Report of the Pennsylvania Department of Environmental Protection's Conventional Oil and Gas Advisory Committee (COGAC) to the Environmental Quality Board (EQB)

Concerning

Proposed Amendments to 25 Pa. Code Chapter 78 Environmental Protection Performance Standards at Oil and Gas Well Sites, Subchapter C

Submitted December _, 2015

Executive Summary

The Conventional Oil and Gas Advisory Committee (COGAC) was formed in March 2015 to serve as an advisory board to the Pennsylvania Department of Environmental Protection (DEP or Department). The bylaws of the COGAC charge it with the "review and comment on all…regulations" promulgated under the 2012 Oil and Gas Act prior to submission of the regulations to the EQB.

At the same time, the established members of the Oil and Gas Technical Advisory Board (OGTAB) were replaced with an entirely new group of professionals. Obviously, the current OGTAB and COGAC members have not had the opportunity to assist with the revisions to Chapter 78 from the beginning. Moreover, the work commenced by the new OGTAB and COGAC members in March, 2015, was hampered by the need for the early meetings to grapple with housekeeping matters. In the few meetings dealing with the regulatory provisions, the format has been for the DEP to provide verbal presentations of material already prepared by the DEP. Neither advisory board has been invited to discuss foundational matters such as the need for regulatory revision, alternatives for small business, or costs of proposed changes. In many material ways the expertise and knowledge of the members of the advisory boards is not reflected in Final Rule. For that expertise and knowledge to be reflected will require several more meetings and the all-important discussion of those foundational matters. The members of COGAC stand ready to perform that work.

On October 27, 2015 the OGTAB adopted a resolution which provides that OGTAB would "incorporate the comments or reports on Chapter 78 that are developed by COGAC into the written report concerning the Department's proposed amendments to Chapter 78 and Chapter 78a that OGTAB will present to the Environmental Quality Board under Section 3226(d) of Act 13." Accordingly this report is respectfully submitted to the EQB and to the OGTAB.

On October 29, 2015, the COGAC unanimously adopted a resolution which, among other things, resolved that the proposed regulatory package for conventional oil and gas wells (Chapter 78) before you today (the "Final Rule) should not be advanced to this Board. (A copy of the resolution is attached as Exhibit A.) This action was not taken lightly as COGAC recognizes the need for and welcomes a robust oil and gas regulatory program in Pennsylvania. The Final Rule, however, overreaches that which is needed to protect the environment; the overreach is so distinct that the program will unnecessarily discourage conventional oil and gas production rather than encourage the optimal development of Pennsylvania's conventional oil and gas resources. More specifically the Final Rule places unneeded and unreasonable burdens on the industry and was developed without the proper process required for all regulatory action in Pennsylvania.

The COGAC members believe that the Final Rule arrived at this end because required rulemaking steps were not followed. In the "Discussion," below, COGAC will detail how key aspects of the Final Rule were conceived without the requisite foundational steps of a financial analysis of the regulatory costs, the statement of need, data, the analysis of alternatives for small business, and the provision of forms required by the proposed regulations.

Because key rulemaking steps were not followed COGAC members observe there exists no explanation why certain items of the new regulations are proposed, the cost of the majority of the regulations were not calculated, that without forms and other documents the extent of the regulatory burdens remains unknowable, and that the proposed regulations do not comport with data and "in-the-field" experience known to the COGAC members.

In the "Discussion" COGAC will also examine specific regulatory provisions. The authorizing legislation requires a balanced approach to the goals of protecting the resources of the Commonwealth and insuring the optimal development of its oil and gas resources. In many instances, discussed below, the substance of the proposed regulations does not achieve that legislative purpose. Moreover, there are portions of the Final Rule wherein it is impossible to determine if the substance of the proposed revision is appropriate because the rulemaking steps are not complete, and the information that would have been derived therefrom (such as the cost of the proposed regulation or the required forms associated therewith) is unavailable. In those instances, the substance of the regulation is also flawed because it is impossible to know if the proposed regulation achieves the legislative purpose. Some of the key regulatory provisions that will be discussed include:

- **§ 78.1 Definitions**
  - The Department has proposed a new definition of "other critical communities" that is without legal or scientific foundation. The proposed definition sweeps in vague and limitless species to be reviewed in the well permit application process.

- **§ 78.15 (f) Permit Applications – Public Resource Agencies**
  - The Final Rule would add counties, municipalities, and school districts to its list of "public resource agencies," along with new obligations for well permit applicants to provide notice to such agencies. This definition of such agencies beyond the state and federal agencies that are authorized by statute to protect the public natural resources of the Commonwealth is outside the scope of EQB's authority, is unnecessary, and is contrary to the express purpose of Act 13 to promote the optimal development of oil and gas resources.

- **§ 78.51 Protection of Water Supplies**
  - This aspect of the Final Rule would create an unreasonable burden for the operator to potentially restore an impacted water supply to a level better than what existed prior to drilling. After more than two years of development, the Department has acknowledged that the technical feasibility and financial obligation of this requirement are unknown and will not be known until "guidance documents" are promulgated. However, this provision is substantially more stringent than comparable provisions in other DEP regulations. A mining industry representative noted that water replacement costs typically range from $50,000 to more than $100,000.
  - Further, the Department is imposing standards for the replacement of water supplies that are unregulated, have no construction standards, and are not subject to state or federal water quality standards.

- **§ 78.52a and § 78.73 Area of Review**
  - The Final Rule overstates the area around a conventional well that may be impacted by hydraulic fracturing and thus adds an unneeded and unnecessary burden to the industry.
  - The extent of the burden is unknown until "guidance documents" including forms required by the regulation are promulgated. However, it is certainly clear that the obligations will far exceed the $0 cost estimated by the RAF.
  - Although guidance documents are not yet issued, comments by DEP staff at COGAC meetings and the revised language of the Final Rule suggest under this section, the DEP could disallow the completion of a new well, thus elevating this section to a new permitting provision, beyond the Department's statutory authority for permit denial.

- **§ 78.55 Site Specific PPC plans**
  - The conventional industry frequently clusters wells and gathers fluids from those wells at a single location; the current practice is to use a single PPC plan for those many wells. The Final Rule, requiring a plan at each of the more than 100,000 conventional wells sites, adds remarkable cost for little to no benefit, inasmuch as the plan details (contractors, supplies, etc.) are similar from site to site. Although DEP staff has stated it is not the purpose of the Final Rule to require site specific PPC plans, the rule, as written, nevertheless contains that obligation.

- **§ 78.65 Site Restoration**
  - The Final Rule requires sites to be restored to "original" or "preconstruction" contours. This is an ill-fitting standard for conventional oil and gas sites which are very small and the majority of which have been in place for decades. Timber has grown on the sites, crops are planted immediately next to conventional wells, and the disturbance to return to original contours would impart more harm than any perceived benefit.
  - Original or preconstruction contours are impossible to know for the majority of conventional wells, most of which are decades old, or in many cases more than 100 years.

- **§ 78.66 Spills and Releases**
  - The Final Rule would inappropriately apply provisions of the Pennsylvania Land Recycling Program (Act 2) to minor spill investigations and cleanup and in so doing would violate the intent of this program established in 1995 to be a voluntary program to encourage the reuse of blighted lands. Further, the Final Rule would establish spill threshold values for brine that are many times more stringent than more toxic, listed hazardous substances. While the Department apparently views brine as being more toxic than many listed hazardous substances in the Commonwealth, COGAC does not share this view and believes this section fails to meet the requisite legislative balance.

- The Final Rule requires oil and gas operators to comply with Act 2 for remediation of spills, when that program is voluntary for all other entities and industries, including manufacturing, power generation, chemical facilities, and more.
- COGAC suggests that the provision which allowed either the use of Act 2 or an alternative method for spills over 42 gallons be allowed as written in previous drafts of the proposed changes to Chapter 78 Subchapter C regulations.

- **Forms**
  - No less than a dozen forms are referenced in the proposed rule that have not been made available for review and comment prior to drafting of the Final Rule. As demonstrated by the controversy created by the Mechanical Integrity Assessment forms, the Department attempts to expand the plain meaning of regulation through the development of forms needed for implementation. The Department's refusal to release the forms for public comment is inappropriate and contrary to the Regulatory Review Act.

- **Advance Notifications**
  - The Final Rule includes multiple points where verbal reporting of certain activities would be required before those activities may begin in the field. While this may be feasible for unconventional wells that take weeks to complete, it is not feasible for shallow conventional wells that are often drilled or completed in three days or less.

- **Procedurally, the following flaws are noted:**
  - The Department failed to conduct and share a financial analysis of the impacts this rule will have on the stakeholders
  - The Department failed to demonstrate or state a compelling need for the regulatory changes proposed
  - The Department failed to provide the required data to support the need of this regulation
  - The Department failed to provide a required regulatory flexibility analysis
  - The Department failed to Provide Authority for the Regulatory Requirements
  - The Department failed to provide numerous forms integral to this regulation for review and comment by the public and interested parties

Procedural Background

The proposed revisions to Chapter 78 Subchapter C regulations were first published December 14, 2013. In association therewith the DEP published a Regulatory Analysis Form (RAF). The RAF is a document required under the Act of June 25, 1982 (P.L.633, No.181), known as the Regulatory Review Act (RRA). The RRA requires that the RAF be published on the same date as the proposed regulations. The RRA also requires that the RAF include over one dozen enumerated items such as estimates of the direct and indirect costs of the proposed regulations,

statement of the need, the data supporting the proposed regulations and the like. The RRA also contains an expression of intent "to improve State rulemaking (by making available) more flexible regulatory approaches for small businesses."

In June 2014, the legislature passed, and the governor signed, Act 126, which requires the DEP to promulgate separate regulations for Pennsylvania's conventional oil and gas industry. In April 2015 the DEP published an Advance Notice of Final Rulemaking (ANFR). The April 2015 ANFR, for the first time, published separate regulations for Pennsylvania's conventional oil and gas industry. However, it is observed that the separate conventional regulations were a selective "cutting and pasting" of material from the original December 14, 2013 publication (as the foundation for the revisions and new subject areas). To date there has been no process by which separate conventional regulations have been published as a proposed rule or accompanied by any separate RAF analyzing the need, cost or other topics addressed in the RRA and which relate to Pennsylvania's conventional oil and gas industry.

Additionally, the ANFR introduced significant additions and revisions to the proposed rule without explanation, without a revision of the RAF, and without describing the rationale for changes made in response to previous comments from the public, the IRRC, the legislative committees, or any other sources. Without such revised or accurate information about costs, anticipated impacts, justification, data or analysis, COGAC was ill-equipped to respond to DEP's presentation of the revisions prior to publication of the ANFR. Without a description of the public comments received following the ANFR, or the DEP's response to those comments, COGAC members remain incapable of providing fully informed comments on the Final Rule that has been submitted to EQB.

In August and October 2015 the DEP posted additional redline versions of its regulatory package. The August 2015 version made yet additional modifications to the proposed regulations affecting conventional oil and gas operations. The August and October 2015 versions were not accompanied by a new or revised RAF; there were still no accompanying documents explaining the DEP's rationale for the several changes or in any other way providing an analysis of the public comments from the 2014 public comment period.

COGAC is concerned that the DEP used the ANFR to substitute for its rulemaking obligations, primarily with respect to the conventional rule, which was published for the first time in the ANFR as a new and separate rule. COGAC understands that newly proposed regulations, such as the new and separate conventional rule, must be presented to IRRC, along with a Regulatory Analysis Form. The ANFR entirely failed to satisfy those requirements, which were adopted to ensure that all rulemaking is done with the utmost transparency and opportunity for public scrutiny. The Final Rule accordingly suffers from a foundational flaw, the lack of a legitimate proposed rulemaking process.

