



Jeffrey Fretwell, Director, Legislative and Intergovernmental Relations
Maryland Department of the Environment
1800 Washington Blvd. Baltimore, MD 21230

Dear Mr. Fretwell:

Thank you for the opportunity to comment on the Maryland Department of the Environment's (the Department) proposed regulations at COMAR Title 26 Subtitle 19 Chapter 1 Regulation .01-.61 (Oil and Gas Exploration and Production) and Title 26 Subtitle 08 Chapter 07 Regulation .04 (Underground Injection Control).¹ Please accept these comments on behalf of Earthworks, a national nonprofit organization dedicated to protecting communities and the environment from the impacts of energy development while seeking sustainable solutions.

General Comments

The best way to protect our communities, environment, and natural resources from the adverse impacts of oil and gas development is to end our reliance on fossil fuels as soon as possible. No amount of regulation makes drilling safe. The Department should simply prohibit all oil and gas drilling in Maryland.

That said, these current proposals substantially weaken the level of protection afforded to Marylanders under the previous Administration (the 2015 regulations).² For instance, the Comprehensive Development Plan (CDP) process now removes authority from state agencies to approve, deny, or place conditions upon the CDP. Baseline monitoring, once two years for both air and water, is now just one year only for water monitoring. Finally, these regulations should include a standard citizen suit provision, similar to those available in many of our bedrock Federal environmental laws.³

Specific Comments on Oil and Gas Exploration and Production Proposed Regulations (COMAR 26.19.1.01-.61)

Seismic Permit Application Procedures .06

This provision should expressly condition the Department's granting of applications for seismic permits upon the Department's approval of the applicant's Comprehensive Development Plan (CDP) pursuant to our recommendations under .12 and .13.

Drilling and Operating Permit Required .09(B)

This regulation should expressly state that the Department approves the plan for abandoning wells. This would create consistency with .57.

Prerequisite for Application for a Permit .10

.10(A)(4) Permit applicants seeking to hydraulically fracture wells with fluid volumes below the 300,000 gallon threshold should also submit a CDP.

.10(B)(3) exempts permit renewals from the CDP, without accounting for what happens when the applicable CDP expires. If the permit renewal occurs within the area described by an expired CDP, the Department should only process that permit renewal application if it is accompanied by a new CDP.

Comprehensive Development Plan- Scope and Contents .12

.12B(3) The Department should modify this provision to require CDP applicants to own both the surface and mineral rights within the area the CDP describes. This will help prevent the potential for negative impacts to land and water resources caused by surface activities.

.12(D), The Department should delete the words “as needed”.

Public Participation for Comprehensive Development Plan .13

.13(B) Under this proposal, the Department may not even see a CDP until the permitting stage. This provision should instead restore the Department’s authority under the 2015 regulations.⁴ In particular, this provision should explicitly state that the Department, upon receipt of the completed CDP application and after public notice and comment, may approve, deny, modify, or place conditions upon the CDP. The Department must exercise its authority and discretion to protect our environment and manage our natural resources, especially with oil and gas development. The Department cannot do so effectively without decision making authority over the CDP.

.13(C) The Department should also publish the applicant’s CDP on its own website to aid transparency.

.13(D) The public comment provisions of this section are a sham. The public should only comment to regulatory agencies, not to oil and gas industry permit seekers with a vested interest in ignoring public concerns. The very notion of submitting public comments to the CDP applicant, rather than to the Department or other appropriate regulatory agency, flies directly in the face of the purpose of public input, weakens the Department’s mandate to protect the public interest, and contravenes the very foundation of administrative law.

Application for an Initial Drilling and Operating Permit .14

(B)(11) In addition to requiring inclusion of all local planning and zoning authorizations in the permit application, these rules should expressly state that nothing in the proposed regulations or the permitting process preempts local planning and zoning authority.

Review Procedures for Drilling and Operating in the Critical Area .15

These proposals defer to the Critical Areas Commission the power to recommend permit conditions for drilling in the Critical Areas. Instead, the Department should expressly prohibit all

oil and gas activity within the Critical Areas. Critical Areas are so designated precisely because of their unique conservation value and incompatibility with heavy industrial activity.

In the alternative, the final rules should expressly provide authority to the Critical Areas Commission to deny permit applications, rather than just set conditions upon them.

Departmental Review Procedures for Drilling and Operating Permit .17

.17(A) This provision should explicitly state that the Department shall not issue any permit unless the Department has approved the final applicable CDP.

