

US EPA ARCHIVE DOCUMENT

RCRA HJ

**ADDENDUM TO PROGRAM DESCRIPTION
OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
HAZARDOUS WASTE MANAGEMENT PROGRAM**

Part I: Organization and Management of the State Program (§ 271.6(b) through (h)

With this revision authorization application, the State of Oklahoma, through the Oklahoma Department of Environmental Quality ("DEQ"), is seeking authorization for RCRA Cluster VI. The State program now has in place statutory authority and regulations for all required program components through RCRA Cluster VI. These statutory and regulatory provisions were developed to provide corresponding authority to the Federal program; therefore, the State program is equivalent to and no less stringent than the Federal program.

The DEQ has received final authorization for the base RCRA program; for non-HSWA Clusters I through VI; for HSWA Clusters I and II; for RCRA Clusters I, II, III, and IV; and on April 15, 1997, submitted its final application for RCRA Cluster V. The DEQ received final authorization for the Base Program in January of 1985.

No major changes have taken place in the State program since the last Addendum to Program Description was submitted to EPA on April 15, 1997.

A. State Agency Responsibilities (§ 271.6(b))

Oklahoma statutes provide authority for a single state agency, the DEQ, to administer the provisions of the State hazardous waste management program. These statutes are the Oklahoma Environmental Quality Act, 27A O.S. Supp. 1997 §§ 1-1-101 et seq. (Appendix A); general provisions of the Oklahoma Environmental Quality Code which may affect the hazardous waste program, 27A O.S. Supp. 1997 §§ 2-1-101 through 2-3-507 (Appendix B); and the Oklahoma Hazardous Waste Management Act, 27A O.S. Supp. 1997 §§ 2-7-101 et seq. ("OHWMA") (Appendix C). No amendments were made to the above statutory authorities

during the 1997 legislative session which will substantially affect the State hazardous waste management program; however, 27A O.S. § 2-14-305 has been added to allow for issuance of general permits (Appendix D).

As was the case when the April 15, 1997, Addendum to Program Description was submitted, the Environmental Quality Board ("Board") which consists of thirteen (13) members is appointed by the Governor with the advice and consent of the Senate. The Board is the rulemaking body of the DEQ. Permanent rules regarding hazardous waste are promulgated with the advice of the Hazardous Waste Management Advisory Council ("Council"); however, emergency rules may be promulgated by the Board without the advice of the Council.

The Council may not recommend rules for promulgation by the Board unless all applicable requirements of the Oklahoma Administrative Procedures Act, 75 O.S. §§ 250 et seq., as amended (Appendix E) have been followed, including but not limited to notice, rule impact statement and rule-making hearings.

The rules promulgated and in effect as permanent rules which implement the State hazardous waste program are codified in the Oklahoma Administrative Code ("OAC") at OAC 252:200 et seq. (Appendix F).

On January 8, 1998, the Council voted to recommend amendments to OAC 252:200-3-1 and 252:200-3-2 to incorporate by reference, in accordance with the *Guidelines For State Adoption Of Federal Regulations By Reference*, the following EPA Hazardous Waste Management Regulations as amended through July 1, 1997: the provisions of 40 CFR Part 124 which are required by 40 CFR § 271.14 as well as 124.31, 124.32, and 124.33; 40 CFR Parts 260-266, with the exception of 40 CFR § 260.20 through 260.22; 40 CFR Part 268; 40 CFR Part 270; 40 CFR Part 273; and 40 CFR Part 279. The Board adopted these amendments on January 27, 1998 as permanent and emergency rules. The emergency amendments will be

effective immediately upon signature by the Governor, and will become effective as permanent rules on June 1, 1998. The Rules in Appendix G contain these latest amendments.

The State's incorporation of Federal regulations does not operate to incorporate prospectively future changes to the incorporated sections of the Code of Federal Regulations, and no other Oklahoma law or regulation reduces the scope of coverage or otherwise affects the authority provided by these incorporated-by-reference provisions. Further, Oklahoma interprets these incorporated provisions to provide identical authority to the Federal provisions. Thus, OAC 252:200-3-1 through 252:200-3-6 provides equivalent and no less stringent authority than the Federal Subtitle C program in effect as of July 1, 1997.

