**To:** CN=David Jewett/OU=ADA/O=USEPA/C=US@EPA;CN=Jeanne Briskin/OU=DC/O=USEPA/C=US@EPA;CN=Doug Beak/OU=ADA/O=USEPA/C=US@EPA;CN=Susan Mravik/OU=ADA/O=USEPA/C=US@EPA;CN=Rick Wilkin/OU=ADA/O=USEPA/C=US@EPA;CN=Ralph Ludwig/OU=ADA/O=USEPA/C=US@EPA;CN=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Jeanne Briskin/OU=DC/O=USEPA/C=US@EPA;CN=Doug Beak/OU=ADA/O=USEPA/C=US@EPA;CN=Susan Mravik/OU=ADA/O=USEPA/C=US@EPA;CN=Rick Wilkin/OU=ADA/O=USEPA/C=US@EPA;CN=Ralph Ludwig/OU=ADA/O=USEPA/C=US@EPA;CN=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Doug Beak/OU=ADA/O=USEPA/C=US@EPA;CN=Susan Mravik/OU=ADA/O=USEPA/C=US@EPA;CN=Rick Wilkin/OU=ADA/O=USEPA/C=US@EPA;CN=Ralph Ludwig/OU=ADA/O=USEPA/C=US@EPA;CN=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Susan Mravik/OU=ADA/O=USEPA/C=US@EPA;CN=Rick Wilkin/OU=ADA/O=USEPA/C=US@EPA;CN=Ralph Ludwig/OU=ADA/O=USEPA/C=US@EPA;CN=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Rick Wilkin/OU=ADA/O=USEPA/C=US@EPA;CN=Ralph Ludwig/OU=ADA/O=USEPA/C=US@EPA;CN=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Ralph Ludwig/OU=ADA/O=USEPA/C=US@EPA;CN=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Randall Ross/OU=ADA/O=USEPA/C=US@EPA;CN=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]; N=Steven Acree/OU=ADA/O=USEPA/C=US@EPA[]
**Cc:** []
**From:** CN=Michael Overbay/OU=R6/O=USEPA/C=US
**Sent:** Thur 10/11/2012 4:17:01 PM
**Subject:** new SPE reports on unconventional hydrocarbon (shale) topics

WSJ New EPA Findings test fracking site.pdf
SPE-161355-MS-P Proppant Selection for Hydraulic Fracture Production Optimization in Shale Plays.pdf
SPE-161357-MS-P Integration of Shale Gas Production Data and Microseismic for Fracture and Reservoir Properties Using Fast Marching Method.pdf
SPE-162821-MS-P Impact of Uncertainty in Estimation of Shale Gas Reservoir and Completion Properties on EUR Forecast and Optimal Development Planning A Marcellus Case Study.pdf
SPE-162909-MS-P An Efficient Decision Framework for Optimizing Tight and Unconventional Resources.pdf
SPE-161350-MS-P A New Simulation-Based Process To Predict the Impact of Hydraulic Fracture Parameters on EUR A Tight Gas Field Example.pdf
SPE-162916-MS-P Comparison of Hydraulic Fracture Fluids in Multi-stage Fracture Stimulated Horizontal Wells in the Pembina Cardium Formation.pdf
SPE-161331-MS-P An Investigation of Ancient Geological Events and Localized Fracturing on Current Bakken Production Trends.pdf
SPE-159683-MS-P Has the Economic Stage Count Been Reached in the Bakken Shale.pdf
SPE-160966-MS-P Using Magneto-Rheological Fluids to Improve Mud Displacement Efficiency in Eccentric Annuli.pdf
SPE-161347-MS-P The Impact of Multistage Fracturing on the Production Performance of the Horizontal Wells in Shale Formations.pdf
SPE-161344-MS-P New Proppant for Hydraulic Fracturing Improves Well Performance and Decreases Environmental Impact of Hydraulic Fracturing Operations.pdf
SPE-161354-MS-P Impact of Hydraulic Fracture and Subsequent Increased Production Due to In-Situ Stress Changes in the Marcellus Shale.pdf
SPE-159786-MS-PHydraulic Fracturing Design and Optimization A Modification to Zipper Frac.pdf
GAO Oil and Gas Information on Shale Resources Development and Environemntal andPublic Health Risks.pdf
SPE-161184-MS-P Modeling and History Matching of Hydrocarbon Production from Marcellus Shale Using Data Mining and Pattern Recognition Technologies.pdf

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----- Forwarded by Michael Overbay/R6/USEPA/US on 10/11/2012 11:12 AM -----

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Date: 10/11/2012 09:51 AM
Subject: hydraulic fracturing in the news / Dilbert cartoon on fracking / new SPE reports

Dilbert cartoon on fracking: http://www.dilbert.com/strips/comic/2012-10-06/

GAO Finds Lack Of Baseline Data Constrains EPA's Fracking Enforcement
Posted: October 10, 2012 Follow Clean Energy Report
A new Government Accountability Office (GAO) study finds that EPA enforcement of hydraulic fracturing is hampered by a lack of baseline data on groundwater quality and other pre-drilling conditions, combined with limited legal authority and existing statutory exemptions for the industry.

The GAO study calls into question the agency's piecemeal approach toward fracking enforcement, in which officials are working to cobble together authorities from existing statutes that were not crafted with fracking in mind, legal experts say.

But it also appears to highlight more specific concerns that conducting groundwater investigations as part of enforcement actions can often be difficult because of a lack of mandatory baseline testing of water quality prior to hydraulic fracturing activities. “For example, in cases of alleged groundwater contamination, EPA would need to link changes in groundwater quality to oil and gas activities before taking enforcement actions,” GAO says in the study. “However, EPA officials said that often no baseline data exist on the quality of the groundwater prior to oil and gas development.”

In the Oct. 9 report, “Key Environmental and Public Health Requirements,” GAO found that EPA officials have highlighted challenges in oversight and enforcement-related activities, and that those actions are further hindered by existing regulatory exemptions for drilling wastes under the Resource Conservation & Recovery Act (RCRA).

“For example, conducting inspection and enforcement activities is challenging due to limited information, such as data on groundwater quality prior to drilling,” the report says, adding that agency officials also highlighted significant challenges with linking groundwater quality to a specific activity like fracking because of the variability in complex geologic formations.

The GAO report also says, “EPA officials also said that the exclusion of exploration and production waste from hazardous waste regulations under RCRA significantly limits EPA's role in regulating these wastes.”

Congressional Democrats, including Sens. Barbara Boxer (CA), chairman of the Senate environmental panel, Sheldon Whitehouse (RI), and Benjamin Cardin (MD), as well as Reps. Henry Waxman (CA), Ed Markey (MA) and others, requested the study, as well as a second GAO report, also released on Oct. 9, which examined public health risks associated with fracking.

In the regulatory study, GAO reviewed environmental and public health requirements at the state and federal level, along with additional controls that may apply on federal lands, aiming to identify challenges in regulating development of unconventional, or shale, oil and gas resources. In Pennsylvania, for example, unconventional wells cannot be drilled within 500 feet of water wells without consent of the well owners unless additional protective measures are adopted.

The report examines shale gas regulations across six states: Colorado, North Dakota, Ohio, Pennsylvania, Texas and Wyoming, and notes that all of them have updated at least some of their oil and gas regulations within the past several years, some of which specifically address fracking and other aspects of unconventional development of shale resources.

While new advances in fracking technology have opened up deep reserves of oil and gas trapped within unconventional shale formations, such as the Marcellus Shale in the Northeast, they have also prompted a flood of concerns from EPA, Democratic lawmakers and environmentalists that additional federal oversight is needed.

But EPA efforts to find authority to better regulate fracking have been rife with uncertainty and industry challenges, given a range of statutory exemptions, including the RCRA waiver, a provision in the Safe Drinking Water Act (SDWA) barring regulation of fracking, and others.

To address this, agency officials say they are working to refine their analysis of their current legal authorities to overcome statutory and other limits that may have stymied some enforcement actions but which Congress appears unlikely to address. Agency attorneys “continue to assess how these authorities would apply in the context of a particular factual situation,” one informed source said recently.

Legal Concerns

But some legal experts say that such legal concerns highlight the need to discuss a new statute governing fracking as part of a broader energy policy.

But even as officials work to refine their interpretations, they are facing losses. For example, the agency withdrew a 2010 SDWA emergency order it had issued to Range Resources for suspected contamination from its drilling operations in Parker County, TX, after the company mounted a constitutional challenge. EPA is also weighing a petition filed by the Natural Resources Defense Council to repeal the RCRA waiver and subject drilling wastes, including fracking fluid, to strict hazardous waste rules.

And in another groundwater investigation related to fracking operations, in Pavillion, WY, EPA highlights the challenges it faces due to lack of baseline monitoring of water quality, saying in its draft report on the alleged Wyoming contamination that the study makes the case for requiring baseline testing as a necessary means of reducing investigative costs and to verify or refute impacts to groundwater.

EPA in the draft report, however, points out that debunking industry arguments that some residents in the Pavillion area have always had gas in their wells is difficult because "unfortunately, no baseline data exists to verify past levels of gas flux to the surface or domestic wells."

Pennsylvania Rejects EPA Concerns Over Drilling Aggregation Guidance
Posted: October 10, 2012 Follow Clean Energy Report
Pennsylvania is rejecting EPA's concerns that the state's contested guidance for how to aggregate, or combine, drilling emissions

for Clean Air Act permitting purposes violates federal law by establishing a first-time quarter-mile distance threshold for triggering aggregation, and the state has finalized the guidance despite the concerns.

The push-back is the latest clash between the state and EPA over aggregation, a fight that environmentalists say highlights how some states are weakening aggregation tests to make it less likely that disparate oil and gas drilling operations will have to be aggregated. Industry generally prefers to avoid aggregating emissions as it could push the combined facilities' emissions over the threshold for requiring a stringent "major" source air permit.

Pennsylvania Oct. 5 finalized the interim guidance it released last fall, and made it effective Oct. 6 although it has been implementing the interim guidance for almost all of the past year. Along with the final document, which clarifies and makes technical corrections to the original, the state responded to 366 public comments including those from EPA.

EPA Region III had raised concerns that the guide's distance threshold violates federal law and Pennsylvania's state implementation plan (SIP) -- a blueprint for complying with agency air standards -- by setting the quarter-mile test, which is not included in EPA's guidance on how to aggregate facilities for air permitting.

EPA says the test undermines the agency's policy on whether distance between operations justifies aggregating them because it would be less likely to aggregate equipment spaced more than a quarter-mile apart.

But in the response to comments, Pennsylvania's Department of Environmental Protection (DEP) says it is not obligated to follow the agency's approach detailed in a memo issued in 2009 by EPA air chief Gina McCarthy. DEP says the non-binding guidance is "instructive . . . but not dispositive" on the state's aggregation policy.

The McCarthy memo rescinded a 2007 guidance issued by Bush-era acting air chief William Wehrum, and reinstated a long-standing three-pronged test for determining when permit writers should aggregate sources to determine whether they need stringing major source permits. The prongs include that the equipment is under common control, that it belongs to the same industrial grouping, and that it is contiguous or adjacent.

EPA in its comments last year on DEP's guide said it added "qualifiers" to aggregation determinations "that conflict with federal law" and the SIP. "Consistent with the McCarthy memo, the region plans to 'continue to review and comment on source determinations to assure that permitting authorities conduct fully reasoned source determinations that remain consistent with existing regulatory requirements and historical permitting practice.'"

DEP in its new response says it believes the guidance "is consistent with all federal and state regulatory requirements." DEP in its response to comments also told EPA that it developed the guidance "because the McCarthy memo retracts previously clear guidance that applied to the oil and gas industry," referring to the Wehrum memo that was seen as loosening EPA's long-standing aggregation policy to the benefit of industry.

According to the state, the DEP guidance document "is not a regulation and therefore cannot create or extrapolate new regulatory definitions. Neither Pennsylvania nor federal regulations define the terms 'contiguous' or 'adjacent' or place any definitive restrictions on how distant two emission units can be and still be considered located on contiguous or adjacent properties for the purposes of a single source determination."

Further, DEP rejects EPA's concern over the guidance's emphasis on proximity of facilities over whether they are contiguous and adjacent. "In fact, by making proximity the only dispositive factor to be considered in determining whether sources are adjacent or contiguous, the interim guidance appears contrary to federal law and the legal and regulatory requirements of the [prevention of significant deterioration] program," EPA had said. But DEP disagrees that proximity is the only factor despite its quarter-mile test, over which EPA has also objected.

Environmentalists Challenge State

Environmentalists are pursuing several challenges to what they see as Pennsylvania's approach favoring industry through aggregation. For example, they are appealing through the state administrative process a DEP decision to aggregate two refineries located 17 miles apart they say allows one of the facilities to meet air pollution limits by using credit for emission cuts at the second refinery, which is slated to close.

Additionally, environmentalists say that they will soon sue EPA to seek to force it to act on a petition they submitted to the agency early this year asking it to reject the Pennsylvania SIP and sanction the state over the aggregation guidance.

But DEP Secretary Mike Krancer is strongly defending the guidance, calling it "a common-sense approach to air aggregation" in an Oct. 5 statement. "Recently, the U.S. Environmental Protection Agency's misuse of the aggregation test for natural gas exploration, extraction and production earned the EPA a sharply worded rebuke" from the U.S. Court of Appeals for the 6th Circuit, Krancer said, referencing a decision in Summit Petroleum v. EPA.

In that suit, the court scrapped EPA's "adjacency" definition for determining when to aggregate emissions as a single source subject to strict Clean Air Act permits, a move seen as emboldening state efforts to pursue aggregation policies based on a "proximate" distance test that activists warn would capture fewer facilities than EPA's approach. The agency has until Oct. 22 to decide whether to appeal the court's 2-1 ruling against the definition

Krancer added in the statement, "The Summit Petroleum court's decision characterized EPA's interpretation as 'unreasonable' and 'inconsistent' with the regulatory history that established the regulatory test.'" And he said Pennsylvania has "a lengthy and successful history of regulating the oil and gas industry."

DEP in its response to comments also rejects concerns raised by environmentalists, including that the policy would harm human health because it is seen as favoring minor source permits for equipment that is spaced more than a quarter-mile apart. "The Department believes that the revised guidance document is protective of public health and welfare, and allows for the development of the natural gas industry in a safe and effective manner," the response says.

DEP says it will continue to make all aggregation determinations on a case-by-case basis. -- Dawn Reeves (dreeves@iwpnews.com)

Fracking Methane Study Launches
Inside EPA Posted: October 10, 2012
The Environmentalist Defense Fund (EDF), natural gas producers and University of Texas researchers have launched a major study to assess emissions of the greenhouse gas (GHG) methane from hydraulic fracturing, which could provide key data to resolve competing claims about the scope of fracking-related GHGs that some environmentalists are urging EPA to regulate.

The study, set for completion in early 2013, could have major implications for the ongoing debate over controlling methane emissions from natural gas production. EPA in its recent emissions rules for the oil and gas drilling sector opted against imposing first-time hard limits on methane emissions, instead relying on “co-benefits” of methane cuts due to other pollution controls.

In addition, the effort could help resolve unanswered questions on the implications of methane leaks during the natural gas production process. Some observers say GHGs from leakage could undermine claims about the climate benefits of using natural gas, which has lower GHGs than coal when burned.

According to an Oct. 10 statement from EDF and the University of Texas, the upcoming study will estimate emissions rate from participating companies' natural gas production, including hydraulically fractured wells, using "direct measurement techniques at a sample of natural gas production sites." The nine natural gas producers participating in the effort are Anadarko Petroleum Corporation, BG Group plc, Chevron, Encana Oil and Gas (USA) Inc., Pioneer Natural Resources Company, Shell, Southwestern Energy, Talisman Energy, USA, and XTO Energy.

The statement notes that natural gas "burns significantly cleaner than other fossil fuels and increased use of shale natural gas in power generation is helping to reduce U.S. carbon dioxide emissions. However, some reports have raised questions about the overall effect of natural gas usage on total U.S. greenhouse gas emissions because of widely varying assumptions concerning the potential emissions of methane during the extraction and production processes."

EDF in an Oct. 10 blog post touting the study notes that estimates of the methane leakage rates range from as high as 7.9 percent to as low as 1 percent. "Methane leakage matters, and has clear implications on whether natural gas can be seen as a lower carbon energy source, " says the group. EDF adds that the study will focus on quantifying emissions from "well completions, gas well liquid unloading and well workovers, in addition to other more routine well-site fugitive emissions, the areas of the production process with the greatest leak rate uncertainties."

Work on the study comes after EPA in August finalized new source performance standards (NSPS) for the oil and gas sector that do not explicitly target the potent GHG. That move left environmentalists mulling further legal options, and they have have since petitioned the agency to reconsider its approach.

On a separate track, environmentalists also urged the Department of Interior last month to include methane controls in its pending regulations for oil and gas operations.

A Department of Energy advisory board also highlighted the need for mandatory baseline data last year in a series of recommendations for improving the environmental record of shale gas development, but while some states, like Colorado, have pursued voluntary monitoring programs, none have yet required such tests.

The second GAO report, “Information on Shale Resources, Development, and Environmental and Public Health Risks,” found a lack of studies that take into account chronic, cumulative health risks associated with increases in shale gas and shale oil development. “For example, the studies and publications GAO reviewed on air quality conditions provide information for a specific site at a specific time but do not provide the information needed to determine the overall cumulative effects that shale oil and gas activities may have on air quality.” -- Bridget DiCosmo (bdicosmo@iwpnews.com)

Facing High Bar, Industry Wins New Briefing On EPA Deference In Bay Suit
Inside EPA Posted: October 10, 2012
The federal judge hearing challenges to EPA's landmark pollution control plan for the Chesapeake Bay has granted an industry request for new briefing on whether the agency's Clean Water Act (CWA) interpretation that underlies its multi-state cleanup effort is entitled to legal deference, after she signaled during oral argument that the industry plaintiffs seeking to overturn the plan could face a high bar under deference standards.

In an Oct. 9 order in American Farm Bureau Federation, et al., v. EPA, Judge Sylvia Rambo, of the U.S. District Court for the Middle District of Pennsylvania, asks for briefs to be filed by Oct. 17 on “the issue of whether the court should defer to the EPA’s interpretation of the Clean Water Act and the applicable [total maximum daily load (TMDL)] regulations.”

Industry has challenged EPA's approaches in crafting the multi-state TMDL for nutrients and sediment, arguing that the agency exceeded CWA authority by dictating state implementation of the plan. But during several hours of oral argument Oct. 4, Rambo directly questioned industry attorneys on whether EPA's position in the case should be entitled to deference under the Supreme Court's ruling in Chevron v. Natural Resources Defense Council, which says courts must respect an agency's “reasonable interpretation” of the law, even when other interpretations are possible.

Rambo's Oct. 9 order came just hours after Farm Bureau attorney Robert Tribeck asked the court in a letter for a new round of briefing so that both sides could give “a more thorough explanation of their views of the law on this subject in response to the Court's questions at the hearing.”

In the case, agriculture and home builder groups are challenging EPA's TMDL, fearing it will set a precedent allowing the agency to force states to strictly regulate nonpoint sources of pollution. They say that EPA's emphasis on taking a leading federal role in the plan to clean up the Bay belies the water law's plain emphasis on the leading role of states in enforcing and developing pollution reduction plans.

Rambo raised Chevron in response to industry's argument that EPA has no statutory authority to specify separate load allocations (LAs) and waste load allocations (WLAs) for nonpoint and point sources, respectively, when it crafts a TMDL.

“It's not a reasonable interpretation for EPA to include point and nonpoint sources in [the TMDL]?” Rambo asked Farm Bureau attorney Richard Schwartz.

In response, Schwartz said a division between WLAs and LAs is “not comprehended under the term 'load' [in the CWA] -- they're extra.” Adding a completely new concept to a statute is outside the bounds of Chevron deference, he said.

EPA argued in its March 27 opening brief that regulations allowing the agency to specify WLAs and LAs “are a reasonable interpretation of the CWA, which are entitled to Chevron deference.” The agency did not argue the point in depth, but cited prior cases upholding TMDLs where the agency included WLAs and LAs -- most recently Anacostia Riverkeeper v. Jackson, decided in 2011 by the district court in the District of Columbia.

The briefs due Oct. 17 could deal with issues beyond Chevron. An environmentalist attorney says “her order covers a lot of ground,” and as written could touch on other forms of deference, including that given to the agency's interpretation of its own rules under Auer v. Robbins.

“She's being careful, and allowing the parties to brief all the issues,” the attorney says.

Judge's Skepticism

At argument, Rambo also appeared skeptical of recent industry claims that the federal appellate ruling vacating EPA's Cross State

Air Pollution Rule (CSAPR) should inform her decision in the Chesapeake Bay case.

The U.S. Court of Appeals for the District of Columbia Circuit in Homer City vacated CSAPR, in part because it imposed federal implementation plans (FIPs) on states subject to "good neighbor" requirements designed to reduce the air pollution they contribute to downwind states, before allowing those states the chance to craft their own state implementation plans (SIPs).

Schwartz said at argument that EPA acted similarly in creating the bay TMDL when it required states to submit for agency approval watershed implementation plans (WIPs) to detail how they would achieve pollution reduction goals, rather than allowing them to develop implementation plans on their own and only stepping in if pollution reductions fell short of the TMDL target.

But Rambo said during argument that “the key” in the Homer City ruling was that the good neighbor goals were handed down “simultaneously” with the FIPs crafted by EPA, so states had effectively no opportunity to develop their own plans. “That didn't happen in the case before us,” she said.

Industry has argued, both at argument and in briefs, that EPA may not dictate state implementation of TMDLs, and that the agency's oversight of WIPs in the Chesapeake Bay violates that restriction. At argument, Schwartz pointed to the highly detailed breakdowns of LAs and WLAs in the EPA-approved plans to support the claim that the agency is micromanaging implementation.

That discussion drew another question from Rambo, who asked the plaintiffs to clarify whether they objected to EPA's use of specific allocations or to its enforcement of the WIPs at all. “I'm not sure what your argument is -- is it the detail, or is it the locked-in nature of the details?” Rambo asked.

Schwartz responded that both are facets of the same problem, because such detailed allocations “show that the agency is getting into implementation.”

Department of Justice attorney Kent Hanson, arguing for EPA, said the specific figures in each state's LAs and WLAs were chosen by state regulators with EPA acting in an oversight role, and that decisions on how to achieve those targets -- through options including stricter discharge permits, encouraging best management practices and establishment of a water quality trading regime -- are being left solely to the states.

EPA's job in the process is to take “a monitoring role, to see if we're making progress,” Hanson said.

Hanson, along with attorneys for publicly owned treatment works and environmental groups that have intervened on EPA's behalf, argued that the bay TMDL was developed as part of a “decades-long cooperative process,” rather than the coercive federal program industry claimed it to be.

