Compliance Assistance Centers Environmental Compliance Information for Energy Extraction (aka Oil and Natural Gas Extraction Portal or Energy Extraction Portal) https://www.eciee.org/

SBEAP Meeting

Catherine Tunis EPA Office of Enforcement and Compliance Assurance May 14, 2019



COMPLIANCE ASSISTANCE C E N T E R S

https://www.complianceassistance.net/

Provide assistance and guidance so regulated entities can more easily comply with regulations

Improve processes and compliance by sharing best practices in a collaborative, cost-effective way

Service both industry-specific sectors and select cross-industry topics

Act as a trusted resource funded through EPA Cooperative Agreements and industry partnerships



What do the Centers Provide?

- Sector-specific multimedia regulatory explanations
- Compliance tools
- Process-specific training
- A place to ask questions and get answers
- Databases on technologies and techniques
- Pollution prevention tips and ideas
- Best Management Practices
- Links to other assistance providers, vendors & suppliers
- Access to state-specific environmental compliance information
- Connections to industry and trades

Agriculture Auto Recycling Auto Repair Beneficial Use Portal Colleges/Universities Combustion Portal Construction Federal Facilities Hazardous Waste Portal Human & Animal Healthcare Import/Export Issues Local Government Metal Finishing Paints and Coatings Port Compliance State Resource Locators Transportation

Oil & Natural Gas Extraction





Environmental Compliance Information for Energy Extraction



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Welcome to the Environmental Compliance Information for Energy Extraction Portal

The Environmental Compliance Information for Energy Extraction (ECIEE) Portal is intended to help you comply with environmental regulations that affect the exploration/development, extraction, production and processing of on-shore crude oil and natural gas. The site includes overviews of the regulations and links to more detailed information and other resources that can help this sector operate in an environmentally responsible manner.

This website was developed and is maintained by the National Center for Manufacturing Sciences. Funding for this project has been provided by EPA under the National Compliance Assistance Centers program. For more information, or to pass along suggestions, please contact: Lisa Stobierski, Administrative Director, LisaS@ncms.org.

Recent Developments

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Quick Access



Exploration/Development



Well Production



Processing





What does the Environmental Compliance Information for Energy Extraction (ECIEE) Portal Provide?

- First stop for information on federal and state environmental regulations that affect the development, extraction, production and processing of oil and natural gas.
- Compliance information is organized by statute (e.g., CAA, RCRA, CWA) and technical topics (e.g., well production, processing).
- Information provided for oil and natural gas extraction activities in Indian country.
- Access to state-specific resources and regulations.



Who Developed the ECIEE Portal?

- The National Center for Manufacturing Sciences (NCMS) in partnership with:
 - State Review of Oil and Natural Gas Environmental Regulations (STRONGER); and
 - U.S. EPA.
- US EPA funding provided through EPA/OECA Centers program.



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Statute-Specific Content



Environmental Compliance Information for Energy Extraction



Underground Source of Drinking Water (USDW)

exempt aguifer or portion thereof that contains a

public water system, and either currently supplies

sufficient quantity of ground water to supply a

drinking water for human consumption or that

solids

contains fewer than 10,000 mg/l total dissolved

A non-exempt aquifer or portion thereof that

supplies any public water system; or a non-

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Safe Drinking Water Act

Overview

The Safe Drinking Water Act (SDWA) is the primary federal law that ensures the quality of Americans' drinking water. Under SD/WA, the U.S. Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees the states, localities, and water suppliers implementing those standards.

Also administered under the SDWA is EPA's Underground Injection Control (UIC) Program, which regulates the construction, operation, permitting, and closure of injection wells that place fluids underground... Among the UIC Program's objectives are to:

- Protect public health through the protection of underground sources of drinking water (USDWs)
- Provide a means for industries, municipalities, and small businesses to dispose of wastes.

SDWA's Effect on Oil and Natural Gas Exploration and Development

- There are two segments of the SDWA that are most likely to impact oil and natural gas conforation and development:
 - Public Drinking Water Systems
 - Underground Injection

Each of these aspects of the SDWA is discussed below.

Public Drinking Water Systems

Under the SDIWA. EPA establishes minimum standards for tap water supplied by public water systems. A public water gratem is defined as a water system that has 15 service connections or regularly serves 25 Individuals for at least 60 days per year. Public water systems obtain their water from two sources: groundwater and surface water. Depending on the quality of the source water pre-treatment may be needed prior to distribution to the public for consumption.

The SDWA's primary regulatory mechanisms are the National Primary Drinking Water Regulations, which identify maximum contaminant levels (MCLs) or treatment techniques generally on a contaminant-by-contaminant basis.

MCLs and treatment techniques are generally based on the potential for toxicity to humans and the feasibility of detection and water treatment. Not all potential contaminants are regulated under this program, however, SDWA mandates an ongoing program for evaluation and regulation of new contaminants found in drinking water.