Discussion

A) Matters of Procedural Concern

Failure of Financial Analysis: The RAF failed to provide an appropriate financial analysis of the regulations proposed in 2013. First, the DEP document was silent as to the cost of 10 of the 13 major regulatory sections affecting conventional operations. Second, the DEP's financial analysis pertained exclusively to costs incurred in the drilling of new wells; the DEP analysis ignored the costs of bringing Pennsylvania's 100,000+ existing (legacy) wells into compliance. Finally, the RAF ignored the ongoing costs of maintaining Pennsylvania's conventional wells in compliance with the new regulatory requirements.

The DEP estimated the cost of compliance at between $5 million and $12 million. Obviously, for the reasons stated above, that estimate is incomplete. The COGAC notes that an industry trade group, Pennsylvania Grade Crude Oil Coalition (PGCC) submitted a 28 page document supported by numerous spreadsheets, which purported to analyze estimated costs for initial and ongoing compliance for all 13 sections contained in the 2013 revisions, for both new and legacy wells. The PGCC estimate was between $.5 billion and $1.5 billion. That the DEP analysis is incomplete, and that such a wide gulf exists between the incomplete DEP estimate and an industry estimate, is of serious concern.

Further, the new regulatory burdens contained in the various drafts and revisions to the ANFR published in 2015 or the Final Rule were not the subject of any financial analysis by the DEP.

The failure of financial analysis is a fundamental omission in the development and analysis of the proposed regulations. The process dictated by the legislature for the adoption of new regulations regards cost analysis as a key component. For example,

- In the RRA's statement of Legislative Intent (Section 2(a)) the Legislature provides: "The General Assembly finds that it must establish a procedure for oversight and review of regulations adopted pursuant to this delegation of legislative power in order to curtail excessive regulation and to require the executive branch to justify its exercise of the authority to regulate before imposing hidden costs upon the economy of Pennsylvania." (Emphasis added)
- At Section 5 (Procedure for Review) the Legislature requires the regulatory body to provide estimates of costs as to all of the proposed regulation (not merely 3 of 13 sections). The statute is, of course, quite specific as to the financial data to be provided and that the same is to be delivered prior to the public comment period so that the intended dialogue is sufficiently informed.
- At Section 5.2(1) the legislature imposes upon the Independent Regulatory Review Commission (IRRC) the obligation to determine several specific items about the financial impact of the proposed regulation. The statute requires that this financial information be available "on the same date" that the proposed regulation is published.

Clearly, the IRRC cannot carry out that function, nor can the public comment contemplated in the RRA be conducted, because the financial information was not provided at the requisite time.

The void of financial information is the undesirable breeding ground for the "hidden costs" the statute is intended to prevent.

Failure to State Need: Section 5.2(b)(3)(iii) of the RRA requires that a statement of need be published at the time the proposed regulations are advanced. There has never been a separate statement of need published as to the proposed conventional oil and gas regulations, and the statement published in 2013, wherein the proposed regulations combined both conventional and unconventional operations, focused on the need relative to unconventional operations. In April 2014 the IRRC commented upon the statement of need as follows:

> Section D of the Preamble to this rulemaking relates to background and purpose. It notes the following: "The 2012 Oil and Gas Act contains new environmental protections for ***unconventional*** wells and directs the Board to promulgate specific regulations. For these reasons, the (EQB) initiated this proposed rulemaking." (Emphasis in original.) Commentators representing the conventional oil and gas industry believe this rulemaking will have a serious negative impact on their businesses. While we understand that EQB has the authority to amend its regulations relating to conventional wells, we ask for a detailed explanation of why more stringent regulations for the conventional oil and gas industry are needed at this time. Has EQB witnessed an increase in environmental mishaps or violations from conventional well operators? What problem is EQB attempting to correct through this proposal with respect to conventional wells?

The "detailed explanation of why more stringent regulations for the conventional industry are needed" has never been provided by the DEP. The "need" documents are integral to the process, and as with the missing financial analysis, cannot be added merely at the end. Without the anchor of "need," there is no end to the number of new regulations which the imagination can conceive and develop.[1] The Legislature recognizes that risk, stating (at Section 2) the RRA is adopted "…in order to curtail excessive regulation and to require the executive branch to justify its exercise of the authority to regulate..." (Emphasis added.) That a new regulation might seem like a good idea to some is not enough. The need must be "justified" in the Preamble, and the comment period unfolds to discuss and allow that justification to be tested. Moreover, and as discussed in more detail below, that test is particularly relevant when the regulated community consists of small businesses. It is impossible for small business alternatives be tested for merit when there is no statement of need. Similarly, it is impossible to determine if small business alternatives are viable when the goal to be achieved is not set out by the regulatory body in a statement of need.

Failure to Provide Acceptable Data: The RRA also speaks to the requirement of acceptable data. Among the statutory charges to the IRRC is the duty to determine "whether the regulation is supported by acceptable data" (RRA Section 5.2(b)(3)(v) and (b)(7)). At Section 6 of its April, 2014 comments the IRRC discussed section 28 of the RAF wherein the DEP stated that "Data is not the basis of this regulation."

The IRRC then stated:

[1] Just four months after the issuance of the April 2015 ANFR the August redline draft was issued—it added many new or amplified regulatory sections. A summary of the August ANFR redline changes is attached as Exhibit B.

> If data is not the basis for this regulation, how did EQB determine that the many standards being imposed are adequate? As noted in our first comment, various segments of the regulated community have opposing views on many provision of the proposal. Those commentators often call for either: more stringent regulations, less stringent regulations, no regulations at all or a more flexible regulatory approach to standards being put forth. Since the regulation is not based on data, we ask EQB to explain how it determined that the numerous standards being proposed are appropriate and why it believes those standards strike the appropriate balance between environmental protection and the optimal development of the oil and gas resources of this Commonwealth.

The lack of data made it impossible for the COGAC members to apply their experience and make a rational analysis. As noted in the substantive discussion, below, the experience of the COGAC members leads them to believe that many of the proposed standards are either unnecessary or are far out of balance with any need or data that might pertain to the protection of the Commonwealth's resources.

Failure to Provide a Regulatory Flexibility Analysis: The statutory charge of the RRA also requires the promulgating agency to provide a regulatory flexibility analysis and to consider various methods of reducing the impact of the proposed regulation on small business. (RRA Sections 5(a) (12.1) and 5.2(b) (8)). Under the RRA the analysis is to consider the following:

1) Less stringent compliance or reporting requirements;
2) Less stringent schedules or deadlines for compliance or reporting requirements;
3) Consolidation or simplification of compliance or reporting requirements;
4) Establishment of performance standards to replace design or operational standards; and
5) The exemption of small businesses from all or any part of the requirements contained in the rule.

Despite the RRA mandate, and the fact that the vast majority of conventional oil and gas operators are small businesses, the Final Rule for conventional oil and gas does not contain any accommodation for small business. Concerning this omission, the IRRC stated in its April 2014 comments: "…we agree that more information is needed in the RAF. We ask EQB to provide the required regulatory flexibility analysis for each section of the proposed rulemaking."

The DEP/EQB has not yet provided the flexibility analysis for each section. It would have been useful, and in accord with the intent of the RRA, if the analysis of alternatives had unfolded long ago so that meaningful comment could have occurred.[2] Indeed, the members of COGAC would be willing to provide information relative to alternatives and to help analyze the same if DEP or EQB were inclined to utilize the COGAC in this method. However, to date, the COGAC has not been so utilized. The failure to state need and the failure to rely upon data have great bearing on small business alternatives. It is impossible to consider whether less stringent alternatives meet a legitimate regulatory need, when that need is not stated. Similarly it is impossible to analyze or

[2] Section 5 of the RRA requires the RAF to be submitted "on the same date" that the regulation is submitted to the LRB for publication in the Pennsylvania Bulletin, and it is the RAF which is to include the specific analysis items set forth above.

comment upon whether alternative performance or operational standards will meet a legitimate regulatory need when the data that underlies the regulatory need is not stated.

Failure to Provide Authority for the Regulatory Requirements: The statutory charge of the RRA also includes the obligation of the regulatory agency to provide "a specific citation to the Federal or State statutory or regulatory authority or the decision of a Federal or State court under which the agency is proposing the regulation…" (Section 5(a)(1.1)). In its April 2014 comments the IRRC identified several regulatory sections for which it asked the EQB to explain its authority for regulation.

That explanation was not provided, and as with the regulatory flexibility analysis, it would have been necessary for that explanation to have unfolded long ago if there were to be meaningful comment.

Failure to Engage in Steps Necessary to Achieve Consensus: The goal of "consensus," identified as part of the Legislative Intent of the RRA, was ill served by a host of matters including the failure to meet the statutorily mandated obligation to provide the legislative need, financial analysis and other components on the "same date" as delivery of the proposed regulations to the Legislative Reference Bureau (LRB). COGAC believes that it can play an effective role in achieving the legislative goal of consensus and that the experience of COGAC members could be more effectively employed in the following particulars:

Process: The meetings with COGAC and DEP employees have been structured so as to have COGAC members review regulatory provisions already drafted by DEP staff. The expertise of the COGAC members was not drawn upon to discuss need, cost, and alternatives because the regulation is already drafted. The agenda has been exclusively the review of a product already crafted, making it unwieldy to discuss the underlying questions of whether the proposed regulation is necessary, whether the cost is appropriate to the benefit achieved, and whether alternatives are fitting. Attempts to move into those arenas are clearly off-agenda and, as noted below, are often impossible because the necessary data or forms are unavailable.

Data: COGAC members have asked the DEP to explain the underlying data, need and authority for various provisions being discussed in the course of the meeting. The DEP has generally refrained from doing so, stating instead that the COGAC members would be "surprised" by such data and justification to be provided with the Final Rule submission to EQB in January 2016. It is contrary to both the letter and spirit of public rule making process, as well as of the stated purposes of COGAC and OGTAB, to deprive the boards, legislators, regulated entities, stakeholders and the public at large of the most basic information - to explain why any revision is needed at all. This information should have been provided with the initial proposal in 2013, so that all comments could be informed by and responsive to the stated need for revision. Without knowing why a revision is needed, commenters could only guess what the DEP was trying to accomplish. Similarly, COGAC cannot provide informed comment in the vacuum created by the lack of data, financial analysis and so forth.

Forms and Guidance: The draft rules describe numerous new forms that will be necessary to implement the final rule, and the DEP has stated that guidance documents will be

necessary for numerous sections of the rule. Despite the obligation in Section 5(a)(5) of the RRA to submit copies of forms required for implementation on the same date as submission of the proposed rule, no draft forms or guidance documents have been provided to OGTAB, COGAC or the public. The DEP mentioned that it would be, and has been, creating "highly technical" workgroups, by invitation only, to develop guidance documents, but is not undertaking this process through OGTAB or COGAC. All forms and guidance have the potential to expand and alter obligations created by the rules themselves, and must be provided for review and comment by the advisory boards and the public before the rule is finalized.

B) Matters of Substantive Concern

Below are sections from the Final Rule about which COGAC has substantial concern. COGAC's ability to set forth its concerns is limited to the extent COGAC has been able to obtain requisite information. For example, where the proposed regulation recites forms and the forms are unavailable, it is impossible for COGAC to speak fully to the import of or concern about the regulatory provision.