The two sides also sparred over the validity of EPA's model for pollution flows in the Chesapeake watershed -- a detailed computer simulation which the agency used to calculate the amount of nutrients and sediment the bay can handle before suffering water quality harms. Industry attorney David Ross argued that the model is too imprecise to register the improvements to water quality from small-scale pollution reductions taking place in a single tributary, meaning states do not get “credit” for such reductions even when they occur in large enough numbers to improve the overall health of the bay.

By refusing to credit states for such improvements, Ross said, the model effectively dictates where states may focus their implementation plans.

But Hanson argued that EPA is capable of aggregating states' pollution-reduction data on its own and feeding those numbers into the model, even when the computers might not register them on its own. The model “is only one tool -- it's not the only tool states could use,” he said.

Although states have already begun to finalize their plans to implement the TMDL goals, Rambo may not rule on the issue before those plans go into practice. She told the court after argument “don't expect a decision soon.” -- David LaRoss (dlaross@iwpnews.com)

Report Finds Fracking at Los Angeles Field Poses No Environmental, Other Threats
By Carolyn Whetzel BNA Daily Environment Report

LOS ANGELES—A yearlong study released Oct. 10 found that hydraulic fracturing activities at the Inglewood Oil Field in Los Angeles County pose no environmental or other threats to surrounding neighborhoods.

The report examined multiple issues and concerns raised by community and environmental groups over the high-volume hydraulic fracturing, or fracking, at the urban oil field, including impacts on groundwater, air quality, and whether the activities could trigger earthquakes.

Terms of a 2011 settlement between several groups and Los Angeles County and Plains Exploration and Production Co. (PXP), the Houston-based company that operates the field, required the study (Community Health Councils Inc. v. County of Los Angeles, Cal. Super. Ct., No. BS118018, 7/15/11).

Filed in California Superior Court in Los Angeles, the consolidated lawsuits challenged the development standards and operating procedures the county approved for the oil field in 2008. Specifically, the lawsuits alleged the county's environmental review for the standards violated the California Environmental Quality Act.

Monitoring data collected at the site found that groundwater quality showed no impacts from fracking, air emissions were within standards set by the South Coast Air Quality Management District, and methane in soil gas and groundwater "did not show levels of concern."

Also, the study found the activities did not compromise the integrity of wells, induce earthquakes, or affect ground movement or subsidence.

No Statistical Difference in Health
The report also cited the county's health department assessment, also required under the settlement, which found no statistical difference in the health of those living near the oil field compared with the health of other county residents.

Standards the county adopted in 2008 for regulation and oversight of PXP's oil and gas operations at Inglewood are stricter than at "most other onshore oil fields," the study said.

The 1,000-plus acre Inglewood site is one of the largest contiguous urban oil fields in the nation and is one of 42 active fields in the Los Angeles basin, it said.

More the 1,475 wells have been drilled at Inglewood since it was discovered in 1924. About 469 active production wells and 168 injection wells are in operation; the remaining wells are idle or plugged.

While the county's 2008 permit established standards for oil and gas activities at the site, the increased use of fracking prompted calls from the community and environmental advocates to ban the process until more is known about its impacts.

PXP paid for the 206-page report, which, under the settlement agreement, had to be peer-reviewed by an independent firm selected by the county and PXP.

For More Information
The Hydraulic Fracturing Study: PXP Inglewood Oil Field is available at
http://www.inglewoodoilfield.com/res/docs/102012study/Hydraulic%20Fracturing%20Study%20Inglewood%20Field10102012.pdf.

Analytical Method Provides Safe Hydraulic Fracturing
Rintoul, Sandra
Pollution Engineering [Pollut. Eng.]. Vol. 44, no. 8, 26 p. Aug 2012.
Hydraulic fracturing to release natural gas is getting positive and negative attention in the news. On the positive side, a less expensive domestic fuel source is a plus for many industries. On the cautionary side, some reporters worry that groundwater, surface water and drinking water sources for families and livestock risk contamination from drilling chemicals, gas leaks and radioactive elements released from the shale. On-site analytical testing can both help the well operators keep systems operating optimally as well as assure concerned citizens that appropriate environmental efforts are being taken. Oil in water testing can be a benefit at several different stages in the handling of water generated during hydraulic fracturing. It is a test that can also conveniently be done at the well location. Onsite oil in water measurements can ensure that the oil/water separation system is removing the oil to the required limits.

Fracking splits opinion
Else, Holly
Professional Engineering. Vol. 25, no. 2, 1 p. Feb 2012.
The UK is facing an energy crisis, and the recent discovery of shale gas in north-west England is heralded by some as one way of becoming self-sufficient and obtaining sustainable power supplies. But others disagree, saying that a shale gas industry could

have environmental impacts and is not a long-term solution to the problem. Shale gas is extracted by a process called hydraulic fracturing. Fracturing has been used in the oil and gas industry since the 1940s. The controversial practice has now arrived on UK shores. Last year, independent energy company Cuadrilla began exploratory work to better understand the prospects for natural gas in the Bowland Shale around Lancaster. Since the start of the exploratory programme, fracking has barely been out of the headlines. Environmentalists have called for a moratorium, MPs have held an inquiry into its potential effects, and two earthquakes in the area concerned have halted proceedings.

Fracking Misunderstood
Bigham, Roy
Pollution Engineering [Pollut. Eng.]. Vol. 44, no. 8, 7 p. Aug 2012.
Most of the increase in America's natural gas production has come from a process known as fracking. This involves a process of drilling down thousands of feet into shale formations and then drilling horizontally up to 10,000 feet. Environmental groups have proclaimed that this process is damaging drinking water supplies as the chemicals and released gases are penetrating the thousands of feet of soil, rock and clay formations to reach the aquifers used for drinking water. P. Lee Ferguson, a Duke University civil and environmental engineering professor, cautioned that no single study would be able to answer all of the potential questions. Drinking water aquifers are located at much shallower depths and would take much longer for any potential impact.

Pa. plant 'born of Marcellus' gets final permits
Saqib Rahim, E&E reporter Energywire Published: Thursday, October 11, 2012

Pennsylvania officials are touting what they say is the state's first new power plant being built to capitalize on cheap gas from the Marcellus Shale.

The Pennsylvania Department of Environmental Protection yesterday approved the air plan submitted by Moxie Liberty LLC, an independent power developer based in Vienna, Va. The approval is the last one Moxie needs to begin construction of the plant, which will sit in an area suffused with "dry" natural gas drilling and provide the grid with up to 936 megawatts.

The approval is the latest example of a state market where the economics have tilted in natural gas's favor, leading to increased operation of old natural gas plants -- and now, construction of new ones.

For Moxie Energy LLC, the parent company, the goal of building two plants in Pennsylvania is getting closer. It is awaiting approval for a similar plant, in nearby Lycoming County. With both plants, the aim is to burn low-cost Marcellus gas mined nearby, then sell it into high-value Northeastern power markets.

Aaron Samson, Moxie's president and founder, said Pennsylvania already has natural gas power plants but these two are "kind of the first ones that were born of Marcellus."

He said both are "in the gas patch"; that is, they sit in a four-county area where drilling yields natural gas with relatively little oil or natural gas liquids alongside it.

This "dry gas," as it is known, is being produced less and less around the country as a result of low gas prices. But Samson said even with the cutbacks, there is still plenty of gas to fuel the plants Moxie wants to build.

That sews up the supply side of the equation. On the demand side, he said, it was easy to rationalize building a power plant there.

"It's a combination of Marcellus and the PJM system," he said, referring to the PJM Interconnection, a major grid operator in the Northeast. "It's the largest of the systems, and so when it comes to transparency, liquidity, financeability on the certainty of that ... it's the best market in the U.S."

Moxie estimates that each of its two plants -- which are the first two it has ever attempted to develop -- will require more than $800 million of investment. Samson said the money has been put forward by a group of major banks that often finance power projects.

The project was caught in a brief mix-up yesterday regarding the use of natural gas in Pennsylvania. In its first press release, the Department of Environmental Protection called Moxie's project "the first power plant in Pennsylvania to run on natural gas, including gas from the Marcellus Shale."

DEP Secretary Mike Krancer celebrated the moment, calling it a "red-letter day."

The DEP then responded to claims that Pennsylvania has burned natural gas in power plants for decades, and it modified the press release late in the afternoon. It now describes "the first new power plant in Pennsylvania to run at least partially on locally grown Marcellus Shale gas."

Regardless of the milestones, the trend in Pennsylvania is clear: Natural gas is eating into coal's market share.

According to the federal Energy Information Agency, coal accounted for nearly 58 percent of the state's net power generation in 2000; natural gas accounted for 1.3 percent. By 2010, coal had been whittled to 48 percent of net power generation in Pennsylvania; natural gas had gained to 14.7 percent.

John Hanger, a consultant and former secretary of DEP, said Pennsylvania added more than 9,000 MW of natural gas capacity between 1999 and 2005. Some of these power plants were even located above prime parts of the Marcellus.

The difference, he said, was that these plants did not run very much, often staying idle 80 to 85 percent of the time. "Gas prices were too high, and the gas plants were uncompetitive with the coal plants," he said. "Today the opposite is the case."

The low natural gas prices have made it much more economical for the gas plants to fire up their turbines -- sometimes at a 50 percent operating factor, or half of the time -- even if Marcellus gas was not part of their original business vision.

As older coal plants are retired in Pennsylvania, the thinking goes, natural gas is becoming less of an "as-needed" fuel and more of a fuel that is burned as baseload -- a load that was once carried almost solely by coal and nuclear power.

In the Bakken, drug screens are key step to energy employment
Pamela King, E&E reporter Energywire Published: Thursday, October 11, 2012

WILLISTON, N.D. -- For many job seekers looking for work in the Bakken Shale oil play, the only thing standing between them and employment is a drug test.

That's increasingly so in North Dakota, where Kari Cutting, vice president of the North Dakota Petroleum Council, says the "vast majority" of oil and gas drillers operating in the state have put screening policies in place. More oil and gas workers are required to submit to pre-employment and, sometimes, post-accident and random drug screenings.

"From a safety perspective, anytime an individual is impaired, they are not as safe as they would be in an unimpaired state," Cutting said. Drug tests are one step to ensure that "people come to work with all of their faculties, ready to go."

Experts watching the social ramifications of the Bakken oil boom contend that much of North Dakota's drug problem stems from the state's population increase. Transient residents who work for energy companies for brief periods before moving on to the next drilling site are contributing to the new law enforcement challenge, said Detective Dave Peterson of the Williston Police Department. With the help of oil and gas industry money, Peterson's police department just acquired a drug-sniffing dog.

Among the companies that conduct drug testing is Checkers Inc., whose squat, gray headquarters sits in the middle of town in Sidney, Mont., 50 miles southwest of Williston. Shortly after starting the company in 2004, Janette McCollum received a call from oil field services firm Halliburton Co., asking her to expand her services to the North Dakota city.

It was the infant days of an oil boom that would soon erupt in the two states, bringing energy producers flocking to the region's Bakken Shale and leading McCollum to expand her business to 23 locations throughout Montana and North Dakota.

The Bakken oil and gas business "grew too fast, too furious for this area," she said, although she added that the economic benefits have been great.

Just as McCollum was getting her business off the ground, North Dakota law enforcement officials were in the midst of a record number of methamphetamine lab busts -- 260 in 2004 compared with just one in 1997 and five in 1998, according to data collected by the North Dakota Bureau of Criminal Investigation. The state has since taken action to limit the sale of nonprescription products containing pseudoephedrine and ephedrine -- key ingredients in meth production -- by requiring stores to log customers' identifying information, a step that has dramatically curbed meth lab busts since 2006, with only seven busts in 2010, according to bureau data.

Still, meth use remains a problem in North Dakota, McCollum said. In the fraction of instant tests that came out positive last year, meth and marijuana were the most common drugs found in people's systems. She cited Checkers' instant tests because other

types of tests are sent to outside labs, which then report the results to employers.

Some people try to hide their drug use by sneaking in devices filled with clean urine. McCollum said she has spotted these devices when asking customers to pull their clothes taut to their bodies.

"We see it all the time," she said. "You cannot believe it."

Of the 26,000 tests Checkers conducted on behalf of employers last year, about half were at the request of oil and gas companies. Most of the remaining clients came from trucking companies working for energy firms and from pipeline companies, McCollum said.

Out of that number, 350 smuggled in urine, 147 did not show for the test and 33 refused to test -- all of which result in a positive test, she said.

At Williston's Mercy Medical Center, which also conducts drug screens, about one-fifth of the people the hospital tests do not pass, said Joel Babcock, occupational care manager for the medical center. The drugs the center typically finds in clients' systems are cocaine, meth, PCP and marijuana, the last of which is the most common, Babcock said.

Whether a company hires a person who tests positive is up to the employer, he said.

But Mercy Medical Center CEO Matt Grimshaw said such candidates are unlikely to be hired. Energy companies, which also sometimes request that the hospital subject job applicants and current employees to grueling strength tests, have their pick of candidates and are looking for the best workers they can find, he said.

"With the high-wage jobs, it's not simply, 'Can you breathe and stand up for work?'" Grimshaw said.

Major methane study chases data to end 'life-cycle' emissions debate
Nathanial Gronewold, E&E reporter Energywire Published: Thursday, October 11, 2012

HOUSTON -- Academics, environmentalists and the oil and gas industry are collaborating to settle once and for all open questions about how much the U.S. shale gas boom contributes to industrial greenhouse gas emissions and air pollution.

The discovery of large new reserves of natural gas unlocked by horizontal drilling and hydraulic fracturing has led to a dramatic transformation in U.S. power generation. Fuel switching from coal to gas is believed to be substantially curbing the release of mercury, dangerous particulates and other health hazards associated with coal-burning power plants, while simultaneously cutting greenhouse gas emissions out of the power sector.

But critics of the oil and gas industry have long pointed out that releases of heat-trapping methane during drilling, well completion and gas distribution contribute to climate change and harm air quality around production and processing sites. So far, the data are spotty. To date, studies attempting to measure the extent of fugitive methane emissions have reached contradictory conclusions.

One high-profile study out of Cornell University has faced withering attacks from the gas industry and some independent analysts for concluding that gas's "life-cycle emissions" -- from production through its use as a fuel to generate electricity -- is worse for the environment than coal. Critics said that study relied on incomplete data.

Yesterday, a team at the University of Texas, Austin, announced the launch of a comprehensive study of methane emissions around gas wells. The team expects initial results to be out by January 2013.

The new study "seeks to estimate the methane emission rates from participating companies' natural gas production, including hydraulically fractured wells, by conducting direct measurement techniques at a sample of natural gas production sites," the research team said in a release. "A greater understanding of the amount of methane emitted into the atmosphere can better inform sound policies and management of emissions from well sites."

The university has hired two environmental engineering firms, URS and Aerodyne Research, to take sample measurements of emissions at well sites across the country. Researchers will focus on gas production sites in the Marcellus, Eagle Ford, Haynesville, Barnett, Fayetteville, and Niobrara shale formations.

Nine oil and gas companies have agreed to allow sampling teams onto their sites: Anadarko Petroleum Corp., BG Group PLC, Chevron Corp., Encana Oil & Gas (USA) Inc., Pioneer Natural Resources Co., Shell Oil Co., Southwestern Energy, Talisman

Energy and XTO Energy, a subsidiary of Exxon Mobil Corp.

The New York-based Environmental Defense Fund (EDF) is also co-sponsoring the study, which aims to collect "scientifically rigorous, representative data from multiple producing basins." EDF has investigated air impacts from gas drilling before in a 2009 study on emissions out of the Barnett Shale gas basin in northern Texas.

The gas field research is part of a broader five-part study to measure methane leakage across the natural gas supply chain. Besides Texas and the nine gas producers, the full study includes research teams at Duke University, Harvard University and Boston University and is scheduled to be completed by the end of 2013.

Methane alone isn't a threat to public health, EDF notes, but the presence of methane is an indication that other toxic gases and chemicals associated with methane could be present in the environment. Unconventional drilling and "fracking" are at the heart of the U.S. shale gas boom. The intensity of drilling and the truck traffic, on-site generators, water use, pipes, waste disposal and gas processing equipment have spurred the push for more data. With regard to climate change, boosters of the study say there need to be better data on greenhouse gas emissions during the production and transportation of gas to help guide future regulation.

Last week, at a public talk regarding the environmental impact of gas production, hosted by the South by Southwest (SXSW) Eco conference, EDF scientist Elena Craft said the Barnett Shale study provided a first glimpse at the significance of emissions out of unconventional gas fields. The Barnett Shale study showed that "emissions from oil and gas activities were comparable to all emissions from all of the vehicles in the Dallas-Fort Worth area," Craft said.

"We've seen several areas around the country where emissions from oil and gas activities have been implicated in exceedences of health protective standards, for instance of ozone," Craft added. The best example of this, Craft asserted, is the experience of the city of San Antonio, where air quality in August exceeded ozone safety levels for the first time, due in large part to oil and gas operations in the nearby Eagle Ford Shale.

The UT Austin-led study is geared toward gathering data to help assess the effect that the nation's onshore drilling boom could have on U.S. greenhouse gas emissions if nothing is done to tighten controls in rapidly expanding oil and gas fields. Methane is a potent heat-trapping gas that remains in the atmosphere for a shorter period than carbon dioxide but is considered a significant contributor to global warming in the shorter term.

For the industry's part, producers are also interested in getting more data on fugitive emissions as a means of improving costs and performance.

At the SXSW conference, David Blackmon, communications director for FTI Consulting, said he advises companies to invest in special ultraviolet-sensitive camera equipment that can detect methane leaks. Plugging the leaks and earning money by selling gas that would otherwise escape into the atmosphere is a significant cost savings, he explained.

Slowly but surely, gas producers are allowing more third-party scrutiny of their practices and environmental impact as they try to bolster their public image. Surveys show that roughly 60 percent of Americans view the oil and gas industry in a negative light.

"Our industry has historically been horrible at public relations and communications, just awful," Blackmon said, joking that recent polling data are an improvement on public opinion in the past.

Still, Blackmon insisted that the industry is becoming more responsive to public environmental concerns and detecting leaks of methane and other pollutants.

Governor opens state schools to gas leasing
Ellen M. Gilmer, E&E reporter Energywire Published: Thursday, October 11, 2012

Pennsylvania natural gas producers are praising a new law that will open more state land to mining and shale drilling.

Gov. Tom Corbett (R) signed the Indigenous Mineral Resources Incentives Development Act this week, placing more state-owned land, including universities and prisons, on the table for leasing. Supporters say the move could be a significant revenue generator for the state, with schools also getting a cut of the profit.

Kathryn Klaber, president of the Marcellus Shale Coalition, which represents gas producers that could jump on newly available leases, called the law pragmatic, evidenced by its revenue distribution plan.

"By allocating natural-gas-related revenue from taxpayer-owned land to conservation and infrastructure programs, and perhaps most importantly, to our state university students in the form of expanded scholarship funding, this law clearly demonstrates the positive impact that natural gas production is having, and will continue to have, across the Commonwealth," she said in a statement.

The new law stipulates that half the royalties or payments received from companies operating on state-owned university land would go to the school. More than one-third would be spread among other state universities, and the rest would be set aside for scholarships in the statewide system. Four state schools are situated above the Marcellus Shale, and two others are on the edge (EnergyWire, Sept. 27).

Leasing of state land for resource extraction was previously reserved for just a few state agencies, including the Department of Conservation and Natural Resources. The new leasing power goes to the Department of General Services, which serves as the state's real estate agent. It will have the option -- not the requirement -- to lease mineral rights.

For the nonuniversity land the law opens to development, such as prisons, the revenue distribution plan sends 60 percent to the Oil and Gas Lease Fund, which supports conservation efforts; 25 percent to the Pennsylvania Infrastructure Investment Authority; and 15 percent to the host agency.

The legislation, sponsored by state Sen. Don White (R), swept through Harrisburg in recent months, garnering a two-thirds majority from lawmakers in the state House. It passed with only three holdouts in the Senate. White touted the bill as a boon to the state's economy.

"It simply provides a new opportunity to generate revenue, while helping students, supporting Pennsylvania's environmental protection efforts and boosting our state economy through the creation of new jobs," he said in a statement after the bill's passage.

But environmentalists still have reservations, mainly that drilling is too risky to be in close proximity to an educational institution. A recommendation from the citizens group PennFuture to require approval from university presidents before leasing did not make it into the law.

A similar push to drill on university land is under way in Ohio. The Buckeye State mandated a resource inventory from public universities to see where Utica Shale drilling would be feasible. Ohio Oil and Gas Association Executive Vice President Tom Stewart indicated at the time that the schools would likely have final control over lease terms (EnergyWire, April 5).

N.D. tribes get Interior green light to build refinery
Ellen M. Gilmer, E&E reporter Energywire Published: Thursday, October 11, 2012

Tribes in North Dakota are on track to build a refinery to process oil from the prolific Bakken Shale basin.

Interior Secretary Ken Salazar yesterday announced that his agency's Bureau of Indian Affairs had approved a crucial step in the Mandan, Hidatsa and Arikara Nation's decadelong quest to build a 13,000-barrel-a-day refinery to turn crude into diesel and other products.

Salazar framed the development as a piece of the Obama administration's "all of the above" energy strategy and a step toward energy independence, an end goal the president and his Republican opponent, Mitt Romney, point to as they barnstorm in energy-rich parts of the country. To that end, Salazar promoted a wind farm in Wyoming on Tuesday (Greenwire, Oct. 10) and a Nevada solar energy proposal last month.

The tribal "land into trust" application will give the MHA Nation, also known as the Three Affiliated Tribes, control over 469 acres of land -- 190 acres for the Thunder Butte Refinery and the rest for agriculture.

The agency spent years reviewing the project. Other outstanding permits are in the hands of the Army Corps of Engineers, U.S. EPA and the Department of Labor's Occupational Safety and Health Administration.

Interior Assistant Secretary for Indian Affairs Kevin Washburn, who approved the trust application as one of his first actions in office, touted the move as a boon for the tribes and North Dakota as a whole.

"Approving the land into trust status will allow the Tribes to continue their work to develop the facility in a safe and responsible

way," he said in a statement, "that brings increased economic opportunity and employment to their people and to North Dakota."

The refinery would create an estimated 800 to 1,000 full-time jobs during construction, plus 80 to 140 permanent positions on site, officials said. Groundbreaking could be as soon as early 2013.

Improving tribal relations

On site at the tribes' Fort Berthold Reservation, Salazar celebrated the development as a display of the administration's pledge to improve government relations with American Indians.

"We are turning a new page on the relationship of the United States with the nation's first Americans," he said.

MHA Nation Chairman Tex Hall, who regularly testifies in Washington, D.C., on Indian affairs, said during a news conference yesterday that he had grown up learning not to trust the government after the tribes lost more than 150,000 acres of prized land to make way for the Garrison Dam in the 1940s. Approval of the refinery was a step toward re-establishing trust, he said.

The MHA Nation and other tribes are fighting Interior on another energy issue: proposed Bureau of Land Management rules for hydraulic fracturing on public and tribal lands. Tribes have argued that their land should not be lumped in with public land for added regulation of well construction and chemical disclosure (EnergyWire, July 16).

