



Athens Conservancy

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To: Athens County Commissioners

Re: Permit Application by K&H Partners for an Injection Well

November 19, 2013

On behalf of the board of directors of the Athens Conservancy, a 501(c)(3) land trust, I am writing in regard to the permit application APATT022697, submitted by K&H Partners, for a new injection well near the town of Torch in Athens County. The board of directors of the Athens Conservancy has concerns about this proposed well, which would be located close to a recreational trail we are developing and a nature preserve that we are about to acquire. We feel that this well poses a conservation risk to our land and a health and safety risk to people using our recreational trail.

The map in the permit application shows a railroad about 2/3 of a mile north of the proposed well site. This is an abandoned railroad grade that the Athens Conservancy purchased in 2010 with a Clean Ohio grant for recreational trail development. Several miles of the trail closely parallel Skunk Run, which the trail crosses five times. The Athens Conservancy has also been awarded a Clean Ohio grant for a 29-acre parcel adjacent to the rail grade, which will be dedicated as the Skunk Run Nature Preserve. The trail will be routed through the preserve and will provide recreational opportunities for southeastern Athens County. Because that area has little other public land, we anticipate that the trail will be well used.

As stated in the application, the location of the new well drains into a tributary of Skunk Run. Any spill of fracking waste from delivery trucks would present a risk of contamination to Skunk Run, as would failure of the well itself. The toxins in this waste, which we understand often include known carcinogens such as toluene and benzene as well as radioactivity, would present a threat to aquatic life in Skunk Run and the ecological integrity of the Skunk Run Preserve. Furthermore, air pollution from such a spill would present a health hazard for people using the recreational trail.

Injection wells have caused earthquakes elsewhere in Ohio. There is nothing in the application materials addressing the safety of injecting such large volumes of liquid in relation to possible inducement of seismic activity. A magnitude 5.7 earthquake in Oklahoma, which destroyed 14 houses and was felt 800 miles away, has been linked to injection of fracking wastewater (<http://www.earth.columbia.edu/articles/view/3072-.UVL1DqJPNPI>). From the same article: “Scientists have linked a rising number of quakes in normally calm parts of Arkansas, Texas, Ohio and Colorado to below-ground injection. In the last four years, the number of quakes in the middle of the United States jumped 11-fold from the three decades prior”. Even small earthquakes could damage and weaken bridges and stone culverts along the rail-trail, threatening the safety of trail-users. The fact that adjacent Washington County has experienced recent earthquakes demonstrates that this concern is relevant in the region of this new well.

There is already one injection well on the site, and the proposed second well is slated to receive more than twice as much fracking waste as the existing one. The risk of a spill increases with the number of vehicles delivering the material and the amount of waste delivered. Similarly, the risk of a well failure is greater with two wells than with one. And contrary to reassurances from government and industry, wells do commonly fail. “Records from disparate corners of the United States show that wells drilled to bury this waste deep beneath the ground have repeatedly leaked, sending dangerous chemicals and waste gurgling to the surface or, on occasion, seeping into shallow aquifers that store a significant portion of the nation's drinking water” (<http://www.scientificamerican.com/article.cfm?id=are-fracking-wastewater-wells-poisoning-ground-beneath-our-feeth>). From the same article, “Regulators say redundant layers of protection usually prevent waste from getting that far, but EPA data shows that in the three years analyzed by ProPublica, more than 7,500 well test failures involved what federal water protection regulations describe as ‘fluid migration’ and ‘significant leaks.’”

In consideration of these issues, we strongly oppose the introduction of over 60 million gallons of toxic waste per year, much of it from out of state, into the Skunk Run watershed. Beyond our concern about the Athens Conservancy’s property and the people who use it, this new well also presents a health and safety threat to the residents of the town of Torch, located a mile northeast of the well site. Any air pollution resulting from a spill would likely be borne by the prevailing southwest winds right into Torch, and the people of Torch would be the most heavily impacted by an earthquake in the vicinity of the well.

The lack of rigor in the permitting procedure used by ODNR, in comparison to that used by US-EPA, increases our concern about the proposed new well. For example, the US-EPA Commercial Class 2 permit, which is the one this well would require, would restrict the fluids injected to a list approved by the US-EPA and detailed in the permit. This information, which is not required for an Ohio permit, would be critical in the event of a spill.

A US-EPA permit, in contrast to ODNR requirements, would also require:

- geologic data (depth, thickness, and lithologic description) for the injection and confining zone,
- mapping of aquifers close to the injection zone.
- a detailed description of the construction procedures,
- quarterly analyses of samples taken from the well location, and

- a testing program designed to obtain data on fluid pressure, estimated fracture pressure, physical and chemical characteristics of the injection zone.

The lack of a requirement for geologic data is a particularly serious flaw in the ODNR procedures. According to a USEPA document (<http://water.epa.gov/learn/training/dwatraining/upload/dwaUIC-uicpermit.pdf>), “There are multiple ways that injected fluids could get into a USDW to endanger it. The review of geologic data helps ensure that natural conduits do not exist that may endanger a USDW [underground source of drinking water]. It is important that the formations intended to seal the injection interval from the USDWs are free of intersecting faults and fractures. If faults or fractures are present, the injected fluid, introduced into the injection interval at an elevated pressure, will seek the path of lower pressure and move upward into a USDW.” ODNR does not require this review and necessary assurance that there are no faults, fractures, or fissures that could provide pathways for toxic injectate to get into drinking water sources. No mapping of geology is provided in the K&H2 permit application. Therefore ODNR’s application process cannot provide protection of groundwater supplies.

These deficiencies are a few of the many ways in which ODNR’s permitting procedure fails to protect public health and safety. The very brief application for the Troy Township well doesn't even describe the unloading facility, which of course can affect the likelihood of spills.

Furthermore, the huge influx of fracking waste from other states, which may be the only reason this new injection well is even being proposed, would not be occurring if Ohio's permitting procedure were as demanding as the EPA's. Because wells in Pennsylvania and West Virginia have to satisfy the EPA regulations, while those in Ohio do not, it is easier and cheaper for drillers in those states to truck their wastes to Ohio than to deal with them where they are generated. Our state government has made Ohio the sacrifice zone for the oil and gas industry. We ask that US-EPA level the playing field by requiring that this industry in Ohio play by the same rules as it does elsewhere.

Sincerely,

David Gedeon
Board member