The SDWA's National Primary Drinking Water Regulations may apply when hydraulic fracturing or other oil or natural gas production activities impact a public water system's supply (e.g., during release cleanup or pre-treatment of groundwater or

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Quick Links to Relevant Regulations



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General control device and work practice requirements (40 CFR Part 60.18 Subpart A) &

Applicability to crude oil and natural gas industry

40 CFR Part 60 Subpart A is a general provisions subpart which is used for administrative convenience (e.g., many general requirements are housed in Subpart A and referenced by other portions of the CAA regulations. A "referencing subpart" is a subpart which references to Subpart A).

Subpart A includes sections relating to monitoring, recordkeeping, and reporting as well as the conduct of performance tests and other requirements to ensure compliance with the standards.

Compliance information

Compliance date: Compliance dates are based on the compliance date of the referencing subpart. In general, the compliance date for sources subject to an NSPS is upon promulgation of the referencing subpart or startup, whichever is later.

More information

- The

 Nebraska DEQ NSPS Notebook (40 CFR Part 60 Subpart A). The Nebraska DEQ NSPS Notebook contains applicability information, regulatory citations, amendment dates, related rules, guidance documents, forms, and other helpful information

Compliance Monitoring, New Source Performance Standards and State Implementation Plans.

Supported By



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§ 60.18

Avenue Marnix 17, B-1000 Brussels, Belgium, Telephone: + 32 2 550 08 11.

(1) DIN EN 303-5:2012E (EN 303-5), Heating bollers—Part 5: Heating bollers for solid fuels, manually and automatically stoked, nominal heat output of up to 500 kW—Terminology, requirements, testing and marking, (October 2012), IBR approved for §50.5476. Interstandard is also available at http:// www.en-standard.eu/csn-en-302-5-heating-bollers-part-5-heating-bollers-forsolid-fuels-manually-and-automaticallystoked-nominal-heat-output-of-up-to-500kw-terminology-requirements-testing-andmarking/30clid CJX12P 97MMCFdccqQodan&AT(A)

UXI2P_97MMCFdccgQodan8ATA) (2) [Reserved]

[79 FR 11242, Feb. 27, 2014, as amended at 79 FR 18965, Apr. 4, 2014; 80 FR 13701, Mar. 16, 2015; 80 FR 64648, Oct. 23, 2015; 81 FR 35805, June 3, 2016; 81 FR 53813, 59368, Aug. 29, 2016; 81 FR 559809, Aug. 30, 2016; 82 FR 28562, June 23, 2017]

§60.18 General control device and work practice requirements.

(a) Introduction. (1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative conventence and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c)(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. (2) Flares, shall be converted with a

40 CFR Ch. I (7-1-18 Edition)

specifications in paragraph (c)(3)(i1) of this section and the maximum tip velocity specifications in paragraph (c)(4)of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than the velocity, $V_{\rm max}$, as determined by the following equation:

 $V_{max} = (X_{H2} - K_1)^* K_2$

Where:

- 9 V_{max} = Maximum permitted velocity, m/sec. 5 K₁ = Constant, 6.0 volume-percent hydrogen.
- K₂ = Constant, 3.9(m/sec)/volume-percent hydrogen.
- X_{HE} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(11) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)(1) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (11) and (11) of this section.

(11) Steam-assisted and nonassisted



Content by Technical Topic



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Study of Oil and Gas Extraction Wastewater Management. EPA is conducting a study that will take a holistic look at how the Agency, states, tribes and stakeholders regulate and manage wastewater from the oil and gas industry.





Well Production



Processing





When Operating in Indian Country

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Indian Country Resources

The complex history between the federal government and American Indian tribes has created a complex division of authority between federal and tribal governments, including on issues related to oil and gas development in Indian country (see definition of "Indian country").

It is important that anyone considering engaging in oil and natural gas extraction activities in Indian country be aware of the environmental regulatory and program administration roles of federally-recognized Indian tribes, EPA or other federal agencies.

- Basic Background Regulatory Responsibility
- Points of Contact
- US EPA
- Department of the Interior (DOI)
- Department of Energy (DOE)
- Non-Federal Resources
- Tribal Laws and Resources
- Glossary

Basic Background – Regulatory Responsibility

Generally, tribes retain civil regulatory authority over tribal member activities in Indian country. Tribal civil regulatory authority over non-tribal member activities in Indian country is generally limited unless the nonmembers have a relevant consensual relationship with the tribe, or the activities threaten or have some direct effect on the political integrity, economic security, or health or welfare of the tribe.

