

Blue Ridge Environmental Defense League

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Ms. Trina Ozer

North Carolina Department of Environment and Natural Resources

1601 MSC

Raleigh NC 27699

Re: Draft North Carolina Oil and Gas Study

April 2, 2012

Dear Ms. Ozer:

On behalf of the Blue Ridge Environmental Defense League (BREDL) and our members and Directors across North Carolina, including two Chapters in the shale basin, I offer the following comments on the “Draft North Carolina Oil and Gas Study.” (Study) BREDL has many concerns regarding groundwater and surface water protection, air quality, impacts on land and lives, infrastructure and waste handling and other negatives the natural gas industry will bring into North Carolina. In our comments, we will focus on some specific issues that were either not addressed in the Study, or that should be improved.

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1. Environmental Justice:

It seems unfathomable that in the state where forced dumping of highly toxic PCB's on the poor African American community of Afton, in Warren County, sparked the Environmental Justice movement, that a major study such as the one the North Carolina Department of Environment and Natural Resources (DENR) has presented us with has no mention of potential Environmental Justice impacts. Many of the mostly rural shale communities have a significant number of minority residents. For example, Lee County has a population that is over 37% People of Color.¹ Anson County is over 53 % minority.² NC DENR's Equity Policy³ states in part that DENR will:

- Address environmental equity issues in permitting decisions for projects potentially having a disparate impact on communities protected by Title VI of the Civil Rights Act of 1964,
- Promote greater use and analysis of demographic information to identify communities that may be disproportionately impacted by sources of pollution,
- Use demographic information to determine whether there is: 1) a need for greater outreach to community in order to encourage more meaningful participation, or 2) special health risks based on the nature of the population,
- Develop guidelines for assessing the cumulative effects of permitted facilities.
- Provide opportunities for interested parties to raise concerns on Environmental Equity in DENR's decisions

¹ [Lee County Community Health Assessment- Page 14, Demographics](#)

² [Anson County NC Quickfacts](#)

³ [NC DENR Environmental Equity Policy](#)

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Recommendation:

Hydraulic fracturing is a huge environmental issue potentially affecting thousands of North Carolinans. Before the Study is finalized, The North Carolina Department of Environment and Natural Resources must identify the potential for disproportionate impacts from this industry on People of Color and the Poor.

2. Air Quality:

In the Study it is stated that “With the exception of internal combustion engine standards, the state air toxics standards will be the only air quality rules which apply to many natural gas production activities, at least until EPA finalizes the proposed NSPS and HAP rules for natural gas production. “ This is alarming on many levels considering the recent assault on the toxics rules, and the politically manipulated proposed increased in the arsenic AAL.⁴ Additionally, many shale areas are experiencing unprecedented ozone problems. As the Study pointed out, natural gas production in the Triassic may impact that area as well as surrounding communities. Ten months a year, the prevailing winds come from the Southwest.⁵

⁴ [First They Came For: The North Carolina Legislature's Assault on the Public](#)

⁵ “Hydraulic Fracturing in Central North Carolina: Potential Impacts on Triangle Air Quality.” Therese Vick, BREDL. Attached

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Recommendation:

DENR, along with DHHS should assess public health impacts of proposed changes to North Carolina's air toxics standards, and how they may affect communities in the shale basin. The Legislature must hold back the air toxics "reform" bill, and not reintroduce SB781, which could effectively tie DENR's hands in efforts to protect public health and the environment.

3. Groundwater Monitoring:

When a site in Wake County located near the Chatham County line was chosen as the finalist for an eight state low-level radioactive waste (LLRW) dump, one of the primary issues was the ability to predict groundwater movement in order to identify a leak when it occurred. After many millions of dollars and hours of site characterization, gaggles of geologists, hydrogeologists, PhDs and engineers could never prove that groundwater movement in the area was predictable. Ultimately, the site was withdrawn. What makes groundwater movement in the Triassic any more predictable now than it was then?

Recommendation: DENR should examine the work done during the site characterization process of the Wake/Chatham LLRW site in order to determine if indeed, the movement of contaminants in groundwater and where that groundwater will go can possibly be predicted.

