



Issue Date: June, 2014

Editor: Curtis Talley Jr., MSU Extension Farm Management Educator, Hart, MI 231-873-2129; talleycu@anr.msu.edu.

MSU Extension has a web page that contains information regarding oil and gas leasing, mineral rights and other related informational topics at http://msue.anr.msu.edu/program/info/oil_and_gas

Information in this Issue

1. FracFocus Information Source for Hydraulic Fracturing Chemicals
2. Input for future newsletter topics requested
3. Michigan Crude Oil And Petroleum Act 16 of 1929 Amended In April, 2014
 - a. Carbon sequestration and capture; enhanced recovery
 - b. Includes pre-emption of local jurisdictions from restricting carbon dioxide (CO₂) pipelines for enhanced recovery of hydrocarbons
 - c. Landowners and the Michigan Crude Oil and Petroleum Act 16 of 1929

FRACFOCUS IS A GOOD INFORMATION SOURCE ABOUT HYDRAULIC FRACTURING CHEMICALS

Dean Solomon, Senior Extension Educator Greening Michigan Institute
cell: 231-357-2761
solomon@msu.edu

The Michigan Department of Environmental Quality (DEQ) recently published [proposed changes](#) to Michigan's rules for oil and gas operations. A new provision requires operations using high volume hydraulic fracturing (greater than 100,000 gallons) to post a list of chemicals used in the process on the [FracFocus](#) Chemical Disclosure Registry. The site is an excellent resource for landowners and local officials in areas where high volume hydraulic fracturing is or might be used to extract natural gas and oil in deep geologic formations. A [current map](#) of active applications and permits is published by DEQ.

Hydraulic fracturing, also known as fracking, is the oil and gas development technique where large volumes of water mixed with sand and chemicals are pumped under high pressure to release deep oil and gas reserves. The method is controversial nationally and in Michigan because of concerns about potential environmental and human health impacts.

The [FracFocus](#) website provides public access to a list of chemicals used in the hydraulic fracturing process, listed by individual wells. The information is provided either voluntarily by drilling companies or

as required by state regulations. In Michigan, posting will be required within 30 days after completion of a high-volume hydraulic fracturing operation if the draft regulations are adopted. Even though not currently required, the site includes records from 20 Michigan wells as of late May 2014, dating back to early 2011.

Each of the records includes the trade name, supplier, purpose, ingredient name, concentration and reference number for the chemicals used in the process. Interpreting that information is made easier on the site by a [list](#) of what chemicals are used and their purpose, and links to government occupational safety and chemical databases and fact sheets.

[FracFocus](#) also includes information about how hydraulic fracturing works, groundwater protection measures and links to regulations in Michigan and many other states. The site is managed by the [Ground Water Protection Council](#) (an organization of state regulatory agencies) and the [Interstate Oil and Gas Compact Commission](#) (a multi-state agency).

For more information about Michigan oil and gas development, visit the [DEQ Office of Oil, Gas and Minerals](#) and the [Michigan State University Extension](#) website [Oil and Gas Information page](#).

INPUT FOR NEWSLETTER TOPICS REQUESTED

Curtis Talley, Farm Business Management Educator Agriculture and Ag Business Institute 231-873-2129; cell 231-215-4859; talleycu@anr.msu.edu

In order to make this newsletter as useful as possible to the reader, I ask that you send me topics for articles that you have interest. For example, the series in this issue on the Michigan Crude Oil and Petroleum Act was from a township board of supervisors.

MICHIGAN CRUDE OIL AND PETROLEUM ACT 16 of 1929 AMENDED IN APRIL, 2014

Curtis Talley, Farm Business Management Educator Agriculture and Ag Business Institute 231-873-2129; cell 231-215-4859; talleycu@anr.msu.edu

Background: The author spoke to a county planning commission recently. One of the subjects requested was the amended Michigan Crude Oil and Petroleum Act 16 of 1929 and how it affected landowners and townships. The amended act was signed into law on April 1, 2014 by Governor Snyder. It now includes pipelines carrying carbon dioxide used in hydrocarbon “enhanced recovery” operations. The next three sections of this newsletter will discuss developments leading up to the changes to the act and what landowners should know when dealing with the act.

1. Carbon Sequestration and Capture

President Obama launched [The President's Climate Action Plan](#) in June of 2013. The action plan states that carbon pollution is one of the biggest drivers of climate change. In 2009, President Obama made a pledge that by 2020, America would reduce its greenhouse gas emissions in the range of 17 percent below 2005 levels if all other major economies agreed to limit their emissions as well. One of the Environmental Protection Agency's tools to reduce carbon in the environment is [carbon sequestration](#). Carbon sequestration does the following:

- Capture of CO₂ from power plants or industrial processes
- Transport of the captured and compressed CO₂ (usually in pipelines).
- Underground injection and geologic sequestration (also referred to as storage) of the CO₂ into deep underground rock formations. These formations are often a mile or more beneath the surface and consist of porous rock that holds the CO₂. Overlying these formations are impermeable, non-porous layers of rock that trap the CO₂ and prevent it from migrating upward.