North Dakota's booming oil patch produced 21.7 million barrels of oil and 23.6 billion cubic feet of natural gas last month.

Study finds no environmental impact around Calif. oil field
Ellen M. Gilmer, E&E reporter Energywire Published: Thursday, October 11, 2012

An oil and gas company operating in California is lauding the results of a study released yesterday that found hydraulic fracturing was not a threat to the environment in the Baldwin Hills area of Los Angeles County.

Plains Exploration & Production Co. (PXP) paid for an independent consultant to do the review of potential impacts as part of a 2011 lawsuit settlement with Culver City and environmental groups, which opposed PXP's use of fracking -- a method of extracting oil and gas by blasting chemical-laced water deep underground -- on two occasions in the area's Inglewood Oil Field.

The study, which was peer-reviewed by two outside specialists, addresses concerns about groundwater contamination, well integrity, earthquakes, air emissions and community health.

"In each and every category, the study did not detect significant impacts once the hydraulic fracturing had been completed," said PXP Vice President of Environmental, Health & Safety and Government Affairs Steve Rusch in a statement. "These facts are important for the community to know."

The report, conducted by environmental consulting firm Cardno Entrix, finds that groundwater beneath the oil field is geologically isolated from the Los Angeles Basin, a drinking water source. Pre-drilling and post-drilling monitoring did not show effects from fracking, although monitoring wells found arsenic, which occurs in naturally high levels in the basin.

Regarding well integrity, the study says that tests done before, during and after fracking did not weaken the steel and cement casings that buffer oil wells from the ground. It also cited measurements of seismicity and found that fracking in the oil field had "no detectable effects on vibration, and did not induce seismicity (earthquakes)."

Finally, the consultants write that air emissions from operations in the oil field were within the standards set by the state's South Coast Air Quality Management District and that the health of residents near the oil field was statisically no different from the health of other county residents.

Eric Adair, a Los Angeles-based energy attorney who tracks drilling issues in the area, said the results reaffirm the safety of fracking in California, but he added that he was doubtful many critics would accept the findings.

"Whether people are satisfied or not is up to them," he said, adding that he has read backlash already from critics who say they do not trust the study because it was funded by PXP. The oil company had no choice in the matter, as the settlement last year required it to fund the report.

The 1,000-acre Inglewood Oil Field was first discovered by Standard Oil in 1924, and PXP has operated it since December 2002.

Some California residents began to voice concerns about fracking as the process, combined with horizontal drilling, began to spread across the country in recent years. California does not require drillers to obtain a permit to frack, and the state has no data on how often the practice is used there.

The state does not appear poised to ban the practice, despite calls from some environmentalists. The California Department of Conservation's Division of Oil, Gas and Geothermal Resources is reviewing state oversight and plans to revise oil and gas regulations, though a timeline for that process is unclear.

Veteran BLM official blasts agency for valuing drilling over conservation
Emily Yehle, E&E reporter Greenwire Published: Wednesday, October 10, 2012

The Interior Department's Bureau of Land Management has lost sight of its mission in the political rush to use public lands for energy development, according to an experienced agency official.

Stan Olmstead retired last month after 20 years at BLM, most recently as a natural resource specialist and environmental scientist in the Vernal Field Office in eastern Utah. In his last few minutes on the clock, he decided to send a three-page memo to his colleagues outlining what he saw as the agency's focus on economics at the expense of natural resources.

He described an office that promotes energy development and measures natural resources "by dollar value," leading to the neglect of sensitive species and the land's health. As examples, he pointed to the loss of the mountain plover in Utah and the delay in reclaiming unused oil and gas wells.

"Without serious fulfillment of the mission we continue to harm public land as it has been harmed so frequently in our historic past," Olmstead wrote. "Be honest about what is happening. It is easier to break something than to fix it, so let us stop breaking the land."

Public Employees for Environmental Responsibility released Olmstead's memo today, calling for a "visionary new leader" at BLM who will steer the agency away from what it sees as a focus on oil drilling. Bob Abbey retired in May as BLM director; since then, Deputy Director Mike Pool has served as acting director. http://www.peer.org/assets/docs/blm/10_10_12_Olmstead_memo.pdf

A BLM spokesman did not immediately return a request for comment.

Abbey had left BLM in 2005, citing the agency's singular focus on oil and gas drilling. He came back in 2009 as director and engineered a sweeping overhaul of oil and gas leasing on federal lands, promoting an expansion of renewable energy and a renewed focus on conservation.

But Olmstead depicts an agency that is still grappling with balancing its mission to protect public lands while reaching administrative goals to expand energy production. In an interview today, he pointed to a recent New York Times article that describes the close relationship between drillers and BLM officials in Utah.

Olmstead said his memo was "one last attempt to try to draw attention to the other values we have." His pleas -- and those of other natural resource employees -- while within the agency were mostly ignored, he said; protection of the health and diversity of public lands was simply not a priority.

"I think my main motive is to communicate," he said, adding that he has a meeting later this month with BLM Utah Director Juan Palma. "I have been somewhat quiet during my employment, and now that I'm in retirement I plan to speak out."

Inglewood fracking study finds no harm from method
Bakersfield Californian, The (CA) - Thursday, October 11, 2012
Author: RUBEN VIVES Los Angeles Times
LOS ANGELES -- A long-awaited study released Wednesday says the controversial oil extraction method known as hydraulic fracturing , or fracking , would not harm the environment if used at the Inglewood Oil Field in the Baldwin Hills area.

The yearlong study included several issues raised by residents living around the field, such as the potential risks for groundwater contamination, air pollution and increased seismic activity.

For months, water wells on the 1,200-acre field were monitored. Data from ground and air monitors were collected and analyzed, but no effects were recorded before or after the technique was used, the study says.

"There were eight contributing studies addressing such things as vibrations at the surface, microseismic activity at depth, noise, ground movement measurements, subsidence, groundwater quality, methane in both soil and groundwater," said Dan Tormey, technical director and principal at Cardno Entrix, the environmental consulting firm that conducted the study. "Each was a study that contributed to the (overall) hydraulic fracturing study."

Plains Exploration and Production Co., the owner and operator of the oil field, paid for the review as part of a settlement agreement with Culver City and environmental and community groups. The report was reviewed by two independent firms selected by the company and Los Angeles County.

The 206-page study is the first of its kind in the state. It comes at a time when environmental and community groups are urging lawmakers to ban fracking , a technique that fractures rock formations to release trapped oil and natural gas. The process involves a high-pressure injection of water, sand and chemical additives into the drill site's wellbore.

Fracking has come under scrutiny in other parts of the country amid allegations that it increases seismic activity and contaminates water supplies.

Situated two miles south of the 10 Freeway, the field is surrounded by Culver City, Baldwin Hills and Inglewood -- making it the largest urban oil field in the country. Plains Exploration is hoping to tap into the oil reserves in the field's shale formations that were identified in 2003.

But people living around the field oppose the idea. Residents say their properties have been damaged by mysterious land shifts, which has increased their fears about fracking .

Some homeowners suspect the movements may be related to Plains Exploration's drilling operations. But the actual cause is unclear; the area sits atop the Newport-Inglewood Fault.

Champion extends extraction moratorium
Carthage Republican Tribune (NY) - Thursday, October 11, 2012
Author: Elaine M. Avallone Johnson Newspapers
WEST CARTHAGE - Following a public hearing at which no one spoke, the town of Champion board extended the moratorium on natural gas or petroleum extraction for 180 days.

The issue was first presented at the April 2 meeting, and an initial 180-day moratorium was enacted at the May meeting to give the town board and Planning Board time to study the issues and develop regulations if deemed necessary.

Town Council members initially expressed concerns about the effect on the environment and property value of hydrofracking activities. During the spring meeting, Councilman Bruce R. Ferguson said that regulating the activity would be in line with the town's comprehensive plan in regard to land-use control.

Planning Board Chairman Peter J. LaBarge said members hope to have land-use regulations devised by the time the extension is up."It takes a lot of time to research," Mr. LaBarge said. "Everyone is worried about fracking . It does not seem very probable at this time - there's not much natural gas in Champion but we want to protect the town and the people for the future."

Test drill begins in Owego for data on Marcellus Shale
Daily Gazette, The (Schenectady, NY) - Thursday, October 11, 2012
OWEGO -- A Texas company has begun drilling a vertical well to explore the potential of the Marcellus Shale natural gas formation, joining about a dozen others probing the potentially lucrative rock beneath New York's southern tier.

Carizzo Oil & Gas of Houston recently started digging its first well north of the Tioga County village of Owego. The Houston-based energy company already has wells in the Eagle Ford and Barnett shale formations in Texas, as well as operations in Colorado, Ohio and the North Sea,

Richard Hunter, Carizzo's vice president of investor relations, said the exploratory well will determine whether the company pursues horizontal drilling .

Horizontal high volume hydraulic fracturing , or fracking , isn't permitted in New York. State regulators have been reviewing the highly polarizing issue for four years and could make a decision whether to allow it by the end of this year.

Fracking injects millions of gallons of chemical-laced water into the ground to crack rock and release gas. Supporters point to

greater domestic energy supply, job creation and revenue for cash-starved states while opponents worry about pollution and health impacts.

The Marcellus, most of which underlies parts of Pennsylvania, Ohio, New York and West Virginia, is considered to be one of the resident and founder, said Pennsylvania already has natural gas power plants but these two are "kind of the first ones that were born of Marcellus."

He said both are "in the gas patch"; that is, they sit in a four-county area where drilling yields natural gas with relatively little oil or natural gas liquids alongside it.

This "dry gas," as it is known, is being produced less and less around the country as a result of low gas prices. But Samson said even with the cutbacks, there is still plenty of gas to fuel the plants Moxie wants to build.

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In the Bakken, drug screens are key step to energy employment
Pamela King, E&E reporter Energywire Published: Thursday, October 11, 2012

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That's increasingly so in North Dakota, where Kari Cutting, vice president of the North Dakota Petroleum Council, says the "vast majority" of oil and gas drillers operating in the state have put screening policies in place. More oil and gas workers are required to submit to pre-employment and, sometimes, post-accident and random drug screenings.

"From a safety perspective, anytime an individual is impaired, they are not as safe as they would be in an unimpaired state," Cutting said. Drug tests are one step to ensure that "people come to work with all of their faculties, ready to go."

Experts watching the social ramifications of the Bakken oil boom contend that much of North Dakota's drug problem stems from the state's population increase. Transient residents who work for energy companies for brief periods before moving on to the next drilling site are contributing to the new law enforcement challenge, said Detective Dave Peterson of the Williston Police Department. With the help of oil and gas industry money, Peterson's police department just acquired a drug-sniffing dog.

Among the companies that conduct drug testing is Checkers Inc., whose squat, gray headquarters sits in the middle of town in Sidney, Mont., 50 miles southwest of Williston. Shortly after starting the company in 2004, Janette McCollum received a call from oil field services firm Halliburton Co., asking her to expand her services to the North Dakota city.

It was the infant days of an oil boom that would soon erupt in the two states, bringing energy producers flocking to the region's Bakken Shale and leading McCollum to expand her business to 23 locations throughout Montana and North Dakota.

The Bakken oil and gas business "grew too fast, too furious for this area," she said, although she added that the economic benefits have been great.

Just as McCollum was getting her business off the ground, North Dakota law enforcement officials were in the midst of a record number of methamphetamine lab busts -- 260 in 2004 compared with just one in 1997 and five in 1998, according to data collected by the North Dakota Bureau of Criminal Investigation. The state has since taken action to limit the sale of nonprescription products containing pseudoephedrine and ephedrine -- key ingredients in meth production -- by requiring stores to log customers' identifying information, a step that has dramatically curbed meth lab busts since 2006, with only seven busts in 2010, according to bureau data.

Still, meth use remains a problem in North Dakota, McCollum said. In the fraction of instant tests that came out positive last year, meth and marijuana were the most common drugs found in people's systems. She cited Checkers' instant tests because other types of tests are sent to outside labs, which then report the results to employers.

Some people try to hide their drug use by sneaking in devices filled with clean urine. McCollum said she has spotted these devices when asking customers to pull their clothes taut to their bodies.

"We see it all the time," she said. "You cannot believe it."

Of the 26,000 tests Checkers conducted on behalf of employers last year, about half were at the request of oil and gas companies. Most of the remaining clients came from trucking companies working for energy firms and from pipeline companies, McCollum said.

Out of that number, 350 smuggled in urine, 147 did not show for the test and 33 refused to test -- all of which result in a positive test, she said.

At Williston's Mercy Medical Center, which also conducts drug screens, about one-fifth of the people the hospital tests do not pass, said Joel Babcock, occupational care manager for the medical center. The drugs the center typically finds in clients' systems are cocaine, meth, PCP and marijuana, the last of which is the most common, Babcock said.

Whether a company hires a person who tests positive is up to the employer, he said.

But Mercy Medical Center CEO Matt Grimshaw said such candidates are unlikely to be hired. Energy companies, which also sometimes request that the hospital subject job applicants and current employees to grueling strength tests, have their pick of candidates and are looking for the best workers they can find, he said.

"With the high-wage jobs, it's not simply, 'Can you breathe and stand up for work?'" Grimshaw said.

Major methane study chases data to end 'life-cycle' emissions debate
Nathanial Gronewold, E&E reporter Energywire Published: Thursday, October 11, 2012

HOUSTON -- Academics, environmentalists and the oil and gas industry are collaborating to settle once and for all open questions about how much the U.S. shale gas boom contributes to industrial greenhouse gas emissions and air pollution.

The discovery of large new reserves of natural gas unlocked by horizontal drilling and hydraulic fracturing has led to a dramatic transformation in U.S. power generation. Fuel switching from coal to gas is believed to be substantially curbing the release of mercury, dangerous particulates and other health hazards associated with coal-burning power plants, while simultaneously cutting greenhouse gas emissions out of the power sector.

But critics of the oil and gas industry have long pointed out that releases of heat-trapping methane during drilling, well completion and gas distribution contribute to climate change and harm air quality around production and processing sites. So far, the data are spotty. To date, studies attempting to measure the extent of fugitive methane emissions have reached contradictory conclusions.

One high-profile study out of Cornell University has faced withering attacks from the gas industry and some independent analysts for concluding that gas's "life-cycle emissions" -- from production through its use as a fuel to generate electricity -- is worse for the environment than coal. Critics said that study relied on incomplete data.

Yesterday, a team at the University of Texas, Austin, announced the launch of a comprehensive study of methane emissions around gas wells. The team expects initial results to be out by January 2013.

The new study "seeks to estimate the methane emission rates from participating companies' natural gas production, including hydraulically fractured wells, by conducting direct measurement techniques at a sample of natural gas production sites," the research team said in a release. "A greater understanding of the amount of methane emitted into the atmosphere can better inform sound policies and management of emissions from well sites."

The university has hired two environmental engineering firms, URS and Aerodyne Research, to take sample measurements of emissions at well sites across the country. Researchers will focus on gas production sites in the Marcellus, Eagle Ford, Haynesville, Barnett, Fayetteville, and Niobrara shale formations.

Nine oil and gas companies have agreed to allow sampling teams onto their sites: Anadarko Petroleum Corp., BG Group PLC, Chevron Corp., Encana Oil & Gas (USA) Inc., Pioneer Natural Resources Co., Shell Oil Co., Southwestern Energy, Talisman Energy and XTO Energy, a subsidiary of Exxon Mobil Corp.

The New York-based Environmental Defense Fund (EDF) is also co-sponsoring the study, which aims to collect "scientifically rigorous, representative data from multiple producing basins." EDF has investigated air impacts from gas drilling before in a 2009 study on emissions out of the Barnett Shale gas basin in northern Texas.

The gas field research is part of a broader five-part study to measure methane leakage across the natural gas supply chain. Besides Texas and the nine gas producers, the full study includes research teams at Duke University, Harvard University and Boston University and is scheduled to be completed by the end of 2013.

Methane alone isn't a threat to public health, EDF notes, but the presence of methane is an indication that other toxic gases and chemicals associated with methane could be present in the environment. Unconventional drilling and "fracking" are at the heart of the U.S. shale gas boom. The intensity of drilling and the truck traffic, on-site generators, water use, pipes, waste disposal and gas processing equipment have spurred the push for more data. With regard to climate change, boosters of the study say there need to be better data on greenhouse gas emissions during the production and transportation of gas to help guide future regulation.

Last week, at a public talk regarding the environmental impact of gas production, hosted by the South by Southwest (SXSW) Eco conference, EDF scientist Elena Craft said the Barnett Shale study provided a first glimpse at the significance of emissions out of unconventional gas fields. The Barnett Shale study showed that "emissions from oil and gas activities were comparable to all emissions from all of the vehicles in the Dallas-Fort Worth area," Craft said.

"We've seen several areas around the country where emissions from oil and gas activities have been implicated in exceedences of health protective standards, for instance of ozone," Craft added. The best example of this, Craft asserted, is the experience of the city of San Antonio, where air quality in August exceeded ozone safety levels for the first time, due in large part to oil and gas operations in the nearby Eagle Ford Shale.

The UT Austin-led study is geared toward gathering data to help assess the effect that the nation's onshore drilling boom could have on U.S. greenhouse gas emissions if nothing is done to tighten controls in rapidly expanding oil and gas fields. Methane is a potent heat-trapping gas that remains in the atmosphere for a shorter period than carbon dioxide but is considered a significant contributor to global warming in the shorter term.

For the industry's part, producers are also interested in getting more data on fugitive emissions as a means of improving costs and performance.

At the SXSW conference, David Blackmon, communications director for FTI Consulting, said he advises companies to invest in special ultraviolet-sensitive camera equipment that can detect methane leaks. Plugging the leaks and earning money by selling gas that would otherwise escape into the atmosphere is a significant cost savings, he explained.

Slowly but surely, gas producers are allowing more third-party scrutiny of their practices and environmental impact as they try to bolster their public image. Surveys show that roughly 60 percent of Americans view the oil and gas industry in a negative light.

"Our industry has historically been horrible at public relations and communications, just awful," Blackmon said, joking that recent polling data are an improvement on public opinion in the past.

Still, Blackmon insisted that the industry is becoming more responsive to public environmental concerns and detecting leaks of methane and other pollutants.

Governor opens state schools to gas leasing
Ellen M. Gilmer, E&E reporter Energywire Published: Thursday, October 11, 2012

Pennsylvania natural gas producers are praising a new law that will open more state land to mining and shale drilling.

Gov. Tom Corbett (R) signed the Indigenous Mineral Resources Incentives Development Act this week, placing more state-owned land, including universities and prisons, on the table for leasing. Supporters say the move could be a significant revenue generator for the state, with schools also getting a cut of the profit.

Kathryn Klaber, president of the Marcellus Shale Coalition, which represents gas producers that could jump on newly available leases, called the law pragmatic, evidenced by its revenue distribution plan.

"By allocating natural-gas-related revenue from taxpayer-owned land to conservation and infrastructure programs, and perhaps most importantly, to our state university students in the form of expanded scholarship funding, this law clearly demonstrates the positive impact that natural gas production is having, and will continue to have, across the Commonwealth," she said in a statement.

The new law stipulates that half the royalties or payments received from companies operating on state-owned university land would go to the school. More than one-third would be spread among other state universities, and the rest would be set aside for scholarships in the statewide system. Four state schools are situated above the Marcellus Shale, and two others are on the edge (EnergyWire, Sept. 27).

Leasing of state land for resource extraction was previously reserved for just a few state agencies, including the Department of Conservation and Natural Resources. The new leasing power goes to the Department of General Services, which serves as the state's real estate agent. It will have the option -- not the requirement -- to lease mineral rights.

For the nonuniversity land the law opens to development, such as prisons, the revenue distribution plan sends 60 percent to the Oil and Gas Lease Fund, which supports conservation efforts; 25 percent to the Pennsylvania Infrastructure Investment Authority; and 15 percent to the host agency.

The legislation, sponsored by state Sen. Don White (R), swept through Harrisburg in recent months, garnering a two-thirds majority from lawmakers in the state House. It passed with only three holdouts in the Senate. White touted the bill as a boon to the state's economy.

"It simply provides a new opportunity to generate revenue, while helping students, supporting Pennsylvania's environmental protection efforts and boosting our state economy through the creation of new jobs," he said in a statement after the bill's passage.

But environmentalists still have reservations, mainly that drilling is too risky to be in close proximity to an educational institution. A recommendation from the citizens group PennFuture to require approval from university presidents before leasing did not make it into the law.

A similar push to drill on university land is under way in Ohio. The Buckeye State mandated a resource inventory from public universities to see where Utica Shale drilling would be feasible. Ohio Oil and Gas Association Executive Vice President Tom Stewart indicated at the time that the schools would likely have final control over lease terms (EnergyWire, April 5).

N.D. tribes get Interior green light to build refinery
Ellen M. Gilmer, E&E reporter Energywire Published: Thursday, October 11, 2012

Tribes in North Dakota are on track to build a refinery to process oil from the prolific Bakken Shale basin.

Interior Secretary Ken Salazar yesterday announced that his agency's Bureau of Indian Affairs had approved a crucial step in the Mandan, Hidatsa and Arikara Nation's decadelong quest to build a 13,000-barrel-a-day refinery to turn crude into diesel and other products.

Salazar framed the development as a piece of the Obama administration's "all of the above" energy strategy and a step toward energy independence, an end goal the president and his Republican opponent, Mitt Romney, point to as they barnstorm in energy-rich parts of the country. To that end, Salazar promoted a wind farm in Wyoming on Tuesday (Greenwire, Oct. 10) and a Nevada solar energy proposal last month.

The tribal "land into trust" application will give the MHA Nation, also known as the Three Affiliated Tribes, control over 469 acres of land -- 190 acres for the Thunder Butte Refinery and the rest for agriculture.

The agency spent years reviewing the project. Other outstanding permits are in the hands of the Army Corps of Engineers, U.S. EPA and the Department of Labor's Occupational Safety and Health Administration.

Interior Assistant Secretary for Indian Affairs Kevin Washburn, who approved the trust application as one of his first actions in office, touted the move as a boon for the tribes and North Dakota as a whole.

"Approving the land into trust status will allow the Tribes to continue their work to develop the facility in a safe and responsible way," he said in a statement, "that brings increased economic opportunity and employment to their people and to North Dakota."

The refinery would create an estimated 800 to 1,000 full-time jobs during construction, plus 80 to 140 permanent positions on site, officials said. Groundbreaking could be as soon as early 2013.

Improving tribal relations

On site at the tribes' Fort Berthold Reservation, Salazar celebrated the development as a display of the administration's pledge to improve government relations with American Indians.

"We are turning a new page on the relationship of the United States with the nation's first Americans," he said.

MHA Nation Chairman Tex Hall, who regularly testifies in Washington, D.C., on Indian affairs, said during a news conference yesterday that he had grown up learning not to trust the government after the tribes lost more than 150,000 acres of prized land to make way for the Garrison Dam in the 1940s. Approval of the refinery was a step toward re-establishing trust, he said.

