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COMMENTS ON PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION'S PROPOSAL TO ADD 25 PA. CODE CHAPTER 78A, UNCONVENTIONAL WELLS

May 19, 2015

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Department of Environmental Protection
Policy Office
400 Market Street
P. O. Box 2063
Harrisburg, PA 17105-2063

Re: Comments on Proposed 25 PA.CODE CH. 78a, Unconventional Wells [45 Pa.B. 1615]

To Whom It May Concern:

Noble Energy, Inc. appreciates the opportunity to submit the following comments in response to Proposed 25 Pa. Code Chapter 78a, Unconventional Wells, which would govern the development and operation of wells producing natural gas from the Marcellus Shale formation. We also support in general the comments made by the Marcellus Shale Coalition and the oil and gas trade associations that have submitted comments on behalf of the industry.

Noble Energy, Inc. (Noble) is a leading independent energy company engaged in worldwide oil and gas exploration and production. We operate primarily in the Appalachian Basin, Rocky Mountains, and deepwater Gulf of Mexico areas in the United States, with key international operations offshore Israel and West Africa.

Noble has nine general suggestions regarding the Pennsylvania Department of Environmental Protection's proposed adoption of 25 Pa. Code Chapter 78a: (1) the proposed regulations need to better address important characteristics of unconventional well development; (2) they should be more performance oriented and less prescriptive to maximize their efficiency; (3) they should create a more streamlined process with fewer individual submittals and approvals; (4) they should provide additional opportunities for variances to improve efficiency; (5) they should treat unconventional development more equitably to maintain a level playing field; (6) they should be more internally consistent to avoid unintended consequences and counterproductive results; (7) they should make more use of policies, pilot programs, and other regulatory tools for emerging issues; (8) more attention should be devoted to their implementation, including the phasing of certain requirements; and lastly (9) rules should be cost effective, provide *tangible* public or environmental value, and further green practices where appropriate. This list is not exhaustive, but is intended to highlight major issues that have received insufficient attention to date and are critical to the success of the Department's regulatory program. Noble's suggestions are based upon its experience in other states as well as Pennsylvania and are supported by a variety of government directives and guidance documents.

From a regulatory standpoint, these nine issues can create a host of problems for the Department and operators alike. For example:

- unconventional well development typically involves large capital costs, expansive drilling and completion programs, and changing practices, all

of which increase the need for a timely and predictable approval process and a flexible and efficient regulatory program;

- the prescriptive nature of many of the proposed environmental and waste management regulations may discourage operators from seeking superior solutions, slow the adoption of new practices and technologies, and foster frustration and resistance;

- the two dozen different submittals and approvals that could be required for each new unconventional well may delay the regulatory process and make it less predictable, generate additional costs, and distract the Department and operators from equally or more important issues;

- the limited opportunities for variances may reduce flexibility, constrain innovation, and limit the Department's ability to balance prescription and performance;

- several of the requirements will place unconventional wells at an unfair disadvantage to other types of economic activity and impose inappropriate obstacles on natural gas production;

- regulatory inconsistencies may cause confusion and frustrate the Department's and the industry's efforts to better protect the environment by increasing the recycling of waste fluids and piping more water to and from the well site;

- other proposed regulations convert current preferences and initial strategies into one-size-fits-all mandates, which may be difficult to change in response to changing circumstances and additional information;

- insufficient attention to implementation can undermine compliance, create confusion, and lead to unnecessary disruption; and

- requirements that increase an operator's risk, cost, or potential for delay but provide no material public or environmental value can significantly decrease the competitiveness of Pennsylvania's oil and gas resources.

These problems are exacerbated by the low natural gas prices that exist today, which are almost 40% below what they were when development of this rulemaking began in 2011 and more than 70% below what they were during the first half of 2008. These low prices create an even greater need for thoughtful and efficient regulations operations. Noble's suggestions are intended to improve the proposed regulations to better meet this need and are further discussed below.

Important Characteristics.

The Department's Advance Notice of Rulemaking notes that "unconventional well development involves larger well sites and centralized storage facilities, mobile wastewater processing, large volumes of water for hydraulic fracturing activities and new pipeline systems." While generally accurate, this statement is

incomplete. Unconventional development also involves large capital costs due to the depth of target formations like the Marcellus Shale and the long horizontal laterals and multi-stage hydraulic fracturing treatments that are required. For example, a 2011 study by the University of Pittsburgh found that the direct cost of a single new Marcellus Shale gas well exceeds $7.6 million, which means that one new multi-well pad could cost tens of millions of dollars. Unconventional development also typically involves extensive drilling and completion programs as reflected by the thousands of Marcellus Shale wells that have been drilled in Pennsylvania, West Virginia, and Ohio during the past decade. Finally, unconventional development involves frequent changes in technologies, practices, and methods. As the Department of Energy ("DOE") recently explained in Modern Shale Gas Development in the United States: an Update, the practices used to develop shale gas "are constantly evolving" as "operators gain experience, new technologies are invented, old technologies are refined, service company innovations are invented, and the economic drivers of well costs and production values rise and fall."

An effective regulatory program for unconventional wells needs to thoughtfully address these three characteristics. The large capital costs involved in unconventional development requires an approval process that is reliable and predictable. The expansive scale of the drilling and completion programs requires a program that is efficient and timely. And the frequent use of new technologies and practices requires a process that is flexible and performance oriented. As explained below, many of the proposed regulations do not meet these requirements, and their adoption would therefore not serve the public interest. This is a critical deficiency given the acknowledged importance of unconventional development for the Commonwealth and the nation. As the Department of Energy has noted, "[t]he unconventional has become the conventional" because it accounts for such a large percentage of current natural gas production.

Performance Oriented.

There is widespread agreement that, to the extent feasible, regulations and standards should be performance oriented rather than prescriptive. As the Department's Policy for Development, Approval and Distribution of Regulations explains: "To the extent possible, regulations should focus on achieving the desired level of environmental performance. Maximum flexibility to achieve the desired outcome should be encouraged rather than prescribing specific technologies or equipment." At the federal level, this approach is mandated by Executive Orders 13563 and 12866 ("to the extent feasible, specify performance objectives"); at the state level, it is reflected in the Interstate Oil & Gas Compact Commission's Adverse Impact Reduction Handbook ("individual approaches must be tailored to local or regional circumstances"); and at the international level it is touted in the International Energy Agency's Golden Rules Report ("performance-based regulation can work better in many areas, particularly for an industry in which technology is changing quickly"). As these authorities recognize, performance-oriented regulation can encourage efficiency and creativity and generate more win-win solutions. It can also maximize flexibility, facilitate lower cost solutions, respond better to market circumstances, and reduce resistance and resentment. This is particularly important for unconventional oil and gas development, where strategies for protecting the environment and minimizing impacts are constantly evolving as illustrated by recent advances in pit-less drilling, green completions, fluid recycling, and facility consolidation. It is also consistent with the Department's primary goal for this rulemaking, which is "to ensure that oil and gas operators employ effective measures that prevent pollution, while allowing flexibility for the optimal development of this natural resource."

Although some of the proposed regulations are performance oriented, others impose extremely detailed and specific requirements and mandate particular actions and equipment. Examples of these regulations include proposed sections 78a.57a (centralized tank storage), 78a.59a (impoundment embankments), 78a.59b (freshwater impoundments), 78a.64a (secondary containment), 78a.68 (gathering lines), and

78a.68b (well development pipelines). In addition to imposing unnecessarily specific requirements, some of these revisions may have unintended and counterproductive consequences as described below under Consistency. Modifying these regulations to make them more performance oriented would benefit all parties.

Streamlining.

Streamlining the approval process can likewise increase efficiency and reduce resistance and resentment. It can also avoid unnecessary delay, decrease costs, and allow operator and agency personnel to devote more attention to important issues. This, too, is particularly important for unconventional oil and gas development, for which a timely and reliable regulatory process is vital because of the multi-million-dollar investments and extensive drilling and completion programs required. In its 2013 follow-up review of Pennsylvania's regulatory program, the State Review of Oil and Natural Gas Environmental Regulations, Inc. ("STRONGER") recommends that the Department "consider developing a streamlined permitting process." This is consistent with STRONGER's current guidelines, which provide that similar requirements of multiple agencies should "be combined where feasible" and that the permitting process should "involve prompt consideration and response to applications." It is also consistent with Executive Order 13563, which directs federal agencies to promote the "coordination, simplification, and harmonization" of regulatory requirements.

Proposed Chapter 78a will require operators to submit up to two dozen different applications, demonstrations, notices, plans, registrations, reports, requests, and other documents for each new unconventional well. Larger operators such as Noble often have six to twelve wells on a single pad which translates to a significant number of submittals, many of which are duplicative, inconsistent, or provide no measurable public or environmental benefit. For example, section 78a.15 (application requirements) would mandate consultation with various public resource agencies require the submittal of entire mitigation plans rather than a simple verification of consultation, section 78a.41 (noise mitigation) would require submittal of a noise mitigation plan regardless of potential to impact, section 78a.52a (area of review) would require reporting on nearby active, inactive, orphaned, and abandoned wells with limited ability for operators to verify information, section 78a.55 (control and disposal planning) would necessitate filing a preparedness, prevention, and contingency plan, section 78a.56 (temporary storage) would require approval for modular aboveground storage and then notification for installation of those tanks the department just approved for siting, section 78a.57 (control, storage and disposal of production fluids) would mandate approval for brine storage and limits storage options needed for a water recycling program, section 78.57a (centralized tank storage) would necessitate a residual waste permit for centralized tank storage for reused water under an authority that does not consider reused water a residual waste , section 78a.58 (onsite processing) would require approval for onsite fluid processing, section 78a.59 (freshwater impoundments) would mandate registration for freshwater impoundments which pose little to no environmental risk, 78a.61 (disposal of drill cuttings) would necessitate notice before disposal of drill cuttings, section 78a.65 (site restoration) would require submittal of various restoration plans and then reports on the same activity, and section 78a.69 (water management plans) would mandate submittal of a water management plan and then subsequent quarterly reports.

The number and variety of these submittals and approvals will increase regulatory compliance costs, delay project approvals, and make the entire process more unpredictable and contentious. To avoid these results, the Department should develop a streamlined and consolidated approval process, which is more timely and predictable and focuses on provisions that maintain or improve public or environmental protection in a meaningful way. The Department should also eliminate, consolidate, and simplify reporting and notification requirements and consider using general permits rather than individual approvals and programmatic documents rather than individual submittals. These changes would better

align Chapter 78a with the Department's Policy for Development, Approval and Distribution of Regulations, which directs that regulations should be drafted "to reduce paperwork, minimize administrative burdens, and save time for both the regulated community and agency staff."

Variances.

Variances can enable operators to use new technologies and practices, which are more efficient and effective than what is prescribed by regulation. This can promote creativity and problem solving, avoid delay, and reduce costs, while still providing equivalent protection for the environment. An appropriate variance process can also create additional flexibility and make a prescriptive regulatory program more performance oriented. This too is particularly important for unconventional oil and gas development. Shale gas development practices "are constantly evolving" and frequently reflect new and refined technologies and new innovations and inventions as noted by the DOE. That is presumably why the recent follow-up review by STRONGER notes that "the state program should have some flexibility" and recommends that the Department "clarify conditions under which variances will be considered." The current STRONGER guidelines similarly explain that "in order to accommodate regional, area-wide, or individual differences within a state, it is appropriate for site-specific waivers or variances to be allowed for good cause shown."

The Department has included several variance provisions in proposed Chapter 78a, including in section 78a.57a (centralized tank storage), section 78a.59a (impoundment embankments), and section 78a.63a (alternative waste management). These variance provisions are vital and should be retained in the final regulations for the reasons stated. In addition, the Department should incorporate similar variance language in section 78a.52a (area of review), section 78a.64a (containment systems and practices), section 78a.65 (site restoration), and section 78a.67 (borrow pits). Adding variance language to these sections would make them more performance oriented and make the regulatory process more efficient, which is consistent with the Department's desire to allow "flexibility for the optimal development of this natural resource."

Level Playing Field.

Regulatory programs should be fair and equitable and create a level playing field, and to this end they should be clear and comprehensible. They should not impose disparate requirements or disproportionate costs on one particular economic or extractive sector. Nor should they create unnecessary risk and uncertainty for the regulated community. The Policy for Development, Approval and Distribution of Regulations states that regulations should have "clear, concise" language and should be drafted "with the goal of minimizing the potential for uncertainty and misinterpretation." These concepts of fairness and clarity are particularly important for natural gas development, which involves a commodity that is widely used and provides important economic and public benefits to the Commonwealth and the nation. As President Obama's All-of-the-Above Energy Strategy recognizes, natural gas "is comparatively cleaner than many other sources of energy" and "already plays a central role in the transition to a clean energy future," while also helping to expand the economy and increase employment.

Proposed Chapter 78a imposes requirements on unconventional well development that are disparate, disproportionate, inequitable, and vague. As a general matter, the extensive and elaborate specifications will increase costs and consume resources, while the excessive number of regulatory submittals and approvals will imperil schedules and budgets. This will put unconventional wells at a disadvantage. In addition, a number of proposed regulations are inequitable or vague or both, including section 78a.1 (definitions), which expansively and ambiguously defines "other critical communities" to include any

"plant and animal species that are not listed as threatened or endangered" and any "significant natural features" or "significant natural communities," section 78a.15 (application requirements), which requires operators to address potential impacts to other critical communities through consultation, additional information, and mitigation and to provide a PNDI receipt and mitigation for any potential PNDI impacts, section 78a.41 (noise mitigation), which broadly and ambiguously requires operators to "minimize noise" and authorizes the Department to suspend operations anytime it believes the operator's efforts to "minimize noise" are "inadequate." These provisions should be eliminated entirely or modified to make them more clear and enable operators to compete on a level playing field.

Consistency.

Regulations should produce consistent and logical results that fulfill the agency's intentions and further the public interest. This means that rules should neither conflict with one another nor lead to counterproductive results. Rules should also be cost effective, provide tangible public or environmental value, and, where appropriate, further green practices. These principles are reflected in the Policy for Development, Approval and Distribution of Regulations, which states that the Department "should avoid promulgating regulations that are inconsistent and incompatible with its other regulations." In addition, the "costs of the regulation shall not outweigh the benefits," and regulations "should promote the utilization of new, less costly methods and technology that will maintain or improve environmental quality." Again, regulatory inconsistency and confusion are particularly problematic for unconventional well development because of the substantial investments and extensive drilling and completion programs required.

Several of the proposed regulations in Chapter 78a would violate these fundamental principles. For example, section 78a.57a would impose eight pages of new requirements on centralized tank storage sites, while section 78a.59c would prohibit the use of centralized impoundments. These new rules would create unnecessary impediments to the recycling and reuse of water by restricting or prohibiting infrastructure that is commonly used for this purpose. This is directly at odds with section 78a.69, which would require water management plans to provide for water reuse and to include a reuse plan for hydraulic fracturing fluids. It would also increase the cost of recycling and reuse and deter the use of this green technology. Similarly, section 78a.68b would impose a host of new restrictions on well development pipelines, which allow operators to reduce truck traffic by piping water to and from the well site. This could increase the cost of such pipelines and thereby deter the use of new technology that will help maintain environmental quality. Another example is section 78a.57(b), which would allow the Department to deny a centralized tank storage permit if the operator has failed to comply with any federal or state environmental statute, any law related to public health, safety or welfare, or any order or permit condition of the Department. This too unnecessarily restricts the availability of potentially cost-effective, green technology. It is also overbroad, in using *any* violation, even minor errors, as a trigger, and unfair to larger operators like Noble, who operate hundreds of wells and hold hundreds of permits. A final example involves sections 78a.65, 78a.57a, and 78a.68b, which would require restoration of the well site and any associated centralized tank storage and well development pipeline to occur within 9 months after the well is drilled, without reference to the completion of the well nor any recognition of the fundamental purpose of a centralized tank site. In the case of a multi-well site, even under an efficient operation, it would not be unusual that the last well may not be completed (i.e. hydraulically fractured) and on production by 9 months from the time the first well "completed drilling." Similarly, a centralized tank site is intended to service wells within a geographical area for multiple years as the operator develops the reservoir in order to minimize surface impacts and maximize efficiency. In both cases, requiring restoration 9 months after drilling will mostly likely increase land disturbance, reduce water reuse, and result in less efficient resource development. To avoid these problems, the Department should amend these sections to simplify the requirements for centralized tank storage, allow centralized impoundments, narrow the situations

where the Department can refuse to permit a centralized tank storage site, and tie restoration of the well site to the well completion and restoration of centralized tank storage and well development pipeline to the end of their usefulness.

Other Tools.

Agencies can draw upon a variety of regulatory tools to address new issues. In addition to enacting mandatory regulations, agencies can adopt policies, issue guidance, initiate pilot programs, offer procedural incentives, recommend best practices, and undertake various other actions to pursue their objectives. These other tools are often more flexible, surgical, and adjustable than regulations, whose modification requires formal rulemaking. For this reason, these other tools are frequently better suited than regulations for new and emerging issues, where changing circumstances and additional information may require multiple modifications to the initial regulatory strategy. This too is particularly important for unconventional oil and gas development. As the DOE has noted, shale gas development practices "are constantly evolving" and frequently reflect new technologies, innovations, and inventions.

A number of the proposed regulations in Chapter 78a appear to convert contemporary policy preferences and initial regulatory strategies into statewide mandates, which may be difficult to adjust as practices evolve and additional information becomes available. These regulations include section 78a.41 (noise), section 78a.52a (area of review), section 78a.59c (centralized impoundments), and section 78a.66 (spills). These provisions should be converted from regulations into policies, guidance, or other more flexible regulatory tools.

Implementation.

Responsible implementation of regulatory revisions is critical to achieving agency objectives, promoting industry compliance, minimizing economic disruption, and avoiding unintended consequences. Agencies need to implement major revisions in a thoughtful and deliberative manner, which may require them to phase in new requirements gradually, provide special training to staff, operators, and other stakeholders, issue guidance and interpretive documents, respond to new information, and develop and apply new metrics. Otherwise, regulatory revisions can create unnecessary confusion and conflict that harms both the regulatory program and the regulated industry. Pennsylvania Executive Order 1996-1 directs that "[c]ompliance shall be the goal of all regulations." This direction is echoed in the Policy for Development, Approval and Distribution of Regulations, which requires the Department to develop compliance assistance programs to help small businesses and to address the subject of compliance assistance in the regulatory preamble.

The Department's Advance Notice of Final Rulemaking includes no information on this subject. Prior notices issued during earlier phases of this rulemaking provided only cursory treatment of the subject. For example, the Department's Draft Notice of Proposed Rulemaking in 2013 states that the Department plans to schedule training sessions for the oil and gas industry and that the Department's field staff will provide technical assistance and field-level direction. But it does not address when the new requirements will be implemented, how the Department will ensure that they are applied consistently, what new guidance or training materials will be prepared, how the Department will address new issues that arise, or how the Department will measure its success in promoting compliance. More attention to and information on the implementation process would benefit both the Department and the industry. In addition, because of the extensive new requirements involved in Chapter 78a, the Department should consider phasing in the regulations over time.

