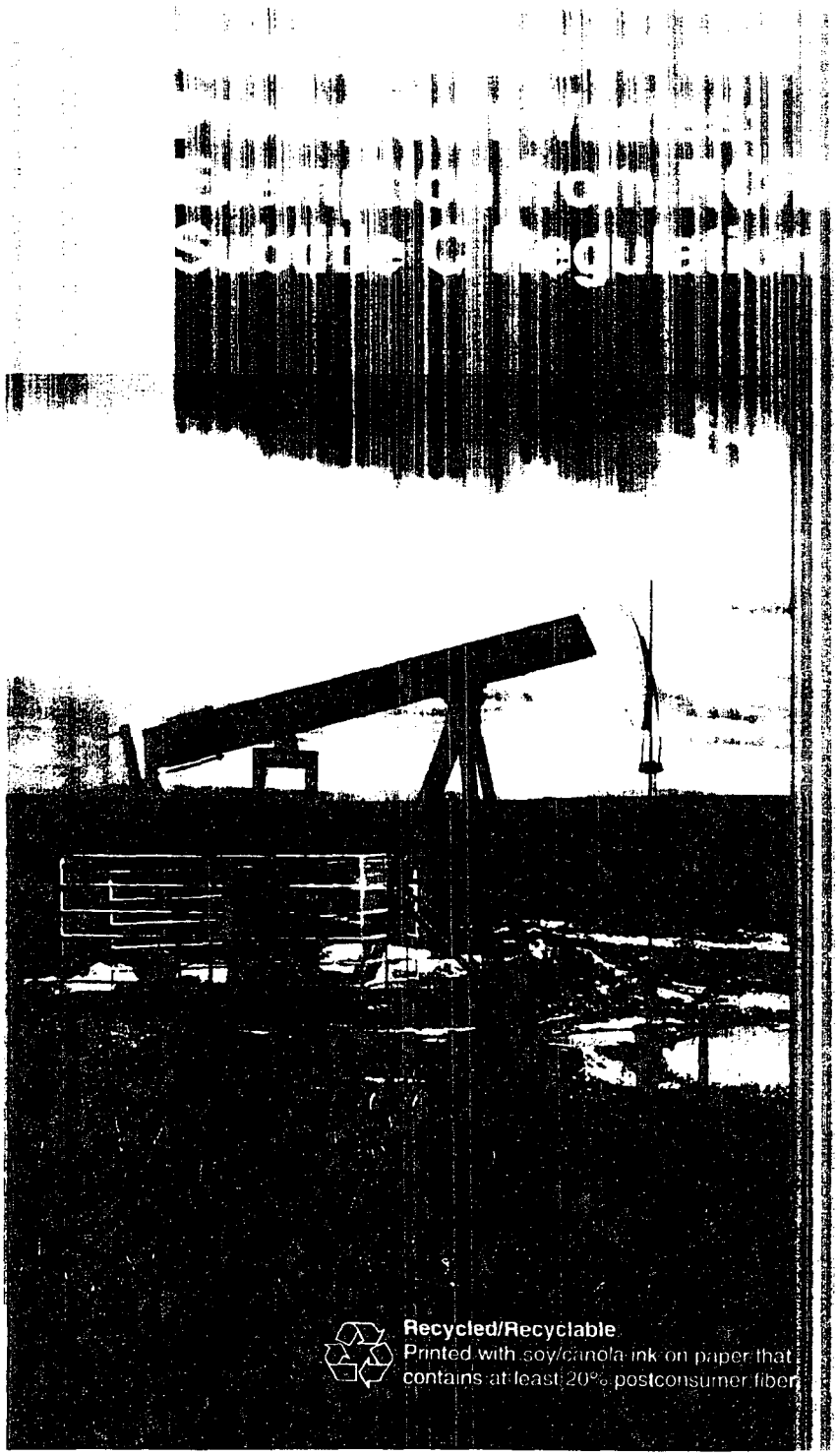

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INTRODUCTION

In the 1987 Report to Congress entitled "Management of Wastes from the Exploration, Development and Production of Crude Oil, Natural Gas and Geothermal Energy," the U.S. Environmental Protection Agency (EPA) presented estimates on the amount of oil and gas drilling and production wastes generated in the United States. Those estimates were provided to the Agency by the American Petroleum Institute (API). Specifically, API estimated that 361 million barrels of drilling wastes and 20.9 billion barrels of produced water were generated in 1985 from exploration and production (E&P) operations. API later estimated that 11.8 million barrels of other wastes associated with E&P operations were generated that same year.

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Drilling activity in the United States has declined significantly since 1985, which would result in a corresponding reduction in the generation of drilling wastes. According to the International Association of Drilling Contractors, the total footage drilled for all oil and gas wells dropped from 315.4 million feet in 1985 to 133.1 million feet in 1991, a decrease of 58 percent. It seems logical to assume that drilling waste volumes would have declined proportionately during this time. On the other hand,

In 1985, 361 million barrels of drilling wastes and 20.9 billion barrels of produced water were generated from E&P operations.

as hydrocarbons from producing wells deplete, produced water volumes typically increase. Because no attempts have been made to update the 1985 E&P waste volume data, it is uncertain what effect the downward trend in drilling activity has had on total E&P waste generation volumes.

