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May 18, 2015

Department of Environmental Protection
Policy Office
400 Market Street
P. O. Box 2063
Harrisburg, PA 17105-2063
www.ahs.dep.pa.gov/RegComments



RE: Chapter 78a – Environmental Protection Performance Standards at (unconventional) Oil & Gas Well Sites

Dear Madam/Sir:

Connection for Oil, Gas & Environment of the Northern Tier, aka C.O.G.E.N.T. has participated in many comment periods to advocate for better operations near our homes and schools with the goal of working towards the delicate balance where all stakeholders – public health and safety, the environment, our communities and industry all thrive. We are based in the Northern Tier Region, focused on the counties of Bradford, Sullivan, Susquehanna, Tioga and Wyoming Counties. Approximately 183,000 souls reside in our region comprised of nearly 4,000 square miles.

We've been involved with this rulemaking since 2011 when we were advocating to our assembly members for better measures, in 2013 participating with the four TAB subcommittees, 2014 submitting written comments on the proposed draft and 2015 as a newly appointed advisor to TAB. We are very pleased the Department has included this one last round of public comment to further fine-tune the proposed regulations ensuring that the areas in which we live, love, raise our families, recreate and work are adequately protected and provide for reasonably regulated unconventional oil and gas industry operations near our homes and schools.

Currently, our Region lies within the heart of the northern reaches of exploitable unconventional shale gas and hosts 41 percent of total unconventional spud wells and a disproportionate share, 54% of violations. Thus with nearly one well (.94) per square mile within our region, and still within the beginning of exploitation, this rulemaking is extremely important to us and will define the manner in which we coexist with the unconventional shale gas industry operating near our homes and schools.

**§78a.1. Definitions.**

**Abandoned Water Well** – while the definition appears sufficient our concerns lie with how this will be interpreted in a guidance document. There are many reasons in rural areas why one party may interpret a well as abandoned and another may not. It is not uncommon to have multiple wells on farms. These wells are of importance when pasturing cattle away from surface water sources as an example. As land-use changes, the need to access what may be considered an "abandoned water well" changes. We strongly recommend that the landowner and tenant farmer (farmers who rent farms/fields) be consulted about land-use when determining when a water well is actually abandoned. Our Region has been historically rural and agricultural. We've lost many farms over the last decades. Many of the few remaining farmers now in addition to their own property rent other properties to grow crops and pasture cattle. These 'tenant' farmers have been taking a pretty big hit during the gas development. Often, they are renting farmland from elderly residents or absentee landowners who are unaware of what these changes to their properties may entail. A trusting stock of rural culture, some landowners are often less inclined to consult with an attorney before signing agreements, a tendency in which the gas industry has taken advantage. 'Tenant' farmers have planted crops only to have them disturbed for pipelines, and then not be compensated for fertilizer, seed, fuel etc. 'Tenant' farmers have had productive fields destroyed by pipeline contractors who failed to restore soil properly, so either the land remains untillable or farm machinery gets stuck unable to till. Acres and

acres of previously valuable farmland have become untillable. There is no one to rectify this problem. Until a farmer goes to work the soil, it looks fine. In many cases, drain tile has been removed during pipeline construction and more often than not, it is not replaced. This also contributes further to an increasing amount of untillable land. 'Tenant' farmers have no way to address these issues. The only recourse they have is once the land is no longer fit to farm, they no longer farm it.

Much the same situation will occur when the 'tenant' farmer is excluded from dialogue concerning when a water well is abandoned. We realize this is a difficult situation, and involves property rights for the landowner. However, land-use is also important, and therefore, there needs to be a mechanism to include 'tenant' farmers in scope of when and how a water well is considered abandoned. A perfect example of the reason why is considering farming and land-use changes. A 'tenant' farmer may utilize an area for crops and there may be an old water well in that area. The next year, he may determine that he wants to pasture livestock there and retrofit that old water well. So, the 'tenant' farmer is a relevant stakeholder and their land-use needs to be considered in terms of when a water well is considered "abandoned."

In rural areas, when the grandparents pass on and the grandchildren are yet to come of age, it is possible that a water well could be disconnected as the home is placed in 'storage' until the younger generation is ready to begin their family. There are also boroughs such as Towanda and Laceyville who have struggled during the last decade to provide residents with quality water supplies. Both boroughs have drilled multiple wells deemed unsuitable and requiring expensive or prohibitive water treatment. Depending on situations and the failed ability to find a productive town water well, these "abandoned water wells" may at some future date become viable.

Thus, we recommend that an adequate guidance document be crafted and issued for public comment prior to the effectiveness of this definition. Above all, it should not be the gas industry or the regulator who determines within these guidelines when a water well is in fact "abandoned." We recommend that determination within the guidelines must be determined at a minimum by the owner/s of the formerly functioning water well and hopefully with input from the 'tenant' farmer.

**Building** – we support the definition providing as interpreted it includes barns used for housing and care of livestock.

**Critical Communities** – we strongly support the inclusion of a definition for Critical Communities applicable to 78a.15(f)(iv). One critical community found in our Region is the timber rattlesnake. Our Region hosts at least three rattlesnake hunts each June in Bradford, Tioga and Wyoming Counties. Avid sportsmen look forward to their participation in the annual snake hunts which are fundraisers for local fire departments and also support the Region's tourism industry. Hunters are required to promptly return snakes safely to the location in which they were originally found. This is due to the fact that the habitat of the timber rattlesnake is so critical to its well-being. Year after year, the timber rattlesnake will return to the same den. The timber rattlesnake has a high fidelity to its communal den. Disturb its den and the timber rattlesnake is also disturbed. Female timber rattlesnakes are thought to "*achieve sexual maturity between 8 to 12 years of age and has a litter every 3 to 5 years to 5 to 15 young (Brown, 1992 and 1993). By comparison, the male reaches sexual maturity at 6 years of age (Brown, 1995). This is extremely important from a conservation standpoint in that it is not easy for the timber rattlesnake to increase its population rapidly. Furthermore, the average lifespan of the timber rattlesnake in the wild is approximately 20 years; a healthy female may reproduce only three to four times her entire life.*" (http://wildliferesearch.org/the-timber-rattlesnake/)

Energy development has resulted in the timber rattlesnake's habitat being under attack. During well pad construction and drilling at both the Wootten Well Pad in Mehoopany Township, Wyoming County and the Roundtop Well Pad in Colley Township, Sullivan County, folks witnessed an amazing amount of snakes quickly moving from the location "flying out of the ground" as it was described by local residents. During 2011, the Pennsylvania Fish and Boat Commission noted that Wyoming County's Forkston Township and nearby environs was Pennsylvania's largest contiguous general range of rattlesnake. (discovered during a DEP file review) This mountainous area now hosts three large diameter, high pressure unregulated gathering lines and the Mehoopany Wind Farm, currently the largest wind farm in Pennsylvania, along with the corresponding overhead transmission lines. There are numerous access roads associated with both developments. The 88 turbine wind farm alone was noted to have disturbed 2% of the 14,000 acres of privately held forested lands including over 30 miles of roads.

