Catalyst Energy, Inc.

February 19, 2014

Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17150-8477 MAR - 5 2014

INDEPENDENT REGULATORY

Dear Board Members:

Catalyst Energy, Inc. objects to each of the following Chapter 78 revisions proposed by PA DEP:

Section 78.15 (d) through (g)

The Department grants itself broad powers to apply special conditions to or deny permits based on things such as species of special concern or cultural resources that are not defined within the regulations.

Catalyst objects to the presence of these provisions.

<u>Section 78.52a (b) (3)</u> Submitting a questionnaire on forms provided by the Department to landowners whose property is within the area identified in subsection (a) regarding the precise location of orphaned and abandoned wells on their property.

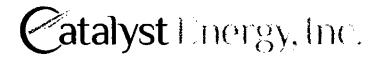
This section will potentially slow down the permitting process, allow landowners to submit unverified and unverifiable information and potentially submit false information to prevent operations on their property. The section fails to address how information received from the landowner is to be used or reported, allowing for open ended delays in the completion of the well and delaying final reclamation of well sites. All these will potentially lead to financial hardship for operators.

Catalyst proposes an exemption for wells of depth less that 3000'.

Section 78.52a (c) Prior to hydraulically fracturing a well, the operator shall submit a plat to the Department showing the location and GPS coordinates of orphaned and abandoned wells identified pursuant to subsection (b) and proof of notification that the operators submitted questionnaires pursuant to subsection (b)(3).

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This sections fails to define what steps the operator has to take to construct the plat, including whether a licensed surveyor has to provide the plat with GPS information. This could potentially cost the operator \$1000 or more.

Catalyst proposes an exemption for wells of depth less that 3000'.

Section 78.55 (d) The well operator's PPC plan must also identify the control and disposal methods and practices utilized by the well operator and be consistent with the act, The Clean Streams Law (35 P. S. §§ 691.1—691.1001), the Solid Waste Management Act (35 P. S. §§ 6018.101—6018.1003) and §§ 78.54, 78.56—78.58 and 78.60—78.63. The PPC plan must also include a pressure barrier policy developed by the operator that identifies barriers to be used during identified operations.

Pressure barrier policy is not defined. Objection is made that the lack of a definition does not allow the operator to know if the policy will require expenditures to fulfill requirements, or if the requirement is reasonable.

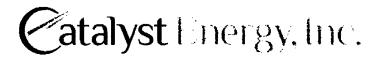
Catalyst proposes an exemption for wells of depth less that 3000'.

Section 78.56 (10) The pit shall be constructed so that the liner subbase is smooth, uniform and free from debris, rock and other material that may puncture, tear, cut or otherwise cause the liner to fail. The pit must be structurally sound and the interior slopes of the pit must have a slope no steeper than 2 horizontal to 1 vertical. The liner subbase and subgrade shall be capable of bearing the weight of the material above the liner without settling that may affect the integrity of the liner. If the pit bottom or sides consist of rock, shale or other materials that may cause the liner to fail, a subbase of at least 6 inches of soil, sand or smooth gravel, or sufficient amount of an equivalent material, shall be installed over the area as the subbase for the liner.

The requirements of this section will impose larger disturbance areas on the operators who are trying to minimize disturbance. Catalyst contends that the requirements are unnecessary in convention operations due to the small size needed and short duration of pit use. Construction requirements could potentially add several thousand dollars to well costs.

Catalyst proposes an exemption for pits less than 1000 barrels.

Section 78.57 (e) Underground or partially buried storage tanks may not be used to store brine or other fluids produced during operation of the well unless approved by the Department. Existing underground or partially buried storage tanks shall be removed within 3 years of the effective date of this subsection. A well operator utilizing underground or partially buried storage tanks as of the effective date of this section shall provide the Department with a list of the well sites where the underground or



partially buried storage tanks are located and schedule for removal of the tanks within six months from the effective date of this subsection.

This section will render many older projects uneconomic and cause irreparable financial damage to some operators. Replacement of existing tanks in conventional operations could cost in excess of \$10,000 per tank. In addition, this will create a potential pollution issue since many operators bury tanks to prevent freezing of light brine. Allowing tanks and line to freeze could result in breakage.

