

**Act 21 requested the Department to develop a proposal for sampling at public water systems the chemicals that are on Department of Health’s list of chemicals that have a Vermont Health Advisory associated with them. Once the Proposal was developed it was publicly noticed requesting comment.**

**This report consists of two parts. The first contains all the responses received during the request for comment. The second part consists of the Department’s response to those comments.**

**Act 21 Sampling Plan Public Comment Received:**

**1.**

Hello Rodney,

I’m writing with comments on the Proposed Public Water Supply Sampling Plan for Contaminants with a Vermont Health Advisory – May 2020. The report says that it would cost approximately \$17,200 for each water system to test for all 43 of the chemicals in the Sampling Plan. West Windsor’s water system has 268 users. Unless the State provides the funding for this Sampling Plan, our water system would have to increase the fee to each of our users by \$64.18 in order to cover the costs. The report indicates that the average cost per sample is \$400 but there is no lab cost provided for many of the chemicals listed in Table 2. Also does the average cost include collecting and shipping the sample? Or just the cost for the lab to analyze it?

I’m also concerned about the paragraph on page 5 of the report, which indicates that the State is not required to evaluate the same criteria that the EPA evaluates, including the technical feasibility of treatment or a cost/benefit analysis. Suppose a water system is notified that one or more of these chemicals is present in their water at a level that is considered to be too high, but there is no treatment method, or the treatment method is prohibitively expensive. What then? If remediation is required and there’s no funding available to help with the associated costs, then the consequences could be catastrophic financially.

Before proceeding with this Sampling Plan, I would urge the State to consider both the short-term costs of implementing the plan, and the long-term costs of remediation. Information is helpful if it can be used to implement positive changes, but not if those changes come at a cost that is unduly burdensome to systems and their users.

I would also urge the State to consider a preventive strategy going forward. It’s unlikely that water systems are responsible for harmful chemicals in their drinking water. The report states that a few are naturally occurring and several are no longer used. For those chemicals that are not naturally occurring, and are still being used, wouldn’t it make more sense to restrict their use than to require water systems to implement expensive treatment protocols?

We all want safe drinking water. We just need to come up with a cost-effective approach to providing it. Thank you for the opportunity to comment.

Martha Harrison

West Windsor Mountain Water System (WSID #5599)

**2.**

Good Evening Rodney,

On behalf of the Lunenburg Fire District #2 in Gilman, we wish to offer the following comments regarding the Act 21 Sampling Plan. We feel the extra burdens in costs and staff time for small systems like our system, which has 133 service connections, would not be feasible. The financial increase to the customers served would be significant. Especially when it is unlikely the 43 contaminants tested for would be present, since the location of our ground water source is and has been isolated in a Source Protection Area from any manufacturing facilities or other outside influence. These contaminants appear to be from issues that we have not needed to deal with at our site.

Thank you for taking the time to review these comments as they relate to our system. We felt they should be made in case they were not thought of.

Take care and be safe.

Sincerely,

Donald Hallee  
Fire District #2  
Prudential Committee Chair  
[dghallee@myfairpoint.net](mailto:dghallee@myfairpoint.net)

**3.**

Rodney,

I have reviewed the proposed Sampling plan targeted at sampling for contaminants listed as Vermont health Advisories. I certainly understand the concern with these contaminants, and do not oppose finding a feasible way to sample and test for these contaminants. I do have concerns about the potential cost to our small public water system. I hope that consideration will be taken to the affects of the cost of more sampling would have on our system. Primarily, a timely notification of the need to budget for these tests would be greatly appreciated. The surprise of performing the PFOS/PFAS sampling while we were 6 months through our fiscal year put a tremendous burden on our system.

Thank you for your time.

Sincerely,

Jon Thornton  
Chief Water & Sewer Operator  
Bradford Water & Sewer Commission  
Bradford, VT 05033  
(802) 222-4315  
(802) 222-4727 Extension 208

**4.**

To Rodney Pingree

Rodney,

I am very supportive of the state funding the Proposed Sampling plan outlined on page 12 of Proposed Public Water Supply Sampling Plan for Act 21.