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Nevertheless, managing all these wastes in a manner that protects human health and the environment is essential for limiting operators' legal and financial liabilities and makes good business sense. The preferred option for preventing pollution is to avoid generating wastes whenever possible (source reduction). Examples include process modifications to reduce waste volumes and materials substitution to reduce toxicity. Also, a determination should be made as to whether the waste is subject to hazardous waste regulations. At times this determination is misunderstood and may lead to improper waste management decisions. Prudent waste management decisions, even for nonhazardous

wastes, should be based on the inherent nature of the waste. Not all waste management options are appropriate for every waste. Additionally, operators should be familiar with state and federal regulations governing the management of hazardous and nonhazardous wastes.

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This publication was produced by EPA to provide an understanding of the exemption of certain oil and gas exploration and production (E&P) wastes from regulation as hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act (RCRA).

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The information contained in this booklet is intended to furnish the reader with:

- A basic background on the E&P exemption.
- Basic rules for determining the exempt or non-exempt status of wastes.
- Examples of exempt and non-exempt wastes.
- Status of E&P waste mixtures.
- Clarifications of several misunderstandings about the exemption.
- Answers to frequently asked questions.
- Recommendations for sensible waste management.
- Additional sources of information.

Understanding the procedures for determining the exempt or non-exempt status of a waste is a valuable tool, especially for operators who choose to develop voluntary waste management plans. When these procedures are used in conjunction with a knowledge of the nature of the waste, the operator will be better prepared to develop site-specific waste management plans and to manage E&P wastes in a manner that protects human health and the environment.

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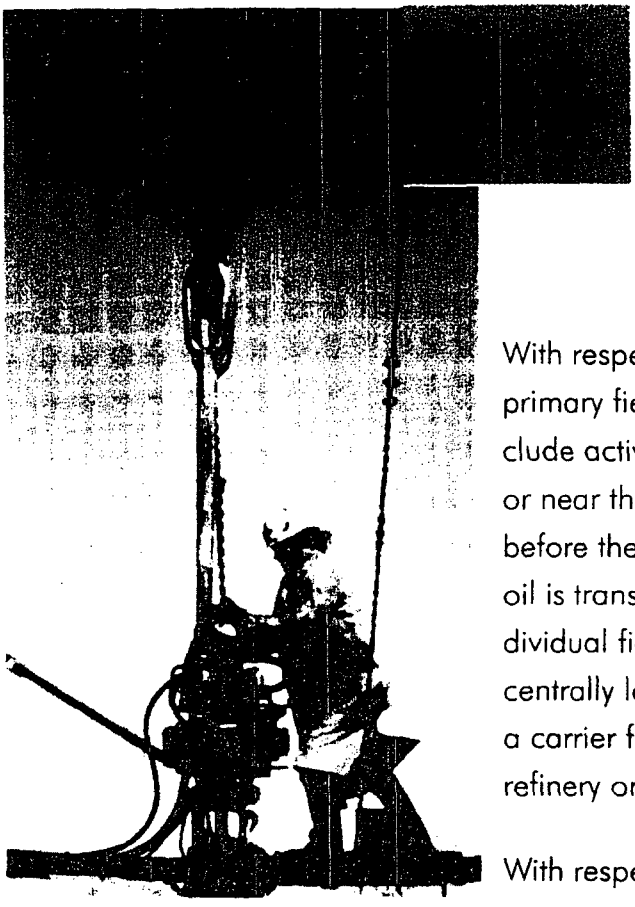
SCOPE OF THE EXEMPTION

In December 1978, EPA proposed hazardous waste management standards that included reduced requirements for several types of large volume wastes. Generally, EPA believed these large volume "special wastes" are lower in toxicity than other wastes being regulated as hazardous waste under RCRA. Subsequently, Congress exempted these wastes from the RCRA Subtitle C hazardous waste regulations pending a study and regulatory determination by EPA. In 1988, EPA issued a regulatory determination stating that control of E&P wastes under RCRA Subtitle C regulations is not warranted. Hence, E&P wastes have remained exempt from Subtitle C regulations. The RCRA Subtitle C exemption, however, did not preclude these wastes from control under state regulations, under the less stringent RCRA Subtitle D solid waste regulations, or under other federal regulations. In addition, although they are relieved from regulation as hazardous wastes, the exemption does not mean these wastes could not present a hazard to human health and the environment if improperly managed.

Among the wastes covered by the 1978 proposal were "gas and oil drilling muds and oil production brines." The oil and gas exemption was expanded in the 1980 legislative amendments to RCRA to include "drilling fluids, produced water, and other wastes associated with the exploration, development, or production of crude oil or natural gas...." (Geothermal energy wastes were also exempted but are not addressed by this publication.)

According to the legislative history, the term "other wastes associated" specifically includes waste materials intrinsically derived from primary field operations associated with the exploration, development, or production of crude oil and natural gas. The phrase "intrinsically derived from the primary field operations" is intended to distinguish exploration, development, and production operations from transportation and manufacturing operations.



With respect to crude oil, primary field operations include activities occurring at or near the wellhead and before the point where the oil is transferred from an individual field facility or a centrally located facility to a carrier for transport to a refinery or a refiner.

With respect to natural gas, primary field operations are those activities occurring at or near the wellhead or at the gas plant but before the point where the gas is transferred from an individual field facility, a centrally located facility, or a gas plant to a carrier for transport to market. Examples of carriers include trucks, interstate pipelines, and some intrastate pipelines.