.17(D)(1-4) This provision should simply prohibit the Department from granting a permit in the Critical Area and tidal or nontidal wetlands. Nor should the Department permit drilling in habitats of endangered or threatened species. Permitting drilling in such fragile environments could result in negative impacts to aquatic systems, wildlife, and other natural resources.

.17(E)- The proposed regulations should expressly condition permit approval upon the Department's determination that the application is complete and only after the Department conducts the Public Participation, Environmental Assessment (EA), and baseline monitoring processes described in .17(C) and .19 respectively. This would make the section consistent with the Department's proposed process in .19B.

The current proposal requires a final Departmental decision on the permit application no *later* than 30 days following the public comment period. Such a deadline hastens a potentially inadequate environmental review and truncates the Department's consideration of public input. This is especially true in light of the Department's staffing needs. The proposal should instead forbid the Department from granting a permit *sooner* than 30 days following public comment.

Renewal of a Drilling and Operating Permit .18

The Department should require the same Public Participation (.17(C)), Environmental Assessment (EA) and baseline monitoring (.19, please see below) provisions for permit renewals as with permits for initial drilling. Under this proposal, permit renewals do not receive EAs, require public comment, or baseline monitoring. Environmental conditions can change considerably in the 5-year term for initial permits. Permit renewals should receive the same review in order to identify any changes or restrictions necessary to protect our resources.

Environmental Assessment and Baseline Monitoring .19

.19(A) First, the Department should restore the air monitoring requirements. Second, the Department should restore the baseline monitoring time period from one year to two years. The 2015 regulations contained these provisions. Third, the Department should specify the area of review for baseline monitoring. As proposed, baseline surface and ground water monitoring occurs only "in the vicinity of the well pad".

.19(C) We support the Department developing guidance for the EA and baseline monitoring. The guidance should afford an opportunity for public notice and comment. The Department should not issue any permits before finalizing this guidance.

Location Restrictions and Setbacks .20

The regulations should expressly state that nothing herein preempts any local, municipal, or county location restriction or setback of greater distance.

.20(B) We support the Department's prohibition of drilling in the Chesapeake Bay and its tributaries.

.20(C) The Department should extend the prohibition in .20(B) to the Critical Areas rather than deferring to the Critical Area Commission.

.20(E)(2)(a-d) We support the Department's prohibition of drilling in the watersheds of Broadford Lake, Piney Reservoir, Savage Reservoir, and Deep Creek Lake.

.20(E)(7), .20(G), .20(H) The Department should extend the prohibitions in .20(B) and .20(E)(2)(a-d) to all public lands managed or owned by the Department of Natural Resources (DNR), rather than deferring to DNR or the Maryland Historical Trust.

.20(J), .20(K), .20(L) The Department should carefully examine all the available geological evidence involving abandoned and active oil and gas wells before granting an initial or renewal drilling permit. However, this evaluation does not belong at the permitting stage. Instead, the Department should consider the applicants' plans for preventing communication with abandoned oil and gas wells within the Department's CDP approval process.

Drilling .24

.24(C)(3) This provision should explicitly state that no operator shall drill, stimulate, complete, or operate more than one well at a time per CDP.

Stormwater .25

.25(B) The Department should require operators to store stormwater in closed tanks to maintain consistency with .30(C)(1).

.25(C) The Department should require a stormwater management plan for all phases of oil and gas activity, not just the production phase. Runoff and erosion can be ongoing problems at well sites unless and until full reclamation occurs. Nor should the Department defer approval of the stormwater management plan to another agency. The Department may consult with other agencies, but the Department's approval or disapproval of a stormwater management plan should neither be instead of, nor subject to, another agency's decision.

Chemical Use, Storage, and Handling .30

.30(B) We support the Department's prohibition on diesel use or diesel mixtures in hydraulic fracturing or any other part of the drilling or fluid injection process.

Disclosure of Chemicals .31

.31(A) All trade secret claimants must certify and substantiate their claims of trade secrecy. The Department must not simply grant trade secrecy upon the claimant's attestation. Instead, the Department should deny all trade secret claims unless the claimant demonstrates a good faith

attempt to keep the claim secret, that the chemical name or use is not otherwise available, and that disclosure would result in substantial harm to their competitive position.

Transportation and Truck Traffic .33

.33(B)(2) The Department should, in consultation with the Maryland Department of Transportation (MDOT), require CDP applicants or other appropriate entities to enter in to a Road Use Maintenance Agreement (RUMA) with MDOT. The Department and MDOT should issue guidance, subject to public notice and comment, on the standard terms of RUMAs. The purpose of RUMAs is to insulate local governments and taxpayers from infrastructure costs associated with damage from heavy industrial activity. The state of Ohio has pioneered the use of RUMAs; they have standard agreements for local and state governments.