In one gathering project, (ESX12-131-0013) the applicant notes *"it appears impossible to cross the mountain in a practical manner without bisecting potential timber rattlesnake habitats."* Further, one of the gathering line projects (Forkston & Eaton Townships 5.25 mile gathering line) had delineated 33 key sites within the assessment area which were grouped into 7 potential timber rattlesnake critical habitats. Six of the habitats involving 19 of the key sites were directly disturbed by the project. All of the critical habitats delineated by the pipeline operator were along a 4.5 mile section. It was noted that key potential denning sites would be disturbed by the proposed alignment.

Gathering line operators across the Northern Tier Region and Pennsylvania Wilds have been mitigating destroying timber rattlesnake dens by building new ones. This simply does not work and endangers the very population being affected by the disturbance. According to the DCNR website, the timber rattlesnake is listed as a threatened and endangered species in adjacent states. The PFBC has listed the

timber rattlesnake as a candidate species. Our regulators need to be mindful of the disruption energy companies are doing to these habitat areas.

Rattlesnakes are beneficial to public health as it has been noted that by keeping the rodent population down reduces ticks that carry Lyme disease.

Recent surveys in the northeast US found that over 60% of populations are in decline, and, although this species has suffered historically from direct persecution by humans, habitat loss and fragmentation are the main causes of population declines (Brown, 1993).
http://www.bio.sdsu.edu/pub/clark/Site/Publications_files/NH_snake_decline.pdf

Unconventional natural gas construction of roads, pipelines, and well sites in numerous locations across the Northern Tier and Pennsylvania Wilds could destroy timber rattlesnakes' dens and gestation sites. Large numbers of timber rattlesnakes, perhaps even hundreds may be found in a single den. *"Adult males may travel up to 3 to 5 miles away from the den before returning in the fall, unlike non-gravid females, which move approximately 1 to 3 miles from the den, and gravid females, which stay close to the den (100-400m). The PFBC considers two types of habitat used by timber rattlesnakes as extremely vital and thus refers to them as "Critical Habitat": over-wintering dens and gestation sites. The loss of either of these habitats will adversely impact the timber rattlesnake.* ***Studies have shown that snakes cannot be successfully relocated and the loss of a den through destruction usually results in the loss of that particular den population, which may be critical to the local population*** *(Reinert and Rupert 1999*). The key to understanding why a den exists in a specific location is the underground microclimate. Although attempts to predict specific den locations by researchers have proven difficult, temperature, humidity, and a water source appear to be critical to den site selection for timber rattlesnakes (H. Reinert, pers. comm..).* ***Efforts to create den habitat have not proven to be successful.***
(PFBC: Habitat Creation for Timber Rattlesnakes 03-05-10)

Thus, for thousands of years a den may have been in use, to which the timber rattlesnake returns year after year. The PFBC as noted above states that efforts to create den habitat have not proven to be successful, yet pipeline operators have mitigated for destroyed dens by creating new ones within Pennsylvania's largest contiguous general range of rattlesnake (Wyoming County) and other locations throughout the Northern Tier and Pennsylvania Wilds (Clinton & Lycoming Counties). In addition, this dramatic change to the timber rattlesnake's habitat creates fragmentation which will increase human interactions negatively impacting an already vulnerable population.

The 88 turbine wind farm has an associated 30+ miles of roads in this area. Add to that the disturbance for turbine pads and three gathering lines, as noted previously, substantial disturbance to their habitat occurred during 2012. Gathering lines have no environmental impact assessment or comprehensive overview regarding the habitat of the timber rattlesnakes. While both wind farm and pipeline operators employed snake handlers to remove snakes from equipment and work area, still a boastful heavy equipment operator noted on a good day he was able to run over 6 snakes.

Now, it is not likely that many of us are fans of timber rattlesnakes, their bite may be deadly and they are not cute, soft, furry critters. However, the fact of the matter is, we are only as healthy as the environment in which we live. The plateau area that hosted this amazing timber rattlesnake habitat has been dramatically changed. Disturbed snakes are more likely to head down the mountain to where folks live, again, endangering themselves into the rural populated area. We will not know the long-term effects of the timber rattlesnake's changed habitat until years to come. It is very likely we've not experienced the last of the gathering line infrastructure to fragment this area formerly known as Pennsylvania's largest contiguous general range of the timber rattlesnake. Currently, a well operator has two permits (131-20494, 131-20463) to develop gas well pads in this same general area. This well

operator is new to the area and at this point not associated with the existing gathering operator. Whether they may be able to connect into this gathering system or create a new one will remain to be seen.

The DCNR website indicates: "*The presence of timber rattlesnakes is one of the components that gives a wild flavor to State Forest land. The largest populations of timber rattlesnakes occur in the remote, heavily forested regions of Pennsylvania, and the state Wildlife Action Plan recognizes the state's responsibility in maintaining viable populations of native species.*" While the Wyoming County habitat is private lands, nevertheless is there a reduced responsibility to protect Pennsylvania's largest contiguous general range of the timber rattlesnake? Presently, it is unclear whether the state has done its due diligence regarding Wyoming County's treasured timber rattlesnake's habitat.

The PFBC referenced report indicates that "***Efforts to create den habitat have not proven to be successful.***" *(PFBC: Habitat Creation for Timber Rattlesnakes 03-05-10)*, yet, both the PFBC and DEP have authorized pipeline operators giving them the freedom to destroy dens and mitigate by building man-made dens. Dens which were proven not to be successful as noted in the PFBC's own report dated 2010, with much of this destruction happening in the years since. Our own agencies have failed to adequately protect the timber rattlesnake's critical habitat during energy development.

Because of the timber rattlesnake, a Pennsylvania candidate species as an example, we strongly support the inclusion of defining critical communities and the Department's ability to address adequate and sufficient mitigations with conditions to permits in areas of known critical communities. We also support authorizing the Department to review such areas in a comprehensive view such as has been demonstrated as necessary above with this one particular species habitat in just one particular locale. We are hopeful that the addition of regulation for critical

communities that the practice of building man-made dens, which have not been proven to be successful will come to an end. One timber rattlesnake expert we consulted advised that when a den is destroyed, the mortality rate for the den is 80%. We strongly recommend for the inclusion the "critical communities" definition and their inclusion as a public resource within the permit application §78.1 and §78a.15(f)(iv).

**Public Resource Agency** – While we support this definition, we caution that it may be too exclusionary. It is not uncommon in the rural areas for a landowner to execute a 99 year, $1 lease with an athletic association for a youth ball field complex. Also, a community group may manage a multi muni park that has common areas for ball field, playground and picnic areas. These common areas, even more so, may be near well pads and need to be considered as public resources as well. These types of facilities may be more common in the rural areas than those located on publicly owned lands due to the nature of rural landowner's historically desiring to maintain ownership of their property (pay taxes) and donate the land-use as a measure of goodwill to their community. Thus, we recommend that such facilities are also considered as public resource agencies.

