close to Meadowbrook Street where the contamination from GCC was previously detected. (MassDEP seemed to be quite interested in this information and took notes.) Lisa Campe and TRC reminded MassDEP of the transport properties of PFOA/PFAS and how they are speedy contaminants that are not easily attenuated or biodegraded and are very toxic (regulated at parts per trillion level). TRC and Lisa Campe emphasized to MassDEP the concerns that these new chemicals that were discovered (TRC called for PFOA/PFOS testing). Lisa Campe reminded them that there is an exposure pathway between the site and Town of Sherborn's private wells and indicated they did not fully take this into account in their reports. Lisa Campe asked that in the next monitoring report that MassDEP show prior measurements as well as the new data so we can see whether concentrations are increasing or decreasing (i.e., trend observations). They mentioned that they will look into this, but that the contractor did not

previously have historical data (until the last few weeks), which came as a surprise to those in attendance. Apparently the transfer of data from the prior GCC Licensed Site Professional (LSP) to the new GCC LSP was very slow.

Clean Ventures Property

There was a lively discussion of the Clean Ventures property (the property across the street from GCC) that transports hazardous waste. Apparently ACV Enviro, a successor organization to Clean Ventures, has claimed the site as one of its locations which was news to most people. Clean Venture has set up a complex reorganization and teaming agreement with several different entities. In this case, the new entity is called ACV Enviro and is comprised of All State Power Vac, Clean Ventures and Cycle Chem. Several people including Health Agent Ethan Mascoop discussed the history of this site and entities and requested authorization to comment on the licensing of the new entity from MassDEP. Mike Hugo of the Framingham Board of Health expressed concern about their operational practices. Neighbors commented about the higher truck traffic associated with the new entity. Some asked aloud whether this new organization was setup to thwart responsibility for the GCC and Clean Venture site.

Massachusetts Water Resources Authority (MWRA) Aqueduct

TRC asked about whether the MWRA aqueduct was going to be lined. MassDEP was not prepared to address the aqueduct, although they indicated that by conducting the thermal remedy that the contaminants leaching into the aqueduct should be decreased.

Meeting Dynamics

The meeting was helpful, informative and real progress seemed to be made. The discussion, although lively at times, was organized and the issues discussed methodically. Carol Bois of the City of Framingham Health Department requested several times for a separate technical meeting to occur between groundwater specialists and the MassDEP contractor, but no resolution was reached.

Recommendations

The levels of contamination reported in the semi-annual reports need to watched as some contaminants seem to be rising and a new threat has been identified (PFOA/PFAS).

Several changes will occur in sampling techniques such that lower detection levels will be sought in the future. There were several problems in sampling and quality assurance/quality control (QA/QC) last time that hopefully will be addressed in the next round. In general MassDEP plans to sample the same offsite wells next time as were sampled in the July round.

If local residents in Sherborn wish to monitor their drinking water for PFOA/PFAS it would be interesting to see if the GCC contamination has already reached the private wells (a distinct possibility). The Sherborn private wells that previously tested positive for chlorinated solvents

and 1,4-dioxane would be the most likely wells to test. However, given that GCC can no longer afford to clean-up the site any contamination they identify will be difficult to address.

Next spring and summer there will be an ongoing remedy. The remedy may cause a spike in contaminant levels in regional groundwater monitoring wells as contaminants become mobilized by the remedial action, but ultimately it should lessen contamination over time. Sherborn will likely want to comment on any proposed monitoring during the remedy to ensure that the aqueduct water contamination does not spike too much or that deep groundwater wells do not show dramatic increase over time. Should those occur you may want to modify the remedy to address the concern or increase the frequency of monitoring. Although unlikely, be prepared for citizen calls if water shows additional turbidity or changes during or after the remedy completes.

Sherborn may want to offer the fact sheet that is being prepared for the remedy to its constituents, especially those that live nearer the site, so they are not alarmed by remediation persons in protective clothing or blindsided by the news.

AHS/ds