The MHA Nation and other tribes are fighting Interior on another energy issue: proposed Bureau of Land Management rules for hydraulic fracturing on public and tribal lands. Tribes have argued that their land should not be lumped in with public land for added regulation of well construction and chemical disclosure (EnergyWire, July 16).

North Dakota's booming oil patch produced 21.7 million barrels of oil and 23.6 billion cubic feet of natural gas last month.

Study finds no environmental impact around Calif. oil field
Ellen M. Gilmer, E&E reporter Energywire Published: Thursday, October 11, 2012

An oil and gas company operating in California is lauding the results of a study released yesterday that found hydraulic fracturing was not a threat to the environment in the Baldwin Hills area of Los Angeles County.

Plains Exploration & Production Co. (PXP) paid for an independent consultant to do the review of potential impacts as part of a 2011 lawsuit settlement with Culver City and environmental groups, which opposed PXP's use of fracking -- a method of extracting oil and gas by blasting chemical-laced water deep underground -- on two occasions in the area's Inglewood Oil Field.

The study, which was peer-reviewed by two outside specialists, addresses concerns about groundwater contamination, well integrity, earthquakes, air emissions and community health.

"In each and every category, the study did not detect significant impacts once the hydraulic fracturing had been completed," said PXP Vice President of Environmental, Health & Safety and Government Affairs Steve Rusch in a statement. "These facts are important for the community to know."

The report, conducted by environmental consulting firm Cardno Entrix, finds that groundwater beneath the oil field is geologically isolated from the Los Angeles Basin, a drinking water source. Pre-drilling and post-drilling monitoring did not show effects from fracking, although monitoring wells found arsenic, which occurs in naturally high levels in the basin.

Regarding well integrity, the study says that tests done before, during and after fracking did not weaken the steel and cement casings that buffer oil wells from the ground. It also cited measurements of seismicity and found that fracking in the oil field had "no detectable effects on vibration, and did not induce seismicity (earthquakes)."

Finally, the consultants write that air emissions from operations in the oil field were within the standards set by the state's South Coast Air Quality Management District and that the health of residents near the oil field was statisically no different from the health of other county residents.

Eric Adair, a Los Angeles-based energy attorney who tracks drilling issues in the area, said the results reaffirm the safety of fracking in California, but he added that he was doubtful many critics would accept the findings.

"Whether people are satisfied or not is up to them," he said, adding that he has read backlash already from critics who say they do not trust the study because it was funded by PXP. The oil company had no choice in the matter, as the settlement last year required it to fund the report.

The 1,000-acre Inglewood Oil Field was first discovered by Standard Oil in 1924, and PXP has operated it since December 2002. Some California residents began to voice concerns about fracking as the process, combined with horizontal drilling, began to spread across the country in recent years. California does not require drillers to obtain a permit to frack, and the state has no data on how often the practice is used there.

The state does not appear poised to ban the practice, despite calls from some environmentalists. The California Department of Conservation's Division of Oil, Gas and Geothermal Resources is reviewing state oversight and plans to revise oil and gas regulations, though a timeline for that process is unclear.

Veteran BLM official blasts agency for valuing drilling over conservation
Emily Yehle, E&E reporter Greenwire Published: Wednesday, October 10, 2012

The Interior Department's Bureau of Land Management has lost sight of its mission in the political rush to use public lands for energy development, according to an experienced agency official.

Stan Olmstead retired last month after 20 years at BLM, most recently as a natural resource specialist and environmental scientist in the Vernal Field Office in eastern Utah. In his last few minutes on the clock, he decided to send a three-page memo to his colleagues outlining what he saw as the agency's focus on economics at the expense of natural resources.

He described an office that promotes energy development and measures natural resources "by dollar value," leading to the neglect of sensitive species and the land's health. As examples, he pointed to the loss of the mountain plover in Utah and the delay in reclaiming unused oil and gas wells.

"Without serious fulfillment of the mission we continue to harm public land as it has been harmed so frequently in our historic past," Olmstead wrote. "Be honest about what is happening. It is easier to break something than to fix it, so let us stop breaking the land."

Public Employees for Environmental Responsibility released Olmstead's memo today, calling for a "visionary new leader" at BLM who will steer the agency away from what it sees as a focus on oil drilling. Bob Abbey retired in May as BLM director; since then, Deputy Director Mike Pool has served as acting director. http://www.peer.org/assets/docs/blm/10_10_12_Olmstead_memo.pdf

A BLM spokesman did not immediately return a request for comment.

Abbey had left BLM in 2005, citing the agency's singular focus on oil and gas drilling. He came back in 2009 as director and engineered a sweeping overhaul of oil and gas leasing on federal lands, promoting an expansion of renewable energy and a renewed focus on conservation.

But Olmstead depicts an agency that is still grappling with balancing its mission to protect public lands while reaching administrative goals to expand energy production. In an interview today, he pointed to a recent New York Times article that describes the close relationship between drillers and BLM officials in Utah.

Olmstead said his memo was "one last attempt to try to draw attention to the other values we have." His pleas -- and those of other natural resource employees -- while within the agency were mostly ignored, he said; protection of the health and diversity of public lands was simply not a priority.

"I think my main motive is to communicate," he said, adding that he has a meeting later this month with BLM Utah Director Juan Palma. "I have been somewhat quiet during my employment, and now that I'm in retirement I plan to speak out."

Inglewood fracking study finds no harm from method
Bakersfield Californian, The (CA) - Thursday, October 11, 2012
Author: RUBEN VIVES Los Angeles Times
LOS ANGELES -- A long-awaited study released Wednesday says the controversial oil extraction method known as hydraulic fracturing , or fracking , would not harm the environment if used at the Inglewood Oil Field in the Baldwin Hills area.

The yearlong study included several issues raised by residents living around the field, such as the potential risks for groundwater contamination, air pollution and increased seismic activity.

For months, water wells on the 1,200-acre field were monitored. Data from ground and air monitors were collected and analyzed, but no effects were recorded before or after the technique was used, the study says.

"There were eight contributing studies addressing such things as vibrations at the surface, microseismic activity at depth, noise, ground movement measurements, subsidence, groundwater quality, methane in both soil and groundwater," said Dan Tormey, technical director and principal at Cardno Entrix, the environmental consulting firm that conducted the study. "Each was a study that contributed to the (overall) hydraulic fracturing study."

Plains Exploration and Production Co., the owner and operator of the oil field, paid for the review as part of a settlement agreement with Culver City and environmental and community groups. The report was reviewed by two independent firms selected by the company and Los Angeles County.

The 206-page study is the first of its kind in the state. It comes at a time when environmental and community groups are urging lawmakers to ban fracking , a technique that fractures rock formations to release trapped oil and natural gas. The process involves a high-pressure injection of water, sand and chemical additives into the drill site's wellbore.

Fracking has come under scrutiny in other parts of the country amid allegations that it increases seismic activity and contaminates water supplies.

Situated two miles south of the 10 Freeway, the field is surrounded by Culver City, Baldwin Hills and Inglewood -- making it the largest urban oil field in the country. Plains Exploration is hoping to tap into the oil reserves in the field's shale formations that were identified in 2003.

But people living around the field oppose the idea. Residents say their properties have been damaged by mysterious land shifts, which has increased their fears about fracking .

Some homeowners suspect the movements may be related to Plains Exploration's drilling operations. But the actual cause is unclear; the area sits atop the Newport-Inglewood Fault.

Champion extends extraction moratorium
Carthage Republican Tribune (NY) - Thursday, October 11, 2012
Author: Elaine M. Avallone Johnson Newspapers
WEST CARTHAGE - Following a public hearing at which no one spoke, the town of Champion board extended the moratorium on natural gas or petroleum extraction for 180 days.

The issue was first presented at the April 2 meeting, and an initial 180-day moratorium was enacted at the May meeting to give the town board and Planning Board time to study the issues and develop regulations if deemed necessary.

Town Council members initially expressed concerns about the effect on the environment and property value of hydrofracking activities. During the spring meeting, Councilman Bruce R. Ferguson said that regulating the activity would be in line with the town's comprehensive plan in regard to land-use control.

Planning Board Chairman Peter J. LaBarge said members hope to have land-use regulations devised by the time the extension is up."It takes a lot of time to research," Mr. LaBarge said. "Everyone is worried about fracking . It does not seem very probable at this time - there's not much natural gas in Champion but we want to protect the town and the people for the future."

Test drill begins in Owego for data on Marcellus Shale
Daily Gazette, The (Schenectady, NY) - Thursday, October 11, 2012
OWEGO -- A Texas company has begun drilling a vertical well to explore the potential of the Marcellus Shale natural gas formation, joining about a dozen others probing the potentially lucrative rock beneath New York's southern tier.

Carizzo Oil & Gas of Houston recently started digging its first well north of the Tioga County village of Owego. The Houston-based energy company already has wells in the Eagle Ford and Barnett shale formations in Texas, as well as operations in Colorado, Ohio and the North Sea,

Richard Hunter, Carizzo's vice president of investor relations, said the exploratory well will determine whether the company pursues horizontal drilling .

Horizontal high volume hydraulic fracturing , or fracking , isn't permitted in New York. State regulators have been reviewing the highly polarizing issue for four years and could make a decision whether to allow it by the end of this year.

Fracking injects millions of gallons of chemical-laced water into the ground to crack rock and release gas. Supporters point to greater domestic energy supply, job creation and revenue for cash-starved states while opponents worry about pollution and health impacts.

The Marcellus, most of which underlies parts of Pennsylvania, Ohio, New York and West Virginia, is considered to be one of the richest natural gas reserves in the world.

The U.S. Geological Survey estimated last year that the region contains some 84 trillion cubic feet of undiscovered, recoverable natural gas, far more than its 2002 assessment of just 2 trillion.

"In an area where there's no production results, there's no prior production for Marcellus, it's really an unknown," Hunter said of the New York test well. "We know it's present, a number of historic wells have gone through the Marcellus, but we don't know much about the rock properties."

It's the company's first evaluation well in NY.

Vertical wells are allowed in New York and the shafts can later be turned into horizontal wells.

Natural gas drives energy, manufacturing rebirth in state
Erie Times-News (PA) - Thursday, October 11, 2012
Author: LOUIS D'AMICO, RALPH PONTILLO
The evidence in Pennsylvania and other Appalachian states is too striking to ignore: Our region is approaching a decades-long resurgence of growth in energy, manufacturing and industrial output that will be the envy of states around the nation. It is in its earliest stages in northwestern Pennsylvania, with Marcellus Shale wells being drilled in Forest and Warren counties, and exploratory Utica Shale wells in Crawford County.

The pace is higher in Ohio, where 19 rigs are currently operating. This means change and growth, and the natural gas industry and the region's manufacturing community are ready and eager to support northwestern Pennsylvania's further integration into the energy boom now occurring in dozens of counties, and share the benefits being experienced throughout the commonwealth.

A forum today at the Manufacturer and Business Association brings together business leaders to learn about opportunities in the industry that will lead to good-paying jobs in just about every sector of the economy. It is hosted by the MBA, the Keystone Energy

Forum, a partnership between the Associated Petroleum Industries of Pennsylvania and the Pennsylvania Independent Oil & Gas Association. Our workforce's familiarity with the skills required by the oil and natural gas industry will be an asset as drilling activity increases, as will our region's long history of energy production.

We can expect challenges, however, as developers evaluate the Utica Shale's potential. An important question focuses on what our region can do to answer those challenges. The first is to establish a dialogue in the community based on facts. Second is to ensure that a new generation of our workers have the skills needed for the full range of jobs available in the industry. Third is to welcome the industries and manufacturers that rely on natural gas as an integral part of their operations and that could be attracted to Pennsylvania due to low energy costs and the state's proximity to the country's large population centers.

There are legitimate questions and issues associated with oil and gas development. Those questions need to be answered based on the facts that have been borne out through decades of experience with oil and gas drilling and hydraulic fracturing . The past several years have been a considerable challenge to convey those facts in the face of misrepresentations raised by opponents to fossil fuels, especially in a number of energy-hungry cities along the eastern seaboard. We should demand a more balanced and researched dialogue on those important questions.

Our region is fortunate to have a base of experienced workers to support the industry, thanks to our conventional oil and gas producers, but the demand will exceed those numbers in the future. This presents a huge opportunity and challenge for educators at all levels. We must develop curriculum paths that lead to technical, engineering and related fields, and form partnerships with business to keep those academic programs in line with the required job skills. Equally important, we need to recognize and address the fact that too many people have little understanding of the range of important issues involving energy development.

Given that global demand for energy is expected to increase by almost 45 percent by 2035, energy education needs to be a priority subject in our schools. The combination of our gas reserves and access to cities in the Midwest and Northeast is already turning the economic fortunes of industrial operations as far east as Philadelphia, where shale gas supplies have helped to rescue two refineries slated to close, saving thousands of good-paying jobs. In the future, we can expect and need to welcome the industries that produce goods demanded by consumers, ranging from chemical and fertilizer producers to pharmaceutical manufacturers.

These positive developments are already taking place in Pennsylvania. Areas with drilling activity have among the lowest levels of unemployment in the state. Energy costs for consumers and businesses have dropped as much as 45 percent. Natural gas producers have paid more than $1 billion into state, county and local taxes in the last six years, and despite the claims of detractors, the industry is protecting Pennsylvania's land and water resources. As a region, we can look forward to a more prosperous future, thanks to these new sources of energy.

LOUIS D. D'AMICO is president of the Pennsylvania Independent Oil & Gas Association; RALPH PONTILLO is president of the Manufacturer & Business Association; and STEPHANIE CATARINO WISSMAN is executive director of the Associated Petroleum Industries of Pennsylvania.

UT-Austin to study methane emissions in natural gas fields
Fort Worth Star-Telegram (TX) - Thursday, October 11, 2012
Author: Jim Fuquay, jfuquay@star-telegram.com
The University of Texas at Austin is leading a major research study to measure methane emissions from natural gas production in several fields including the Barnett Shale, the latest academic effort to assess the environmental impact of the drilling boom.

The study, launched in May, is directly measuring emissions at sites, including hydraulically fractured wells. Results are expected to be released in January.

"A greater understanding of the amount of methane emitted into the atmosphere can better inform sound policies and management of emissions from well sites," the school said in a news release.

David Allen, principal investigator and director of the UT's Cockrell School of Engineering's Center for Energy and Environmental Resources, said the Barnett in North Texas was "among the most extensively sampled of the regions that we visited." Other fields included the Eagle Ford in South Texas, the Haynesville in East Texas and Louisiana, the Marcellus in Appalachia, the Fayetteville in Arkansas and the Denver-Julesberg in Colorado.

Methane is the primary component of natural gas and is a powerful greenhouse gas. Some investigators have concluded that natural gas can be a worse source of greenhouse gas than coal, based largely on the impact of unburned methane that leaks during production and transmission.

A Colorado study released earlier this year and based on 2008 measurements found higher-than-expected methane emissions.

And most recently, the Proceedings of the National Academy of Sciences published a report estimating a current leak rate of less than 3.2 percent for gas produced and used for power generation.

If the methane leakage rate can be reduced below 1 percent, that report said, then switching to vehicles powered by natural gas instead of other fossil fuels could provide immediate climate benefits. But like many previous studies, it relied on earlier estimates of emissions rather than contemporary measurements in the field

Participating are nine gas producers, including Fort Worth-based XTO Energy, two environmental testing firms and the Environmental Defense Fund.

"The study is unique in that it brings multiple key stakeholders to the table to make measurements of emissions at the well-pad. If we want natural gas to be an accepted part of a strategy for improving energy security and moving to a clean energy future, it is critical for all of us to work together to quantify and reduce methane emissions as may be appropriate," said Mark Brownstein, chief counsel to EDF's national energy program and head of EDF's natural gas efforts.

UT Austin said Allen has disclosed outside interests in accordance with UT's conflict of interest policies. The school was embarrassed this summer when it was learned that a study of hydraulic fracturing was led by professor Charles Groat, who did not disclose that he serves on the board of a large gas producer.

Jim Fuquay, 817-390-7552 Twitter: @jimfuquay

Fox Guarding Henhouse: Not Surprisingly, PXP Study Finds No Harm From Fracking at Inglewood Oil Field
Targeted News Service (USA) - Thursday, October 11, 2012
LOS ANGLES, Calif., Oct. 10 -- Food & Water Watch issued the following statement by Kristin Lynch, Pacific Region Director:

"The Inglewood Oil Field fracking study PXP released today is a quintessential example of the oil and gas industry hiding behind sponsored scientists and environmental consulting groups to skew findings to align with their financial interests. The study was paid for by PXP and conducted by Cardno ENTRIX, which advertises its ability to 'help the oil and gas industry meet its needs.' Further, it was peer reviewed by John P. Martin, a consultant that offers 'strategic planning, resource evaluation, project management and government/public relations services to the energy industry' and that has a record of promoting the drilling and fracking industry.

"The study looks at only the near-term impacts of a single stage of fracking done on just two vertical wells, but PXP plans to drill and frack many horizontal wells in many stages. The industry can now drill up to two miles or more horizontally, fracking in up to 40 stages along the way. This means that some of the near-term environmental impacts could be 40 times worse, on a per well basis. And there are fundamental differences in how horizontal drilling and multi-stage fracking will interact with the underlying Newport-Inglewood Fault, compared to just single stage fracking of vertical wells.

"The study dismisses the long-term risks to groundwater by essentially saying there isn't much of it, and by citing clearly biased criticism from Energy in Depth (an Independent Petroleum Association of America front group) of a peer-reviewed scientific study.

"Overall, the study protects the long-term profit interests of PXP with its narrow focus. The conflict of interest and lack of independent scientific scrutiny involved in this "study" could not be more obvious and does nothing to address the long-term risks that drilling and fracking pose to communities surrounding the Inglewood Oil Field. It is an example of shill science at it's worst."

TNS rd43 121011-4064311 StaffFurigay
Memo: Anna Ghosh, 415/265-1568, aghosh(at)fwwatch(dot)org

Fracking Illustrates Principles of Environmental and Resource Economics
Targeted News Service (USA) - Thursday, October 11, 2012
GRAHAMSTOWN, South Africa, Oct. 10 -- Rhodes University issued the following news:

The economic realities of the plan by oil companies to carry out the process of hydraulic fracturing for shale gas in the Karoo were explored in an inaugural lecture given by Professor Gavin Fraser of the Department of Economics and Economic History.

Commonly known as fracking , hydraulic fracturing is a method used to extract natural gas (such as shale gas) from reservoir rock

formations. There has been a heavy debate raging around the practice, with proponents pointing out the economic benefits and opponents the potentially severe environmental impacts which include the contamination of groundwater, destruction of aquifers, migration of gases and chemicals, possibly radioactive ones, to the surface, risks to air quality and, of course, the destruction of the natural habitats and ecosystems of the already fragile Karoo.

Professor Fraser, whose talk was entitled Institutional Economics and the Environment, has recently been awarded a research focus area by the Rhodes Research Office to explore environmental and resource economics from an institutional economics point of view.

While, historically, environmental exploitation has not topped the critical level for resources, the situation the world finds itself in today - use of fossil fuels, deforestation, overfishing, climate change - means that this can no longer be counted on to remain the case. The proliferation of largely ineffective Protocols, such as Kyoto, Rio, Stockholm and Montreal, indicate the concern which exists, albeit largely ineffectual up to this point.

Environmental economics is a relatively new area, only coming into its own in the 1970's, explained Professor Fraser, with ecological economics arising even later. In an interesting and informative exploration of economic history, he dealt with the evolution of economic theory, from classical practitioners such as Smith and Malthus through the neo-classical approach, and looked at New Institutional Economics' attempts to explain the interdependence of institutions, and their evolution over time, to evaluate their impact on economic growth.

Returning to the issue of fracking , Professor Fraser expounded on an application of New Institutional Economics, namely property rights. In the rush to attempt to extract the shale gas from the Karoo, property rights have, he says, been ignored and the principle of exclusivity inherent in the rights of the property owners would be breached if fracking concession holders were to go ahead onto privately owned land.

Farmers in the Karoo have incentive to either obtain a good price for the use of the land, or to retain and maintain their farms as they are for the use of future generations. Concession holders, such as Shell Oil, Sasol and Falcon Oil & Gas, should be negotiating with the farmers for a fair price for both the use of the land and its rehabilitation once the extraction process is complete.

By Jeannie Mckeown TNS C-sm92 121011-mt93-4065048 61MarlizTagarum

TX-based co. drills exploratory well in NY shale
Associated Press State Wire: New York (NY) - Wednesday, October 10, 2012
OWEGO, N.Y. (AP) — A Texas company has begun drilling a vertical well to explore the potential of the Marcellus Shale natural gas formation, joining about a dozen others probing the potentially lucrative rock beneath New York's southern tier.

Carizzo Oil & Gas of Houston recently started digging its first well north of the Tioga County village of Owego. The Houston-based energy company already has wells in the Eagle Ford and Barnett shale formations in Texas, as well as operations in Colorado, Ohio and the North Sea,

Richard Hunter, Carizzo's vice president of investor relations, said the exploratory well will determine whether the company pursues horizontal drilling .

Horizontal high volume hydraulic fracturing , or fracking , isn't permitted in New York. State regulators have been reviewing the highly polarizing issue for four years and could make a decision whether to allow it by the end of this year.

Fracking injects millions of gallons of chemical-laced water into the ground to crack rock and release gas. Supporters point to greater domestic energy supply, job creation and revenue for cash-starved states while opponents worry about pollution and health impacts.

The Marcellus, most of which underlies parts of Pennsylvania, Ohio, New York and West Virginia, is considered to be one of the richest natural gas reserves in the world. The U.S. Geological Survey estimated last year that the region contains some 84 trillion cubic feet of undiscovered, recoverable natural gas, far more than its 2002 assessment of just 2 trillion.

"In an area where there's no production results, there's no prior production for Marcellus, it's really an unknown," Hunter said of the New York test well. "We know it's present, a number of historic wells have gone through the Marcellus, but we don't know much about the rock properties."

It's the company's first evaluation well in NY.

Vertical wells are allowed in New York and the shafts can later be turned into horizontal wells.

Frack delay reeks of politics
Daily Star, The (Oneonta, NY) - Wednesday, October 10, 2012
Author: The Daily Star
Environmental advocates and anti-frackers are doing a victory lap after news came that New York state officials are likely to further delay any decision about the controversial gas drilling practice.

This may, indeed, be a good thing. After all, if one has to choose between getting it right and getting it done quickly, the former is clearly the way to go, particularly when it involves the health and welfare of millions of people.

What we fear, however, is that this latest delay is not out of concern for the health of Gov. Andrew Cuomo's constituents, but rather the health of his political career.

It would be naive to suggest that any decisions that get made about fracking in Albany could possibly escape the taint of politics. But it is particularly frustrating to see such a monumental decision get kicked down the road until after the November election. New Yorkers have been waiting for four years to see the state Department of Environmental Conservation's regulations that would govern horizontal hydraulic fracturing , and it's fair to say that everyone is a bit antsy.