Pursuant to the Oklahoma statutes listed in Part I.(A) above, a single state agency, the DEQ, has authority to administer the provisions of the State hazardous waste management program.

The DEQ remains the official agency of the State of Oklahoma, as designated by 27A O.S. Supp. 1997 § 2-7-105(13) to cooperate with Federal agencies for purposes of hazardous waste regulation.

The OHWMA delegates authority to the DEQ to administer the State hazardous waste program, including the statutory and regulatory provisions necessary to administer the RCRA VI provisions. The DEQ is the sole State agency responsible for administering the provisions of the OHWMA.

Currently, the Oklahoma Corporation Commission ("OCC") regulates certain aspects of the oil and gas production and transportation industry in Oklahoma, including certain wastes generated by pipelines, bulk fuel sales terminals and certain tank farms. The DEQ and the OCC have in place a *DEQ/OCC Jurisdictional Guidance Document* which reflects the current state of affairs between the two agencies. The DEQ exclusively regulates hazardous waste in Oklahoma

(excluding Indian lands) and the OCC does not regulate hazardous waste in Oklahoma. Appendix H contains the current DEQ/OCC Jurisdictional Guidance Document.

The revision of the State program to include administering the provisions of RCRA Cluster VI will not require a change in which state agency will be responsible for administering the State hazardous waste program.

B. Staffing and Funding Resources (271.6(b))

The Executive Director of the DEQ, whose responsibilities have not changed significantly since the April 15, 1997 Addendum to Program Description submittal, is appointed by the Board, and is responsible for the administration of the DEQ. The Executive Director is given specific powers and duties necessary to fully implement a State hazardous waste program which is equivalent to the Federal hazardous waste program.

The Executive Director is given the duty to "establish such divisions and such other programs and offices as the Executive Director may determine necessary to implement and administer programs and functions within the jurisdiction of the DEQ pursuant to the Oklahoma Environmental Quality Code". Accordingly, the Executive Director has created the Waste Management Division ("WMD") which is responsible for implementing the provisions of the OHWMA.

The Waste Management Division continues to be staffed with personnel that have the administrative expertise, technical background and experience necessary to effectively administer and implement the RCRA VI program.

Many of the personnel currently employed in the service have several years of experience in the hazardous waste program. Both experienced and new personnel participate in a variety of training programs to increase their expertise and skills. A training curriculum designed specifically for new employees of the WMD is well established.

The organization of the WMD is depicted in Appendix I. Table I shows staffing requirements for the WMD hazardous waste program support personnel, based on the EPA/State Grant. Table I-A itemizes the costs of administrative support, technical support, and costs of personnel for fiscal year 1998, based on contributions the State will make above the amounts in the EPA/State Grant. Table II shows the WMD hazardous waste program budget for State Fiscal Year 1998 (July 1, 1997-June 30, 1998), which shows funding amounts based on the personnel requirements set out in the EPA/State Grant. Tables III and IV are estimated budgets for FY 1999 and FY 2000, respectively. Tables II, III, and IV also identify the sources and amounts of funding, including Federal grant money, and explain how the funding may be expended.

Personnel are primarily engineers and hydrologists in the Permitting & Site Remediation Section of the WMD. These individuals are presently involved in the ongoing RCRA permitting and facility management activities throughout the state.

With respect to assignment of personnel to perform necessary duties to meet the requirements of implementation of RCRA Cluster VI, many factors will be taken into consideration. These factors include: (1) other Program Plan commitments; (2) other state program commitments; (3) the nature of the work being performed; and (4) the specific skills of the personnel. For example, although most of the personnel involved will be engineers and groundwater specialists, if a project requires specialized knowledge of hazardous waste combustion, the DEQ technical staff utilizes personnel with advanced knowledge in this area. Therefore, RCRA work involving combustion is handled by these individuals and other work assignments are adjusted accordingly.