Primary field operations include exploration, development, and the primary, secondary, and tertiary production of oil or gas. Crude oil processing, such as water separation, de-emulsifying, degassing, and storage at tank batteries associated with a

specific well or wells, are examples of primary field operations. Furthermore, because natural gas often requires processing to remove water and other impurities prior to entering the sales line, gas plants are considered to be part of production operations regardless of their location with respect to the wellhead.

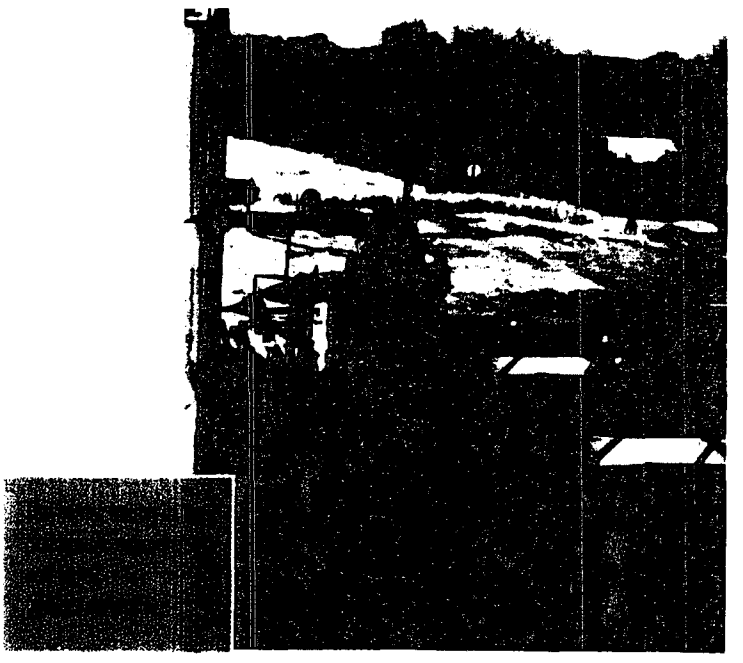
In general, the exempt status of an E&P waste depends on how the material was used or generated as waste, not necessarily whether the material is hazardous or toxic. For example, some exempt E&P wastes might be harmful to human health and the environment, and many non-exempt wastes might not be as harmful. The following simple rule of thumb can be used to determine if an E&P waste is exempt or non-exempt from RCRA Subtitle C regulations:

- **Has the waste come from down-hole, i.e., was it brought to the surface during oil and gas E&P operations?**
- **Has the waste otherwise been generated by contact with the oil and gas production stream during the removal of produced water or other contaminants from the product?**

If the answer to either question is yes, then the waste is most likely considered exempt from RCRA Subtitle C regulations.

EXEMPT AND NON-EXEMPT WASTES

In its 1988 regulatory determination, EPA published the following lists of wastes that were determined to be either exempt or non-exempt. The lists are provided as examples of wastes regarded as exempt and non-exempt and should not be considered comprehensive. The exempt waste list applies only to those wastes generated by E&P operations. Similar wastes generated by activities other than E&P operations are not covered by the exemption.



Exempt E&P Wastes

- Produced water
- Drilling fluids
- Drill cuttings
- Rigwash
- Drilling fluids and cuttings from offshore operations disposed of onshore
- Geothermal production fluids
- Hydrogen sulfide abatement wastes from geothermal energy production
- Well completion, treatment, and stimulation fluids
- Basic sediment, water, and other tank bottoms from storage facilities that hold product and exempt waste
- Accumulated materials such as hydrocarbons, solids, sands, and emulsion from production separators, fluid treating vessels, and production impoundments
- Pit sludges and contaminated bottoms from storage or disposal of exempt wastes
- Gas plant dehydration wastes, including glycol-based compounds, glycol filters, and filter media, backwash, and molecular sieves
- Workover wastes
- Cooling tower blowdown
- Gas plant sweetening wastes for sulfur removal, including amines, amine filters, amine filter media, backwash, precipitated amine sludge, iron sponge, and hydrogen sulfide scrubber liquid and sludge
- Spent filters, filter media, and backwash (assuming the filter itself is not hazardous and the residue in it is from an exempt waste stream)
- Pipe scale, hydrocarbon solids, hydrates, and other deposits removed from piping and equipment prior to transportation
- Produced sand
- Packing fluids
- Hydrocarbon-bearing soil
- Pigging wastes from gathering lines
- Wastes from subsurface gas storage and retrieval, except for the non-exempt wastes listed below
- Constituents removed from produced water before it is injected or otherwise disposed of
- Liquid hydrocarbons removed from the production stream but not from oil refining
- Gases from the production stream, such as hydrogen sulfide and carbon dioxide, and volatilized hydrocarbons

- Materials ejected from a producing well during blowdown
- Waste crude oil from primary field operations
- Light organics volatilized from exempt wastes in reserve pits, impoundments, or production equipment