We recommend that counties be included in the definition of "public resource agency." For example, Bradford County one of the most heavily drilled counties in Pennsylvania has several county parks within the heart of the drilling, specifically – Larnard-Hornbrook County Park, Mt. Pisgah County Park (adjoins Mt. Pisgah State Park) and Sunfish Pond County Park.

We recommend that hospitals be included in the definition of "public resource agency." For example, the blowout at the (Wyoming County, Washington Township) Yarasavage well pad was all too real when it was realized that the Tyler Memorial Hospital (Wyoming County, Tunkhannock Township) was within a mile radius of the site including a public water supply. While many of our region's hospitals are

located within boroughs and not likely to be near a well pad, that is not the case for the Endless Mountains Health Systems Hospital located near the outskirts of Montrose (Susquehanna County) and within a mile of a couple well pads. Guthrie Troy Community Hospital (Bradford County) is a little over a mile away from the nearest well pad. While at a mile away, the Tyler Hospital was monitored during a blowout, we are concerned that well pads may be proposed/located nearer to hospitals lacking consultation with hospital officials. Currently, there are several well pads in the area including one that is within half a mile from the Tyler Hospital. Within a zoned community, there may be opportunities to address concerns. However, the Tyler Memorial Hospital for example, is located within a non-zoned community. Therefore, it seems relevant that hospitals may have needs that may need to be accommodated. Including hospitals as a public resource for notification purposes is reasonable. We recommend that the notification zone for a hospital be 600.'

We recommend defining playground in conjunction with 78a.15(f)(1)(vii).

**Playground** – A property that is either owned or under long-term lease by a county, municipality, school district or community association. The established function of the property is to provide recreational opportunities for children and youth. The playground is open to the public. The use of the playground extends from enjoying traditional playground equipment to established and maintained fields for the purpose of organized children and youth sports activities such as T-ball, little league, softball, football, soccer and other sports.

**§78a.15 Application requirements.**

**§78a.15(b.1)** We support these additional protections from the Pennsylvania Clean Streams Law to further protect our water resources. In many areas of our Region, it is practically common place for a small stream, pond or wetland to be immediately adjacent to well pads. These resources become critical areas in the event of a spill

or unexpected blow-out. These areas need to have adequate and sufficient protection.

**§78a.15(b.2)** We support the provision for abandoned water wells providing a technical guidance document is crafted to assist when and who determines that the water well is in fact abandoned and does not constitute a water well.

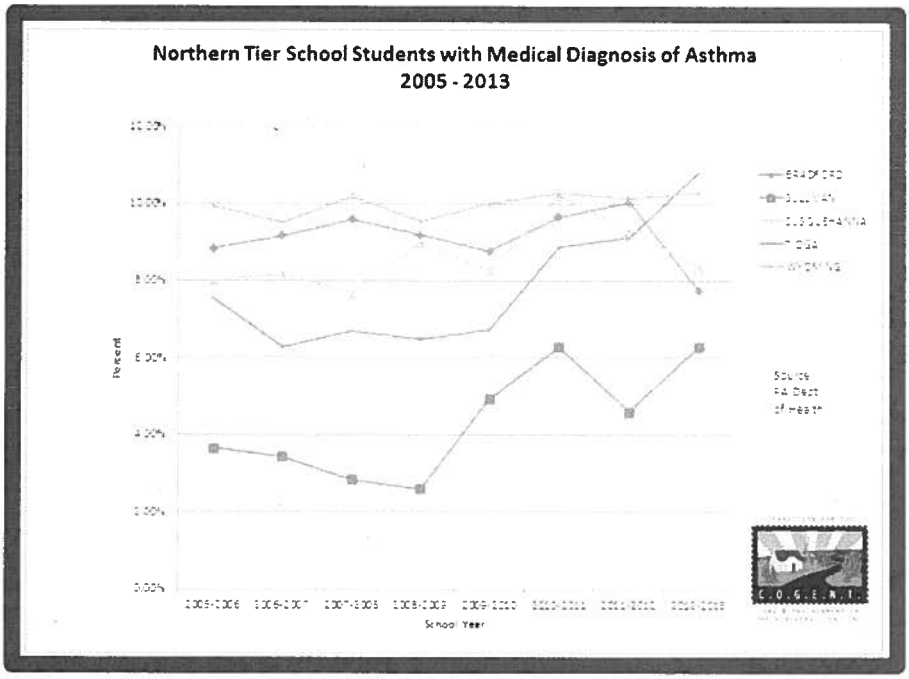
**§78a.15(d)** We continue to support the PNDI policy and agency efforts to identify and protect species. In our Region, it is not uncommon for well pads and gathering lines to just skirt core habitat areas. While we don't particularly endorse being right on the edge of a core habitat area, it is better than a pad or gathering line set right in the middle of a core habitat location so critical to maintaining the healthy environment in which we live.

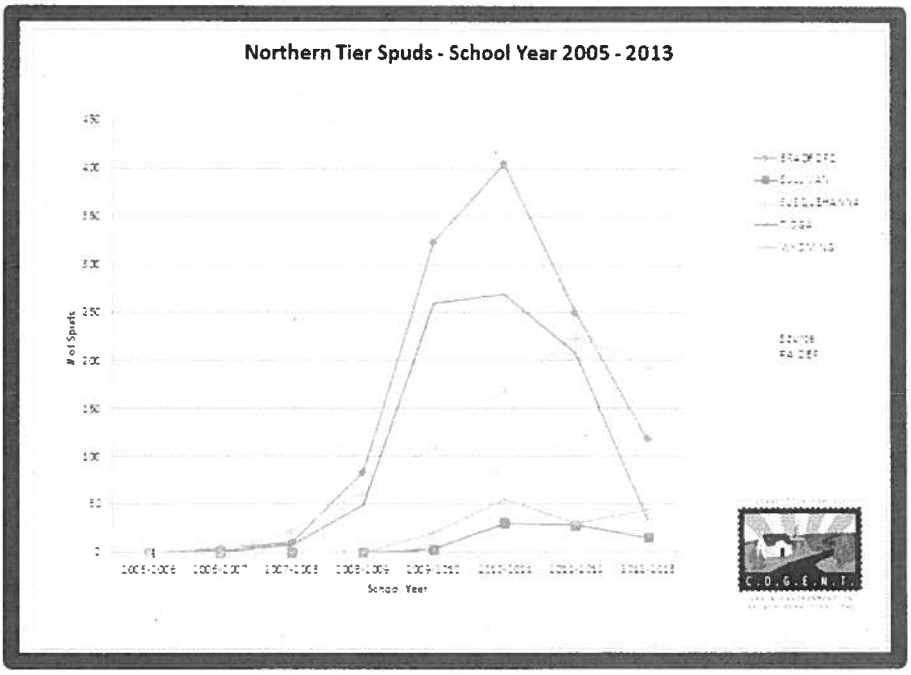
**§78a.15(f)(1)** We support the language change to limit of disturbance. We fully support language changes from the surface location and well head to limit of disturbance as being familiar with the daily impacts of well pads, they are not limited to either the well head or the surface location. Spills and blowouts when uncontrolled have traveled beyond the well head and surface location. Adequate and sufficient attention needs to be given to that fact.

