Clean Water for North Carolina

Science-Based Environmental Justice

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CWFNC Resolution on Hydraulic Fracturing

May 2011

The Board of Clean Water for North Carolina resolution on hydraulic fracturing is based on review of scientific research and results of practices in other states, and finds that high pressure hydraulic fracturing and horizontal drilling should continue to be banned in the state of North Carolina. The process of extraction of natural gas from deep shales, underlying as many as 14 counties of our state, has been shown to cause harm to residents, natural resources and communities in many places where the process has occurred across the US, with economic benefits obtained only by a few landowners and energy corporations at the expense of most residents. The following considerations, along with large numbers of reported serious impacts of fracking operations from many states, the near total lack of regulation and enforcement, and the existence of multiple federal environmental exemptions, have motivated the drafting of this statement:

Passage of the 2005 Energy Policy Act of 2005, also known as Halliburton Loophole, undermined environmental regulation by exempting the process from the Safe Drinking Water Act (SDWA), Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), National Environmental Policy Act, and the Toxic Releases Inventory under the Emergency Planning and Community Right-to-Know Act.

A study sponsored by the U.S. Environmental Protection Agency on fracking impacts on drinking water has been substantially narrowed in scope by pressure from industry, as well as the failure to disclose important findings for the past 25 years by the natural gas industry. The current EPA study focuses only on deliberate and intentional use of water in the fracking process itself; therefore, excluding consideration of other impacts to drinking water from critical steps in the extraction process. The study will not produce final results until at least 2014.

North Carolina regulations currently prohibit high-pressure underground injection that could extend beyond a target formation, horizontal drilling (drilling more than 3° off vertical), and injection of toxic wastes that could contaminate groundwater. Nevertheless, gas companies are currently getting landowners to sign leases, many with predatory provisions, on thousands of acres of land, primarily in Lee County. Statewide protections currently in place are a first line of defense to protect residents, so we need to prevent them from being overturned.

Most recently, well-documented studies showing a) a greenhouse gas footprint for shale fracking operations projected to be greater than for the same fuel value of coal (Cornell, Horwath), b) significant damaging economic and social effects of fracking on communities (Cornell, Christopherson) and c) strong, multi-faceted evidence for shale gas contamination of drinking water wells (Duke, Osborne et al) have further increased concerns about the damage expected from fracking vs. the benefits of natural gas extraction by this method.

Major concerns associated with the fracking process include:

Massive depletion of local water resources to provide millions of gallons of water needed for the fracking process;

Impacts to surface water quality from sedimentation and erosion during development and road building, as well as stormwater runoff; degradation of riparian zones related to well-pad and other construction;

Contamination of drinking water wells and groundwater with natural gas and VOCs; chemical and radioactive contamination of groundwater from introduced and naturally occurring substances; migration of natural gas and toxic volatile organic compounds due to improperly cased and cemented wells, and possible transmission through underground fractures and old penetrations, with the presence of toxic volatile organic compounds and other contaminants in groundwater found in multiple states (including PA, TX, CO, and WY);

Severe air contamination with toxic volatile compounds in TX and CO with some evidence of neurological damage; increased rates of asthma and upper respiratory infections;

Discharges of "return or produced water" to public wastewater plants and directly to surface water that have been harmful to downstream drinking water supplies and aquatic life in PA and WV; insufficient infrastructure and methods to treat contaminated wastewater;

Damage to surface buildings, roads, other infrastructure and vegetation in every one of the 30+ states where fracking is occurring;

Noise and light pollution, and high volumes of truck traffic;

Extreme hazards, including many instances of household water that is combustible, risk of explosion; well and condensation tank explosions; well blowouts, fires and gas leaks;

Risk of seismic activity in areas of deep injection of wastewaters;

Increased rates of crime, weakened social and community bonds, impacts of transient workforce, increased impacts on judicial system and other government services, unemployment rates, and other socioeconomic impacts;

Decreased property values, effects on median household incomes, impacts on home sales, loss of agricultural and other program benefits

The Board and Staff of CWFNC resolve that:

Until fracking technology has been demonstrated to have been implemented in highly similar formations with NO detections of shale contaminants (methane, VOCs, metals, radioactivity) or fracking fluid constituents in nearby drinking water wells, NO predatory leasing arrangements, NO damage to the local economy (including loss of diversification, stress on local government services and increased income disparity), and NO surface water or groundwater impacts due to land disturbance, storage or treatment of wastewaters, Clean Water for North Carolina resolves that there shall be NO consideration of changes to regulations that currently prevent fracking in North Carolina, except for changes to clarify those prohibitions.

A statewide ban must be declared on any permitting program that would allow horizontal drilling or hydraulic fracturing for natural gas extraction until the above demonstration has been made and 1) comprehensive and credible scientific studies on drinking water, environmental and health impacts can be

completed by EPA and other independent entities (no sooner than the end of 2014), 2) a bond sufficient to assure coverage for all accidents, spills, infrastructure damage and contamination of natural resources on and off-site, and full restoration of landowner property for safe use, in no case less than \$5 million per well site; and 3) an independently (ie, no more than half fee-supported) and adequately funded regulatory program, including comprehensive and accountable inspection of every well installation and oversight of pressure and other conditions at each fracking event is established.

The protection of residents, neighborhoods and the natural resources on which they depend constitutes the highest purpose of our state government. Local communities and regional entities must have the right to determine the best means of ensuring their rights as state residents to protect their health, safety and welfare. These rights must not be overridden by resource extraction corporations or their lobbyists or economically interested parties claiming certain legal rights, or by a less protective state law ("preemption").

Statement by the Board of Directors Clean Water for NC, May 2011