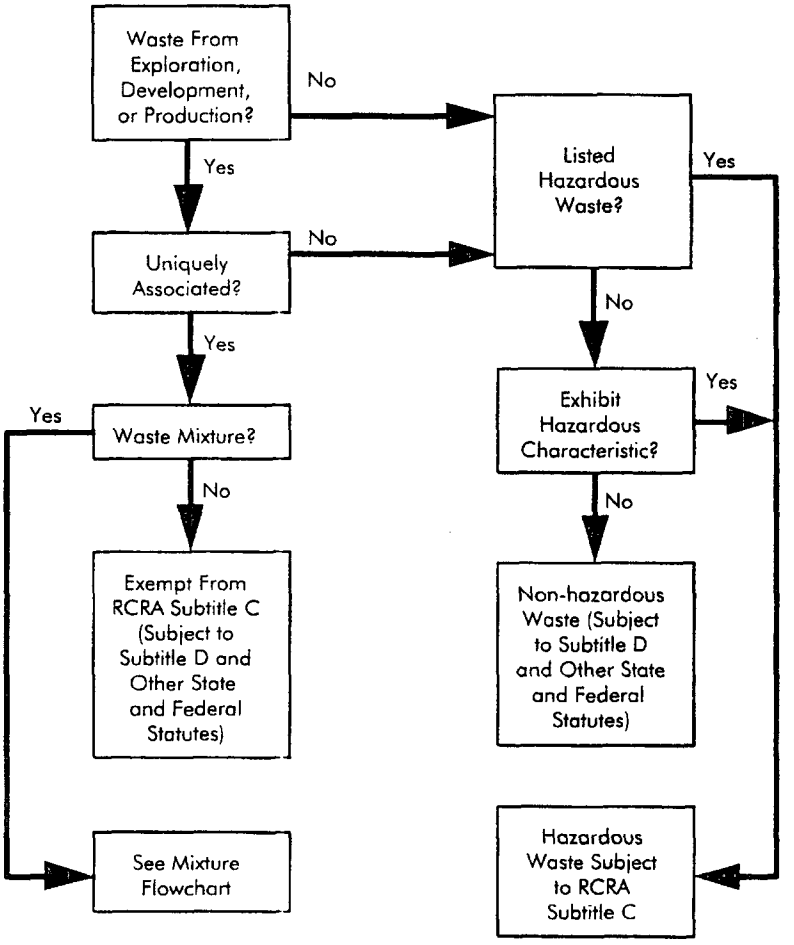
Non-Exempt Wastes

- Unused fracturing fluids or acids
- Gas plant cooling tower cleaning wastes
- Painting wastes
- Waste solvents
- Oil and gas service company wastes such as empty drums, drum rinsate, sandblast media, painting wastes, spent solvents, spilled chemicals, and waste acids
- Vacuum truck and drum rinsate from trucks and drums transporting or containing non-exempt waste
- Refinery wastes
- Liquid and solid wastes generated by crude oil and tank bottom reclaimers[1]
- Used equipment lubricating oils
- Waste compressor oil, filters, and blowdown
- Used hydraulic fluids
- Waste in transportation pipeline related pits
- Caustic or acid cleaners
- Boiler cleaning wastes
- Boiler refractory bricks
- Boiler scrubber fluids, sludges, and ash
- Incinerator ash
- Laboratory wastes
- Sanitary wastes
- Pesticide wastes
- Radioactive tracer wastes
- Drums, insulation, and miscellaneous solids

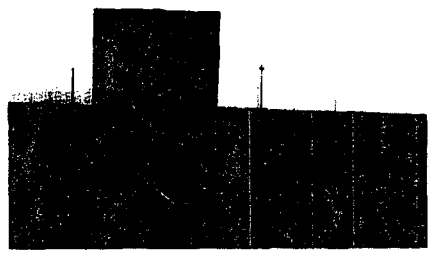
[1]*Although non-E&P wastes generated from crude oil and tank botton reclamation operations (e.g., waste equipment cleaning solvent) are non-exempt, residuals derived from exempt wastes (e.g., produced water separated from tank bottoms) are exempt. For a further discussion, see the* Federal Register *notice, "Clarification of the Regulatory Determination for Waste from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy," March 22, 1993,* Federal Register *Volume 58, Pages 15284 to 15287.*

The following flowchart should be useful in determining whether a waste is exempt or non-exempt from RCRA Subtitle C regulation.

Exempt/Non-Exempt Waste



MIXING WASTES



ıg wastes, particularly ex- t and non-exempt wastes, ...tes additional considera- ...s. Determining whether a mixture is an exempt or non-exempt waste requires an understanding of the nature of the wastes prior to mixing and, in some instances, might require a chemical analysis of the mixture. Whenever possible, avoid mixing non-exempt wastes with exempt wastes. If the non-exempt waste is a listed or characteristic hazardous waste, the resulting mixture might become a non-exempt waste and require management under RCRA Subtitle C regulation. Furthermore, mixing a characteristic hazardous waste with a non-hazardous or exempt waste for the purpose of rendering the hazardous waste non-hazardous or less hazardous might be considered a treatment process subject to appropriate RCRA Subtitle C hazardous waste regulation and permitting requirements.

NOTE: As this document was being prepared, the "mixture rule" was being re-examined by EPA as a result of a court challenge. Because the rule could be amended or clarified, the status of the rule should be determined prior to mixing any E&P wastes with hazardous wastes. For additional information, refer to the Federal Register *notice "Land Disposal Restrictions for Ignitable and Corrosive Characteristic Wastes Whose Treatment Standards Were Vacated; Interim Final Rule," May 24, 1993,* Federal Register *Volume 58, Pages 29860 to 29887.*

Below are some basic guidelines for determining if a mixture is an exempt or non-exempt waste under the present mixture rule.