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4. Naturally Occurring Radioactive Material (NORM)

The legislature directed DENR to include NORM as part of its Study. Sadly, the danger from exposure to radiation was minimized-the word “only” being used often. There is *no* safe level of radiation exposure. Although some testing was performed, geochemical sampling results were not included in the report. Additionally, scale that builds up on piping and other well-pad equipment, can reach significant levels of radioactivity. There is no mention in the Study about safe handling and transport of these materials, worker or community safety.

Recommendation:

The Study should not be presented to the legislature until all geochemical test results have been evaluated and included. Discussion of how the highly radioactive metal piping and other well pad materials should be handled and transported safely should be included in the Study. Additionally, potential impacts to workers and the surrounding community should be assessed.

5. Public Health:

Recommendation:

A multi-disciplinary health risk assessment should be performed in the areas potentially impacted by shale gas extraction. This assessment should include physiological as well as psychological effects.

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6. Infrastructure:

This section was fairly thorough, although those most likely to face homelessness were not identified. Poor people, young families and minorities are more likely to be renters.

Skyrocketing rents will likely impact vulnerable communities disproportionately. Also, the impact of hundreds of thousands of trucks on North Carolina rural roads cannot be overstated. A representative from NC DOT speaking before the Senate Energy Policies Committee stated that a PDOT official had seen “a road go from asphalt to mud in 36 hours.”

Recommendation:

DENR should evaluate the demographics of renters in the basin to see if people of color and the poor will stand to be disproportionately affected. Additionally, the Attorney General’s office should be consulted on possible protections from unscrupulous landlords. Additional to DENR’s recommendations, NC DOT should calculate the costs to North Carolina taxpayers for road damage.

7. Earthquakes:

While admitting that seismic activities can be induced by fracking activities, the Study seeks to reassure the reader by minimizing the threat—“microseismic” events that “do not pose a threat to the environment or human health or safety.” Just this week, the United States Geological Survey (USGS) released an abstract of a study that shows: “A remarkable increase in the rate of M 3 and

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greater earthquakes is currently in progress in the US midcontinent.”⁶ The Shearin-Harris nuclear reactor is less than twenty miles away from the Cumnock community, in highway miles. Much shorter as the crow flies. A 5.8 seismic event in Virginia was twice what the North Anna power plant was designed to withstand, and two reactors were shut down. We felt it here in the Triangle.

Recommendation:

Before the Study is finalized, potential affects from fracking induced seismic activity must be analyzed including causing possible emergencies at Shearin-Harris.

8. Consumer Protection:

It is hard to have a comment as they are not included with the Study.

Recommendation: The Study should have been held until all mandated parts were complete.

9. Effect on Sense of Community

The exploitation of natural gas has created an unprecedented sense of communal loss wherever it is occurring. In addition to environmental degradation, sociologic and psychological effects are creating a deep sense of sadness in shale gas communities. Constant noise and light pollution

⁶ [ARE SEISMICITY RATE CHANGES IN THE MIDCONTINENT NATURAL OR MANMADE?](#)

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disrupt sleep, loss of property value creates financial insecurity, the huge increases in traffic contribute to frustration, and the indifference or downright animosity of public officials and regulatory agencies fosters anger and distrust. The division in opinion which sets neighbors and families against one another, feelings of helplessness, depression, anxiety, frustration and anger all contribute to the unraveling of a community's sense of place.

A Bradford County, Pennsylvania citizen quoted in a recent study eloquently described it this way: ***"It's Like We're Losing Our Love"***

In conclusion, Blue Ridge Environmental Defense League opposes shale gas extraction, also known as hydraulic fracturing or "fracking." Describing natural gas as a solution to America's fossil fuel dependency is misleading and ignores real solutions like conservation, as well as truly clean energy like wind and solar power. Hydrofracking is fraught with environmental, public health, and economic problems. The extraction of the gas from the shale uses toxins injected underground, and releases methane, toxic pollutants, radon gas, and radium which contaminate air, land and water. The gas industry has ignored community concerns and paved its way with campaign contributions and bully tactics, which has resulted in human misery, contamination, foreclosures and lawsuits. North Carolina's public health, quality of life, and environment must not be sacrificed to this practice and the dirty money that comes with it. There is too much at stake.

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Thank You For The Opportunity to Comment.

Sincerely,

Therese Vick

North Carolina Healthy and Sustainable Communities Coordinator

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Attachment:

There is a Powerpoint Presentation attached to the email that contains these comments.

Thank You