

STATE COORDINATING COMMITTEE ON GROUND WATER

Ohio Environmental Protection Agency
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Columbus, Ohio 43215-1049

Ohio Department of Natural Resources
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Columbus, Ohio 43224-1387

Ohio Department of Health
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Columbus, Ohio 43266-0588

Ohio Department of Commerce-SFM
8895 East Main Street
Reynoldsburg, Ohio 43068

Ohio Public Utilities Commission
180 East Broad Street
Columbus, Ohio 43266-0573

Ohio Department of Agriculture
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Ohio Department of Development
77 South High Street
Columbus, Ohio 43266-0413

Ohio Department of Transportation
1980 West Broad Street
Columbus, Ohio 43215

TO PROMOTE AND GUIDE THE IMPLEMENTATION OF A COORDINATED, COMPREHENSIVE AND EFFECTIVE GROUND WATER PROTECTION AND MANAGEMENT PROGRAM FOR THE STATE OF OHIO

August 20, 2009
Horace Collins Classroom
ODNR Repository
Delaware, Ohio

The August 2009 SCCGW meeting consisted of Agency announcements and a presentation by Tom Tomastik (ODNR-Division of Mineral Resources Management) on the Marcellus Shale brine disposal and related issues.

ATTENDANCE

Ohio EPA: Michael Eggert, Brian Hall, Bob Knipmeyer, Barb Lubberger
ODNR: Rick Pavey, Tom Tomastik
ODH: Rebecca Fugitt
ODOT: Doug App
PUCO: Sue Daly
USGS: Ralph Haefner
OSU Ext.: Cindy Folck

AGENCY UPDATES AND ANNOUNCEMENTS

Ohio Department of Health:

Household and Small Flow Sewage system Rules.
As part of the Ohio Budget bill, the suspension of most portions of ORC Chapter 3718 was continued for another six months, and the uncodified sections of law enacted in 2007 under Am. Sub. H.B. 119 were also continued through January 1, 2010.

--Currently there are two bills each in the House and Senate that propose various changes to the state law: SB 110 (introduced by Senator Niehaus), HB 141 (Sen. Dodd), SB 100 (Grendell) and HB 236 (Newcomb). SB 110 and HB 141 implement the

recommendations of the Sewage Study Commission that met for two years to develop a consensus position on changes to ORC Chapter 3718. SB 100 and HB 236 would set aside the state regulations and allow county health departments to enact their own household and small flow system sewage rules related to soil absorption specification, and systems siting and design. Legislative discussions will continue on the remaining unresolved issues between the two sets of bills with possible additional hearings in the fall, or the introduction of a substitute bill.

--Meanwhile, the Technical Advisory Committee continues to meet, reviewing new technologies for household waste treatment systems, including "green technologies".

Domestic Water Well Rules. These rules are undergoing a 5-year rule review. They will be submitted to the Public Health Council in November. Proposed revisions include:

- Water quality standards for private systems that mimic the federal Maximum Contaminant Levels for public drinking water systems.

- Requiring a 1.5-inch annular space for new wells, as required for public water system wells.
- Changing the required setback from Construction and Demolition Debris wells, to match the setback required by Ohio EPA (i.e., 500 feet from the facility boundaries).
- Using four colony counts of total coliform, and the presence of *E. coli* as the standard for bacterial contamination (currently the standard is presence/absence for total coliform and *E. coli*).
- ODH has convened a small workgroup with representatives from Ohio Water Well Assn., Ohio Water Quality Assn., Ohio Environmental Health Assn. and the Assn of Ohio Health Commissioners to work through comments on the rules from the last five years and develop proposed rule changes for statewide review in September.

Sewage Remediation. ODH is applying for \$5 million from the Great Lakes Restoration Initiative provide funding for failing sewage system repair and replacement in the Lake Erie Basin. ODH has also been working with Ohio EPA, DEFA to implement funding for failing systems with \$5 million from federal stimulus funds (ARRA) provided to Ohio through the State Revolving Loan Fund. County contracts are now being awarded and failing systems will be replaced through November 1, 2009. The funds can be used to replace up to 75% of the cost of the system, with 25% match by the system owner.