- **A mixture of an exempt waste with another exempt waste remains exempt.**

EXAMPLE:
A mixture of stimulation fluid that returns from a well with produced water results in an exempt waste.

- **Mixing a non-hazardous waste (exempt or non-exempt) with an exempt waste results in a mixture that is also exempt.**

EXAMPLE:
If non-hazardous wash water from rinsing road dirt off equipment or vehicles is mixed with the contents of a reserve pit containing only exempt drilling waste, the wastes in the pit remain exempt regardless of the characteristics of the waste mixture in the pit.

- **If, after mixing a non-exempt characteristic hazardous waste with an exempt waste, the resulting mixture exhibits any of the same hazardous characteristics as the hazardous waste (ignitability, corrosivity, reactivity, or toxicity), the mixture is a non-exempt hazardous waste.**

EXAMPLE:
If, after mixing non-exempt caustic soda (NaOH) that exhibits the hazardous characteristic of corrosivity in a pit containing exempt waste, the mixture also exhibits

the hazardous characteristic of corrosivity as determined from pH or steel corrosion tests, the entire mixture becomes a non-exempt hazardous waste.

EXAMPLE:
If, after mixing a non-exempt solvent containing benzene with an exempt waste also containing benzene, the mixture exhibits the hazardous characteristic for benzene, the entire mixture becomes a non-exempt hazardous waste.

- **If, after mixing a non-exempt characteristic hazardous waste with an exempt waste, the resulting mixture does *not* exhibit any of the same characteristics as the hazardous waste, the mixture is exempt. Even if the mixture exhibits some other characteristic of a hazardous waste, it is still exempt.**

EXAMPLE:
If, after mixing non-exempt hydrochloric acid (HCl) that exhibits the corrosive characteristic only with an exempt waste, the mixture does *not* exhibit the hazardous characteristic of corrosivity but does exhibit some other hazardous characteristic such as toxicity, the mixture is exempt.

EXAMPLE:
If, after mixing a non-exempt waste exhibiting the hazardous characteristic for lead with an exempt waste exhibiting the characteristic for benzene, the mixture exhibits the characteristic for benzene but not for lead, the mixture is exempt.

- **Generally, if a listed hazardous waste[2] is mixed with an exempt waste, regardless of the proportions, the mixture is a non-exempt hazardous waste.**

EXAMPLE:

If any amount of leaded tank bottoms from the petroleum refining industry (listed as waste code K052) is mixed with an exempt tank bottom waste, the mixture is considered a hazardous waste and is therefore non-exempt.

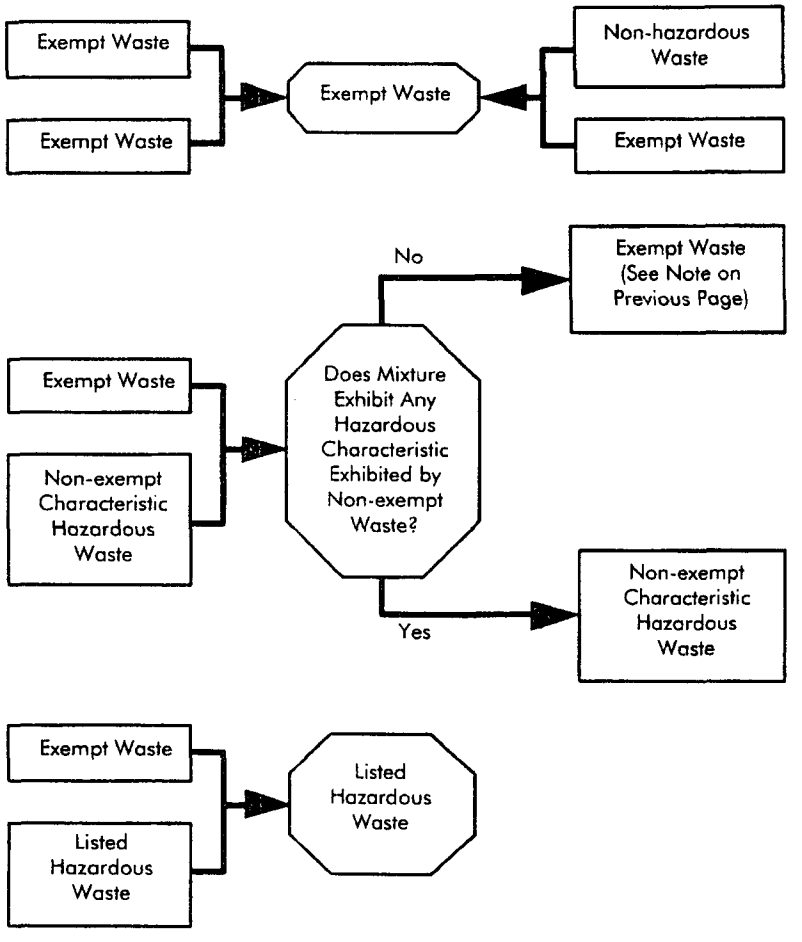
It is also important to emphasize that a mixture of an exempt waste with a listed hazardous waste generally becomes a non-exempt hazardous waste *regardless of the relative volumes or concentrations* of the wastes. Similarly, if a mixture of an exempt waste with a non-exempt characteristic hazardous waste exhibits any of the same hazardous characteristics as the hazardous waste, the mixture becomes a non-exempt hazardous waste *regardless of the relative volumes or concentrations* of the wastes. In other words, for both scenarios, the wastes could become non-exempt even if only one barrel of hazardous waste were mixed with 10,000 barrels of exempt waste.