Catalyst proposes either grandfathering in older tank batteries, or providing for longer compliance periods for conventional operators.

<u>Section 78.57 (g)</u> All new, refurbished or replaced tanks storing brine or other fluids produced during operation of the well shall be reasonably protected from unauthorized acts of third parties. Unless the tank is surrounded by a fence, tank valves and access lids shall utilize locks, open end plugs or removable handles and ladders on tanks shall be retractable or other measures that prevent access by third parties.

This section will potentially add several hundred dollars to \$1000 or more to tank battery costs.

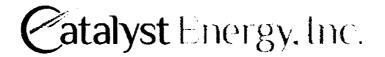
Catalyst proposes an exemption for tanks less than 500 barrels.

Section 78.62 (5) The owner or operator shall notify the Department at least 3 days before disposing residual waste according to this section. This notice shall be submitted electronically to the Department through its website and include the date the residual waste will be disposed. If the date of disposal changes, the operator shall re-notify of the new proposed date of disposal.

Notification places an unnecessary burden on conventional operators. Conventional operators typically move quickly with pit closure and notification requirements would create chaotic delays and financial burdens on conventional operators.

Catalyst proposes an exemption for pits less than 1000 barrels.

Section 78.62 (9) The bottom of the pit is a minimum of 20 inches above the seasonal high groundwater table. The well operator shall determine that the pit bottom is at least 20 inches above the seasonal high groundwater table prior to using the pit. The determination shall be made by a soil scientist or other similarly trained person using accepted and documented scientific methods. The individual's determination shall contain a statement certifying that the pit bottom is at least 20 inches above the seasonal high groundwater table according to observed field conditions. The name, qualifications



and statement of the individual making the determination and the basis of the determination shall be provided to the Department upon request.

The requirement for professional determination would create a huge financial burden on conventional operators.

Catalyst proposes an exemption for pits less than 1000 barrels.

Section 78.65. Site restoration

(iii) All areas of the site not needed to safely operate the well are restored to approximate original conditions, including preconstruction contours, and can support the original land uses to the extent practicable.

Restoration to original contours will create a large financial impact on conventional operators who do not disturb large areas and who would create more potential for erosion and sedimentation by that restoration than if restored as built. This could add 5 to 10 % to the cost of marginal wells.

Catalyst proposes an exemption for conventional wells less than 3000 feet in depth.

<u>Section 78.65 (f) (3)</u> The location, **including GPS coordinates**, of the pit in relation to the well, the depth of the pit, the type and thickness of the material used for the pit subbase, the type and thickness of the pit liner, the type and nature of the waste, **the type of any approved solidifier**, a description of the pit closure procedures used and the pit dimensions.

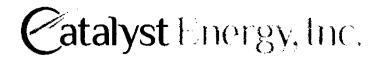
This section is confusing. If the location of the pit is reported in relation to the well, then GPS coordinates are unnecessary. If GPS coordinates are required then the location of the pit in relation to the well is immaterial.

Catalyst proposes an exemption for pits less than 1000 barrels.

<u>Section 78.65 (f) (6)</u> The name, qualifications and basis for determination that the bottom of a pit used for encapsulation is at least 20 inches above the seasonal high groundwater table.

See response to Section 78.62 (9) above.

Catalyst proposes an exemption for pits less than 1000 barrels.



<u>Section 78.65 (f) (g)</u> The well operator shall forward a copy of the well site restoration report to the surface landowner if the well operator disposes of drill cuttings or residual waste at the well site.

This section opens up the operator to potential actions or objections by the surface landowner.

Catalyst proposes an exemption for wells less than 3000' depth.

<u>Section 78.66</u> Catalyst requests that the department consider bioremediation according to EPA standards as an alternative to those measure outlined in this section.

Section 78.68 (c) The operator shall maintain topsoil and subsoil during excavation pursuant to the following, unless otherwise authorized by the Department:

- (1) Topsoil and subsoil must remain segregated until restoration.
- (2) Topsoil and subsoil must be prevented from entering watercourses and bodies of water.
- (3) Topsoil cannot be used as bedding for pipelines.
- (4) Native topsoil or imported topsoil must be of equal or greater quality to ensure the land is capable of supporting the uses that existed prior to earth disturbance.