In theory, there is nothing wrong with further study. Horizontal hydrofracking is a complex issue, and the technology that allows drillers to extract gas from shale continues to evolve. But no one (not Cuomo, and not the DEC) has been able to explain exactly what new information the state expects to collect.

After the tens of thousands of comments the DEC already read on the subject, what is it still waiting to hear from the public?

Cuomo told the New York Times "Let's get some facts and data and some science, and we'll make the decision on the science, which is what should be done here."

What the heck has the DEC been doing for four years if it hasn't amassed that data by now?

Cuomo and the DEC owe it to New Yorkers to shed a little more light on this latest delay, which looks for all the world like it's being orchestrated by a career politician who's just felt a noticeable shift in the wind and is changing tack accordingly.

Of course, Cuomo will still have to face the issue, no matter what happens in November. But he may hope to be able to sneak a decision through at a moment when there are fewer eyes on Albany. (Perhaps at 4 p.m. on Black Friday, for example.)

We're not necessarily in a rush for the DEC to make its decision. But the agency and the governor's office could both benefit from greater transparency. Taking it slowly is fine. Just tell us where it is that we're going, and how we're going to get there.

Longmont took stance against residential oil and gas wells in 1995
Daily Times-Call, The (Longmont, CO) - Wednesday, October 10, 2012
Author: Scott Rochat Longmont Times-Call
LONGMONT -- Oil and gas wells don't belong in a residential neighborhood. That's a familiar position for the Longmont City Council in 2012.

And apparently, also in 1995.

That's when the city condemned a gas well to help create the Ute Creek Golf Course. In the process, it declared that not only that well, but any well, had no business being near homes.

"The potential fire hazard of wells on and next to a residential community," reads ordinance O-95-47, "and the danger to residents and golfers from additional truck and service vehicle traffic and other perils associated with oil and gas development are contrary to the health, safety and welfare of present and future citizens, residents and golfers."

An attempt to place that idea in the city's zoning laws -- with, admittedly, no direct reference to golfers -- currently has Longmont in the middle of a lawsuit. In July, the Colorado Oil and Gas Conservation Commission sued the city over its newly adopted oil and gas regulations. The eight items the COGCC has disputed include a restriction on surface drilling in residential areas and a

requirement to disclose any hazardous materials transported on the city's roadways.

The Ute Creek action predated both those 2012 regulations and the city's last set of oil and gas rules, adopted in 2000. It also predates the common use of multi-well pads -- drilling multiple wells that reach in multiple directions from a single site -- and the modern controversy over hydraulic fracturing , or " fracking ," in which high-pressure fluid is used to crack rock deep underground to get at hard-to-reach oil and gas deposits.

The well condemnation was adopted in June 1995 and signed by then-Mayor Leona Stoecker. A court approved the action and granted the city possession that October, though the city did not post a bond with the COGCC until later, drawing a protest from the well's previous owner, TOP Operating.

"We have grave concerns that the Colorado Oil and Gas Conservation Commission will, by inaction, abrogate its authority to govern oil and gas operations in this state," TOP President Rodney K. Herring wrote to the COGCC. "The circumstances surrounding the condemnation of the subject oil and gas lease set a precedent that threatens your ability to govern and imperils all mineral properties in the Wattenburg gas field."

The well since has been plugged and abandoned.

"That particular well would have been pretty close to a platted lot, at least within 150 to 200 feet of a home," said city planner Brien Schumacher, one of the most involved in developing the city's new drilling rules. "It wasn't on the fairway, but it was on the fringe of the planned golf course, and there was concern about having the well that close to people's homes."

In urban areas, COGCC regulations call for a 350 foot "setback" distance between a well and an existing occupied building. That would not have applied in this case, since the well was on the site first.

"It was recognized that they're not good neighbors in a residential area," said then-city manager Gordon Pedrow, who since his retirement in April has been active in calling for stronger local control on oil and gas issues. "It was recognized even back then that it was an industrial use."

On hearing the 1995 language, Mayor Dennis Coombs' reaction was immediate: "Wow!"

"I can just tell Leona I'm following her lead," Coombs said, laughing. "She's on my side on this one!"

Stoecker has not taken a public position on the city's new oil and gas regulations, though she is one of seven former mayors -- along with Bryan Baum, Bob Askey, Roger Lange, Julia Pirnack, Al Sweney and Bill Swenson -- to publicly oppose Ballot Question 300, a citizen-initiated ballot issue to ban fracking from the city.

Stoecker could not be reached for comment Wednesday afternoon.

The new oil and gas rules passed by a 5-2 vote, following a 4-3 vote to keep the residential restrictions in. Councilwoman Katie Witt, a "nay" vote on both measures, said she wasn't surprised that the issue had been a concern 17 years ago as well.

"I don't think anyone has any question about wells right next to someone's home," said Witt, who has argued that, because of the city's growth pattern, few if any Longmont residential areas are in danger of having a well nearby. "People have made it very clear they have no interest in that."

Meanwhile, Coombs said he didn't mind surrendering some of his "groundbreaker" status on the issue to Stoecker and the 1995 council.

"I think that's great that she had the foresight to think of these things back in 1995," Coombs teased. "I don't mind being second on this. I don't have to be first."

Scott Rochat can be reached at 303-684-5220 or srochat@times-call.com.
Caption: Photo: Phil Kretsinger tees off on the first hole at Ute Creek Golf Course Wednesday morning Oct. 10, 2012. (Lewis Geyer/Times-Call)
Photo: Golfers wait to tee off on the second hole at Ute Creek Golf Course Wednesday morning, Oct. 10. Photo: Terry Robuck watches his tee shot on the no. 2 hole at Ute Creek Golf Course on Wednesday morning Oct. 10, 2012. (Lewis Geyer/Times-Call)

Well injection, quakes linked

Dominion Post, The (Morgantown, WV) - Wednesday, October 10, 2012
Author: David Beard, The Dominion Post, Morgantown, W.Va.
Oct. 10--CHARLESTON -- There's no evidence to date that fracking causes earthquakes -- but there is some correspondence between quakes and deep-well injection of wastewater.

Michael Hohn, director of the West Virginia Geological and Economic Survey, based in Morgantown, conveyed this to members of a joint legislative Judiciary subcommittee Tuesday morning.

The U.S. Geological Survey reports: "Earthquakes induced by human activity have been documented in a few locations in the United States, Japan and Canada. The cause was injection of fluids into deep wells for waste disposal and secondary recovery of oil, and the filling of large reservoirs for water supplies. Most of these earthquakes were minor."

Several injection wells in the Youngstown, Ohio, area were closed this year after a series of 11 quakes -- the strongest magnitude 4.0 -- in late 2011, according to reports.

Braxton County experienced what Hohn called a "swarm of earthquakes" in 2010 -- all of them mild, as high as 3.4, which can rattle dishes.

Hohn pointed out that Braxton has one injection well.

Sen. Clark Barnes, R-Randolph, asked Hohn about the counties immediately northeast -- Lewis and Upshur. Hohn said those counties have many more wells, and several months after the Braxton swarm, they experienced two small quakes.

The risk factors for quakes from human activity include proximity to fault lines, how the activity affects the pore pressure of the rock formations where the activity takes place, and the degree the formations are subject to stress and brittleness.

In the case of the West Virginia quakes, no one knew there was a fault line there until the quakes occurred. Now they know one runs southwest to northeast -- paralleling the line of the mountains.

Fracking -- hydraulic fracturing of the rock formation to allow gas to follow -- doesn't pose much seismic risk, Hohn said. There are 35,000 shale wells and only three instances of seismic activity associated with them -- one in England and two in Oklahoma -- and the data on one of the Oklahoma quakes are inconclusive.

There are 30,000 injection wells in the nation. An area in central Arkansas experienced about 100 quakes in 2011, before activity at two injection wells was suspended, according to the Center for Earthquake Research and Information. The highest was 4.7, enough to cause some damage.

After the wells were closed, the number and severity of the quakes decreased, leading scientists to believe the quakes were connected to the wells -- though not convinced enough to call it proof.

The National Academy of Sciences National Research Council said this in a report this year: "Of all the energy-related injection and extraction activities conducted in the United States, only a very small fraction have induced seismicity at levels noticeable to the public (that is, above magnitude 2.0). ... Hydraulic fracturing to date has been confirmed as the cause for small, felt seismic events at one location in the world. The process of hydraulic fracturing a well as presently implemented for shale gas recovery does not pose a high risk for inducing felt seismic events."

It continues: "Water injection for disposal has been suspected or determined a likely cause for induced seismicity at approximately 8 sites in the past several decades. However, the long-term effects of increasing the number of waste water disposal wells on the potential for induced seismicity are unknown, and wells used only for waste water disposal usually do not undergo detailed geologic review prior to injection, in contrast to wells for enhanced oil recovery and secondary recovery."

Hohn said quakes can continue for months or years following injection. It's hard to evaluate the potential in advance, as there's no way to locate unmapped faults and measure the stress.

In response to a question from subcommittee co-chairman Delegate Tim Manchin, D-Marion, Hohn said the quakes can become more severe over time. The last Ohio quake was the strongest.

Hohn said that U.S. Geological Survey earthquake expert William Leith told Congress in June there's still not enough data, but recommended states require seismic monitoring as part of the permitting process.

Hohn told Manchin four monitors ranged as far as a well is deep -- about a mile -- would cost about $100,000 total.

Manchin asked Hohn if the Braxton quakes have produced evidence of water wells suffering damage or diminished water levels, or of cracked gas well casings. Hohn said he's had no word on any of that happening.

Hohn said the jury is still out on one potential wave of the future: Carbon capture and sequestration -- storing carbon dioxide emissions underground so they don't produce greenhouse effects.

The National Research Council said this in its report: "Carbon capture and storage differs from other energy technologies because it involves the continuous injection of very large volumes of carbon dioxide under high pressure, and is intended for long term storage with no fluid withdrawal. The large net volumes of carbon dioxide that would help reduce global carbon dioxide emissions to the atmosphere may have potential for inducing larger felt seismic events due to increases in pore pressure over time; potential effects of large-scale carbon capture storage projects require further research."
Memo: --- (c)2012 The Dominion Post (Morgantown, W.Va.)

Markey, Waxman, DeGette: Loopholes in Federal Oversight of Oil and Gas Drilling Demand Congressional Action - Rep. Ed Markey (D-MA) News Release
Government Press Releases (USA) - Wednesday, October 10, 2012
WASHINGTON, DC -- The Government Accountability Office (GAO) today released two reports on oil and gas development of shale resources and the utilization of hydraulic fracturing technology. GAO completed the reports in response to a bicameral request made by Reps. Edward J. Markey (D-Mass.), Henry A. Waxman (D-Calif.), Diana DeGette (D-Colo.) and four other Senators. These reports come at a time of increased domestic oil and gas production and environmental concerns related to hydraulic fracturing .

"We shouldn't let chemicals and pollutants seep into the environment due to loopholes in the laws governing oil and gas drilling," said Rep. Markey, Ranking Member of the Natural Resources Committee. "Regulators have operated with one hand tied behind their back for too long when it comes to the oil and gas industry. Federal officials are limited in their ability to even collect the information necessary for conducting oversight activities. Congress should enact changes to the law that will strengthen oversight of hydraulic fracturing operations, including the disposal of fracturing fluids. In turn, this will strengthen public confidence in this new source of American energy that we can harness to meet our nation's future energy needs."

"EPA and the states share responsibility for ensuring that oil and gas development doesn't irreparably harm the quality of the air we breathe and the water we drink," said Rep. Waxman, Ranking Member of the Energy and Commerce Committee. "To do its job and enforce the law, EPA needs timely and unfettered access to information about oil and gas operations, the chemicals they are using, and their releases to air, land, and water."

"Over and over again, GAO highlights that shale oil and gas development can pose inherent environmental and public health risks," said Rep. DeGette, Ranking Member of the Subcommittee on Oversight and Investigations. "Exemptions and limitations make it difficult to determine the extent of those risks. That's why I introduced the FRAC Act, which allows for chemical disclosure and federal oversight of hydraulic fracturing to ensure that the economic benefits of oil and gas production do not come at the expense of the health and safety of our families and communities."

The new GAO reports describe the main environmental risks associated with unconventional shale resource development, including risks to air quality, land resources, wildlife and surface water and groundwater quality. While many assume that these risks can be mitigated by the Environmental Protection Agency (EPA) using its authority under national environmental laws, the GAO also clearly identifies key exemptions for or limitations in the applicab
ichest natural gas reserves in the world.

The U.S. Geological Survey estimated last year that the region contains some 84 trillion cubic feet of undiscovered, recoverable natural gas, far more than its 2002 assessment of just 2 trillion.

"In an area where there's no production results, there's no prior production for Marcellus, it's really an unknown," Hunter said of the New York test well. "We know it's present, a number of historic wells have gone through the Marcellus, but we don't know much about the rock properties."

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Vertical wells are allowed in New York and the shafts can later be turned into horizontal wells.

Natural gas drives energy, manufacturing rebirth in state
Erie Times-News (PA) - Thursday, October 11, 2012
Author: LOUIS D'AMICO, RALPH PONTILLO
The evidence in Pennsylvania and other Appalachian states is too striking to ignore: Our region is approaching a decades-long resurgence of growth in energy, manufacturing and industrial output that will be the envy of states around the nation. It is in its earliest stages in northwestern Pennsylvania, with Marcellus Shale wells being drilled in Forest and Warren counties, and exploratory Utica Shale wells in Crawford County.

The pace is higher in Ohio, where 19 rigs are currently operating. This means change and growth, and the natural gas industry and the region's manufacturing community are ready and eager to support northwestern Pennsylvania's further integration into the energy boom now occurring in dozens of counties, and share the benefits being experienced throughout the commonwealth.

A forum today at the Manufacturer and Business Association brings together business leaders to learn about opportunities in the industry that will lead to good-paying jobs in just about every sector of the economy. It is hosted by the MBA, the Keystone Energy Forum, a partnership between the Associated Petroleum Industries of Pennsylvania and the Pennsylvania Independent Oil & Gas Association. Our workforce's familiarity with the skills required by the oil and natural gas industry will be an asset as drilling activity increases, as will our region's long history of energy production.

We can expect challenges, however, as developers evaluate the Utica Shale's potential. An important question focuses on what our region can do to answer those challenges. The first is to establish a dialogue in the community based on facts. Second is to ensure that a new generation of our workers have the skills needed for the full range of jobs available in the industry. Third is to welcome the industries and manufacturers that rely on natural gas as an integral part of their operations and that could be attracted to Pennsylvania due to low energy costs and the state's proximity to the country's large population centers.

There are legitimate questions and issues associated with oil and gas development. Those questions need to be answered based on the facts that have been borne out through decades of experience with oil and gas drilling and hydraulic fracturing . The past several years have been a considerable challenge to convey those facts in the face of misrepresentations raised by opponents to fossil fuels, especially in a number of energy-hungry cities along the eastern seaboard. We should demand a more balanced and researched dialogue on those important questions.

Our region is fortunate to have a base of experienced workers to support the industry, thanks to our conventional oil and gas producers, but the demand will exceed those numbers in the future. This presents a huge opportunity and challenge for educators at all levels. We must develop curriculum paths that lead to technical, engineering and related fields, and form partnerships with business to keep those academic programs in line with the required job skills. Equally important, we need to recognize and address the fact that too many people have little understanding of the range of important issues involving energy development.

Given that global demand for energy is expected to increase by almost 45 percent by 2035, energy education needs to be a priority subject in our schools. The combination of our gas reserves and access to cities in the Midwest and Northeast is already turning the economic fortunes of industrial operations as far east as Philadelphia, where shale gas supplies have helped to rescue two refineries slated to close, saving thousands of good-paying jobs. In the future, we can expect and need to welcome the industries that produce goods demanded by consumers, ranging from chemical and fertilizer producers to pharmaceutical manufacturers.

These positive developments are already taking place in Pennsylvania. Areas with drilling activity have among the lowest levels of unemployment in the state. Energy costs for consumers and businesses have dropped as much as 45 percent. Natural gas producers have paid more than $1 billion into state, county and local taxes in the last six years, and despite the claims of detractors, the industry is protecting Pennsylvania's land and water resources. As a region, we can look forward to a more prosperous future, thanks to these new sources of energy.

LOUIS D. D'AMICO is president of the Pennsylvania Independent Oil & Gas Association; RALPH PONTILLO is president of the Manufacturer & Business Association; and STEPHANIE CATARINO WISSMAN is executive director of the Associated Petroleum Industries of Pennsylvania.

UT-Austin to study methane emissions in natural gas fields
Fort Worth Star-Telegram (TX) - Thursday, October 11, 2012
Author: Jim Fuquay, jfuquay@star-telegram.com
The University of Texas at Austin is leading a major research study to measure methane emissions from natural gas production in several fields including the Barnett Shale, the latest academic effort to assess the environmental impact of the drilling boom.

The study, launched in May, is directly measuring emissions at sites, including hydraulically fractured wells. Results are expected to be released in January.

"A greater understanding of the amount of methane emitted into the atmosphere can better inform sound policies and management of emissions from well sites," the school said in a news release.

David Allen, principal investigator and director of the UT's Cockrell School of Engineering's Center for Energy and Environmental Resources, said the Barnett in North Texas was "among the most extensively sampled of the regions that we visited." Other fields included the Eagle Ford in South Texas, the Haynesville in East Texas and Louisiana, the Marcellus in Appalachia, the Fayetteville in Arkansas and the Denver-Julesberg in Colorado.

Methane is the primary component of natural gas and is a powerful greenhouse gas. Some investigators have concluded that natural gas can be a worse source of greenhouse gas than coal, based largely on the impact of unburned methane that leaks during production and transmission.

A Colorado study released earlier this year and based on 2008 measurements found higher-than-expected methane emissions.

And most recently, the Proceedings of the National Academy of Sciences published a report estimating a current leak rate of less than 3.2 percent for gas produced and used for power generation.

If the methane leakage rate can be reduced below 1 percent, that report said, then switching to vehicles powered by natural gas instead of other fossil fuels could provide immediate climate benefits. But like many previous studies, it relied on earlier estimates of emissions rather than contemporary measurements in the field

Participating are nine gas producers, including Fort Worth-based XTO Energy, two environmental testing firms and the Environmental Defense Fund.

"The study is unique in that it brings multiple key stakeholders to the table to make measurements of emissions at the well-pad. If we want natural gas to be an accepted part of a strategy for improving energy security and moving to a clean energy future, it is critical for all of us to work together to quantify and reduce methane emissions as may be appropriate," said Mark Brownstein, chief counsel to EDF's national energy program and head of EDF's natural gas efforts.

UT Austin said Allen has disclosed outside interests in accordance with UT's conflict of interest policies. The school was embarrassed this summer when it was learned that a study of hydraulic fracturing was led by professor Charles Groat, who did not disclose that he serves on the board of a large gas producer.

Jim Fuquay, 817-390-7552 Twitter: @jimfuquay

Fox Guarding Henhouse: Not Surprisingly, PXP Study Finds No Harm From Fracking at Inglewood Oil Field
Targeted News Service (USA) - Thursday, October 11, 2012
LOS ANGLES, Calif., Oct. 10 -- Food & Water Watch issued the following statement by Kristin Lynch, Pacific Region Director:

"The Inglewood Oil Field fracking study PXP released today is a quintessential example of the oil and gas industry hiding behind sponsored scientists and environmental consulting groups to skew findings to align with their financial interests. The study was paid for by PXP and conducted by Cardno ENTRIX, which advertises its ability to 'help the oil and gas industry meet its needs.' Further, it was peer reviewed by John P. Martin, a consultant that offers 'strategic planning, resource evaluation, project management and government/public relations services to the energy industry' and that has a record of promoting the drilling and fracking industry.

"The study looks at only the near-term impacts of a single stage of fracking done on just two vertical wells, but PXP plans to drill and frack many horizontal wells in many stages. The industry can now drill up to two miles or more horizontally, fracking in up to 40 stages along the way. This means that some of the near-term environmental impacts could be 40 times worse, on a per well basis. And there are fundamental differences in how horizontal drilling and multi-stage fracking will interact with the underlying Newport-Inglewood Fault, compared to just single stage fracking of vertical wells.

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"Overall, the study protects the long-term profit interests of PXP with its narrow focus. The conflict of interest and lack of independent scientific scrutiny involved in this "study" could not be more obvious and does nothing to address the long-term risks that drilling and fracking pose to communities surrounding the Inglewood Oil Field. It is an example of shill science at it's worst."

TNS rd43 121011-4064311 StaffFurigay
Memo: Anna Ghosh, 415/265-1568, aghosh(at)fwwatch(dot)org

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By Jeannie Mckeown TNS C-sm92 121011-mt93-4065048 61MarlizTagarum

TX-based co. drills exploratory well in NY shale
Associated Press State Wire: New York (NY) - Wednesday, October 10, 2012
OWEGO, N.Y. (AP) — A Texas company has begun drilling a vertical well to explore the potential of the Marcellus Shale natural gas formation, joining about a dozen others probing the potentially lucrative rock beneath New York's southern tier.

Carizzo Oil & Gas of Houston recently started digging its first well north of the Tioga County village of Owego. The Houston-based energy company already has wells in the Eagle Ford and Barnett shale formations in Texas, as well as operations in Colorado, Ohio and the North Sea,

Richard Hunter, Carizzo's vice president of investor relations, said the exploratory well will determine whether the company pursues horizontal drilling .

Horizontal high volume hydraulic fracturing , or fracking , isn't permitted in New York. State regulators have been reviewing the highly polarizing issue for four years and could make a decision whether to allow it by the end of this year.

Fracking injects millions of gallons of chemical-laced water into the ground to crack rock and release gas. Supporters point to greater domestic energy supply, job creation and revenue for cash-starved states while opponents worry about pollution and health impacts.

The Marcellus, most of which underlies parts of Pennsylvania, Ohio, New York and West Virginia, is considered to be one of the richest natural gas reserves in the world. The U.S. Geological Survey estimated last year that the region contains some 84 trillion cubic feet of undiscovered, recoverable natural gas, far more than its 2002 assessment of just 2 trillion.

"In an area where there's no production results, there's no prior production for Marcellus, it's really an unknown," Hunter said of the New York test well. "We know it's present, a number of historic wells have gone through the Marcellus, but we don't know much about the rock properties."

It's the company's first evaluation well in NY.

Vertical wells are allowed in New York and the shafts can later be turned into horizontal wells.

Frack delay reeks of politics
Daily Star, The (Oneonta, NY) - Wednesday, October 10, 2012
Author: The Daily Star
Environmental advocates and anti-frackers are doing a victory lap after news came that New York state officials are likely to further delay any decision about the controversial gas drilling practice.

This may, indeed, be a good thing. After all, if one has to choose between getting it right and getting it done quickly, the former is clearly the way to go, particularly when it involves the health and welfare of millions of people.

What we fear, however, is that this latest delay is not out of concern for the health of Gov. Andrew Cuomo's constituents, but rather the health of his political career.