NOTE: Mixing a characteristic hazardous waste with a non-hazardous or exempt waste for the purpose of rendering the hazardous waste non-hazardous or less hazardous might be considered a treatment process subject to RCRA Subtitle C hazardous waste regulations and appropriate permitting requirements.

[2] ***Listed hazardous wastes are those wastes listed as hazardous in the Code of Federal Regulations under Subpart D of 40 CFR Part 261.***

The following flowchart depicts the various possible mixtures and their exempt and non-exempt status..

Possible Waste Mixtures



COMMON MISUNDERSTANDINGS

An incomplete understanding of the hazardous waste regulations can result in misinterpretations of the regulatory status of various wastes. The most common misunderstandings of that arise with the RCRA Subtitle C exemption and hazardous waste determinations are presented here for clarification.

Misunderstanding:

All wastes located at E&P sites are exempt.

Fact:

All wastes located at E&P sites are not necessarily exempt. To be considered an exempt waste, the waste must have been generated from a material or process uniquely associated with the exploration, development, and production of crude oil and natural gas. For example, a solvent used to clean surface equipment or machinery is not exempt because it is not uniquely associated with exploration, development, or production operations. Conversely, if the same solvent were used in a well, it would be exempt because it was generated through a procedure that is uniquely associated with production operations.

Misunderstanding:

All service company wastes are exempt.

Fact:

Not all service company wastes are exempt. As with all oilfield wastes, only those wastes generated from a material or process uniquely associated with the exploration and production of oil and gas are considered exempt. The previous example of solvents used for cleaning equipment and machinery would also apply in this case—the solvent is not an exempt waste.

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Misunderstanding:

Unused products are exempt.

Fact:

Unused products, if disposed of, are not exempt, regardless of their intended use, because they have not been used and therefore are not uniquely associated with the exploration or production of oil and gas. When unused products become waste (e.g., they are disposed of), they are subject to RCRA Subtitle C hazardous waste regulations if they are listed or exhibit a hazardous characteristic.

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Misunderstanding:

All exempt wastes are harmless to human health and the environment.

Fact:

Certain exempt wastes, while excluded from RCRA Subtitle C hazardous wastes control, might still be harmful

to human health and the environment if not properly managed. The exemption relieves wastes that are uniquely associated with the exploration and production of oil and gas from regulation as hazardous wastes under RCRA Subtitle C but *does not* indicate the hazard potential of the exempt waste. Additionally, some of these wastes might still be subject to state hazardous or non-hazardous waste regulations or other federal regulations (e.g., hazardous materials transportation regulations, reserve pit regulations, and National Pollutants Discharge Elimination System (NPDES) or state discharge regulations) unless specifically excluded from regulation under those laws.

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Misunderstanding:

Any mixture of a non-exempt hazardous waste with an exempt waste becomes an exempt waste.

Fact:

Not all mixtures of a non-exempt hazardous waste with an exempt waste become exempt wastes. Generally, a mixture of a listed hazardous waste with an exempt waste becomes a non-exempt hazardous waste. Also, a mixture of a hazardous waste that exhibits one of the characteristics of a hazardous waste (ignitability, corrosivity, reactivity, or toxicity) with an exempt waste, becomes a non-exempt characteristics hazardous waste if the mixture exhibits one of the same hazardous characteristics as the original hazardous waste. Conversely, if the mixture does not exhibit one of the same hazardous characteristics of the hazardous

waste, the mixture becomes a non-hazardous exempt waste. As previously noted, mixing a non-exempt hazardous waste with an exempt waste for the purpose of rendering the hazardous waste non-hazardous or less hazardous may be considered a treatment process and must be conducted in accordance with applicable RCRA Subtitle C regulations and permitting requirements.

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Misunderstanding:

A waste exempt from RCRA Subtitle C regulation is also exempt from state and other federal waste management regulations.

Fact:

The exemption applies only to the federal requirements of RCRA Subtitle C. A waste that is exempt from RCRA Subtitle C regulation might be subject to more stringent or broader state hazardous and non-hazardous waste regulations and other state and federal program regulations. For example, oil and gas exploration and production wastes are subject to regulation under the Clean Air Act (CAA), Clean Water Act (CWA), Safe Drinking Water Act (SDWA), and Oil Pollution Act of 1990 (OPA).

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FREQUENTLY ASKED QUESTIONS

receives calls on a regular basis requesting answers to questions related to the E&P exemption. The most common questions and answers are listed below.

Q: Are RCRA-exempt wastes also exempt under other federal laws?

A: Not necessarily. Unless specifically excluded from regulation under other federal laws, RCRA-exempt wastes might still be subject to regulation under authorities other than RCRA.

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Q: What is the benefit of the RCRA exemption if the operator is still liable for cleanups under RCRA?

A: Although the operator might still be liable for cleanup actions under RCRA for wastes that pose an imminent and substantial endangerment to human health and the environment, the RCRA exemption does allow the operator to choose a waste management and disposal option that is less stringent and possibly less costly than those required under RCRA Subtitle C. However, the operator should make every effort to choose the proper management and disposal procedures for the particular waste to avoid the need for later cleanup action.

Q: When is a waste considered "uniquely associated with" exploration and production operations?