**§78a.15.(f)(vii)** WITHIN <u>600 FEET</u> OF COMMON AREAS ON A SCHOOL'S PROPERTY OR A PLAYGROUND.

We are still lacking long term air monitoring data on air emissions concerning drilling, fracturing, work-over rigs and producing well pads. There is a lack of information what effect these emissions may have on children. According to the PA Department of Health's School Age Asthma statistics, (which we've been tracking) the Northern Tier's school age asthma rates have been increasing since development began. We are continuing to lack long term data on the well

development's harmful emissions such as VOCs & HAPs and what this may mean to children attending school, playing sports etc. in areas that are within measured feet of well pads.



A school district may desire dialogue between the district, jurisdictional fire company and operator in order to craft an effective incident action plan. This plan would enable all parties to know their roles in the event of an emergency that may occur while school is in session. The revision to 600' would provide this opportunity. School properties located within zoned municipalities may provide for such a requirement. School properties located within non-zoned municipalities have little or no opportunity for such a requirement; that does not necessarily mean they are at lesser risk.

One example of how this provision may assist in better operations near school common areas occurred during the fall of 2014 at Elk Lake School District. At the culmination of the annual fall sports activities, Elk Lake sponsors their Annual Homecoming which includes recognizing senior sports participants. During 2014 when this annual festivity occurred, flaring was taking place at the well pad behind the school common area. Despite the use of the field PA system, those in attendance could not hear what was being said due to the loudness of the flare. Due to new regulations, for the most part, flaring is a well development activity of the past. However, it is an example of why an operator needs to communicate or have permit conditions that dictate segments of time when work can/cannot occur. There is a good chance that drilling or fracturing would provide the same outcome to those attending Homecoming with coinciding well activity. If we are all going to co-exist, there needs to be land-use respect with the neighbors and in this case, school common areas. It is important to note, that in this particular case, the nearest well pad to the school common area, measured well pad edge to common area edge is approximately 920 feet. Thus, there is most definitely a reason to consider extending the proposal of 200 feet to that of 600 feet or something greater.

The proposed 200 feet, as a notification zone is too short a distance to enter into a discussion on how to avoid or minimize probable harmful impacts for school children and activities. Therefore, we are recommending the distance be revised to

a minimum of 600 feet or more appropriately, perhaps something greater. (We had proposed at the March TAB meeting 600 feet; subsequent to that meeting we were advised of the situation that occurred at Elk Lake School District's Home Coming.)

**§78.15(h)** We fully support erosion and sediment plans consistent with Chapter 102 for high quality and exceptional value streams. Our region has many designated streams. It is imperative to provide adequate protection to our water resources. Only a small fraction of the estimated wells have been drilled. We are expecting many more wells and well pads to be constructed. Considering the current regional share 54% violation rate, (of the state total) improved safeguards are necessary to adequately protect our water resources.

**§78a.17** We recommend that should the permit period be extended that the Department increase the corresponding permit fee in order to adequately fund the Oil & Gas Program. No extension of the permit should come at the expense of adequate funding.

**§78a.41 Noise Mitigation.**

During the recent March and April TAB meetings industry voting members attempted to purport that the only reason for this section was anecdotal. During the April TAB meeting, as an advisor I spoke about my personal experience concerning intolerable indoor noise levels that have resulted during several drilling and fracturing experiences. These experiences are intermittent, they are anything but temporary over the five years the well pad has next to my home. Once I concluded my remarks an industry voting TAB member noted that *"Emily what you have just described here is not temporary."* Since I elaborated my personal experience during the TAB meeting, I'm not going to repeat it here. However, many folks who deal with these intolerable noise levels in non-zoned municipalities feel helpless. The operators may not respond. There is no one at either the municipal or county level with any jurisdiction to assist and neither is there is anyone at DEP who may assist,

so often their misery goes without any governmental contact. Families have to grin and bear it which is much easier said than done. Often, those living nearby are elderly or sickly and are just unable to cope with advocating on their own behalf and may not even know where or who to call. And, really, presently there is no one to call when the operator fails to respond or respond with a real solution. Thus, we strongly support this section and recommend the Department moves forward to regulate noise via mitigation at well pads.

With that in mind, our first suggestion revolves around the Department crafting a technical guidance document which is made available for public comment. Secondly, we recommend the Department create a fact sheet that is made available on the internet and is included in the packet mailed to landowners and municipalities when the operator is applying for a well permit. Folks are going to need to know they have the ability to file a complaint when intolerable indoor noise issues exist and what they may expect in steps to resolution.

**§78a.41 (c)** We recommend the below noted language change.
*If the Department determines during drilling, stimulation and servicing activities that the plan is inadequate to minimize noise, the Department* ***shall*** *order the operator to suspend operations and to modify the plan and obtain Department approval.*

We've got experience with operators, and not all are created equal. We do not want to see some determined drilling or fracturing crew continue head-on once a complaint has been filed. Generally, folks are probably going to have already put up with a significant amount of noise before they file the complaint. The activity may well be underway, and the operator may say, we only need a few more days. The Department should in no way subject the neighbors to a "few more days" of intolerable levels. These are for all intents and purposes construction sites and construction sites are regularly subject to change and are not prone to be on schedule. So, it is easy for a "few more days" to be a week or longer. The operator

needs to stop and appropriately mitigate as they should've been doing for years. The only flexibility we see is for the operator to cease intolerable noise levels from the hours of 9:00 p.m. to 7:00 a.m. In other words, once a complaint has been filed, well pad activity must cease during those hours until appropriate and effective mitigation is in place.

The Department also needs to be aware that in our rural areas, bedtime is earlier due to folks working on their farms or longer commutes to work. Thus folks will retire earlier in our region than say, our suburban counterparts who may have only a ten minute commute to work.

The provisions noted in the draft document are broad in scope. Therefore, we offer the following suggestions.