United States Geological Survey:

New Well in Erie County. A new water level monitoring well was installed in Erie County just north of Bellevue, with a real-time transducer. However, ground water levels have recently dropped below the level of the transducer, so it currently is not providing data.

Passive Seismic Investigations. In the City of Columbus' south wellfield, Survey staff are researching "passive seismic" methods, which use sound waves from ambient noise (from trucks, trains, etc.) to identify differences in subsurface lithology.

Rain Gardens. The Survey is increasingly involved in research related to Storm Water BMPs. One

question that warrants more study is the extent to which ground water quality is impacted when storm water is channeled to land-based disposal sites such as containment ponds, rain gardens and porous pavements.

Methane Gas Contamination. The Survey is working with ODNR on a study of the methane gas contamination of the water table in Bainbridge.

Stray Gas Workshop. The USGS Eastern Region and the Pennsylvania Water Science Center are sponsoring a Stray Gas Workshop in Pittsburgh, PA on November 4-6, 2009. A description follows:

"Stray gases can originate from a variety of sources and accumulate in natural and man-made spaces where dispersion and ventilation are inadequate. Accumulation and the fugitive nature of gases can lead to blackdamp and explosion hazards in buildings or other confined spaces... This workshop will present the scientific basis for assessment of, and various types of geochemical analyses for, stray and fugitive gases."

More information, abstract submittal, and registration can be found on:

http://pa.water.usgs.gov/stray_gas/

Marcellus Shale. USGS recently published a fact sheet titled "Water Resources and Natural Gas Production from the Marcellus Shale". [See notes from Presentation]

WMAO Meeting. The Water Management Association of Ohio (WMAO) Fall conference will be held November 4-5 at the Ramada Hotel and Conference Center on Sinclair Road. The conference theme is "Reinvesting in Water".

Mercury Contamination. USGS recently put out a press release on mercury contamination in fish.

Ohio EPA, Division of Surface Water:
Cuyahoga River. This year marks the 40th anniversary of the Cuyahoga River catching fire, one of several events that galvanized the nation to create U.S. EPA and enact the Clean Water Act. The river has made a truly remarkable recovery since that time.

Stimulus Funds. The agency received 2,100 applications for Stimulus funds for wastewater treatment projects. The amounts requested totaled \$4.5 billion. However, only \$220 million was allotted to wastewater projects, and it was awarded to 225 projects.

Great Lakes Restoration Initiative. President Obama proposed \$275 million for this initiative. Much of it is expected to go to USEPA for issues including research, habitat protection, and nonpoint sources.

Harmful Algal Blooms. The Division is studying the water quality of 19 lakes in Ohio. In 2007, a third of them had microcystin, a toxin produced by certain blue-green algae ("cyanobacteria"). Although no federal limit has been established yet for microcystin, the World Health Organization recommends a limit of 1 ppb for drinking water and 20 ppb for recreational exposure. At Grand Lake St. Mary's, the levels have varied between 40-80 ppb. Samples from other lakes are below 20 ppb.

Integrated Water Quality Assessment Report. This report, which comes out every two years, is due April 2010. Ohio EPA will meet its 2010 goal for full attainment of aquatic life standards in 80% of Ohio's major streams.

"Navigable Waters". The definition of "navigable waters" in the Clean Water Restoration Act continues to be a source of contention. Some recent federal court decisions have ruled that a body of water with no nexus to a stream should not be considered a navigable water.

Rules Update.

- new PTI rules that include holding tank and isolation distances will become effective in September.
- Recreational standards for bacteria will be going to JCARR soon.
- Rules on water quality, 401, & antidegradation were proposed last fall and are still out for interested party review.
- Rules concerning stream mitigation and nutrients are under internal review.

Ohio Department of Transportation:

Stimulus Funds. As of last Friday, \$425 million for ODOT projects has been obligated, and 67 projects have been started. Ohio currently has the most multi-modal projects of all the states.

The Ohio State University Extension:

Atrazine. U.S. EPA's Pesticide Section has put a page on atrazine on its Web site, which pulls together all the studies that have been done regarding its impacts on water quality. See www.epa.gov/pesticides/reregistration/atrazine/atrazine_update.htm.

