NORTH DAKOTA PETROLEUM COUNCIL
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Testimony of Ron Ness
Administrative Rules Committee
September 13, 2016

Chairman Devlin and members of the committee, my name is Ron Ness, president of the North Dakota Petroleum Council. The North Dakota Petroleum Council (NDPC) represents more than 475 companies working in all aspects of the oil and gas industry, including oil and gas production, refining, pipeline, transportation, mineral leasing, consulting, legal work, and oilfield service activities in North Dakota. I appear before you today to discuss the new oil and gas rules approved by the North Dakota Industrial Commission.

As many of you know – you were there, participate in the many discussions and voted on the bill– these rules are a result of HB 1358 and the EERC study that followed. Many hours and much work was put into the final version of HB 1358. There were many discussions, amendments and mark-ups, but you, the legislature, very deliberately settled on what became the final engrossed bill and established the framework for these rules.

Following the release of the proposed rules, the NDPC solicited input from our member companies and formed a technical committee to develop comments. We submitted 23 pages of comments, suggested language, and clarifications (handout A). In the end, we do not agree with or support a number of changes made in the 42 different sections of administrative code, but, we recognize and respect the process, and that ship has sailed. However, a handful of the changes go beyond the legislative intent you and your colleagues so clearly laid out, are arbitrary and capricious, or are just flat-out not practical, and are within your jurisdictional authority to amend, void or remand back to the agency.

As you examine the proposed rules, you'll notice a multitude of dates referenced. Some rules are applicable going forward, while others - site berms and pipeline bonds - are retroactive. Not only does this create a great deal of confusion for companies trying to be in compliance, but HB 1358 clearly intended for the rules to be prospective only. Shouldn't new rules be effective the date they are enacted so the regulated community is able to clearly identify their course of action to be in compliance? These pads or pipelines were built months, years or decades ago, and now the rules are changing, creating substantial impact to the regulated community. The rules are a new course for North

Dakota and should be implemented going forward.

Legislation was also very clear and purposeful in its use of the term 'leak protection' rather than 'leak detection'. The term 'leak detection' should not be used in the proposed rule changes, as the legislative committee acknowledged and EERC study confirmed there is no single system that can effectively detect leaks in gathering lines, and the intent of statute is 'protection'. If you review version 15.0460.03010 of HB 1358 as prepared for Senator Carlisle (handout B), you'll see the amendment that intentionally used 'detection' and removed 'protection. For the agency to approve rules that include leak protection is clearly not legislative intent. Additionally, EERC was clear in their findings, as noted in key finding 18, that there is no silver bullet when it comes to 'detection', even stating that "a technology gap exists for implementing external leak detection". We ask that all references to 'leak detection' be struck from the final rules.

Another proposed change, the six inch perimeter berm requirement on all new and old well pads, stipulates substantive changes for the industry and creates an additional cost of $6-10k per well, with no clear benefit to the health, safety and the environment on every well site. Adding berms on existing well pads is even more costly, not to mention maintenance and water disposal costs (handout C). Once again, the retroactive application of this rule change is outside the scope of legislative intent, and not practical to apply new rules to decades-old pads. The current NDIC process of evaluating a well pad during the permitting process to determine if a berm is appropriate is working. 4,400 pads, or virtually one-third of all wells, now have berms as required via the permit without the mandate. Federal law already requires a dike on the well pad around storage tanks as well. Additionally, mandating a six inch berm is not always practical. If a berm is required, six inches is not always enough. Each pad is unique. While we oppose mandated berms and the retroactive nature of this rule, the oil and gas industry does not oppose working with permitting staff to prospectively require site berms when specific environmental risks or hazards deem it necessary, nor do we oppose working with field staff to identify existing pads that pose a significant risk to determine the value and scope of a berm. The exemptions included by the NDIC as guidance are a substantial improvement, but then should be both in the rule and a clear exemption rather than 'may consider'. Operators are expected to be in compliance or file for an extension on October 1, even though field inspectors have not yet been able to determine which of 4,360 existing well sites may or may not need a berm. The regulated community needs to know the rules it is expected to operate under, not just possible interpretations. We must also remember that the value of these berms is not cut-and-dry. It is impossible to

determine exact costs, but we know that it will be substantial. If you own hundreds of existing well pads, it could be $6-10 million in unanticipated costs. This is not the time for unwarranted expense on this industry.

We are also concerned with some of the aspects of crude oil and produced water gathering pipeline bonding required in the new rules. While HB 1358 gave the NDIC authority to bond gathering lines, again, the intent was clearly to apply prospectively only. How do you begin to determine the appropriate bond amount for a line that has been in the ground for decades? We are also concerned with the idea of relating additional bond amounts to the economic value of the underground gathering pipeline systems as proposed. The pipeline's economic value has no relevance in relation to higher bond amounts for pipeline abandonment. We ask that this section be remanded to be prospective only, and the reference to economic value be struck.