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Noble Energy, Inc. appreciates the opportunity to comment on proposed 25 PA. Code Chapter 78a. Included with this letter, is an attachment outlining additional specific concerns including additional discussion on the sections referenced here and recommended revisions for the proposal for your review. Please feel free to contact Noble Energy Inc. should you have any questions or concerns.

Sincerely,

Kevin Hansford
EHSR Manager
Noble Energy, Inc.

Enclosure

cc: John Quigley, Acting Secretary, Department of Environmental Protection
Scott Perry, Deputy Secretary, Office of Oil and Gas Management, Department of Environmental Protection

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Noble Energy, Inc. Specific Comments and Suggested Amendatory Language for the proposed Chapter 78a Regulation

§ 78a.1 Definitions.

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Body of water **– The term as defined in § 105.1 (relating to definitions).**

The definition of "body of water" as referenced in the cited section requires clarification. Section 105.1 defines this term as "a natural or artificial lake, pond, reservoir, swamp, marsh or wetland," which could be interpreted as including such things as impoundments. Therefore it is Noble's suggestion that the language be modified to exclude artificial water bodies, such as impoundments, from the definition of a "body of water" for the purposes of Chapter 78a.

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Borrow pit—An **area of earth disturbance activity where rock, stone, gravel, sand, soil or similar material is excavated for construction of well sites, access roads or facilities that are related to oil and gas development.**

The definition of "borrow pit" as proposed would inadvertently classify all oil and gas activity locations as borrow pits, since any construction involves some level of earth disturbance. Under proposed Section 78a.67, this would subject such locations to a variety of additional and unnecessary obligations, including permitting and bonding obligations under other applicable laws. To correct this problem, Noble supports the Marcellus Shale Coalitions (MSC)'s suggested definition below:

> ***"Borrow pit*** **– An area of earth disturbance activity where rock, stone, gravel, sand, soil, or similar material mix excavated for construction of well sites, access roads or facilities that are related to oil and gas development. This definition does not include specific well sites or activities otherwise permitted by the Department under the Oil and Gas Act."**

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BUILDING **– AN OCCUPIED STRUCTURE WITH WALLS AND ROOF WITHIN WHICH PERSONS LIVE OR CUSTOMARILY WORK.**

Noble seeks clarification that the Department does not intend to include temporary structures in this definition of "building."

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FLOODPLAIN **– THE AREA INUNDATED BY THE 100-YEAR FLOOD AS IDENTIFIED ON MAPS AND FLOOD INSURANCE STUDIES PROVIDED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, OR IN THE ABSENCE OF SUCH MAPS OR STUDIES OR ANY EVIDENCE TO THE CONTRARY, THE AREA WITHIN 100 FEET MEASURED HORIZONTALLY FROM THE TOP OF THE BANK OF A PERENNIAL STREAM OR 50 FEET FROM THE TOP OF THE BANK OF AN INTERMITTENT STREAM.**

Consistency in terminology is a key principle of good regulation. Inconsistencies make interpretation difficult and create risk, confusion, and undue burdens for both the regulated community and the agency, and this is particularly problematic for unconventional wells given the cost of development and scale of activity. They also increase the risk of unintended and counterproductive results. For this reason, Noble suggests striking this definition of "floodplain" and instead incorporating by reference the definition utilized in Chapter 105. If retained, Noble requests that the Department clarify what will qualify as "any evidence to the contrary."

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***Freeboard*–The vertical distance between the surface of an impounded or contained fluid and the lowest point or opening on a lined pit edge or open top storage structure.**

For consistency, Noble suggests that the phrase "lined impoundment edge" be listed after "lined pit edge" in this definition of freeboard.

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***Gathering Pipeline*—A pipeline that transports oil, liquid hydrocarbons or natural gas from individual wells to an intrastate or interstate transmission pipeline.**

Although proposed section 78a.68(h) subjects gathering pipelines to certain federal requirements, this definition does not account for the federal definition of, or jurisdictional guidance on, this term. Therefore, in order to avoid inconsistencies between state and federal definitions, Noble recommends the proposed definition be stricken and replaced by a reference to the definition in 49 CFR § 192.3 and the jurisdictional guidance for gathering lines in 49 CFR § 192.8. This too is consistent with how the term is defined in Act 13, Section 3218.5 and will promote regulatory consistency.

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***Mine influenced water* –Water in a mine pool or a surface discharge of water caused by mining activities that pollutes, or may create a threat of pollution to waters of the Commonwealth. The term may also include surface waters that have been impaired by pollutional mine drainage as determined by the Department.**

Noble is concerned that this definition gives the Department the ability to determine that any surface waters impaired by mine drainage are mine influenced water, without any criteria or standards. Given the breadth of the Department's list of waters impaired by mine drainage, this definition would include many surface waters throughout the Commonwealth. For example, this would include sections of major rivers such as the Allegheny, Monongahela, Youghiogheny and West Branch of the Susquehanna, and their tributaries, some of which are widely used for public water supplies. It is inappropriate to subject the storage and use of such a broad universe of waters to these special approval requirements, particularly as they are routinely used by other industries without comparable requirements. Additionally, the significance has been magnified by the amendment to Section 78a.58(a) which would potentially require special permission in order to blend water from the above-mentioned rivers with other water before using the mixture to hydraulically fracture a well. This definition fails to establish a cogent regulatory standard that informs the industry which waters are subject to these requirements, but rather authorizes arbitrary

determinations by the Department disparately for one industry. As such, Noble supports the MSC's suggested amendatory language:

> **"*Mine influenced water*—Water contained in a mine pool, or a surface discharge of water caused by mining activities that pollutes, or may create a threat of pollution to, waters of the Commonwealth."**

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***OTHER CRITICAL COMMUNITIES*–THE TERM SHALL MEAN:**

(1) PLANT AND ANIMAL SPECIES THAT ARE NOT LISTED AS THREATENED OR ENDANGERED BY A PUBLIC RESOURCE AGENCY, INCLUDING:

(i) PLANT AND ANIMAL SPECIES THAT ARE CLASSIFIED AS RARE, TENTATIVELY UNDETERMINED OR CANDIDATE,

(ii) TAXA OF CONSERVATION CONCERN,

(iii)SPECIAL CONCERN PLANT POPULATIONS.

(2) THE SPECIFIC AREAS WITHIN THE GEOGRAPHICAL AREA OCCUPIED BY A THREATED OR ENDANGERED SPECIES DESIGNATED IN ACCORDANCE WITH THE ENDANGERED SPECIES ACT OF 1973, 16 U.S.C. §§ 1531 ET SEQ., THAT EXHIBIT THOSE PHYSICAL AND BIOLOGICAL FEATURES ESSENTIAL TO THE CONSERVATION OF THE SPECIES AND WHICH MAY REQUIRE SPECIAL CONSIDERATION OR PROTECTIONS; AND

(3) SIGNIFICANT NON-SPECIES RESOURCES, INCLUDING UNIQUE GEOLOGICAL FEATURES; SIGNIFICANT NATURAL FEATURES OR SIGNIFICANT NATURAL COMMUNITIES.

Noble has significant concern that the definition of "Other Critical Communities" is overly broad and ambiguous and would create significant uncertainty, work, and costs for oil and gas operations in the state of Pennsylvania.

Paragraph (1) of the definition provides that **any** plant, animal, or groups of plants and/or animals that are currently not listed as threatened or endangered by a public resource agency could be considered *Critical Communities*, which means that the definition would encompass most plants and animals including all common species. Although subparagraphs (i), (ii), and (iii) list several examples of plants and animals that would apparently constitute *Critical Communities*, this list is not exclusive but only illustrative. Further, paragraph (1) is entirely open-ended and provides no guidance on when, how, by what criteria, or by whom additional species will be identified as *Critical Communities*. It could also extend Federal Endangered Species Act (ESA)-type protections to untold numbers of species that are not ESA listed. The definition then goes on to include in paragraph (2) areas that appear to constitute critical habitat, as the language closely mirrors the definition of critical habitat provided by ESA. However, paragraph (3) of the definition adds the ambiguous concept of "significant non-species resources," which

includes an equally vague reference to "significant natural communities." This could conceivably encompass areas that exhibit features similar to critical habitat, but may not actually be designated critical habitat, or even be historical range of the species in question, whether or not such species has any sort of protections under the ESA. Again, paragraph (3) fails to explain when, how, by what criteria, or by whom these "non-species resources" determinations will be made.

Defining *Other Critical Communities* to encompass a nearly limitless, virtually undefined, and highly subjective combination of plants, animals, habitat, and habitat features creates unnecessary and significant uncertainty. Additionally, it will create delays related to jurisdictional, regulatory and permitting pathways as it will substantially expand the number of permit applicants requiring consult with the respective wildlife and natural resource agencies. These agencies are already struggling under limited resources to achieve their conservation goals, whereas this process would add significant additional workload for this non-specific category of "communities" which have not been found to warrant an endangered or threatened species protection.

Specific to the obligatory use of the Pennsylvania Natural Diversity Inventory Environmental Review Tool (PNDI) during the permitting process, the potential for uncertainty and unnecessary costs and confusion is exacerbated by the increased potential for PNDI "hits" related to the broad definition of *Other Critical Communities*. Determining applicable jurisdictional, regulatory and permitting pathways related to plant and animal species classification (rare, special concern) and "non-species resources" is further confused by a lack of defined process of determination, thus creating additional uncertainty involving avoidance and mitigation measures. Since the definition of *Other Critical Communities* excludes plant and animal species that are listed as threatened and endangered, uncertainly surrounds what such a species listing would mean if the species was previously defined as *Other Critical Communities.* Lastly, PA Code Chapter 102 already provides requirements for a PNDI review for the presence of a State or Federal threatened or endangered species on the project site and for "Rare and Significant Ecological Features," thus these provisions in Chapter 78a are duplicative and unnecessary.

Finally, the Department has not provided an adequate statement of need or estimate of cost to the regulated community pursuant to the requirements of Pennsylvania's Regulatory Review Act. This Advanced Notice of Final Rulemaking (ANFR) is not a substitute for fulfilling the formal steps of the Regulatory Review Act or the accompanying requirements imposed on the promulgating agency. Accordingly the Department should not proceed to finalize the definition of "other critical communities", but should withdraw the definition and proceed with a separate proposed rulemaking in order to fully and properly comply with the RRA.

Fundamentally, the Department's authority to regulate the potential impact on public resources derives from § 3215(c) of Act 13 of 2012 (which does not define the term "other critical communities"). In fact, the term "other critical communities" is used in that subsection and nowhere else in Act 13, nor is it used in any other statute relied upon as authority for these regulations. However, in the Robinson Township decision (Robinson Twp. et al v. Commonwealth, 83 A.3d 901 (PA 2013)) the Supreme Court enjoined the application of § 3215(c). Accordingly, the Department lacks the authority to regulate with regard to "other critical communities" specifically and lacks the legal authority to implement § 3215(c) in its entirety. Section 78a.15(f) should be stricken.

To avoid unnecessary uncertainty, project delays and increased costs, it is recommended that PNDI identify and map only federal and state threatened and endangered plant and animal species and associated critical habitats, and that the definition of *Other Critical Communities* be removed from the proposed rules. This will help applicants with identifying jurisdictional, regulatory and permitting

pathways, and reduce the potential burden on the Department and other agencies. In addition, a clear PNDI designation will help will project planning regarding avoidance and mitigation measures, thus benefiting threatened and endangered species and the environment generally.

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PUBLIC RESOURCE AGENCY **— AN ENTITY RESPONSIBLE FOR MANAGING A PUBLIC RESOURCE INCLUDING, PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, PENNSYLVANIA FISH AND BOAT COMMISSION, PENNSYLVANIA GAME COMMISSION, UNITED STATES FISH AND WILDLIFE SERVICE, WATER PURVEYORS, MUNICIPALITIES, AND SCHOOL DISTRICTS.**

Noble is concerned that the specific role of a public resource agency is not clearly defined nor has the Department performed a Regulatory Impact Analysis. The definition should be limited to agencies with legal authority to regulate public resources. Including water purveyors, municipalities, and school districts within the list of public resource agencies that would have authorities and responsibilities within 78a.15 to review and condition oil and gas permits causes significant concern. For example, the term "water purveyor" includes not only public utilities or other public entities, but also many private companies or organizations that provide drinking water to a sufficient number of individuals (25 or more individuals for 60 or more days per year) or via 15 service connections. Classifying private entities as "public resource agencies" with the associated roles and responsibilities outlined in 78a.15 is inappropriate, particularly without any associated Regulatory Impact Analysis of the consequences.

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Pit—A **natural topographic depression, manmade excavation or diked area formed primarily of earthen materials designed to hold fluids, semifluids or solids [~~associated with oil and gas activities, including, but not limited to, fresh water, wastewater, flowback, mine influenced water, drilling mud and drill cuttings, that services a single well site~~].**

This definition of "pit" is inconsistent with the definition outlined in Chapter 78 for Conventional Oil and Gas Wells. Under Chapter 78, the definition includes the language that is excluded from this Chapter 78a definition. Consistency in definitions is critical in a regulatory program. A pit serves similar purposes regardless of drilling method or target formation and should be defined in the same manner. To avoid unintended confusion and maintain a level playing field, Noble suggests that the agency restore the stricken language and define a pit the same for conventional and unconventional operations. Consistent with its comments above on the definition of "body of water," Noble further suggests the definition of pit be modified to clarify that a "pit" is not considered a "body of water" for the purposes of Chapter 78a.

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[~~*Pre-wetting—Mixing* brine with antiskid material prior to roadway application.~~]

Chapter 78 for Conventional Wells includes the definition of "pre-wetting" which has been stricken from Chapter 78a. Consistency in definitions is critical in a regulatory program. The practice of pre-wetting is the same regardless of drilling method and should be defined in the same manner. Noble suggests that the agency restore the stricken language.

***

Regulated substance—Any **substance defined as a regulated substance in section 103 of The Pennsylvania Land Recycling and Environmental Remediation Act (Act 2) (35 P.S. § 6020.103).**

This definition in Act 2 was developed to assist those conducting cleanup operations at brownfield sites throughout the Commonwealth. The definition, which includes substances "covered by" six other named statutes, is overly broad for purposes of Chapter 78a and fails to provide the necessary guidance for the reporting obligations under proposed Section § 78a.66(b). At a minimum, the definition should be further clarified by reference to some known list of substances, such as those found in Chapter 250. Noble supports MSC's suggested amendatory language:

> **"Regulated substance—Any substance defined as a regulated substance in section 103 of Act 2 (35 P.S. §6020.103) and listed in 25 Pa. Code Chapter 250."**

***

Seasonal high groundwater table—The **saturated condition in the soil profile during certain periods of the year. The condition can be caused by a slowly permeable layer within the soil profile and is commonly indicated by the presence of soil mottling.**

It should be clear that perched water is not included in the definition of a "seasonal high groundwater table." Perched water is typically situated atop some sort of restrictive layer and separated from the water table. It sits above the water table in the unsaturated zone, as opposed to the saturated zone, and thus should not be included in the definition of seasonal high groundwater table. Noble suggests adding language identical to the clarification in the definition for "Regional groundwater table," which is included below.

> **ii) The term does not include the perched water table or the seasonal high groundwater table.**

***

Stormwater—Runoff **from precipitation, snowmelt, surface runoff and drainage.**

Noble has concerns that this definition is overly broad and could encompass more than is intended or appropriate for oil and gas operations. For example, this definition may be interpreted to capture "runoff from drainage," unrelated to a precipitation event, which would then trigger a myriad of regulatory applications and legal uncertainties. As previously noted, consistency in definitions is critical to avoid regulatory confusion and conflict and unintended consequences. As such, Noble recommends the Department incorporate the existing definition of "storm water" in Pennsylvania's Storm Water Management Act P.L. 864, No. 167, which reads as follows:

> **"Storm water." Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.**

***

~~*[Temporary]*~~ ***WELL DEVELOPMENT*** ***pipelines—Pipelines*** **used for oil and gas operations that:**

(i) Transport materials used for the drilling or hydraulic fracture stimulation, or both, of a well and the residual waste generated as a result of the activities.
(ii) Lose functionality after the well site it serviced has been restored under § 78a.65 (related to site restoration).

This definition should clarify whether both conditions (i) and (ii) must be met for a pipeline to constitute a "well development pipeline" or whether only one condition must be met for this purpose." Additionally, the removal of the reference to temporary lines makes it unclear whether the Department intends to capture buried water lines within this definition. Like other operators in the region, Noble has invested millions of dollars to develop extensive water infrastructure in order to maximize water reuse, minimize truck traffic, and reduce impacts to nearby communities. The use of buried infrastructure provides increased resilience against the risk of leakage due to weather (freezing and thawing) or vandalism and decreased truck traffic reduces noise, air emissions, and impacts on the surrounding community. To prohibit or restrict this practice could potentially increase negative impacts on communities and the environment. Noble therefore requests that the Department limit this definition to only those lines that meet both conditions listed as (i) and (ii) and specifically exclude buried pipelines that transport water from the well site. Noble supports MSC's suggested amendatory language:

> **"Well Development pipelines—Pipeline that is part of oil and gas operations and that:**
>
> **(1) transport materials used for the drilling or hydraulic fracture stimulation, or both, of a well and the residual waste generated as a result of those activities; and**
>
> **(2) lose its functionality after the well site it serviced has been restored under § 78a.65 (related to restoration).**
>
> **The term does not include those portions of pipelines that are located within the boundaries of unconventional well sites subject to the containment system requirements of § 78a.64a."**

***

Water source-
(i) Any of the following:
(A) Waters of the Commonwealth.
(B) A source of water supply used by a water purveyor.
(C) Mine pools and discharges.
(D) Any other waters that are used for drilling or completing a well in an unconventional formation.
(ii) The term does not include flowback or production waters or other fluids:
(A) Which are used for drilling or completing a well in an unconventional formation.
(B) Which do not discharge into waters of the Commonwealth.

Noble is concerned that elements of this definition contradict one another. Specifically, the definition states in (i) that any waters used for drilling or completing a well are considered a water source, but then under (ii) it excludes flowback or produced water from that definition. The industry has been consistently encouraged by the public and the state to do whatever practicable to minimize competition for water and reduce waste. As such, the use of flowback or produced water for completing a well has become a common practice and is legitimately considered a "water source." Noble therefore requests that the Department eliminate the contradiction and strike (ii) from this definition.

***

***WATERCOURSE*—THE TERM AS DEFINED IN § 105.1.**

While Noble supports consistency in terminology among regulatory programs, we are concerned that the in this context the definition is overly broad and would create unintended consequences of substantial burden on the industry. For example, under this definition, channels and diversion ditches around a farmer's field or farm road would be considered to be a "watercourse" and subject industry to a myriad of protection requirements. This application would be inappropriate and unduly burdensome. As such, Noble recommends the proposed definition be deleted.

