The Common Sense Initiative was established by Executive Order 2011-01K and placed within the Office of the Lieutenant Governor. Under the CSI Initiative, agencies should balance the critical objectives of all regulations with the costs of compliance by the regulated parties. Agencies should promote transparency, consistency, predictability, and flexibility in regulatory activities. Agencies should prioritize compliance over punishment, and to that end, should utilize plain language in the development of regulations.

**Regulatory Intent**

1. Please briefly describe the draft regulation in plain language. *Please include the key provisions of the regulation as well as any proposed amendments.*

   The rules require the owners or operators of those solid waste landfills and transfer facilities that choose to accept drilling operation materials after the effective date of the rules to provide notice to Ohio EPA. Those owners or operators currently accepting drilling operation materials must provide notice not later than thirty days after the effective date of the rules if their intent is to continue to accept drilling operation materials. Those facilities authorized by Ohio Department of Natural Resources (ODNR) and/or Ohio Department of Health (ODH) to accept and manage technologically enhance naturally occurring radioactive material (TENORM) that contains radium 226 or 228 above 5
picocuries per gram above natural background would be required to modify their Solid Waste Facility permit. These rules outline the operational and monitoring requirements imposed on solid waste landfills and solid waste transfer facilities that voluntarily choose to accept drilling operation waste (oil and gas production waste) for disposal or transfer in Ohio.

2. **Please list the Ohio statute authorizing the Agency to adopt this regulation.**

   These rules are authorized under Ohio Revised Code Section 3734.02, including paragraph (P) and paragraph (Q).

3. **Does the regulation implement a federal requirement? Is the proposed regulation being adopted or amended to enable the state to obtain or maintain approval to administer and enforce a federal law or to participate in a federal program?**

   *If yes, please briefly explain the source and substance of the federal requirement.*

   No.

4. **If the regulation includes provisions not specifically required by the federal government, please explain the rationale for exceeding the federal requirement.**

   Not Applicable.

5. **What is the public purpose for this regulation (i.e., why does the Agency feel that there needs to be any regulation in this area at all)?**

   House Bill 59 passed by the 130th General Assembly amended several sections of Ohio law to provide for greater oversight and coordination between the ODH, ODNR, and Ohio EPA in ensuring the safe management of oil and gas waste. The public purpose is to safeguard public health from unnecessary exposure to radiation from oil and gas waste. Consistent with statute, these Ohio EPA rules would ensure safe management and disposal practices of TENORM associated with oil and gas production waste at solid waste landfills and solid waste transfer facilities in Ohio.

6. **How will the Agency measure the success of this regulation in terms of outputs and/or outcomes?**

   The Agency will measure success of these regulations in the prevention of acceptance of unauthorized levels of TENORM associated with oil and gas production waste by assessing landfill and transfer facility compliance with requirements to identify and prevent acceptance of unauthorized radioactive material and ensure the proper management of such radioactive material. Landfill and transfer facility owners and operators will install alarms and implement a radioactive material detection program, and landfill owners and operators will also monitor and report radium concentrations in leachate and ground water to ensure no adverse impact to human health, safety, or the environment.

**Development of the Regulation**

7. **Please list the stakeholders included by the Agency in the development or initial review of the draft regulation.**

   *If applicable, please include the date and medium by which the stakeholders were initially contacted.*

   The Agency contacted stakeholders via email on October 2, 2013 to inform them of the Early
Stakeholder Outreach process and the associated comment period. The email was sent to subscribers on the Agency’s “solid waste landfill” listserv consisting of over 2,100 subscribers and “solid waste transfer facility” listserv” consisting of over 1,400 subscribers.

After the 2013 release, comments were considered and conceptual draft rules were created. Another early stakeholder outreach was released on May 18, 2015, along with the draft language.

More recently, on February 17 2016, Ohio EPA contacted stakeholders, including the oil and gas industry, to further discuss the draft rules prior to the interested party release period. A stakeholder meeting was held on March 1, 2016.

8. **What input was provided by the stakeholders, and how did that input affect the draft regulation being proposed by the Agency?**

The Agency received a large amount of feedback from stakeholders on the concepts outlined in the 2013 Early Stakeholder Outreach, including thousands of “form-letter” email messages from environmental groups including the Ohio Sierra Club and Food and Water Watch. Concerns with ground water contamination and radium thresholds were noted, as well as numerous general comments regarding the shared regulatory authority between Ohio EPA, Ohio Department of Natural Resources (ODNR), and Ohio Department of Health (ODH). Based on the significant interest in the rules, the Agency held a second ESO period on May 18, 2015. This release also included a draft of the rules for stakeholder review. Feedback received during the conceptual release included comments from the oil and gas industry, landfill industry, and consultants associated with those industries. The comments focused primarily on narrowing the applicability of the draft rules to only solid waste landfills and transfer facilities that accept oil and gas production waste for transfer or disposal, comments on the solidification of TENORM, and comments on the draft ODH guidance that Ohio EPA plans to incorporate by reference in the rules. Ohio EPA considered stakeholder input and made several changes to the draft rules in response to the feedback.

9. **What scientific data was used to develop the rule or the measurable outcomes of the rule? How does this data support the regulation being proposed?**

The Agency utilized scientific data in the creation of these rules to determine appropriate waste handling and disposal practices for oil and gas production waste. The Agency consulted with both ODH and ODNR regarding the scientific data and appropriateness of the handling and disposal practices. Specifically, the following documentation was utilized:

- West Virginia Department of Environmental Protection: Examination of Leachate, Drill Cuttings and Related Environmental, Economic and Technical Aspects Associated with Solid Waste Facilities in West Virginia (June 2015).
- Association of State and Territorial Solid Waste Management Officials (ASTSWMO): TENORM Associated with Shale Gas Operations.