Clean Sweep. ODA's annual Clean Sweep program is collecting old pesticide containers from farmers for safe disposal.

County Offices Closing. The economic downturn has hit many counties hard, resulting in closure of several county extension offices, including those of Allen and Williams Counties.

Ohio Department of Natural Resources, Ohio Geological Survey:

Monitoring Well Regulations. Jim Raab and Mike Angle attended a National Driller's Association – Buckeye Chapter meeting last month. Chief among the topics discussed was Kentucky's requirements for monitoring well installation regulations. The group would like to see something similar adopted in Ohio (which has regulatory guidance only). The Kentucky rules can be viewed at: <http://www.lrc.state.ky.us/kar/401/006/350.htm>

Budget. OGS took a 30% cut in General Revenue Fund this biennium, and expects no GRF funding at all in 2011, which means they will not be able to make required match for their federal grants. They are currently looking to partner with other agencies.

Ohio EPA, Division of Drinking and Ground Waters:

Clyde Investigation. The investigation continues, with another round of pesticide sampling completed in June by Ohio EPA in cooperation with Ohio Department of Agriculture. The report should go up on Ohio EPA's Web page within a week or so.

Pesticide Sampling. The US Department of Agriculture research branch has offered Ohio funding for pesticide analysis of up to 300 samples, but the funded agency would need to conduct the sampling. Ohio EPA will follow up with ODA and ODH staff to select area(s) and assign tasks.

Gibsonburg Dye Trace Study. The second dye trace study was conducted at Gibsonburg, to verify the results from the first. In both cases, ground water flow velocities averaged about 2,000 feet/day.

Ground Water Rule Sampling. Ohio EPA staff have initiated a Ground Water Rule sampling program to determine the validity of criteria proposed to identify systems most likely to be impacted by micro-organisms. Samples will be collected monthly for a year at two sites, and analyzed for a suite of micro-biological and inorganic constituents.

Ohio EPA, Division of Solid and Infectious Waste Management:

Interested Party Meeting [provided by e-mail]. DSIWM is organizing an interested party meeting on 'concepts for rule development for ground water assessment and compliance monitoring programs. The meeting will be held September 2, 2009, 10:00 am to 3:00 pm at the Vern Riffe Center, 31st Floor, Room "South B and C". More information is available at <http://www.epa.ohio.gov/LinkClick.aspx?fileticket=cj9ed0y6lp0%3d&tabid=1763>.

PRESENTATION

Tom Tomastik (ODNR-Mineral Resources Management) gave a presentation on the Marcellus Shale brine disposal and related issues. The Marcellus Shale is an extensive shale unit underlying the Appalachian Mountains that contains significant quantities of natural gas. New developments in drilling technology, along with higher gas prices, have recently made the Marcellus Shale an economically attractive resource.

However, production of commercial quantities of gas from this shale requires large volumes of water to drill and hydraulically fracture the rock. Concerns about wastewater brine disposal have been raised throughout the region. The gelatinous "hydro-frac" water may contain brines, heavy metals, radio-

nuclides and organics. Some neighboring states have minimal regulation of this waste, and reports of high salinity in some Appalachian rivers have been linked to the disposal of Marcellus Shale brines. Some companies send it to wastewater treatment plants, but the effectiveness of standard wastewater treatment on these fluids is not well understood. Another option is to inject the waste fluid into deeper formations that are not used as aquifers.

NEXT SCCGW MEETING:

... will be held **October 22nd** at the **Ohio Department of Natural Resources, Bldg. D-3** large conference room.

Featured presentations will cover various aspects of geothermal well siting and construction. Staff from the Ohio Water Well Association and the National Ground Water Association will join us for discussion of how other states handle the siting and construction standards for these wells, whether Ohio should provide more oversight, and if so, what SCCGW should do to move the effort forward.

NOTE CHANGE IN DATE AND LOCATION

REMINDER: Meeting agendas and final meeting summaries are posted on the SCCGW Web site: <http://www.wpp.epa.ohio.gov/ddagw/SCCGW/>.
PLEASE NOTE THE WEB ADDRESS CHANGE.