

## Ohio Class II Injection Wells are Destroying Ohio

Class II injection wells in Ohio receive liquid oil and gas (o&g) industry waste from Ohio, West Virginia, Pennsylvania and other states. They are not designed to receive hazardous waste and create serious risk to human health and the environment. Class II wells provide no benefits to communities and do not foster job growth. They should be banned.

Class II wells receive large quantities of waste from deep-shale drilling and hydraulic fracturing (fracking). The waste contains high amounts of undisclosed highly toxic chemicals, including benzene, xylene, naphthalene, formaldehyde, cadmium, mercury, arsenic as well as radioactive radium, barium, and strontium. A U.S. Geological Survey report (12/11) found radioactivity levels in Pennsylvania frackwaste over 3600 times higher than drinking water standards and more than 309 times higher than Nuclear Regulatory Commission limits for industrial discharge to water. These levels are significantly greater than in waste from conventional o&g wells. (*Columbus Dispatch* 9-3-12)

O&G waste is exempted from federal hazardous waste regulations and important portions of federal Safe Drinking Water, Clean Air and Clean Water acts. These toxic fluids are allowed to be called “non-hazardous” only by legal exemption. Their toxicity would deem them hazardous and require them to be disposed of in Class I hazardous waste wells.

In 2013, Ohio’s injection wells accepted 16,354,784 barrels or 686,900,928 gallons of toxic liquid waste. 8,277,964 barrels or close to 349 million gallons came from out of state.

Radioactivity, chemical concentrations, and chemical composition are not regulated or tracked by Ohio authorities. There is no chemical disclosure to Ohio communities as would be required of other waste by federal Emergency Planning Community Right to Know laws.

ODNR does not monitor for water contamination around Class II injection wells. Even Class I wells in Ohio and elsewhere have caused groundwater contamination. All wells eventually fail.<sup>1</sup> State and federal records reveal that during the years 2007 to 2010 one out of every six inspected injection wells failed mechanical integrity testing. ODNR has a long history of ignoring repeated, flagrant violations. It does not enforce even its weak rules, ignores citizens concerns, and denies evidence of problems and risks.<sup>2</sup>

Many existing Class II wells are old production wells not built to current inadequate state standards for injection. Our communities also face great risk from truck accidents and spills. Class II injection wells have also been linked in peer-reviewed research to earthquakes in Ohio as well as in other states, including many in Oklahoma, one measuring 5.7 on the Richter Scale. The latest research<sup>3</sup> concludes that fluid injection can cause large (7M) quakes and that injection-related quakes can occur more than 20 miles from the injection site. In addition to injection and frack-related quakes near Youngstown, Pike, Washington, and Athens counties have experienced recent quakes. All are recipients of large quantities of injected out-of-state frack waste. ODNR’s attempt to dismiss the science on injection-induced seismicity has been exposed<sup>4</sup> by scientists quoted in the *Columbus Dispatch*<sup>5</sup> and elsewhere. Thousands of Ohioans have signed petitions for a

---

<sup>1</sup> Former Mobil exec, Louis W. Allstadt, on well integrity: “There are lots of good indications that plugging the well doesn’t really

<sup>2</sup> [acfan.org/2013/odnr-responses-misleading-at-best-kh-permit-should-not-be-granted/](http://acfan.org/2013/odnr-responses-misleading-at-best-kh-permit-should-not-be-granted/)

<sup>3</sup> [sciencemag.org/content/345/6192/13.summary](http://sciencemag.org/content/345/6192/13.summary)

<sup>4</sup> [acfan.org/2014/odnr-reveals-lack-of-geological-and-seismic-data/](http://acfan.org/2014/odnr-reveals-lack-of-geological-and-seismic-data/)

<sup>5</sup> [dispatch.com/content/stories/local/2014/03/14/university-reporting-additional-quakes.html](http://dispatch.com/content/stories/local/2014/03/14/university-reporting-additional-quakes.html)

ban on Class II wells and for Ohio HB 148/SB 178 that would ban this dangerous dumping of toxic, radioactive oil and gas waste in Ohio communities.