- A provision needs to be added to ensure that this section includes all existing well pads and wells. **(g) This section applies to all wells and well sites permitted prior to the effective date of the rulemaking.** Noise has been an on-going problem across the development area when homes are near sites where the topography provides opportunities for homes to 'catch' or 'attract' very loud noise from drilling and fracturing operations. We are not referring to traffic, but rather actual operational noises that result in indoor noise levels which create very difficult living and sleeping environments. These folks also deserve the benefits of the noise mitigation performance standard. Development is not sustainable when nearby families are not able to function in their homes normally. There is a need for balance.
- A provision needs to be added clarifying that this section only pertains to municipalities that lack zoning, or local/county zoning ordinances that choose to regulate it through referencing this section in their zoning ordinance.
- There needs to be a performance template as to what is a reasonable and unreasonable indoor noise level. This is much different from determining

outdoor noise levels, and may even be a little more complex. An operator may choose as part of their site specific noise mitigation plan to take pre-activity readings at locations near homes. There needs to be a study rather than a snapshot. We'd suggest a 3 day, 24 hour study. Indoor noise levels also need to be ascertained at a minimum for 3 days period for nighttime levels. Indoor noise levels are going to vary depending on regular, non-industry road traffic, refrigerators, furnaces and other appliances intermittently running. It is important to note, most of these will be less likely to contribute to indoor noise levels at night. A loud, intermittent refrigerator could increase indoor noise levels to 50dB for a few minutes when normal indoor noise levels may be at 40dB while in rural areas, the outdoor ambient noise level may be at 35dB or even less. So, this can become pretty complicated. Alberta's Directive 38, takes into account present background levels and indicates a buffer of 5dB with the industry needing to meet that increased level. Thus, while they are doing the study, nightly indoor noise levels need to be monitored in a similar fashion to come up with that typical indoor noise level at that home. Homes are going to vary, so that also needs to be considered. The industry must then meet that ambient level +5 which would be reasonable for folks trying to sleep.

- During the day the indoor noise levels may be higher, nevertheless OSHA has requirements for 8 hour noise levels and levels that would require hearing protection. The Department needs to be mindful these are our homes. We are at home for more than 8 hours and should not have to wear hearing protection while inside our homes. The Department needs to regulate noise so folks are comfortable within their homes and are able to enjoy normal activities such as watching TV, conversation, using the telephone and sleeping without the interference of intolerable industrial noise levels. Thus, we are hesitant to prescribe a decibel level. In some homes 55-60 dB is going to be too loud, while in other homes, it is not.

- The Department also needs to be mindful that noise is very fluid when there is activity on-site. There are clangs, bangs, horns, beeps, roars, reving, and more. So, the practically constant changing sounds and varying loudness makes it difficult to become accustom to the noise such as one would with say, just traffic for example. Another aspect is that one may be able to cope with the present noise level for an hour and fall asleep only for that noise level to abruptly change when they are awaken by something similar to a loud thunderbolt, which is essentially a bang at the well pad. Instead of it being for a flash of a few seconds, rather it continues all night long and there is no more sleeping.
- The Department needs to determine/define permissible sound level similar to what is defined in Alberta's Directive 38. The Department needs to determine/define basic sound level similar to what is defined in Alberta's Directive 38. The Department actively determining/defining PSL and BSL will aid the industry in knowing what parameters are reasonable to meet adequate performance of noise mitigation and best management practices. This will also aid in creating a predictable performance standard. In conjunction with this process, we recognize that there needs to be an adjustment between daytime and nighttime established levels. There may also be the need to establish a seasonal adjustment. Seasons, weather, wind speed, temperature all have effects on noise. We suggest Alberta's Directive 38 as a good resource with application on these levels be replicated here in the Departments effort to regulate noise mitigation at well pads.
- We recommend the Department review Directive 38 (2) Determining Sound Levels and Adjustments and (3) Noise Impact Assessments for opportunities to replicate provisions into Chapter 78a §78a.41.

- We recommend the Department define the duration of drilling, stimulation and servicing activities. Our experience is those activities begin when the first truck appears on-site delivering materials, equipment or personnel and ends once all materials, equipment and personnel have vacated the site. Generally, one of the first loads to reach the pad and the last to leave are the mobile light plants. Once the light plants are delivered, generally the site is bright that evening. Work is seriously underway and remains that way until the light plants are removed. We would suggest as a helpful parameter as an example that activity occurs corresponding to light plants being brought to the site which allows them to work 24/7. Even though the site may not yet be seriously engaged with a downhole drill bit or fracturing stage, as they are erecting and placing equipment they also begin to idle equipment. Thus, the noise time table extends beyond the downhole efforts.

- We agree with the regulation being complaint driven. It is unlikely that every home near a well pad is going to have intolerable indoor noise levels, and it is likely that there will be pads where there are no nearby homes and this is a non-issue. However, it is important that the Department regulate noise at well pads in non-zoned municipalities in order that families are able to be comfortable within their homes and function normally.
- All sound level results obtained by the operator on a complainants property whether indoors or out need to be furnished to the Department and the property owner within ten days.
- The operator must contract third party bona fide, certified professionals that monitor noise once the Department notifies the operator of a complaint.
- The operator needs to maintain contact with the complainant in order to be aware of any intolerable noise levels being experienced.
- The Department needs to determine how they will be able to respond to complaints for intolerable noise levels during sleeping hours. There needs to

be clear guidelines so the complainant knows what the process entails, what to expect and what their rights are.

- The operator needs to advise both the Department and the complainant what measures they are taking to mitigate noise. They need to communicate when they have completed making these alterations and when activity is anticipated to restart with the lower noise levels.
- The Alberta Directive 38 provides that noise impacts from heavy truck traffic and vibration impacts may require corrective action in the case of a complaint. Operators on occasion may stage trucks at well pads near homes during drilling and fracturing events at nearby well pads. This staging may go on for months during multi-well development. This situation may present problems for those whose homes are too close. Trucks that meet the California emission standards are allowed to idle all night long. A quantity of trucks idling may increase indoor noise levels and vibration impacts for neighbors and cause sleep disruption. We recommend that the Department provide for measures regarding well pads used as truck staging sites.
- Prior to Act 13, homes were setback 300' from the well head. There are also situations in which we are aware that unknowing landowners signed waivers and their homes are sited less than 300' from the well head. Act 13 provided for a 500' setback from the well head. Operators shall not be obligated to implement noise mitigations at well pads for new dwellings built disregarding the 500' setback after the effective date of this section.
- There are phases of drilling, fracturing and servicing that are much nosier which the operator could choose to do between the hours of 7:00 a.m. and 9:00 p.m. which would help to reduce the potential impact of noise upon the neighbors.
- The operator needs to advise the nearby residents of significant noise-causing activities and schedule these events to reduce disruption to them. It would be very beneficial for the operator to robo call the residents within 1,000' of the well pad the week before they are planning to move into drill,

fracture or service a well. Currently there is a 24 hour activity notice provided to the municipality and landowner, but a 24 hour activity notice is a no-brainer when the neighbors have been seeing the equipment hauled in over the past week.