***

[§78a.15 Application Requirements.]

Noble is concerned that this section creates an open-ended process, which lacks clear standards for implementation, and does not properly balance the cost of permit conditions to protect public resources against the benefits of these provisions. Noble concurs with MSC comments on this section and believes that the cost of consultation and mitigation will be orders of magnitude higher than the Department estimates and must be reconsidered.

***

§ 78a.15 (b.1) IF THE PROPOSED LIMIT OF DISTURBANCE OF THE WELL SITE IS WITHIN 100 FEET MEASURED HORIZONTALLY FROM ANY WATERCOURSE OR BODY OF WATER EXCEPT WETLANDS SMALLER THAN ONE ACRE THAT ARE NOT EXCEPTIONAL VALUE, THE APPLICANT SHALL DEMONSTRATE THAT THE WELL SITE LOCATION WILL PROTECT THOSE WATERCOURSES OR BODIES OF WATER. THE APPLICANT MAY RELY UPON OTHER PLANS DEVELOPED UNDER THIS CHAPTER OR PERMITS OBTAINED FROM THE DEPARTMENT TO MAKE THIS DEMONSTRATION, INCLUDING:

(1) AN EROSION AND SEDIMENT CONTROL PLAN OR PERMIT CONSISTENT WITH CHAPTER 102 (RELATING TO EROSION AND SEDIMENT CONTROL).

(2) A WATER OBSTRUCTION AND ENCROACHMENT PERMIT ISSUED PURSUANT TO CHAPTER 105 (RELATING TO DAM SAFETY AND WATERWAY MANAGEMENT).

(3) APPLICABLE PORTIONS OF THE PPC PLAN PREPARED IN ACCORDANCE WITH § 78a.55(a)-(b).

(4) APPLICABLE PORTIONS OF THE EMERGENCY RESPONSE PLAN PREPARED IN ACCORDANCE WITH § 78a.55(i), AND

(5) APPLICABLE PORTIONS OF SITE CONTAINMENT PLAN PREPARED IN ACCORDANCE WITH 58 Pa.C.S. § 3218.2 (RELATING TO CONTAINMENT FOR UNCONVENTIONAL WELLS).

Noble seeks clarification of what will constitute a satisfactory demonstration by the applicant that the requisite watercourse protection will be provided. Noble suggests that is should be sufficient if the applicant identifies appropriate erosion and sediment controls as addressed in the current version of the Erosion and Sedimentation Control Manual, which is adopted in Chapter 102 permitting.

***

§ 78a.15(b.2)(d) **~~[The applicant shall provide proof of consultation with the Pennsylvania Natural Heritage Program (PNHP) regarding the presence of a State or Federal threatened or endangered species where the proposed well site or access road is located. If the Department determines, based on PNHP data or other sources, that the proposed well site or access road may adversely impact the species or critical habitat, the applicant shall consult with the Department to avoid or prevent the impact. If the impact cannot be avoided or prevented, the applicant shall demonstrate how the impacts will be minimized in accordance with State and Federal laws pertaining to the protection of threatened or endangered flora and fauna and their habitat.]~~** **THE APPLICANT SHALL DEMONSTRATE THAT THE PROPOSED WELL, WELL SITE OR ACCESS ROAD WILL NOT IMPACT THREATENED OR ENDANGERED SPECIES BY SUBMITTING A PNDI RECEIPT TO THE DEPARTMENT. IF ANY POTENTIAL IMPACT IS IDENTIFIED IN THE PNDI RECEIPT TO THREATENED OR ENDANGERED SPECIES, THE APPLICANT SHALL DEMONSTRATE HOW THE IMPACT WILL BE AVOIDED OR MINIMIZED AND MITIGATED IN ACCORDANCE WITH STATE AND FEDERAL LAWS PERTAINING TO THE PROTECTION OF THREATENED OR ENDANGERED SPECIES TO THE SATISFACTION OF THE APPLICABLE PUBLIC RESOURCE AGENCY. THE APPLICANT SHALL PROVIDE WRITTEN DOCUMENTATION TO THE DEPARTMENT SUPPORTING THIS DEMONSTRATION, INCLUDING ANY AVOIDANCE/MITIGATION PLAN, CLEARANCE LETTER, DETERMINATION OR OTHER CORRESPONDENCE RESOLVING THE POTENTIAL SPECIES IMPACT WITH THE APPLICABLE PUBLIC RESOURCE AGENCY.**

The provisions outlined in this section are already regulated under 25 PA Code, Chapters 102 and 105. Adding these requirements into Chapter 78a is duplicative and unnecessary. Additionally, should a PNDI receipt indicate potential impact to a threatened or endangered species, the respective wildlife agency approval letter should suffice in lieu of submitting a minimization, avoidance, or mitigation plan to this Department. This Department does not have the qualified expertise nor the statutory authority to judge the merits of such a plan. For the purpose of this section, a verification of an approved plan from the appropriate wildlife or natural resource agency is all that is warranted. As such, Noble recommends modifications to this subsection in order to eliminate redundancy and clarify the obligation of applicants:

> **"(d) The applicant shall utilize the Pennsylvania Natural Diversity Inventory (PNDI) to identify the presence or absence of a State or Federal threatened or endangered species where the proposed well site or access road is located and shall provide proof of notification, consultation and, if found warranted, a mitigation plan with the applicable resource agency regarding the screening for the presence of such species and their critical habitat in the well permit application. An applicant's submission of proof of notification, consultation and where appropriate a mitigation plan concludes the information required to be submitted to the Department pursuant to subsection (b)."**

***

§ 78a.15(b.2) (f) An applicant proposing to CONSTRUCT A WELL SITE ~~[drill a well]~~ at a location THAT MAY IMPACT A PUBLIC RESOURCE AS PROVIDED ~~[listed]~~ in paragraph (1) shall notify the applicable PUBLIC resource agency, if any, in accordance with paragraph (2). THE APPLICANT SHALL ALSO and provide the information in paragraph (3) to the Department in the well permit application.

(1) This subsection applies if the proposed ~~[surface location]~~ LIMIT OF DISTURBANCE of the well SITE is located:

(i) In or within 200 feet of a publicly owned park, forest, game land or wildlife area.

(ii) In or within the corridor of a State or National scenic river.

(iii) Within 200 feet of a National natural landmark.

(iv) In a location that will impact other critical communities. ~~[For the purposes of this section, other critical communities means special concern species.]~~

(v) Within 200 feet of a historical or archeological site listed on the Federal or State list of historic places.

(vi) ~~[In the case of an unconventional well, w]~~ Within 1,000 feet of a water well, surface water intake, reservoir or other water supply extraction point used by a water purveyor.

(vii) WITHIN 200 FEET OF COMMON AREAS ON A SCHOOL'S PROPERTY OR A PLAYGROUND.

(viii) WITHIN AN AREA DESIGNATED AS A WELLHEAD PROTECTION AREA AS PART OF AN APPROVED WELLHEAD PROTECTION PLAN.

Noble has significant concerns about this section. Act 13 did not include language or express intent to impose oil and gas development restrictions based on broadly defined and unspecified "other critical communities" or "a playground." As noted above, the Department's definition for other critical communities is overly broad, ambiguous, and subjective; it could encompass virtually any species, geological formation, or natural area, without an adequate basis in fact or law, nor any ecological basis for protection. Nor is any process defined for determining what species, formations, and areas constitute critical communities.

Similarly, the Department has not defined what "a playground" will mean in this context nor any process for determining what areas qualify as a playground for this purpose. It is not clear whether a playground must be associated with a school based on the current wording. Unlike the majority of the resources listed in subsections (i) through (v), which have established boundaries, "common areas on a school's property" do not have defined boundaries. Schools may own property with ancillary functions, such as a maintenance yards or drainage areas. Moreover, "schools" could include academic schools from pre-kindergarten through post-secondary education (e.g., trade schools, colleges or universities) and even educational facilities for non-traditional/non-academic subjects. The same issue arises for "playgrounds", which could include private restaurants with play facilities. These deficiencies introduce significant regulatory uncertainty and risk to operations.

As previously noted, the Department's authority to regulate the potential impact on public resources derives from Section 3215(c) of Act 13 of 2012. However, according to the Robinson Township decision (Robinson Twp. et al v. Commonwealth, 83 A.3d 901 (PA 2013)) the Department lacks the authority to regulate with regard to "other critical communities" specifically and lacks the legal authority to implement Section 3215(c) in its entirety. Lastly, the protective efforts intended for threatened and endangered species and their designated critical habitats are already required under 25 PA Code Chapter 102. As such, Noble suggests Section 78a.15(b.2)(f) be stricken from the rule.

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§ 78a.15(b.2)(f) (2) The applicant shall notify the public resource agency responsible for managing the public resource identified in paragraph (1)[~~, if any].~~ The applicant shall forward by certified mail a copy of the plat identifying the proposed [~~location of the well, well site and access road~~] <u>LIMIT OF DISTURBANCE OF THE WELL SITE</u> and information in paragraph (3) to the public resource agency at least [~~15~~] 30 days prior to submitting its well permit application to the Department. The applicant shall submit proof of notification with the well permit application. From the date of notification, the public resource agency has [~~15~~] 30 days to provide written comments to the Department and the applicant on the functions and uses of the public resource and the measures, if any, that the public resource agency recommends the Department consider to avoid or minimize probable harmful impacts to the public resource where the well, well site and access road is located. The applicant may provide a response to the Department to the comments.

While Noble does not object to the requirement that a potentially affected and appropriately defined public resource agency be provided notification and opportunity to comment on a permit application, Noble is concerned about the additional time required from notice to permit submittal and the additional time required for written comment regardless of whether it is needed. Permit processing times are currently taking anywhere from 60 days to several months, which has already presented a significant challenge to operational efficiency. Adding 30 days to notification requirements prior to permit submittal further increases these delays, in some cases challenging the very economics of our operations, which already face a low commodity price environment. Similarly, should a public resource agency provide comments on a permit application quickly, the requirement to wait 30 days adds delay without benefit. Noble suggests that proof of timely notification be required with the permit application but not be limited to a 30 day comment period should the public resource agency respond earlier. Alternatively, the public comment period should be able to be conducted concurrently during the permit application review process. Noble suggests that the regulatory language be modified to require notification to the public resource agency in a similar manner as is required for surface owners under Act 13. Noble requests that the existing permitting application forms that track record of notification be modified to add in a column for public resource agencies. To facilitate this change, Noble suggests the following modified language:

> **<u>"The applicant shall notify the public resource agency responsible for managing the public resource identified in paragraph (1). Notification to the public resource agency shall be on forms, and in a manner prescribed by the department, sufficient to identify the details of the application and include a copy of the survey plat identifying the limit of disturbance of the well site. The applicant shall submit proof of notification with the well permit application."</u>**

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§ 78a.15(g) If the proposed well, well site or access road poses a probable harmful impact to a public resource, the Department may include conditions in the well permit to avoid or mitigate those impacts to the public resource's current functions and uses. The Department shall consider the impact of any potential permit condition on the applicant's ability to exercise its property rights with regard to the development of oil and gas resources and the degree to which any potential condition may impact or impede the optimal development of the oil and gas resources. The issuance of a permit containing conditions imposed by the Department pursuant to this subsection shall be an action that is appealable to the Environmental Hearing Board. The Department shall have the burden of proving that the conditions were necessary to protect against a probable harmful impact of the public resource.

Noble is concerned that the proposed language of this section does not include any criteria, as required by Section 3215(e) of Act 13, that the Department must satisfy if it imposes permit conditions to protect public resources. This omission undermines the applicant's right to appeal such conditions to the Environmental Hearing Board and to obtain meaningful judicial review. The provision should set forth specific criteria for this purpose, and it should specify that the evidence of probable harmful impact must be clear and convincing.

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§ 78a.17. Permit <u>EXPIRATION AND</u> renewal.

<u>(a) A WELL PERMIT EXPIRES ONE YEAR AFTER ISSUANCE IF DRILLING HAS NOT COMMENCED. IF DRILLING IS COMMENCED WITHIN A YEAR AFTER ISSUANCE, THE WELL PERMIT EXPIRES UNLESS DRILLING IS PURSUED WITH DUE DILIGENCE. DUE DILIGENCE FOR THE PURPOSES OF THIS SUBSECTION MEANS COMPLETION OF DRILLING THE WELL TO TOTAL DEPTH WITHIN 16 MONTHS OF ISSUANCE. A PERMITEE MAY REQUEST AN EXTENSION OF THE 16-MONTH EXPIRATION FROM THE DEPARTMENT. THIS REQUEST SHALL BE SUBMITTED ELECTRONICALLY TO THE DEPARTMENT THROUGH ITS WEB SITE FOR GOOD CAUSE, OR RENEWAL OF THE PERMIT IN ACCORDANCE WITH SUBSECTION (b).</u>

Noble is concerned that the one year expiration date for a well permit is too short. It often currently takes 60 days or more to obtain a well permit, and operators, particularly in the southwest portion of the state, frequently experience significant additional delays in obtaining the Erosion and Sediment Control General Permit (ESCGP-2) that is required for well pad construction. Operators are often six to eight months into their well permits before they can begin clearing land or constructing the pad. Because of these delays when dealing with a multi-well pad, completions schedules are also delayed. For these reasons, Noble requests that a well permit remain valid for 2 years before expiration to allow the permit holder adequate time to proceed with due diligence given the many other challenges of the oil and gas regulatory program. Noble also requests that the Department clarify that the reference to "completion of drilling" does not include, and should not be confused with, "well completions," which is a subsequent stage that takes place after drilling has ended to ready a drilled well for production.

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§ 78a.17 (b) An operator may request a ~~**[1 year]**~~ **2-YEAR** renewal of ~~**[a]**~~ ~~**AN UNEXPIRED**~~ well permit. The request shall be accompanied by a permit fee, the surcharge required **[in section 601 of the**

act (58 P.S. § 601.601),] under section 3271 of the act (relating to well plugging funds) and an affidavit affirming that the information on the original application is still accurate and complete, that the well location restrictions are still met and that the **[surface owners, coal owners and operators, gas storage operators, where the permit renewal is for a proposed well location within an underground gas storage reservoir or the reservoir protective area, and water supply owners within 1,000 feet,] entities required to be notified under section 3211(b)(2) of the act (relating to well permits)** have been notified of this request for renewal. **IF NEW WATER WELLS OR BUILDINGS ARE CONSTRUCTED THAT ARE NOT INDICATED ON THE PLAT AS ORIGINALLY SUBMITTED, THE ATTESTATION MUST BE UPDATED AS PART OF THE RENEWAL REQUEST. ANY NEW WATER WELL OR BUILDING OWNERS SHALL BE NOTIFIED OF THE RENEWAL REQUEST; HOWEVER, THE SETBACKS OUTLINED IN SECTION 3215 OF THE ACT (RELATING TO WELL LOCATION RESTRICTIONS) DO NOT APPLY PROVIDED THAT THE ORIGINAL PERMIT WAS ISSUED PRIOR TO THE CONSTRUCTION OF THE BUILDING OR WATER WELL.** The request shall be received by the Department at least 15 calendar days prior to the expiration of the original permit.

Noble supports the Department's change to a 2-year renewal process for an expiring permit. As previously noted, operators trying to demonstrate due diligence are often subject to delays for reasons outside of their control, such as ESCGP-2 permit processing timelines or seasonal mitigations for an endangered species. These challenges will be exacerbated by the number and variety of regulatory approvals required under Chapter 78a as described elsewhere in these comments. As such, having a process that allows for operators to extend permits to a workable timeframe where appropriate is critically important, particularly for multi-well operations.

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§ 78a.41. NOISE MITIGATION.

(a) PRIOR TO PREPARATION AND CONSTRUCTION OF THE WELL SITE OR ACCESS ROAD, THE OPERATOR SHALL PREPARE AND IMPLEMENT A SITE SPECIFIC NOISE MITIGATION PLAN TO MINIMIZE NOISE DURING DRILLING, STIMULATION AND SERVICING ACTIVITIES.

(b) THE PLAN SHALL INCLUDE THE FOLLOWING:
(1) AN ASSESSMENT OF BACKGROUND NOISE IN THE AREA OF THE WELL SITE.

(2) AN ASSESSMENT OF KNOWN AND POTENTIAL NOISE FROM DRILLING, STIMULATION AND SERVICING ACTIVITIES, TAKING INTO CONSIDERATION THE INTERESTS OF NEARBY RESIDENTS, INCLUDING THE AFFECTS ON INDOOR NOISE LEVELS FOR RESIDENTS NEAR THE WELL SITE.

(3) A DESCRIPTION OF THE OPERATOR'S PLANS TO MITIGATE NOISE. OPERATORS MUST ADOPT AND INCORPORATE A BEST PRACTICES APPROACH TO NOISE MANAGEMENT INTO THEIR DRILLING, STIMULATION AND SERVICING ACTIVITIES PROCEDURES.

(c) IF THE DEPARTMENT DETERMINES DURING DRILLING, STIMULATION AND

SERVICING ACTIVITIES THAT THE PLAN IS INADEQUATE TO MINIMIZE NOISE, THE DEPARTMENT MAY ORDER THE OPERATOR TO SUSPEND OPERATIONS AND TO MODIFY THE PLAN AND OBTAIN DEPARTMENT APPROVAL.

(d) THE OPERATOR SHALL PERFORM REGULAR, FREQUENT AND COMPREHENSIVE SITE INSPECTIONS TO EVALUATE THE EFFECTIVENESS OF ANY NOISE MITIGATION MEASURES.

(e) AN OPERATOR SHALL PROMPTLY ADDRESS AND CORRECT PROBLEMS AND DEFICIENCIES DISCOVERED IN THE COURSE OF INSPECTIONS PERFORMED UNDER PARAGRAPH (d).

(f) THE NOISE MITIGATION PLAN SHALL BE MAINTAINED BY THE OPERATOR AT THE WELL SITE WHILE DRILLING, STIMULATION AND SERVICING ACTIVITIES ARE BEING CONDUCTED AND SHALL BE MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST.

In Noble's experience, noise mitigation requirements are generally driven by the potential for noise impacts, and therefore they are typically promulgated by a local community under their zoning authority as opposed to the state. Noble has concerns about a blanket statewide requirement for multiple reasons. First, many of our operations occur in remote areas where noise impacts on a community are not a concern, particularly as they are temporal in nature. In these situations, noise assessments and mitigation plans provide no benefit and add unnecessary costs to the operation.

Second, both the Department's authority for these requirements and the standards an operator must meet remain undefined. In proposing these new requirements as part of a final regulation, none of the requirements of the Regulatory Review Act have been followed. For example, the proposal is missing a statement of need, estimates of cost have and neither the Independent Regulatory Review Commission (IRRC) nor the standing committees have had an opportunity to review and comment on this provision. Neither Act 13 of 2012 nor any other statute we are aware of authorizes the Department to regulate noise and it does not regulate noise for any other industry.

