

June 14, 2018 GWCC Meeting

Attendees: Patti Casey, Zeno Levy, Liz Royer, Colin Dowe, Rodney Pingree, Mary Clark, Craig Heindel, Jon Kim, Robert Pelosi, Michele Eisenstein, Shaun Felder, Scott Stewart, Kasey Kathan, Michael Smith, Kira Jacobs (phone)

VEC: State of Vermont's Water:

Scott – Summary of what was presented re: GWPRS and Class IV Groundwater Reclassification Procedure (being reviewed by Emily Boedecker and signature) – plan for moving GWPRS draft forward places tentative ICAR date in August (with public comment to follow).

Talk on chloride contaminated stream from stormwater runoff; Stormwater Rule going forward toward ICAR in July. John Schmeltzer PFOA/S sampling and lab testing methods and results.

Jon and Patti – Nitrate presentation on aquifer characterization and farm management practices– work continues, they went out this past week to continue tracer study work – For those that missed the talks – stay tuned – they're thinking about other presentations!

Phytoremediation:

Michael – Brief presentation and discussion of a case study of 1,4 dioxane treatment in NJ using installation of zero valent iron at the base of the tree well. Variation on typical phytoremediation (i.e. metal remediation which requires management of the leaves) in that the trees are being utilized to facilitate contaminated groundwater migration through the zero-valent iron – good for containment of contamination. Limitations – need lots of trees, only a limited zone of influence.

Questions: Does type of tree make a difference? -fast growing with large water consumption is ideal, roots above the water table to facilitate pull through (willows, not evergreens). Impacts of Temperature? - study was in NJ, winter containment in a cold climate may be more problematic, but still useful to consider.

Back Diffusion Video

Michael presented a brief video on a study showing back diffusion of contaminants from a low-K (permeability) area- work like this supports the reasoning in the draft GWPRS for not requiring full remediation in low K zones if monitoring wells show concentrations below standards and support the need to know where the contaminant mass is stored.

Permeable Reactive Barriers

Question from Mary on anyone's involvement in their use – Yes, they have been used successfully in VT.

Small and inexpensive options are available and starting to be used for wastewater.

Action – Mary to provide some studies on PRB'S and wastewater use.

Discussion on Presumption of Compliance language in draft GWPRS

Scott presented an overview of the informational meeting he held with programs staff in charge of the rules that fall under the GWPRS and the public trust test to be used in review of future rule changes.

General discussion on the draft rule language:

1(A): Best Practical Treatment– discussion on whether the use of “best” practical treatment means that Programs will be required to implement management or treatment practices that exceed the necessary protections (i.e. there may be other sufficient and lower cost treatments that aren’t necessarily the “best”) Suggestion: consider replacing “best” with ‘appropriate’, look at whether any permits use BMP in the permit language. Cost effective is also a consideration in 1(A).

3(A): “not prohibited by the requirements of a municipal ordinance” – discussion on whether this is placing the Agency in a position of enforcing/reviewing municipal ordinances or taking on the role of local zoning. Consider having ACCD review/comment on this. The burden appears to be on the applicant to review any ordinances.

Review of the Rules for presumption of compliance: concern was expressed that the GWCC is too informal of a group and may want to consider an appointed group (Subgroup) to provide input to the Secretary. Look at the language on the appointment of the Wastewater Advisory Committee or the VT Pesticide Council. The GWCC ‘bylaws’ does list representatives from DEC (DWGPD), VT Dept of Health, Agency of Ag, Farm, Markets, and Forest, Parks and Recreation as standing members.

3(B): Source Protection Area – no solid definition of Source Protection Area (SPA) is in the Water supply rules or specifically the “purpose”. Suggestions: consider saying “activity is not inconsistent with purpose of SPA” and more explicitly defining SPA and its purpose.

3(B): Consider including Class I and Class II groundwater and the UIC Rules in the prohibitions considerations. Add as 3 (E) “not inconsistent with”.

Class IV Procedure

Secretary reviewing currently, likely signature within a week or so. The revisions to the Procedure incorporate the changes suggested by Lean event (coupling the reclassification to corrective action plans as an institutional control option). There will likely need to be an additional procedure developed for the special considerations that could be applied to allow well development within Class IV areas, per the new statute language (Chapter 48).

Act 161: Groundwater Source Testing

The potable water supply testing that was built in to S.103 initially (which was vetoed) was added and passed as part of H.554 and adopted as Act 161. Testing for As, Pb, Ur, Gross Alpha, T. Coliform, T. Nitrate and Nitrite, Mn and any other adopted in to rule. Sampling at source (well) construction, prior to use, with results submitted to Dept. of Health.

Discussion: Language being drafted for inclusion in the potable supply rule, looking at where the testing will be completed and when (flushing considerations etc.) Water quality results will be

submitted to the database that was established as part of Act 163 requiring all certified labs to submit drinking water sample results to VDH. Since adoption of Act 163, the database has been developed and currently Endyne is providing data. Questions of confidentiality of the data require formalized request with assurance that the data will not be used as point location information.

It was suggested that, if possible, have the Well Completion Report (or Tag number) be placed on the water quality test form so there is link between the new well and the test results.

Well Drillers Database upgrades update

The online form being developed for well drillers to submit well completion reports “beta” version will be out soon, after a few months of testing, full roll out will be in August or September. Generally, will be more standardized (dropdowns, etc.), additional forms for well abandonment, replacement and fracking are part of the on-line version. Benefits– better lithologies! No mis-types! Static water levels!

Well Location Corrections

Colin’s work on correcting well locations is moving along, currently Lamoille, Washington and Orange are completed, Caledonia is likely next. Getting better than 50% correction and the atlas is being updated on a county level once the corrections are done, correction level is at the E911 address building level (i.e. may not be at the well location, but will be at the building, not roadside).

Questions: How can you tell if a location is a corrected location? Can’t necessarily but the location method is being updated by Colin for those he finds (so screen digitized becomes E911). The well completion report does have a time last updated field and these corrected locations will have a recent updated date.

What does the Well Driller/Clarion symbology on the atlas indicate? Clarion was the original database, developed from locations originally positioned on paper maps (i.e. interpret it as low confidence).

An app is currently under development to allow for manual submittal of well location corrections on the atlas – suggestions will be verified by the Agency before being posted.

Suggestion - if the well location correction app works well, may want to expand to hazardous site location corrections as well.

General Updates

2019 NEGSA – There’s going to be a Private Wells Session next year! Sille, Liz and Patti representing again. Abstract deadline will be sometime in December.

Zeno is headed to Sacramento! He’s taken a research position with the USGS there. Best of Luck!

NEXT MEETING: July 26th 1pm at the Annex