The Clean Air Act (CAA), Clean Water Act (CWA), and Safe Drinking Water Act (SDWA) expressly provide the authority for EPA to approve tribes to play essentially the same role in Indian country that states do within state lands. Other environmental statutes also have important roles for tribes. Where a tribe administers an EPA-approved program, EPA maintains oversight responsibility in the same manner as it would for approved state programs. EPA maintains a list of tribes with approved programs.

The majority of regulatory activity under federal environmental laws in Indian country is currently conducted by EPA and is known as EPA direct implementation in Indian country. EPA's direct implementation role in Indian country is significant because very few tribes have as yet sought and been approved by EPA to administer regulatory programs in the same manner as states. Further, as a general matter, states are not approved by EPA to administer regulatory programs under EPA's statutes in Indian country. In most cases, therefore, EPA is the entity administering environmental programs – including CAA, CWA, SDWA, and RCRA programs – in Indian country. Additional background information is available from the Intermountain Oil and Gas BMP Project.

Readers are advised to contact EPA or the affected tribe or tribes to learn more about regulatory program administration in Indian country. Terms of art and definitions unique to Indian country are found in the Glossary section.

More specific information on EPA program administration is found in other areas of the Portal, particularly the federal "Statutes and



State-Specific Resources

BACK TO THE GATEWAY



NATURAL GAS & OIL STATE RESOURCE LOCATOR



Oil & Natural Gas Exploration

This page provides an overview of state regulations that apply to oil and gas exploration and production for each state. To be sure that you have the most comprehensive and current information, please contact the appropriate state agency.

Click on your states initials.





PROVIDE FEEDBACK

Oil & Natural Gas Exploration

Pennsylvania Regulations for Oil and Gas Exploration and Production

This page provides an overview of state regulations that apply to oil and gas exploration and production in Pennsylvania. To be sure that you have the most comprehensive and current information, please contact the appropriate state agency.

- Oil and Gas Regulation
- Air
- Water
 - Produced water
 - Stormwater
 - Wetlands
- Underground Injection Wells
- Solid and Hazardous Waste
- Compliance Assistance
- More Pennsylvania Resources

Oil and Gas Regulation

- State Environmental Agency: <u>Pennsylvania Department of Environmental Protection (DEP)</u>
- Oil and Gas Regulatory Agency: DEP, Office of Oil and Gas Management
 - Oil and gas regulations
 - Permit applications

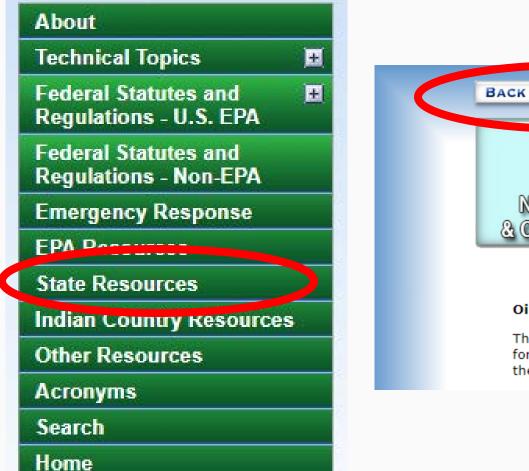


Questions/Suggestions? Contact:

- Lisa Stobierski, NCMS Project Officer, at lisas@ncms.org
- Ryan Steadley, STRONGER Executive Director, at <u>steadley@strongerinc.org</u>
- Catherine Tunis, U.S. EPA point of contact, at <u>tunis.catherine@epa.gov</u>.



State Resource Locators





Oil & Natural Gas Exploration

This page provides an overview of state reg for each state. To be sure that you have the the appropriate state agency.



Update the State Resource Locators

Use the Feedback Form at the bottom of each state page to add new resources or update existing ones!

GATEWAY TO STATE RESOURCE LOCATORS



This gateway provides you easy access to a wide variety of very powerful State Resource Locator tools. State Resource Locators (SRLs) allow you to generate customized reports for a wide range of environmental compliance topics for your state. Included are complete listings of state and Federal regulations impacting selected environmental topics along with individual state contacts, information, and permits for downloading, all at your fingertips.

All Locators



Feedback Form
If you found a broken link or a mistake of any sort, or if you would like to comment on this resource, please use this form to do so.
Category of feedback: Broken Link
Enter your comment, description of the correction, additional or broken link (please provide the correct or additional link if possible) or let us know what you were looking for that you did not find.
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Your contact information
Name:
Company:
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DETAIL: Updating the State Resource Locators





e-Manifest Saves Time and Money

- EPA OLEM is preparing new "how-to" materials for the Centers on how to register for and use e-Manifest for hazardous waste.
- Plan to promote e-Manifest, especially to metal finishers and foundries.
- OLEM would like **a few volunteers** to review outreach materials (1-2-pages).
- If interested, contact David Nicholas (<u>nicholas.david@epa.gov</u>) or Catherine Tunis (<u>tunis.catherine@epa.gov</u>)