Third, the language in § 78a.41 lacks the clarity needed for a regulatory standard. To effectively implement noise requirements, an operator needs to know what is considered an acceptable noise level as well as how effectiveness in meeting this standard will be gauged. The ability of the Department to order a suspension of operations, coupled with the breadth and ambiguity of the "inadequate to minimize noise" standard, presents an unreasonable risk to operators. Fourth, an operator may not be able to *immediately* cease some active phases of a drilling or completion operation without compromising safety or permanently damaging the well. Accordingly, Noble suggests that the Department strike this section 78a.41.

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§ 78a.51. Protection of water supplies.
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§ 78a.51 (b) A landowner, water purveyor or affected person suffering pollution or diminution of a water supply as a result of well site construction, well drilling, altering or operating ~~[an oil or gas well]~~ activities may so notify the Department and request that an investigation be conducted.

For clarification, Noble suggests modifying the above text so as to clarify that such an allegation is necessarily conclusory and unproven. Such as distinction could be achieved by adding the word "suspected" after the word "supply" and before the words "as a result."

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§ 78a.51 (d) A restored or replaced water supply includes any well, spring, public water system or other water supply approved by the Department, which meets the criteria for adequacy as follows:
***
(2) *Quality.* The quality of a restored or replaced water supply will be deemed adequate if it meets the standards established under the Pennsylvania Safe Drinking Water Act (35 P.S. §§ 721.1 – 721.17). **IF, PRIOR TO POLLUTION, A WATER SUPPLY WAS OF A HIGHER QUALITY THAN REQUIRED UNDER PENNSYLVANIA SAFE DRINKING WATER ACT STANDARDS, THE RESTORED OR REPLACED WATER SUPPLY SHALL MEET THE PRE-POLLUTION QUALITY OF THE WATER~~[, or is comparable to the quality of the water supply before it was affected by the operator if that water supply~~ ~~[~~did not meet these~~] [exceeded those standards].~~**

Noble has concerns about this section which would unfairly impose an obligation on oil and gas operators that is neither legally required under Act 13 nor practically achievable under certain circumstances in Pennsylvania. The cost to install treatment technology to achieve predrilling conditions for individual parameters better than Safe Drinking Water Standards, or to achieve better than pre-drilling conditions for parameters that were worse than Safe Drinking Water Standards, even if possible, may be prohibitively expensive. No such requirement is imposed on any other industry. As stated in our general comments, regulatory programs should be fair and not impose disparate requirements or disproportionate costs on one particular economic or extractive sector. Noble suggest the changes be stricken and that the standing requirements remain as follows:

> **"(2) *Quality.* The quality of a restored or replaced water supply will be deemed adequate if it meets the standards established under the Pennsylvania Safe Drinking Water Act (35 P.S. §§ 721.1 – 721.17) or is comparable to the quality of the water supply before it was affected by the operator if that water supply did not meet these those standards."**

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§ 78a.52. Predrilling or prealteration survey.

§ 78a.52 (d) An operator electing to preserve its defenses under section **[208(d)(1) of the act] 3218(d)~~[(1)(i) and]~~ (2)(i) of the act (relating to protection of water supplies)** shall provide a copy of **all** the **sample** results **taken as part** of the survey **ELECTRONICALLY** to the Department **[and] ~~[by electronic means in a format determined by the Department]~~ ON FORMS PROVIDED THROUGH ITS WEB SITE within 10 business days of [receipt of all the sample results taken as part of the survey] ASSIGNMENT OF AN API NUMBER BY THE DEPARTMENT FOR THE GAS WELL THAT IS THE SUBJECT OF THE SURVEY. The operator shall provide a copy of any sample results to the landowner or water purveyor within 10-business days of receipt of the sample results. [Test] Survey results not received by the Department within 10 business days may not be used to preserve the operator's defenses under section [208(d)(1) of the act] 3218(d)~~[(1)(i) and]~~ (2)(i) of the act**

Noble is concerned that the 10 day requirement is too short, will impose additional unnecessary costs, and may actually decrease the reliability of the results. Typically these tests take two weeks from lab receipt for the lab to run the necessary analysis, and additional time is spent shipping the samples to the lab, receiving the results from the lab, and transmitting the results to the Department. In order for a prudent operator insure compliance with the deadline, it would be forced to have survey analyses "rushed," which typically increases the cost by a magnitude of four and tends to increase the number of lab errors and sample errors as well. Additionally, an operation such as Noble's would require one or more dedicated Full Time Employees (FTE) to manage this process within the required time frame. Accordingly, Noble suggests that the language be revised to say "10 business days upon receipt of results." In that case, additional language could be added clarifying that an operator cannot start drilling until we have confirmed receipt that the landowner received the results. This would reduce the cost and administrative burden of this requirement without compromising environmental protection.

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§ 78.52(g) The operator of an unconventional well must provide written notice to the landowner or water purveyor indicating that the presumption established under section 3218(c) of the act (58 Pa.C.S. § 3218(c)) may be void if the landowner or water purveyor refused to allow the operator access to conduct a predrilling or prealteration survey. Proof of written notice to the landowner or water purveyor shall be provided to the Department for the operator to retain the protections under sections 3218(d)(1)(ii) and 3218(d)(2)(ii) of the act (58 Pa.C.S. §§ 3218(d)(1)(ii) and 3218(d)(2)(ii)). Proof of written notice shall be presumed if provided in accordance with section 3212(a) of the act (58 Pa.C.S. § 3212(a)).

In order to avoid undue delays from non-responsive landowners, the rule should provide a time frame by which a landowner must respond to an operator's notification of the desire to conduct water sampling. Noble recommends that language be added specifying that a landowner must act within 15 days from notification of intent by certified mail, after which refusal shall be presumed.

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§ 78a.52a. ~~{Abandoned and orphaned well identification}~~ AREA OF REVIEW.

(a) ~~{Prior to hydraulically fracturing the well, the}~~ THE operator ~~{of a gas well or horizontal oil well}~~ shall identify the SURFACE AND BOTTOM HOLE LOCATIONS [location] of ACTIVE, INACTIVE, orphaned ~~{or}~~ AND abandoned wells HAVING WELL BORE PATHS within 1,000 feet measured horizontally from the vertical well bore and 1,000 feet measured from the surface above the entire length of a horizontal well bore in accordance with subsection (b). ~~{Prior to hydraulically fracturing the well, the operator of a vertical oil well shall identify the location of orphaned or abandoned wells within 500 feet of the well bore in accordance with subsection (b). For the purposes of this section, a gas well is a well which is producing or capable of producing marketable quantities of gas or of gas and oil with a gas-oil ratio of more than 100 MCF per bbl of oil.}~~

(b) Identification shall be accomplished by ~~{conducting}~~ the following:

(1) CONDUCTING ~~{A}~~ A review OF the Department's ~~{orphaned and abandoned well database}~~ WELL DATABASES AND OTHER AVAILABLE WELL DATABASES.

(2) CONDUCTING ~~[A]~~ A review of HISTORICAL SOURCES OF INFORMATION, SUCH AS applicable farm line maps, where accessible.

(3) Submitting a questionnaire on forms provided by the Department to landowners whose property is within the area identified in subsection (a) regarding the precise location of orphaned and abandoned wells on their property.

(c) ~~[Prior to hydraulically fracturing a well, the]~~ THE operator shall submit a REPORT SUMMARZING THE REVIEW, INCLUDING:

(1) A plat ~~[to the Department]~~ showing the location and GPS coordinates of ALL [orphaned and abandoned] wells identified under subsection (b).

(2) ~~[and proof]~~ PROOF ~~[of notification]~~ that the operator[s] submitted questionnaires under subsection (b)(3).

(3) A MONITORING PLAN FOR WELLS REQUIRED TO BE MONITORED UNDER SECTION 78a.73(c) (RELATING TO GENERAL PROVISION FOR WELL CONSTRUCTION AND OPERATION), INCLUDING THE METHODS THE OPERATOR WILL EMPLOY TO MONITOR THESE WELLS.

(4) TO THE EXTENT THAT INFORMATION IS AVAILABLE, THE TRUE VERTICAL DEPTH OF IDENTIFIED WELLS.

(5) THE SOURCES OF THE INFORMATION PROVIDED FOR IDENTIFIED WELLS.

(6) TO THE EXTENT THAT INFORMATION IS AVAILABLE, SURFACE EVIDENCE OF FAILED WELL INTEGRITY FOR ANY IDENTIFIED WELL.

(d) THE OPERATOR SHALL SUBMIT THE REPORT REQUIRED BY SUBSECTION

(c) TO THE DEPARTMENT AT LEAST 30 DAYS PRIOR TO COMMENCEMENT OF DRILLING THE WELL OR AT THE TIME THE PERMIT APPLICATION IS SUBMITTED IF THE OPERATOR PLANS TO COMMENCE DRILLING THE WELL LESS THAN 30 DAYS FROM THE DATE OF PERMIT ISSUANCE. THE REPORT SHALL BE PROVIDED TO THE DEPARTMENT ELECTRONICALLY THROUGH THE DEPARTMENT'S WEB SITE.

Noble is concerned that the Department's database is not presently a reliable source on which a regulatory requirement can be based. The database does not have field GPS location coordinates for a large number of wells, some coordinates have been derived from old maps and are inaccurate. Similarly, a requirement to consult "applicable farm line maps, where accessible" in order to identify wells lacks the clarity required for a regulation. If the Department's database could be sufficiently enhanced, a review of the database should be an adequate obligation for well identification. Due to the generally higher rate, volume and pressure used in hydraulic fracturing of the Marcellus and other deep shales, constructing a more comprehensive database of historical deep wells (those that penetrate to a depth at least 1,500 feet above the Marcellus shale) should be a priority. It is hoped that with good cooperation this step could be accomplished soon, as the Commonwealth's current database for this set of deeper wells is believed to be

nearly complete. Enhancement of the shallow well database will require significantly more work, time and expense, and it likely a multi-year project.

However, the regulatory obligation should be focused on only those wells which appear on the Department's database and which have a total depth that extends within 500 feet of the target zone to be perforated or isolated for hydraulic fracturing. Additionally, the oil and gas industry's identification of abandoned and orphaned wells will benefit from further development of the Department's database, and should be postponed until the database and map viewer are improved. Accordingly, the Department should consider a phased implementation of this new section.

Similarly, under Section 78a.52(a), the Department broadly requires that operators identify surface and bottom whole locations of active, inactive, orphaned and abandoned wells. Later in Section 78a.52(b)(3), the Department only requires such identification to the extent that information is available. As previously stated, the database is not reliable nor does it have this sort of detailed information. Therefore, Section 78a.52(a) should clarify that the requirement to identify surface and bottom hole locations applies only "to the extent that information is available." Section 78.52a(b)(3) should similarly clarify who should receive the questionnaires and that operators have no obligation to verify the information received.

Lastly, the obligation to monitor wells as identified in Section 78a.73(c) is subjective, does not account for those instances where permission cannot be obtained to access the surface near an abandoned well, and is impractical to do over long periods of time. Noble addresses this section later in this document.

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§ 78a.53. Erosion and sediment control AND STORMWATER MANAGEMENT.

~~[During and after earthmoving or soil disturbing activities, including the activities related to siting, drilling, completing, producing, servicing and plugging the well, constructing, utilizing and restoring the access road and restoring the site, the operator shall design, implement and maintain best management practices in accordance with]~~ Any person proposing or conducting earth disturbance activities associated with oil and gas OPERATIONS [activities] shall comply with Chapter 102 (relating to erosion and sediment control) [and an erosion and sediment control plan prepared under that chapter]. Best management practices for erosion and sediment control AND STORMWATER MANAGEMENT for oil and gas ~~[activities]~~ OPERATIONS are listed in the [*Oil And Gas Operators Manual,* Commonwealth of Pennsylvania, Department of Environmental Protection, Guidance No. 550-0300-001 (April 1997), as amended and updated] *Erosion and Sediment Pollution Control Program Manual,* Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-2134-008, as amended and updated, THE *PENNSYLVANIA STORMWATER BEST MANAGEMENT PRACTICES MANUAL,* COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION, NO. 363-0300-002, AS AMENDED AND UPDATED, the *Oil and Gas Operators Manual,* Commonwealth of Pennsylvania, Department of Environmental Protection, Guidance No. 550-0300-001, as amended and updated, AND *RIPARIAN FOREST BUFFER GUIDANCE, (BUFFER GUIDANCE),* COMMONWEALTH OF PENNSYLVANIA, DEPARTMENT OF ENVIRONMENTAL PROTECTION, NO. 395-5600-001 (2009), AS AMENDED AND UPDATED.

Noble questions the codification of guidance, which has not gone through statutory procedures for rulemaking, into regulation in this manner. Guidance does not have the force of law nor does it create a binding legal norm, thus it is not appropriate as a regulatory requirement. Incorporating guidance into regulation in this way is inappropriate because it creates new law, rights, and obligations without providing the statutory public notice and opportunity to comment and satisfying other rulemaking requirements. Additionally, this language allows for future updates to guidance to be codified automatically in this regulation as well, which is a further violation of the agency's procedural duties. For these reasons, Noble suggests striking the language codifying guidance.

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§ 78a.55. Control and disposal planning; emergency response for unconventional wells.
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§ 78a.55 (g) *Guidelines.* With the exception of the pressure barrier policy required under subsection (d), a PPC plan developed in conformance with the *Guidelines for the Development and Implementation of Environmental Emergency Response Plans,* Commonwealth of Pennsylvania, Department of Environmental Protection, No. 400-2200-001, as amended and updated, will be deemed to meet the requirements of this section.

As previously commented, Noble has serious concerns with the practice of codifying guidance and future updates to guidance into regulation, as it does not receive the same scrutiny and public participation statutorily required for rulemaking. Additionally, in regards to this particular guidance, "Guidelines for the Development and Implementation of Environmental Emergency Response Plans," much of the document is outdated and does not apply to oil and gas development. Noble recommends that the Department updates its oil and gas operators manual or develop guidelines specifically for oil and gas that better reflects its current practice of requiring site specific information within a PPC plan and/or tailor a template for oil and gas specific PPC plans. In addition, Noble recommends the Department strike Section 78a.55(g) from the regulations.

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§ 78a.55(f)(5)(i)(I) THE LOCATION OF AND MONITORING PLAN FOR ANY EMERGENCY SHUTOFF VALVES LOCATED ALONG TEMPORARY PIPELINES IN ACCORDANCE WITH § 78a.68b (RELATING TO TEMPORARY PIPELINES FOR OIL AND GAS OPERATIONS).

Act 9 of 2012 ("Requiring Operator of Each Permitted Unconventional Well in Pennsylvania to Post Certain 911 Response Information at Entrance to Each Unconventional Well Site") was promulgated into the Departments's regulations as the current 25 Pa. Code § 78.55(f). The Legislature intended for the requirements set by Act 9, including the requirement to develop and submit an emergency response plan, to apply to unconventional wells only. Act 9 defines "unconventional wells" as "[a] borehole drilled or being drilled for the purpose of or to be used for the production of natural gas from an unconventional formation." This definition and the intent of Act 9 does not contemplate the application of emergency response plans to well development pipelines, as proposed to be defined in Section 78a.1. The proposed subsection (I) is therefore beyond the scope of the Legislature's intent for Act 9.

Additionally, Noble respectfully questions the need for adding this new subsection. Given the specific requirements outlined in Section 78a.68b(e) to limit that maximum discharges and Section 78a.68b(i) to require daily inspections, there appears to be no need to require modification of emergency response plans

for these lines. Section 78a.68b will already have sufficient protective measures in place. Lastly, the location of the shutoff valve locations for well development pipelines are typically not known by an operator until several days before completion of the unconventional well. As such, Noble recommends the proposed subsection (I) be deleted.

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§ 78a.56 [Pits and tanks for temporary containment] Temporary storage.

§ 78a.56(a)(2) Modular aboveground storage structures that ~~[are assembled onsite]~~ EXCEED 20,000 GALLONS CAPACITY may not be utilized to store regulated substances without PRIOR Department approval. The Department will maintain a list of approved modular storage structures on its web site.

As previously referenced in our general comments about the drawbacks of overly prescriptive language, Noble suggests that the Department strike the language saying "The Department shall maintain a list of approved modular storage structures on its website" and instead establish minimum requirements for modular aboveground storage structures. This would maintain the Department's desired standard, but allow operators flexibility to determine the best available options at any given time for their circumstances. Additionally, Noble asks that the Department issue guidance as to the approval process required for modular above ground storage structures assembled on site. Lastly, Noble requests that the capacity limit be changed to 21,000 gallons to align with typical tank sizing.

***

§ 78a.56(a)(4) AFTER OBTAINING APPROVAL TO UTILIZE A MODULAR ABOVEGROUND STORAGE STRUCTURE AT A SPECIFIC WELL SITE, ~~[The]~~ THE owner or operator shall notify the Department at least 3 business days before the beginning of construction of these storage structures. The notice shall be submitted electronically to the Department through its web site and include the date the storage structure installation will begin. If the date of installation is extended, the operator shall re-notify the Department with the date that the installation will begin, which does not need to be 3 business days in advance.

Noble believes the requirement to provide notice of construction for a structure that just received approval to construct offers no meaningful value to the public nor the environment and instead adds a needless burden upon the operator. Noble requests that the Department strike this provision.

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§ 78.56(a)(7) Unless an individual is continuously present at the well site, operators shall equip all tank valves and access lids to regulated substances with reasonable measures to prevent unauthorized access by third parties such as locks, open end plugs, removable handles, retractable ladders or other measures that prevent access by third parties. Tanks storing ONLY freshwater, fire prevention materials and spill response kits are excluded from the requirements of this paragraph.

As previously referenced in our general comments about the drawbacks of overly prescriptive language, Noble suggests that the phrase "such as locks, open end plugs, removable handles, retractable ladders or other measures that prevent access by third parties" be stricken. Additionally, a lock, plug, or handle may

not be able to absolutely ensure "prevention" of unauthorized acts by third parties or damage by wildlife. As such, for additional clarity, Noble recommends replacing the word "prevent" with "discourage" The requirement that operators take reasonable measures to discourage third party access provides clear direction while allowing operators flexibility to determine the best protections for their specific circumstances.

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§ 78a.56(a)(8) The operator of an unconventional well site shall display a sign on or near the tank or other approved storage structure identifying the contents, and containing an appropriate warning of the contents such as flammable, corrosive or a similar warning.

As previously referenced in our general comments about the benefits of streamlined program, Noble suggests that the Department strike the language in Section 78.56(a)(8) which is duplicative of federal regulation. Operators are already required by the Occupational Safety and Health Administration's Hazard Communication Standard, which aligns to the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) Standard, to provide hazard information by putting labels on containers and preparing safety data sheets.

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§ 78.56(a)(9) A ~~[pit] [or][, tank]~~ **TANK or other approved storage structure** that contains drill cuttings from below the casing seat, ~~[pollutional]~~ **regulated** substances~~[, wastes]~~ or fluids other than tophole water, fresh water and uncontaminated drill cuttings shall be impermeable **[and comply with the following:]**
***

Condensate, whether separated or mixed with other fluids, may not be stored in any open top structure or pit. ABOVEGROUND TANKS ~~[Tanks]~~ used for storing or separating condensate during well completion shall be monitored and have controls to prevent vapors from exceeding the lower explosive limits of the condensate outside the tank. Tanks used for storing or separating condensate shall be grounded.