§ 78.1 Definitions

Other Critical Communities

The COGAC members struggle to understand the boundaries of "other critical communities" or what the scientific basis is for the new definition. The proposed definition includes species of special concern identified on a PNDI receipt, including plant or animal species that are not listed as threatened or endangered by any federal or state public resource agencies, plant and animal species that are classified as rare, tentatively undetermined, candidate, or proposed as threatened, endangered or rare. This definition would come into play in the well permit application process, where applicants would be required to give notice to Public Resource Agencies "responsible for managing" the habitats of these critical communities. See proposed §78.15(f)(1-4).

COGAC inquires as to the legal authority to develop such rules given that the Pennsylvania Supreme Court invalidated Sections 3215 (b) through (e) of Act 13. However, beyond the lack of authority under Act 13, the Final Rule is also both broad and unworkable, creating unpredictable and unlimited obligations to protect unknown and unknowable species and non-species resources.

Under the regulation the presence of "other critical communities" is determined by utilizing the Pennsylvania Natural Diversity Index ("PNDI") database. PNDI, however, does not use the term "critical communities." When there is a "hit" in the PNDI database, a PNDI receipt indicates that "special concern" species may be impacted by the project. "Special concern" species, however, are not defined in any state or federal statute or regulation, and no agency or entity that populates the PNDI database utilizes a consistent or public standard or process for the categorization of such species. These decisions are made without public notice, input, rulemaking or peer review.[3]

[3] This uncertainty was the subject of discussion at the COGAC meeting held October 29, 2015. As a result of that discussion it was agreed that DEP would host a meeting with TAB, COGAC and various Pennsylvania Resource

COGAC has expressed its grave worry about this change to the DEP. Other agencies will now be adding species to a list that has regulatory impact on oil and gas operators; those other agencies will be doing so without communication with, and thus presumably without concern about how the additions or associated mitigation measures will impact, Pennsylvania's conventional oil and gas industry. The list of species that would fall within the "critical communities" could change without notice on a daily, weekly or monthly basis. That will leave little certainly or predictability for conventional oil and gas operators.

This proposed change is an example of the interweaving of the procedural and substantive concerns. The proposed changes will impose both time and financial burdens depending upon the speed and quantity of species additions. The Regulatory Review Act requires that certain questions be asked. Does this new addition to the old regulation constitute what the legislature termed an "unnecessary"? Do the costs of the new additions qualify as "hidden"? Do the new additions comport with the "optimal" development of oil and gas? It is impossible to answer these questions; there is no data provided in the RAF to support the broad net cast by the proposed additions. Despite the introduction of the new time and financial burdens, the cost attributed in the RAF is, remarkably, $0. As to need, Pennsylvania's conventional oil and gas industry has operated successfully in coordination with the PNDI program to identify threatened and endangered species for many years. Yet the RAF is entirely silent as to why that coordination has been inadequate and why these new additions are necessary.

Public Resource Agency

The Final Rule would add counties, municipalities, and school districts to its list of "public resource agencies," along with new obligations for well permit applicants to provide notice to such agencies. COGAC believes that expanding the definition of such agencies beyond the state and federal agencies that are authorized by statute to protect the public natural resources of the Commonwealth is outside the scope of EQB's authority, is unnecessary, and is contrary to the express purpose of Act 13 to promote the optimal development of oil and gas resources. Like the numerous new proposals throughout the rulemaking for notice to landowners and other entities, this expansion will obstruct, rather than optimize, development of oil and gas resources.

Moreover, conventional oil and gas operators have communicated with local municipalities and school districts for decades and will continue to do so in a manner that is consistent with both the law and good community relations. The COGAC members observe there is no statement of need showing how the existing regulations are inadequate to address the needs of local municipalities and school districts. Indeed, the members of COGAC can provide many examples of cooperation with such entities that belie any such need. The reality is that nearly all conventional operators are small businesses with headquarters, or in the case of sole proprietorships, residences, in the municipalities and school districts where operations occur. Conventional well operators, local municipalities and school districts are collectively aware of local conditions and circumstances; all have co-existed for decades.

Agencies to discuss how species of special concern are categorized by those agencies. While such discussion is a positive step toward clarification, the need for the meeting exemplifies why the rule is not ready to be advanced.

§ 78.15 Application Requirements

Section 78.15(f) would add new Public Resources to the list established by the General Assembly, adding wellhead protection areas, schools, and playgrounds to the existing list of natural or entirely public resources that may trigger consideration by DEP in its well permitting. The new public resources are described as locations:

- **WITHIN 200 FEET OF COMMON AREAS ON A SCHOOL'S PROPERTY OR PLAYGROUND.**

- **WITHIN ZONES 1 OR 2 OF A WELLHEAD PROTECTION PROGRAM APPROVED UNDER § 109.713 (RELATING TO WELLHEAD PROTECTION PROGRAM).**

First, even if Department has the authority to expand the list of public resources, common areas of schools and playgrounds are simply not comparable to the areas set forth in Act 13:

- Publicly owned park, forest, game land or wildlife area;
- State or National scenic river;
- National natural landmark;
- A location that will impact other critical communities; or
- Historical or archeological site listed on the Federal or State list of historic places.

It is notable that each public resource listed in Act 13 is limited in number and unlikely to be altered or expanded without significant public notice. In contrast, the large number of "common areas" the Department would add to the list illustrates the incongruity of the additions. Obviously there are many school parcels in each county, and in the rural character of western Pennsylvania many school tracts are quite large. This combination of frequency and size will yield many "common areas" wherein the oil and gas applicants, school officials and permit reviewers will be faced with a large variety and uses of "common areas," as well as the unlimited number of measures that could be recommended by schools and parents for the mitigation of impacts. Relative to the "interweaving" of the procedural and substantive factors, the RAF attributes $0 cost to this significant new addition, considers no alternatives for small business, and fails to state the need. The necessary balancing, including whether this new language allows for "optimal" development of oil and gas, cannot possibly be accomplished in the vacuum created by these procedural failures.

Second, Act 13 expressly provides for the protection of water wells under Section 3215(a) through a setback requirement that can be waived by the owner of that supply. Given that the legislature already considered and addressed wellhead protection in this manner, COGAC is concerned that the Department has exceeded its authority and has created unnecessary, duplicative and therefore unnecessarily costly protection by expansion of the listed public resources in Section 3215(c). The legislature considered and comprehensively provided for the protection of water supplies in the adoption of Act 13 in 2012. The legislators deliberately chose to add precise protection with respect drinking water supplies in Section 3215(c) and created

obligations for the Department in Section 3218.1.[4] In the face of this comprehensive statutory scheme, the inclusion of wellhead protection areas in the permit review process is beyond the Department's and EQB's statutory authority.

Further, if the Department intends to protect some "area" beyond the setbacks and protections already specified in Act 13, neither the need nor purpose for such expansion can be gleaned from the proposed revision, preventing COGAC or anyone else from providing a well-informed comment on whether the revision properly addresses either a need or the Department's purpose in making the revision.

Act 13 also requires that permit conditions respect "property rights of oil and gas owners." Oil and gas owners own their parcels by virtue of various deeds and leases—many of which are 100 or more years old. These documents often state specific property rights such as the oil and gas owner's authority to use timber, construct buildings, use water, etc. Another property right valued by oil and gas owners is the right to use as much of the surface as is reasonably necessary and to discuss the terms of use with the surface owner. A few years ago many of us watched with great interest the case of Belden & Blake Corp. v. Pennsylvania, 969 A.2d 528, 532-33 (Pa. 2009) because it tested whether the oil and gas owner's rights were applicable when the surface is owned by public agencies. The Pennsylvania Supreme Court affirmed the old case law and held that even when the surface is owned by a public agency the oil and gas owner has the right to use the surface, that the oil and gas owner has the right to discuss that usage, and that if there is disagreement the oil and gas owner's rights are dominant and that the oil and gas owner may proceed over the objections of the surface owner. (The surface owner can object but the surface owner must shoulder both the cost of the lawsuit and the burden of proof that the oil and gas usage is unreasonable.)

Section 78.15(f)(2) does not respect these property rights. Instead of allowing for negotiation, section 78.15(f)(2) bypasses that negotiation in favor of vesting in the DEP the unilateral right to impose operating conditions. Specifically, the regulations allow the array of public resource agencies to simply communicate concerns to the DEP. The give and take of the discussion between the two owners is eradicated because, under the proposed regulations, the DEP becomes the judge of what the operating conditions should be on public lands. And under section 78.15(f)(2) the burden of bringing the appeal and carrying the burden of proof is shifted to the oil and gas owner.

Not only is this a remarkable diminishment of private property rights in the face of the legislature's express protection of same, but the proposed regulations are without any limit as to what concerns the resource agencies might submit, what constitutes a "harmful impact" under the regulations, or what the limits of mitigation might be.

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[4] Section 3215(c) provided that "Sources used for public drinking supplies in accordance with subsection (b)" be considered by PADEP when issuing well permits.

Section 3218.1. provides: "Notification to public drinking water systems. Upon receiving notification of a spill, the department shall, after investigating the incident, notify any public drinking water facility that could be affected by the event that the event occurred. The notification shall contain a brief description of the event and any expected impact on water quality" (emphasis added).

The process outlined by the Department's Final Rule improperly changes established relationships under property and contract law, and would invite unbounded suggestions for the mitigation of perceived impacts from state agencies, local municipalities and schools, in what appears to be a plan to obstruct, rather than foster, the optimal development of the oil and gas resources of this Commonwealth. COGAC members firmly believe that the costs and burdens that would be involved in such a regulatory configuration far exceed the $0 attributed in the RAF. As with the other sections, above, the failure to analyze those costs, state the need, and analyze small business alternatives, makes it impossible to balance whether the proposed regulation complies with the RRA and whether it allows for the "optimal" development of Pennsylvania's conventional oil and gas resources.

§ 78.51 Protection of Water Supplies

§78.51(d) (2) would be revised to state:

> (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 WATER THAT EXISTED PRIOR TO POLLUTION IF THE WATER QUALITY WAS BETTER THAN THESE STANDARDS**.

This section would impose an obligation on oil and gas operators that is neither legally required under Act 13 nor practically achievable under certain circumstances. Act 13 requires impacted water supplies to be restored for the purposes served by those supplies. Chapter 78 defines water supplies to include commercial, industrial and agricultural supplies, all of which may include impaired water of varying qualities and none of which necessarily require drinking water standards. Act 13 recognizes the very different purposes of water supplies and requires water to be restored "for the purposes served." The language used in the Final Rule requires that all water supplies impacted by oil and gas operations to be restored to Safe Drinking Water (SDWA) standards or better. Restoring such supplies to SDWA standards could be an act of sheer futility, with excessive cost and no underlying rationale. This result is neither authorized nor required under Act 13 or elsewhere.

Secondly, "exceeded" as used in § 3218(a) means worse than, not better than, and is evidenced by the fact that the only other place in the Act where the General Assembly used the word "exceed" or "exceeded" in a similar context is in § 3304 related to exceeding noise standards. This usage clearly meant worse than those standards. Even though § 3304 is now enjoined, it provides a clear example of the General Assembly's usage of the term to mean worse than. Also, 25 Pa. Code Chapter 109 (safe drinking water) consistently uses the term "exceed" to refer to water that does not meet, and is therefore worse than the standard. Therefore, there is no legitimate basis for assuming that the same word means the complete opposite in Act 13.

Additionally, in public presentations the Department has acknowledged that after several years of deliberation the technical feasibility and cost to comply with this provision of the regulation is unknown and will not be known until "guidance documents" are promulgated. However, this provision is substantially more stringent than comparable provisions in other DEP regulations,

most notably the mining program where water replacement costs typically range from $50,000 to more than $100,000.