It would be naive to suggest that any decisions that get made about fracking in Albany could possibly escape the taint of politics. But it is particularly frustrating to see such a monumental decision get kicked down the road until after the November election. New Yorkers have been waiting for four years to see the state Department of Environmental Conservation's regulations that would govern horizontal hydraulic fracturing , and it's fair to say that everyone is a bit antsy.

In theory, there is nothing wrong with further study. Horizontal hydrofracking is a complex issue, and the technology that allows drillers to extract gas from shale continues to evolve. But no one (not Cuomo, and not the DEC) has been able to explain exactly what new information the state expects to collect.

After the tens of thousands of comments the DEC already read on the subject, what is it still waiting to hear from the public?

Cuomo told the New York Times "Let's get some facts and data and some science, and we'll make the decision on the science, which is what should be done here."

What the heck has the DEC been doing for four years if it hasn't amassed that data by now?

Cuomo and the DEC owe it to New Yorkers to shed a little more light on this latest delay, which looks for all the world like it's being orchestrated by a career politician who's just felt a noticeable shift in the wind and is changing tack accordingly.

Of course, Cuomo will still have to face the issue, no matter what happens in November. But he may hope to be able to sneak a decision through at a moment when there are fewer eyes on Albany. (Perhaps at 4 p.m. on Black Friday, for example.)

We're not necessarily in a rush for the DEC to make its decision. But the agency and the governor's office could both benefit from greater transparency. Taking it slowly is fine. Just tell us where it is that we're going, and how we're going to get there.

Longmont took stance against residential oil and gas wells in 1995
Daily Times-Call, The (Longmont, CO) - Wednesday, October 10, 2012
Author: Scott Rochat Longmont Times-Call

LONGMONT -- Oil and gas wells don't belong in a residential neighborhood. That's a familiar position for the Longmont City Council in 2012.

And apparently, also in 1995.

That's when the city condemned a gas well to help create the Ute Creek Golf Course. In the process, it declared that not only that well, but any well, had no business being near homes.

"The potential fire hazard of wells on and next to a residential community," reads ordinance O-95-47, "and the danger to residents and golfers from additional truck and service vehicle traffic and other perils associated with oil and gas development are contrary to the health, safety and welfare of present and future citizens, residents and golfers."

An attempt to place that idea in the city's zoning laws -- with, admittedly, no direct reference to golfers -- currently has Longmont in the middle of a lawsuit. In July, the Colorado Oil and Gas Conservation Commission sued the city over its newly adopted oil and gas regulations. The eight items the COGCC has disputed include a restriction on surface drilling in residential areas and a requirement to disclose any hazardous materials transported on the city's roadways.

The Ute Creek action predated both those 2012 regulations and the city's last set of oil and gas rules, adopted in 2000. It also predates the common use of multi-well pads -- drilling multiple wells that reach in multiple directions from a single site -- and the modern controversy over hydraulic fracturing , or " fracking ," in which high-pressure fluid is used to crack rock deep underground to get at hard-to-reach oil and gas deposits.

The well condemnation was adopted in June 1995 and signed by then-Mayor Leona Stoecker. A court approved the action and granted the city possession that October, though the city did not post a bond with the COGCC until later, drawing a protest from the well's previous owner, TOP Operating.

"We have grave concerns that the Colorado Oil and Gas Conservation Commission will, by inaction, abrogate its authority to govern oil and gas operations in this state," TOP President Rodney K. Herring wrote to the COGCC. "The circumstances surrounding the condemnation of the subject oil and gas lease set a precedent that threatens your ability to govern and imperils all mineral properties in the Wattenburg gas field."

The well since has been plugged and abandoned.

"That particular well would have been pretty close to a platted lot, at least within 150 to 200 feet of a home," said city planner Brien Schumacher, one of the most involved in developing the city's new drilling rules. "It wasn't on the fairway, but it was on the fringe of the planned golf course, and there was concern about having the well that close to people's homes."

In urban areas, COGCC regulations call for a 350 foot "setback" distance between a well and an existing occupied building. That would not have applied in this case, since the well was on the site first.

"It was recognized that they're not good neighbors in a residential area," said then-city manager Gordon Pedrow, who since his retirement in April has been active in calling for stronger local control on oil and gas issues. "It was recognized even back then that it was an industrial use."

On hearing the 1995 language, Mayor Dennis Coombs' reaction was immediate: "Wow!"

"I can just tell Leona I'm following her lead," Coombs said, laughing. "She's on my side on this one!"

Stoecker has not taken a public position on the city's new oil and gas regulations, though she is one of seven former mayors -- along with Bryan Baum, Bob Askey, Roger Lange, Julia Pirnack, Al Sweney and Bill Swenson -- to publicly oppose Ballot Question 300, a citizen-initiated ballot issue to ban fracking from the city.

Stoecker could not be reached for comment Wednesday afternoon.

The new oil and gas rules passed by a 5-2 vote, following a 4-3 vote to keep the residential restrictions in. Councilwoman Katie Witt, a "nay" vote on both measures, said she wasn't surprised that the issue had been a concern 17 years ago as well.

"I don't think anyone has any question about wells right next to someone's home," said Witt, who has argued that, because of the city's growth pattern, few if any Longmont residential areas are in danger of having a well nearby. "People have made it very clear

they have no interest in that."

Meanwhile, Coombs said he didn't mind surrendering some of his "groundbreaker" status on the issue to Stoecker and the 1995 council.

"I think that's great that she had the foresight to think of these things back in 1995," Coombs teased. "I don't mind being second on this. I don't have to be first."

Scott Rochat can be reached at 303-684-5220 or srochat@times-call.com.
Caption: Photo: Phil Kretsinger tees off on the first hole at Ute Creek Golf Course Wednesday morning Oct. 10, 2012. (Lewis Geyer/Times-Call)
Photo: Golfers wait to tee off on the second hole at Ute Creek Golf Course Wednesday morning, Oct. 10. Photo: Terry Robuck watches his tee shot on the no. 2 hole at Ute Creek Golf Course on Wednesday morning Oct. 10, 2012. (Lewis Geyer/Times-Call)

Well injection, quakes linked
Dominion Post, The (Morgantown, WV) - Wednesday, October 10, 2012
Author: David Beard, The Dominion Post, Morgantown, W.Va.
Oct. 10--CHARLESTON -- There's no evidence to date that fracking causes earthquakes -- but there is some correspondence between quakes and deep-well injection of wastewater.

Michael Hohn, director of the West Virginia Geological and Economic Survey, based in Morgantown, conveyed this to members of a joint legislative Judiciary subcommittee Tuesday morning.

The U.S. Geological Survey reports: "Earthquakes induced by human activity have been documented in a few locations in the United States, Japan and Canada. The cause was injection of fluids into deep wells for waste disposal and secondary recovery of oil, and the filling of large reservoirs for water supplies. Most of these earthquakes were minor."

Several injection wells in the Youngstown, Ohio, area were closed this year after a series of 11 quakes -- the strongest magnitude 4.0 -- in late 2011, according to reports.

Braxton County experienced what Hohn called a "swarm of earthquakes" in 2010 -- all of them mild, as high as 3.4, which can rattle dishes.

Hohn pointed out that Braxton has one injection well.

Sen. Clark Barnes, R-Randolph, asked Hohn about the counties immediately northeast -- Lewis and Upshur. Hohn said those counties have many more wells, and several months after the Braxton swarm, they experienced two small quakes.

The risk factors for quakes from human activity include proximity to fault lines, how the activity affects the pore pressure of the rock formations where the activity takes place, and the degree the formations are subject to stress and brittleness.

In the case of the West Virginia quakes, no one knew there was a fault line there until the quakes occurred. Now they know one runs southwest to northeast -- paralleling the line of the mountains.

Fracking -- hydraulic fracturing of the rock formation to allow gas to follow -- doesn't pose much seismic risk, Hohn said. There are 35,000 shale wells and only three instances of seismic activity associated with them -- one in England and two in Oklahoma -- and the data on one of the Oklahoma quakes are inconclusive.

There are 30,000 injection wells in the nation. An area in central Arkansas experienced about 100 quakes in 2011, before activity at two injection wells was suspended, according to the Center for Earthquake Research and Information. The highest was 4.7, enough to cause some damage.

After the wells were closed, the number and severity of the quakes decreased, leading scientists to believe the quakes were connected to the wells -- though not convinced enough to call it proof.

The National Academy of Sciences National Research Council said this in a report this year: "Of all the energy-related injection and extraction activities conducted in the United States, only a very small fraction have induced seismicity at levels noticeable to the public (that is, above magnitude 2.0). ... Hydraulic fracturing to date has been confirmed as the cause for small, felt seismic events at one location in the world. The process of hydraulic fracturing a well as presently implemented for shale gas recovery

does not pose a high risk for inducing felt seismic events."

It continues: "Water injection for disposal has been suspected or determined a likely cause for induced seismicity at approximately 8 sites in the past several decades. However, the long-term effects of increasing the number of waste water disposal wells on the potential for induced seismicity are unknown, and wells used only for waste water disposal usually do not undergo detailed geologic review prior to injection, in contrast to wells for enhanced oil recovery and secondary recovery."

Hohn said quakes can continue for months or years following injection. It's hard to evaluate the potential in advance, as there's no way to locate unmapped faults and measure the stress.

In response to a question from subcommittee co-chairman Delegate Tim Manchin, D-Marion, Hohn said the quakes can become more severe over time. The last Ohio quake was the strongest.

Hohn said that U.S. Geological Survey earthquake expert William Leith told Congress in June there's still not enough data, but recommended states require seismic monitoring as part of the permitting process.

Hohn told Manchin four monitors ranged as far as a well is deep -- about a mile -- would cost about $100,000 total.

Manchin asked Hohn if the Braxton quakes have produced evidence of water wells suffering damage or diminished water levels, or of cracked gas well casings. Hohn said he's had no word on any of that happening.

Hohn said the jury is still out on one potential wave of the future: Carbon capture and sequestration -- storing carbon dioxide emissions underground so they don't produce greenhouse effects.

The National Research Council said this in its report: "Carbon capture and storage differs from other energy technologies because it involves the continuous injection of very large volumes of carbon dioxide under high pressure, and is intended for long term storage with no fluid withdrawal. The large net volumes of carbon dioxide that would help reduce global carbon dioxide emissions to the atmosphere may have potential for inducing larger felt seismic events due to increases in pore pressure over time; potential effects of large-scale carbon capture storage projects require further research."
Memo: --- (c)2012 The Dominion Post (Morgantown, W.Va.)

Markey, Waxman, DeGette: Loopholes in Federal Oversight of Oil and Gas Drilling Demand Congressional Action - Rep. Ed Markey (D-MA) News Release
Government Press Releases (USA) - Wednesday, October 10, 2012
WASHINGTON, DC -- The Government Accountability Office (GAO) today released two reports on oil and gas development of shale resources and the utilization of hydraulic fracturing technology. GAO completed the reports in response to a bicameral request made by Reps. Edward J. Markey (D-Mass.), Henry A. Waxman (D-Calif.), Diana DeGette (D-Colo.) and four other Senators. These reports come at a time of increased domestic oil and gas production and environmental concerns related to hydraulic fracturing .

"We shouldn't let chemicals and pollutants seep into the environment due to loopholes in the laws governing oil and gas drilling," said Rep. Markey, Ranking Member of the Natural Resources Committee. "Regulators have operated with one hand tied behind their back for too long when it comes to the oil and gas industry. Federal officials are limited in their ability to even collect the information necessary for conducting oversight activities. Congress should enact changes to the law that will strengthen oversight of hydraulic fracturing operations, including the disposal of fracturing fluids. In turn, this will strengthen public confidence in this new source of American energy that we can harness to meet our nation's future energy needs."

"EPA and the states share responsibility for ensuring that oil and gas development doesn't irreparably harm the quality of the air we breathe and the water we drink," said Rep. Waxman, Ranking Member of the Energy and Commerce Committee. "To do its job and enforce the law, EPA needs timely and unfettered access to information about oil and gas operations, the chemicals they are using, and their releases to air, land, and water."

"Over and over again, GAO highlights that shale oil and gas development can pose inherent environmental and public health risks," said Rep. DeGette, Ranking Member of the Subcommittee on Oversight and Investigations. "Exemptions and limitations make it difficult to determine the extent of those risks. That's why I introduced the FRAC Act, which allows for chemical disclosure and federal oversight of hydraulic fracturing to ensure that the economic benefits of oil and gas production do not come at the expense of the health and safety of our families and communities."

The new GAO reports describe the main environmental risks associated with unconventional shale resource development,

including risks to air quality, land resources, wildlife and surface water and groundwater quality. While many assume that these risks can be mitigated by the Environmental Protection Agency (EPA) using its authority under national environmental laws, the GAO also clearly identifies key exemptions for or limitations in the applicability of these laws to oil and gas development activities that prevent EPA from taking any action.

For example:

* Hydraulic fracturing with fluids other than diesel is exempted from permit requirements under the Safe Drinking Water Act.

* Release of hazardous air pollutants from oil and gas wells and their associated equipment can not be aggregated and regulated as a major source of air pollution under the Clean Air Act, as typically is done with other industrial stationary sources.

* Typically, EPA requires permits for stormwater discharges at construction sites, which prevents sediment from entering nearby streams. These permits are not required for construction activities on oil and gas well sites.

* The Emergency Planning and Community Right to Know Act established the Toxics Release Inventory (TRI)--a publicly available database containing information about chemical releases from more than 20,000 industrial facilities--but oil and gas operators are not required to report chemical releases under TRI.

* EPA cannot treat oil and gas production wastes as hazardous under the Resource Conservation and Recovery Act.

The GAO report describing shale resources and environmental risks entitled "Information on Shale Resources, Development, and Environmental and Public Health Risks" can be found HERE http://markey.house.gov/document/2012/gao-report-shale-and-public-health-risks.

The GAO report reviewing state and federal laws applying to oil and gas development entitled "Key Environmental and Public Health Requirements" can be found HERE http://markey.house.gov/document/2012/gao-report-unconventional-oil-and-gas-driling.

This past summer, the Department of Interior for the first time in more than thirty years proposed regulations for hydraulic fracturing on federal lands. While acknowledged as an important step in establishing basic safety protections for public health and the environment, Rep. Markey submitted a critique of these rules suggesting several areas for improvement. Earlier this year, Rep. Markey also released a report detailing oil and gas drilling violations occurring on federal lands. The report found that Department of Interior inspectors were severely limited in their enforcement actions and restricted in the amount of fines levied against violating companies because of outdated and lenient laws and regulations. In fact, all fines issued to more than 300 companies in 17 states over more than a decade were less than $275,000.

In 2011 an investigation released by Reps. Waxman, Markey, and DeGette found that the fourteen leading oil and gas companies used more than 32 million gallons of unpermitted diesel fuel as a component of their hydraulic fracturing fluid, a violation of the Safe Drinking Water Act. The use of diesel in hydraulic fracturing fluid is the only component that triggers the need for a permit under this law.

Read this original document at: http://markey.house.gov/press-release/markey-waxman-degette-loopholes-federal-oversight-oil-and-gas-drilling-demand

Fuelfix.com 'A game-changer' - Shale gas bonanza may have long reach - Report says bounty could create boom times for other industries
Houston Chronicle (TX) - Wednesday, October 10, 2012
Author: Jeannie Kever
FuelFix.com

Now in print: See highlights from the Chronicle's energy website. D3

The shale gas boom could cut costs significantly for the chemical industry and ultimately benefit the apparel, electronics, machinery and other industries, according to a report released Tuesday.

The report by PricewaterhouseCoopers US suggests cheap natural gas liquids could even prompt some companies to move production back to the United States.

It already has spurred an estimated $15 billion in new investments in Texas chemical plants, according to Hector Rivera, president

and CEO of the Texas Chemical Council.

Rivera said the rebound started as the nation began to recover from the recession.

"Here in the United States, it has been a game-changer and has created an opportunity for a lot of companies to make new investments in the United States, as opposed to overseas markets where natural gas has historically been cheaper over the last 10 or 15 years," he said.

Anthony Scamuffa, U.S. chemicals leader for Price-waterhouseCoopers, predicted that the effects of low-priced natural gas liquids will ripple through the manufacturing chain.

"As the U.S. chemical industry expands (natural gas liquids) conversion into a higher volume of downstream products, the positive impacts could flow through the value chain into other manufacturing sectors, particularly given that chemicals are used in an estimated 90 percent of all manufactured products," he said in a statement. "Not only could the abundance of (natural gas liquids) help drive reduced pricing for derivative products, it could also potentially drive domestic re-shoring activity and possibly bring about a favorable shift in the U.S. balance of trade as ethylene capacity comes on line."

The report, "Shale Gas: Reshaping the U.S. Chemicals Industry," followed an earlier Price-waterhouseCoopers report that estimated shale gas could cut raw material and energy costs for U.S. manufacturing by as much as $11.6 billion annually by 2025.

The chemical industry uses natural gas liquids to produce products used in a number of manufacturing sectors, so lower costs for natural gas could mean lower costs for a wide range of other products, according to the report.

Pricewaterhouse-Coopers said specialty chemical companies are starting to feel the impact of lower natural gas and natural gas liquids prices and speculated that companies might look for longer-term sourcing relationships and partnerships with suppliers.

The report said manufacturers should see costs drop if they replace petroleum-based raw materials with products based on ethylene, which is derived from natural gas, a pattern it said would be repeated for other petroleum-based raw materials, including many used in building and construction.

Scamuffa noted that the extent of the shift would depend, in part, on public tolerance for expanded hydraulic fracturing , which is used to extract shale gas. Opponents of fracturing fear environmental damage from the process, which involves injecting water, sand and chemicals into a well to force oil and gas out of tight formations.

jeannie.kever@chron.com
Caption: John Davenport / San Antonio Express-News The Eagle Ford shale area is bustling with work. A new report says an abundance of natural gas could create ripple effects across other industries.

TDEC Official Labels Citizen Fracking Comments 'Stupid' in Emails
Knoxville News Sentinel: Blogs (TN) - Wednesday, October 10, 2012
Author: Tom Humphrey
Michael Burton, a supervisor in the state Department of Environment and Conservation, tells WTVF-TV that he regrets responding to citizen emails on the department's new " fracking " rules with remarks described as rude, dismissive and condesending.

NewsChannel 5 Investigates asked Burton, "Did you write stupid on some of these comments?"

"I did," he admitted.

Why did he do that?

"It was a time of frustration and I vented my frustrations on paper," he answered.

Burton said that his notes were never meant to be public and he apologizes.

"Do you think people opposed to fracking are stupid?" NewsChannel 5 Investigates asked.

"No, not at all," Burton responded.

One of the comments he underlined and called stupid claims hydraulic fracturing has left "homes and farms abandoned, livestock

gone" in other states.

NewsChannel 5 Investigates asked, "What's wrong with that comment?"

"There's no recorded incident of that happening anywhere in the United States because of fracking ," Burton responded.

But, in Louisiana, 17 cows died after coming in direct contact with hydraulic fracturing fluid.

Fracking no answer for energy concerns
Monterey County Herald, The (CA) - Wednesday, October 10, 2012
Author: MISHKA CHUDILOWSKY, JUDY KARAS and SIDNEY RAMSDEN SCOTT
Most politicians have been silent about hydraulic fracturing —or fracking , as it is commonly known—and California politicians have been negligent. Though some states require the disclosure of chemicals used or the number or location of the fracking wells, our state does not, though well operators have disclosed voluntarily more than 350 fracking wells in our state.

The technique is used to increase or restore the rate at which substances such as petroleum, water or natural gas can be produced from subterranean reservoirs. To release natural gas and other fluids held in rock formations deep within the Earth, a mixture of water, sand and chemicals is injected at high pressure, fracturing the rock and allowing the oil or gas to escape. Up to 4million gallons of water and 60,000 gallons of chemicals may be used per single lateral well, according to Scientific American.

The federal Energy Policy Act of 2005, crafted with "help" from Vice President Dick Cheney and oil and gas lobby associates, prevented the Environmental Protection Agency from establishing safeguards to protect the public from chemicals used in fracking . Thus, the process has been exempted from provisions of the U.S. Safe Drinking Water Act.

As reported in The Herald on Sept. 30, an 18,000-acre expanse spanning Monterey, San Benito and Fresno counties rests on a large segment of Monterey shale. The federal government owns below-surface rights to the mostly private land. With a potential of millions or billions of barrels of underground oil and who knows what else, the Bureau of Land Management is scheduled to lease large parcels to oil and gas companies in a December auction. Interest by oil and gas companies is reported to be high.

In 2011, the federal government auctioned off a smaller section of the Monterey shale, 2,600 acres. That auction is being litigated by Sierra Club and the Center for Biological Diversity.

The BLM's draft analysis of the proposed lease concludes there would be "no significant impact." But one wonders about that conclusion because the BLM doesn't know what chemicals might be used.

The Center for Biological Diversity and the Sierra Club have filed a 60-day notice of intent to sue the government. According to the Center for Biological Diversity, "A congressional report found that the oil and gas service companies used hydraulic fracturing products containing 29 chemicals that are known or possible human carcinogens, that are regulated for their risks to human health or are listed as hazardous air pollutants.

In early 2011, the House Energy and Commerce Committee found fracking fluids contained 750 chemicals, some of which were "extremely hazardous to human health."

Fracking has been called safe by industry spokespeople and government officials. Tupper Hull, spokesman for the Western States Petroleum Association, stated that in California, fracking "has never been identified or associated with any kind of environmental hazard or risk that anyone has ever demonstrated."

But opposition is increasing. More than 1,000 documented cases of water contamination across the country have been associated with fracking . In Youngstown, Ohio, there have been 11 earthquakes since the D & L Energy Co. began injecting drilling waste underground in 2010. Seismologists from Columbia University affirmed the likelihood that fracking activities caused the quakes. Fracking -related earthquakes in Ohio and Texas should make us extremely cautious about the technology because of our state's earthquake faults.

With growing awareness, Californians have begun talking about the need to monitor and regulate the industry. (California, the nation's fourth largest oil-producing state, doesn't tax oil extracted from our state's resources as Texas, Alaska, and other oil-producing states do.) Two bills originating in the state Legislature that would have put regulations in place were defeated recently after heavy lobbying by the oil and gas companies.

Gov. Brown signed the Human Right to Water Bill, which requires state agencies to ensure all residents have access to clean and

affordable water. Central California already has water needs. Where will the millions of gallons of water come from to be used in fracking operations? How will the polluted water be handled?

We encourage people to learn more about fracking . See www.foodandwaterwatch.com and www.gaslandthemovie.com to learn more. Join efforts to ban fracking by seeing www.globalfrackdown.org.

People should contact California's legislators to demand a moratorium on fracking until it can be shown to have no serious adverse effects. Decisions about fracking must be guided by the idea the planet must be safeguarded for the generations coming after us and for species that cannot speak for themselves. Let's put our energies and federal funds toward development of safer, sustainable and renewable sources of energy.

The authors are members of the Monterey County branch of Women's International League for Peace and Freedom.