If Vermont does not fund the work to get this started, I have many concerns and request more time to fully develop my concerns.

Here are some of my comments.

## Comments on Act 21 Sampling Plan

I appreciate all the work done to date to support us in this testing. I have been involved in our water system for more than 20 years. One of my main concerns has been contamination of our water. We have 1 well and no space to drill a different well. Our well is on the edge of our community and on the edge of Red Rocks Park. Our community has been diligent in protecting our Source Protection Area (SPA). However, we occasionally discover that someone has used a pesticide or herbicide. We also have a VELCO substation touching our SPA and the last data I have indicates that they apply a mixture of 3 herbicides inside the substation. Occasionally, South Burlington has used an herbicide in Red Rocks Park. There are industrial buildings just beyond our SPA.

### Concerns

1. How much of the sampling plan would we be required to do?
  - a. How far back do we need to check the use of the land in the SPA?
  - b. Is the current SPA, determined in the 80's big enough for these contaminants?
  - c. Our well is about 500' from Lake Champlain. We have done Microparticulate Analysis tests and there is no influence of surface water in our well. Can the toxic chemicals from algae blooms travel through our aquifer to our well? The water level in the well is about 60' below lake level during pumping. Who would determine this? How would we test since algae blooms are random?
  - d. Do we need to add pharmaceuticals to the testing as they are being dumped into Lake Champlain by sewage plants?
  - e. When will the path to testing waivers be established?
  - f. Will the state consider adding a "clean-up" fee to the cost of herbicides and pesticides?
2. I do not see round-up or the other pesticides with a waiver for testing and since Round-up is showing up in ground water in many places, it is irresponsible to leave it out of testing for chemicals that are likely contaminants of our groundwater.
3. We are very protective of our well that we drilled in 1909. I am concerned that water contaminants from somewhere else could end the great water we so enjoy.

From:

South Burlington Fire District #1

Andy Johnson

5.

To Whom it May concern,

I would like to comment on the proposed sampling plan pertaining to Act 21. I first learned of this plan in a training E-mail from VT Rural dated August 24, 2020. Having had ample time to read through the plan twice and digest its content, my first response is why is the State of Vermont choosing to further burden its people with the cost for yet more sampling and testing in search of the proverbial needle in in the proverbial haystack. None of the chemicals listed are regulated by EPA. We are already testing for PFAS and related compounds, at the parts per trillion level and at great cost, for which the State bamboozled us all, and is now requiring repeat testing. This is all happening at a time of a pandemic, economic uncertainty and extreme social unrest.

Vermont has approximately six hundred thousand residents that will have to pay for these tests estimated at ten plus million and then what? It is clear in reading the plan the vast problems anticipated are reasonably spelled out. The first being, can the State administer such a program. We can contract with some entity to do so. Maybe we can hire the software company that cost taxpayers eighty million dollars plus for the health insurance program of a few years back. The second would be, are there Labs available to meet the need?

I believe the plan should be to slow down, and return to the legislature, and ask to follow federal guidelines instead of creating VHAs that may or may not improve people's lives but will burden all Vermonters greatly.

It has also been suggested to me that manufacturers of the listed chemicals be the ones to pay for sampling and testing. I suspect that would require some doing but should be explored.

I wish that I had more time to further investigate this plan, but I was not afforded that opportunity. My best piece of advice is to move very slowly consider rescinding the Act and put Vermonters first.

Sincerely,  
Marshall C. Frizzell

Brighton Water System

**6.**

Hello Robert -

I'm writing to you as committee chair for Richmond Fire District 1. Our comments on the proposed sampling plan are below. Please let us know if you have any questions. Thank you.

We are a small residential development. The approximate cost of \$17,200 for the additional samples is more than our entire operating expenses for the previous year. It would be an undue burden on our residents to suddenly require paying more than two and half time the previous costs for the same service. Any remediation efforts would further exacerbate this financial burden beyond what our community can support.