Noble supports the Department's removal of overly prescriptive language in this section and instead simply requiring impervious storage structures. This change provides clear direction while allowing operators flexibility to determine the best means of meeting that direction for their site specific circumstances.

Noble does have concerns about the section prohibiting any condensate storage in an open-topped structure without any specification for a *de minimis* amount. The ability to stage and temporarily store flowback or produced water is critical for operators to maximize the reuse or recycling of water in their future operations. While all reasonable efforts will have been made to separate hydrocarbons from water produced prior to storage, trace amounts of hydrocarbons could remain. Therefore, an absolute prohibition on condensate storage without a *de minimis* exception could significantly inhibit prudent operators from being able to stage sufficient water for reuse to economically justify the costs of a water recycling/reuse program. While such a program could technically be accomplished using aboveground tanks, the number of tanks required would be substantial. The costs of tanks and related trucking required increases emissions and could make such a program uneconomic for operators depending on the current commodity environment. For these reasons, Noble requests that some *de minimis* exception be added to

account for the possibility of trace amounts of hydrocarbons and preserve the ability to stage water in open topped containers. Lastly, Noble asks that the Department clarify what defines "storage of water" for the purpose of this regulation.

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§ 78.56(a)(9) (c) Disposal of uncontaminated drill cuttings in a pit or by land application shall comply with § 78a.61. [A pit used for the disposal of residual waste, including contaminated drill cuttings, shall comply with § 78a.62. Disposal of residual waste, including contaminated drill cuttings, by land application shall comply with § 78a.63.]

Noble recommends paragraph (c) dealing with disposal of drill cuttings be removed from this section. Section 78a.56 has nothing to do with temporary storage and is duplicative of the requirements in Section 78a.61.

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§ 78a.56(10) (d) [Unless a permit under The Clean Streams Law (35 P.S. §§ 691.1—691.1001) or approval under § 78a.57 or § 78a.58 (relating to control, storage and disposal of production fluids; and existing pits used for the control, storage and disposal of production fluids) has been obtained for the pit, the] ~~[The] [owner or operator shall remove or fill the pit within 9 months after completion of drilling, or in accordance with the extension granted by the Department under section]~~ [206(g) of the act (58 P.S. § 601.206(g))] ~~[3216(g) of the act (relating to well site restoration) and § 78.65(d) (relating to site restoration).] [Pits used during servicing, plugging and recompleting the well shall be removed or filled within 90] [calendar] [days of construction.]~~

PITS MAY NOT BE USED FOR TEMPORARY CONTAINMENT. AN OPERATOR USING A PIT FOR TEMPORARY STORAGE AT THE EFFECTIVE DATE OF THESE REGULATIONS SHALL PROPERLY CLOSE THE PIT IN ACCORDANCE WITH APPROPRIATE RESTORATION STANDARDS NO LATER THAN (EDITOR'S NOTE: THE BLANK REFERS TO A DATE SIX MONTHS FROM THE EFFECTIVE DATE OF THIS REGULATION). ANY SPILLS OR LEAKS DETECTED SHALL BE REPORTED AND REMEDIATED IN ACCORDANCE WITH § 78a.66 (RELATING TO REPORTING AND REMEDIATING SPILLS AND RELEASES) PRIOR TO PIT CLOSURE.

Noble has significant concerns that this section could be interpreted as excluding the use of centralized impoundments (Section 78a.59c). Centralized impoundments play a critical role in facilitating a robust water recycling program which in turn provides relief to water use and disposal demands in the region. It has been a stated goal for the Commonwealth to promote the responsible recycling and reuse of oil and gas wastes to reduce the demand on fresh water resources for oil and gas development and operations. If forced to abandon the use of centralized impoundments for collecting produced water to stage for reuse, companies would have to supplant that storage with a series of storage tanks that drive up operational costs and total a much larger footprint or else turn to a greater use of freshwater. Instead, Noble supports the MSC's proposed language for a new section addressing temporary storage: "§ 78a.56a. Alternate temporary storage"

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§ 78a.57. Control, storage and disposal of production fluids.

(a) Unless a permit has been obtained under § 78a.60(a) (relating to discharge requirements), the operator shall collect the brine and other fluids produced during operation[, service and plugging] of the well in a tank[, pit] or a series of [pits or] tanks, or other device approved by the Department for subsequent disposal or reuse. Open top structures may not be used to store brine and other fluids produced during operation of the well. AN OPERATOR USING A PIT FOR STORAGE OF PRODUCTION FLUIDS AT THE TIME OF THE EFFECTIVE DATE OF THESE REGULATIONS SHALL REPORT THE USE OF THE PIT TO THE DEPARTMENT NO LATER THAN (Editor's Note: The blank refers to a date six months from the effective date of this regulation) AND SHALL PROPERLY CLOSE THE PIT IN ACCORDANCE WITH APPROPRIATE RESTORATION STANDARDS NO LATER THAN (Editor's Note: The blank refers to a date one year from the effective date of this regulation). ANY SPILLS OR LEAKS DETECTED SHALL BE REPORTED AND REMEDIATED IN ACCORDANCE WITH § 78a.66 (RELATING TO REPORTING AND REMEDIATING SPILLS AND RELEASES) PRIOR TO PIT CLOSURE. Except as allowed in this subchapter or otherwise approved by the Department, the operator may not discharge the brine and other fluids on or into the ground or into the waters of this Commonwealth.

Similar to the previous comment, Noble has serious concerns about preserving its ability to utilize a robust water recycling and reuse program. There are significant environmental benefits of such a program, not the least of which are reduced emissions and community impacts from truck traffic. The ability to maximize water reuse depends on the ability to store and stage water efficiently and cost effectively. Under this section, operators will be greatly limited in storage options by eliminating open-top tanks for brine and reused water storage. The options for staging and storing water for reuse have been significantly constrained to the point that it may no longer be economic for operators, particularly in this low commodity price environment. The result of such constraints will mean more trucks on the road, more disturbed surface area for aboveground storage tanks, increased disposal, greater competition for water sources, and most likely more public complaints. Noble therefore requests that the Department reconsider its position with respect to storage and staging water for reuse and preserve this practice the state has been pushing operators to utilize.

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§ 78a.57(f) All new, refurbished or replaced ABOVEGROUND tanks that store brine or other fluid produced during operation of the well must comply with the applicable corrosion control requirements in §§ 245.531 – 245.534 (relating to corrosion and deterioration prevention), WITH THE EXCEPTION OF USE OF DEPARTMENT-CERTIFIED INSPECTORS TO INSPECT INTERIOR LININGS OR COATINGS.

(g) ALL NEW, REFURBISHED OR REPLACED UNDERGROUND STORAGE TANKS THAT STORE BRINE OR OTHER FLUID PRODUCED DURING OPERATION OF THE WELL MUST COMPLY WITH THE APPLICABLE CORROSION CONTROL REQUIREMENTS IN § 245.432 (RELATING TO OPERATION AND MAINTENANCE INCLUDING CORROSION PROTECTION) WITH THE EXCEPTION OF USE OF DEPARTMENT-CERTIFIED INSPECTORS TO INSPECT INTERIOR LININGS.

This section would make tanks used by oil and gas operators subject to the Administration of the Storage Tank and Spill Prevention Program requirements for Pennsylvania according to 25 PA Code Chapter 245.531. However, under the definitions section of that same Code (25 PA Code 245.1) "Tanks which are used to store brines, crude oil, drilling or frac fluids and similar substances or materials and are directly related to the exploration, development or production of crude oil or natural gas regulated under the Oil and Gas Act" are specifically exempted from that definition. It is inappropriate for a state agency to establish two conflicting regulatory regimes for the exact same activity. Moreover, it is duplicative and inefficient for an agency to regulate the same activity under two separate programs. This section should be stricken.

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§ 78a.57~~(g)~~(h) All new, refurbished or replaced tanks storing brine or other fluids produced during operation of the well must be reasonably protected from unauthorized acts of third parties. Unless the tank is surrounded by a fence, tank valves and access lids must utilize locks, open end plugs or removable handles and ladders on tanks must be retractable or other measures that prevent access by third parties.

As previously referenced in our general comments about the drawbacks of overly prescriptive language, it is Noble's suggestion that the prescriptive language be stricken. The requirement for reasonable measures to discourage unauthorized acts of third parties should suffice while allowing the operator the flexibility to determine the best approach for each particular circumstance that avoids inadvertently creating occupational safety concerns.

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§ 78a.57(i) TANKS STORING BRINE OR OTHER FLUIDS PRODUCED DURING OPERATION OF THE WELL MUST BE INSPECTED BY THE OPERATOR AT LEAST ONCE PER CALENDAR MONTH AND DOCUMENTED ON FORMS PROVIDED BY THE DEPARTMENT. ANY DEFICIENCIES IDENTIFIED DURING THE INSPECTION MUST BE REPORTED TO THE DEPARTMENT WITHIN 3 DAYS OF THE INSPECTION AND REMEDIED PRIOR TO CONTINUED USE OF THE TANK. INSPECTION RECORDS SHALL BE MAINTAINED FOR 1 YEAR AND MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST.

Noble is concerned about the requirement that "any deficiency" must be "remedied prior to continued use" of a tank. Certainly any deficiency that compromises a tank's integrity should be remedied prior to continued use. However, a strict reading of the section could require operators to empty tanks and place them out of service even for minor deficiencies such as such as a tank label fading. This type of result would be unreasonable and would not serve a public good. Noble suggests the agency more clearly define what will be considered a deficiency for this purpose and clarify that minor deficiencies may be remedied without placing the tank out of service.

Additionally, Noble recommends that the requirement to use "forms provided by the Department" be stricken as a copy of this form has not been provided, as required by Section 5(a)(5) of the Regulatory Review Act. As a result, industry is unable to review any inspection requirements that may be contained in this form and therefore unable to comment appropriately.

Noble supports MSC's suggested amendatory language:

"(i) Tanks storing brine or other fluids produced during operation of the well must be inspected by the operator at least once per calendar month and documented. Any deficiencies identified during the inspection must be remedied in a timely manner. Inspection records shall be maintained for 1 year and made available to the Department upon request. "

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§ 78a.57a. CENTRALIZED TANK STORAGE.

§ 78a.57a (b) THE DEPARTMENT MAY DENY THE ISSUANCE OF A PERMIT IF IT FINDS THAT THE APPLICANT HAS FAILED OR CONTINUES TO FAIL TO COMPLY WITH ANY PROVISION OF THE SOLID WASTE MANAGEMENT ACT (35 P.S. §§ 6018.101–6018.1003), THE CLEAN STREAMS LAW (35 P.S. §§ 691.1–691.1001), ENCROACHMENTS ACT (32 P.S. §§ 693.1–693.27), OR ANY OTHER STATE OR FEDERAL STATUTE RELATING TO ENVIRONMENTAL PROTECTION OR TO THE PROTECTION OF THE PUBLIC HEALTH, SAFETY AND WELFARE; OR ANY RULE OR REGULATION OF THE DEPARTMENT; OR ANY ORDER OF THE DEPARTMENT; OR ANY CONDITION OF ANY PERMIT OR LICENSE ISSUED BY THE DEPARTMENT; OR IF THE DEPARTMENT FINDS THAT THE APPLICANT HAS SHOWN A LACK OF ABILITY OR INTENTION TO COMPLY WITH ANYPROVISION OF ANY OF THE ACTS REFERRED TO IN THIS SUBSECTION OR ANY RULE OR REGULATION OF THE DEPARTMENT OR ORDER OF THE DEPARTMENT, OR ANY CONDITION OF ANY PERMIT OR LICENSE ISSUED BY THE DEPARTMENT AS INDICATED BY PAST OR CONTINUING VIOLATIONS. IN THE CASE OF A CORPORATE APPLICANT, PERMITTEE OR LICENSEE, THE DEPARTMENT MAY DENY THE ISSUANCE OF A PERMIT IF IT FINDS THAT A PRINCIPAL OF THE CORPORATION WAS A PRINCIPAL OF ANOTHER CORPORATION WHICH COMMITTED PAST VIOLATIONS OF THE SOLID WASTE MANGEMENT ACT.

Noble has significant concerns about the breadth and ambiguity of this provision. As proposed, it would authorize the Department to deny a permit because the Department "finds" that the applicant previously violated or currently violates any one of dozens of unidentified federal and state statutes "relating" to "environmental protection" or "public health, safety, or welfare," or any Department "regulation," "order," or "permit," regardless whether such violation was ever formally asserted or adjudicated, whether it was either recent or negligent, whether the requirement in question directly protects the environment or public health, safety, or welfare, or whether the Department's finding bears upon the applicant's ability to operate a centralized tank storage site. The Department could also deny a permit if a "principal" of the corporation was also a principal of another corporation which violated the Solid Waste Management Act at any time in the past, regardless whether the principal had any responsibility for or involvement in the prior violation.

This authority is so overbroad and ambiguous that it would violate due process and authorize permit denials for reasons that are arbitrary and capricious, e.g., an un-adjudicated prior instance of inadvertent noncompliance with a paperwork requirement in another jurisdiction which presented no direct threat of harm and is irrelevant to the operation of a centralized tank battery could prohibit the operator from obtaining any centralized tank storage permits. The resulting uncertainty would be particularly unfair and problematic for larger operators whose extensive activities in multiple jurisdictions would increase the

risk of collateral violations that could potentially lead to permit denial. Because these problems infect the entire provision Noble suggests that the provision be deleted in its entirety.

If the Department determines that it needs to retain the provision in some form, then Noble suggests that the provision be limited to those situations where: (1) an adjudication within the prior three years determined that the applicant violated a requirement of the Solid Waste Management Act or a Department regulation, order, or permit; (2) the requirement that was violated directly related to protection of the environment or public health, safety, and welfare; and (3) the violation demonstrates that the applicant lacks the ability or intention to comply with Section 78a.57a because it was knowing and willful, or constituted gross negligence, or was part of a pattern of such violations.

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§ 78a.57a (f) NO PORTION OF A CENTRALIZED TANK STORAGE SITE MAY BE CONSTRUCTED IN THE FOLLOWING AREAS:

The setback requirements in subsection (f) are unclear as the point from which the measurement is taken is undefined throughout. The setback requirements in Section 78a.57(f) are similar to those for municipal waste landfills (25 Pa. Code § 273.202), residual waste landfills (25 Pa. Code §§ 288.422, 288.522, 288.622), and waste tire facilities (25 Pa. Code § 299.158) and are significantly more stringent than the setback regulations for aboveground and underground storage tank facilities in Chapter 245. Additionally, several of the setback requirements for municipal waste landfills, residual waste landfills, and waste tire facilities contain written waiver provisions, but no such written waiver allowances for setback requirements are provided in proposed Section 78a.57(f).

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§ 78a.57a (f)(1)IN A FLOODPLAIN

Noble seeks clarity as to the Department's definition of "site" for the purposes of this section. Due to the natural topography of the area where we operate in southwestern Pennsylvania, we often have to select ridges and mountain tops to build pads for wells or tank storage in order to avoid or minimize the potential to impact wetlands or navigable waters. As a result, we often have to construct long roads to access these locations. Under the expanded definition of "floodplain" under this Chapter 78a, and the likely expansion of the federal floodplain jurisdiction under Executive Order 13960, it may be difficult to avoid having any portion of a road constructed within a floodplain. Given that these access roads do not present risks of the same type or magnitude as a centralized tank pad, Noble asks that the Department clarify that this prohibition does not apply to access roads with the following revision:

> **"NO PORTION OF A CENTRALIZED TANK STORAGE SITE, excluding the access road, MAY BE CONSTRUCTED IN THE FOLLOWING AREAS:"**

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§ 78a.57a(h) TANKS SHALL MEET THE DESIGN AND PERFORMANCE STANDARDS ESTABLISHED BY THIS SECTION. THE TANKS SHALL BE CLEARLY LABELED AS "RESIDUAL WASTE" AND THE TYPE OF RESIDUAL WASTE SHALL BE IDENTIFIED

The requirement to label tanks storing produced water for reuse and recycling as residual waste is inconsistent with residual waste regulations promulgated by the Bureau of Waste Management. The residual waste definition in 25 Pa Code 287.1 covers "Garbage, refuse, other *discarded* material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge…" Since reused/recycled water is not discarded and does not constitute waste, it does not meet the definition of a residual waste. This is confirmed by General Permit WMGR123 for the Processing and Beneficial Use of Oil and Gas Liquid Waste, which states that an "oil and gas liquid waste that has been processed under the authority of this general permit is not considered a waste as defined in Pa. Code § 287.1 (i.e. de-wasted)…" Therefore if an operator has met the conditions of its permit under WMGR123, the respective tank should not be required to be labeled as "RESIDUAL WASTE." Noble requests that the Department modify this language to remove the requirement for tanks storing reused or recycled water to be labeled as "residual waste."

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§ 78a.57a(i)(17) TANKS MUST BE INSPECTED BY THE PERMITEE AT LEAST EVERY FIVE YEARS AND ANY DEFICIENCIES IDENTIFIED DURING THE INSPECTION MUST BE REPORTED ELECTRONICALLY TO THE DEPARTMENT THROUGH ITS WEB SITE WITHIN 30 DAYS OF THE INSPECTION. ALL DEFICIENCIES MUST BE REMEDIED PRIOR TO CONTINUED USE OF THE TANK. DOCUMENTATION OF THE REMEDY MUST BE MAINTAINED FOR ONE YEAR AFTER THE REPAIR AND MADE AVAILABLE TO THE DEPARTMENT UPON REQUEST.

Noble requests that the Department provide the standards and guidance for determining what constitutes a deficiency. Noble also has concerns about the requirement that "all deficiencies must be remedied prior to continued use of the tank." A strict reading of that section would require that operators empty tanks and place them out of service even for minor deficiencies. Noble requests that the Department modify the language to allow for minor deficiencies to be quickly remedied rather than placed out of service.

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§ 78a.57a(k) THE DESIGN ENGINEER SHALL PROVIDE OVERSIGHT FOR ALL ASPECTS OF TANK AND STORAGE SITE CONSTRUCTION TO ENSURE THAT CONSTRUCTION IS COMPLETED IN ACCORDANCE WITH THE DESIGN AND QUALITY ASSURANCE AND QUALITY CONTROL PLAN.

Requiring oversight by "the design engineer" unnecessarily restricts the flexibility of operators or an engineer to manage the construction of a tank and storage site. As such, Noble suggests amendatory language below:

> **"(k) The design engineer, or an appropriately trained professional designated by the design engineer, shall provide oversight for all aspects of tank and storage site construction to ensure that construction is completed in accordance with the design and quality assurance and quality control plan."**

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§ 78a.57a(n)(1)(iv)(B) A SOIL SAMPLING PLAN THAT EXPLAINS HOW THE PERMITTEE WILL ANALYZE THE SOIL BENEATH THE STORAGE SITE. THE PLAN SHALL BE BASED ON A GRID PATTERN OR OTHER METHOD APPROVED BY THE DEPARTMENT.