Oil and gas gathering lines constructed by conventional operators disturb such a narrow corridor that this requirement is impractical and too costly.

Catalyst proposes an exemption for pipeline related disturbance less than 2 acres.

Section 78.72 (i) Well drilling and completion operations requiring pressure barriers, as identified by the operator under § 78.55(b) (relating to [control and disposal plan] planning and emergency response), shall employ at least two mechanical pressure barriers between the open producing formation and the atmosphere that are capable of being tested. The mechanical pressure barriers shall be tested according to manufacturer specifications prior to operation. If during the course of operations the operator only has one functioning barrier, operations must cease until additional barriers are added and tested or the redundant barrier is repaired and tested. Stripper rubber or a stripper head may not be considered a barrier.

A response to this cannot be formulated due to the lack of an adequate definition of 'pressure barrier'.

Catalyst proposes an exemption for wells less than 3000' depth.

Section 78.122 (13) The borrow pit used for well site development, if any.

Catalyst Energy, Inc.

This section places an unnecessary burden on operators of conventional wells. Stone use from borrow pits is minor compared to unconventional wells and the registering of pits should be enough.

Catalyst proposes an exemption for conventional oil and gas wells.

The financial burdens which the Department is placing on small conventional oil and gas operators is onerous at best. Catalyst brings millions of dollars in investment into Pennsylvania and we are the verge of getting out of the state due to the costs imposed in the past along with the costs to be imposed by these regulations. Another small business ruined by government regulations, which in this case have not been properly and legally vetted.

Overall, Catalyst objects to the regulatory proposals because the Department did not adequately assess their impacts on small businesses within the Commonwealth. Catalyst recommends that the Department develop separate regulations for conventional operators, properly assess the financial impacts on those conventional operators and adhere to the laws requiring them to do so. We ask that the Environmental Quality Board reject these regulations by voting "No".

Singerely,

Douglas E/Jones

Vice President and General Manager Catalyst Energy, Inc.

Cc File



February 19, 2014

Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17105-8477

To Whom It May Concern,

MAR - 5 2014

INDEPENDENT REGULATORY REVIEW COMMISSION

As an employee of Iron Carey, LLC, I am providing the following comments to the proposed revisions to Chapter 78 by the PA Department of Environmental Protection. Iron Carey LLC is a well drilling, stimulation, and servicing company for the conventional oil & gas industry in northwest Pennsylvania.

I object to all proposed revisions to Chapter 78 and recommend that separate oil & gas regulations be drafted for conventional and unconventional operations. At a minimum, exemptions should be put in place so the proposed regulations do not affect operators of oil & gas wells less than 3,000 feet deep. Proposed regulations for pits should have an exemption for pits less than 1,000 bbl in volume.

I work on a hydraulic fracturing crew that operates a single pump truck for each frac job. Every day, DEP personnel are present to ensure that our jobs are being conducted within the current regulations, which is perfectly acceptable. Adding more requirements, as seen in the proposed revisions to Chapter 78, will give DEP more unnecessary leverage to cite and fine us for items that do not clearly benefit the environment. We are already hypersensitive to the regulations because the DEP inspectors' interpretations of current regulations changes daily with no explanation. More vague regulations will give DEP more room to interpret them.

The history of conventional oil & gas operations in Pennsylvania goes back over 150 years. These proposed regulations in combination with recently enacted Act 13 threaten to end conventional oil & gas. I work hard for my paycheck and would expect that the government would work hard to maintain my job, not threaten to end it. Please vote "no" to the proposed changes to Chapter 78.

Sincerely,

Bryant Gray Stimulation Crew

Bryant Gray



February 17, 2014

Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17105-8477 RECEIVED

MAR - 5 2014

INDEPENDENT REGULATORY

To Whom It May Concern,

As an employee of Catalyst Energy, Inc. (Catalyst), I am providing the following comments to the proposed revisions to Chapter 78 by the PA Department of Environmental Protection (PADEP). Catalyst is an operator of conventional oil & gas wells in northwest Pennsylvania. I am employed as an environmental engineer for Catalyst.