In addition to financial hardship that would be caused by this sampling plan, the additional testing may be unnecessary for our district. Our water source protection area is bordered by undeveloped land, mostly state forest land.

The plan states "VHAs have not typically been used to set enforceable standards for public drinking water supplies." If there are no Maximum Contaminant Levels for these chemicals, and VHAs are not used to set enforceable standards, what is the enforceable standard? What determines if a test passes or fails? And ultimately, what is the purpose of the additional, expensive testing if there is no enforceable standard?

There is also a concern that the additional capacity needed to collect and test the additional samples is not available. Just this year we had a PFAS sample that needed to be collected multiple times because the initial sample was not tested in time. If we are already struggling to get samples tested in time, how could the state possibly handle this huge increase in sampling?

Thank you for your consideration of our concerns.

Joe di Stefano  
480-459-6720  
Prudential Committee Chair  
Richmond Fire District #1

7.

Dear Rodney,

As representatives of public water systems, the Vermont Rural Water Association is providing feedback on the Proposed Public Water Supply Sampling Plan for Contaminants with a Vermont Health Advisory.

We are proud that Vermont is a national leader in protecting public health by regulating contaminants in drinking water. However, we have some concerns about the feasibility and costs of the proposed sampling plan.

Most significantly, we feel this plan will have a major financial impact on community and NTNC water systems, which were burdened last year by the requirements to sample for PFAS and are currently struggling due to the COVID-19 pandemic. The estimated cost of \$17,200 to test for all 43 contaminants would be an unfair burden to these water systems and their users. Vermont Rural Water strongly urges DEC to seek funding to cover all costs associated with sampling, as recommended on page 10 of the proposal.

Additionally, the proposed sampling plan could present many of the same challenges that were experienced in 2019 when public water systems were required to test for 5 PFAS initially. Water system operators will need to be trained on new sampling protocols and spend time ordering, collecting, and shipping samples; alternatively, systems will have to pay a contractor to perform the sampling. These factors must be considered before implementing the proposed sampling plan.

The availability of laboratory analysis is another concern, as mentioned on page 10 of the proposal. If few labs are able to perform these methods, they may be overwhelmed by an influx of Vermont systems all needing to test at once, as happened last year with PFAS. DEC could consider staggering the sampling schedules to avoid lab delays. Endyne is the only Vermont lab currently performing most drinking water analyses and they do not have the capacity to analyze any of the 43 proposed additional contaminants. The proposal indicates that each system's sampling plan would require testing only for those contaminants likely to be present in the Source Protection Areas based on land use, geology, and hydrogeology. Narrowing down the list of potential contaminants in this way would help ease the burden to water systems by reducing the number of samples required and the associated costs and staff time. However, the proposal states that DEC does not have the staff

or funding to do this review. We are concerned that this step may be skipped due to the lack of capacity at DEC, and we recommend that the proposal not move forward unless there is a way to guarantee that each system will receive a thorough review and be required to test for only those contaminants determined to have a likely risk of being present.

Additionally, the proposal states that inconclusive reviews or limited data would “result in the need to sample” (page 9). Does DEC expect this scenario to happen frequently? Would systems in this scenario be required to test for all 43 contaminants?

We would like to request clarification of the sentence on page 9 that reads, “Depending on the results of [the] first round of testing, if significant positive results are found, additional tests should be required to be taken at water systems initially found to be exempt.” Does this mean that if an individual system has positive test results, that system would be required to test for additional contaminants? Or if one system has positive results, other systems will be required to test for the contaminant?

Finally, we are concerned that if a system is found to have a contaminant exceeding the health advisory, the treatment may be technically difficult and/or prohibitively expensive. We ask DEC to seek funding to cover all costs associated with treatment, including engineering, equipment/facility upgrades, new water sources, and follow-up sampling.

In addition, it is unclear whether there is an effective treatment method for each of the 43 contaminants, and whether a cost/benefit analysis shows these treatment methods provide reasonable health benefits given the cost of treatment. Has DEC considered the feasibility of treatment for each of the contaminants listed in this proposal?