Finally, there are two parts of the new gathering pipeline rules and regulations that we feel need to be reworked. First, the ban on utilizing the squeeze technique, a technical process used to repair or tie in new pipelines, is not practical. This practice is widely accepted and safe when done properly. Squeeze tools have been used for over 40 years, and is a recognized process by ASTM with best practices (handouts D and E). We ask that the committee urge the NDIC to work with the regulated community to understand the process and reconsider the application or wording of this rule. We also find it burdensome that a 48-hour notice be required to perform an integrity test. Integrity tests are common and ongoing on gathering systems, and to require 48-hour notice would significantly delay the work being done. Integrity tests can occur whenever operations are happening, and it is a safety mechanism we want to encourage. Industry does not oppose 48-hour notice on **scheduled** integrity tests.

I urge you to consider what I have proposed today. Of the 40 proposed changes, there are five to six that do not meet legislative intent or are arbitrary and capricious. The regulated community is concerned and confused on these important rule changes. Once again, these issues are:

1) lack of clear applicable dates and retroactivity – shouldn't rules as authorized by legislation be prospective?;

2) mandatory six inch site berms, especially the retro-fitting of existing sites when staff currently has the ability to require berms;

3) the use of leak detection in addition to leak protection, which is outside of legislative intent;

4) retroactive pipeline bonds; and

5) the impractical banning of pipeline squeezing and requirement of 48-hour notice of integrity tests.

While we appreciate the work done in writing and proposing these rules, it's important that we not ignore the directives given by the legislature in HB 1358. The items listed above are few, but they create rules that are not the most effective they can be. Regulation of crude oil and produced water gathering lines by the state of North Dakota is new ground, not only for North Dakota, but for the entire country. We must get it right. These are not huge changes. We simply ask you to remand these items back to the agency for further clarification, void or amend them, or take whatever action is in your legislative authority.

HANDOUT A

NORTH DAKOTA
PETROLEUM
COUNCIL

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April 11, 2016

Bruce Hicks, Assistant Director
NDIC Department of Mineral Resources, Oil and Gas Division
600 E. Boulevard Ave.
Bismarck, ND 58505

RE: Comments on Proposed Rules Changes

Dear Mr. Hicks:

Thank you for the opportunity to provide comments on the proposed Administrative Rules changes. The North Dakota Petroleum Council (NDPC) is a trade association that represents more than 475 companies involved in all aspects of the oil and gas industry including oil and gas production, refining, pipeline, transportation, mineral leasing, consulting, legal work, and oil field service activities in North Dakota, South Dakota, and the Rocky Mountain Region.

We appreciate the time and effort these rules have required. With our recommended clarifications and suggested language, industry supports many of them. The oil and gas industry is heavily regulated and we recognize the need to adapt regulations to address issues as they arise. However, we must keep in mind that today's economics cannot absorb the great costs of increasing regulation without substantial increases in health and safety. To formulate comments on behalf of the industry, the NDPC solicited input from our member companies and formed a technical committee to develop the attached comprehensive comments on behalf of our membership. The proposed rules involve forty changes to the regulatory framework in North Dakota. Many of these changes are the result of the Energy and Environmental Research Center study and the 2015 legislative session, which many of our members provided countless hours of input. However, many changes, including the requirements for underground gathering pipelines and saltwater handling facilities are incredibly broad and go far beyond legislative intent and the recommendations of the EERC study. For example, legislation clearly limited its application to underground crude oil and produced water gathering lines. As written, sections 43-02-03-11, 43-02-03-14, 43-02-03-29.1 and 43-02-03-30 apply to gas gathering lines. Proposed changes should not apply to gas gathering lines, consistent with the legislation. Legislation was also very clear and purposeful in its use of the term 'leak protection' rather than 'leak detection'. The term 'leak detection' should not be used in the proposed rule changes, as there is no system that can detect leaks one hundred percent of the time, and the intent of statute is 'protection'. Other proposed changes, like increased dike and perimeter berm requirements, stipulate substantive changes for the industry and add to industry cost per well, with no clear benefit to health, safety and the environment. In fact, as noted in our comments, these berms can be detrimental to health and safety.

We believe many of these rules should be reevaluated for their necessity and effectiveness. We must remain cognizant that not all facets of industry are the same, and one-size-fits-all rules are not good practice. Many of the proposed rules are extremely proscriptive and limit the industry's ability to implement operational efficiencies developed through technological advances and hands-on experience. Overregulation and restrictive rules only add cost to those that follow the rules and limit the ability of those with the most expertise to develop effective solutions. With the next legislative session just eight months away, it may be more appropriate to defer some of these major policy decisions to the 2017 Legislature.

Thank you.

