Sept. 26, 2012

via electronic mail to james.zehringer@dnr.state.oh.us and Rick.Simmers@dnr.state.oh.us; cc oilandgas@dnr.state.oh.us

James Zehringer, Director, Ohio Department of Natural Resources Richard Simmers, Chief, Division of Oil and Gas Ohio Department of Natural Resources 2045 Morse Rd., Building F-2 Columbus, Ohio 43229-6693

Re: Application #aAMY0000706, D.T. Atha Permit # 3761 Dear Director Zehringer and Chief Simmers,

As a long time Athens County resident and landowner I am alarmed to see an application for another injection well in Rome Township. I have read the application and have many issues concerning health, safety and conservation with the permit application of D.T. Atha, Permit # 3761. I am requesting that you call a Public Hearing on this well application in Athens County.

This well will convert an old production well into an injection well. There is no report on plans to bore out old cement. Will it be done?

How is the cement tested to insure that there are no leaks? If new cement is poured, how will you ensure and document that the cement forms an adequate thickness rather than just oozing into crevices and cavities rather than forming the casing you expect?

How will it be guaranteed for 10,000 years (as required for Class I injection wells, to which your Class 2 wells are compared by your department)?

How will this casing and inner tube be guaranteed not to deteriorate for this period, given the highly corrosive and otherwise deterioration-inducing nature of the complex and UNKNOWN contents of the injectate that the well *may legally receive* and given the history of well failures of both Class I and II wells? Why would this well somehow be different? If it is not, how can you say that there are not OVERWHELMING HEALTH AND SAFETY AND CONSERVATION concerns?

If it can't be guaranteed for 10,000 years as supposedly guaranteed in a Class I injection well, how can you permit it, given that well experts and the industry acknowledge the inevitable failure of wells within a century if not mere decades and that OHIO LAW REQUIRES YOU TO EVALUATE HEALTH, SAFETY AND CONSERVATION CONCERNS OF THIS WELL APPLICATION? You will clearly be abrogating your responsibilities as public officials if you do not grant our community's requests for a public hearing on this matter of urgent public health and safety concern.

Given that there is no information in the application about an annulus, how will you assure that an annulus will be created that can adequately monitor pressure and protect against leakage?

The well is near the Hocking River. Nowhere in the application can I find a map of the aquifer. In fact, there is a complete lack of any information regarding groundwater, though

many people in this part of the county rely on private water wells for drinking water. These should be safeguarded at all costs. How will these drinking water supplies be protected, since ODNR does not do any groundwater monitoring?

The permit application contains a letter from the OEPA raising concerns about the cement used. The permit application doesn't contain a response that answers the questions raised. Please forward. Thank you.

There are also issues with the length of the proposed well. The drill log only goes into the Oriskany sandstone $\sim 3600'$ - 3607', yet the application says the bottom of the hole will be $\sim 3810'$. There is no drill information that shows that the Oriskany sandstone is 200' thick. The thickness of the formation should be verified.

There is no information on the geology, porosity, or permeability of the intended receiving formation. How can it be assured that the highly toxic bacteriologically active radioactive waste will stay confined to this unmapped receipt region, especially given recent incidence of anthropogenic earthquakes in nearby Washington County caused by injectate?

How has ODNR modified well construction, monitoring, and application review requirements and evaluation of risks to groundwater in such a way as to be protective of public health and safety and land conservation if this well is permitted? YOU are in charge of public health and safety and land conservation as a result of this well approval. I see NO assurance in this application or your rules and regulations that our health and safety and land conservation can be protected, given what I know about fracking waste toxicity, radioactivity, and bacteriologically active characteristics and given what I know about well failure rates, geology, groundwater, and hydrology.

How have you taken into account the recent peer-reviewed science by Tim Myers on the rate at which contaminants move and the role of fractures in this movement? Please reply with specifics.

How have you taken into account Osborn et al., 2011, James Northrup's, industry and government reports of cement, bonding, and well failures, "accidents and incidents," and corrosion, hydrologic, and geologic science in considering this permit application process to be appropriate and protective of human health, safety, and environmental conservation? How does this application take into account this extensive evidence of likely or inevitable harm to public health, safety, and environmental conservation? Please reply with specifics.

In the permit it says the injection pressure for the well has been increased from 550psi to 630psi. How have they determined the well can stand the increased pressure? Has the entire length of the production casing been tested?

The Supplement to Application states that the retention basin will be designed to hold 1.5 times the capacity of the holding tanks. But what if the retention basin fills with rain water? The supplement should state that the retention basin will be kept pumped dry and that any rainwater collected will be removed within 24 hours.

This well is on St Rt. 144. That is a dangerous road. It is very icy in the winter. There have been fatalities from people sliding off the road into the river. According to the amount of "brine" that can be disposed of in a year, there may be 20-30 tanker trucks a day on this road. How does this application protect against and address the probable health and safety issues involved in transport of the highly toxic, radioactive, and bacteriologically active waste to be transported to this well?

Rt. 144 is a major school bus route. 24 school busses a day travel this road (between Federal Hocking High School, Middle School, and Coolville Elementary School). On much of the road there is no cell phone service. What happens if there is an accident? What happens if a tanker truck carrying out-of-state liquid fracking waste overturns or hits a school bus! The first responders in the area are local volunteer firefighters. Will they know what is in the tanker trucks and how to handle it? How can they be safe if they come in contact with some of the many carcinogens and radioactive substances in the fracking waste? Given the current laws that say that this is "proprietary information," how will they find out?

Since well integrity is legally required only once every five years, how will leaks and contamination be found and addressed, especially given that you do not monitor for contamination and you can not prevent contamination once it has occurred?

Given another Athens County injection well's history of flagrant violations and well failures that have not been addressed or remedied while the well continues to receive highly toxic out-of-state fracking waste, and given ODNR's abominable record on enforcement and transparency, on what basis should Athens County residents be sanguine about their **health and safety** and **conservation of our land and resources** from this new highly inadequate well application for further industrialization of our rural county?

On what basis can you assure our residents that their water will not be contaminated and their **health and safety** devastated? On what basis can you assure residents that you can *correct problems* once they have occurred? Please explain how you can guarantee that water will not be contaminated. How can you assure residents that children will not be **killed**? How can you assure us that our land will be **conserved** and river not be poisoned in truck accidents, other spills, and underground leaks? On what basis does this permit application serve the interests of our state and its natural resources, which you are entrusted to protect? Are you hired by the shale industry or by the public, whose well being you are entrusted to protect as stated by law?

These and other public **health and safety issues** must be addressed <u>BEFORE</u> this new injection well is permitted. There must be a **public hearing in Athens County** to address these and other concerns before this well application is approved.

Sincerely, Heather Cantino 33 Cable Lane, Athens OH 45701