Thank you for considering these comments. Please contact us if you have any questions or need clarification.

Sincerely,



*Executive Director*

*Vermont Rural water Association*

**8.**

RE: Proposed Public Water Supply Sampling Plan For Contaminants with a Vermont Health Advisory - May 2020

Dear Mr. Pingree,

This letter is in response to the Proposed Public Water Supply Sampling Plan For Contaminants with a Vermont Health Advisory - May 2020 which is currently

published for public review and comment.

The Richmond Water and Sewer Commission is dedicated to providing high quality water for our customers and supports sampling to ensure our water meets State standards. However, the proposed sampling plan includes the following statement in regards to VHA contaminant sampling:

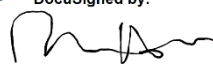
These methods have a range of cost from \$50 to \$700 for each analysis. If all 43 chemicals are to be sampled, and the average cost is \$400 per sample, the total cost would be approximately \$17,200 per water system (or \$10.3 million if all subject water systems sampled), should public water systems bear the cost. This would be overwhelming for the majority of Vermont's public water systems. DEC therefore recommends a one-time funding mechanism to cover sampling costs.


The one time funding proposed in the plan simply does not go far enough. If this is to be an ongoing responsibility of water systems more State funding is necessary. Our water system struggles to keep costs down and provide reasonable rates to our customers. Adding a cost of \$17,200 per year for annual sampling is frankly too much of a burden on the budget. Richmond has about 300 water customers so this would represent an average of \$57 per water customer in Richmond. The cost per customer would be much higher for systems with fewer users. We are asking that the State ensure adequate funding for annual sampling and analysis

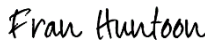
It appears to this Commission that the State is asking public water systems to fund sampling which will be capable of detecting evidence of groundwater contamination. Any source water contamination that is detected by these tests will more than likely be from a source that is independent of the public water system. Therefore the cost of this testing should be borne by the State, and not public water systems which are the victims of groundwater contamination by a third party. In most previous cases such as this the cost of testing has been borne by the polluter, not the water system that is a victim of the pollution. Further, if source water is found to be contaminated, the burden to remediate that situation should be placed on the entity which caused the pollution, not the public water system.


Sincerely,

The Richmond Water and Sewer Commissioners,

DocuSigned by:  
  
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Bard Hill  
DocuSigned by:  
  
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David Sander

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Fran Huntoon

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Don Morin

9.

August 27, 2020

Dear Mr. Pingree,

I am writing to submit comments on the Proposed Public Water Supply Sampling Plan for Contaminants with a Vermont Health Advisory on behalf of the Village of Johnson.

The Village of Johnson has serious concerns with the proposed sampling plan. Those concerns are focused on several key areas; cost of hydrogeologic testing, cost of contaminant testing, cost of contaminant remediation, and ratepayer burden.

- Our system would be required to test for any or all of the 43 contaminants that have a likely risk of being present in our water system. The cost of the hydrogeologic study to determine if our SPA is vulnerable to these contaminants must be borne by DEC, not the Village. Given that DEC states they do not have the capacity at this time to determine this, who will? The Village does not have the funds to hire this work out. DEC must take this upon themselves to source funding for these studies.
- If our system is required to test for all 43 contaminants, the estimated cost is \$17,200 per well per sample. The Village of Johnson has 2 wells that are a significant distance from each other. We would have to sample both wells, as we had to for PFA testing, potentially costing us \$34,400!
- Treatment or remediation for these contaminants could be difficult and/or expensive. The Village of Johnson is still paying off the bond of the existing water treatment facility. We also are beginning the engineering phase of a major improvement to 3 booster stations. With the uncertainty of the treatment available should we have a contaminant above the VHA, and the costs associated with remediation, we feel this is extremely burdensome on a small village



system.

- The Village of Johnson is a small public water system. The median household income is below the 80% threshold. We have little to no industry to supplement our rates. The burden is on the residents. We struggle yearly to keep the rates affordable, and provide a quality product for our users. This plan would have an adverse effect on the Village ratepayers in such a small community.