Leak Detection and Repair .39

The Leak Detection and Repair (LDAR) program must include a mechanism for third party verification. Third party LDAR verification allows Marylanders to submit complaints for repairs of leaks for Departmental enforcement using the same technology and quality assurance and quality control (QAQC) methods employed by regulators and industry. All the Department needs to do is supply contact information (preferably an email address and phone number) for a complaints processor. Upon receipt of a Marylander's complaint, the Department may take appropriate enforcement action.

The best available technology, using Optical Gas Imaging including the use of Forward Looking Infrared (FLIR) cameras, now belongs in the hands of communities affected by oil and gas development. Marylanders' participation in LDAR benefits the regulated community by quickly and accurately detecting leaks, saving the operators the product they wish to deliver to market, as well as reducing any fines, fees, or penalties assessed. Under this approach, Marylanders will submit FLIR footage and other information to the Department's complaints processor who, upon review, takes enforcement action.

Third party LDAR programs also benefit regulators by relieving some of their enforcement burdens, saving time, and reducing costs. Finally, Marylanders benefit from community enforcement that results in operators quickly finding and fixing the sources of leaks leading to cleaner air, water, and a healthier environment.

The Department should, after public notice and comment, finalize an LDAR Guidance. The Guidance should specify best practices and best available technology for the regulated community as well as for third party verification.

.39(B)(5) These regulations should require the operator to perform LDAR inspections at least quarterly.

Management of Drilling Fluids, Stimulation Fluids and Produced Water .45

.45(B) The Department should delete the word "demonstrates" and replace it with "certifies".

Gathering Lines and Pipelines .46

This provision should explicitly state that nothing herein preempts local or municipal governments from imposing their own regulations for gathering lines and intrastate pipelines. Further, this provision should also reflect the Department's embrace of third party LDAR verification with respect to gathering lines and pipelines.

.46(B) The operator's LDAR program (see .39 above) should also include at least quarterly inspection of gathering lines and pipelines.

.46(D) The Department should not exclusively rely upon industry design practices for pipeline safety and operation. This proposal should instead incorporate by reference any federal regulations promulgated by the Pipelines and Hazardous Materials Safety Administration (PHMSA) into Maryland rules.

Flaring .47

.47(C)(1) We support the requirement for 98% flaring efficiency.

Invasive Species .52

.52(A) The plan submitted pursuant to this section should occur as part of the applicant's CDP.

Site Reclamation .53

.53(D) The plan submitted pursuant to this section should occur as part of the applicant's CDP.

Wastes and Wastewater .54

Nothing prevents the state of Maryland from enacting oil and gas regulations more stringent than federal standards. This proposed regulation should delete the categorical exemption that oil and gas exploration and production (E&P) wastes enjoy from the federal Resource Conservation and Recovery Act (RCRA).⁵ With the exemption removed, MDE should require hazardous waste determinations⁶ in oil and gas wastewater and ensure testing of all E&P wastes for toxicity, ignitability, flammability, and corrosivity characteristics.⁷

We support the Department's proposal in .54(G) to, under certain circumstances, require radioactivity testing. We also support the Department's ban on the construction of UIC wells.

More than a quarter century ago, EPA concluded, "It is clear that some portions of both the large-volume and associated waste would have to be treated as hazardous if the Subtitle C exemption were lifted."⁸ MDE and DNR reiterated this position in their Draft Partial Responses to Comments On Draft Best Practices Report:

*Looking at the situation in 2014, we note that some flowback and produced water from HVHF (high volume hydraulic fracturing) contain some constituents at greater than 100 times drinking water standards. **If the exemption were not in place, it is possible that these wastes would qualify as hazardous.** When these wastes are mismanaged, they have the potential to cause damage.* (Emphasis and italics added)⁹

This view is also supported by documentation of flammability, toxicity, and ignitability levels high enough to trigger RCRA requirements for E&P wastes, were it not for the exemption. This

includes a 2009 study analyzing constituents of flowback in West Virginia and Pennsylvania that detected both barium and known carcinogens such as benzene, toluene, ethylbenzene, and xylene in excess of their regulatory thresholds for toxicity.¹⁰

