

MEMORANDUM

To: James Zehringer, Director, Ohio Department of Natural Resources

Fr: Henry Henderson, Natural Resources Defense Council

Date: March 13, 2012

Re: ODNR Well Construction Rules – Serious Problems Remain

Following up on our conversation last week, this memo provides a more detailed response to the attached ODNR “Drilling Regulation” diagram upon which you requested our comments. NRDC appreciates your involving us in discussions regarding ODNR’s proposed well construction rules, and we remain willing to work with your office to help you meet the Governor’s desires for a strong and transparent permitting program for shale gas wells.

As described below, however, the diagram fails to address the substance of the concerns we have raised in our written comments and prior communications on ODNR’s proposed well construction rules. Although we appreciate ODNR’s willingness to improve its proposed rules in response to our comments, to date only minor improvements have been offered. ODNR’s proposed rules need to be substantially strengthened before they are finalized if they are to live up to the Governor’s goal that Ohio become a leader in developing standards that protect public health and the environment.

Top Panel: Number of Standards Addressed

ODNR claims its rules address 55 “standards,” which is more than other sources. This is a misleading statistic, as it is the stringency, not the number, of standards that is the true measure of a regulatory program’s efficacy. The majority of those 55 standards do not actually constitute minimum standards, but rather refer to provisions in the proposed rules that delegate to ODNR discretion to address health and safety issues through site-specific individual permit conditions. For example, proposed Rule 08(K) provides that the placement and number of centralizers (that center the casing in the wellbore so cement is evenly distributed around the circumference) is completely in the operator’s discretion subject only to individual permit conditions. In contrast, other states have clear minimum requirements, as we explained in Comments 19 and 20 of our December 12, 2011 comments on the proposed rules. Here, however, ODNR appears to be claiming to have a “standard” on centralizers.

We agree with ODNR’s approach to use both prescriptive and performance based standards. Where ODNR does set a minimum standard, however, it is consistently weaker than other states’ standards as well as American Petroleum Institute recommended best practices. In our December 12, 2011 comments, as well as in our subsequent discussions, we have emphasized the need to strengthen those standards, but ODNR has generally asserted that stronger statewide minimum standards are not

necessary, even when ODNR's proposed standards are demonstrably weaker than the best practices that the industry is already following when it drills shale wells in Ohio.

In the case of performance-based standards, the rules sometimes lack clarity on the safety or environmental protection standards that the rule is intended to address. For example, Rule 08(M)7(iii) allows operators the discretion to use production liner rather than the more protective requirement of a full string of production casing but does not provide any criteria to determine under which circumstances this would or would not be appropriate.

For both prescriptive and performance-based standards, ODNR should substantially revise and strengthen its proposed rules, taking industry best practices as a starting point then determining whether additional protections are necessary to ensure that public health and the environment are protected to the maximum extent achievable.

Middle Panel: Casing Safety with Three Separate Misleading Claims

a) ODNR's first claim that its rules require complete cementing from "seat to surface" is simply not required by its proposed rules. This is true only for the "surface casing" that extends from the surface to just 50 feet beneath the lowest underground drinking water sources (this minimum 50 foot buffer itself is weaker than other states, see our Comment 26). Other casing strings that go deeper are not fully cemented, e.g., the final production casing need only be cemented to 500 feet above the seat of the well, Rule 08(J)(7)(a).

b) ODNR's second claim that its "most stringent" cementing standard for lead and tail cements of 500 psi for 30 minutes does not accurately describe its proposed rules, which give an operator the option of two different standards: 500 psi for 5 minutes or a pressure of 0.2 times the casing length for 30 minutes (see proposed Rule 08(D)(3)). These two options in ODNR's proposed rules are both weaker than the description in ODNR's fact sheet. Further, even the standard described in ODNR's fact sheet is weaker than American Petroleum Institute best practices, as we set forth in Comment 31 of our December 12, 2011 letter.

c) ODNR's third claim that it requires a greater quantity of cement than Pennsylvania has no basis in its proposed rules. ODNR's proposed rules require only "sufficient cement" for surface casing (see Rule 08(M)(4)(b)). The calculation ODNR claims it uses to determine required cement volume does not appear anywhere in its proposed rules. If it is an internal policy, it should be put in rules as a transparent minimum standard. In contrast, Pennsylvania's standard, which we reference in Comment 27 of our December 12, 2011 letter, requires 20% more cement than ODNR's proposed "sufficient cement" standard.

Final Panel: Total Depth of Surface Casing

ODNR claims here that it requires the surface casing to extend to a depth of 655 feet uniformly across the state, which is more than other states. However, the 655 foot requirement is nowhere in ODNR's proposed rules and its basis is entirely unclear, nor is it clear how the same depth could be required throughout Ohio's diverse geology. If ODNR intends to require this surface casing depth in the future, ODNR should incorporate the surface casing depth standard into its proposed rules.

We remain concerned that the surface casing setting depth requirement in ODNR's proposed rules is too weak. Regardless of a state's definition of "protected water," industry best practice is to set surface casing at least 100 feet below the base of the deepest protected water, as recommended by the American Petroleum Institute. ODNR's proposed rules require that casing extend only 50 feet beneath the deepest underground source of drinking water. Other states require a minimum 110 foot depth, as we explained in Comment 26 of our December 12, 2011 letter.

Summary: Only 3 of our 43 Comments fully satisfied

While we generally believe that ODNR's February 8, 2012 revisions to its proposed rules are an improvement, the vast majority of our 43 comments submitted on December 12, 2011 remain unaddressed. We consider only Comments 2, 3 and 11 in our December 12, 2011 letter fully satisfied, with some partial improvements on the issues identified in our Comments 1, 9, 14, 17, 19 and 28.

We believe the rules need substantial revision before they can be said to meet Governor Kasich's goals of high stringency and transparency. ODNR's continuing reliance on the exercise of case-specific discretion instead of strong minimum standards based on industry best practice is not adequate to ensure that the proposed rules meet Governor Kasich's objectives of full protection of the environment and public health and safety.