Further, the Department is imposing standards on water supplies that are largely unregulated, have no construction standards and are not subject to State or Federal water quality standards.

The revised language in the Draft Final Rule would impose obligations on oil and gas operators that are neither legally required nor practically feasible.

§ 78.52a and § 78.73 Area of Review

The proposed Area of Review (AOR) regulations address the issue of communication between a new well and an old well, during the completion (hydraulic fracturing or hydrofacture) of the new well. During the completion of a new conventional well, water and sand are injected under pressure into the oil and gas bearing formation in order to fracture the formation. If there is an old well bore too close to the new well the water under pressure can enter the old well bore. If that old well bore was not plugged the pressurized water can travel up the old well bore and escape to the surface, bringing with it oil or other contents formerly trapped in the old hole.

There are several thousand orphaned or abandoned wells; some suffer the risk described above. It must be understood, however, that communication with an abandoned or orphaned well is highly devastating to the performance of the nearby new well. Communication means that the effect of the hydrofracture is forfeited, with the hydrofracture energy instead being released into the old hole. Without successful completion (hydrofracture) the new well will be entirely uneconomic and the investment in the new well is lost unless the old hole is properly plugged so that the hydrofracture can be completed.

When the communication occurs, the "forfeiture" or "release" of energy into the old well bore is evidenced by a significant drop in pressure at the hydrofracture equipment. The normal hydrofracture operation involves the application of pressure by which the fracture in the oil and gas formation is propagated. The formation provides resistance, and throughout the hydrofracture process the pressure is maintained or builds as the fracture reaches further and becomes more difficult to maintain. However, when an old well is communicated with the resistance is lost as the hydrofracture energy rushes into the old well bore. That radical "release" is immediately registered on the pressure gauges at the hydrofracture pumps operating at the new well. Normal protocol is to discontinue the hydrofracture, confirm pressure loss is not due to equipment failure, and if communication is suspected, examine the surrounding area for signs of the same. If no surface evidence is found the existence of communication will, nevertheless, be confirmed if, upon restarting the hydrofracture, normal resistance is not obtained.

In the face of potential serious economic loss and pollution, the conventional industry is already careful to identify old holes. As a result, communication with old holes is rare. When it occurs, the orphan or abandoned well is generally very old. Usually the casing was "pulled" (meaning our forefathers removed the casing to take to another well they intended to drill). Because the casing was removed decades ago, there is no current surface evidence of the old well.

Several realities pertain to this issue:

a) A conventional operator preparing to drill and complete a new well has paramount incentive to first identify any nearby orphan or abandoned wells.
b) If the operator elects to drill a new well near any identified orphan or abandoned well, the only economically prudent action is to plug the old well bore before attempting the new well; it is far more expensive to plug an old well bore after communication than before because the communication generates cleanup costs and renders the old hole more difficult to access and prepare for plugging.
c) Under existing law and regulations an oil and gas operator is already obligated to remediate and plug any old well that the operator communicates with.
d) There is no exercise of prudence that can prevent communication with an undiscoverable old well bore. The only preventative measure is to plug the old well bore before hydrofracture—which cannot be accomplished if the old well bore is hidden.

COGAC objects to the regulation, as written, for these reasons.

1) The regulation imposes what is in reality a new permitting requirement: Section 78.52a. introduces the new requirement of a Monitoring Plan and section 78.52a(f) authorizes DEP to make a "case-by-case" determination as to the adequacy of that Plan. At the October 29, 2015 COGAC meeting, DEP staff confirmed that under section 78.52a(f) DEP can bar an oil and gas operator from completing a new well due to DEP concerns about the required Monitoring Plan.

This new permit requirement is without authority. The preparation and submission of the Monitoring Plan and the thirty day DEP review time are not sanctioned by any statutory authority. Indeed, each time it has addressed the Oil and Gas Act, the legislature has shown sensitivity to the need for the prompt processing of permits and for the provision of an appeals process in the event of permit denial. The new monitoring plan creates an entirely new permitting burden, not rooted in any legislation, and which is bereft of any appeal protection.

Further, the standards by which the DEP will allow or disallow new well completion are not known. In the Monitoring Plan the well operator must identify surrounding wells; the regulation requires the operator to make the identification by reviewing "available well databases" and "historical sources of information." Despite request the Department has been unable to identify the required databases or historical sources. The regulation requires the submission of a questionnaire to surrounding landowners; the Department has not provided the questionnaire. The regulation requires monitoring of all surrounding wells. Despite request, the Department has not stated whether that requires the hiring of personnel to provide constant or periodic monitoring or whether the monitoring can be from a distance.

An important concern is whether the DEP will allow well completion if the operator finds reference to an old well on a historical map but cannot locate that old well in the field. In the experience of COGAC members historical maps are notoriously unreliable due to the fact that for over 125 years wells were drilled in Pennsylvania without permits and often without maps. Given that notorious inaccuracy it would be a costly forfeiture for the Department to disallow the

completion of a new well every time a historical map suggested the possibility of a nearby old well. Nevertheless, the regulation as written allows this forfeiture.

The complexity of the new permit (significant new paperwork and notices) is not supported by a rational goal or need. The type of data that would logically drive such a new permitting requirement is a significant number of communication events that were preventable had the well operator conducted a prudent search for old well bores. The Department has not provided that statement of need. In the experience of the COGAC members that need does not exist because of the very infrequent instances of communication and because of the very strong incentive each well operator has to diligently avoid a communication event.

This new permitting requirement is written in a sweeping and open-ended manner with the seeming assumption that only via the broadest possible regulation will the threat of communication be contained. That philosophy entirely overlooks the reality that there is already great incentive for the operator to avoid a communication event and that the operator must plug any old well bore that is discovered by communication.

2) Data does not support the AOR distance requirements: Under section 78.52a. the AOR obligations apply within 1000 feet of a new conventional gas well and 500 feet of a new conventional oil well. The RAF admits these distances are not supported by data, and the COGAC members find these distances do not comport with the data with which they are familiar.

A prime measure of communication data exists in the form of well spacing utilized by operators, in that the optimum spacing for property development is a distance that avoids communication between wells (so that drainage areas do not overlap) yet a distance that is not so great that areas between wells are left undrained.

It is the observation of the COGAC members that the distances set forth in the proposed regulation are too great relative to the actual communication distances reflected in the experience yielded in the drilling and operation of thousands of actual wells in Pennsylvania's conventional formations. That the proposed regulation utilizes distances too great is of no small moment; the excess distance translates to large excess areas. It requires significant time and money to gather data about and to monitor areas of review; excess areas are a significant waste.

For example, the difference in area between a radius of 200 feet (2.8 acres) and 500 feet (18 acres) is over 15 acres. COGAC members believe that a thorough review of data for Pennsylvania oil wells will show that the actual area of concern for oil wells is at or near the lower figure. Doubtless the proposed area of review contains more acres of waste than of useful area. Data for gas wells will show a similar excess area.

However, data is not open for discussion because the DEP did not rely upon data. Had the DEP utilized data the RRA would have required the DEP to carry the burden of proof to show that the data is sufficient to support the requirements imposed by the proposed regulation. This lack of data is a fundamental failing that violates the process by which regulations are properly crafted

under the RRA. The result of that failing is a regulation that contains unnecessary costs and which contains requirements not supported by any actual need.

3) Data does not support the requirement to monitor Active and Plugged Wells: The regulation as originally promulgated pertained only to abandoned and orphaned wells. In later versions the regulation was expanded to include Active and Plugged wells. COGAC members have not encountered any communication concerns with Active and Plugged wells nor are they aware or any such concerns befalling other operators.

The need for such addition is unknown to the COGAC members and accordingly they object to what they regard as an unnecessary component of the regulation.

4) The regulation can require an operator to trespass: When existing wells are on a neighboring parcel, a conventional operator will have to make at least two trips to that adjacent parcel, one to gather "surface evidence" as to the neighboring wells before submitting the Monitoring Plan (section 78.52a(d)(6)), and one to monitor the adjacent well (section 78.52a(d)(3)) during hydrofracture activities. There is no legislative authority to either allow such trespass or to protect or define the rights of the trespassing party or the adjacent property owner who is subject to the trespass.

5) The regulation was promulgated without a consideration of costs: The DEP's 2013 Regulatory Analysis attributes $0 of cost to the implementation of this regulation. At the October 29, 2015 COGAC meeting the issue was raised that the many requirements of the regulation will entail significant cost; however DEP has yet to provide an estimate of the costs of the several steps or to engage in a discussion with COGAC about those costs. The several steps include the following:

a. Perform the required historical research (some DEP staff have suggested that a required element will be research at one or more libraries or museums);
b. Research identity and contact information for surface owners of all properties within radius;
c. Send questionnaire by certified mail to all surface owners;
d. Process questionnaire results;
e. Review DEP database;
f. Create required plat;
g. Perform field examination of all area within the radius for evidence of wells for evidence of wells;
h. Perform required examination of all wells in radius area for surface evidence of failed integrity (COGAC members do not understand what this requirement will entail);
i. Researching the depth of identified wells;
j. Gather GPS data for wells identified in field;
k. Calculate GPS data for wells identified on any maps;

l. Develop monitoring methods for identified wells, including visual monitoring under accompanying section 78.73;
m. Provide thirty days advance notice to adjacent operators under accompanying section 78.73; and
n. Submit the monitoring plan at least 30 days prior to the commencement of completion of the well.

It is self-evident that the cost of these many measures is far greater than $0. It is also evident that the regulation has not been crafted in accordance with the RRA because none of the required cost items were considered. It is too late to insert cost as an afterthought. Under the RRA costs are to be estimated when the proposed regulation is first published so that comment can be considered on whether the costs have been properly accounted for and how the costs balance the need for the regulation and the impact upon optimal development of oil and gas.

COGAC believes that cost is a key item of consideration in Area of Review and that if cost had been balanced as against the relative need for such broad regulatory provisions and their negative impact on conventional oil and gas development, the final regulation would have involved much less documentation, less area of review, and that the burdens would have been much more articulately defined. Only when cost is introduced at the beginning of the process and the regulation commented upon with the benefit of that cost analysis, will the rule be ready for advancement in final form.

6) The regulation was promulgated without consideration of alternatives for small business: Most of the conventional operators completing conventional wells are small businesses as that term is used in the RRA. Section 12.1 of the RRA requires DEP to conduct a regulatory flexibility analysis in which it must consider methods that would accomplish the objectives of the applicable statutes while minimizing adverse impacts on small businesses. The DEP did not do this.

Certainly, however, there are flexible options to discuss. A key discussion point is the recognition that communication with an old well results in a serious financial loss to the operator. The loss will always include poor performance of the well being stimulated and may also include the costs of cleanup. That communication with an old hole spells financial disaster, particularly to small business owners who may have "all the eggs" in the basket of one or a handful of wells, means there is already considerable incentive for the small business operator to prudently identify communication risks and that the costs of preparing yet another report, gathering new GPS data for adjacent wells, and submitting a monitoring plan 30 days in advance are not sensible.

Indeed, a prudent operator is already doing the following things:

a. Making a reasonable attempt to identify and be aware of the location of all active, inactive and orphan wells within a radius equivalent to the well spacing utilized in that area;

b. Making a field examination for orphan or abandoned wells that is limited to a "reasonable" standard and that entails neighboring property only when permission can "reasonably" be gained without compensation.
c. Consideration of fracture geometry when planning new wells.

Another flexible option is to rely upon the pressure change that is observed at the hydrofracture pumps if a communication with an old hole is experienced. Indeed, language about that pressure change was added by the DEP in the 2015 rewriting of the proposed section 78.73. That new language recognizes treatment pressure changes as indicative of abnormal fracture propagation. This is indeed the most likely evidence of a communication problem. Upon encountering such change, the operator should cease stimulation and investigate each of the inactive, orphan and abandoned wells that the operator previously familiarized himself with.