The data utilized in the development of the rules supports the environmental controls the Agency has proposed in OAC Chapter 3745-515.
10. What alternative regulations (or specific provisions within the regulation) did the Agency consider, and why did it determine that these alternatives were not appropriate? If none, why didn’t the Agency consider regulatory alternatives?
   Alternative regulations were not considered by Ohio EPA. The statute provides the Agency with the authority to adopt rules for solid waste landfills and transfer facilities regarding oil and gas production waste acceptance and management and prescribes the requirements and prohibitions that shall be contained in the rules. The Agency consulted with ODH and ODNR regarding the appropriate industry practices and requirements under other statutes and rules for the identification, testing, monitoring, and management of TENORM and oil and gas production waste.

11. Did the Agency specifically consider a performance-based regulation? Please explain.
   Performance-based regulations define the required outcome, but don’t dictate the process the regulated stakeholders must use to achieve compliance.
   The Agency did consider performance-based regulations. The rules only apply to solid waste facilities that accept oil and gas production wastes. Consistent with ORC section 3734.02, the rules prohibit acceptance for transfer or disposal of TENORM with radium 226 or 228 at concentrations equal to or greater than 5 picocuries per gram above natural background radiation. These rules do not dictate the process by which stakeholders may lower the level of radiation below the statutory mandated level of five picocuries per gram above natural background at which landfill or transfer facility acceptance is permissible.

12. What measures did the Agency take to ensure that this regulation does not duplicate an existing Ohio regulation?
   The Agency reviewed our own regulations and performed a search of regulations from other agencies to determine if duplication exists. Given that House Bill 59 amended several sections of Ohio law to provide for greater oversight and coordination between the ODH, ODNR, and Ohio EPA in ensuring the safe management of oil and gas waste, Ohio EPA worked closely with both the ODH and ODNR to clarify regulatory roles and avoid duplication with other regulations. Based on these efforts and to our knowledge, Ohio EPA is not duplicating another existing Ohio regulation.

13. Please describe the Agency’s plan for implementation of the regulation, including any measures to ensure that the regulation is applied consistently and predictably for the regulated community.
   The Agency plans to continue to coordinate with stakeholders, including ODNR and ODH, to identify implementation needs and ensure regulatory consistency. Technical assistance, training, compliance inspections, and guidance for solid waste landfill and transfer facility owners and operators as well as local health departments are all options the Agency plans to implement as appropriate.

Adverse Impact to Business

14. Provide a summary of the estimated cost of compliance with the rule. Specifically, please do the following:
   a. Identify the scope of the impacted business community;
The scope of the impacted business community includes owners and operators of solid waste landfills and transfer facilities that choose to accept drilling operation materials after the effective date of the rules.

b. Identify the nature of the adverse impact (e.g., license fees, fines, employer time for compliance); and

The nature of the adverse impact includes employer time for compliance as well as expenses to obtain compliance with OAC Chapter 3745-515.

c. Quantify the expected adverse impact from the regulation.

The adverse impact can be quantified in terms of dollars, hours to comply, or other factors; and may be estimated for the entire regulated population or for a “representative business.” Please include the source for your information/estimated impact.

The adverse impact associated with these rules includes the cost to install fixed radiation detectors at the facility, which can range from approximately $35,000-$60,000 depending on the manufacturer and selected options.

A cost of compliance is also incurred with the addition of radium-226 and radium-228 to the leachate and ground water monitoring parameter list. This cost would be variable depending on the laboratory analyzing the samples. The cost is associated with implementation of ORC Section 3734.02(P)(4)(a).

15. Why did the Agency determine that the regulatory intent justifies the adverse impact to the regulated business community?

The Agency has determined the regulatory intent justifies the adverse impact to owners and operators of solid waste landfills and transfer facilities that choose to continue to accept oil and gas production waste after the effective date of these rules in order to ensure that disposal of TENORM associated with drilling operation material does not adversely impact human health, safety, or the environment. Evidence of environmental impacts has been documented at landfills in other states that have accepted oil and gas waste and did not have fixed radiation detectors.

Regulatory Flexibility

16. Does the regulation provide any exemptions or alternative means of compliance for small businesses? Please explain.

An owner or operator of a solid waste landfill or transfer facility may choose not to accept drilling operation waste and not be subject to Chapter 3745-515. An owner or operator may propose variances to the rules as an alternative means of compliance. The director also has the authority to consider exemptions under ORC section 3734.02(G).

17. How will the agency apply Ohio Revised Code section 119.14 (waiver of fines and penalties for paperwork violations and first-time offenders) into implementation of the regulation?
The director or the approved health department will evaluate the applicability of ORC section 119.14 to solid waste facilities regulated under OAC Chapter 3745-515 when assessing fines and penalties for paperwork violations and first-time offenders.

18. What resources are available to assist small businesses with compliance of the regulation?

Ohio EPA’s Office of Compliance Assistance and Pollution Prevention (OCAPP) is a non-regulatory program that provides information and resources to help small businesses comply with environmental regulations. OCAPP also helps customers identify and implement pollution prevention measures that can save money, increase business performance and benefit the environment. Services of the office include a toll-free hotline, on-site compliance and pollution prevention assessments, workshops/training, Plain-English publications library and assistance in completing permit application forms. Additional information is available at: [http://epa.ohio.gov](http://epa.ohio.gov).