This provision would require that a centralized tank storage site undergo what amounts to an American Society for Testing and Materials (ASTM) Phase II Environmental Site Assessment process even in situations where there is no evidence of leak or contamination. However, according to ASTM, a Phase II "practice is intended for use on a voluntary basis by parties who wish to evaluate known releases or likely release areas identified..." To presumptively assume a release has occurred and require this assessment on all tank sites regardless of evidence imposes an unfair burden on the oil and gas industry. As stated in our general comments, regulatory programs should be fair and not impose disparate requirements or disproportionate costs on one particular economic or extractive sector. For these reasons, Noble requests that the Department limit the requirement for a soil sampling plan to only those instances where there is evidence of a likely leak or contamination.

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§ 78a.57a(n)(2) WITHIN 9 MONTHS OF COMPLETION OF DRILLING THE LAST WELL SERVICED BY THE CENTRALIZED TANK STORAGE SITE OR THE EXPIRATION OF THE LAST WELL PERMIT THAT THE SITE WAS INTENDED TO SERVICE. THE TANK STORAGE SITE SHALL BE RESTORED BY REMOVING ANY IMPERMEABLE MATERIALS SO THAT WATER MOVEMENT TO SUBSOILS IS ACHIEVED. THE PERMITEE SHALL ENSURE THAT ALL TANKS ARE PROPERLY REMOVED FROM SERVICE. AN EXTENSION OF THE RESTORATION REQUIREMENT MAY BE APPROVED UNDER § 78a.65(d) (RELATING TO SITE RESTORATION). THE PERMITTEE OF THE CENTRALIZED TANK STORAGE SITE SHALL REPORT QUARTERLY ELECTRONICALLY TO THE DEPARTMENT THROUGH ITS WEB SITE ALL WELLS SERVICED BY THE CENTRALIZED TANK STORAGE SITE DURING THE PREVIOUS QUARTER AS WELL AS THE AMOUNTS OF FLUIDS SENT TO OR FROM THOSE WELL SITES.

Noble has significant concerns regarding this section which could force closure of centralized tank sites prematurely. In order to minimize surface impacts and maximize efficiency, Noble utilizes multi-well pads of approximately 6 to 12 wells per pad. Typically, all these wells would be drilled in sequence and then subsequently completed in sequence and then turned to production. This assembly-line approach allows us concentrate our activity and find efficiencies to reduce the time required for this work and the surface disturbance that occurs over the life of the pad. However, even under this efficient approach, it often takes more than 9 months after the first well has "completed drilling" before the last well is completed and on production. Additionally, centralized tank storage sites reflect significant capital investments by the operator, and they are economically justifiable only if they can service wells within a geographical area for multiple years as the operator develops the reservoir.

These sites are vital to water sourcing generally and are not tied to one single well pad. Therefore, tying restoration of such sites to the completion of drilling of a well will truncate their useful life and make them uneconomic. This in turn will increase land disturbance, reduce water reuse, and result in less efficient resource development. To avoid these problems, the Department should amend these sections to simplify the requirements for centralized tank storage, allow centralized impoundments, narrow the situations where the Department can refuse to permit a centralized tank storage site, and tie restoration of

centralized tank storage to the end of its usefulness. This will help avoid unintended consequences and environmentally counterproductive results as discussed in our general comments.

Additionally, Section 78a.57a(n) should include a restoration waiver provision that allows the landowner to waive the requirement that the operator return the area to approximate original conditions. If landowners can waive restoration conditions requirements in other subsections of Chapter 78a, a similar provision should be provided for centralized tank storage facilities.

Noble also requests that the Department remove, simplify, or clarify the necessity and environmental benefit of the quarterly reporting. As stated in our general comments, the significant number and variety of required reports, notifications, and approvals under Chapter 78a will increase regulatory compliance costs, delay project approvals, and make the entire process more unpredictable and contentious. To avoid these results, Noble believes the Department should eliminate, consolidate, and simplify these submittal requirements. This change would better align Chapter 78a with the Department's Policy for Development, Approval and Distribution of Regulations, which directs that regulations should be drafted "to reduce paperwork, minimize administrative burdens, and save time for both the regulated community and agency staff."

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§ 78a.58. [Existing pits used for the control, storage and disposal of production fluids.] <u>Onsite processing.</u>

[For pits in existence on July 29, 1989, the operator may request approval for an alternate method of satisfying the requirements of § 78.57(c)(2)(iii) (relating to control, storage and disposal of production fluids), the angle of slope requirements of § 78.57(c)(2)(v) and the liner requirement of § 78.57(c)(2)(vi)—(viii) by affirmatively demonstrating to the Department's satisfaction, by the use of monitoring wells or other methods approved by the Department, that the pit is impermeable and that the method will provide protection equivalent or superior to that provided by § 78.57. The operator shall request approval under § 78.57(c)(1).]

<u>(a) The operator may request approval by the Department to process fluids generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells at the well site where the fluids were generated or at the well site where all of the fluid is intended to be beneficially used to develop, drill or stimulate a well. The request shall be submitted on forms provided by the Department and demonstrate that the processing operation will not result in pollution of land or waters of the Commonwealth.</u>

The Department has repeatedly maintained that the Commonwealth desires to promote the responsible recycling and reuse of oil and gas wastes to reduce the demand on fresh water resources for oil and gas well development and operations. Noble shares this goal and believes regulations that encourage and facilitate this practice will best protect public health, safety, and welfare and the environment, as well as facilitate responsible energy development. As such, Noble suggests the language below to clarify that operators may conduct processing, recycling and beneficial reuse activities at well sites and related operations under the jurisdiction of the Department's Office of Oil and Gas Management:

> **<u>"(a) The Department supports the processing, recycling, and beneficial reuse of fluids and other materials generated by the development, drilling, stimulation, alteration, operation or plugging of oil or gas wells, where the processing of the fluids or other</u>**

materials for recycling or beneficial reuse will not result in pollution of land or waters of the Commonwealth.

(b) Approval from the Department is not required for the following activities conducted at a well site or centralized impoundment permitted under § 78a.59c:

(1) mixing fluids with freshwater;
(2) aerating fluids;
(3) filtering solids from fluids;
(4) removal of free phase hydrocarbons;
(5) the addition of biocides to reuse fluids;
(6) the addition of scale inhibitors, polymers/friction reducers, gels, and/or corrosion inhibitors to reuse fluids;
(7) blending fresh or reuse water with sand; or
(8) any other activity approved by the Department and posted on its website."

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§ 78a.58 (d) OPERATORS CONDUCTING ACTIVITIES DESCRIBED IN SUBSECTIONS (b)(1-3) AT A WELL SITE, OR CENTRALIZED TANK STORAGE SITE PERMITTED UNDER § 78a.57a (RELATING CENTRALIZED TANK STORAGE), MUST NOTIFY THE DEPARTMENT THAT THE ACTIVITY WILL BE CONDUCTED AT A PARTICULAR LOCATION AT LEAST THREE BUSINESS DAYS PRIOR TO CONDUCTING THE ACTIVITY. THE NOTICE SHALL BE SUBMITTED ELECTRONICALLY TO THE DEPARTMENT THROUGH ITS WEB SITE. IF THE DATE OF INSTALLATION IS EXTENDED, THE OPERATOR SHALL RENOTIFY THE DEPARTMENT WITH THE DATE THAT THE INSTALLATION WILL BEGIN, WHICH DOES NOT NEED TO BE 3 BUSINESS DAYS IN ADVANCE

Noble has concerns about the requirement that notifications must occur 3 business days prior to conducting permitted activities under Section 78a.58(b)(1-3). At the point this notification is required, these activities will have already been approved by the Department, thus additional notification serves no environmental benefit and unfairly places additional costs and burden on an operator. Additionally, during an active operation, an operator may not have 3 days' warning that certain activities, such as adding additional freshwater, will need to be conducted, while other activities, such as aeration, may be ongoing. This provision has the potential to decrease efficiency, add unnecessary delay, and increase costs, while adding no public or environmental benefit. As such, Noble suggests that this provision be stricken from the rule.

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§ 78a.59b. Freshwater impoundments

Noble is concerned that the proposed regulations have extensive new requirements for impoundments storing freshwater that are often unnecessary and go beyond those any other industry must follow for this purpose. Regulating freshwater impoundments for only the oil and gas industry, despite their use by many other industries, is arbitrary and capricious. Noble suggests that freshwater impoundments either be removed from the proposed oil and gas regulations, or Title 25 needs to be revised to regulate all persons, groups, or industries equally.

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§ 78a.59b~~[(e)]~~ (f) The bottom of the impoundment shall be at least 20 inches above the seasonal high groundwater table. The applicant may maintain the required separation distance of 20 inches by PASSIVE artificial means such as an under-drain system throughout the lifetime of the impoundment. In no case shall the regional groundwater table be affected. The operator shall document the depth of the seasonal high groundwater table, the manner in which the depth of the seasonal high groundwater table was ascertained, the distance between the bottom of the impoundment and the seasonal high groundwater table, and the depth of the regional groundwater table if the separation between the impoundment bottom and seasonal high groundwater table is maintained by artificial means. A SOIL SCIENTIST OR OTHER SIMILARLY TRAINED PERSON USING ACCEPTED AND DOCUMENTED SCIENTIFIC METHODS SHALL MAKE THE DETERMINATION. THE DETERMINATION MUST CONTAIN A STATEMENT CERTIFYING THAT THE PIT BOTTOM IS AT LEAST 20 INCHES ABOVE THE SEASONAL HIGH GROUNDWATER TABLE ACCORDING TO OBSERVED FIELD CONDITIONS. THE NAME, QUALIFICATIONS AND STATEMENT OF THE PERSON MAKING THE DETERMINATION AND THE BASIS OF THE DETERMINATION SHALL BE PROVIDED TO THE DEPARTMENT UPON REQUEST. ~~[The operator shall submit records demonstrating compliance with this subsection to the Department upon request.]~~

This section requires the same groundwater table determination practices for freshwater impoundments as for produced water impoundments. These practices are wholly unnecessary for freshwater which poses no environmental risk, they provide no tangible environmental benefit, and they will add additional cost in time, resources, and capital funding to perform the studies required. Additionally, as previously stated in our general comments, Noble believes regulations should produce consistent and logical results that fulfill the agency's intentions and further the public interest. This means that rules should not regulate activity that creates no public harm nor should rules conflict with the very practice they are meant to regulate and lead to counterproductive results. Rules should also be cost effective and further green practices where appropriate. Again, regulatory inconsistency and confusion are particularly problematic for unconventional well development because of the substantial investments and extensive drilling and completion programs required. For all of these reasons, Noble suggests that the section be removed in its entirety. If the section is retained, then the requirements should reflect the lack of risk that freshwater impoundments pose. Additionally, the section should authorize a "professional geologist" to make the determinations and certifications of the pit bottoms.

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§ 78a.59b~~[(f)]~~ (g) Freshwater impoundments shall be restored by the operator [so] that the impoundment is registered to WITHIN 9 MONTHS OF COMPLETION OF DRILLING THE LAST WELL SERVICED BY THE IMPOUNDMENT. AN IMPOUNDMENT IS RESTORED UNDER THIS SUBSECTION by THE OPERATOR removing excess water and the synthetic liner, ~~[and]~~ returning the site to approximate original conditions, including preconstruction contours and ~~[can support]~~ SUPPORTING the land uses that existed prior to oil and gas ~~[activities]~~ OPERATIONS to the extent practicable ~~[within 9 months of completion of drilling the last well serviced by the impoundment]. [A 2-year restoration extension may be requested under section 3216(g) of the act (relating to well site restoration).]~~ AN EXTENSION OF THE RESTORATION REQUIREMENT MAY BE APPROVED UNDER § 78a.65(d) (RELATING TO SITE RESTORATION). If ~~[written]~~ REQUESTED BY ~~[is obtained from]~~ the landowner IN

WRITING, ON FORMS PROVIDED BY THE DEPARTMENT, the requirement to return the site to approximate original contours may be waived by the Department if the liner is removed from the impoundment.

Freshwater impoundments, when not needed for operations and not wanted by the surface owner, should be restored in accordance with applicable site restoration plans. Like centralized tank storage sites, centralized freshwater impoundments reflect major capital investments by the operator and are intended to service wells within a geographical area for multiple years as the operator develops the reservoir. Like centralized tank storage sites, centralized freshwater impoundments are vital to water sourcing generally and are not tied to one single well pad. Requiring restoration tied to a specified timeframe (drilling or completion) will lead to premature closure of freshwater impoundments and may increase land disturbance and result in less efficient resource development. To avoid these problems, Noble requests that the Department amend this section to tie restoration of a freshwater impoundment to the end of the impoundment's usefulness and to the end of development within the reservoir operating area.

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§ 78a.59c. Centralized impoundments.

These provisions require the oil and gas industry to comply with residual waste standards for centralized impoundments, which is above and beyond what other industries that similarly utilize such impoundments are required to do. Noble believes strongly that regulatory programs should be fair and equitable and create a level playing field, and to this end they should be clear and comprehensible. An agency should not impose disparate requirements or disproportionate costs on one particular economic or extractive sector. Nor should they create unnecessary risk, costs, or uncertainty for the regulated community. These concepts of fairness and clarity are particularly important for natural gas development, which involves a commodity that is widely used and provides important economic and public benefits to the Commonwealth and the nation. In addition, these provisions place additional challenges and costs against the industry's ability to stage and store water for a robust reuse and recycling program. As a general matter, they will increase costs and consume resources putting unconventional wells at a disadvantage. In addition, Noble supports the MSC's comments on the extensive list of concerns related to this section. These provisions should be eliminated entirely or standards should modified for all industries utilizing centralized impoundments.

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§ 78a.64a ~~[(e)]~~ (d) Containment systems must meet all of the following:

As previously referenced in our general comments about the drawbacks of overly prescriptive language, Noble suggests that this language be modified to allow for greater flexibility in meeting the Department's objectives. As such, Noble supports the MSC suggested language which reads:

> **"(d) Unless otherwise approved by the Department, containment systems shall meet all of the following:"**

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§ 78a.64a(d) (1) A containment system must be used on the well site when any equipment that will be used for any phase of drilling, casing, cementing, hydraulic fracturing or flowback operations is brought onto a well site and when regulated substances including drilling mud, drilling mud additives, hydraulic oil, diesel fuel, hydraulic fracturing additives or flowback are brought onto or generated at the well site.

Noble is concerned that this proposed subsection is overly broad, would apply to cement in cement trucks, and conflicts with 52 P.S. § 3218.2, which provides a specified list of materials that require storage in containment systems which are addressed in a previous subsection. The subsection is unnecessary because it is redundant with revised subsection (b) and (c) above. As such, Noble suggests deleting subsection (d)(1).

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§ 78a.64a(d) (2) A containment system must have a coefficient of permeability no greater than 1 x 10-10 cm/sec.

The Department has not demonstrated the need, nor provided justification, for requiring a 1 x 10-10 cm/sec permeability standard, which is far more stringent than is required to prevent spill materials from leaving the well site. Noble would suggest a "sufficiently impervious" standard similar to and consistent with the containment standard for oil and condensate tanks Section § 78a.64(a) is an appropriate provision.

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§ 78a.64a(d) (3) The physical and chemical characteristics of all liners, coatings or other materials used as part of the containment system, that could potentially come into direct contact with regulated substances being stored, must be compatible with the regulated substance and be resistant to physical, chemical and other failure during handling, installation and use. Liner compatibility shall satisfy ASTM Method D5747, Compatibility Test for Wastes and Membrane Liners, or other standards as approved by the Department.

ASTM D5747 is a test for landfill liners and pits where the liner is submerged in diluted chemicals for extended periods of time. It is extremely expensive (approximately $5,000) to run on each chemical type found at a site. As such, Noble supports MSC's proposal of ASTM D543 as alternate test for surface liners. It contains a wet patch method that simulates a concentrated surface spill, which ASTM D5747 does not. We recommend testing for 72 hours at 140°F to account for response time and summer surface temperatures.

Noble supports MSC's suggested amendatory language as subject to MSC's comment to §78a.1 regarding the definition of "containment system.":

> **"(3) The physical and chemical characteristics of all liners, coatings or other materials used as part of the containment system, that could potentially come into direct contact with the listed materials being stored, must be compatible with the materials and be resistant to physical, chemical and other failure during handling, installation and use. Liner compatibility shall satisfy ASTM Method D5747 Compatibility Test for Wastes and**

Membrane Liners, ASTM D543 wet patch at 140°F for 72 hours, or other standards as approved by the Department."

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§ 78a.64a~~[(f)]~~ (e) An operator shall utilize secondary containment when storing additives, chemicals, oils or fuels. The secondary containment must have sufficient containment capacity to hold the volume of the largest container within the secondary containment area plus 10% to allow for precipitation, unless the container is equipped with individual secondary containment such as a double walled tank. Tanks that are manifolded together shall be designed in a manner to prevent the uncontrolled discharge of multiple manifolded tanks. A well site liner that is not used in conjunction with other containment systems does not constitute secondary containment for the purpose of this subsection.

Under Section 3218.2(d) of Act 13, there is no mandatory secondary containment requirement when storing additives, chemicals, oils or fuels. Noble therefore recommends striking the first sentence. The final sentence of this subsection is vague and potentially contrary to Act 13 which has no such prohibition. As we understand, the Department's concern is that an impervious berm be used with the liner to provide sump capacity. Noble suggests stating this directly as in the MSC's suggested amendatory language below:

"(e) Areas where additives, chemicals, oils or fuels are to be stored must have sufficient containment capacity to hold the volume of the largest container stored in the area plus 10% to allow for precipitation, unless the container is equipped with individual secondary containment such as a double walled tank. Tanks that are manifolded together shall be designed in a manner to prevent the uncontrolled discharge of multiple manifolded tanks. A well site liner that is not used in conjunction with an impervious berm does not constitute secondary containment for the purpose of this subsection."

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§ 78a.64a~~[(g)]~~ (f) Subsurface ~~[secondary]~~ containment systems may be employed at the well site. SUBSURFACE SECONDARY CONTAINMENT DOES NOT CONSTITUTE SECONDARY CONTAINMENT FOR THE PURPOSES OF THIS SUBSECTION. Subsurface secondary containment must meet the following requirements:

As previously referenced in our general comments about the drawbacks of overly prescriptive language, Noble suggests that this language be modified to allow for greater flexibility in meeting the Department's objectives. As such, Noble supports the MSC suggested language which reads,

> **"(f) Subsurface secondary containment systems may be employed at the well site. Unless otherwise approved by the Department, subsurface secondary containment shall meet the following requirements:"**

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§ 78a.64a~~[(h)]~~ (g) All surface containment systems shall be inspected weekly to ensure integrity. If the containment system is damaged or compromised, the well operator shall repair the containment system as soon as practicable. The well operator shall maintain records of any repairs until the well site is restored. Stormwater shall be removed as soon as possible and prior to the capacity of secondary containment being reduced by 10% or more.