Sincerely,

Ron Ness

enclosure

NDPC Comments as submitted to NDIC April 20, 2016

On bonding:

...from page 2

43-02-03-15.8 Crude oil and produced water underground gathering pipeline bond. (page 9 of proposed rules)

Comment: NDPC is concerned that this section is overreaching. NDPC recommends a new definition be added to 43-02-03-01 to define production facility. This definition would provide needed clarity to this section. Additionally, NDPC suggests the terms 'system' and 'flow lines' also be defined or clarified. NDPC also requests clarity on whether a blanket bond is required if a crude oil or produced water underground gathering pipeline system is being built in sections. NDPC believes a system should include all sections of a pipeline.

NDPC also requests that any deadline to have all underground gathering lines bonded should take into account the date the rule goes into effect. If rules are not in place until October 1, 2016, the July 1st, 2017 deadline is burdensome and difficult to meet.

...from page 3

43-02-03-15.8.b. Crude oil and produced water underground gathering pipeline bond. (page 10 of proposed rules)

Comment: As written this section does not have clear standards and gives the Commission an inappropriate amount of discretion. NDPC recommends adding 'physically isolated' to the proposed language of subsection 8.b.(1). While an underground gathering pipeline may not be technically in service, a tie-in may still be active and have pressure on it. In these situations, a line has not been physically isolated, should not be considered out of service or abandoned, and should not contribute to the aggregate. For this reason, NDPC recommends delineating between this type of line or system and those that have been truly abandoned. NDPC is concerned with the idea of relating additional bond amounts to the economic value of the underground gathering pipeline system as proposed in 8.b.(2), and recommends striking that language. NDPC feels the intent is to insure that the State has the funds available to abandon the pipeline safely and reclaim the right-of-way, so that should be the only consideration. The pipeline's value has no relevance in relation to higher bond amounts. NDPC also recommends striking the last sentence in subsection 8.b.(2), as it does not clearly define 'multiple', nor does it take into account damage or failures caused by a third party. We do not believe it is the Commission's intent, but want to clarify that if an operator has installed an underground gathering pipeline, but has not yet placed it into service, that line should not be considered abandoned.

On berms:

...from pages 16-18

43-02-03-49 Oil Production Equipment, Dikes and Seals (page 35 of proposed rules)

Comment: As written, the proposed changes in this section expand the authority of the director to require dikes and appear to require new dikes on any existing wells and tanks at any production facility built or rebuilt on or after July 1, 2000. The Director already has the authority to require dikes and berms when deemed necessary. Conditional usage of dikes and berms has become common practice over the past several years and is supported by industry where appropriate. This process has been used wisely and effectively. The expanded requirements would greatly increase costs to operators, and at current prices would likely result in a large number of wells being plugged and abandoned. The cost of building a berm on each pad will range from $12,000-30,000 per pad on new wells plus maintenance costs. Operators will also incur the additional expense of dealing with the storm-water captured on site, which may exceed $35,000/year per company. We don't believe the intent was to apply to existing wells, and recommend the rules include language stating as such.

NDPC believes the current policy of requiring berms only when necessary is effective, and statistics show the policy is working. As such, we suggest the requirement be struck. The Commission has expressed concerns that the rate of uncontained spills is increasing at a troubling rate, but data shows the containment rate only appears to have decreased one to two percent between 2014 and 2015, and no more than five percent since 2013. The containment rate has varied from about 70 to 80 percent in the last decade, even as wells and production have increased dramatically, and recent years are well within that range. In addition, of the approximately 25 percent of uncontained spills, 25 percent of those are attributed to pipeline leaks. It seems highly illogical to include pipeline leaks in containment statistics as a pipeline leak is most likely to occur offsite. Additionally, the statistics do not clearly indicate most of the spills would be contained by berms. Many of the spills being deemed uncontained are the result of things like vapor release or a blow out, where the uncontained fluid is carried offsite by the wind. It's clear to see that adding perimeter berms would not affect a majority of uncontained spills and only provide benefit to an incredibly small number of spills and leaks. The cost to benefit ratio in this situation is incredibly disproportionate. In addition, the use of berms can cause a number of unintended consequences. Federal agencies typically don't use berms due to the unavoidable accumulation of runoff water from rain or snow. This accumulation can result in standing pools of water, which create safety risks of their own and are expensive to collect and dispose of. The use of perimeter berms can also limit an operator's ability to lessen its footprint and leave more land for agricultural or other uses by reclaiming unused portions of an active well pad. It is for these reasons that we request the requirements contained in this section be struck. NDPC believes the Commission is doing a good job determining when perimeter berms are truly necessary, but they may consider a requirement for berms around heater treaters when appropriate going forward. Again, we recommend striking this requirement.

