



## Early Stakeholder Outreach — House Bill 59 – Beneficial Use of Material from a Horizontal Well that has come in contact with refined oil-based substances that is not TENORM

*Ohio EPA prepares early stakeholder outreach fact sheets to ensure stakeholders are brought into the review process as early as possible and to obtain additional input and discussion before development of interested party draft rules.*

House Bill 59 was passed by the 130<sup>th</sup> General Assembly on July 1, 2013. This bill amended several sections of Ohio law to provide for greater oversight and coordination between the Ohio Department of Health (ODH), Ohio Department of Natural Resources (ODNR) and the Ohio Environmental Protection Agency (Ohio EPA) in ensuring the safe management of oil and gas waste. It is anticipated more of this waste will need to be disposed of in Ohio landfills due to increased oil and gas drilling.

Among the amendments to the solid waste statute in Ohio Revised Code (ORC) Chapter 3734 was the authority for Ohio EPA to promulgate rules regarding the beneficial use of material from a horizontal well that has contacted a refined oil-based substance and that is NOT a technologically enhanced naturally occurring radioactive material (TENORM). The ORC Chapter 3734 amendments specific to beneficial use of this horizontal well material are shown below with changes indicated with an underline:

**ORC Section 3734.01.** *As used in this chapter:*

(V) *"Beneficially use" includes:*

*(1) With regard to scrap tires, to use a scrap tire in a manner that results in a commodity for sale or exchange or in any other manner authorized as a beneficial use in rules adopted by the director in accordance with Chapter 119. of the Revised Code;*

*(2) With regard to material from a horizontal well that has come in contact with a refined oil-based substance and that is not technologically enhanced naturally occurring radioactive material, to use the material in any manner authorized as a beneficial use in rules adopted by the director under section 3734.125 of the Revised Code.*

*(HH) "Horizontal well" has the same meaning as in section 1509.01 of the Revised Code.*

[Note: ORC 1509.01(GG) states: "Horizontal well" means a well that is drilled for the production of oil or gas in which the wellbore reaches a horizontal or near horizontal position in the Point Pleasant, Utica, or Marcellus formation and the well is stimulated.

### How can I provide input?

The Agency is seeking stakeholder input on the proposed concepts included in this document. When preparing your comments, be sure to:

- explain your views as clearly as possible;
- describe any assumptions used;
- provide any technical information and/or data used to support your views;
- explain how you arrived at your estimate for potential burdens, benefits or costs;
- provide specific examples to illustrate your views; and
- offer alternatives.

Written comments will be accepted through close of business June 16, 2014. Please submit input to:

Michelle Braun  
P.O. Box 1049  
Columbus, OH 43216-1049  
[michelle.braun@epa.ohio.gov](mailto:michelle.braun@epa.ohio.gov)

### What if I have questions?

Please contact Dan Harris at (614) 728-5377 or [daniel.harris@epa.ohio.gov](mailto:daniel.harris@epa.ohio.gov).

## Early Stakeholder Outreach — House Bill 59 – Beneficial Use of Material from a Horizontal Well

**ORC Section 3734.125.** The director of environmental protection may adopt rules in accordance with Chapter 119. of the Revised Code establishing requirements governing the beneficial use of material from a horizontal well that has come in contact with a refined oil-based substance and that is not technologically enhanced naturally occurring radioactive material.

### What are drilling wastes?

The Ohio Department of Natural Resources, Division of Oil and Gas Resources Management (ODNR-DOGGRM) has primary regulatory authority over oil and gas drilling activity in Ohio, including rules for well construction, siting, design and operation.

Oil and gas wastes include, but are not limited to, drill cuttings (e.g. earthen materials), drill cuttings that have come in contact with refined oil-based substances, spent drilling muds, filter socks, tank bottoms, spent frac sand, and pipe scale. Drill cuttings refer to a mixture of soil, rock and other subterranean matter brought to the surface during drilling of oil and gas production wells. ODNR-DOGGRM also regulates brine disposal in Ohio, including permitting and oversight of Class II underground injection wells used for disposal of waste fluids from oil and gas drilling/production operations. ODNR-DOGGRM also registers transporters hauling these fluids in Ohio.