A: A waste is "uniquely associated with" exploration and production operations if it is generated from a material or procedure that is necessary to locate and produce crude oil or natural gas. Also, a waste is "uniquely associated with" exploration and production operations if it is generated from a material or procedure that only occurs during the exploration and production of crude oil or natural gas. A simple rule of thumb for identifying "uniquely associated wastes" is whether the waste came from downhole or otherwise was generated in contact with the oil or gas production stream for the purpose of removing water or other contaminants from the well or the product.

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Q: Are wastes generated from a transportation pipeline considered exempt wastes under RCRA Subtitle C?

A: No. The RCRA Subtitle C exemption only applies to wastes generated from the exploration, development, and production (i.e., primary field operations) of crude oil or natural gas. Hence, wastes generated from the transportation of crude oil or natural gas are not RCRA-exempt.

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Q: Do exempt wastes lose their exempt status if they undergo custody transfer and are transported offsite for disposal?

A: No. Custody transfer is used to define the endpoint of production operations for crude oil and applies only to the change ownership of the product (e.g., crude oil). Exempt wastes maintain their exempt status even if they undergo custody transfer and are transported offsite for disposal or treatment.

Q: Are all wastes generated at facilities that treat or reclaim exempt wastes also exempt?

A: No. The exemption applies only to those wastes derived from exempt wastes, not to additional wastes generated by the treatment or reclamation of exempt wastes. For example, if a treatment facility uses an acid in the treatment of an exempt waste, any waste derived from the exempt waste being treated is also exempt but the spent acid is not.

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Q: When does transportation begin?

A: For crude oil, transportation begins at the point of custody transfer of the oil or, in the absence of custody transfer, after the endpoint of production separation and dehydration. Storage of crude oil in stock tanks at production facilities is considered part of the production separation process, not transportation, and is included in the exemption. For natural gas, transportation begins at the point where the gas leaves the facility after production separation and dehydration at the gas plant. Natural gas pipelines between the gas well and the gas plant are considered to be part of the production process, rather than transportation, and wastes that are uniquely associated with production that are generated along such a pipeline are exempt.

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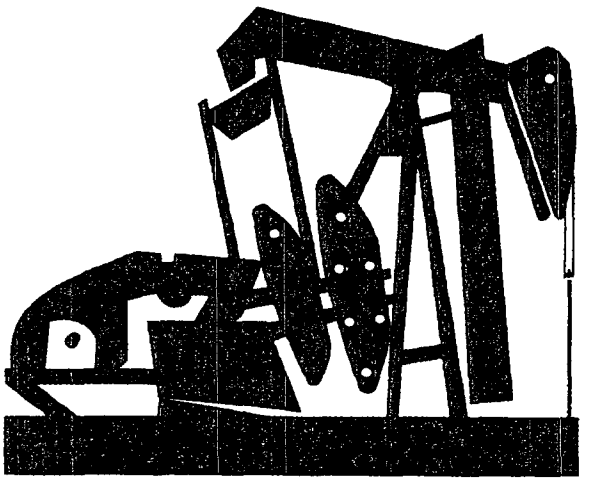
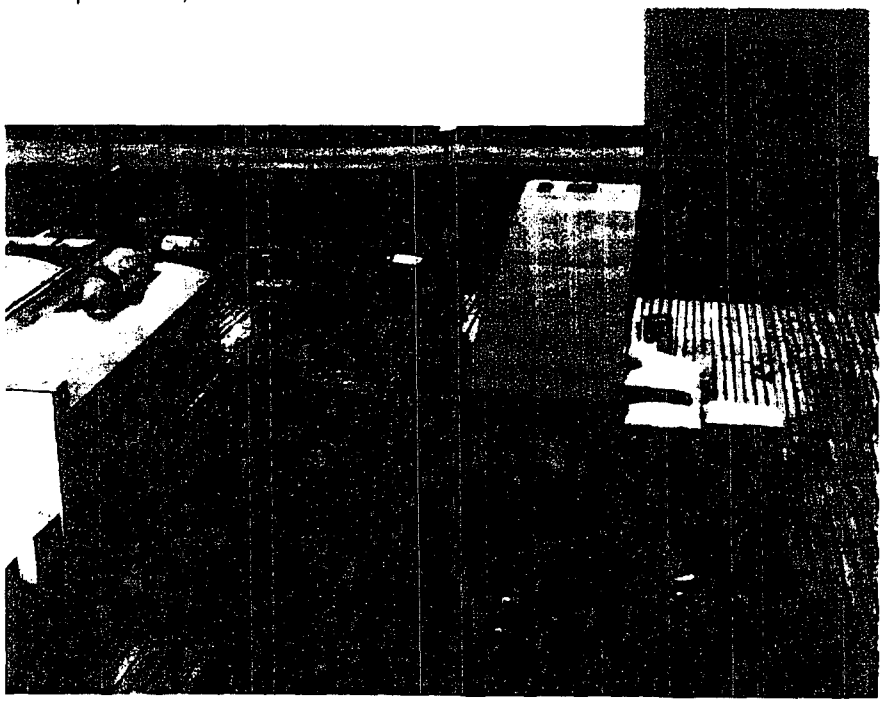
EPA periodically issues interpretive letters regarding the oil and gas exemption. One such letter was in response to a request for clarification of the exempt or non-exempt status of wastes generated at natural gas compressor stations. In some regions, such as the Appalachian states, natural gas might not require sweetening or extensive dehydration. Therefore, the gas generally does not go to a gas plant but is carried from the wellhead to a main transmission line and, in some cases, directly to the customer. Compressor stations are located as needed along the pipelines that run between the wellhead and the main transmission line or the customer to maintain pressure in the lines. The Agency has taken the position that these compressor stations (in the absence of gas plants, and handling only local production) should be treated the same as gas plants, and that wastes generated by these compressor stations are exempt. On the other hand, compressor stations located along main gas transmission lines are considered to be part of the transportation process, and any wastes generated by these compressor stations are non-exempt.



