November 13, 2019

Attending: Kasey Kathan, Rodney Pingree, Graham Bradley, Nate Kie, Jon Kim, Marjie Gale, Rosa, Julia, John, Jen Gould, Michelle Eisenstein, Reed Sims, Joe Buford, Patty Casey, John Schmeltzer, Sille Larsen

## Introduction

Welcome Julia Boyles – Stepping into Colin Dowey's position. Private well relocation work will continue, finishing the remaining counties (Rutland, Addison, Orleans). Working on better locations for outfalls of wastewater facilities, which will include visiting facilities to validate and importing data into Wastewater database by the end of next year. Also working on extraction data (i.e. fish hatcheries, golf courses), and pairing of HUC 8 codes.

## PFAS

Solid Waste (KK): As part of the NEWSVT landfill certification – two reports of have in prepared by Casella. One evaluates landfill leachate treatment options, while the other evaluated waste being disposed at the landfill. Wastes analyzed were primarily those anticipated to have elevated PFAS concentrations. Highest concentrations were reported in residential textiles (carpets, couches, clothing). SPLP was done on a subset of samples and identified high leachability in some food packaging. Incoming work from Weston and Sampson will be looking at wastewater treatment facility influent, effluent, sludge, and a small set of septage samples.

Bennington (JS) – overview of PFAS work completed 650 wells sampled, over half with PFAS detections. As part of the consent order, the area will be going through reclassification to Class IV and using the new statue provision to allow 'replacement wells' within the reclassification area. The consent order does have provisions in place to ensure ongoing evaluation of any future replacement well. Reclassification petition will likely begin moving through the process, including public comment, in the next several months

Public supply testing – To date, 3 supplies with results over the health advisory, all are in the retesting phase. 15 had detects, but below the health advisory and 210 have reported non-detects.

<u>Agricultural Sampling (PC)</u> – this summer continued private wells sampling around agricultural use areas, and some research in conjunction with the Miner Agricultural Research Institute on broader investigations into distribution of agricultural contaminants (fields, ambient surface water, tiles drains). Work focused on agricultural contaminants. In 2019 – Preliminary review shows around 400 samples, around a quarter of which are on farms, with the remained being neighboring areas, and the legacy and research sites. Of these, 19 were over nitrate standard, 18 of which were samples from legacy sites, and one attributed to septic. Corn herbicides were found in trace amounts, but magnitudes of order lower than drinking water standard. Glyphosate samples taken at most locations, around 500 taken at this point from 'random' locations, but within agricultural use areas (tile drains, wells, surf. water) and there have been no detections (detection limit of 10 mg/l). Migrating to anew database, but also integrating the new lab database, so some hand-entry/delay. Once the new database is online, phosphorous analysis will be possible including a general look at whether groundwater is any significant contribution.

Well Location (discussion) – It is currently possible to update well locations through the ANR atlas. Additionally, a new submittal application has been developed which will allow well drillers to automatically upload information to the database to be confirmed by the GWPRS and then posted to the atlas. A pilot test of this submittal will be coming shortly J. Gould willing to be involved in pilot.

Act 21 Evaluation of chemicals with a VHA: Required the development of a plan to evaluate chemicals that have a VHA and see how prevalent they are in Vermont. All public and NTNC systems will test, unless there is a reason not to test (e.g. chemicals have been previously evaluated, there's no reasonable use of them in VT

etc.). The plan will be prepared by the end of December, and there will likely be significant testing in the coming year.

<u>VGS Work (JK)</u> – writing up Bennington PFAS work, preparing to present this work at a number of locations. PFAS work continues at the Clarendon airport with most recently a drone survey of the gorge completed showing strong fracture control. There 10 wells have been sampled for chemical fingerprinting and stable isotopes. Geophysical logging of five of these 10 planned and more bedrock mapping will be occurring. Also working on a detail plan for evaluating groundwater and surface water interactions in the Lake Carmi watershed.

<u>VDH Work (SL)</u> – last meeting of the private well workgroup focused outreach. Some of the outcomes of that meeting at are being worked on are: making links available between the different agencies so it's easier for people to navigate between DEC and VDH information and adding well assessment info from RCAP. Also improving/adding fact sheets.

Well tag numbers – asking people testing through VDH to write down well tag so water quality can be linked to location. Currently creating language for the website on how to find the well tag Suggestions – include some language of looking for the well tag a bit into the subsurface, they sometimes slide down; also homeowner can contact the well driller if there's info in the land record, some well drillers offer systems analysis (pull pumps, look at date etc.)

Road salt fact sheet – will be published soon

Village wastewater solution – DEC has provided grant funding for assessment of rural villages to identify possibilities to improve wastewater water infrastructure – VDH is providing free water testing to incentivize participation – this work may enable us to see if septic problems within villages with higher density is a problem. Five villages completed so far, beginning analysis – but generally not seeing a lot of contamination from leach field signatures (nitrate, chloride etc.)

Finalized private well testing requirements fact sheets – Well drillers have been contacted to see if they want copies of the new fact sheets. J. Gould suggested reaching out to them again later this winter, once things have quieted down for the drillers.

Arsenic – New Hampshire has lowered their arsenic mcl 10 to 5– VDH setting up to look at it in Vermont

Possible topics for future meetings:

Stormwater and contaminated sites/groundwater issues – recent New England wide workshop on the issue: Trish Coppolino may be a resource, for speakers on the issue

Surface water groundwater interaction – EPA's completed work on Cape Cod on nitrates to surface water – Jon Kim has a speaker he could contact to go over this work