The DEQ estimates that a full-time technical employee costs \$45,000 - \$50,000 annually, including benefits and all administrative costs. It is anticipated that no additional personnel will

need to be hired to implement the provisions of RCRA Cluster VI. The state matching funds are required to be spent within the hazardous waste program, however, there are no restrictions or limitations which would prohibit these funds from being spent on RCRA requirements.

C. State Procedures (§ 271.6(c))

The current rules of procedure in place for the DEQ were amended by the Environmental Quality Board on January 28, 1997. These rules, OAC 252:002 were approved by the Governor on March 18, 1997, and became effective as permanent rules on April 2, 1997. See Appendix J. Nothing in the current rules in any way restricts the Waste Management Division from fulfilling its responsibilities under the OHWMA, the Memorandum of Agreement ("MOA") which is included with this Revision Application, or the Performance Partnership Agreement ("PPA") entered into by the DEQ and EPA.

Appeal procedures for RCRA hazardous waste permits issued by the DEQ are specified in 40 CFR § 124.19(a) through (c) and (e), which the DEQ adopts by reference.

The Department and EPA have agreed to a joint permitting process (see section V.D of the MOA) for the joint processing and enforcement of permits for those provisions of HSWA promulgated after June 30, 1993; however, as the Department receives authorization for provisions of the HSWA promulgated after June 30, 1993, EPA will suspend issuance of Federal permits in the State for those provisions.

The division of responsibility between the State and EPA for administration of respective provisions of RCRA is described in detail in the MOA.

While EPA may comment on any permit application or draft permit, EPA's overview function will focus primarily on those facilities identified in the PPA, as well as on facilities for which the Department requests EPA's assistance.

D. Compliance Tracking and Enforcement (§ 271.6(e))

The goal of the RCRA Compliance Unit of the DEQ has not changed since the submittal of the April 15, 1997 Addendum to Program Description, and the Unit continues to achieve and maintain a high rate of compliance within the regulated universe by establishing a comprehensive inspection program and taking timely and effective enforcement actions against violators.

The DEQ continues to diligently attempt to adhere to the time frames for enforcement actions specified in the current EPA Enforcement Response Policy ("ERP") and the multi-year EPA/DEQ Enforcement Memorandum of Understanding ("MOU") [generally, 180 days for formal enforcement against Significant Non-Compliers ("SNC"), and 180 days from the first day of discovery of noncompliance with the compliance schedule (and extensions granted) established through the informal enforcement action (Notice of Violation "NOV") for formal enforcement if necessary or appropriate against Secondary Violators ("SV")]. In those circumstances in which the DEQ determines it cannot meet a specified time frame, it makes every effort to notify the EPA, as specified in the ERP and MOU, in advance of the deadline with a specification of the reason(s) for the delay and identifies an alternate time frame.

The PPA specifies the annual goals for inspections to be performed by the DEQ within the various categories of hazardous waste handlers.

The DEQ identifies violations of RCRA hazardous waste requirements by three primary means: inspections, periodic record reviews (e.g. manifests and state disposal plans), and complaints (as verified by subsequent investigation or inspection). The DEQ utilizes numerous inspection checklists to identify violations, including the Land Disposal Restriction checklist, when performing inspections at hazardous waste handler sites. Once a violation is identified, it is recorded by entry into the EPA RCRIS system, as well as the internal tracking system of the WMD. Violations are documented by the issuance of a Notice of Violation ("NOV") for most Class I and II violations and by the issuance of an Administrative Compliance and Penalty

Order ("ACPO") for SNCs. When either an NOV or ACPO is issued, compliance is tracked by both the WMD tracking system previously mentioned and by the computerized docket system of the Office of General Counsel of the DEQ, until resolution.