We are therefore asking DEC for the following assistance and consideration

- The Village is already dealing with the unexpected cost of resampling for PFA's, even though we were non-detect when we sampled both wells last year. If this plan is enacted, there needs to be a funding mechanism for the added cost of training, sampling and the added cost of the laboratory testing.
- Should we test above the VHA on any contaminants, there needs to be a funding in place to cover the additional costs associated with remediation. The burden on the rate payers of a small system like ours would simply be too much.

Thank you for the opportunity to provide public comments. Sincerely,

Meredith Dolan Village  
Manager Village of Johnson  
WSID #5156

**10.**

Re: Town of Bethel's comments on Act 21 Sampling plan

Dear Rodney,

While the Town of Bethel is unwavering in our desire to provide affordable, high quality water to our users, we find several areas of the Act 21 Sampling Plan to be onerous. Bethel is a relatively small system with just over 300 users. We have a large population of seniors and 12.7% of our residents currently live below the poverty rate.

To implement this proposed sampling plan, without any funding to cover the cost for the additional testing, is a financial burden we cannot take on. We are in the middle of a \$2.8 million dollar upgrade to our system and are currently in the planning phase of another large system upgrade. The cost of these upgrades falls solely to our users.

We feel a more fiscally responsible plan would be for the State to issue grants, starting with the largest systems in the State, to fund site assessments. This would determine if they are a historically compromised site or not. Then, based on the historical assessment, the State could require any or all of the tests for the 43 additional contaminants appropriate to that specific system. That would give water

systems time to plan for the site assessment. and the possibility of additional testing fees. It would also allow labs in Vermont to upgrade their equipment, hire additional employees, etc. to meet these needs. As it currently stands, there are only a few labs able to perform some of these tests.

The other area of the plan we struggle with, is that if contaminants are present in a system, there is currently no funding available to assist us with remediation. So, not only would be responsible for upwards of \$20,000 of additional testing for the rare chance our system would have even one of these contaminants, if one is found, we are on our own to deal with it. That would be financially catastrophic for most Towns and water systems in the State of Vermont. We would hope, by starting with site assessments, it would give the State time to work with the EPA to find a funding source to assist with any remediation.

As we stated at the beginning, the Town of Bethel strives every day to provide high quality water at an affordable price to our users. Part of that service is being fiscally responsible to our users. While we applaud the State's desire to provide it on a statewide level, you must take into consideration the entire financial burden of the State's water systems and residents. Vermonter's are struggling every day to pay high rents, high property taxes, heating bills and utility rates. To add to that burden is unfair, particularly during a country wide pandemic, when we have more Vermonter's using food shelves, applying for fuel assistance and coming to utilities like Bethel's to ask for their bills to be forgiven, if only for a quarter or two.

We encourage you to rethink the Act 21 Sampling Plan and work directly with Vermont Water Systems on a compromise we can all support, both fiscally and enthusiastically.

Sincerely,



Therese Kirby  
Bethel Town Manager



Tim Mills  
Bethel Utility Director

11.

#### Act 21 Sampling Plan Comments

- GMWEA supports the creation of a grant program to help Vermont drinking water systems pay for monitoring and laboratory testing of the list of chemicals proposed for testing by the VTDEC Drinking Water and Groundwater Protection Division.
- GMWEA supports the creation of a grant program to cover the expenses incurred by these

systems to conduct hydrogeologic evaluations to produce data for DEC and management of this data.