To avoid unnecessary compliance stringency, the requirement for removing stormwater should be changed from "as soon as possible" to "as soon as practicable." In combination with the additional requirement to ensure stormwater is removed prior to the secondary containment capacity being reduced by 10%, this revised language will meet the Department's intended goal. As such, Noble supports the MSC's suggested amendatory language for the last sentence of (g) which reads,

> **"(g) Stormwater shall be removed as soon as practicable and prior to the capacity of secondary containment being reduced by 10% or more."**

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§ 78a.64a~~[i]~~ (h) Regulated substances that escape from primary containment or are otherwise spilled onto a containment system shall be removed as soon as possible. After removal of the regulated substances the operator shall inspect the containment system. A Department approved leak detection system capable of rapidly detecting a leak shall satisfy the requirement to inspect the integrity of a subsurface containment system. Groundwater monitoring wells shall not constitute a leak detection system for the purpose of this subsection. If the containment system did not completely contain the material, the operator shall notify the Department and remediate the affected area in accordance with §78a.66.

The reference to "regulated substance" is unnecessary and unclear in this subsection, and as such Noble suggests striking the term "regulated." Additionally, operators clean up spills to containment as a standard. If a spill escapes containment, the provisions of Sections 91.33 and 78a.66 will apply.

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§ 78.64a~~(k)~~ (i) Inspection reports and maintenance records shall be available at the well site for review by the Department.

While this provision seems like a simple request, for many operators, it is not practical to store hard copies of inspection reports and maintenance records at the well site. Due to the significant reporting requirements under Chapter 78a and other Department regulations, the number of records required to be kept onsite can amount to thousands and thousands of sheets of paper. Office trailers and personnel are generally present on well sites only during the intense phases of drilling and completion. Once a well is on production, as it is for most of the life of the well, the site is generally unmanned. Storing this amount of paper at an unmanned facility is logistically impractical. Often these records are maintained and made available electronically by operators to various parties working on the well site. Noble suggests that the language be revised to require that inspection reports and maintenance records be available for review upon request.

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§ 78a.65. Site restoration.

Noble is concerned that Section 78a.65 has been almost entirely rewritten in the ANFR. Accordingly, the Department should not proceed to finalize this section, but should withdraw it and proceed with a separate proposed rulemaking in order to fully and properly comply with the Regulatory Review Act.

The Department did not include any estimate for the costs associated with the new pad restoration requirements in the Regulatory Analysis Form (RAF). Rather, the Department claims the industry will realize a cost savings because an operator may be able to obtain a 2 year extension to postpone the restoration. However, a mere postponement of a cost is not an avoidance of the cost. The alleged estimated savings of $21.7 million (estimated by the Department as $50,000 per site at 434 sites per year) is actually a cost that will ultimately be incurred, not a savings. Moreover, the MSC estimates that the cost of pad restoration, as proposed in the regulations will be in the area of $200,000 to $300,000 per pad; not $50,000 as the Department estimates. Therefore rather than a $21.7 million savings, the restoration requirements as proposed would add a cost of $130 million.

The Legislature has addressed the issue of site restoration. Section 3216(a) of the Oil and Gas Act of 2012 requires restoration of the land surface within the area disturbed in siting, drilling, completing and producing the well. Section 3216(c) imposes interim restoration requirements within nine months after completion of drilling a well and Section 3216(d) requires removal of all facilities, supplies and equipment and restoration of the well site within nine months after plugging a well.

The Department's current and proposed regulations still require site restoration within 9 months after completion of drilling. Unconventional well development, which consists of multiple wells on a well pad, is a lengthier process than conventional well development, which was the basis for the 9 month time frame. The section should be revised to either increase the amount of time allotted for restoration for the unconventional industry due to the unique requirements for unconventional well development, or to start the clock after completion of the well, with completion referring to development of a well to a state capable of production.

25 Pa. Code § 102.8(n) states that an oil and gas restoration plan that identifies Post Construction Stormwater Management (PCSM) Best Management Practices (BMPs) to manage stormwater from oil and gas activities meets the requirements of Section 102.8 if the restoration plan meets 102.8(b), (c), (e), (f), (h), (i), (l) and (m), if applicable. Unconventional operators with a restoration plan that identifies PCSM BMPs in such a manner are not required to conduct a PCSM plan stormwater analysis under § 102.8(g). Therefore, any reference to Section 102.8(g) should be deleted from the ANFR.

In addition, there is no requirement in Act 13 Sections 3215(c) or 3315(d), or in Chapter 102, that imposes an obligation to restore well sites to approximate original contours or conditions. Act 13 mentions approximate original contours (not conditions) in Section 3215(g) related to extension of restoration requests. It would defeat legislative intent to impose this obligation generally when the General Assembly clearly chose not to alter the obligations under Sections 3215(c) or (d). Such an obligation would also create unreasonable requirements in many locations across the Commonwealth where there is significant topographical variation. When a restoration plan proposes restoration to approximate original contours, it would be a part of expected restoration obligations. The restoration plan is the governing document that addresses restoration obligations. In addition, the Department has no authority or technical expertise to dictate operational or safety requirements to the unconventional oil and gas industry, making subsection (a)(1)(iv) unnecessary and inappropriate.

Requests for extension that include the information described in the Oil and Gas Act of 2012 should be approved, denied, or deemed to be approved within 90 days of submission to the Department. The regulation should be structured to allow for renewable two year extensions of the restoration deadline provided the site restoration plan and appropriate PCSM measures are fully implemented. This extension process is critical to avoid unnecessary earth moving activities for reconstruction of a well pad should an operator plan to drill and produce additional wells on the same pad location at some later time in the future. The risk of accelerated erosion and resulting sedimentation is much greater during earth moving activities that would take place if a pad would be made smaller or expanded, possibly multiple times in the future.

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§ 78a.65(a) *RESTORATION.* THE OWNER OR OPERATOR SHALL RESTORE LAND SURFACE AREAS DISTURBED TO CONSTRUCT THE WELL SITE AS FOLLOWS:

(1) *POST-DRILLING* – WITHIN 9 MONTHS AFTER COMPLETION OF DRILLING A WELL, THE OWNER OR OPERATOR SHALL UNDERTAKE POST-DRILLING RESTORATION OF THE WELL SITE IN ACCORDANCE WITH A RESTORATION PLAN DEVELOPED IN ACCORDANCE WITH SUBSECTION (b) AND REMOVE ALL DRILLING SUPPLIES, EQUIPMENT AND CONTAINMENT SYSTEMS NOT NECESSARY FOR PRODUCTION OR NEEDED TO SAFELY OPERATE THE WELL.

(i) WHEN MULTIPLE WELLS ARE DRILLED ON A SINGLE WELL SITE, POST-DRILLING RESTORATION IS REQUIRED WITHIN 9 MONTHS AFTER COMPLETION OF DRILLING ALL PERMITTED WELLS ON THE WELL SITE OR 30 CALENDAR DAYS AFTER THE EXPIRATION OF ALL EXISTING WELL PERMITS ON THE WELL SITE, WHICHEVER OCCURS LATER.

As previously noted, even under an efficient multi-well pad operation, it often takes more than 9 months after the first well has "completed drilling" before the last well is completed and on production. Requiring restoration without reference to well completion (i.e. hydraulic fracturing) may increase land disturbance, reduce water reuse, and result in less efficient resource development. To avoid these problems, Noble suggests that the section read "Restoration after completion" and refer to restoration after completion of a well rather than restoration after "drilling" or "completion of drilling." Noble contends that 9 months is an aggressive target, particularly given our geographical climate and four seasons of weather and the current low price commodity price environment which is forcing operators to slow the pace of completions. Noble therefore requests the Department to allow 2 years for restoration after completion. Additionally, the requirement to restore a site within 30 days after expiration of all existing well permits is not an adequate timeframe, and accordingly Noble suggests this requirement be increased to 90 days.

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§ 78a.65(b) *RESTORATION PLAN.* A RESTORATION PLAN MUST CONTAIN DRAWINGS AND NARRATIVE THAT DESCRIBE:

(1) THE RESTORATION OF AREAS NOT NEEDED TO SAFELY OPERATE THE WELL TO APPROXIMATE ORIGINAL CONDITIONS.

(2) THE PROPOSED SITE CONFIGURATION AFTER POST-DRILLING RESTORATION INCLUDING THE AREAS OF THE WELL SITE BEING RESTORED.

As this section is written, it is unclear whether the Department intends such plans to include drawings and configurations of equipment and equipment locations, which an operator may not know at the time the plans are due. Noble requests that the Department clarify that the requirement that an operator provide post-drilling restoration drawings and configurations is limited to the general surface topography and does not include equipment configurations.

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§ 78a.65(b)(5) THE MANNER IN WHICH THE RESTORATION OF THE DISTURBED AREAS WILL ACHIEVE MEADOW IN GOOD CONDITION OR BETTER OR OTHER WISE INCORPORATE ABACT OR NONDISCHARGE ALTERNATIVE PCSM BMPS.

As written, this section is ambiguous and confusing. The phrase "meadow in good condition" is not defined, and standards are not set forth for making this determination. Nor is meadow in good condition a commonly recognized ecological term. Noble suggests instead that the Department utilize the more commonly recognized phrase of "site stabilization" expressed as 70 percent vegetative growth. Noble suggests the following language below:

> **"(5) THE MANNER IN WHICH THE RESTORATION OF THE DISTURBED AREAS WILL ACHIEVE SITE STABILIZATION OF 70 PERCENT VEGETATIVE COVER OR BETTER OR OTHERWISE INCORPORATE ABACT OR NONDISCHARGE ALTERNATIVE PCSM BMPS"**

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§ 78a.65(c) *EXTENSION OF DRILLING OR PRODUCTION PERIOD.* THE RESTORATION PERIOD IN THIS SUBSECTION MAY BE EXTENDED THROUGH APPROVAL BY THE DEPARTMENT FOR AN ADDITIONAL PERIOD OF TIME, NOT TO EXCEED 2 YEARS.

While Noble appreciates the option to extend drilling or production periods, Noble is concerned that a single 2 year extension may not be sufficient, especially in the current low commodity price environment. Additionally, the rule does not take into account the challenge operators are experiencing from permit processing delays for things like major modification out of the southwest regional office (SWRO). These types of permit approvals are supposed to be covered under the Permit Decision Guarantee policy, but most permits are voided out of this policy by SWRO. Noble has experienced significant delays with the technical review requiring up to six months. Furthermore, the last MSC analysis compiled for SWRO in February 2015 from various operators showed an average permitting timeline of 132 days, but with numerous permits taking over 200 day to issue. For these reasons, Noble believes this regulation should be structured to allow for *renewable* two year extensions of the restoration deadline provided the site restoration plan and appropriate PCSM measures are fully implemented. This extension process is critical to avoid unnecessary earth moving activities for reconstruction of a well pad should an operator plan to drill and produce additional wells on the same pad location at a later time. The risk of accelerated erosion and resulting sedimentation is much greater during the earth moving activities that would take place if a pad must be made smaller or expanded on multiple subsequent occasions.

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§ 78a.65(c)(3) A DEMONSTRATION THAT THE EXTENSION WILL RESULT IN LESS EARTH DISTURBANCE, INCREASED WATER REUSE OR MORE EFFICIENT DEVELOPMENT OF THE RESOURCES SHALL INCLUDE THE FOLLOWING:

Noble appreciates the Department's intent to verify that an extension would decrease disturbance or increase water reuse or efficiency, however, this provision fails to recognize the challenge operators have been facing with the evolution to the ESCGP-2 permit which requires that companies implement PCSM controls. In practice, the implementation of these controls is leading to more earth disturbance than would occur if the stringent PCSM controls were not required. Additionally, many of our sites were originally designed and permitted under the ESCGP-1 permit program, and site restoration requirements have required us to complete ESCGP-2 major modifications. To meet these obligations, sites again have to deploy more stringent PSCM controls to meet the flow requirements of an ESCGP-2 permit, which likewise results in more earth disturbance. Noble requests that the Department modify the language as follows to better provide for these circumstances and avoid conflicting requirements:

> **"(3) A DEMONSTRATION THAT THE EXTENSION WILL RESULT IN ONE OF THE FOLLOWING: LESS EARTH DISTURBANCE, INCREASED PSCM CONTROLS, INCREASED WATER RESUSE, OR MORE EFFICIENT DEVELOPMENT OF THE RESOURCES."**

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§ 78a.65(e) *POST DRILLING RESTORATION REPORTS.* WITHIN 60 CALENDAR DAYS AFTER POST-DRILLING RESTORATION UNDER PARAGRAPH (a)(1), THE OPERATOR SHALL SUBMIT A RESTORATION REPORT TO THE DEPARTMENT. THE WELL OPERATOR SHALL FORWARD A COPY OF ALL RESTORATION REPORTS TO THE SURFACE LANDOWNER. THE REPORT SHALL BE MADE ELECTRONICALLY ON FORMS PROVIDED BY THE DEPARTMENT THROUGH THE DEPARTMENT'S WEBSITE AND SHALL IDENTIFY THE FOLLOWING:

Noble questions the need for this additional reporting as it adds burden and cost on the operator but provides no environmental or public benefit. We submit a restoration plan as part of the ESCGP-2 or Chapter 105 General permit applications, and we are already required to notify the Department when we have completed restoration through the submittal of our Notice of Termination (NOT) to close out the permits. Therefore, this requirement to submit an additional restoration report is superfluous. As previously stated in our general comments, unnecessary submittals generate additional costs, and distract the Department and operators from equally or more important issues. To better align with the Department's Policy for Development, Approval and Distribution of Regulations, which directs that regulations should be drafted "to reduce paperwork, minimize administrative burdens, and save time for both the regulated community and agency staff," Noble requests the Department remove this requirement.

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§ 78a.65(f) *POST PLUGGING RESTORATION REPORTS.* WITHIN 60 CALENDAR DAYS AFTER POST-PLUGGNG RESTORATION UNDER PARAGRAPH (a)(2), THE OPERATOR SHALL SUBMIT A RESTORATION REPORT TO THE DEPARTMENT. THE WELL OPERATOR SHALL FORWARD A COPY OF ALL RESTORATION

REPORTS TO THE SURFACE LANDOWNER. THE REPORT SHALL BE MADE ELECTRONICALLY ON FORMS PROVIDED BY THE DEPARTMENT THROUGH THE DEPARTMENT'S WEBSITE AND SHALL INCLUDE THE FOLLOWING:

(1) A DESCRIPTION OF THE TYPES AND VOLUMES OF WASTE PRODUCED AND THE NAME AND ADDRESS OF THE WASTE DISPOSAL FACILITY AND WASTE HAULER USED TO DISPOSE OF THE WASTE.

As noted in the previous comment, this additional reporting requirement adds burden and cost on the operator but provides no environmental or public benefit. An operator is already required to obtain a permit to plug a well and to send a certificate of well plugging upon plugging completion. Additionally, operators are already required to conduct residual waste reporting. Thus, the reporting requirement under this provision is duplicative. To better align with the Department's Policy for Development, Approval and Distribution of Regulations, which directs that regulations should be drafted "to reduce paperwork, minimize administrative burdens, and save time for both the regulated community and agency staff," Noble suggests the Department remove these requirements.

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§ 78a.66. Reporting and remediating SPILLS and releases.

Noble shares MSC's belief that this entire section is unnecessary. The oil and gas industry is already subject to the requirements for reporting releases pursuant to 25 Pa. Code § 91.33 that apply to all other regulated entities in Pennsylvania. Noble contends that there is nothing sufficiently unique in this regard about the oil and gas industry that warrants a separate and significantly more onerous approach to reporting for the oil and gas industry in comparison with all other elements of the regulated community.

Noble supports MSC's general comments on the proposed Section 78a.66 which are as follows:

- The revision of the scope of entities subject to release reporting requirements to cover any "other responsible party" is excessively vague and reflects a significant departure from the remainder of Chapter 78a. Neither the Oil and Gas Act of 2012 nor the ANFR define the term responsible party. It is not appropriate to extend the obligations of this provision to parties other than owners or operators.

- It is unnecessary and inappropriate to apply reporting requirements under other environmental laws and regulations, such as 25 Pa. Code § 91.33 – a regulation promulgated pursuant to the Clean Streams Law – to oil and gas spill reporting under Chapter 78a. The Department should focus its efforts on defining the circumstances in which owners and operators must report spills from oil and gas operations rather than adding open-ended references to other existing spill reporting obligations.

- Per previous comments, the definition of "regulated substances" is overly broad and does not provide the necessary guidance for reporting obligations that would be imposed under the proposed Section 78a.66(b). Replacement of the previous "reportable release of brine" definition with a broad "regulated substance" trigger for reporting complicates spill reporting obligations at well sites for minor releases of brine previously exempt from reporting under the existing oil and gas regulations.

- It is often infeasible to "demonstrate attainment" with Act 2 standards within the oil and gas context because there are no relevant Act 2 criteria for chlorides and other substances commonly found in produced fluids associated with oil and gas-related operations. For substances for which there are no medium-specific concentrations (MSCs) in soil, such as chlorides, operators will be required to pursue either background or site specific standard cleanups at each well site.

- The scope of information to be reported under the ANFR revisions is broader than under the proposed rulemaking, requiring reporting on any degree of "threatened pollution" to surface water, groundwater or soil, "potential impacts to public health and safety or the environment", and the weight or volume of each regulated substance released. As a result, operators will be required to assess a spill of produced water, in addition to brine, with enough specificity to be able to quantify and characterize the spill. As a result, operators are likely to incur significant expenses in collecting additional analytical data for produced water in order to prepare chemical-specific spill reports.

- The requirement to identify and sample water supplies for which there is a "potential for pollution" is vague and inappropriate for inclusion in this section.

- By eliminating the "alternative remediation option" from the Section 78a.66(c), the ANFR purports to require remediation under Act 2 standards. However, the procedural remediation requirements under the draft which reflects a far more "command and control" framework than Act 2.

- MSC agrees with the prior OGTAB's position in Section I of its July 18, 2013 Report and Recommendation Letter to the EQB that the Department's then-proposed Section 78.66 substantially increases the time and costs for addressing small spills of less than 42 gallons of a regulated substance, and that in most circumstances the costs to comply with the proposed regulation would far exceed the environmental benefit to be realized.

- The proposed Section 78a.66 disregards and otherwise makes the future status of the Department's current policy, Addressing Spills and Releases at Oil & Gas Well Sites or Access Roads, Document No. 800-5000-001, unclear.

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§ 78a.66(b) ~~(4)~~ (5) The Department may immediately approve temporary emergency storage or transportation methods necessary to prevent or mitigate harm to the public health, safety or the environment. Storage may be at the site of the incident or at a site approved by the Department.