While we do not agree with the need for perimeter berms, we also strongly object to retroactively applying this rule to existing pads. NDPC also suggests striking the requirement of 'sufficiently impermeable material.' The remaining language already requires the berm to provide 'emergency containment', which implies some level of impermeability.

Additionally, should any of this section be retained, we request additional language to be added explaining how the Commission interprets how to calculate the required capacity of the dikes. It is industry's understanding that when calculating capacity that the Commission does not factor in freeboard from precipitation and displacement from other obstructions, as is required under the SPCC Program through the EPA. Currently when preparing SPCC Plans and determining containment calculations, industry must request a case-by-case determination from the NDIC on how to calculate the required berm capacity under this provision. It would be helpful, transparent and more efficient to have more details in the rule in the NDICs interpretation of required dike capacity, as the default interpretation of the Federal SPCC requirement is different than the verbal NDIC interpretation provided in the past.

Suggested language: Storage of oil in underground or partially buried tanks or containers is prohibited. Surface oil tanks and production equipment must be devoid of leaks and ~~in good condition~~ constructed of materials resistant to the effects of produced fluids or chemicals that may be contained therein. Unused tanks and production equipment must be removed from the site or placed into service, within a reasonable time period, not to exceed one year. ~~Dikes must be erected and maintained around oil tanks at any production facility built or rebuilt on or after July 1, 2000.~~ Dikes must be erected and maintained around oil tanks at any production facility built or rebuilt on or after July 1, 2000. Dikes may be erected and maintained around heater treaters at any production facility built or rebuilt on or after August 1, 2016 if the necessity therefor can be demonstrated to the director's satisfaction.

Dikes must be erected around oil tanks at any new production facility ~~within thirty days after the well has been completed~~ prior to ~~completing any well~~ placing tanks into service. Dikes must be erected and maintained around oil tanks at ~~production~~ all production facilities ~~built prior to July 1, 2000, when deemed necessary~~ built prior to July 1, 2000, when deemed necessary ~~unless a waiver is granted~~ by the director. Dikes as well as the base material under the dikes and within the diked area must be constructed ~~of sufficiently impermeable material~~ to provide emergency containment. Dikes must be of sufficient dimension to contain the total capacity of the largest tank plus one day's fluid production. The required capacity of the dike may be lowered by the director if the necessity therefor can be demonstrated to the director's satisfaction.

~~A perimeter berm, at least one foot [30.48 centimeters] in height, shall be constructed of sufficiently impermeable material to provide emergency containment around all storage facilities and production sites and to divert surface drainage away from the site, unless waived by the director.~~

On leak detection:

...from page 12

43-02-03-29.1.10 Leak detection and monitoring (page 25 of proposed rules)

Comment: NDPC also has a number of objections to subsection 10. First, it should be said that the term 'leak detection' should not be used in the title and the following subsection, as there is no system that can detect leaks 100 percent of the time, and the intent of statute is 'protection'. The first statement in this subsection is ambiguous – there is uncertainty as to whether a plan is required, or just required to be submitted if an operator has a plan. It also seems unnecessary to file a leak detection and monitoring plan with the director, as this creates yet another pile of paperwork without any benefit. Second, NDPC is concerned with the language regarding computational pipeline monitoring leak detection systems. These systems are not appropriate for gathering lines, as they are intended for transmission lines. CPM models are generally considered to be algorithm based models for pipeline monitoring. Note that they are not leak detection systems despite commonly being referenced as such. According to API RP 1130, "CPM systems that use algorithmic approach to detect hydraulic anomalies in pipeline operating parameters." "The primary purpose of these systems is to provide tools that assist pipeline controllers in detecting commodity releases that are within the sensitivity of the algorithm." It is concerning that CPM is referenced without caution, thus insinuating that it is applicable and potentially expected to be applied on a broad range of crude oil and produced water gathering systems in North Dakota, even though it is not appropriate for all gathering systems. Language in this subsection should be altered so that it is clear that a CPM program is not required.

...from page 14

In subsection 13.c. the phrase 'computational pipeline monitoring and leak detection systems' should be changed to 'leak protection and monitoring systems'. Statutory language is specifically 'leak protection and monitoring', NOT leak detection. In addition the first statement in this subsection is too broad and should be removed or the NDIC should provide clarification on 'continual pipeline integrity'.

Suggested language: The underground gathering pipeline owner of record must demonstrate ~~continual~~ pipeline integrity for all in-service underground gathering pipelines. Pipeline integrity can be demonstrated through periodic pressure testing, ~~computational pipeline monitoring and~~ leak ~~detection~~ protection and monitoring systems, or internal integrity inspections. Pipeline integrity records shall be retained for the in-service life of the pipeline and made available upon request by the commission.