The DEQ continues to use EPA's Violation Classification Guidance document, i.e., violations are classified as Class I* (most serious), Class I (very serious), and Class II (less serious), and violators as SNCs and SVs. A SNC is a handler who, by its violations, has caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous constituents, or who is a chronic or recalcitrant violator, or who substantially deviates from the terms of a permit, order or decree. Generally, a SV is a handler who does not meet the criteria for identification as a SV. More details, along with examples, of the violation classification scheme are contained in the EPA/DEQ Enforcement MOU.

As noted above, Administrative Orders with penalties are the means commonly used to address SNCs. NOV's are typically issued to SVs, with an administrative order subsequently issued if necessary within 180 days from the first day of discovery of noncompliance with the schedule (and extensions granted) established through the NOV. State statutes also authorize the DEQ to bring actions in state court for injunctions and civil penalties, and to refer violations to state district attorneys for criminal prosecution. Fines of up to \$25,000.00 per day per violation are authorized in administrative, civil and criminal actions; additionally, the most serious violations (e.g. illegal disposal), if committed knowingly and willfully, are now classified as felonies under state law, with prison terms of up to ten years. A copy of the Environmental Crimes Act, 21 O.S. Supp. 1997 §§ 1230.1 et seq is attached as Appendix K.

Once any type of order is issued to a facility, it is tracked by the above-mentioned tracking mechanisms until resolution. Verification of compliance is usually accomplished by either requiring the violator to submit appropriate documentation to demonstrate compliance, by

a follow-up inspection or a combination of submittal of appropriate documentation and a follow-up inspection.

E. Estimated Regulated Activities (§§ 271.6(g) and (h))

Currently, based on Hazardous Waste Notifications, there are approximately 177 large quantity generators; 1,268 small quantity generators; 1,393 conditionally exempt generators; and 484 transporters.

There are approximately 3 on-site and 5 off-site treatment facilities in Oklahoma. The State has five on-site disposal facilities and 2 off-site disposal facilities.

Of the total of approximately 19 storage facilities, there are approximately 14 on-site facilities and 5 off-site facilities. Treatment facilities that were also storage facilities were only counted in the treatment category. Disposal facilities that also had storage were only counted in the disposal category. Virtually all of the treatment and disposal facilities also had storage capability.

DEQ data from 1985, which was the year the State program was originally authorized, indicates the universe in the State at that time included approximately 136 large quantity generators; 160 small quantity generators; 350 conditionally exempt generators; 115 transporters; 17 burner/blenders; and 47 treatment, storage and disposal facilities.

Estimates of annual quantities of hazardous waste managed in Oklahoma, based upon the most recent available compiled Biennial Report data, are:

- 511,918 tons generated within the State;
- 121,115 tons transported into the State;
- 46,626 tons transported out of the State;
- 424,844 tons managed on-site within the State;

- 138,537 tons managed off-site within the State (including 121,115 tons of imported waste).

F. Copies of State Forms and Coordination With Other Agencies (§§ 271.6(d) and (f))

There is no impact upon State forms or upon interagency coordination by the changes discussed herein. It should be noted in particular, because of the ramifications for other authorized State programs and the Federal program, that the DEQ continues to require use of the Uniform Hazardous Waste Manifest for the shipment of hazardous waste. The DEQ supplies copies of all international shipment manifests to EPA in accordance with the PPA. The DEQ is currently working with EPA to automate this process. Copies of the forms used by the State are attached as Appendix L.

Part II: Scope, Structure, Coverage and Processes

To provide a more detailed discussion of the scope of the program revisions being applied for, the following narrative discussion corresponds to the format of the Reviewer's Checklist for the Program Description included in SPA 17 of the EPA State Authorization Manual:

A. Hazardous Waste Management; Liquids in Landfills, Revision Checklist 145 (HSWA): In accordance with federal authorities RCRA §3004(c), 42 U.S.C. 6924(c); 40 CFR §§ 264.314(e)(2)(ii)&(iii), and 265.314(e)(2)(ii)&(iii) as amended July 11, 1995 (60 FR 35703), State statutes 27A O.S. Supp. 1997 §§ 2-7-106, 2-2-107, 2-2-104 and Rules 252:200-3-1 through 252:200-3-6 provide authority for State program requirements to be equivalent to the Federal program requirements which provide that OECD 301B (Modified Sturm Test) may also be used to demonstrate that a sorbent is non-biodegradable as indicated in Revision Checklist 145.