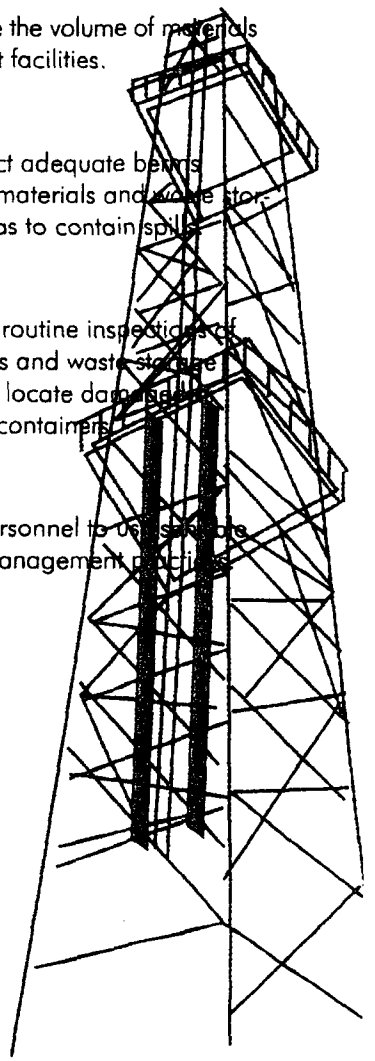
SENSIBLE WASTE MANAGEMENT

ent operators will design E&P facilities and processes to mize potential environmental threats and legal liabilities. EPA has been promoting sensible waste management practices through a number of joint efforts with organizations such as API and the Interstate Oil and Gas Compact Commission (IOGCC). The following waste management suggestions have been compiled from publications produced by these organizations as well as from literature available from industry trade associations, trade journals, and EPA.



Suggested E&P Waste Management Practices

- Size reserve pits properly to avoid overflows.
- Use closed loop mud systems when practical, particularly with oil-based muds.
- Review material safety data sheets (MSDSs) of materials used, and select less toxic alternatives when possible.
- Minimize waste generation, such as by designing systems with the smallest volumes possible (e.g., drilling mud systems).
- Reduce the amount of excess fluids entering reserve and production pits.
- *Do not* place non-exempt wastes in reserve or production pits.
- Design the drilling pad to contain stormwater and rigwash.
- Recycle and reuse oil-based muds and high density brines when practical.
- Perform routine equipment inspections and maintenance to prevent leaks or emissions.
- Reclaim oily debris and tank bottoms when practical.
- Minimize the volume of materials stored at facilities.
- Construct adequate berms around materials and waste storage areas to contain spills.
- Perform routine inspections of materials and waste storage areas to locate damaged or leaking containers.
- Train personnel to use safe waste management practices.



SOURCES OF INFORMATION

tional information regarding the exemption of E&P wastes from RCRA Subtitle C regulations can be obtained from the following publications and organizations.

Publications

Title:
EPA "Report to Congress: Management of Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas, and Geothermal Energy," December 1987, NTIS Publication No. PB 88-146212.

Available from:
National Technical Information Service
5285 Port Royal Road
Springfield, VA 22161
703 487-4650

Title:
"Regulatory Determination for Oil and Gas and Geothermal Exploration, Development, and Production Wastes," July 6, 1988, *Federal Register* Volume 53, Pages 25446 to 25459.

Available from:
RCRA/Superfund Hotline
Washington, DC
800 424-9346

Title:
"Clarification of the Regulatory Determination for Wastes from the Exploration, Development, and Production of Crude Oil, Natural Gas and Geothermal Energy," March 22, 1993, *Federal Register* Volume 58, Pages 15284 to 15287.

Available from:
RCRA/Superfund Hotline
Washington, DC
800 424-9346

Title:
"API Environmental Guidance Document: Onshore Solid Waste Management in Exploration and Production Operations," January 1989.

Available from:
American Petroleum Institute
1220 L Street, NW.
Washington, DC 20005
202 682-8375

Title:
"Oil and Gas Exploration and Production Field Personnel Pollution Prevention Training."

Available from:
National Environmental Training Association
2930 East Camelback Road, Suite 185
Phoenix, AZ 85016-4412
602 956-6399

OTHER SOURCES OF INFORMATION

U.S. Environmental Protection Agency
Office of Solid Waste
Oil and Gas Industry Section (5302W)
401 M Street, SW.
Washington, DC 20460
703 308-8424

RCRA/Superfund Hotline
Washington, DC
800 424-9346

Safe Drinking Water Hotline
Washington, DC
800 426-4791

We welcome your comments. Please let us know if you found this publication to be informative and helpful. We would also like to receive your suggestions for improving this publication and for adding information that would be useful to you on this topic. Thank you.

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