Noble supports the need for regulatory flexibility to facilitate emergency response actions. In this case, however, Noble believes that the provision does not go far enough. Specifically, the regulations should be clear that permits and other forms of formal authorization are not to be required where to do so would delay timely implementation of response actions. In that regard, Pennsylvania's regulations contain similar provisions to facilitate emergency response actions under other regulatory programs. See 25 Pa. Code § 287.101(d). As such, Noble supports MSC's suggested amendatory language below:

> **"(5) The Department shall not require a permit or other formal authorization for temporary emergency remediation methods, including treatment, storage and**

transportation, necessary to prevent or mitigate harm to the public health, safety or the environment. Treatment and storage may be at the site of the incident or at an alternative appropriate site. The operator or responsible party shall promptly notify the Department if treatment or storage will take place at a location that is not the site of the incident."

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§ 78a.66(b) ~~(5)~~ (6) After responding to a spill or release, the operator shall decontaminate equipment used to handle the regulated substance, including storage containers, processing equipment, trucks and loaders, before returning the equipment to service. Contaminated wash water, waste solutions and residues generated from washing or decontaminating equipment shall be managed as residual waste.

Noble is concerned that this section, designed to address steps to decontaminate equipment used in responding to a spill or release, is overly broad and unnecessarily restrictive. Decontamination of equipment may be unnecessary in some cases. For example, if spilled diesel fuel is recovered and placed in a tank that is dedicated to holding diesel fuel, there would be no tangible public or environmental value to emptying and decontaminating the tank before putting more diesel fuel in it. As such, Noble supports MSC's suggested language below:

> **"(5) After responding to a spill or release, the operator shall decontaminate equipment, including storage containers, processing equipment, trucks and loaders, where necessary and appropriate, before returning the equipment to service."**

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§ 78a.66(1) Spills or releases to the ground of less than 42 gallons at a well site that do not ~~[impact or]~~ POLLUTE OR threaten to pollute ~~[of]~~ waters of the Commonwealth may be remediated by removing the soil visibly impacted by the SPILL OR release and properly managing the impacted soil in accordance with the Department's waste management regulations. The operator or responsible party shall notify the Department of its intent to remediate a spill or release in accordance with this paragraph at the time the report of the spill or release is made. ~~[Completion of the cleanup should be documented through the process outlined in § 250.707(b)(1)(iii)(B) (relating to statistical tests).]~~ (2) For spills or releases to the ground of more than 42 gallons or that ~~[impact]~~ POLLUTE or threaten ~~[pollution of]~~ TO POLLUTE waters of the Commonwealth, the operator or OTHER responsible person ~~MUST [may satisfy the requirements of this subsection by demonstrating]~~ DEMONSTRATE attainment of one or more of the standards established by Act 2 and Chapter 250 (relating to administration of land recycling program) IN THE FOLLOWING MANNER:

These sections essentially codify portions of the Department's *Addressing Spills and Releases at Oil & Gas Well Sites or Access Roads* (Document #800-5000-001 dated September 21, 2013), which imposes significantly more onerous obligations on the oil and gas industry than other industries are subjected to. In addition, Section 78a.66(2) leaves out the alternative remediation practice allowed in the spill policy and instead requires industry to demonstrate attainment of an Act 2 standard for any release greater than 42 gallons. This inadvertently requires industry to undertake an Act 2 closure process for every occurrence, which is a long and burdensome process that is often not necessary when the initial response effectively contains and remediates the spill. If industry is not to be granted the release of liability under

this Act 2 process, then we should not be subject to the Act 2 obligations. Taken together, these provisions will require the Department to be notified in all cases for a spill of any size regardless of whether it does or does not pollute the waters of the Commonwealth.

As previously noted in our general comments, Noble believes regulatory programs should be fair and equitable and create a level playing field, and should not impose disparate requirements or disproportionate costs on one particular economic or extractive sector. In contrast to this fundamental principal, these provisions, including the underlying spill policy, are disparate, disproportionate, and inequitable. The extensive and elaborate specifications will increase costs and consume resources and will put unconventional wells at a disadvantage.

Lastly, neither Act 2 nor 25 Pa. Code Chapter 250 includes a statewide health standard for chlorides in soil. While brine releases or spills from oil and gas industry activities occur infrequently, when they do occur there are significant unnecessary complications and costs related to their remediation that result from the lack of a chloride standard.

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§ 78a.68 Oil and gas gathering PIPELINES ~~[lines]~~
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§ 78a.68(e) Equipment shall not be refueled within the ~~jurisdictional~~ floodway ~~of any watercourse~~ or within 50 feet of any body of water.

As noted in our general comments, variance and exception language can improve efficiency and make the regulatory process more performance-oriented. Consistent with this principal, Noble asks that the Department provide exception language for when materials staging for gathering line installations is not feasible outside the floodway or more than 50 feet from a body of water. For example, water withdrawal pumps need to be refueled. These pumps are often placed within the floodway to operate effectively, and refueling them outside of the floodway poses an operational and safety risk from continually mobilizing the pump for refueling. Since sufficient containment around the unit is required to prevent any release, the prescriptive language is not necessary. Noble suggests the Department provide exception language for instances where operators would not be able to reasonably comply. Noble would support a provision like that written for 78.a68(f):

> **"Equipment shall not be refueled within the ~~jurisdictional~~ floodway ~~of any watercourse~~ or within 50 feet of any body of water, unless otherwise approved in writing by the Department."**

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§ 78a.68b. ~~[Temporary]~~ WELL DEVELOPMENT pipelines for oil and gas operations.

Noble has concerns about this section which seems to limit the use of buried pipelines for the movement of reused water. In an effort to reduce truck traffic related to water hauling, companies like Noble have made significant investments to develop buried pipelines to transport the water to the field. Because of these lines we can maximize our water reuse and recycling, minimize the use of surface water and groundwater and reduce truck traffic on local roads. The reasons for burying these pipelines are numerous. This infrastructure is intended to service an entire field rather than just a single pad, thus longevity is of particular concern. As such, buried lines are much less susceptible to

damage from vandalism or weather (freezing and thawing). Additionally, companies can take the opportunity to co-locate the lines when installing other buried infrastructure thereby reducing the inconvenience to landowners resulting from a myriad of over-land lines. The ability to economically move and store a large amount of water across a development field is essential to preserve the economics of water reuse and recycling. At a minimum, Noble requests that exiting buried water infrastructure be grandfathered into this regulatory program. In general, Noble suggests the Department modify this and other sections to encourage the use of buried water infrastructure for the reasons mentioned above.

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§ 78a.68b(b) OPERATORS SHALL INSTALL WELL DEVELOPMENT ~~[Temporary]~~ pipelines that transport fluids other than fresh ground water, surface water, water from water purveyors or OTHER DEPARTMENT-approved sources ~~[shall be installed]~~ aboveground except when crossing pathways, roads or railways where the pipeline may be installed below ground surface, OR CROSSING A WATERCOURSE OR BODY OF WATER WHERE THE PIPELINE MAY BE INSTALLED BELOW THE GROUND SURFACE WITH PRIOR DEPARTMENT APPROVAL

As previously commented, Noble is concerned about the requirement that lines used for the movement of fluids be constructed aboveground. Burying these lines makes them more resilient to the effects of freezing and thawing and eliminates the risk of vandalism, both of which can result in leaks. In order to operate these buried lines, Noble constructs all water pipelines (above or below ground) in accordance with detailed standard operating procedures (SOPs) designed to ensure efficient operation while providing necessary environmental protection. As such, our design standards for water pipelines require high-density polyethylene (HDPE) pipe with a dimension ratio (DR) of 7 for all water transfer projects. Noble requires HDPE butt fusion connections on all waterlines with detailed fusion logs completed for every connection and maintained for the lifetime of the pipeline. Isolation valves are installed at all tee and pipeline ends and air release valves are installed at all topographic highpoints along the pipeline. These design parameters are supplemented by an extensive monitoring and maintenance program which includes daily inspections of buried lines transferring reused water when such lines are in use. These multiple measures allow us to use these lines while maintaining appropriate environmental protection. Therefore, Noble requests that the language be modified to allow for transfer of reused water in underground lines with prior Department approval. Additionally, Noble requests that existing buried infrastructure currently utilized for water reuse and recycling be grandfathered into this rule. These modifications will improve the efficiency and fairness of this section consistent with our general comments.

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§ 78a.68(e) In addition to the requirements of subsection (c), ~~[temporary]~~ WELL DEVELOPMENT pipelines used to transport fluids other than fresh ground water, surface water, water from water purveyors or approved sources, must have shut off valves, check valves or other ~~[method]~~ METHODS of segmenting the pipeline placed at designated intervals, to be determined by the pipeline diameter, that prevent the discharge of ~~[no]~~ more than 1,000 barrels of fluid. Elevation changes that would effectively limit flow in the event of a pipeline leak shall be taken into consideration when determining the placement of shut off valves and be considered effective flow barriers.

Noble has concerns about the requirement to add additional valves along a pipeline on a specified basis. Multiple factors must be considered during pipeline design including topography, accessibility, and the presence of sensitive receptor areas such as streams and wetlands. While Noble appreciates the Department's attempt to provide means to limit the amount of accidental discharge, in practice valves often act as potential leak-points and thus should be limited where possible. Noble suggests the language be modified to allow operators to locate valves according to the most beneficial construction design and outside of sensitive receptor areas, as opposed to an arbitrary fluid amount which may inadvertently increase the risk of leakage.

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§ 78a.68(i) ~~[Temporary]~~ WELL DEVELOPMENT pipelines shall be inspected prior to and during each DAY THE PIPELINE IS IN use. Inspection dates and any defects and repairs to the ~~[temporary]~~ WELL DEVELOPMENT pipeline shall be documented and made available to the Department upon request.

The requirement for daily inspection is excessive for well development pipelines which are moving freshwater. Noble requests that the Department modify this language to reduce the inspection burden on freshwater lines which do not present any significant environmental risk.

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§ 78a.68(j) ~~[Temporary]~~ WELL DEVELOPMENT pipelines not in use for more than 7 calendar days shall be emptied and depressurized. IN NO CASE MAY A WELL DEVELOPMENT PIPELINE BE IN USE FOR MORE THAN TWELVE MONTHS WITHOUT APPROVAL FROM THE DEPARTMENT

Noble requests clarification regarding the twelve month determination. Does it refer to twelve months from first to last use, or a continuous twelve month use? Noble requests that the language be modified to clarify that a well development pipeline may not be in use for more than twelve months since first use, without the Department's approval. In addition, the requirement to empty and depressurize a well development pipeline not in use for more than 7 calendar days is cumbersome to the operator whose water sourcing operations are constantly changing based on the needs of the completion activities being conducted. Noble recommends changing this requirement for buried water lines from 7 calendar days to 14 calendar days.

Furthermore, and as previously discussed, buried lines are installed for longevity and thus can often be used for more than 12 months. As buried lines avoid the inconvenience to landowners and the public from over land lines, reduce truck traffic and its associated environmental impacts, and are at less risk to damage from vandalism and weather than aboveground lines, Noble urges the Department to provide for and encourage the use of buried water infrastructure in this rule. Similar to aboveground pipelines, the requirement to empty and depressurize a buried pipeline not in use for more than 7 calendar days is cumbersome and provides no additional environmental benefit. Buried water lines are installed to provide water sourcing for the entire development area, and they commonly experience periods of less frequent use due to reduced operations occurring within the area. Noble recommends changing this requirement for buried water lines from 7 calendar days to 30 calendar days.

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§ 78a.73(c) THE OPERATORS OF ACTIVE AND INACTIVE WELLS IDENTIFIED AS PART OF AN AREA OF REVIEW SURVEY CONDUCTED UNDER § 78a.52a (RELATING TO AREA OF REVIEW) THAT LIKELY PENETRATE WITHIN 1500 FEET MEASURED VERTICALLY OF A FORMATION INTENDED TO BE STIMULATED SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING. Orphaned ~~[or]~~ AND abandoned wells identified AS PART OF AN AREA OF REVIEW SURVEY CONDUCTED under § 78a.52a (relating to AREA OF REVIEW ~~[abandoned and orphaned well identification]~~) that likely penetrate WITHIN 1500 FEET MEASURED VERTICALLY OF a formation intended to be stimulated shall be visually monitored during stimulation activities. ALL WELLS WITH AN UNKNOWN TRUE VERTICAL DEPTH SHALL BE PRESUMED TO PENETRATE WITHIN 1500 FEET MEASURED VERTICALLY OF THE FORMATION INTENDED TO BE STIMULATED. The operator shall immediately notify the Department ELECTRONICALLY THROUGH THE DEPARTMENT'S WEB SITE of any change to ~~[the]~~ AN orphaned or abandoned well being monitored OR OF ANY TREATMENT PRESSURE CHANGES INDICATIVE OF ABNORMAL FRACTURE PROPAGATION AT THE WELL BEING STIMULATED. IN SUCH AN EVENT THE OPERATOR SHALL CEASE STIMULATING THE WELL THAT IS THE SUBJECT OF THE AREA OF REVIEW SURVEY and take action to prevent pollution of waters of the Commonwealth or discharges to the surface. THE OPERATOR MAY NOT RESUME STIMULATION OF THE WELL THAT IS THE SUBJECT OF THE AREA OF REVIEW SURVEY WITHOUT DEPARTMENT APPROVAL

The obligation to notify other active or inactive well operators identified under proposed Section 78a.52a in advance of hydraulic fracturing must be a reasonable efforts standard. The location coordinates for many wells that may exist in the Department's database are likely derived from sources other than field GPS coordinates. Some coordinates may have been derived from old maps and few if any would include vertical depth. For a variety of reasons, a well with lat/long coordinates in the Department's database may not be visible on the ground, perhaps because the coordinates are inaccurate, or possibly because the well does not exist. The operator should only be required to obtain and use information in current Department records for the active or inactive well operator, and notice should be via certified mail or other reasonable method to confirm notice was provided.

Noble is concerned that the Department's proposal that all wells in the area of review with an unknown true vertical depth (no well record) be presumed to penetrate within 1,500 feet measured vertically of the formation intended to be stimulated is untenable and illogical. The state has a long history of oil and gas drilling, however numerous published reports and other private records of early drilling describe depths typically of less than 3,000. In contrast, Marcellus wells are much deeper, closer to 6,500 feet, thus significantly farther than 1,500 feet. As such, Noble supports MSC's recommendation that the Department's proposal be amended to allow operators to demonstrate – through the presentation of data or other evidence (see proposed subsection 78a.52a(b)) – to the Department that wells in the area of review with an unknown true vertical depth are not likely to penetrate within 1,500 feet measured vertically of the formation intended to be stimulated. As described in detail in MSC's comments, there is other data available that could be presented to demonstrate likely depth of well; for instance, the Pennsylvania Geologic Survey historical reports about oil and gas development in certain localities of evidence.

Additionally, the obligation to visually monitor wells is subjective and it may not be possible to get permission to access the surface near an abandoned well. Locating a well in the field that has been identified from the Department's database or an old map or geologic report is not assured for a variety of reasons and access to private lands to conduct a search may not be possible for an operator. A

reasonable efforts standard should apply to both the obligation to locate and the obligation to monitor wells.

Noble supports the MSC's suggested language for this section below:

> **"§ 78a.73. General provision for well construction and operation.**
>
> **"(c) The operators of active and inactive wells identified as part of an area of review survey conducted under § 78a.52a (relating to area of review) that likely penetrate within 1500 feet measured vertically of a formation intended to be stimulated shall be notified at least 72 hours prior to commencement of hydraulic fracturing. Orphaned and abandoned wells identified as part of an area of review survey conducted under § 78a.52a (relating to area of review) likely penetrate within 1500 feet measured vertically of a formation intended to be stimulated shall be visually monitored during stimulation activities, provided that surface access can be obtained. The operator shall immediately notify the Department of any change to an orphaned or abandoned well being monitored. In such an event the operator shall cease stimulating the well that is the subject of the area of review survey and take action to prevent pollution of waters of the Commonwealth or discharges to the surface. The operator may not resume stimulation of the well that is the subject of the area of review survey without Department approval."**

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§ 78a.122. Well record and completion report.

(a) For each well that is drilled or altered, the operator shall keep a detailed drillers log at the well site available for inspection until drilling is completed. Within 30 calendar days of cessation of drilling or altering a well, the well operator shall submit a well record to the Department on a form provided by the Department that includes the following information:

The amount and detail of information required on the forms have increased significantly over the years, though the timeframe to collect and report this information has not. It is unclear how much of the information requested provides an environmental or public benefit, particularly as the information is already submitted in the required Frac Focus submittal. Noble contends that 30 days from "cessation of drilling" is a confusing trigger and an insufficient time frame for a multi-well site. The information required in the report was challenging but possible for a conventional single-well location, however, it is extremely difficult to accomplish this for a multi-well site. For example, on a multi-well pad more than 30 days may have transpired between the first and the last wells drilled, thus flowback may not have commenced at the time the report is due. Nonetheless, flowback information is required on the forms and currently no sundry process exists where an operator could amend a form once this information is acquired nor is there a process for obtaining a variance. Lastly, requirements to report recycled water versus the freshwater breakdown used in a hydraulic fracturing operation presents a significant challenge unless you are trucking water, which typically has more environmental impacts than piping water. Noble suggests the language be modified to require reports "90 days from rig release" or "90 days from the end of a completion of a well." Noble also suggests the Department remove the requirement to report recycled water.

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§ 78a.122(a)(12) The country of origin and manufacture of tubular steel products used in the construction of the well.

Noble recommends that the Department strike the requirement to report country of origin and manufacture of tubular steel products used in the construction of the well. This requirement serves no protective environmental purpose and is difficult for operators to obtain and costly to attempt to track. Requiring this information after a well is drilled adds burden while providing no environmental nor public benefit.

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§ 78a.122(b) Within 30 calendar days after completion of the well, when the well is capable of production, the well operator shall arrange for the [submit] submission of a completion report to the Department on a form provided by the Department that includes the following information:

Noble requests that the Department clarify what is acceptable as an "arrangement" for the submission of a completion report. Noble also suggests that the Department clarify for Sections 78a.122(b)(6)(iii,iv,v) whether submission to Frac Focus meets the reporting requirement.

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§ 78a.122b(9) The freshwater ~~[and centralized]~~ impoundment, if any, used in the development of the well.

The withdrawal of freshwater is already require to be reported on a quarterly basis under PA Chapter 110 reporting (25 Pa Code 110.301). As such, Noble contends this requirement is duplicative and unnecessary. Noble suggests that this provision be stricken.

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§ 78a.123. Logs and additional data.

(a) If requested by the Department within 90 calendar days after the completion [of drilling] or recompletion of drilling [of a well], the well operator shall submit to the Department a copy of the electrical, radioactive or other standard industry logs run on the well.

To avoid confusion, the Department should strike "recompletion of drilling" and insert "recompletion of a well." Additionally, Noble supports the inclusion of a 2 year confidentiality clause to prevent the sharing of an operator's logs and data, both of which represent a significant capital investment and competitive advantage.