- There are approximately 600 water systems in Vermont subject to the testing requirements. Approximately 500 of these systems serve populations of less than 500. Of these 600 systems the median population served is approximately 140.
- The testing methods within the plan have a range of cost from \$50 to \$700 for each analysis. The average cost is \$400 per sample. The total cost would be approximately \$17,200 per water system (or \$10.3 million if all subject water systems are sampled). GMWEA does not believe that public water systems should bear this cost, especially if repeat sampling comes up negative. These costs will be overwhelming for the majority of Vermont's public water systems. GMWEA supports the VTDEC recommendation of a one-time funding mechanism to cover these sampling costs.
- Among these water system-specific criteria are a hydrogeologic evaluation and land use patterns around the source(s). A source-specific hydrogeologic evaluation would be conducted to determine if there are geologic features such as low permeability layers and groundwater flow direction away from a potential source of contamination. In addition, land uses surrounding each water source would be evaluated in concert with the hydrogeological analysis to determine the likelihood of a VHA contaminant reaching the water supply.
- Technical assistance for hydrogeologic evaluations and reporting is very important. This task is substantial and beyond the ability for most of these systems to do it internally with their own staff. It is conceivable that these evaluations will cost more than the contaminant testing itself. GMWEA asks for funding and technical assistance for these systems to cover the hydrogeologic evaluations and database management.
- Even with full The Agency funding the costs associated with Act 21 sampling will be substantial for the citizens of Vermont. Consideration for alternate methods such as screening a diverse subsample of systems and using the resulting information to identify characteristics associated with elevated levels and then targeting systems that have similar characteristics for sampling specific contaminants should be considered.
- For comparison, Act 66 (lead in drinking water in schools and daycares) allocated millions of dollars for testing and remediation along with 2.0 FTE's for state agencies to coordinate this process.

Green Mountain Water Environment Association

**END COMMENTS**

**Response to Comments:**

The comments received are in plain type, and response to comments are in **Bold type**.

Because many of the comments are similar, the responses to those have been consolidated under a single heading.

**1, Having adequate funding for the proposed testing for the Vermont Health Advisory chemicals by public water systems is the major concern for these water systems. This also includes having adequate funding for performing water source hydrogeologic evaluations, building and maintaining a database for testing related data, the cost of collecting the water sample and transporting it to the laboratory, the cost of the laboratory to analyze the sample, the water system costs of designing and building water treatment facilities, and for payment for any work related to the original testing.**

**Adequate funding for this plan is the number one concern of the respondents who commented on the plan. This included providing funding for conducting the hydrogeologic/geologic work that would be needed to eliminate certain of the chemicals from required testing. Even though not a specific part of the plan, the need for financial assistance was also identified if a chemical contamination above the Vermont Health Advisory standard was found for remediation of the health threat, either by designing and installing a water treatment facility or by finding a different water supply source.**

**Specific comments:**

For some of the chemicals there is no associated lab costs to analyze the contaminant.

**Greater in-depth research needs to be conducted.**

Urge the state to consider the short-term and long-term costs of remediation.

**Noted. The Agency will consider this aspect.**

if there is no known treatment method, or the treatment method is prohibitively expensive, then what?

**This would have to be evaluated on a case-by-case basis.**

We support State funding of the proposed Sampling Plan.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

Consider the cost to the water system and to the users on the water system.

**Yes, the full costs need to be known to formulate an effective strategy.**

Can the State administer such a program?

How can the State possibly handle this huge increase in sampling?

**Not with current staffing levels. With additional funding and adequate staffing the Agency could administer the program.**

Sampling and follow-up will burden Vermonters greatly.

The costs of sample analysis would be an undue burden on our water system.

This plan would have an adverse impact on the rate payers.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

Recommend that the manufacturers of these chemicals be the ones to pay for the sampling and testing.

**This item is outside of the scope of this report and process.**

Any remediation effort would exacerbate the financial burden.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

Urge DEC to seek funding to cover all costs associated with sampling.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

Need training of water system staff for sampling, ordering supplies, shipping, or pay a contractor(s) to perform the sampling.

**Should this effort proceed, the Agency will consider all options including training water system staff and/or pursuing contractor services for the work.**

Agree with narrowing down the number of contaminants to be tested for, however the State does not have the staff or the funding to perform this work.

**Noted. Staffing has been discussed above.**

Treatment may be technically difficult or prohibitively expensive, therefore we ask DEC to seek funding to cover all costs associated with treatment, engineering, equipment/facility upgrades, new water sources, and follow-up sampling.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

Unclear if there is an effective treatment method for each of the 43 contaminants and whether a cost/benefit analysis shows these treatment methods provide reasonable health benefits given the costs.