On integrity testing:

...from page 14

43-02-03-29.1.13 Pipeline Integrity (page 27 of proposed rules)

Comment: Language proposed in subsection 13 is also problematic. It is not practical to leave a gathering system shut-in for 48 hours to wait for testing. Many small repairs can be made in the same day they are discovered. Requiring a 48 hour delay would cause unnecessary shut ins of the gathering system. DOT does not require 48 hours notice, so it seems inappropriate for the Commission to do so. If the Commission is concerned with operators conducting a valid test, then requiring a certification of calibrated gauges and a signed chart or downloaded data would be more appropriate. Delaying the repair of a leak is counter to the intent of the rulemaking, which is to proactively prevent spills. Pressure testing is also not typical for minor repairs. Other forms of non-destructive examination can be used in lieu of pressure testing and are acceptable by industry standards. Additionally, this delay would increase flaring, which is also counter to the Commission's goals. NDPC suggests striking subsection 13.a.

HANDOUT B
PAGE 2 • SECT. 2

15.0460.03010

SECOND ENGROSSMENT

Sixty-fourth
Legislative Assembly
of North Dakota

REENGROSSED HOUSE BILL NO. 1358

Introduced by

Representatives D. Anderson, Hatlestad, J. Nelson, Porter, Weisz

Senators Bekkedahl, O'Connell

A BILL for an Act to create and enact a new section to chapter 38-08 and a new subsection to section 38-08-26 of the North Dakota Century Code, relating to the operation of underground gathering pipelines and the sharing of information by a surface owner; to amend and reenact subsection 18 of section 38-08-02, subdivisions d and l of subsection 1 of section 38-08-04, subsection 6 of section 38-08-04, and section 38-08-04.5 of the North Dakota Century Code, relating to an exception to confidentiality of well data, to underground gathering ~~pipeline bonds~~pipelines, to temporarily abandoned status, and the uses of the abandoned oil and gas well plugging and site reclamation fund; to provide a report to the legislative management; to provide a transfer; to provide an appropriation; and to declare an emergency.

BE IT ENACTED BY THE LEGISLATIVE ASSEMBLY OF NORTH DAKOTA:

SECTION 1. AMENDMENT. Subsection 18 of section 38-08-02 of the North Dakota Century Code is amended and reenacted as follows:

18. "Underground gathering pipeline" means an underground gas or liquid pipeline ~~that~~with associated above ground equipment which is designed for or capable of transporting crude oil, natural gas, carbon dioxide, or water produced in association with oil and gas which is not subject to chapter 49-22. As used in this subsection, "associated above ground equipment" means equipment and property located above ground level, which is incidental to and necessary for or useful for transporting crude oil, natural gas, carbon dioxide, or water produced in association with oil and gas from a production facility. As used in this subsection, "equipment and property" includes a pump, a compressor, storage, leak detection or monitoring equipment, and any other facility or structure.

SECTION 2. A new section to chapter 38-08 of the North Dakota Century Code is created and enacted as follows:

Controls, inspections, and engineering design on crude oil and produced water underground gathering pipelines.

~~The operator of an~~The application of this section is limited to an underground gathering pipeline that is designed or intended to transfer crude oil or produced water from a production facility for disposal, storage, or sale purposes and which was placed into service after August 1, 2015. ~~shall file with the commission engineering design drawings and a certificate of inspection from a qualified third-party for the underground gathering pipeline. The commission shall require the operator of the pipeline to install flow meters and overpressure protection devices designated by the commission or the commission may require alternative leak detection and monitoring technologies be installed by the operator of these pipelines.~~ Upon request, the operator shall provide the commission the underground gathering pipeline engineering construction design drawings and specifications, list of independent inspectors, and a plan for leak protection and monitoring for the underground gathering pipeline. Within sixty days of an underground gathering pipeline being placed into service, the operator of that pipeline shall file with the commission an independent inspector's certificate of hydrostatic or pneumatic testing of the underground gathering pipeline.

SECTION 3. AMENDMENT. Section 38-08-04.5 of the North Dakota Century Code is amended and reenacted as follows:

38-08-04.5. Abandoned oil and gas well plugging and site reclamation fund - Budget section report.

There is hereby created an abandoned oil and gas well plugging and site reclamation fund.

1. Revenue to the fund must include:
   a. Fees collected by the oil and gas division of the industrial commission for permits or other services.
   b. Moneys received from the forfeiture of drilling and reclamation bonds.
   c. Moneys received from any federal agency for the purpose of this section.
   d. Moneys donated to the commission for the purposes of this section.
   e. Moneys received from the state's oil and gas impact fund.
   f. Moneys recovered under the provisions of section 38-08-04.8.
   g. Moneys recovered from the sale of equipment and oil confiscated under section 38-08-04.9.

h. Moneys transferred from the cash bond fund under section 38-08-04.11.

i. Such other moneys as may be deposited in the fund for use in carrying out the purposes of plugging or replugging of wells or the restoration of well sites.

j. Civil penalties assessed under section 38-08-16.