In 2002, the California Department of Toxic Substances Control found 11% of oil waste samples tested exceeded ignitability regulatory thresholds.¹¹ As early as 2003, federal regulators became aware that E&P wastes do spontaneously combust. In January of that year, a Texas collection pit of E&P waste ignited when hydrocarbon vapors interacted with sediments and water in the pit.¹² In May 2006, a natural gas condensate tank and pit operated by EnCana caught fire and burned for five hours.¹³ In April 2010, a wastewater impoundment in Washington County, PA ignited reportedly shooting flames 100 feet in the air.¹⁴

.54(B) The Department should prohibit any person from delivering oil and gas wastewater to publicly owned treatment works (POTWs) consistent with the oil and gas effluent guidelines recently established by the US Environmental Protection Agency.¹⁵

.54(C) We support the Department's prohibition against applying flowback and produced water to de-ice the roads.

.54(D) We support the Department's prohibition here and in the accompanying regulations to ban construction of Underground Injection Control (UIC) wells and prohibit disposal of oil and gas wastewater into UIC wells.¹⁶

Replacement of a Contaminated Water Supply .59

.59(C)(2) and (3) The Department should remove these sections in their entirety. The very purpose behind the baseline monitoring requirements of .19 is to determine whether the contamination of a water supply predated drilling. The results of the baseline monitoring should be dispositive. These regulations should therefore not allow operators to retroactively demonstrate that the contamination predated drilling.

.59(D) Under no circumstances should these regulations allow a permittee or operator to seek reimbursement from either the landowner or any Maryland citizen for the costs of water supply replacement.

Violations of Statutory, Regulatory, or Permit Requirements .61

The Department has very limited statutory administrative and civil enforcement authority.¹⁷ The Department will need higher penalties to deter violations and pay for damages.

Conclusion

The Department's proposals to prohibit diesel use, drilling in the Chesapeake Bay, and some selected watersheds should be extended statewide. Banning drilling is the only regulation that makes oil and gas development safe. Weakening the 2015 regulations, takes Maryland in the wrong direction.

¹ Maryland Register, Volume 43, Issue 23, Monday, November 14, 2016 and Maryland Register, Volume 43, Issue 24, Monday, November 28, 2016

² Maryland Register, Volume 42, Issue 1, Friday, January 9, 2015

³ See generally CITIZEN ENFORCEMENT OF ENVIRONMENTAL LAWS by David Altman, Amy M. Hartford, and Justin D. Newman. Standard citizen suit provisions include the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §6972; the Clean Air Act (“CAA”), 42 U.S.C. §7604; and the Clean Water Act (“CWA”), 33 U.S.C. §1365.

⁴ The 2015 regulations called the CDP a Comprehensive Gas Development Plan or CGDP.

⁵ Maryland has incorporated the federal exemption in to state regulations. COMAR 26.13.02.04-1(A)(5)

⁶ 4 COMAR 26.13.03.02

⁷ If the Hazardous Waste Determination reveals that the wastewater exhibits any of the characteristics identified in COMAR 26.13.02.10—14, then all requirements of Title 26 Subtitle 13 Chapter 3 should apply.

⁸ 7 US Environmental Protection Agency. “Regulatory Determination for Oil and Gas and Geothermal Exploration, Development, and Production Wastes.” Federal Register, Volume 53, 1988.

⁹ 8 Marcellus Shale Safe Drilling Initiative Study, Draft Partial Response to Comments On Draft Best Practices Report, April 2014, Classification of wastes under the Resource Conservation and Recovery Act (RCRA)

¹⁰ T. Hayes. Sampling and Analysis of Water Streams Associated with the Development of Marcellus Shale Gas, Gas Technology Institute, report prepared for the Marcellus Shale Coalition. December 2009.

¹¹ Claudia Zagrean Nagy, California Dep’t of Toxic Substances Control, Oil, Exploration and Production Wastes Initiative (2002) at 36

¹² U.S. Dep’t of Labor, Occupational Safety and Health Admin., Potential Flammability Hazard Associated with Bulk Transportation of Oilfield Exploration and Production (E&P) Waste Liquids, SHIB 03-24-2008. It is possible also that this incident might meet the RCRA standard for reactivity

¹³ Earthworks Oil & Gas Accountability Project, Spring/Summer 2006 Report

¹⁴ Janice Crompton, Residents Reported Gas Odors Before Explosion, Pittsburg Post-Gazette, Apr. 1, 2010 at B-1

¹⁵ Please see EPA-HQ-OW-2015-0665

¹⁶ Ibid.

¹⁷ See proposed .61(A). The Department should support legislation to improve enforcement and raise fees, fines, and penalties.