**The Agency would need to perform additional research to identify treatability of the listed compounds.**

The cost of approximately \$17,200 (per water source) would be overwhelming to most small water systems.

**Noted. If multiple water sources per water system needed to be sampled, the cost would multiply accordingly. Should this effort proceed, additional funding will need to be obtained.**

The one-time sampling funding if provided does not go far enough. If additional sampling is necessary, it would be too much of a budget burden.

**Noted. Should this effort proceed, additional funding will need to be obtained. Additional or on-going monitoring costs will be considered as part of the overall funding.**

We are asking that the State ensure adequate funding for annual sampling and analysis be provided.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

The cost of testing should be borne by the State.

Create a grant program to pay for the monitoring and laboratory costs.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

If contamination is found the costs of remediation should be placed on the entity that caused it.

**Should this sampling proceed the State would seek to impose the costs on any Potentially Responsible Parties for the contamination.**

The DEC must take it upon themselves to source funding for hydrogeologic studies.

Create a grant program to cover the costs of hydrogeologic studies.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

The full costs for a single source to be tested is approximately \$17,200, if the water system has multiple sources then the cost would be multiplied by the total number of sources tested.

**Noted. This is true unless composite sampling is available. If not available, this cost needs to be factored into the total cost of sampling and analysis.**

The cost for remediation could be too expensive for a small water system to afford.

If contamination is found the remediation would be financially catastrophic.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

If this plan is enacted, there would have to be a funding mechanism for the added costs of training, sampling, and the cost of laboratory testing.

**Noted. Should this effort proceed, additional funding will need to be obtained. This includes funding for sample analysis, data management, hydrogeologic analysis, consultant(s) to take the samples, and staffing for program administration.**

There needs to be funding in place to cover the additional costs associated with remediation, as the burden on the rate payers of a small water system would simply be too much.

**Noted. Should this effort proceed, additional funding will need to be obtained. This includes funding for remediation, on-going maintenance, and on-going sampling requirements.**

GMWEA supports the DEC recommendation of a one-time funding mechanism for covering all the sampling costs.

**Noted. Should this effort proceed, additional funding will need to be obtained. Should these requirements be implemented, funding options for program implementation would need to be obtained. This includes funding for sample analysis, data management,**

hydrogeologic analysis, consultant(s) to take the samples, and staffing for program administration.

2. The second most prevalent comment to the Plan was to delay implementing the proposed Sampling Plan and/or phase in the sampling/testing program to ensure adequate funding and resources are fully available.

**Specific comments:**

A timely notification of sampling is needed to budget-in sampling requirements.

**If additional funding is not made available, the Agency could consider spreading sampling out over a longer time to make this plan achievable.**

Slow the Plan down and follow the Federal guidelines.

**Noted. With a few exceptions, this is how the drinking water program operates.**

Recommend not moving forward until all staffing and funding is capable to evaluate all water systems for reduction in testing.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

Phasing the sampling over time would allow for possibly easing the financial burden and allow for laboratories to upgrade equipment and staffing for the additional testing.

**Noted.**

With phased testing it may give the State and EPA time to find a funding source for remediation.

**Noted.**

3. The third general category was to conduct evaluation of site-specific criteria, hydrogeology, source location, potential sources of contamination in the area of the water source to determine the need for testing. By determining the vulnerability to specific chemicals on the sampling list would allow water systems to obtain a waiver from testing for those chemicals. Those obtaining waivers would incur substantial cost saving by not having to sample and test for those constituents.

**Specific comments:**

The location of the water source should be considered in relation to the potential source of the chemicals to eliminate unnecessary testing.

**Noted. This would be accomplished in conjunction with the hydrogeologic evaluation.**

When would the path to testing waivers be established?

**The hydrogeologic evaluation could be completed by a consultant over a designated period of time, likely in 12 to 24 months after a consultant(s) is/are selected. The Agency would then**

**need to determine vulnerability and whether reduced sampling or a waiver from sampling would be required. Additional Agency resources would be necessary to make this happen.**

Provide financial grants to perform site assessments for the larger water systems and then sample for the chemicals they are vulnerable to.