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Oil, gas drilling not likely to cause quakes
Register-Herald, The (Beckley, WV) - Wednesday, October 10, 2012
Author: Mannix Porterfield, Register-Herald Reporter
One cannot totally rule out an earthquake triggered by oil and gas extraction in West Virginia, but the likelihood of this, based on historical evidence, is remote to say the least, lawmakers were told Tuesday.

Such was the conclusion given to lawmakers by Michael Hohn, director of the West Virginia Geological and Economic Survey.

“ Hydraulic fracturing does not pose a high risk, based on 35,000 shale wells today,” Hohn told Judiciary Subcommittee A.

There have been two, possibly three, such tremors linked to hydraulic fracturing , one of them in Oklahoma measured at 2.8 on the Richter scale.

Hohn said it is “difficult” to draw a parallel between gas extraction and seismic activity.

Last year in England, a quake with a magnitude of 2.3 led the extraction company to take responsibility for fracturing right inside a fault, he said.

“So, the potential is there,” Hohn said.

“But the number of incidents to date is very small.

Attempting to discern the prospects of an earthquake prompted by a deep injection is difficult because most of the time the depth of underground faults isn’t known, the geologist said.

On average, West Virginia is known to experience one or two earthquakes every year.

“But they’re very small, hardly noticeable in most places,” Hohn said.

Effects of quakes are classified as hazard, the physical traits such as the ground trembling and noise, and by risk, the structural damage, injuries and deaths.

“You really cannot predict the future,” Hohn told the legislators.

“There is no reliable prediction of earthquakes anywhere in the world, other than on a statistical basis.”

The magnitude of an earthquake is the amount of energy discharged, and this hinges on the total area of the fault, Hohn explained.

Generally, the quakes recorded in West Virginia have ranged between 3 and 3.5 on the Richter scale.

“You’ll feel them,” Hohn said, noting a favorite dish handed down by a grandmother could topple from a hutch and smash on the floor, while automobiles can move.

A swarm of quakes occurred two years ago in Braxton County, but most of them occurred at a time when a seismometer was being upgraded, Hohn said.

Most were of the magnitude of less than 3, he noted.

“People did feel them,” Hohn told the panel.

“Persons described them as sounding like a car hitting your house if you were inside.”

From an industrial standpoint, however, Hohn suggested there seems to be little concern that extraction and injection in the removal of gas will result in earthquakes.

“A very small fraction of the hundreds of thousands of wells for injection and extraction have induced seismic levels noticeable to the public,” he said.

Those that have occurred are spawned by the changes in pressure created by the injection or puling out of fluids.

“In conventional oil and gas recovery, there have been rare cases of oil and gas being withdrawn causing earthquakes,” he said.

Various criteria are employed to ascertain if an injection could lead to seismic activity, he said.

Have large quakes occurred before? What is the proximity to the drilling site? How about the rate of activity near the operation? Were injection practices and the pressures employed sufficient to prompt earthquakes?

“Most of this list leaves West Virginia out in the sense that it’s really a list for California and Alaska, the Middle East, Japan,” Hohn said.

“We are not in an area of high Teutonic activity. Earthquakes are relatively rare. They tend to be spotty. Again, only a handful per year almost, unless you get one of those swarms.”

— E-mail: mannix@register-herald.com

DRILLING; Focus shifts from contain to prevent
San Antonio Express-News (TX) - Wednesday, October 10, 2012
Author: Jennifer Hiller
Following the 2010 Deepwater Horizon explosion and oil spill, the words “well containment” have become a major topic for the oil and gas industry as it moves into unconventional shale plays and more extreme deep-water drilling.

But containing a well and cleaning up a spill shouldn't be as hot a topic as preventing a blowout in the first place, panelists at a Society of Petroleum Engineers Annual Technical Conference and Exhibition said Tuesday.

“We don't want any problems,” said J.C. Cunha, drilling manager of Ecopetrol Inc. “We don't want you to have any containments.”

And the industry knows that it can ill afford another high-profile spill.

George King, an engineering adviser with Apache Corp., said that many of the environmental fears about hydraulic fracturing , or fracking , are unfounded. “We really haven't had much pollution with the fractures,” he said. But he said the industry does have to take some of the concerns to heart.

“There is such a thing as a social license to operate,” King said. “Yes, (people) vote. Yes, they can create a lot of problems.”

King said that he sees potential problems with well construction, noting that some issues have been traced back to a faulty cement casing. That's something the industry has been doing for decades, so there shouldn't be room for error, King said. “How good is the cement job?” he asked.

The sheer reach of horizontal drilling also can be a challenge to conventional well design, King said, noting that a 6-acre fracking site can reach 6,000 acres of oil and gas.

And in some states, such as Pennsylvania where old wells are not mapped well, new horizontal wells can run into problems if they

unsuspectingly cross an abandoned well. “They don't even know where they are,” King said.

Texas has had more oil and gas regulation through the decades and has better mapping of new and old wells, though, he said.

Cunha and other industry experts said that more research is needed, but that in many ways, the technology and expertise to prevent spills exists already - as long as they're used properly.

Technological improvements to allow better monitoring and reams of real-time data should help employees spot something that looks odd with an operation. But even though the data are available, they may not be used the way they should be, Cunha said.

“Basically what they're looking for is to have complete control of the well all of the time,” Cunha said.

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EPISODE FOCUSING ON NATURAL GAS CAREERS TO PREMIERE NOV. 5
US Fed News (USA) - Wednesday, October 10, 2012
WILLIAMSPORT, Pa., Oct. 9 -- Pennsylvania College of Technology issued the following news release:

While natural gas exploration throughout Pennsylvania has stirred debate in recent years, there is one issue on which most can agree: the emergence of viable employment opportunities. The natural gas sector offers rewarding career prospects, especially for those with a technical skill set.

Those possibilities are the focus of the latest edition of "degrees that work.tv," an award-winning documentary series produced by Pennsylvania College of Technology and WVIA Public Media. The episode, "Natural Gas Careers," premieres throughout northeastern and northcentral Pennsylvania on Nov. 5 at 7 p.m. on WVIA-TV.

While natural gas has been extracted for more than a century, much of the exploration targeted limited amounts of shallow gas contained in porous rock deposits just beneath the earth's surface. The episode illustrates that advancements in technology, namely horizontal drilling and hydraulic fracturing , have allowed companies to access vast amounts of natural gas contained in shale - dense, sedimentary rock formations that are typically a mile or more below surface.

The Marcellus Shale, located under parts of six states including approximately two-thirds of Pennsylvania, is particularly attractive for development due to its natural gas capacity and proximity to major population centers in the Northeast.

According to the U.S. Energy Information Administration, natural gas production in the state "more than quadrupled" between 2009 and 2011. This boom has led to varied career options. The Pennsylvania Statewide Marcellus Shale Workforce Needs Assessment has estimated that the life cycle of a Marcellus well requires approximately 420 individuals across 150 different occupations.

"The natural gas industry provides high-value types of jobs, offering family-sustaining wages," said Thomas B. Murphy, co-director of the Penn State Marcellus Center for Outreach and Research, and one of the experts featured in the episode. "I've been working as an outreach educator for more than 25 years, and these certainly are the most exciting years that I've spent in my career, seeing this energy resource development occur in Pennsylvania and in various other locations globally."

Thanks to its extensive workforce development programming, Penn College offers numerous training and educational initiatives for the natural gas industry. Through ShaleTEC, a partnership with Penn State Extension, Penn College provides a variety of noncredit training and consulting services for incumbent natural gas professionals and those moving into the industry. As the recipient of a $14.96 million federal grant, the college is the lead institution for ShaleNET U.S., a consortium initiative that seeks to develop and standardize educational programs serving high-demand occupational categories in the oil and natural gas and associated supply-chain industries.

The college's applied-technology curriculum provides another clear path to the industry with numerous associate and bachelor's degrees relating to natural gas careers. For long-term growth potential and career flexibility, higher education in the form of trade/industrial certifications and two- and four-year degrees is recommended for the sector.

"The more you bring to the table, the quicker and higher you are likely to advance in your career opportunities or up the career ladder," Murphy said.

The episode follows three diverse alumni whose bachelor's degrees are working for them in the industry: Brandon J. Howe, class

of 2001, information technology: data communications and networking (now information technology: network specialist); Douglas Martin, class of 2008, electronics engineering technology (now electronics and computer engineering technology); and Westley A. Smith, class of 2009, welding and fabrication engineering technology. Howe, senior IT systems analyst, and Martin, automation technician, are employed by Anadarko Petroleum Corp. in Williamsport. Smith is a welding engineer for Appellation Pre-Fab in Montoursville.

In addition to exploring their individual career paths and present-day duties, the episode explains the basics of natural gas drilling and production and visits a typical well site in northcentral Pennsylvania.

Following its Nov. 5 premiere at 7 p.m. on WVIA, the "Natural Gas Careers" episode of "degrees that work.tv" will be rebroadcast that evening at 10 p.m. on WVIA-2, Nov. 6 at noon on WVIA-2, Nov. 8 at 8 p.m. on WVIA and Nov. 9 at 8 a.m. on WVIA-2. The program also will be part of a "degrees that work.tv" marathon on Nov. 18. All seven "degrees that work.tv" episodes - "Nanotechnology," "Welding," "Advanced Manufacturing," "Plastics," "Going Green Part I," "Going Green Part II" and "Natural Gas Careers" - will air on WVIA beginning at 11:30 a.m.

The "degrees that work.tv" series is a public-service initiative that connects young people to workforce needs and rewarding future career paths. Following a story-driven approach, episodes highlight the technologies, educational foundation and opportunities within career clusters. Free educational materials designed for classroom use have been developed to accompany the series.

For any query with respect to this article or any other content requirement, please contact Editor at htsyndication@hindustantimes.com

Mill Creek board seeks more input on fracking
Vindicator (Youngstown, OH) - Wednesday, October 10, 2012
Author: Ashley Luthern, Vindicator, Youngstown, Ohio
Oct. 10--CANFIELD -- Mill Creek MetroParks Board of Commissioners formally introduced a new executive director and announced two public hearings to gather information about hydraulic fracturing .

Dennis Miller, a 14-year MetroParks employee, succeeded Clarke Johnson as executive director Sept. 18.

Board president Robert Durick acknowledged receiving a petition from concerned residents who wanted a nationwide search conducted for Johnson's replacement, but Tuesday night he defended the board's decision to hire Miller, who was responsible for managing the golf course, Wick Recreation Area and Judge Morley Pavilion before being appointed director.

"I see [Miller] sitting in the executive director chair for many years," Durick said.

Miller, who is the fourth permanent executive director since 2002, said he will strive to manage all aspects of the park wisely.

"I understand and respect the park's history and the legacy of Volney Rogers," he said.

Harry Meshel, a former state senator and park commissioner, praised the decision to hire Miller during public comment. Meshel was on the board when Miller was hired as a golf pro.

"I understand about national searches. ... You can search all over the world but often times, you find the jewel right in your back yard," Meshel said.

In other business, the park board announced dates for public hearings to discuss hydraulic fracturing and leasing mineral rights in the MetroParks.

The first public hearing will be from 6 to 8 p.m. Tuesday at the Davis Center at Fellows Riverside Gardens. During the first hour, the board will hear from Rhonda Reda, executive director of Ohio Oil & Gas Energy Education Program.

The second hearing will be from 6 to 8 p.m. Oct. 25 at the MetroParks Farm in Canfield. The board said each resident will receive two minutes, but also could pool their time and address the board as a group.

Durick said the hearings are for factfinding purposes and said no decision nor direct debate will occur.

Youngstown resident Lynn Anderson and others questioned the board about Reda, saying OOGEEP is not an unbiased organization and promotes natural gas and oil exploration in Ohio.

"OOGEEP is funded exclusively by Ohio's crude oil and natural gas producers and royalty owners through a voluntary assessment on the production of all crude oil and natural gas produced in Ohio," according to the organization's website.

The board was expected to discuss the 10-year strategic park plan Tuesday, but because of scheduling conflicts between the board and PROS Consulting, LLC, a full-service management consulting and planning firm hired to help with the plan, the discussion was postponed.

Durick said the board should approve a final version at its December meeting.
Memo: --- (c)2012 Vindicator (Youngstown, Ohio)

Eagle Ford Shale, La Quinta Terminal fill Port of Corpus Christi agenda
Corpus Christi Caller-Times (TX) - Tuesday, October 9, 2012
Author: Mike D. Smith, Corpus Christi Caller Times
CORPUS CHRISTI — Port of Corpus Christi commissioners Tuesday approved several developments tied to its role in area energy projects.

The port has become a transfer point for Eagle Ford Shale crude oil flowing in from intense drilling atop the 400-mile-long, 50-mile-wide band of deeply buried deposits about 65 miles northwest of Corpus Christi.

Commissioners reassigned a lease to a company taking over the operations of an unprofitable frac sand company. Startup company Cornell Carriers entered a lease with the port in May 2011 for three acres, two cargo sheds and railroad tracks to haul sand for hydraulic fracturing to Eagle Ford drillers.

Their business was outpaced by larger competitors, port Deputy Director of Business Development Sandy Sanders said. Port records show Cornell owes more than $295,000 in back rent, utilities and usage fees dating to February.

At Cornell's request, commissioners reassigned the lease — which ends in 2014 — to Nabors Completion and Production Services Co., to help make Cornell profitable again. Nabors will pay the port $300,000 for Cornell's unpaid rent and utilities, and fulfill the lease.

"This is a very, very good fit and it also makes the port whole financially," Sanders told commissioners.

Commissioners also approved two pipeline easement deals.

Valero Refining-Texas will pay $19,802 per year for the first 10 years of a 30-year agreement with the port to run a 12-inch pipeline through about 5,200 feet of port property.

The pipeline will carry crude oil and condensates from the Plains Pipeline terminal being built at Interstate 37 and Suntide Road to the Valero Bill Greehey Refinery West Plant.

Trafigura Terminals will run a 6-inch pipeline to connect its new terminal at the former site of the Texas Docks and Rail steel plant with a pipeline delivery station on Suntide Road.

The pipeline only will cross about 39 feet of port property. Trafigura will pay the port $1,500 per year for the first 10 years of its 30-year lease.

Fee adjustments are possible every 10 years on the Trafigura and Valero easement agreements.

Two decisions also impacted the development of the La Quinta Terminal property, a 1,100-acre strip of land in San Patricio County extending from the La Quinta Ship Channel extension on the north side of Corpus Christi Bay.

Commissioners granted an eight-year exclusion zone agreement for a portion of the property to Corpus Christi Liquefaction LLC, a subsidiary of Cheniere Energy.

Cheniere proposes a more than $10 billion terminal and associated pipeline to export

liquefied natural gas, or LNG — natural gas supercooled to its liquid form for transport.

Cheniere applied in August for permits for the terminal through the Federal Energy Regulatory Commission to build the terminal between Sherwin Alumina and La Quinta.

Placing the LNG terminal requires criteria such as keeping an area within a certain radius of the terminal free of structures and large gatherings of people, which impacts a 17-acre section of the eastern side of the property, port Engineering Services Director David Krams told commissioners.

Commissioners also approved a professional services agreement with an engineering firm to develop an access road for the La Quinta terminal property. The port will pay as much as $150,000 to Corpus Christi-based LNV Inc., for the work.

IN OTHER BUSINESS

Port of Corpus Christi commissioners also:

Approved an amended lease for Archer Daniels Midland Co. to allow it to expand the company's rail yard near the port's grain elevator. The company leases 28.5 acres and plans to do more nontraditional cargo including sand and proppants, which are in high demand for hydraulic fracturing . The company will pay for and build the improvements, which will increase capacity from 80 railcars to 150.

Approved the final reading of a franchise agreement with Gulf Marine Fabricators, giving the company the right to use port dredge material placement areas through August 2042. Gulf Marine ask to use the placement areas for a project at the company's north yard along the Intracoastal Waterway, but that can't be done without first getting a franchise agreement with port. Gulf Marine will pay the port a variable monthly sum.

Approved a retention agreement with Houston-based commercial and environmental law firm Connelly-Baker-Wotring for an amount not to exceed $125,000. The firm will assist the port with
lity of these laws to oil and gas development activities that prevent EPA from taking any action.

For example:

* Hydraulic fracturing with fluids other than diesel is exempted from permit requirements under the Safe Drinking Water Act.

* Release of hazardous air pollutants from oil and gas wells and their associated equipment can not be aggregated and regulated as a major source of air pollution under the Clean Air Act, as typically is done with other industrial stationary sources.

* Typically, EPA requires permits for stormwater discharges at construction sites, which prevents sediment from entering nearby streams. These permits are not required for construction activities on oil and gas well sites.

* The Emergency Planning and Community Right to Know Act established the Toxics Release Inventory (TRI)--a publicly available database containing information about chemical releases from more than 20,000 industrial facilities--but oil and gas operators are not required to report chemical releases under TRI.

* EPA cannot treat oil and gas production wastes as hazardous under the Resource Conservation and Recovery Act.

The GAO report describing shale resources and environmental risks entitled "Information on Shale Resources, Development, and Environmental and Public Health Risks" can be found HERE http://markey.house.gov/document/2012/gao-report-shale-and-public-health-risks.

The GAO report reviewing state and federal laws applying to oil and gas development entitled "Key Environmental and Public Health Requirements" can be found HERE http://markey.house.gov/document/2012/gao-report-unconventional-oil-and-gas-driling.

This past summer, the Department of Interior for the first time in more than thirty years proposed regulations for hydraulic fracturing on federal lands. While acknowledged as an important step in establishing basic safety protections for public health and the environment, Rep. Markey submitted a critique of these rules suggesting several areas for improvement. Earlier this year, Rep. Markey also released a report detailing oil and gas drilling violations occurring on federal lands. The report found that Department of Interior inspectors were severely limited in their enforcement actions and restricted in the amount of fines levied against violating companies because of outdated and lenient laws and regulations. In fact, all fines issued to more than 300 companies in 17 states over more than a decade were less than $275,000.

In 2011 an investigation released by Reps. Waxman, Markey, and DeGette found that the fourteen leading oil and gas companies used more than 32 million gallons of unpermitted diesel fuel as a component of their hydraulic fracturing fluid, a violation of the Safe Drinking Water Act. The use of diesel in hydraulic fracturing fluid is the only component that triggers the need for a permit under this law.

Read this original document at: http://markey.house.gov/press-release/markey-waxman-degette-loopholes-federal-oversight-oil-and-gas-drilling-demand

Fuelfix.com 'A game-changer' - Shale gas bonanza may have long reach - Report says bounty could create boom times for other industries
Houston Chronicle (TX) - Wednesday, October 10, 2012
Author: Jeannie Kever
FuelFix.com

Now in print: See highlights from the Chronicle's energy website. D3

The shale gas boom could cut costs significantly for the chemical industry and ultimately benefit the apparel, electronics, machinery and other industries, according to a report released Tuesday.

The report by PricewaterhouseCoopers US suggests cheap natural gas liquids could even prompt some companies to move production back to the United States.

It already has spurred an estimated $15 billion in new investments in Texas chemical plants, according to Hector Rivera, president and CEO of the Texas Chemical Council.

Rivera said the rebound started as the nation began to recover from the recession.

"Here in the United States, it has been a game-changer and has created an opportunity for a lot of companies to make new investments in the United States, as opposed to overseas markets where natural gas has historically been cheaper over the last 10 or 15 years," he said.

Anthony Scamuffa, U.S. chemicals leader for Price-waterhouseCoopers, predicted that the effects of low-priced natural gas liquids will ripple through the manufacturing chain.

"As the U.S. chemical industry expands (natural gas liquids) conversion into a higher volume of downstream products, the positive impacts could flow through the value chain into other manufacturing sectors, particularly given that chemicals are used in an estimated 90 percent of all manufactured products," he said in a statement. "Not only could the abundance of (natural gas liquids) help drive reduced pricing for derivative products, it could also potentially drive domestic re-shoring activity and possibly bring about a favorable shift in the U.S. balance of trade as ethylene capacity comes on line."

The report, "Shale Gas: Reshaping the U.S. Chemicals Industry," followed an earlier Price-waterhouseCoopers report that estimated shale gas could cut raw material and energy costs for U.S. manufacturing by as much as $11.6 billion annually by 2025.

The chemical industry uses natural gas liquids to produce products used in a number of manufacturing sectors, so lower costs for natural gas could mean lower costs for a wide range of other products, according to the report.

Pricewaterhouse-Coopers said specialty chemical companies are starting to feel the impact of lower natural gas and natural gas liquids prices and speculated that companies might look for longer-term sourcing relationships and partnerships with suppliers.

The report said manufacturers should see costs drop if they replace petroleum-based raw materials with products based on ethylene, which is derived from natural gas, a pattern it said would be repeated for other petroleum-based raw materials, including many used in building and construction.

Scamuffa noted that the extent of the shift would depend, in part, on public tolerance for expanded hydraulic fracturing , which is used to extract shale gas. Opponents of fracturing fear environmental damage from the process, which involves injecting water, sand and chemicals into a well to force oil and gas out of tight formations.

jeannie.kever@chron.com
Caption: John Davenport / San Antonio Express-News The Eagle Ford shale area is bustling with work. A new report says an

abundance of natural gas could create ripple effects across other industries.

TDEC Official Labels Citizen Fracking Comments 'Stupid' in Emails
Knoxville News Sentinel: Blogs (TN) - Wednesday, October 10, 2012
Author: Tom Humphrey
Michael Burton, a supervisor in the state Department of Environment and Conservation, tells WTVF-TV that he regrets responding to citizen emails on the department's new " fracking " rules with remarks described as rude, dismissive and condesending.

NewsChannel 5 Investigates asked Burton, "Did you write stupid on some of these comments?"

"I did," he admitted.

Why did he do that?

"It was a time of frustration and I vented my frustrations on paper," he answered.

Burton said that his notes were never meant to be public and he apologizes.

"Do you think people opposed to fracking are stupid?" NewsChannel 5 Investigates asked.

"No, not at all," Burton responded.

One of the comments he underlined and called stupid claims hydraulic fracturing has left "homes and farms abandoned, livestock gone" in other states.

NewsChannel 5 Investigates asked, "What's wrong with that comment?"

"There's no recorded incident of that happening anywhere in the United States because of fracking ," Burton responded.

But, in Louisiana, 17 cows died after coming in direct contact with hydraulic fracturing fluid.

Fracking no answer for energy concerns
Monterey County Herald, The (CA) - Wednesday, October 10, 2012
Author: MISHKA CHUDILOWSKY, JUDY KARAS and SIDNEY RAMSDEN SCOTT
Most politicians have been silent about hydraulic fracturing —or fracking , as it is commonly known—and California politicians have been negligent. Though some states require the disclosure of chemicals used or the number or location of the fracking wells, our state does not, though well operators have disclosed voluntarily more than 350 fracking wells in our state.

The technique is used to increase or restore the rate at which substances such as petroleum, water or natural gas can be produced from subterranean reservoirs. To release natural gas and other fluids held in rock formations deep within the Earth, a mixture of water, sand and chemicals is injected at high pressure, fracturing the rock and allowing the oil or gas to escape. Up to 4million gallons of water and 60,000 gallons of chemicals may be used per single lateral well, according to Scientific American.