2. Moneys in the fund may be used for the following purposes:

a. Contracting for the plugging of abandoned wells.

b. Contracting for the reclamation of abandoned drilling and production sites, saltwater disposal pits, drilling fluid pits, and access roads.

c. To pay mineral owners their royalty share in confiscated oil.

d. Defraying costs incurred under section 38-08-04.4 in reclamation of oil and gas-related pipelines and associated facilities.

e. Reclamation and restoration of land and water resources ~~adversely affected~~impacted by oil and gas development, including related pipelines and facilities ~~which~~that were abandoned or were left in an inadequate reclamation status before August 1, 1983, and for which there is not any continuing reclamation responsibility under state law. Land and water degraded by any willful act of the current or any former surface owner are not eligible for reclamation or restoration. The commission may expend up to one million five hundred thousand dollars per biennium from the fund in the following priority:

(1) For the restoration of eligible land and water that are degraded by the adverse effects of oil and gas development including related pipelines and facilities.

(2) For the development of publicly owned land adversely affected by oil and gas development including related pipelines and facilities.

(3) For administrative expenses and cost in developing an abandoned site reclamation plan and the program.

(4) Demonstration projects for the development of reclamation and water quality control program methods and techniques for oil and gas development, including related pipelines and facilities.

3. All moneys collected under this section must be deposited in the abandoned oil and gas well plugging and site reclamation fund. This fund must be maintained as a

special fund and all moneys transferred into the fund are appropriated and must be used and disbursed solely for the purpose of defraying the costs incurred in carrying out the plugging or replugging of wells, the reclamation of well sites, and all other related activities.

4. The commission shall report to the budget section of the legislative management on the balance of the fund and expenditures from the fund each biennium.

SECTION 4. AMENDMENT. Subdivision d of subsection 1 of section 38-08-04 of the North Dakota Century Code is amended and reenacted as follows:

d. The furnishing of a reasonable bond with good and sufficient surety, conditioned upon the full compliance with this chapter, and the rules and orders of the industrial commission, including without limitation a bond covering the operation of any underground gathering pipeline ~~intended to transfer~~transferring oil or produced water from a production facility for disposal, storage, or sale purposes, except that if the commission requires a bond to be furnished, the person required to furnish the bond may elect to deposit under such terms and conditions as the industrial commission may prescribe a collateral bond, self-bond, cash, or any alternative form of security approved by the commission, or combination thereof, by which an operator assures faithful performance of all requirements of this chapter and the rules and orders of the industrial commission.

SECTION 5. AMENDMENT. Subdivision l of subsection 1 of section 38-08-04 of the North Dakota Century Code is amended and reenacted as follows:

l. The placing of wells in abandoned-well status which have not produced oil or natural gas in paying quantities for one year. A well in abandoned-well status must be promptly returned to production in paying quantities, approved by the commission for temporarily abandoned status, or plugged and reclaimed within six months. ~~A surface owner may request a review of the temporarily abandoned status of a well that has been on temporarily abandoned status for at least seven years. The commission shall require notice and hearing to review the temporarily abandoned status. After notice and hearing, the surface owner may request a review of the temporarily abandoned status every two years.~~ If none of the three

preceding conditions are met, the industrial commission may require the well to be placed immediately on a single-well bond in an amount equal to the cost of plugging the well and reclaiming the well site. In setting the bond amount, the commission shall use information from recent plugging and reclamation operations. After a well has been in abandoned-well status for one year, the well's equipment, all well-related equipment at the well site, and salable oil at the well site are subject to forfeiture by the commission. If the commission exercises this authority, section 38-08-04.9 applies. After a well has been in abandoned-well status for one year, the single-well bond referred to above, or any other bond covering the well if the single-well bond has not been obtained, is subject to forfeiture by the commission. A surface owner may request a review of the temporarily abandoned status of a well that has been on temporarily abandoned status for at least seven years. The commission shall require notice and hearing to review the temporarily abandoned status. After notice and hearing, the surface owner may request a review of the temporarily abandoned status every two years.

SECTION 6. AMENDMENT. Subsection 6 of section 38-08-04 of the North Dakota Century Code is amended and reenacted as follows:

6. To provide for the confidentiality of well data reported to the commission if requested in writing by those reporting the data for a period not to exceed six months. However, the commission ~~shall~~may release:

   a. Volumes injected ~~from~~into a saltwater injection well.

   b. Information from the spill report on a well on a site at which more than ten barrels of fluid, not contained on the well site, was released for which an oilfield environmental incident report is required by law.

SECTION 7. A new subsection to section 38-08-26 of the North Dakota Century Code is created and enacted as follows:

The surface owner may share information contained in the geographic information system database.