I have been heavily involved for several years with all aspects of conventional well operations including: permitting, construction, drilling, fracking, and well operations. The majority of the proposed Chapter 78 regulation changes will have negligible environmental benefits and some will actually be a detriment to the environment compared to the current Chapter 78. As an environmental professional in the industry who references Chapter 78 every day, I would expect my comments to be especially helpful to the EQB. I offer the following comments to the proposed regulation changes.

Section 78.15 (d) through (g).

The PADEP grants itself broad, unquestioned power with the ability to deny permits based on species of special concern or cultural resources not defined in regulation. Passage of this portion of regulation will essentially allow PADEP to bypass laws that were created to keep its governing ability in check. Passage of this proposed regulation will create a state of chaos between industry and all state agencies, who will subsequently push for arbitrary species or resources to be the reason for denying permits with no due legislative process. I recommend removing this provision.

Section 78.52a (b) (3)

I believe the questionnaire and requirement for operators to search for abandoned wells within any radius of a proposed well is unnecessary for conventional well development. In the vast majority of cases, any abandoned wells in a potential area for new development will have the exact target formation as the proposed new wells. Simple economics play a key role in the identification of old wells: conventional well operators stand to drill a dry hole if an abandoned well in the vicinity of a new well is not identified. In addition, current PADEP regulations stating that an operator who affects an abandoned well must plug it is enough deterrence to ensure that operator due diligence is done correctly.

The proposed regulation is vague and offers no process for which unverifiable evidence by landowners can be resolved. I recommend dropping this proposed regulation for conventional operators.

Section 78.55 (d)

The proposed "pressure barrier policy," to be developed by the operator, is poorly defined with no restraints or guidelines. It is impossible to assess economic losses from the policy as currently written. I recommend either a more specific definition or its removal from the proposed regulations.

Section 78.56 (10)

With regards to pit side slopes of 2:1 (H:V), the surface area disturbance necessary to meet this proposed requirement will increase the pit size by at least a factor of ten up to a factor of 100. No specific incidents or justification for this proposed regulation have been referenced by PADEP. Implementation of this regulation will be a detriment to the environment since it will require further earth disturbance with no clear benefit. I recommend removing this requirement or imposing an exemption for pits 1,000 bbl or less.

Section 78.57 (e)

The DEP intends to force operators to remove below ground brine storage tanks with this proposed regulation. Operators typically use buried brine tanks for gravity draining to minimize pumping, valves, and fittings. If above ground brine tanks are installed next to oil tanks, brine must be pumped from one tank to another, increasing the risk of pollution from vandalism or from freezing. I recommend the DEP study the potential environmental effects of freezing pipes and pumps associated with above ground brine tanks and fluid transfer. If the environmental benefits associated with removing buried brine tanks outweighs the potential pollution caused by frozen pipes and pumps, only then should this portion of regulation should be implemented.

Section 78.62 (5)

PADEP is proposing to require 72 hour notification for disposal of residual waste. Operators currently have to abide by drilling, notching, and fraccing notifications. An additional notification for closing in of a drill pit will add to the confusion currently being experienced by conventional operators who drill and frac different wells every day. Something as simple as a rainstorm would cause a chain reaction: a pit can't be encapsulated in the rain, so the state would need to be renotified and operators would be forced to wait an additional 72 hours to meet notification requirements. No notification should be required for a process as simple as encapsulating a drill pit. I recommend an exemption for pits less than 1,000 bbl.

Section 78.62 (9) and Section 78.65 (f) (6)

The proposed regulation stating that a certified scientist or engineer must evaluate the seasonal high groundwater table comes at extreme cost with little environmental benefit. Conventional operators can have dozens of small pits within a few acres. A pit cannot be utilized for drilling or fraccing if it is below the groundwater table simply because it fills up with water. Therefore, the DEP is attempting to further regulate a situation that does not exist. I propose adding a pit exemption for pits less than 1,000 bbl.