- Operators need to comply with a requirement that all internal and external combustion engines are fitted with appropriate muffler systems.
- The regulation needs to be explicit that the operator is responsible for noise control regardless of who the subcontractor is and what methods they may or may not choose to employ.
- The cost/benefit of implementing this section is not as tangible as the industry would suggest. Cost/benefit needs to include the difficult living situations that nearby residents have had to endure this past eight years of drilling within the Northern Tier Region. This would extend to vehicle accidents, work absence, medical appointments, and undue stress and recuperation periods for residents who have been terribly affected by lengthy periods of intolerable noise. Many of these situations have been unreported or operators have poorly dealt with them. We anticipate a regulation that is not a premier concern at all well pads. There are many well pads in state forest lands (where animals are able to roam freely away from the noise) and on private lands that may be well over 1,000' from the nearest home with no negligible noise impact. This regulation would be most applicable to sites that have been poorly sited with no regards to the neighbors and future sites where hopefully, operators will choose more balanced locations that will fit within the scope of adequate noise mitigation. We see these as a minimal number of the total established and future well pads.
- There needs to be a firm guideline as to how a complaint is filed; who to call, what kind of information to provide.
    - The regulation needs a provision to indicate how soon the Department will respond and how they will respond. We recommend

the Department respond immediately. Unlike a water complaint, the noise situation is a very fluid situation. It is likely that folks will not phone immediately. It is likely they will question whether they are being reasonable, or they may think it may improve, or they may be reluctant to phone for a variety of reasons. Thus, the family could be dealing with a few weeks of intolerable noise levels before they call. Thus, the Department needs to swiftly respond. Once a report has been filed, the Department needs to make a site visit and subsequently, when necessary contact the operator.

- The regulation needs a provision to indicate what exactly the operators responsibility is, how soon they need to respond and in what manner. We recommend that once the Department has contacted the operator, the operator respond immediately. Once the operator receives a complaint, that is top priority and no site activity is as important as solving the intolerable noise issue. They must make direct contact with the complainant in order to understand the concerns and to establish dialogue to set reasonable expectations and a time frame for action to resolve the issue. The operator must carefully explain the requirements they must meet including the time lines they intend to follow in addressing the intolerable indoor noise problem.
- The operator needs to provide correspondence to the DEP and the complainant explaining exactly what the operator did to successfully mitigate for the intolerable indoor noise. This record will prove valuable to all parties the next time the well pad has activity. It will serve as a record of what was effective in reducing intolerable indoor noise levels; mitigation which may be repeated next time there is activity at the well pad.
- The regulation needs to specify the maximum length of time the operator has to resolve the complaint.

- Any instruments used by the contracted third party/operator to record sound levels must have a certificate of calibration. Calibrations must be done within the guidelines recommended by the manufacturer.

- Above all, we request that as the Department fine tunes this new section that they are most mindful of the quiet environs of our rural areas and our basic need to be comfortable within our homes. These two items should be the drivers of establishing template parameters, ASL, BSL and what is considered reasonable and unreasonable levels of noise. What may be considered reasonable in more populated suburban and urban areas is not comparable to our rural settings. That fact is noted in virtually every study and existing regulation, greater populated areas have inherently higher background ambient noise levels. So, please be mindful of our unique circumstances of a very quiet area with an influx of extreme industrial noise, and how to balance that within the scope of what is reasonable – that at the very least, we must be comfortable within our homes.

**§78a.51.(d)(2)** We recommend the adoption of the language clarification. We advocated very strongly with our assembly members to have this provision included with the intention that we would have our water restored at better than SDWAS if that is what we had pre-drill or if we had less than SDWAS that water supplies would be restored to SDWAS. This language clarifies the intent of the assembly.

**§78a.52a – Area of Review**

We support the language changes, including the addition of active and inactive wells. It was noted during TAB meetings that an unconventional well is more likely to communicate with an unconventional well in the area rather than a shallow conventional well. We recommend the section for adoption into the final regulation.

**§78a.55.(i)(5)(i)(I)** We recommend the operator of an unconventional well include in their emergency response plan location and monitoring plan for emergency shut-off valves located along temporary pipelines. Emergency Response Planning is very important. While 'rare and unexpected' events happen they are not the norm. When they do occur, that is not the time to scramble and wish valves were included in the plan. We appreciate the Department recognizing the importance of adequate pipeline regulations even for "temporary" pipelines. The state of North Dakota has been dramatically affected by the lack of pipeline regulations and oversight. This is not an experience we want to see duplicated in Pennsylvania. We still need regulatory oversight on Class 1 Area high pressure, large diameter gathering lines.

**§78a.56** Temporary Storage

**§78a.56.(a)(3)** We support and recommend the Department having a mechanism to issue a permit for these facilities. The Department needs to track and enforce compliance on these facilities. The Department needs to ensure they are established in such a way that protects public health and safety and the environment.

**§78a.56.(d)** We support and recommend the discontinuance and prohibition of pits.

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

We support and recommend the discontinuance and prohibition of pits.

**§78a.57(e)** We do not support the use of underground or partially buried storage tanks. While Pennsylvania has one of the most stringent tank programs in the nation, still we are challenged with staffing issues at the Department. With two or more tanks on every well pad, we hesitate to support their use due to inadequate staffing levels at the Department. Which program will be responsible for compliance issues with tanks on well pads? Will the Oil & Gas Program be responsible, or will it involve the Tank Program? Will Oil & Gas field staff be

monitoring for leaks with the underground and partially buried tanks? All of these tanks will age on the same calendar which is also a concern. Certain soils create opportunities for tank corrosion, brine is also corrosive. Tanks will be affected by both internal and external corrosion. What type of leak detection program will be installed at all these tank locations? We prefer the use of above ground tanks with secondary containment that may be easily monitored for leaks. Should the Department determine that the underground or partially buried storage tanks will remain in use and possibly be expanded throughout the gas fields, we recommend that once the Department receives the data and organizes the inventory that this information would be readily available with internet access. Rural folks concerned about water supplies hundreds of feet away would appreciate knowing what types of infrastructure may be buried or partially buried with a potential to impact their private water supply.

**§78a.57 (i)** The Department needs an inspection policy on all tanks, relying on the operator's monthly inspections until a deficiency is reported is insufficient. Maintaining inspection records for a 5 year period will provide better information should there be an unforeseen leak. Maintaining these in an electronic data base solves the paper storage issue and creates an easier purge as well.

We recommend the addition of two provisions noted below.

**§78a.57 (j)** All underground and partially buried tanks used to store brine or other fluids produced during the operation of the well shall be equipped with a leak detection system that includes an alarm.

**§78a.57 (k)** Landowners shall be notified two weeks in advance when underground and partially buried tanks used to store brine or other fluids produced are scheduled to be installed on their property.

Underground and partially buried tanks used to store brine or other fluids produced during the operation of multiple wells on an unconventional well pad may be in use for many decades. We are not considering the new tank installed today, but rather multiple locations with simultaneous aging infrastructure. Underground and partially buried tanks are not the best environmental option for tanks. Aboveground tanks are a better option and provide sufficient and adequate environmental protection. Aboveground tanks need to be encouraged not discouraged by providing for the use of lesser environmentally sound options. There are numerous cases of aging leaking tanks across Pennsylvania, a new generation prone to age on the same or similar time table is not acceptable.

Landowners utilize land adjacent to well pads with a variety of land use activities. Some of these activities may not be suitable with nearby underground or partially buried tanks lacking leak detection. Therefore, the landowner needs to receive notice that such an installation is scheduled on their property.