Please refer to ODNR-DOGGRM's webpage at [oilandgas.ohiodnr.gov](http://oilandgas.ohiodnr.gov) for information regarding oil and gas drilling operations, regulations, a glossary of terms, and frequently asked questions.

### What are NORM and TENORM?

The Ohio Department of Health (ODH), Bureau of Radiation Protection, has primary regulatory authority over radioactive materials and Ohio's TENORM regulations. It is anticipated that most of the material at drilling operations would consist of soil, rock, and other subterranean matter and would be categorized as naturally occurring radioactive materials (NORM). NORM is radioactive material naturally present in the environment (i.e., soils, air and water) and can be found everywhere. Since these materials are found in the natural environment, NORM is exempted from regulation by the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission and ODH. NORM such as [uranium](#) (U), [radium](#) (Ra), and [thorium](#) (Th) emit low levels of naturally occurring radiation. Examples of NORM include radon gas in homes and potassium-40 found in all plants and animals including humans.

A part of the oil and gas drilling waste stream will qualify as TENORM. ODH defines TENORM as naturally occurring radioactive material with radionuclide concentrations that are increased by or as a result of past or present human activities. Examples of potential TENORM from oil and gas drilling include filter socks, tank bottoms, spent frac sand, spent drilling muds and pipe scale. According to the following statutory definition of TENORM, drill cuttings are not TENORM.

**ORC Section 3748.01.** As used in this chapter:

*(X) "Technologically enhanced naturally occurring radioactive material" means naturally occurring radioactive material with radionuclide concentrations that are increased by or as a result of past or present human activities. "Technologically enhanced naturally occurring radioactive material" does not include drill cuttings, natural background radiation, byproduct material, or source material.*

*(Y) "Drill cuttings" means the soil, rock fragments, and pulverized material that are removed from a borehole and that may include a de minimus amount of fluid that results from a drilling process.*

For more information, please refer to ODH's [NORM/TENORM information sheet](#) and [Radiation Protection Program webpage](#).

### What is material from a horizontal well that has contacted a refined oil-based substance?

A significant volume of material from a horizontal well will be drill cuttings generated during the phase of drilling that involves air, water, clay, or other inert materials. These drill cuttings are considered earthen materials and are not regulated as a solid waste. The drilling process along portions of a horizontal well may necessitate the addition of refined oil-based substances. Drill cuttings coming into contact with refined oil-based substances that are sent off-site for disposal are classified as a solid waste under Ohio EPA regulations. While drill cuttings that have come into contact with

## Early Stakeholder Outreach — House Bill 59 – Beneficial Use of Material from a Horizontal Well

refined oil-based substances may be disposed of at a licensed solid waste landfill, ORC Section 3734.125 provides that the Ohio EPA Director may adopt rules for the beneficial use of such material.

### Why is the Agency seeking Early Stakeholder Outreach?

ORC Section 3734.125 authorizes the Ohio EPA director to adopt rules regarding beneficial uses of material from a horizontal well that has come in contact with a refined oil-based substance and that is not TENORM. In response to Executive Order 2011-01K, Ohio EPA has included an additional step to ensure stakeholders are brought into the review process as early as possible. This additional interested party notification and request for information will allow for early feedback before the rule language has been developed by the Agency.