The federal Energy Policy Act of 2005, crafted with "help" from Vice President Dick Cheney and oil and gas lobby associates, prevented the Environmental Protection Agency from establishing safeguards to protect the public from chemicals used in fracking . Thus, the process has been exempted from provisions of the U.S. Safe Drinking Water Act.

As reported in The Herald on Sept. 30, an 18,000-acre expanse spanning Monterey, San Benito and Fresno counties rests on a large segment of Monterey shale. The federal government owns below-surface rights to the mostly private land. With a potential of millions or billions of barrels of underground oil and who knows what else, the Bureau of Land Management is scheduled to lease large parcels to oil and gas companies in a December auction. Interest by oil and gas companies is reported to be high.

In 2011, the federal government auctioned off a smaller section of the Monterey shale, 2,600 acres. That auction is being litigated by Sierra Club and the Center for Biological Diversity.

The BLM's draft analysis of the proposed lease concludes there would be "no significant impact." But one wonders about that conclusion because the BLM doesn't know what chemicals might be used.

The Center for Biological Diversity and the Sierra Club have filed a 60-day notice of intent to sue the government. According to the

Center for Biological Diversity, "A congressional report found that the oil and gas service companies used hydraulic fracturing products containing 29 chemicals that are known or possible human carcinogens, that are regulated for their risks to human health or are listed as hazardous air pollutants.

In early 2011, the House Energy and Commerce Committee found fracking fluids contained 750 chemicals, some of which were "extremely hazardous to human health."

Fracking has been called safe by industry spokespeople and government officials. Tupper Hull, spokesman for the Western States Petroleum Association, stated that in California, fracking "has never been identified or associated with any kind of environmental hazard or risk that anyone has ever demonstrated."

But opposition is increasing. More than 1,000 documented cases of water contamination across the country have been associated with fracking . In Youngstown, Ohio, there have been 11 earthquakes since the D & L Energy Co. began injecting drilling waste underground in 2010. Seismologists from Columbia University affirmed the likelihood that fracking activities caused the quakes. Fracking -related earthquakes in Ohio and Texas should make us extremely cautious about the technology because of our state's earthquake faults.

With growing awareness, Californians have begun talking about the need to monitor and regulate the industry. (California, the nation's fourth largest oil-producing state, doesn't tax oil extracted from our state's resources as Texas, Alaska, and other oil-producing states do.) Two bills originating in the state Legislature that would have put regulations in place were defeated recently after heavy lobbying by the oil and gas companies.

Gov. Brown signed the Human Right to Water Bill, which requires state agencies to ensure all residents have access to clean and affordable water. Central California already has water needs. Where will the millions of gallons of water come from to be used in fracking operations? How will the polluted water be handled?

We encourage people to learn more about fracking . See www.foodandwaterwatch.com and www.gaslandthemovie.com to learn more. Join efforts to ban fracking by seeing www.globalfrackdown.org.

People should contact California's legislators to demand a moratorium on fracking until it can be shown to have no serious adverse effects. Decisions about fracking must be guided by the idea the planet must be safeguarded for the generations coming after us and for species that cannot speak for themselves. Let's put our energies and federal funds toward development of safer, sustainable and renewable sources of energy.

The authors are members of the Monterey County branch of Women's International League for Peace and Freedom.

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Oil, gas drilling not likely to cause quakes
Register-Herald, The (Beckley, WV) - Wednesday, October 10, 2012
Author: Mannix Porterfield, Register-Herald Reporter
One cannot totally rule out an earthquake triggered by oil and gas extraction in West Virginia, but the likelihood of this, based on historical evidence, is remote to say the least, lawmakers were told Tuesday.

Such was the conclusion given to lawmakers by Michael Hohn, director of the West Virginia Geological and Economic Survey.

“ Hydraulic fracturing does not pose a high risk, based on 35,000 shale wells today,” Hohn told Judiciary Subcommittee A.

There have been two, possibly three, such tremors linked to hydraulic fracturing , one of them in Oklahoma measured at 2.8 on the Richter scale.

Hohn said it is “difficult” to draw a parallel between gas extraction and seismic activity.

Last year in England, a quake with a magnitude of 2.3 led the extraction company to take responsibility for fracturing right inside a fault, he said.

“So, the potential is there,” Hohn said.

“But the number of incidents to date is very small.

Attempting to discern the prospects of an earthquake prompted by a deep injection is difficult because most of the time the depth of underground faults isn't known, the geologist said.

On average, West Virginia is known to experience one or two earthquakes every year.

"But they're very small, hardly noticeable in most places," Hohn said.

Effects of quakes are classified as hazard, the physical traits such as the ground trembling and noise, and by risk, the structural damage, injuries and deaths.

"You really cannot predict the future," Hohn told the legislators.

"There is no reliable prediction of earthquakes anywhere in the world, other than on a statistical basis."

The magnitude of an earthquake is the amount of energy discharged, and this hinges on the total area of the fault, Hohn explained.

Generally, the quakes recorded in West Virginia have ranged between 3 and 3.5 on the Richter scale.

"You'll feel them," Hohn said, noting a favorite dish handed down by a grandmother could topple from a hutch and smash on the floor, while automobiles can move.

A swarm of quakes occurred two years ago in Braxton County, but most of them occurred at a time when a seismometer was being upgraded, Hohn said.

Most were of the magnitude of less than 3, he noted.

"People did feel them," Hohn told the panel.

"Persons described them as sounding like a car hitting your house if you were inside."

From an industrial standpoint, however, Hohn suggested there seems to be little concern that extraction and injection in the removal of gas will result in earthquakes.

"A very small fraction of the hundreds of thousands of wells for injection and extraction have induced seismic levels noticeable to the public," he said.

Those that have occurred are spawned by the changes in pressure created by the injection or puling out of fluids.

"In conventional oil and gas recovery, there have been rare cases of oil and gas being withdrawn causing earthquakes," he said.

Various criteria are employed to ascertain if an injection could lead to seismic activity, he said.

Have large quakes occurred before? What is the proximity to the drilling site? How about the rate of activity near the operation? Were injection practices and the pressures employed sufficient to prompt earthquakes?

"Most of this list leaves West Virginia out in the sense that it's really a list for California and Alaska, the Middle East, Japan," Hohn said.

"We are not in an area of high Teutonic activity. Earthquakes are relatively rare. They tend to be spotty. Again, only a handful per year almost, unless you get one of those swarms."

— E-mail: mannix@register-herald.com

DRILLING; Focus shifts from contain to prevent
San Antonio Express-News (TX) - Wednesday, October 10, 2012
Author: Jennifer Hiller
Following the 2010 Deepwater Horizon explosion and oil spill, the words "well containment" have become a major topic for the oil

and gas industry as it moves into unconventional shale plays and more extreme deep-water drilling.

But containing a well and cleaning up a spill shouldn't be as hot a topic as preventing a blowout in the first place, panelists at a Society of Petroleum Engineers Annual Technical Conference and Exhibition said Tuesday.

“We don't want any problems,” said J.C. Cunha, drilling manager of Ecopetrol Inc. “We don't want you to have any containments.”

And the industry knows that it can ill afford another high-profile spill.

George King, an engineering adviser with Apache Corp., said that many of the environmental fears about hydraulic fracturing , or fracking , are unfounded. “We really haven't had much pollution with the fractures,” he said. But he said the industry does have to take some of the concerns to heart.

“There is such a thing as a social license to operate,” King said. “Yes, (people) vote. Yes, they can create a lot of problems.”

King said that he sees potential problems with well construction, noting that some issues have been traced back to a faulty cement casing. That's something the industry has been doing for decades, so there shouldn't be room for error, King said. “How good is the cement job?” he asked.

The sheer reach of horizontal drilling also can be a challenge to conventional well design, King said, noting that a 6-acre fracking site can reach 6,000 acres of oil and gas.

And in some states, such as Pennsylvania where old wells are not mapped well, new horizontal wells can run into problems if they unsuspectingly cross an abandoned well. “They don't even know where they are,” King said.

Texas has had more oil and gas regulation through the decades and has better mapping of new and old wells, though, he said.

Cunha and other industry experts said that more research is needed, but that in many ways, the technology and expertise to prevent spills exists already - as long as they're used properly.

Technological improvements to allow better monitoring and reams of real-time data should help employees spot something that looks odd with an operation. But even though the data are available, they may not be used the way they should be, Cunha said.

“Basically what they're looking for is to have complete control of the well all of the time,” Cunha said.

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The Marcellus Shale, located under parts of six states including approximately two-thirds of Pennsylvania, is particularly attractive for development due to its natural gas capacity and proximity to major population centers in the Northeast.

According to the U.S. Energy Information Administration, natural gas production in the state "more than quadrupled" between 2009 and 2011. This boom has led to varied career options. The Pennsylvania Statewide Marcellus Shale Workforce Needs

Assessment has estimated that the life cycle of a Marcellus well requires approximately 420 individuals across 150 different occupations.

"The natural gas industry provides high-value types of jobs, offering family-sustaining wages," said Thomas B. Murphy, co-director of the Penn State Marcellus Center for Outreach and Research, and one of the experts featured in the episode. "I've been working as an outreach educator for more than 25 years, and these certainly are the most exciting years that I've spent in my career, seeing this energy resource development occur in Pennsylvania and in various other locations globally."

Thanks to its extensive workforce development programming, Penn College offers numerous training and educational initiatives for the natural gas industry. Through ShaleTEC, a partnership with Penn State Extension, Penn College provides a variety of noncredit training and consulting services for incumbent natural gas professionals and those moving into the industry. As the recipient of a $14.96 million federal grant, the college is the lead institution for ShaleNET U.S., a consortium initiative that seeks to develop and standardize educational programs serving high-demand occupational categories in the oil and natural gas and associated supply-chain industries.

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The episode follows three diverse alumni whose bachelor's degrees are working for them in the industry: Brandon J. Howe, class of 2001, information technology: data communications and networking (now information technology: network specialist); Douglas Martin, class of 2008, electronics engineering technology (now electronics and computer engineering technology); and Westley A. Smith, class of 2009, welding and fabrication engineering technology. Howe, senior IT systems analyst, and Martin, automation technician, are employed by Anadarko Petroleum Corp. in Williamsport. Smith is a welding engineer for Appellation Pre-Fab in Montoursville.

In addition to exploring their individual career paths and present-day duties, the episode explains the basics of natural gas drilling and production and visits a typical well site in northcentral Pennsylvania.

Following its Nov. 5 premiere at 7 p.m. on WVIA, the "Natural Gas Careers" episode of "degrees that work.tv" will be rebroadcast that evening at 10 p.m. on WVIA-2, Nov. 6 at noon on WVIA-2, Nov. 8 at 8 p.m. on WVIA and Nov. 9 at 8 a.m. on WVIA-2. The program also will be part of a "degrees that work.tv" marathon on Nov. 18. All seven "degrees that work.tv" episodes - "Nanotechnology," "Welding," "Advanced Manufacturing," "Plastics," "Going Green Part I," "Going Green Part II" and "Natural Gas Careers" - will air on WVIA beginning at 11:30 a.m.

The "degrees that work.tv" series is a public-service initiative that connects young people to workforce needs and rewarding future career paths. Following a story-driven approach, episodes highlight the technologies, educational foundation and opportunities within career clusters. Free educational materials designed for classroom use have been developed to accompany the series.

For any query with respect to this article or any other content requirement, please contact Editor at htsyndication@hindustantimes.com

Mill Creek board seeks more input on fracking
Vindicator (Youngstown, OH) - Wednesday, October 10, 2012
Author: Ashley Luthern, Vindicator, Youngstown, Ohio
Oct. 10--CANFIELD -- Mill Creek MetroParks Board of Commissioners formally introduced a new executive director and announced two public hearings to gather information about hydraulic fracturing .

Dennis Miller, a 14-year MetroParks employee, succeeded Clarke Johnson as executive director Sept. 18.

Board president Robert Durick acknowledged receiving a petition from concerned residents who wanted a nationwide search conducted for Johnson's replacement, but Tuesday night he defended the board's decision to hire Miller, who was responsible for managing the golf course, Wick Recreation Area and Judge Morley Pavilion before being appointed director.

"I see [Miller] sitting in the executive director chair for many years," Durick said.

Miller, who is the fourth permanent executive director since 2002, said he will strive to manage all aspects of the park wisely.

"I understand and respect the park's history and the legacy of Volney Rogers," he said.

Harry Meshel, a former state senator and park commissioner, praised the decision to hire Miller during public comment. Meshel was on the board when Miller was hired as a golf pro.

"I understand about national searches. ... You can search all over the world but often times, you find the jewel right in your back yard," Meshel said.

In other business, the park board announced dates for public hearings to discuss hydraulic fracturing and leasing mineral rights in the MetroParks.

The first public hearing will be from 6 to 8 p.m. Tuesday at the Davis Center at Fellows Riverside Gardens. During the first hour, the board will hear from Rhonda Reda, executive director of Ohio Oil & Gas Energy Education Program.

The second hearing will be from 6 to 8 p.m. Oct. 25 at the MetroParks Farm in Canfield. The board said each resident will receive two minutes, but also could pool their time and address the board as a group.

Durick said the hearings are for factfinding purposes and said no decision nor direct debate will occur.

Youngstown resident Lynn Anderson and others questioned the board about Reda, saying OOGEEP is not an unbiased organization and promotes natural gas and oil exploration in Ohio.

"OOGEEP is funded exclusively by Ohio's crude oil and natural gas producers and royalty owners through a voluntary assessment on the production of all crude oil and natural gas produced in Ohio," according to the organization's website.

The board was expected to discuss the 10-year strategic park plan Tuesday, but because of scheduling conflicts between the board and PROS Consulting, LLC, a full-service management consulting and planning firm hired to help with the plan, the discussion was postponed.

Durick said the board should approve a final version at its December meeting.
Memo: --- (c)2012 Vindicator (Youngstown, Ohio)

Eagle Ford Shale, La Quinta Terminal fill Port of Corpus Christi agenda
Corpus Christi Caller-Times (TX) - Tuesday, October 9, 2012
Author: Mike D. Smith, Corpus Christi Caller Times
CORPUS CHRISTI — Port of Corpus Christi commissioners Tuesday approved several developments tied to its role in area energy projects.

The port has become a transfer point for Eagle Ford Shale crude oil flowing in from intense drilling atop the 400-mile-long, 50-mile-wide band of deeply buried deposits about 65 miles northwest of Corpus Christi.

Commissioners reassigned a lease to a company taking over the operations of an unprofitable frac sand company. Startup company Cornell Carriers entered a lease with the port in May 2011 for three acres, two cargo sheds and railroad tracks to haul sand for hydraulic fracturing to Eagle Ford drillers.

Their business was outpaced by larger competitors, port Deputy Director of Business Development Sandy Sanders said. Port records show Cornell owes more than $295,000 in back rent, utilities and usage fees dating to February.

At Cornell's request, commissioners reassigned the lease — which ends in 2014 — to Nabors Completion and Production Services Co., to help make Cornell profitable again. Nabors will pay the port $300,000 for Cornell's unpaid rent and utilities, and fulfill the lease.

"This is a very, very good fit and it also makes the port whole financially," Sanders told commissioners.

Commissioners also approved two pipeline easement deals.

Valero Refining-Texas will pay $19,802 per year for the first 10 years of a 30-year agreement with the port to run a 12-inch

pipeline through about 5,200 feet of port property.

The pipeline will carry crude oil and condensates from the Plains Pipeline terminal being built at Interstate 37 and Suntide Road to the Valero Bill Greehey Refinery West Plant.

Trafigura Terminals will run a 6-inch pipeline to connect its new terminal at the former site of the Texas Docks and Rail steel plant with a pipeline delivery station on Suntide Road.

The pipeline only will cross about 39 feet of port property. Trafigura will pay the port $1,500 per year for the first 10 years of its 30-year lease.

Fee adjustments are possible every 10 years on the Trafigura and Valero easement agreements.

Two decisions also impacted the development of the La Quinta Terminal property, a 1,100-acre strip of land in San Patricio County extending from the La Quinta Ship Channel extension on the north side of Corpus Christi Bay.

Commissioners granted an eight-year exclusion zone agreement for a portion of the property to Corpus Christi Liquefaction LLC, a subsidiary of Cheniere Energy.

Cheniere proposes a more than $10 billion terminal and associated pipeline to export

liquefied natural gas, or LNG — natural gas supercooled to its liquid form for transport.

Cheniere applied in August for permits for the terminal through the Federal Energy Regulatory Commission to build the terminal between Sherwin Alumina and La Quinta.

Placing the LNG terminal requires criteria such as keeping an area within a certain radius of the terminal free of structures and large gatherings of people, which impacts a 17-acre section of the eastern side of the property, port Engineering Services Director David Krams told commissioners.

Commissioners also approved a professional services agreement with an engineering firm to develop an access road for the La Quinta terminal property. The port will pay as much as $150,000 to Corpus Christi-based LNV Inc., for the work.

IN OTHER BUSINESS

Port of Corpus Christi commissioners also:

Approved an amended lease for Archer Daniels Midland Co. to allow it to expand the company's rail yard near the port's grain elevator. The company leases 28.5 acres and plans to do more nontraditional cargo including sand and proppants, which are in high demand for hydraulic fracturing . The company will pay for and build the improvements, which will increase capacity from 80 railcars to 150.

Approved the final reading of a franchise agreement with Gulf Marine Fabricators, giving the company the right to use port dredge material placement areas through August 2042. Gulf Marine ask to use the placement areas for a project at the company's north yard along the Intracoastal Waterway, but that can't be done without first getting a franchise agreement with port. Gulf Marine will pay the port a variable monthly sum.

Approved a retention agreement with Houston-based commercial and environmental law firm Connelly-Baker-Wotring for an amount not to exceed $125,000. The firm will assist the port with legal work necessary for securing an air permit for the port's bulk terminal. The port plans to upgrade the bulk terminal to handle additional amounts of dry cargoes such as coal.
Caption: TODD YATES/CALLER-TIMES The M/V Pennsylvania tanker pulls into the Port of Corpus Christi making it first port of call here to load crude from the Eagle Ford Shale fields Wednesday. he newly built vessel will be moving oil and products related to the Eagle Ford Shale fields to American markets.

The green side of fracking
St. Paul Pioneer Press (MN) - Tuesday, October 9, 2012
Author: The Washington Post
New York State has become the country's most intense battleground in the fight over unconventional natural-gas drilling, known as fracking . Now anti- fracking activists in the Empire State are claiming a victory. They ought to think twice about what they are

wishing for.

Those who would ban fracking or regulate it into oblivion ignore the exceptional benefits that inexpensive natural gas can provide in the biggest environmental fight of our time -- against climate change.

After four years of review, state regulators opted for another round of public-health analysis before they permit new unconventional wells. More analysis will probably trigger another public-comment period, even though the state has already taken in nearly 80,000 comments.

Why more delay? Among other things, Gov. Andrew Cuomo (D) and other officials say that environmentalists have threatened to sue the state if it permits fracking . Cuomo argues that a thorough environmental and health review will make the state's eventual fracking rules more resistant to legal challenges. "Months or years of litigation may be avoided," Cuomo said.

We are in no position to judge what combination of politics and legal judgment pushed New York toward this latest delay, and we're all for making sure that fracking is safe. Fracking involves pumping a mixture of water and chemicals deep underground to free trapped gas, and it should proceed with due care and proper regulation. The federal Interior Department and Environmental Protection Agency have proposed some sensible rules.

But anti- fracking activists who hope delay begets delay and eventually prohibition are doing the environment no favor. Burning natural gas produces only about half the carbon emissions as burning coal, which produced 42 percent of America's electricity in 2011. With the increasingly common use of fracking , natural gas prices have plummeted, encouraging a switch from coal to gas, and the country's emissions trajectory has improved.

True, half the emissions does not mean no emissions. But the United States does not have to eliminate its carbon footprint all at once, nor should it. Doing so would cost far too much. Instead, natural gas can play a big role in transitioning to cleaner energy cheaply. A recent analysis from Resources for the Future, a think tank, shows that low, fracking -driven natural gas prices combined with efficiency measures and a serious carbon tax would result in a massive increase in the use of natural gas, nearly eliminating America's coal dependence by 2035 and cutting emissions from the electricity sector by more than half.

Renewable technologies, meanwhile, would have time to lower costs and address other hurdles to widespread deployment before picking up more of the load later in the century.

Environmentalists, in other words, should hope fracking is safe -- and permitted.

Judge rejects NY gas drilling lawsuit against feds
Associated Press Archive - Tuesday, September 25, 2012
Author: MARY ESCH, Associated Press
A federal judge has rejected state Attorney General Eric Schneiderman's lawsuit seeking to force a full environmental review before the Delaware River Basin Commission allows natural gas drilling in a watershed that provides drinking water for millions of New Yorkers.

U.S. District Court Judge Nicholas Garaufis in Brooklyn ruled Monday in favor of the Army Corps of Engineers, the Environmental Protection Agency and other federal agencies. He said the lawsuit filed last year by Schneiderman was speculative, because the commission hasn't adopted final regulations yet.

Garaufis noted that there will be plenty of time to file lawsuits after the regulations are adopted.

Schneiderman said Tuesday that he's pleased the ruling left the door open for legal action at a later date. "This office will continue to review all options moving forward to ensure that the federal government meets its clear legal obligation to fully study the potential risks to New Yorkers' health, environment and public safety before allowing fracking in the Delaware River Basin," Schneiderman said in a statement.

A moratorium is in effect in the Delaware River Basin while the commission establishes regulations for high-volume hydraulic fracturing , or fracking . The commission, comprised of representatives from New York, New Jersey, Pennsylvania, Delaware and the federal government, released draft regulations last year. A special meeting to vote on the regulations in November was postponed to allow more time for review, and no new date has been set.

The commission regulates water use in a 13,539-square-mile area that supplies drinking water to 15 million people, including Philadelphia and half the population of New York City. About 36 percent of the watershed is in the Marcellus Shale region, a gas-

rich area that extends from southern New York to Pennsylvania, eastern Ohio and West Virginia.

Gas is being extracted in the Marcellus Shale using horizontal drilling and fracking , which uses a mix of water, sand and chemicals to crack the shale thousands of feet underground. The commission has identified three major areas of concern over fracking : stream flow and aquifers may be impacted by huge water withdrawals; drilling operations may pollute ground or surface water; and millions of gallons of wastewater will have to be disposed of properly.

New York has kept fracking on hold since 2008 while it completes a massive environmental review that's expected to be finished later this year. Its proposed regulations would ban drilling in the watersheds of New York City and Syracuse.

Landowners seeking gas leases in New York praised the court decision.

"We encourage the DRBC to complete its regulations promptly, and for New York to move on to the important business of developing our state's energy so that we may accomplish twin goals of improving our environment and boosting our economy," said Dan Fitzsimmons, president of the Joint Landowners Coalition of New York.

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"Strive not to be a success but rather of value." Albert Einstein
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