Additionally, some interested landowners may want to be present to observe at a distance the installation. They will need adequate notice to arrange for time off from work and other obligations.

It is possible that had landowners been aware that their property would serve to host underground storage tanks, as stewards of their lands, they may have negotiated provisions prohibiting underground or partially buried storage tanks. So much information was not provided during the leasing phase. Essentially, a landowner may have a well pad located on their property where they may prefer above ground tanks with secondary containment. The Department has an obligation to promote the environmental practices that will balance the environmental, public health and safety, and industry needs. The utilization of underground and partially buried storage tanks does not meet that obligation.

**§78a.57a. Centralized Tank Storage**

It is our understanding that this section provides an avenue to enlarge the site of WMGR123 permitted activities, or that the storage area may be a location to 'stock' flowback waters until they are processed at a WMGR123 permitted location or 'stock' treated waters to be used for drilling and hydraulic fracturing.

**§78a.57a.(a)** We fully support the implementation of the permitting process for Centralized Tank Storage. We are supportive of the public notice component, and in addition, we recommend a mailed notice of intent be provided to the property owners within 1,000'. While the Department may publish notice in the Pennsylvania Bulletin, most folks are unaware of the publication. These will be large facilities and the immediate neighbors need to be advised that an industrial facility is proposed near their homes. In zoned municipalities, there is adequate notice and discussion at least through the zoning board. Residents are able to be involved with that process. In non-zoned municipalities while the municipality is provided notice (§78a.57a.(c)) there is little discussion as there are no avenues for any local regulations that would be applicable. There is no opportunity for public involvement in non-zoned municipalities. These facilities, for the nearby neighbors will increase traffic and other related impacts. It is reasonable to advise the property owners within 1,000'.

**( ) The applicant shall provide notice to property owners within 1,000 ft. of the location. The notice shall include a copy of a map to scale indicating the location, LOD, access road, indication of the 1,000 ft. radius, property boundaries, type of fluids to be stored (ex - fresh/flowback/produced waters) and the contact person in case of questions.**

Centralized Tank Storage locations are large and busy long-term facilities. The fact that there is a setback from homes and water supplies, notes some degree of risk for the neighbors. They need to be sufficiently notified, and they need to have someone

to contact with any questions they may have. While PAB notification meets the spirit of notification, most neighbors of such a facility are not going to be aware of the PAB or read it weekly. A simple notice to the neighbors is preferred over a legal advertisement as most people do not routinely read legal advertisements either. Those property owners within the 1,000' of the location are primarily those with immediate impacts and may have concerns regarding their private water supplies, therefore they need to be served an adequate notice. Additionally, these types of facilities are large and busy. They are going to increase the amount of diesel exhaust fumes in the immediate area, an air quality concern for many asthmatics. Asthma statistics among school age children in our Region are increasing. Asthmatics that do not attend school are noting changes in their ability to control their asthma. Thus, being aware of new facility nearby brings concerns to these folks, concerns where they may want to prepare in advance by consulting their physician for better ways to control their asthma. Facilities being located in zoned municipalities are more likely to be located in specific areas conducive to this land-use option. Facilities being located in non-zoned municipalities where there is no local regulation regarding location or input from residents are our main concern and why we are recommending the notification to property owners within 1,000'.

**§78a.57a.(f)(1-3, 5-7)** We support these provisions which are measures provided in other provisions related to well pads and other facilities.

**§78a.57a.(f)(4)** We understand that the 500' measure is more than likely based off the similar measure for well pads. However, in many cases there are well pads within that measurement that from the point of impact, whether it be noise or air emissions, are just too close to homes. 24/7 noise from idling traffic and opportunities for diesel to enter homes from traffic, idling or otherwise create difficulties for some living near well pads. We recommend that this information be considered and the setback be modified to 750' in the same prescribed measure in order that the setback be more balanced. Unlike well pads where the operator has a

need to 'hit' a certain area of the formation, a Centralized Tank Storage site may be more flexible in location. We recommend the setback be modified to 750' from a building. We recommend that **§78a.41** be applicable to these facilities in non-zoned municipalities should a situation arise where the property owner may be dealing with concerning indoor noise levels or vibration impacts.

**§78a.57a.(f)(8)** WITHIN 300 YARDS (**900 FEET)** OF A BUILDING WHICH IS OWNED BY A SCHOOL DISTRICT OR SCHOOL AND USED FOR INSTRUCTIONAL PURPOSES, A PARK OR A PLAYGROUND.

We understand that this provision was 'borrowed' from another program. Since all measures in the O&G program are in feet, we recommend that both yards and feet be used just so there is no misunderstanding of the measure.

**§78a.57a.(g)** We recommend a language change: UNDERGROUND STORAGE TANKS **SHALL** NOT BE USED AT CENTRALIZED TANK STORAGE SITES. We want to be very clear here, these sites are established not as permanent, but on an 'as needed' basis. While the 'as needed' basis may continue for a decade or longer, still they are not intended to be permanent fixtures. Underground storage tanks, are not the best practice we want to see in the gas fields. We urge the Department to make this language change and ensure that there will be no underground storage tanks. We don't want to see this provision up for interpretation where there are cases where they MAY be allowed. Underground storage tanks are an inferior environmental method for tank sitings.

**§78a.57a. (i)(17)** These tanks may be in service for decades. Inspection frequency is insufficient should there be an issue that could be discovered and repaired, avoiding an environmental impact. Maintaining inspection records for a 5 year period will provide better information should there be an unforeseen leak. Maintaining these in an electronic data base solves the paper storage issue and creates an easier purge as well.

**( ) The centralized storage tanks storing flowback, produced and treated waters need to be covered and equipped with a HEPA filter to reduce VOCs emitted into the air.** (besttank.com)

According to the *"Overview of the 2013 Emissions Inventory for the Natural Gas Industry,"* provided by the DEP BAQ at the February, 2015 AQTAC meeting, VOC emissions are on the rise in Pennsylvania. There is a need to reduce these harmful emissions through the use of available technologies whenever possible. The Department is lacking information regarding the amount of VOCs that may be emitted through a centralized tank storage system. Because of increasing VOC emissions and the unknown emissions associated with the centralized tank storage system it is necessary to exercise caution and use available technology. Therefore, we recommend the use of HEPA filtration with Centralized Tank Storage.

**§78a.57a.(n)(G)**
What is provision (1), it seems to be missing?

**(2)** The understanding is this is not a static set of wells. Therefore, it appears reasonable that the operator needs to notify the Department when they have serviced the last well. There also needs to be a time frame of when that notification occurs, for example, "Within 30 days of servicing the last drilled/ fractured well, the operator shall make notification to the Department that they will begin the restoration process within 9 months of completion date."

With the addition of the changes proposed above, we support **§78a.57a** at a minimum as written.