Accordingly, the State requirements are consistent with and equivalent to the Federal requirements and no significant increase in funding or personnel will be required when the State receives authorization for these provisions.

B. RCRA Expanded Public Participation, Revision Checklist 148 (Non-HSWA):

In accordance with federal authorities RCRA §§2002, 3004, 3005, and 7004(b), 40 CFR §§ 124.31, 124.32, 124.33, 270.2, 270.14(b)(22), 270.30(m), 270.62(b)(6), 270.62(d), 270.66(d)(3), and 270.66(g) as amended December 11, 1995 (60 FR 63417), State statutes 27A O.S. Supp. 1997 §§ 2-7-106, 2-7-105 and 2-2-104, and Rules 252:200-3-1 through 252:200-3-6 provide authority for State program requirements to be equivalent to the Federal program requirements which provide for opportunities for earlier public involvement in the permitting process and expand public access to information throughout the permitting process and the operational lives of facilities as indicated in Revision Checklist 148. Accordingly, the State requirements are consistent with and equivalent to the Federal requirements, and no significant increase in funding or personnel will be required when the State receives authorization for these provisions.

C. Identification and Listing of Hazardous Waste; Amendments to Definition of Solid Waste, Revision Checklist 150 (Non-HSWA): In accordance with federal authorities RCRA §§2002 and 3001; 40 CFR §§ 261.4(a)(12) as amended March 26, 1997 (61 FR 13103), State statutes 27A O.S. Supp. 1997 §§ 2-7-106, 2-2-104 and Rules 252:200-3-1 through 252:200-3-6 provide authority for State program requirements to be equivalent to the Federal program requirements which provide that recovered oil excluded from the definition of hazardous waste at 40 CFR § 261.4(a)(12) be inserted into the petroleum refining process at or before a point where contaminants are removed as indicated in Revision Checklist 150. Accordingly, the State requirements are consistent with and equivalent to the Federal

requirements, and no significant increase in funding or personnel will be required when the State receives authorization for these provisions.

D. Land Disposal Restrictions Phase III--Decharacterized Wastewaters, Carbamate Wastes, and Spent Potliners, Revision Checklist 151 (HSWA): In accordance with federal authorities RCRA § 3004(d) through (k), 3004(m); Public Law 104-119, 100 Stat. 830, 40 CFR Part 268 as amended April 8, 1997 (61 FR 15566 and 61 FR 15660); April 30, 1997 (61 FR 19117); June 28, 1996 (61 FR 33680); July 10, 1996 (61 FR 36419); August 26, 1996 (61 FR 43924), and February 19, 1997 (62 FR 7502), State statutes 27A O.S. Supp. 1997 §§ 2-7-107(A)(10), 2-7-106, 2-2-104 and Rules 252:200-3-1 through 252:200-3-6 provide authority for State program requirements to be equivalent to the Federal program requirements which contain treatment standards for hazardous wastes from the production of carbamate pesticides and from primary aluminum production; contain the treatment standards for hazardous wastes that exhibit the characteristic of reactivity; and put back into place the LDR "Third" "Third" provisions for the treatment of certain wastewaters as indicated in Revision Checklist 151. These statutes and regulations also codify the Federal policy that combustion of inorganic waste is an impermissible form of treatment as also indicated in this checklist. Accordingly, the State requirements are consistent with and equivalent to the Federal requirements, and no significant increase in funding or personnel will be required when the State receives authorization for these provisions.