### What is being suggested?

While it is anticipated that more oil and gas drilling wastes will be generated, Ohio EPA is uncertain of the volume, extent of interest, and types of potential beneficial uses of horizontal well material that has come in contact with refined oil-based substances that are not TENORM. Ohio EPA seeks stakeholders' input, suggestions, and information regarding these and the following questions:

- Identification of any other horizontal well materials that are not drill cuttings, as defined in ORC Section 3748.01(Y), that have come into contact with a refined oil-based substance and are not TENORM.
- Information regarding how horizontal well materials that have been in contact with refined oil-based substances and that are not TENORM are identified and segregated from other drilling wastes.
- Information regarding the characteristics of materials that the Agency should consider for beneficial use including the nature and levels of refined oil-based substances.
- Information regarding the degree of variability in the material, its characteristics, and the refined oil-based substances.
- Information regarding types of beneficial uses suited to this material.
- Information regarding processes and treatment methods that might be utilized to prepare the material for beneficial use.

Ohio EPA is considering the following approach for possible rule-making and invites stakeholder input and suggestions.

1. To accommodate the anticipated increased generation of drilling wastes, develop a rule specific to the establishment of a requirement for a director's beneficial use authorization of horizontal well material that has been in contact with refined oil-based substances and that are not TENORM and submission of required information. The review would be case specific to the material, the beneficial use, and the location of the use. The advantage of this approach is rule-making could be focused on horizontal well material beneficial use.

Conceptually, this approach would be similar to OAC Rule 3745-27-05(A)(4) pertaining to authorization of alternative disposal methods also known as the Integrated Alternative Waste Management Program (IAWMP).

2. Include the beneficial use of horizontal well material that has been in contact with refined oil-based substances and that are not TENORM into the broader dialogue of developing a beneficial use regulatory program addressing various types of wastes and beneficial uses. Upon adoption of these broader beneficial use regulations, the above horizontal well material beneficial use rule may be rescinded.

Ohio EPA has been engaged in a stakeholder discussion on the development of a beneficial use regulatory program since June 2012. The dialogue on developing a beneficial use regulatory program has involved numerous stakeholder meetings and most recently released an updated 2013 Early Stakeholder Outreach with draft conceptual rule language. Information on this dialogue is available on the Division of Materials and Waste Management's (DMWM) [early stakeholders outreach section](#) of our webpage.

### Who is regulated by this rule?

This would be a new rule that would establish requirements on any person seeking to beneficially use horizontal well material that has been in contact with refined oil-based substances and that are not TENORM.

## Early Stakeholder Outreach — House Bill 59 – Beneficial Use of Material from a Horizontal Well

### What input is the Agency seeking?

The Agency is seeking stakeholder input on the suggested concepts included in this document. General comments and specific factual information must be submitted by the June 16, 2014 deadline. The following questions may help guide you as you develop your comments.

- Is the general regulatory framework proposed the most appropriate? Should the Agency consider any alternative framework?
- What options are available for improving an identified concept?
- Are there considerations the Agency should take into account when developing a specific concept?
- Is there any information or data the Agency should be aware of when developing program concepts or rule language?

Ohio EPA would especially like to hear information regarding the following from stakeholders who may be impacted by the new program.

- Would this regulatory program have a positive impact on your business? Please explain how.
- Would this regulatory program have an adverse impact on your business? If so, please identify the nature of the adverse impact (for example, license fees, fines, employer time for compliance).

### What's the next step?

After the June 16, 2014 comment deadline, Ohio EPA will evaluate feedback and facilitate additional stakeholder engagement as needed to further obtain input on the beneficial use of horizontal well material. The Agency will then prepare a draft version of rules for interested party review. After incorporating interested party comments, Ohio EPA will begin the rules filing process required by the Joint Committee on Agency Rule Review (JCARR) for a 65-day jurisdiction period. They will be heard at JCARR before they are deemed effective as proposed. Visit JCARR's website for meeting dates and agenda items at <https://www.jcarr.state.oh.us/>.

### How can I track the program and rule-development progress?

Stakeholders are encouraged to sign up for the Agency's "Oil and Gas-beneficial use" electronic mailing list which provides automatic updates about various topics. Registered users will receive progress updates and be notified when new information is posted on the program website. To sign up, go to [ohioepa.custhelp.com/ci/documents/detail/2/subscriptionpage](http://ohioepa.custhelp.com/ci/documents/detail/2/subscriptionpage).