**§78a.58, §78a.59a., §78a.59b., 78a.60** We recommend the revisions as presented for adoption.

**§78a.59c.** We support the prohibition and closing of centralized waste water impoundments. We are extremely supportive of the Department taking this step to

protect our water resources. There have been several operators with very costly violations associated with centralized waste water impoundments. We've had concerns regarding ineffective leak detection systems. We were not confident that the use of centralized waste water impoundments provided adequate and sufficient protection of our water supplies. Thank you for discontinuing their utilization.

We recommend that in the case that as closure proceeds and contamination is noted in either soil or on-site monitoring water wells, that all owners of water supplies within a minimum of 1,000' be notified of contamination, along with instructions of how they may contact the Department should they notice any changes in the water quality of their private water supply. In such cases, we also recommend the Department pull water samples to determine whether there are any impacts beyond the on-site monitoring water well.s

With the addition of the private water supply consideration we recommend the provisions as written be adopted at a minimum.

**§78a.61** We support the changes to this section, especially the landowner notification. We recommend the provisions be adopted.

**§78a.62** We do not support the use of Disposal of residual waste – pits authorized by permit or other Departmental approval. On-site disposal in the unconventional oil and gas plays is not a reasonable environmental disposal method. There are not controls such as those that would be available at a regulated landfill. The Department must not create an inventory of farmland filled with pits. The Department needs to ensure our agricultural areas are environmentally suited to former land use. Isolated forested areas do not create good disposal dumps. We have legacy of non-regulated landfills that dot our country-side prior to landfill regulations. The Department must not create a further legacy. It is totally inappropriate in this day and age that the Department would consider on-site

disposal of contaminated drill cuttings. We recommend that these pits be prohibited, such that no situation would warrant well pad pit disposal.

We recommend the following language change.

**The owner or operator of an unconventional well may not dispose of residual waste, including contaminated drill cuttings, in a pit at the well site.**

We do not support the remainder of the language change since the remainder of the section is proposed as deleted and there are no provisions as to how they will be handled should the Department determine to issue a permit or other approval.

In the case that the Department deems to adopt these provisions as is, we suggest the noted below additional provisions.

**Proposal:**

**§78a.62 Disposal of residual waste – pits**

(a)(1) In the case where a pit is authorized by permit or other approval is obtained from the Department the operator shall notify the landowner.

(a)(2) The operator shall record the location and contents of the pit at the county recorder's office in the property's deed.

The landowner needs to be aware of the onsite disposal as they are the landowners and stewards of their land. The Deed record is necessary in order to have full disclosure of the location and contents in the case that many years pass, memories fail and when the land is sold, no one may recall. This is in the spirit of full disclosure so a buyer may be adequately aware of the onsite disposal.

**§78a.63** We recommend the following language change.

**The owner or operator of an unconventional well may not dispose of residual waste, including contaminated drill cuttings, at the well site by land application of the waste.**

We do not support the remainder of the language change since the remainder of the section is proposed as deleted and there are no provisions as to how they will be handled should the Department determine to issue a permit or other approval.

**§78a.63a., §78a.64** We recommend the revisions as presented for adoption.

**§78a.65. Site Restoration.**

We recommend a notification to adjacent landowners that the site is restored. Pre-development plans have not always indicated existing diversion ditches that guided storm water run-off on prior to the siting of the well pad. Adjacent landowners, especially those with homes on the downside may have benefited from these diversion ditches. The Department needs to ensure that adequate measures are in place with site restoration to avoid storm water run-off that may create problems in nearby homes.

With this addition, we support the changes to this section, especially the surface landowner post drilling and post plugging restoration reports. We recommend the provisions be adopted.

**§78a.66** We support the changes to this section, especially the restored and replaced water supplies. It is very important to provide adequate protection for water supplies. We strongly support the adoption of Act 2 requirements. Most of the areas where the gas development is occurring are green/virgin sites. The handling of spills and releases in conjunction with Act 2 is more respectful to our environment and will assist in preserving future land-use activities. Act 2 and these revisions provide better protection for the environment within our Region. We recommend the provisions be adopted.

**§78a.67** We recommend the revisions as presented for adoption.

**§78a.68** The addition of pipeline rights of way, service roads and access points all provide for increased storm water run-off. The operators do not replant trees or shrubs to replace what has been removed and prohibit plantings by the landowner. We are concerned about further erosion from storm-water run-off in cases where areas are proliferated with gathering lines. Roads are further eroded easily when they are not properly maintained. Poorly maintained access roads may also become an attraction for rural 4-wheeling off-roading enthusiasts providing for further degradation and increased erosion issues.

**§78a.68a.** We find the language changes reasonable and necessary. We recommend the revisions as presented for adoption.

**§78a.68b.** We find the language changes reasonable and necessary. We appreciate the provision requiring that pressure test results and any defects and repairs to the well development pipeline shall be documented and made available to the Department upon request. We know on occasion pipelines may leak and since there is a variety of waters being used, this will be helpful information in case of any pipeline failure. We recommend the revisions as presented for adoption.

**§78a.69, §78a.70, §78a.70a.** We find the language changes reasonable and necessary. We recommend the revisions as presented for adoption.

**§78a.73** We find the language changes reasonable and necessary. The language changes will better provide for environmental protection concerning communication between existing, abandoned and orphaned wells. We recommend the revisions as presented for adoption.

**§78a.121.** We find the language changes reasonable and necessary, responding to the recent legislative action. We recommend the revisions as presented for adoption.

**§78a.122.** We find the language changes reasonable and necessary especially regarding the certification regarding the Area of Review. We recommend the revisions as presented for adoption.

Over the last several years, the Department has continued to improve the website and internet access to information related to the Oil & Gas program. We encourage the Department to continue to move along this path. Ideally, we would like to be able to review permit applications and authorizations, inspection reports, root cause analysis, consent order agreements, basically anything having to do with well development we'd appreciate being able to access online saving our time and that of the Department's by reducing the need for file reviews.

We appreciate the Department's determination to add this final comment period to the rulemaking process. We appreciate the opportunity to be seated on the TAB and participate fully in the rulemaking process.

Our organization's focus area is that of Bradford, Sullivan, Susquehanna, Tioga and Wyoming Counties. Folks we are likely to receive calls from are landowners or residents of these counties, many of whom have well pads either near or next to their homes. These are folks that this rulemaking actually has an effect on their daily lives. How their water is protected, whether they can sleep at night with a drilling or fracturing event happening not far from their bedroom, whether there is a spill on their property or is released onto their property, how the soil may be restored to the field they annually harvest crops during gathering line construction. There are many aspects of this rulemaking that affect us daily; we need this rulemaking package, we need it effective at the earliest possible date. We request that our suggestions be considered as suggestions and recommendations for further fine tuning to the benefit not only to our rural, farmland, forested communities, but also, that the industry has a strong guide to operate better, in a more sustainable

community manner. Lacking regulations, there is no standard that will create the reality that we are striving for, and that is to reach that delicate balance where all stakeholders thrive. We are not there yet, but this rulemaking will be a big step in getting us there.

Thank you for the opportunity to provide comment.

Best Regards,

Emily E. Krafjack

Emily E. Krafjack