An alternatives analysis would test whether the above steps would be a meaningful response to the risk of communication. An alternatives analysis would also test whether such suggested standards are sufficiently ascertainable by the operator, and enforceable by the DEP, so as to be realistically counted upon. COGAC believes the answer to both questions is yes.

An alternatives analysis would also test whether the submission of the reports, monitoring plan and other data called for in proposed section 78.52a. adds to the protection against communication and, if so, whether the substantial paperwork costs (both for the operator and the DEP) are worth the expenditure. COGAC believes the answer is no.

The above alternatives are but some feasible for small business. Yet the process now underway never included discussion of any alternative or an opportunity for the public to comment on such alternatives. These problems with the AOR are instructive as to why the rule should not be advanced.

§ 78.53 E&S and Stormwater

DEP would revise this section to list numerous manuals that may provide best management practices for erosion and sediment control and stormwater management. There is no need, however, to list or refer to manuals in the regulation, which already provides a reference to the mandatory obligations in Chapter 102 with which anyone conducting earth disturbance activities must comply. The first sentence thus provides all of the instruction necessary for this subsection; the second sentence is not only unnecessary but also creates the very real risk that DEP staff in regional offices will require rigid adherence to manuals that do not have the same legal authority as the regulations themselves. Operators and staff are well aware that manuals exist and may be useful. Elevating manuals to the status of regulations is legally improper and potentially limit the best practices that may be developed outside of the manuals and utilized with better efficiency and results.

§ 78.55 Site Specific PPC plans

This section has been discussed at COGAC meetings with the concern being expressed that a PPC plan will have to be placed at each of the over 100,000 conventional well sites in Pennsylvania and then thereafter maintained. All of this would be at great expense.

The DEP has stated that it is not intended that the regulation require PPC plans at each well site. Nevertheless, the DEP has not squarely addressed the fact that the regulation, as written, clearly requires a PPC plan at each well site, nor has the DEP made the requested change to remove the references that require the PPC plan at each well site.

The proposed language requires a "site specific" plan that meets the requirements in 25 Pa. Code 91.34 and 102.5(l). Section 91.34 applies to locations where pollutants are both "produced" and "stored." Section 102.5(l) applies to oil and gas activities, which include pipelines and processing. Accordingly COGAC members have observed that oil and produced water are regarded as "pollutants", that oil and produced water are "produced" at the well site, and that, therefore, a PPC plan is required at each well site. COGAC members do not believe the regulation as written allows for any other reading.

Under current practice, conventional operators frequently cluster wells with fluids gathered at one location. In this circumstance operators employ a single PPC plan that meets the requirements of existing section 78.55. Among other items, the plan lists the company contacts and internal spill cleanup resources and lists the outside contractors who might be called upon to assist in the response. This information is and has been a sufficient guide on how to handle materials and respond to releases or threatened releases because (i) conventional well and tank sites are small, (ii) the volume of material that could be released from an accidental spill is small, and (iii) there are fewer different materials on site at conventional versus unconventional operations to manage.

The site specific proposal will have a serious debilitating effect on the conventional industry. While individual conventional sites are very small and treat with very small quantities of materials, conventional sites are numerous. Including wells and tanks, the estimated number is 200,000. (This number excludes pipelines—COGAC cannot discern how or where PPC plans would be maintained on pipelines.) PGCC, an industry trade group, has estimated that to achieve initial compliance, the cost will range between $33 million and $100 million. Thereafter, the annual burden of keeping 200,000 paper plans both legible and updated will cost approximately $25 million per year.

COGAC is unaware of the DEP ever stating the need for the additional burden of site specific PPC plans. Given the large number of conventional wells and tanks, the cost is extraordinary, but the benefit would be small—if not nonexistent. In addition to containing small amounts of materials, conventional well and tank locations are highly similar. There does not exist unique chemicals or other pollutants, from site to site, which would render a site specific plan useful in the conventional well context. Instead, the critical information of who to contact and where to locate cleanup resources is already contained in the generic plans.

Further the DEP never engaged in any discussion or analysis of the costs of compliance with COGAC.

Finally the DEP did not consider alternatives for small businesses under the RRA. The COGAC members believe that this proposed regulatory change is a prime fit for such discussion since the generic plans presently in use substantively meet the objectives of the planning requirement and because the cost of the new burden is so dramatically out of balance with the benefit (if any) that might be achieved. The RRA suggests exemption from requirement for small business; COGAC members believe exemption is appropriate. Alternatively COGAC observes that with the application of technology, one or more alternatives might be conceived which do away with paper for operators who utilize computers and thus offer the opportunity for information sharing with cost savings. But without the DEP beginning the process with its statement of need for change, and without there having been a dialogue of how to adapt the regulatory culture to the needs of small business, it is quite impossible to comment on alternatives that meet the DEP's goals—whatever those goals might be in this instance of change.

§ 78.56 Temporary Storage

The previously proposed requirement that the interior slopes of a pit with a footprint of 1,000 square feet or more have a slope not steeper than 2 horizontal and 1 vertical was discussed over the course of the three COGAC meetings, culminating in appropriate changes being made at the October 29, 2015 meeting. COGAC believes this is an example of how the Department, public and COGAC can work together to develop logical rules that serve the balance contemplated by the legislature. It will require many more COGAC meetings in order to address all of the sections in this manner; however, the COGAC members are prepared to invest the necessary time to fulfill that function.

Miscellaneous concerns remain as follows: Section 78.56(a)(8)(ii) states that a list of approved liners shall be maintained on the Department's website however, no such list exists or is available to the public.

Second, the Department has previously stated that approved 20 mil liners are and will remain on the list. Due to the absence of this list, COGAC is unable to confirm the statement and provide meaningful comments. Additionally, without the list said to contain approved 20 mil liners, COGAC fears the possibility that all pits will be required to be lined with 30 mil liners.

§ 78.57 Control, storage and disposal of production fluids

DEP is proposing to impose the corrosion control requirements upon ALL new, refurbished or replaced tanks that store "brines, crude oil, drilling or frac fluids, and similar substances," which far exceeds its statutory authority. Act 13 of 2012 specifically addresses corrosion control requirements at section 3218.4; therein, the legislature provides that tanks "must comply with the applicable corrosion control requirements in the storage tank regulations" (emphasis added). Clearly those regulations do not impose the corrosion control requirements upon aboveground tanks that store "brines, crude oil, drilling or frac fluids and similar substances" and, therefore, proposed section 78.57(f) may not create a corrosion control burden more stringent than the legislature authorized in Act 13.

Imposing corrosion control provisions contained at 245.531 through 245.534 on all aboveground tanks would require very significant and expensive measures certainly never presented by DEP or quantified financially in its RAF. These expensive measures include, for example, cathodic protection – a measure not currently used at virtually any conventional oil and gas facility in Pennsylvania.

Similarly, DEP failed to engage, in any way, in accommodations or considerations for small businesses. Almost all conventional operators are small businesses, as that term is employed in the RRA. Section 12.1 of the RRA requires DEP to conduct a regulatory flexibility analysis in which it must consider methods that would accomplish the objectives of the applicable statutes while minimizing adverse impacts on small businesses. That none of the conventional oil and gas tanks in Pennsylvania conform to measures such as cathodic protection speaks loudly to the need for consideration of the alternatives contemplated under the RRA. The DEP has entirely failed to conduct the required alternatives analysis.

Without legislative amendment or express direction, the Department cannot remove exemptions for existing tanks and has failed to provide any data, analysis or justification for this revision.

Additionally, 78.57(c) requires secondary containment for all new, replaced, or refurbished tanks that contain brine and other fluids produced during operation of the well. Conversely, language already contained in 78.64(a) states that secondary containment is not required for tanks with a combined capacity of less than 1,320 gallons to contain oil or condensate produced from a well. COGAC contends that this provision should also apply to tanks with a combined capacity of less than 1,320 gallons used to contain brine. As it is currently written, 78.57 (c) does not have this capacity threshold provision.

DEP has remarked that tanks used to store waste may be treated differently than tanks containing product. COGAC disagrees with this statement. In the event of a spill, the cost of remediation will in most cases far exceed the value of any product contained in the tank; therefore great incentive exists for operators to properly maintain their tanks. Second, does this contradictory language suggest that brine is more toxic than oil or condensate?

Especially in the context of conventional gas wells (where brine tanks are usually located at the well site) brine production declines as wells reach maturity, a small tank is used. Therefore the exemption in this case has important financial significance. Because the cost of retrofitting older low producing wells with expensive double wall tanks or dikes will be an economic burden, and because the risk is low in these low-volume situations, the exemption should be maintained. This is particularly true in the conventional context where nearly all operators are small businesses; this is precisely the type of alternative that is contemplated under the RRA for small businesses.

Overall this section of the Final Rule is defective as follows:

1) Failure to Demonstrate Need: A leaking storage tank causes financial loss in the forms of lost product and cleanup liability. It behooves a prudent operator to inspect storage

facilities regularly, and such inspections are the norm without the burden of yet another report to be prepared and submitted to the State.

To the extent one acknowledges the form is not necessary from the prudent operator, but is intended to enforce inspections by non-prudent operators, COGAC questions the logic of the premise that a non-prudent operator will conduct the inspection that underpins the completion of the form.

The DEP has not provided any data that would support what COGAC regards as the erroneous proposition that the completion of a form will prevent tank breaches. The DEP has access to all records of tank leakage in Pennsylvania and can analyze what leakage was preventable by inspection and submission of a form. However, the DEP has not taken this requisite step. The imposition of quarterly inspections of over 100,000 tanks, and the subsequent generation of over a million new forms per year, should not be imposed without that requisite step having been fulfilled.

2) Failure of Statutory Authority: In 2012, Act 13 added a limited obligation related to tanks that cannot be interpreted to remove existing exemptions from the tank program or to authorize the Department to create new inspection obligations for tanks in Chapter 78. The legislature recently considered this precise question and adopted the measures it determined to be necessary for oil and gas operations. COGAC believes the Department has exceeded its legal authority in attempting to create a new inspection program for tanks used for the control, storage or disposal of production fluids.

3) Failure to Consider Costs: The DEP's 2013 Regulatory Analysis obviously did not address the costs of the quarterly inspection obligation added in 2015 Final Rule. And to the extent the proposed regulations are to be read as imposing corrosion control upon all new, refurbished or replaced aboveground tanks and all buried tanks regardless of size or use, the DEP's 2013 Regulatory Analysis did not address such costs.

The DEP has not provided any cost estimate for the compliance with these new burdens contained in the Final Rule. There has not been time for COGAC to conduct a cost analyses nor has the DEP established any format with COGAC that allows for discussion of cost. All that can be said is that operating costs will be significantly increased by virtue of the new proposed obligations. Given that the obligations necessarily involve over a million reports annually, it is safe to conclude that the cost will involve millions of dollars.

What is ascertainable, however, is that the DEP did not perform the financial analysis required by law. This is a fundamental procedural failure that prevents COGAC from commenting meaningfully and, most important, prevents an analysis of whether the proposed regulations meet the dictates of the RRA.

4) Failure to Account for Small Business: As noted, almost all of the conventional operators are small businesses; the RRA requires DEP to conduct a regulatory flexibility analysis.

The DEP has not conducted that analysis, and it is impossible for COGAC to meaningfully comment about potential alternatives inasmuch as DEP has failed to state why there is a need to introduce new obligations in the Final Rule. Since we do not have a statement as to what goal(s) the DEP is seeking to achieve via change, it is impossible to discuss alternatives which might achieve that goal or goals.