Transport of CO₂ through pipelines is the main method of transporting CO₂. The April, 2014 update to the Michigan Crude Oil and Petroleum Act 16 of 1929 includes transport of CO₂ in underground pipelines. Carbon sequestration can provide additional benefits through a process known as "enhanced recovery". **Enhanced Oil Recovery** (abbreviated EOR) is a generic term for techniques for increasing the amount of [crude oil](#) that can be extracted from an [oil field](#).¹ Enhanced recovery is being used in older oil and gas fields. By utilizing enhanced recovery, carbon is sequestered deep beneath the earth's surface and additional crude oil is extracted, providing additional energy.

2. THE MICHIGAN CRUDE OIL AND PETROLEUM ACT 16 OF 1929

(Pre-empts local jurisdictions from restricting CO₂ pipelines for enhanced recovery of hydrocarbons).

[The act](#) was amended in April of 2014. Four different acts each contributed to the final amended Act 16.

Act 82 (House bill 4885) reduced the severance tax from 5% for gas and 6.6% for oil to 4% for oil and gas produced from a carbon dioxide secondary or enhanced recovery project.

Act 83 (House Bill 5254) adds the use of public highways and condemnation of private property to transport carbon dioxide substances by pipeline. It also lays out the following procedures a company must use with the landowner for a crude oil or CO₂ pipeline being considered:

1. A person who is conducting survey work for a proposed pipeline shall notify all affected property owners in writing before a survey crew enters the owner's property.
2. An offer for an easement shall include:
 - a. Anticipated physical impact of pipeline construction on landowner's property

¹ Enhanced Oil Recovery, Wikipedia, http://en.wikipedia.org/wiki/Enhanced_oil_recovery

- b. Written assurance any drainage tile damaged or removed will be repaired or replaced.
- c. Written assurance that topsoil that is disturbed is properly separated and replaced.
- d. The method the property was appraised.
- e. For property used to produce crops, an estimate of the value of the loss of productivity based on the historic yield of the site before construction of the pipeline. Property owner shall provide historic crop yield values upon request.
- f. Payment will be made for all damages incurred after construction of the pipeline.
- g. The landowner has rights under the uniform condemnation procedures act.

Act 84 authorizes the condemnation of property by eminent domain and the use of highways to acquire necessary rights of way for transport of crude oil, petroleum or carbon dioxide substances.

Act 85 pre-empts local governments from restricting pipelines in their jurisdiction. It also states: "...operators of private trunk or gathering lines or other methods of conveying those products are not subject to this act if the nature and extent of their business is private and no public interest is involved in the conduct of the business."

3. LANDOWNERS AND THE MICHIGAN CRUDE OIL AND PETROLEUM ACT 16 OF 1929

As energy infrastructure for our state and nation improve and grow, a landowner may be approached to allow the construction of a pipeline across their property. It is important for landowners to know the process when considering a right of way and their options. Here are some important things to consider:

1. The power of eminent domain is not granted if the project does not provide a public interest.
2. Act 16 contains a specific procedure for dealing with and compensating an affected landowner from initial surveys to the consideration payment for the right of way or easement. It is important that landowners know what to expect when dealing with an offer of right of way or easement.
3. The Act contains both terms "right of way" and "easement." A right of way commonly has an expiration date, while an easement commonly is perpetual. It is not uncommon for landowners to prefer a right of way because it allows them to negotiate a new right of way contract when the existing contract expires. For example, if the right of way has a 30-year term, at the end of 30 years the company and the landowner will negotiate a new agreement and payment for the continued use of the landowner's property. Conversely, if a permanent easement is granted, the landowner will receive compensation once.

MSU Extension created the document [Right of Way Information for Landowners](#) that discusses the right of way process. There are other things a landowner should consider when contemplating a right of way or easement in that document.

Before signing a right of way or easement agreement it is recommended that an attorney knowledgeable in real estate transactions be consulted for additional provisions or interpretation.

Landowner Informational Meetings

MSU Extension personnel, private attorneys specializing in assisting landowners with oil and gas leasing, personnel from the Department of Environmental Quality and representatives of the Michigan oil and gas industry offer public meetings to educate landowners about the oil and gas industry in Michigan, which includes understanding and negotiating oil and gas leases. If you would like a meeting in your area, please contact Curtis Talley.

Please Share Your Oil and Gas Experiences

The editor is very interested in hearing both your positive and negative experiences dealing with oil and gas leasing or production. All information is kept confidential and is combined with data from other landowners to analyze the effectiveness of the educational effort. Report your experiences to the editor by phone at 231-873-2129 or talleycu@anr.msu.edu e-mail.

This newsletter is intended for landowners and other members of the public with interest in the oil and gas industry. If you would like to be added to the e-mail list to receive this newsletter, please contact the editor. You can also contact your local county MSU Extension Office to obtain copies of the newsletter and other free oil and gas leasing information.