Section 78.65 (f) (3)

PADEP proposes regulation of requiring GPS coordinates for all pits. In conventional operations, pits are always immediately adjacent to a well. The requirement is unnecessary. I propose an exemption for conventional wells less than 3,000' deep.

Section 78.65 (f) (g)

This section states a copy of the well restoration report must be forwarded to the surface owner. PADEP needs to further define the rights and allowable objections the surface owner may have with respect to the restoration plan. I recommend the DEP either remove this proposed regulation or better define the protection an operator will have from frivolous surface owners.

Section 78.72 (i)

PADEP is proposing two separate pressure barriers that must be capable of being independently tested. Conventional wells operate at low pressures and pose little environmental risk with regards to oil and gas releases due to pressure. PADEP must better define "pressure barrier" or create an exemption for wells less than 3,000' feet deep.

In general, I recommend PADEP separate Chapter 78 into two different entities: Conventional Oil & Gas Chapter 78 and Unconventional Oil & Gas Chapter 78. The proposed changes to the current Chapter 78 are clearly being written to enforce stricter standards on the new unconventional industry. The conventional oil & gas industry has operated with little environmental impact in Pennsylvania for the last 150 years. As an engineer who oversees day-to-day operations in the field, I can honestly say that the vast majority of the proposed changes are unnecessary and that stricter regulations will suffocate an industry that operates on thin margins for little environmental benefit.

Thank you for your time.

Sincerely,

R. John Cass
District Engineer



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INDEPENDENT REGULATORY
REVIEW COMMISSION

February 5, 2014

Environmental Quality Board P.O. Box 8477 Harrisburg, PA 17105-8477



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DEP Policy Office

To Whom It May Concern,

Catalyst Energy, Inc. is an oil and gas producer and operator based out of Pittsburgh, PA, with field offices located in Warren and Kane, PA. We have drilled and operate over 1500 wells in a five county radius of Northwestern PA, and drill 100-150 new wells each year. Catalyst employs over 80 employees from the Warren, Forest, and McKean County region, and have been working these shallow Upper Devonian Formations since 1992 in the area.

The proposed revisions to the Chapter 78 regulations that are being discussed are objectionable to all those who work in the "conventional" oil and gas industry. These regulations are a hard line approach to dealing with the "unconventional" industry, and were not properly constructed with the shallow oil and gas economics and practices in mind. A separation of these regulations must be enacted to ensure that the department does not otherwise destroy an industry that has thrived in Western Pennsylvania for over 150 years. As you well know, this was the birthplace of the worldwide industry, an industry for a product so vital that wars have been fought to secure this valuable commodity.

These proposed regulations in combination with the recently enacted Act 13 legislation, threaten to put an end to this industry, along with the jobs, investment monies, and royalty revenue that are critical for the economy in our region. With so many few thriving industries remaining in Western Pennsylvania, attacking shallow oil and gas production seems out-of step with the mindset of creating jobs and solidifying our economic welfare. We have seen the steel industry crippled, the coal mines close, and the population dwindle; and so the natural next step is to over-regulate our lone remaining industry that benefits our communities?

The employees at Catalyst and other small producers work hard every day, every week, and throughout the year on these wells and earn their paychecks. If these regulations are not abolished or re-worked, these men and women will be out of jobs, because the economic barriers to drilling and production will be too great to sustain even a company of our size. The \$15-20 million dollars of investment money that we bring into the state each and every year will cease, and much like our predecessors of note in the region, Quaker State, Pennzoil, Kendall – we will be gone.

At a minimum, regulations should be changed to specifically address those operators who drill and produce wells less than 3000' in depth. To classify an operator who produces several 1500' shallow wells with the Marcellus and Utica operators is asinine. There is not a comparison or argument that can be made that the same standards and regulations should adhere to both parties.

I would certainly hope that reasonable minds and perspectives can resolve this issue, as this is a bi-partisan concern. I would ask that you please vote "no" to the proposed changes to Chapter 78.

Sincerely

Tyson W. Ruhlman

Vice President of Land and Acquisitions

Catalyst Energy, Inc.