§ 78.59a (impoundment embankments) and § 78.59b (freshwater impoundments)

In the Final Rule, the DEP significantly expanded the requirements for freshwater impoundments beyond the requirements introduced in the 2013 Proposal. Comment has been made at a COGAC meeting that the proposed regulation is out of touch with the nature of freshwater usage in the conventional context. Indeed, many new conventional wells use only a few hundred barrels of freshwater. That freshwater is drawn from either streams or impoundments. The "impoundments" are nothing more than small ponds, indistinguishable from what one knows as a small "farm pond." A single pond might serve a hundred or more new wells over the span of many years, and the frequency and impact of the ponds is so small that the types of items regulated in the 2013 Proposal are strangely ill-fitting. The Final Rule compounds that problem in that the regulatory requirements are heightened. As with the 2013 Proposal, there is no statement of need for the new regulations, the requirements are out of touch with the actual nature of the ponds (like any pond, the impoundments are aesthetically pleasing and serve the needs of wildlife), and the regulatory cost is not analyzed by the DEP.

In addition, COGAC objects to the Department's attempt to expand the scope of Chapter 78 beyond wells and well sites. Oil and gas operators are subject to numerous environmental statutes, including the Pennsylvania Clean Streams Law, the Dam Safety Act, the Air Pollution and Control Act, the Solid Waste Management Act, as well as applicable federal laws and regulations. Chapter 32 of Act 13 applies to wells and well sites. Chapter 78 should be accordingly limited in scope to avoid the application of unnecessary and duplicative requirements on this particular industry when other industries are not similarly regulated. Accordingly, freshwater impoundments used for oil and gas operations are sufficiently regulated under existing law and should not be subject to additional regulation through the oil and gas program. Absent compelling justification, which the Department has not provided, these sections must be deleted from the final rule.

§ 78.60 - § 78.63 Discharge and Disposal

The Department proposes to use the term "regulated substances" throughout these sections, which is overly broad and lacking in clarity necessary for regulatory guidance to the agency and the regulated community. "Regulated substances" as defined would include sediment or other natural constituents of tophole water or soil, which would effectively prohibit the discharge of tophole water and the disposal of uncontaminated drill cuttings, entirely defeating the purposes of subsections 78.60 and 78.61. The term should be removed from 78.60(b) (1), 78.61(a)(2), 78.61(b)(2), and elsewhere in these sections to avoid absurd results and unintended consequences.

The Department has also added a new prohibition to the discharge of tophole water or disposal of drill cuttings "within the floodplain," which lacks both clarity and justification. Floodplains may extend thousands of feet beyond water courses in flat areas of the Commonwealth, which could improperly prohibit typical practices of conventional oil and gas operations unnecessarily. Without an explanation of why the Department is suggesting this revision, however, COGAC cannot provide a fully informed comment on the proposal.

The Department has also added new notice requirements. DEP is an agency tasked only with the enforcement of environmental laws and regulations, and should not require or dictate landowner/operator communications beyond any provisions expressly provided in Act 13 or other enabling statutes.

The overall import of both the 2013 Proposal and the new burdens in the Final Rule is to treat these very small quantity materials as regulated substances without supporting data, statement of need, cost analysis or examination of alternatives.

§ 78.65 Site Restoration

COGAC objects to the new obligation to restore conventional well sites to original contours. The obligation is stated expressly in section 78.65 and incorporated in section 78.65's obligation to return sites to "approximate original condition," which in the definitions is defined as "reclamation of the land affected to preconstruction contours…"

This is a significant departure both from existing regulations as well as from the initial version of the revised regulations first published in 2013. Like other regulatory provisions discussed above this new and significant change is not supported by the necessary statement of need, the analysis of costs and the consideration of alternatives for small business.

COGAC members are very interested in participating in the discussion of need because the members firmly believe the conditions applicable in the conventional oil and gas industry do not show a need for this significant change. Indeed, in the context of the conventional industry, and its history, this change is likely to impart harm.

Most of Pennsylvania's conventional well sites are decades old. Many are over 100 years old. Immediately after the sites were constructed trees began to grow on the modified contours. Today many of those trees are now timber! Thus even if one could guess at what the original contour looked like the return to preconstruction or original contours would involve the removal of many trees. And for what end?

Pennsylvania's conventional well sites are small. Even at original construction they are a small percentage of an acre. And after original drilling and completion of the well the only necessary area remaining are spaces sufficient to hold the collection tank and to park a service rig (about the size of a medium dump truck) in front of the well. And in oil areas (mostly northwestern Pennsylvania) the site does not even require a collection tank (because the oil is usually collectively gathered at one well location). Hopefully the reader can picture the many conventional wells visible along Pennsylvania's highways where the surrounding field crops

crowd next to the pump jack or where the surrounding trees virtually hide the well from view. Because the conventional sites have such small footprint, the necessary tree removal, soil moving and installation of E&S facilities, would be a disturbance far outweighing any benefit of contour change.

Indeed, at the COGAC meeting of October 29, 2015 a COGAC non-voting member expressed the very concern, that required site work creates unwanted surface disturbance.

COGAC believes that the standards of "original" and "preconstruction contours" were crafted with unconventional well sites in mind—which unconventional sites are five acres or more in size, and that because the approach to the new regulations has not properly segregated conventional and unconventional well activities, the conventional wells have been inadvertently swept into the site restoration standard of original and preconstruction contours.

COGAC firmly believes that separate needs analysis for conventional oil and gas regulations would reveal the lack of necessity of this provision and that until such separate needs analysis is performed the ruled for conventional oil and gas operations are not ready to be advanced.

A second new obligation in the Final Rule is the duty to comply with 25 Pa. Code section 102.8(g) (relating to stormwater analysis and construction). Among other things, section 102.8 requires analysis by a certified professional as well as the installation of post-construction stormwater structures. Historically, oil and gas activities have been exempt from this complicated, costly and unnecessary stormwater requirement. Section 102.8(n) creates an alternative approach for small earth disturbance activities such as conventional oil and gas operations.

The Final Rule elevates the burden for both plugging activities and for the development of all new conventional well sites. The post-plugging requirement is found at section 78.65(a)(2). The requirement as to new conventional well sites is found in the new requirements regarding the restoration plan. While that planning component is currently carried out in the context of the E&S plan, the Final Rule requires a much more complex plan that demonstrates a return to preconstruction runoff rate, volume and quantity in accordance with section 102.8(g). Moreover, areas not restored, presumably such as roads and well site operation areas, are separately addressed and are required to comply with all provisions of chapter 102—which provisions, of course, include section 102.8(g). In fact, the 2015 version specifically renders the exception under section 102.8(n) inapplicable.

The burden under this new regulatory provision is severe. PGCC obtained estimates from professional firms providing the services necessary to comply with section 102.8(g). The estimates of the cost to comply ranged from $22,000 to $84,000 per new conventional well. Even at commodity prices two to three times as high as today such new costs would consume all the profit yielded in a new conventional well.

At the COGAC meeting of October 29, 2015, this topic of concern was raised by COGAC members and DEP stated that it was not the intention to change current practice and that it was intended conventional oil and gas operations would not have to comply with the elevated

stormwater requirements. Two proposed changes in language were discussed and DEP agreed to reflect upon the language necessary to make the rule clear. However, the Final Rule was not modified.

If the Final Rule is retained as is COGAC would, of course, state the objections that the significant and very costly change is not supported by a needs analysis, discussion of costs, or consideration of alternatives. However, based on DEP statements that the rule would be changed COGAC expects this is an oversight. In either event the rule is not ready to be advanced for approval.

§ 78.66 Spills and Releases

In September 2013, DEP finalized a policy addressing spills on oil and gas well sites, including access roads. That document created a policy unique to the oil and gas industry, but could not impose new binding obligations beyond existing statutes and regulations. The policy includes references to *mandatory* provisions outside the policy and provides *recommendations* for reporting and remediation steps that would help operators "clearly protect themselves" from potential liability. See DEP's Comment and Response Document, September 2013, pp. 6, 9, 10, and 11.[5] The stated purpose of the policy is to increase uniformity of handling spills on oil and gas well sites.

Relevant and applicable law, outside the policy, includes the Pennsylvania Clean Streams Law, 25 Pa. Code Chapter 91.33, 25 Pa. Code 78.66, and Pennsylvania's Land Recycling and Reclamation Act, Act 2. Pennsylvania Clean Streams Law, Act 2, and the reporting obligations under Section 91.33 fully provide for the reporting and cleanup of typical accidental spills that occur on conventional oil and gas well sites, which may include brine or oil spills. Under the existing provisions of section 78.66, conventional oil and gas operators are further required to report releases of brine, depending on the quantity spilled and the total dissolved solids in the brine. This provision addresses what may be unique to oil and gas operations, namely brine spills.

DEP has failed to state any need to revise section 78.66, and COGAC is unaware of any such need. Neither brine nor oil presents a hazardous situation or significant threat to the environment or public health or safety in the course of typical conventional oil and gas operations that would justify revision. If conventional oil and gas operations present remediation challenges under existing law, DEP should work to address those concerns with its existing authority and its vast arsenal of enforcement tools. COGAC is unaware of any spills on conventional oil and gas operations that cannot be addressed under current law.

In fact, the situation of oil spills presents an excellent opportunity to develop small business alternatives as contemplated under the RRA. Spilled oil can and has been successfully

[5] Addressing spills and releases at oil and gas well sites or access roads (800-5000-001) Final technical guidance document; Comment and response document. Available at http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-96768/Final%20Spill%20Policy%20Comment%20%20Response%20%282013-09-18%29.pdf.

remediated by measures far less intrusive and costly than the inflexible requirements spelled out in Act 2. For example, oil is lighter than water; a highly successful non-intrusive spill methodology is to contain the spill area by earthen berm, introduce freshwater, and "float" the oil so that it can be collected by vacuum truck. Another methodology discussed in PGCC's comments is bioremediation, a method specifically contemplated by other regulatory agencies. DEP has failed entirely to discuss any such alternatives.

Moreover, section 78.66 would increase the reporting and cleanup obligations beyond the 2013 Proposal through the elimination of the alternate method for spill cleanups that was developed under the 2013 Spill Policy. The Final Rule would not only require full compliance with Act 2 for all spills, but would require operators to demonstrate Act 2 attainment through specific procedures with restrictive deadlines that are not found in Act 2. These additional requirements are virtually identical to the procedural requirements under the Storage Tank and Spill Prevention Act ("Tank Act"), from which oil and gas operations are generally exempt. By imposing Tank Act remediation procedures on spills of brines and oil, the proposed § 78.66 effectively eliminates the legislature's distinction between tanks used for oil and gas operations and regulated tanks storing gasoline or hazardous substances.

The Final Rule would significantly broaden reporting obligations and require greater documentation, increased sampling, and more stringent restoration standards than are necessary or appropriate for conventional operations. These additional requirements would substantially increase the time and costs of addressing small spills on well sites, with little meaningful environmental benefit. Existing law provides standards for cleanups and enforcement authority where needed to protect public health, safety and the environment. Brine and oil accidental spills, which have occurred in the past and will occur in the future, can and should be addressed under existing law and policy.

All of the foregoing changes are proposed without the DEP having engaged in the proper procedural steps required under the RRA. As noted, the DEP failed to engage in any alternatives analysis. Similarly, the RRA requires a statement of needs, a consideration of the effectiveness of the current regulations, and what is, in effect, a cost-benefit analysis of the proposed regulation relative to the harm being guarded against. These procedural details are discussed earlier and not repeated here. However, it is instructive to discuss the type of data that a proper cost-benefit analysis might have yielded.