Athens County Action Network has filed a lawsuit,<sup>6</sup> now in Franklin County Common Pleas Court, against the state for the most recent injection well (K&H2) permitted in Athens County. The well was permitted in spite of hundreds of public comments objecting to the permit, including from Athens County Commissioners and Athens City Council, and a standing-room only public meeting hosted by the Commissioners.<sup>7</sup> ODNR has not adequately responded<sup>8</sup> to any of the hundreds of substantive concerns raised. ACFAN and Appalachia Resist have also filed a complaint with USEPA<sup>9</sup> for federal intervention in the Ohio Underground Injection Control (UIC) program based on problems with the drilling of this well, the second well on the Troy Township site owned by K&H Partners of West Virginia (and purchased through deception by Mr. Harper, who advertised in the local paper for “hunting land”). The ACFAN/AR appeal follows hundreds of others delivered to USEPA from Ohioans last fall, appealing to USEPA to take away Ohio’s primacy (state control) over its UIC program. Buckeye Forest Council has also filed a complaint<sup>10</sup> to USEPA calling for an end to Ohio primacy. Nearby states, which do not have primacy and must abide by USEPA permitting requirements, have many fewer injection wells and are getting hardly any new ones permitted.

Southeast Ohio thrives on tourism, a vibrant local food economy, and several institutions of higher learning. All this is greatly threatened and already impacted by importation and dumping of frack waste in the region. One local organic farm that provided meat, grains, and vegetables to the Athens Farmers’ Market has shut down operations due to proximity to an injection well and to the farmers’ distrust of their food’s safety. A prospective Ohio University parent has written to the Athens News<sup>11</sup> that she would not permit her son to attend OU due to injection wells. Farmers around the K&H wells fear for their well water on which their animals depend, and other nearby landowners fear plummeting land values. The community already experiences significant air pollution from eleven large storage tanks that continuously vent highly toxic and carcinogenic volatile organic compounds.

Our current Ohio government is imperiling drinking water supplies, lives, and the economic health and well being of Ohio communities and citizens. Irresponsible management, lack of transparency<sup>12</sup>, and collusion<sup>13</sup> of the current Ohio administration with the oil and gas industry are leading to Ohio becoming the toilet of the nation. This does not serve the economic interest of Ohioans.<sup>14</sup>

**Athens County Fracking Action Network: [www.acfan.org](http://www.acfan.org), [acfanohio@gmail.com](mailto:acfanohio@gmail.com)**

---

<sup>6</sup> [acfan.org/2014/odnr-injection-permit-appealed-a-first-this-century-formal-complaint-to-usepa-filed/](http://acfan.org/2014/odnr-injection-permit-appealed-a-first-this-century-formal-complaint-to-usepa-filed/)

<sup>7</sup> [acfan.org/2013/athens-county-commissioners-hold-standing-room-only-public-injection-well-meeting/](http://acfan.org/2013/athens-county-commissioners-hold-standing-room-only-public-injection-well-meeting/)

<sup>8</sup> [acfan.org/2013/odnr-responses-misleading-at-best-kh-permit-should-not-be-granted/](http://acfan.org/2013/odnr-responses-misleading-at-best-kh-permit-should-not-be-granted/)

<sup>9</sup> [appalachiaresist.wordpress.com/complaint-to-federal-epa-re-kh-2/](http://appalachiaresist.wordpress.com/complaint-to-federal-epa-re-kh-2/)

<sup>10</sup> [buckeyeforestcouncil.org/ohio-injection-well-program/](http://buckeyeforestcouncil.org/ohio-injection-well-program/)

<sup>11</sup> [athensnews.com/ohio/article-37885-how-can-i-allow-my-son-to-attend-a-university-in-a-toxic-area.html](http://athensnews.com/ohio/article-37885-how-can-i-allow-my-son-to-attend-a-university-in-a-toxic-area.html)

<sup>12</sup> See for example [acfan.org/2014/acfan-files-legal-complaint-against-odnr-for-public-records/](http://acfan.org/2014/acfan-files-legal-complaint-against-odnr-for-public-records/)

<sup>13</sup> [ohio.com/business/kasich-s-office-reportedly-involved-in-2012-ohio-report-to-promote-fracking-in-state-parks-forests-1.467294](http://ohio.com/business/kasich-s-office-reportedly-involved-in-2012-ohio-report-to-promote-fracking-in-state-parks-forests-1.467294)

<sup>14</sup> [ohiogasdrilling.files.wordpress.com/2013/07/pogco-factsheet-actual-job-numbers.pdf](http://ohiogasdrilling.files.wordpress.com/2013/07/pogco-factsheet-actual-job-numbers.pdf)