MARK S. COLEMAN
Executive Director



RCRA VL

FRANK KEATING
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

December 11, 1997

Mike Battles, Director
Oil and Gas Conservation Division
Oklahoma Corporation Commission
P.O. Box 52000
Oklahoma City, OK 73105

Dear Mike:

As you are aware, earlier this year an issue arose with the DEQ Resource Conservation and Recovery Act program and the EPA as to the language in the DEQ/OCC Jurisdictional Guidance Document and how some RCRA related matters were discussed in the document. Meetings were held between DEQ and OCC staff and the changes in wording to the document which are included in the attached were agreed upon. Nothing in these changes is expected to alter the way that current programs are coordinated between our two agencies. They simply clarify areas of responsibility as they currently exist.

As always, we appreciate the cooperation of Tim Baker of your staff in working with us to draft these changes. Should you have any questions, please contact us.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mark S. Coleman".
Mark S. Coleman
Executive Director

cc: Michael Bernard, Oklahoma Mid-Continent Oil & Gas Association

DEQ/OCC Jurisdictional Guidance Document

Under Oklahoma statutes, the Department of Environmental Quality (DEQ) has responsibilities over many/most of the State's environmental programs, including those dealing with public water supply, air quality, hazardous and solid waste management, and wastewater treatment and disposal. DEQ has also been authorized by the U.S. Environmental Protection Agency (EPA) to implement Federal program requirements under several Federal Acts, including public water supply and underground injection of wastes under the Safe Drinking Water Act (SDWA), air quality under the Clean Air Act (CAA), and hazardous waste management and municipal solid waste landfills under the Resource Conservation and Recovery Act (RCRA). For purposes of this document, all references to hazardous waste means hazardous waste as defined in 40 CFR § 261.3.

DEQ is currently seeking authorization to implement the NPDES Program for wastewater discharges under the Clean Water Act (CWA).

The Oklahoma Corporation Commission (OCC) has been given broad authority under State statutes over the oil and gas industry, including many environmental responsibilities. In particular, OCC has been given responsibility over transportation, treatment, and disposal of "deleterious substances" associated with oil and gas exploration and production. EPA has delegated to OCC responsibility over underground injection of oil field wastes (i.e., Class II injection wells) under the Federal Safe Drinking Water Act (SDWA).

This document is an attempt to clarify "gray" areas of jurisdiction by providing a guidance document for the local offices of the OCC and the DEQ when responding to complaints. The document is organized by the following five categories of oil and gas industry-related facility types: I. Oil and Gas Exploration and Production; II. Refining and Marketing; III. Transportation; IV. Oil Field Service; and V. Miscellaneous.

I. Oil and Gas Exploration and Production ("E&P")

Oil and gas exploration and production, as defined by Oklahoma Statutes, Title 52, Section 139(B)(1) (a) through (k), and brine extraction activities as defined by Title 17, Section 503, are under the jurisdiction of the Oklahoma Corporation Commission, with the following exceptions (See Attachment A, including figure 1, for clarification of what E&P includes):

- A. Air emissions or potential for air emissions required or requested to be permitted under the Clean Air Act are under the jurisdiction of the Department of Environmental Quality. All sources of air emissions of regulated pollutants from oil and gas exploration and production which are less than Title V major source thresholds are the jurisdiction of OCC except those which may be covered by NSPS, NESHAPs, PSD, or other applicable federal regulations requiring an air quality permit. Any source under OCC jurisdiction which elects to submit a permit application or applicability determination request to DEQ may do so. (See Attachment B for examples of what activities may require DEQ Air Quality permits.)

- B. Disposal of any solid waste, including exempted oil field wastes, at a landfill regulated by the DEQ may require prior approval of the DEQ. (See Attachment C for details.)

C. Spills

OCC has jurisdiction for activities to contain and remediate spills of exempt oil field waste and certain non-exempt non-hazardous waste, with the exception of that which is disposed of in a DEQ-regulated landfill. DEQ regulates hazardous waste and has approval authority for disposal of certain spill-related wastes in a DEQ-regulated landfill.