The brine water produced in Pennsylvania's conventional operations is trapped from ancient oceans. It is similar to brine manufactured by PennDOT for spreading on roads in winter. It weighs about 9 pounds per gallon. The proposed regulations require reporting for 5 gallons or more and would require Act 2 cleanup for 42 gallons or more.

Under EPA guidelines, there are over 700 hazardous materials that have a higher reportable quantity than Pennsylvania's produced brine. For example, Ammonia, Hydrogen Sulfide, and Phosphine are all toxic and may be fatal if inhaled. In fact, the latter two materials require self-contained breathing apparatus for cleanup. The reportable spill quantity for all three is 100 pounds.

A data-driven discussion would allow the relative dangers of these materials and brine to be quantified. A data-driven discussion would also account for the amount of sodium and calcium chloride contained in brine water. Some brine is nearly fresh water. For the majority of the conventional industry's existence, it was the practice to drain all brine water upon the ground, and since 1859 billions of gallons of brine were so deposited. Where that water contained high amounts of sodium and calcium chloride, there were observable impacts including vegetation kills. That was not the case where the water was virtually fresh and, in all circumstances, the danger of brine is qualitatively different than materials such as Ammonia, Hydrogen Sulfide and Phosphine.

But by preparing regulations in a process that is not data driven, the DEP has arrived at requirements that involve extraordinary new cost (Act 2 cleanup mandates), without any measurement of the benefit yielded by that extraordinary cost. Similarly, the DEP has arrived at the mandate for such extraordinary costs without the necessary analysis of alternatives for small business or the consideration of whether the extraordinary cost is in balance with the statutory mandate of "optimal" development of the Commonwealth's oil and gas resources. These are fatal oversights that require the current proposal to be abandoned in favor of compliance with the rigor expected of agencies adopting new burdensome and highly expensive regulations.

And finally, the requirement for conventional oil and gas operators to enter into and follow the voluntary provisions of Act 2 violates the intent of this valuable and hugely successful program and thereby undermining public confidence in DEP to abide by the promises made at the time of the implementation of Act 2.

§ 78.67 Borrow Pits

The Department has added some language to comport with Section 3273.1 of Act 13, which provides an exemption from obligations under the Noncoal Surface Mining Conservation and Reclamation Act (SMCRA) or regulations under that statute, where a borrow area is used solely for the purpose of oil and gas well development. The Department has added, however, a requirement that areas subject to this exemption comply with standards in Chapter 77, adopted pursuant to the Noncoal SMCRA. This is contrary to the exemption provided in Act 13, which cannot be altered by the Department or the EQB. Without legislative amendment, this expansion is beyond the scope of legal authority.

In addition, in the Final Rule, DEP has added the requirement that such areas be "included in any permit required under Chapter 102." The meaning and purpose of this statement is unclear. The exemption in Act 13 states that the obligations for borrow areas are satisfied when the well is permitted and the owner or operator of the well meets its bonding obligations. There is no reference to additional permits under Chapter 102 needed to satisfy the exemption. If the Department means that borrow pits are not exempt from the Pennsylvania Clean Streams Law or that permits under Chapter 102 may be needed for certain borrow areas, the language must be revised to state its intent more clearly.

§ 78.121 Annual Reporting

The Final Rule adds to the annual production report the information of where the waste was managed. Conventional operators retain and can provide such information when necessary. However, the complication of adding that information to the report comes in the context of two dozen other new forms and electronic reporting. The cumulative impact of the new reporting requirements is in direct conflict with the intent expressed by the legislature in the RRA. The RRA requires the regulatory body to provide "an explanation of measures which have been taken to minimize… [the] recordkeeping or other paperwork, including copies of forms or reports which will be required for implementation." No such explanation or measures have been proffered by the DEP.

As to small businesses, the regulatory agency is directed to take the additional step of conducting a regulatory flexibility analysis wherein it specifically considers "the consolidation or simplification of compliance or reporting requirements for small businesses." Again, no such analysis was performed by the DEP as to the new requirement. Without such analyses, the requirement should be stricken.

Electronic Reporting and Forms

COGAC notes that electronic reporting can be burdensome and unnecessary for small businesses in this industry. Many operators own just one or a few wells; in many ways the conventional industry is similar to small farming operations. Many of these operators do not own or know how to operate a computer.

COGAC and other commenters, observing this reality, have requested relief form the electronic requirement. The Department has not provided that relief; moreover the proposed regulations expand the number of new forms and electronic reporting obligations in the Draft Final Rule. Under the Regulatory Review Act, the Department was to provide ALL forms to the EQB and IRRC with submission of the proposed rulemaking in 2013. The Department has failed to comply with the express requirements of the statute to submit such forms, has failed to accommodate small businesses with reasonable alternatives, and has expanded the number of NEW forms to more than two dozen.

The legislature has expressed the intention that the regulatory process be "reformed" to enhance efficiency for all businesses, with special considerations for small businesses. COGAC understands the difficulty with and costs involved in grappling with the forms and wishes to see the "reform" actualized in the new rules. Since the forms are not available it is impossible to comment on their content. However, the sheer number of forms points to the DEP's failure to achieve the substantive reform desired by the legislature.

The new reporting requirements have not been properly explained by the DEP and no alternatives have been examined for the small businesses that will be most adversely affected by the substantial new burdens.

EXHIBIT A

RESOLUTION OF THE
PENNSYLVANIA CONVENTIONAL OIL AND GAS ADVISORY COMMITTEE

Proposed Amendments to 25 Pa. Code Chapter 78 Environmental Protection Performance Standards at Oil and Gas Well Sites Re; Pa. Code Chapter 78 Subchapter C

WHEREAS, the bylaws of the Conventional Oil and Gas Advisory Committee (COGAC) charge it with the "review and comment on all...regulations" promulgated under the 2012 Oil and Gas Act prior to submission of the regulations to the Environmental Quality Board; and

WHEREAS, the COGAC desires to conduct its review consistent with legislative intent of the statutory authority for such regulations; and

WHEREAS, the COGAC has examined several laws and the legislative intent contained in those laws, including:

A) the 2012 Oil and Gas Act, which among other expressions of intent, includes "the optimal development of oil and gas resources of this Commonwealth consistent with protection of the health, safety, environment and property of Pennsylvania citizens;" and
B) the Act of June 25, 1982 (P.L.633, No.181), known as the Regulatory Review Act (RRA), which among other matters contains an expression of intent "to improve State rulemaking (by making available) more flexible regulatory approaches for small businesses."

WHEREAS, to act consistently with legislative intent, the COGAC requires information described in the RRA, such as: 1) the expected costs of proposed regulations to enable review and comment upon whether optimal development of oil and gas is served, 2) the need for proposed regulations to enable review and comment upon the protection of natural resource in balance with optimal development of oil and gas, and 3) the data underlying standards to enable review and comment upon alternatives for small businesses, among other necessary information; and;

WHEREAS, several factors have prevented COGAC from receiving or obtaining the above-described necessary information; and

WHEREAS, the COGAC finds that one of those factors is the Department of Environmental Protection's (DEP) inability (despite request) to provide information, which inability includes the following:

A) The DEP has not provided any data, let alone "acceptable data" as that term is used in the RRA. This inability has interfered with the COGAC's ability to review and comment upon the many standards contained in the proposed regulations.

B) The DEP has not provided documents or evidence that describe the need for the sweeping revisions contained in the proposed regulations. This inability has interfered with the COGAC's ability to understand why each revision is being proposed and, in turn, to assess or comment on matters identified by the Legislature, such as whether each revision serves to protect an environmental resource not protected under current regulations, whether the proposed regulations as a whole serve optimal oil and gas development, and so forth.

C) The DEP has not provided financial analysis data for the vast majority of the regulations proposed for conventional oil and gas operations. For example, regulatory sections likely generating new costs and financial impact, such as Public Resources (78.15), Area of Review (78.52a), Site Specific PPC Planning (78.55), Site Restoration (78.65), Water Supply (78.51), Spill Remediation (78.66) and others were either not analyzed by DEP or were attributed no cost by DEP. Moreover, the costs that the DEP did attribute applied only to new well development and ignored any costs associated with bringing into compliance existing conventional oil and gas wells. Given the existence of approximately 100,000 conventional oil and gas wells, the failure to perform a financial analysis for the existing wells leaves a large void in the information the COGAC would need to perform its review and comment. Similarly, the costs the DEP did attribute applied only to initial compliance; the DEP did no financial analysis concerning the costs of maintaining conventional oil and gas wells in compliance with the proposed regulations. An industry group has commented that, based upon its examination, the proposed regulations would impose costs 100 or more times greater than that estimated by the DEP and that the actual costs would far exceed the gross revenues of the conventional oil and gas industry. A thorough understanding of the costs is key to the balancing of interests contemplated in law, and without that financial information the COGAC finds it impossible to carry out the review and comment duties charged to it in its bylaws.

D) The DEP has not provided a regulatory flexibility analysis that considers methods of reducing the impact the proposed regulation will have upon small businesses. The experience or expertise of the COGAC members enables the COGAC members to envision numerous potential alternatives including reduction of paperwork and notices, submission of written rather than electronic forms, different standards, use of techniques allowed either under current regulations or federal law but not permitted under the proposed regulations, exemption from certain regulations, and the like. However, without the above cited information concerning data and the need for revised regulations, it has not been possible to responsibly comment on whether any alternatives meet a need or comport with data, inasmuch as data and needs have not been available to COGAC. Similarly, for the majority of the proposed regulations it is not possible to comment upon whether alternatives would reduce negative financial impact inasmuch as financial data provided by DEP is, for the most part, not available.

WHEREAS, the COGAC finds that another factor preventing its review of necessary information is the DEP's inability (despite request) to provide the forms called for under the proposed regulations. Examples of the several new forms include the form required to identify public resources under section 78.15, the form of questionnaire to landowners required under section 78.52, the form for well monitoring required under section 78.52 and 78.73, and others. Although Section 5(a)(5) of the RRA requires DEP to submit copies of forms required for implementation on the same date as submission of the proposed rule, the DEP has advised the COGAC that the forms do not exist. It is therefore impossible for the COGAC to review and comment on the required forms.

WHEREAS, in addition to the failure of information, the COGAC finds that its ability to review and comment has been impeded by the breadth of changes and lack of time. The COGAC finds the following matters to have had significant impact:

A) The EQB and DEP have chosen to repeatedly modify an already very complex and broad set of proposed regulations. The ANFR published in April 2015 added many new provisions as did the August 2015 redline version. The October 2015 version made yet additional changes which COGAC has not yet had time to even perfunctorily examine.

B) COGAC was not formed until March 2015 and the initial meetings of COGAC were consumed not with thorough review and comment on the Chapter 78 regulations, but rather with the bylaws of COGAC and other housekeeping matters.

C) Under the COGAC bylaws, the DEP is charged with "framing the issues" brought before the COGAC, and in that framing the DEP has elected to utilize the lecture format, providing a presentation about the results of the most recent modifications to the regulations written by the DEP. Given the breadth of both the proposed regulations and the many changes made by the DEP in 2015, these presentations take many hours and consume all of the meeting time (not otherwise spent on housekeeping matters). Consequently the COGAC has not had time to inquire of the DEP about ambiguities in the proposed regulations, to discuss the impact of the regulations, to inquire about or discuss alternatives, or to otherwise bring to bear the experience and expertise of the COGAC members.