SECTION 8. TRANSFER - ABANDONED OIL AND GAS WELL PLUGGING AND SITE RECLAMATION FUND TO OIL AND GAS RESEARCH FUND - PRODUCED WATER

PIPELINE STUDY - REPORT TO LEGISLATIVE MANAGEMENT. The director of the office of management and budget shall transfer the sum of $1,500,000 from the abandoned oil and gas well plugging and site reclamation fund to the oil and gas research fund for the purpose of funding a special project through the energy and environmental research center at the university of North Dakota during the biennium beginning July 1, 2015, and ending June 30, 2017. The special project must focus on conducting an analysis of crude oil and produced water pipelines including the construction standards, depths, pressures, monitoring systems, maintenance, types of materials used in the pipeline including backfill, and an analysis of the ratio of spills and leaks occurring in this state in comparison to other large oil and gas-producing states with substantial volumes of produced water. The industrial commission shall contract with the energy and environmental research center to compile the information and the center shall work with the department of mineral resources to analyze the existing regulations on construction and monitoring of crude oil and produced water pipelines, determine the feasibility and cost effectiveness of requiring leak detection and monitoring technology on new and existing pipeline systems, and provide a report with recommendations to the industrial commission and the energy development and transmission committee by December 1, 2015. The industrial commission shall adopt the necessary administrative rules necessary to improve produced water and crude oil pipeline safety and integrity. In addition, the industrial commission shall contract for a pilot project ~~on pipeline flow monitoring~~ to evaluate a ~~working~~pipeline leak detection and monitoring system.

SECTION 9. APPROPRIATION. Notwithstanding section 38-08-04.5, there is appropriated out of any moneys in the abandoned oil and gas well plugging and site reclamation fund in the state treasury, not otherwise appropriated, the sum of $500,000, or so much of the sum as may be necessary, to the industrial commission for the purpose of conducting a pilot program involving the oil and gas research council in conjunction with research facilities in this state to determine the best techniques for ~~removing~~remediating salt and any other contamination from the soil surrounding waste pits reclaimed by trenching between 1951 and 1984 in the north central portion of this state, for the biennium beginning July 1, 2015, and ending June 30, 2017.

SECTION 10. EMERGENCY. This Act is declared to be an emergency measure.

HANDOUT C

Additional Anticipated Costs to Industry Due to Site Berm Rule

	Construction Cost/Site	Maintenance Costs	Total Anticipated Cost
Company #1	$6,300 - $8,100		+/- $1,600,000
Company #2	$5,000-8,000+	$2500 - $5000 per significant rainfall event, or $20,000 - $50,000 annually	$5-10 million/year
Company #3		$5,167,500/yr	$952,500 new construction plus $5,167,500/yr for maintenance
Company #4	$5,000	$1,000 p/site p/yr	$175,000 for initial compliance costs, $35,000/yr for maintenance
Company #5	$8,000 - 50,000		$500,000 plus unknown ongoing costs
Company #6	$4,500-7,000	$75,000 to $100,000 per year but could double depending on disposal costs	$400,000-$500,000
Company #7	$20,000	$1000 to $1500 per site per rainfall event	$10,000,000 plus maintenance
Company #8			$675,000 for our sites + annual maintenance
Company #9	$10,000	$40,000 per site per year	

HANDOUT D

PERFORMANCE PIPE
A DIVISION OF CHEVRON PHILLIPS CHEMICAL COMPANY LP

www.performancepipe.com

Technical Note PP 801-TN

Polyethylene Pipe Squeeze-Off

Squeeze-Off Overview

Squeeze-off is a technique used to control the flow of gas or liquid in polyethylene pipe by compressing the pipe between parallel bars until the inside surfaces make contact. The flexibility and toughness of most polyethylene pipes allow the pipe to recover from a properly made squeeze-off without a measurable loss in service life. Under some conditions, the operator or installer may obtain a complete flow shut-off. Other conditions may require a second squeeze-off tool in line to achieve complete flow shut-off.

The squeeze-off technique can be useful for making installation tie-ins as well as for emergency repairs. Squeeze-off is not suitable for repeated flow control at the same location or to throttle or partially restrict flow. Valves or other flow control devices are more suitable for those situations.

ASTM standards provide guidance and requirements for squeeze-off tools, operating procedures and qualification procedures.

- **ASTM F1041, "Standard guide for Squeeze-Off of Polyolefin Gas Pressure Pipe and Tubing"**
- **ASTM F1563, "Standard Specification for Tools to Squeeze-Off Polyethylene (PE) Gas Pipe or Tubing"**
- **ASTM F1734, "Standard Practice for Qualification of a Combination of Squeeze Tool, Pipe, and Squeeze-Off Procedures to Avoid Long-Term Damage in Polyethylene (PE) Gas Pipe"**

Performance Pipe periodically tests its current products to the squeeze-off requirements of ASTM D2513 Annex A1. However given the wide variety of squeeze-off tools and procedures, Performance Pipe cannot test and evaluate all possible tools and procedures. Performance Pipe recommends that anyone using squeeze tools on our products use the guidelines and requirements of the above listed ASTM standards.