**Noted and has been discussed above re: hydrogeologic evaluation.**

GMWEA asks for funding and technical assistance to conduct the hydrogeologic site investigations and database management.

**Noted. Should this effort proceed, additional funding will need to be obtained.**

**4. Misc. concerns to address and consider. These comments did not fit into an easily identified group and are addressed independently below.**

**Specific comments:**

Consider implementing preventative strategy for the chemicals of concern, such as restrict the chemical's use instead of treating for it when found.

**Noted. However, some chemicals may have a legacy use that never or slowly degrades over time or that may be regulated currently but historically have not. Denying specific chemical use in some parts of the state are outside the scope if this report.**

How far back do land uses in the SPA need to go?

**That would depend on more research regarding the chemical's degradation and dilution.**

Is the current SPA appropriately sized for the new contaminants?

**We believe that it is appropriately sized. This is because the SPA is the area that water travels through, or recharge occurs within, that will reach the withdrawal area of the well, spring, or surface water intake.**

Can toxic chemicals from algal blooms travel through the aquifer to out well?

**This is unlikely because the toxic bloom chemicals would need to move against the hydraulic gradient which is from the groundwater within the land toward the water body. In addition, if that were to occur, there would be substantial dilution of the lake water by the uncontaminated water table water.**

Do we need to add pharmaceuticals to the testing list?

**This list and plan captures contaminants that have adopted health advisories already in place. Contaminants without established health advisories are outside of the scope of this report.**

Will the State consider adding a clean-up fee to the cost of herbicides and pesticides?

**This item is outside of the scope of this report and process.**



Will Round-Up be on the list of chemicals to be tested for since it shows up in groundwater in many places?

**There is an established MCL for Glyphosate (the active ingredient in Round-Up) of 700 mg/L. Currently, the state of Vermont has a state-wide waiver for sampling of glyphosate due to its fate and transport so public drinking water systems in Vermont are not required to sample for it.**

Are there laboratories available to meet the testing needs?  
Availability of laboratories to do the analysis is a concern.

**This is an area that needs more investigation.**

The Act should be rescinded.

**Noted.**

If there is no MCL for these chemicals and a VHA is not used to set the enforceable standard, what would be the enforceable standard?

**In absence of an MCL, DWGWP does not have authority to mandate treatment/abatement of the contamination, although other programs may have enforcement authority over a Potentially Responsible Party which caused the contamination. The Agency has the regulatory authority to protect public health through public notification measures, should the situation (elevated results) warrant notifying the public. Should it be determined necessary upon consultation with the Health Department, the necessary public notice information may be required.**

Would inconclusive (hydrogeologic) data or lack of data require all 43 chemicals be tested for?

**Not necessarily, depending on other data available.**

Depending on the results of initial testing would the water system be required to test for additional contaminants, or would other water systems be required to test for that contaminant?

**This depends on the chemical found, the risks associated with it, and future information about adverse effects the contaminant has and whether the contaminant has a health advisory established.**

Has the DEC considered the feasibility of treatment for each of the contaminants on the list?

**Not for all the chemicals. Treatment feasibility and treatment costs, along with disposal of the treated chemical/wastewater needs to be performed.**

We encourage Vermont to rethink the act 21 sampling Plan and work directly with Vermont water systems on a compromise plan that all can support.

**Noted.**

Consider alternative methods, such as screening a diverse sub-sample of water systems to identify characteristics associated with elevated levels, and then targeting those systems with similar characteristics.

**Because the levels of the proposed chemicals for sampling and analysis are not known, it would not be possible to pre-screen them, and because of the diversity of geologic, site conditions, land uses, soil parameters, etc. it would not reasonably eliminate a significant number of water sources from testing.**

**Should this Plan proceed, a response would need to also identify what would happen should any of these compounds be found above the VHA value. This should be conducted in consultation with the Vermont Department of Health.**

**END of Response to Comments**