D) There are many ambiguities the COGAC would like to discuss with DEP before commenting upon the proposed regulations, including ambiguities generated by inconsistencies between what DEP has orally reported to members of the regulated community at meetings or elsewhere and the actual text of the proposed regulations, as well as ambiguities generated by the lack of information such as the lack of the required forms. Examples of these ambiguities include:

    1) Area of Review (78.52a. and 78.73). What monitoring will be required? The proposed regulation requires that during new well

completion all plugged, abandoned, orphaned and active wells within either 500' or 1000' of the new well be monitored. Within 500' of a new conventional oil well there would normally be four to eight wells requiring monitoring under this new regulation. If full time monitoring is required then obviously many employees or contractors would have to be hired. Yet the DEP's RAF attributes $0 of cost to the implementation of this regulation. And the form for the required well monitoring plan has not been provided by the DEP.

2) Site Restoration (78.65). Is section 102.8(g) applicable to all new conventional wells (requiring certified professional, soil tests, permanent stormwater measures, and surface owner consent in deed)? The expansion of the site restoration requirements is, in great part, a result of changes proposed in the April 2015 ANFR and there are no explanatory or analysis documents published by the DEP that clarify the new requirements. One industry group solicited two engineering firms to provide cost estimates for conventional well operators to comply with the revised Site Restoration requirements (including the 102.8(g) requirements cited therein), and the estimates ranged from $22,000 to $84,000 per individual conventional well site, depending upon the site topography. Given that the average cost of a conventional oil well in this study area is currently slightly in excess of $100,000 this one new requirement would increase the cost of a new conventional oil well by 25% to 75%. Yet DEP employees have repeated orally stated to members of the regulated community, whom are represented by COGAC that industry cost estimates for compliance with the proposed regulations are overstated.

3) Site Specific PPC Plans (78.55). Where are individual PPC plans required? The proposed regulations incorporate the provisions of 25 Pa. Code 91.34 which require the supply of PPC plans at both well sites and tank storage locations. This would greatly amplify the current PPC plan practice of a PPC plan on site at individual leases or tank battery, but not at each well site. However, DEP employees have orally stated to members of the regulated community that the new regulation is not intended to change existing practice and that individual plans will not be required at each well site. Those oral statements are in conflict with the provisions of 25 Pa. Code 91.34.

WHEREAS, in addition to the failure of information and adequate time, COGAC has concern that the DEP has not complied with Act 126 of 2014, which requires the DEP to "promulgate proposed regulations under 58 Pa. C.S. (relating to oil and gas) or other laws of this Commonwealth relating to conventional oil and gas wells separately from proposed regulations relating to unconventional gas wells." As individuals familiar with the technology and methodologies utilized to find and

recover oil and gas, the COGAC members are well familiar with the significant differences between the conventional and unconventional oil and gas industries. The COGAC believes that the General Assembly adopted Act 126 to address the impropriety of regulating conventional and unconventional oil and gas operations as a single industry and that DEP's response of simply dividing the rule into separate subchapters in the middle of the current rulemaking process does not follow the statutory procedures for the promulgation of a separate rule for conventional oil and gas operations; and

WHEREAS, all of the COGAC members are experienced in the realm of conventional oil and gas operations are familiar with the current regulations pertaining thereto, and believe, based upon that experience, that: 1) the existing regulations are adequate and appropriate to both accomplish the protection of the environmental resources of the Commonwealth and allow for optimal development of oil and gas from conventional well operations, 2) the remarkably sweeping changes contained in the proposed regulations have not been explained or justified by data or need, and 3) the proposed changes are unnecessary and inappropriate.

NOW THEREFORE, IT IS RESOLVED, that the voting members of COGAC are in full agreement that relative to the proposed regulations:

1) The above recitals are incorporated as part of the conclusions of the COGAC;

2) That Act 126 of 2014 required that the process of formulating new regulations for Pennsylvania's conventional oil and gas industry should be restarted in its entirety;

3) That if the process for conventional oil and gas regulations is not restarted and this process is continued, that for COGAC to give meaningful review and comment the following procedures must be adopted as a minimum:
    a. That the process be suspended until such time as the following is provided by the DEP and/or the EQB:
        i. A corrected financial analysis that includes analysis of: 1) the regulatory sections not analyzed by the DEP, 2) the implantation costs for existing wells not analyzed by the DEP, 3) the costs of maintaining the proposed regulations not analyzed by the DEP;
        ii. the required forms;
        iii. a regulatory flexibility analysis for each regulatory section;
        iv. a statement of need detailing the inadequacies of the existing regulations for conventional oil and gas well operations; and
        v. data supporting any proposed new standards.
    b. That following the provision of such materials the COGAC be afforded the period of nine months to review and comment upon the proposed regulations with meetings scheduled once per month; and
    c. That at each such meeting the minimum time of two hours be allowed by DEP for the COGAC voting members to carry on dialogue with themselves and informed DEP staff for the purpose of discussing ambiguities, need, alternatives and the like.

4) The COGAC members have not had adequate time to review and comment upon the proposed regulations;

5) The remarkably sweeping changes contained in the proposed regulations have not been justified by data or need, and that therefore, the proposed changes are unnecessary and inappropriate.

6) The DEP should not move the regulatory package to the EQB for the reasons stated above;

7) This Resolution shall be made part of the public record; and

8) A copy of this Resolution should be forwarded to the Pennsylvania Independent Regulatory Review Commission, the Pennsylvania House and Senate Environmental Resources and Energy Committees.

By: _____

Mark L. Cline

_____

_____

_____

DATE: 10/29/15

EXHIBIT B

The following changes were newly added in August 2015 and are cumulative, added to the revisions in prior versions of the proposed rule.

78.15 – Well Permit application requirements

- If the proposed limit of disturbance is within 100 feet of any wetland one acre or greater in size, the applicant must demonstrate that the well site location will protect the wetland.

- "Other critical communities" to be protected would include species of special concern identified on a PNDI receipt, including species simply proposed for listing as threatened, endangered, rare or candidate.

    - The ANFR had a more confusing but no less broad definition. This is meant to codify the PNDI policy. This change is significantly burdensome: the language includes rare and candidate species, as well as species proposed for listing as threatened or endangered. Beyond that, however, the new language includes any species of special concern listed on a PNDI receipt. Since the Ch. 78 regulations do not and cannot govern how a species is included in the PNDI receipt, the new language leaves such species designation without public process, standards or limits.

- Additional agencies to comment on well permit applications would include any "educational entity," counties and various federal agencies, including USCOE, US Forest Service and US National Park Service. Additional "public resources" to protect would include all community operated recreational facilities.

- An applicant proposing to drill a well that involves one to less than five acres of earth disturbance over the life of the project and is located in a watershed that has a designated or existing use of high quality or exceptional value pursuant to Chapter 93 must submit an erosion and sediment control plan consistent with Chapter 102 with the well permit application for review and approval and must conduct the earth disturbance in accordance with the approved erosion and sediment control plan. This is a new plan approval process. Given that it is an "approval" and not a permit it is unclear how DEP will determine if plans are "consistent" with Chapter 102.

- Section 78.15(h) utilizes the term "enhanced drilling or completion technologies." This term is not defined.

- For wellhead protection area the revision now specifically incorporates the requirements of section 109.73 regarding wellhead protection program.

- The inclusion of wellhead protection areas as an additional resource to be included in a new public comment process for well permits is contrary to Act 13, in which the legislature already considered and addressed protection of water wells and included setbacks in Section 3215 (a). Even if the addition of this resource were authorized under the statute, it would invite comments on well permits that would be located in a zone that "contributes surface water and groundwater" to zones within a half mile radius around the source, a geographic area that is without reasonable bounds for such review.

- DEP removed the helpful language that reminded the DEP carries the burden of proving its conditions protecting public resources are necessary to protect against probable harmful impacts, not simply impacts.

78.52 – Area of review

- Adds plugged and abandoned wells to be identified in the area of review.

- The operator of a vertical oil well which will be stimulated using hydraulic fracturing shall identify the surface and bottom hole locations of active, inactive, orphaned, abandoned, and plugged and abandoned wells having well bore paths within 500 feet of the well bore.

    - This significant new requirement is added without consultation with industry and without any analysis of need or costs. This new requirement is fraught with ambiguity including what it entails to identify the bottom location of a well, how the endeavor is to be performed when wells are located outside of the operator's ownership, whether the bottom location is the current bottom location or the bottom location when the well was originally drilled (sometimes unknowable in the case of abandoned or orphaned wells), what responsibility the state will assume for providing the information relative to orphaned wells, etc.

- The Department may require other information necessary to review the report. The Department may make a determination that additional measures are needed, on a case-by-case basis, to ensure protection of waters of the Commonwealth.

78.51 Protection of Water Supplies

- Quality of replacement water modified: minimum is still Safe Water Drinking Act, but if the quality prior to pollution was BETTER than SWDA then replacement must meet the higher standard. This section still requires SWDA even if original quality is less than SWDA and even if the water supply is used for commercial, industrial or agricultural purposes.

EXHIBIT B

78.56 – Temporary storage

- Requires DEP approval of any pits, tanks or storage structures used for materials during drilling, altering, completing, servicing and plugging wells.

78.57 – Control, storage and disposal of production fluids

- A well operator shall register the location of an additional underground storage tank prior to installation. Registration shall utilize forms provided by the Department and be submitted electronically to the Department through its website.

- New or replaced aboveground or underground tanks must meet all, not simply applicable, corrosion control requirements in 25 Pa Code Sections 245.432, and 245.531-245.534.

    - For above ground tanks this includes: evaluation by a corrosion expert to determine if cathodic protection is necessary; exterior coating of tanks and piping which prevents corrosion; provisions for interior lining (if used).

- Deficiencies in tanks storing brine or other fluids produced during operation of the well must be noted during the inspection and addressed and remedied. When substantial modifications are necessary to correct deficiencies, they shall be made in accordance with manufacturer's specifications and applicable engineering design criteria.

78.58 – Onsite processing

- Adds drill cuttings to onsite processing approvals needed

- An operator processing fluids of drill cuttings must develop an action plan specifying procedures for monitoring for and responding to radioactive material produced by the treatment processes, as well as related procedures for training, notification, recordkeeping, and reporting.

78.59b – Well development impoundments [Freshwater]

- Any existing freshwater impoundments that do not have synthetic impervious liners, and either 24 hour supervision or fence, must be upgraded.

78.65 – Site restoration

- An operator of a well site which is required to obtain a permit under § 102.5(c) must develop a written restoration plan, including specified drawings and narrative described

in the proposed rule. Note: 102.5(c) involves oil and gas activities greater than 5 acres in size.

78.66 – Reporting and remediating spills and releases

- For spills greater than or equal to 42 gallons, within 45 days after a required remedial action plan is fully implemented, the operator or other responsible party shall submit a remedial action completion report, containing elements in 25 Pa. Code Section 245.313(b), to the appropriate Department regional office for approval.

78.67 – Borrow pits

- Borrow pits shall be considered part of the project along with the well site for ESCGP permits.

78.73 – General provision for well construction and operation

- Notice must be provided to operators of wells identified under section 78.52a 30 days prior to drilling, or at the time of permit application if the drilling will commence less than 30 days from permit issuance.

- Immediate electronic notice is required when there is any change to a well being monitored, or something indicates abnormal fracture propagation at the well-being stimulated, or a confirmed well communication incident.

78.111 – Abandonment of radioactive logging sources

- Upon plugging a well in which a radioactive source is left in the hole, the operator must place a permanent plaque as a visual warning to a person reentering the hole that a radioactive source has been abandoned in-place in the well.

- The permanent plaque placed above the plugged well with radioactive material must state the date that the source was abandoned.