Preventing Pipe Damage

Tests have shown that when squeeze-off procedures and tools meet the ASTM guidelines and requirements, squeeze-off can occur without compromising the expected service life of the pipe. However, the installer or operator must take care during the squeeze to prevent damage to the pipeline. The list below contains some areas that require extra attention during squeeze-off to prevent pipe damage. Additional cautions to avoid pipe damage are in the above listed ASTM standards, the AGA Plastic Pipe manual and other Industry sources.

- **Ensure the tool meets the requirements of ASTM F1563 and that it is square to the pipe with the squeeze plates parallel to each other.**
- **A thorough inspection of the pipe for cuts, scrapes, gouges or anomalies should be made before placing of the squeeze off tool.**

March 2006 Supercedes all previous publications

Performance Pipe, a division of
Chevron Phillips Chemical Company LP
5085 W. Park Blvd, Suite 500
Plano, TX 75093
Phone: 800-527-0662
Fax: 972-599-7348

- **Locate the squeeze-off tool a minimum of 3x the pipe diameter, or 12 inches, whichever is greater, from any fusion joint, mechanical connection, prior squeeze-off point, or second squeeze-off tool.**
- **Compress the pipe at a slow rate to allow stress relaxation in the pipe. ASTM F1041 recommends a maximum compression rate of 2ipm. For example, it should take no less than 2.25 minutes to fully compress 4"IPS pipe (4.5inch/2ipm)**
- **Do not over-squeeze the pipe. The squeeze-off tool should contain stops that limit the squeeze to 70% of twice the maximum wall thickness as described in ASTM F1563.**
- **When removing the squeeze-off tool it is critical to release the squeeze very slowly. ASTM F1041 recommends that the release rate not exceed 0.5ipm. For example, it should take no less than 9 minutes to fully release 4" IPS pipe (4.5inch/0.5ipm)**
- **After the squeeze-off tool has been removed, the pipe should be closely inspected for any signs of damage. Any pipe suspected of damage during a squeeze-off should be replaced or removed from service.**
- **Cold weather increases the pipe's susceptibility to damage. Compression and release times should increase in cold weather.**
- **Do not squeeze in the same place more than once. Do not squeeze on pipe sections containing deep scratches (>10% of pipe wall thickness).**
- **If the installer or operator does not follow the approved procedure during a squeeze-off, such as what might occur in an emergency, presume the pipe damaged and replace or remove from service.**

Static Electricity Concerns for Gas Squeeze-off

Polyethylene pipe is a relatively low conductor of electricity. As a result polyethylene pipe builds up a static charge when it is in gas service due to the gas flow on the inside surface of the pipe. During squeeze-off, the velocity of the gas flowing through the flattened section of pipe increases. This increases the rate and amount of static charge build-up.

In addition to the potential for pipe damage due to static discharge, the build up of a static charge represents an explosion hazard. Where there is a flammable or combustible environment in conjunction with static charges, arc preventing safety precautions are necessary. Additional information on arc prevention and tool grounding is available through the AGA Plastic Pipe Manual (www.AGA.org) and through the squeeze-off tool equipment suppliers. Performance Pipe recommends that all companies performing squeeze-off operations have grounding procedures in place to be used during squeeze-off operations and that all personnel involved in the squeeze-off operations receive training on those procedures and understand the hazards involved.

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HANDOUT E

COMPANY | PRODUCTS | TECHNICAL INFO | PARTS & SERVICE | TRAINING | FAQ

Manual Squeeze Tools

A complete line of ruggedly built, manually actuated tools for squeezing PE pipe sizes ranging from ½" CTS to 8" IPS.


DBS-10A


DBS-11A


DBS-20C


DBS-24C


DBS-40F


DBS-44F


DBG-60


DBGA-80


GLS-26

Huskie Steel Tools

Small, light and powerful emergency shut-off tools for 2" IPS Schedule 40 coated pipe.


PS-62B

PS-75

Hydraulic Pumps

Precisely administer pressure to hydraulic tools.


Model 20A


Model 25

Hydraulic Squeeze Tools

To tackle the toughest jobs, when maximum force and precision is required, look no further than Mustang's Heavy-Duty hydraulic tools for 6" to 24" IPS PE pipe.


DBM-60


DBML-80


DBH-68-E


DBH-1200B

Tool Saddle Clamps

When additional compressive force is needed for difficult to squeeze PE pipe, Mustang Saddle Clamps are the answer.


SC-40/44


SC-60


SC-80

Static Discharge

Safely channels hazardous static electricity into the ground and away from the work area and crew.