NOTE: Additionally, for purposes of this document the terms exempt waste, RCRA exempt waste and exempt oil field waste refer to waste drilling fluids, production waters, and other waste intrinsically associated at the wellhead with the exploration, development, or production of crude oil, natural gas, or geothermal energy which are specifically exempted from regulation as hazardous waste under 40 CFR § 261.4(b)(5). EPA issued guidance regarding this exemption in a Federal Register notices, Wednesday, July 6, 1988, Volume 53, Number 129, on pages 25453 and 25454 & 58 FR 15284, March 22, 1993. (See Attachment D for examples of RCRA exempted wastes.)

All handling, storage, treatment, recycling and disposal activities associated with *hazardous waste* are under the jurisdiction of the DEQ. ~~(Hazardous waste is a waste that is identified on one of the three lists of hazardous waste, or exhibits one or more of the four characteristics of a hazardous waste [40 CFR Part 261]).~~

D. Other Related Wastes

Wastes generated at oil and gas facilities that are not associated with exploration, development, or production activities are regulated by DEQ (whether they are hazardous or not). Examples of these wastes are included in Attachment D. (See item I.C. above.)

Non-exempt non-hazardous wastes may be disposed of under OCC regulations unless taken to a DEQ permitted facility, in which case they must meet DEQ non-hazardous industrial waste rules.

E. Permitted wastewater & storm water discharges

The U.S. Environmental Protection Agency (EPA), through its Region 6 office in Dallas, retains authority over wastewater and storm water discharges from E&P sites under its NPDES Program. With certain

exceptions, Federal rules generally prohibit the discharge of wastes associated with E&P.

II. Refining and Marketing

Refining and Marketing, as the term is used in this document, includes 1) facilities for processing oil and gas after being transported from the oil field, such as oil refineries and natural gas processing plants, and 2) facilities which market oil and gas products on a retail or wholesale basis, such as gasoline service stations and bulk terminals.

A. Refineries

DEQ has primary jurisdiction over air emissions, wastewater, solid waste, and hazardous waste treatment and disposal and groundwater remediation at refineries. Exceptions include underground fuel or other underground product storage tanks at refineries, which are the responsibility of OCC (see UST discussion under II.D. below).

B. Natural Gas Processing Plants

DEQ has primary jurisdiction over air emissions, wastewater, solid waste, and hazardous waste treatment and disposal ~~at natural gas processing plants~~ created from the processing of natural gas. Specific examples include:

1. contaminated soil, water and snow resulting from leaks, spills, or routine practices,
2. waste mercury from meters and gauges, and
3. pump lube oil.

Exceptions to this include handling of "exempted" oil field waste ~~(see NOTE under I.C. above)~~ and contamination created from the gathering of natural gas prior to reaching the gas processing plant.

C. Natural Gas Liquids Extraction Plants

DEQ has primary jurisdiction over air emissions, wastewater, solid waste, and hazardous waste treatment and disposal at natural gas liquid extraction facilities. Specific examples include:

1. contaminated soil, water and snow resulting from leaks, spills, or routine practices,
2. waste mercury from meters and gauges, and
3. pump lube oil.

Exceptions to this include handling of "exempted" oil field waste (~~see NOTE under I.C. above~~) and contamination created from the gathering of natural gas prior to reaching the liquids extraction plant.

D. Service Stations (Gasoline, Diesel, etc.)

With some exceptions, OCC has primary responsibility for above-ground storage tanks (ASTs) at retail facilities and underground storage tanks (USTs). The DEQ has jurisdiction over hazardous waste stored in ASTs and USTs. The DEQ also has jurisdiction over contaminated soil, media or debris which is hazardous waste.¹ This responsibility includes implementing requirements for the installation, registration, operation, and removal of the tanks themselves. It also includes overseeing remediation of leaks and spills from the tanks. Exceptions include:

1. While OCC has jurisdiction over onsite disposal or treatment of soils contaminated by such leaks, DEQ has responsibility for contaminated soils which are removed from the site for treatment or disposal. Soils contaminated with refined petroleum products may not be disposed of at OCC disposal sites.
2. The DEQ has responsibility for regulating discharges from underground storage tank-related groundwater remediation projects (e.g., "pump and treat") otherwise regulated by OCC.
3. DEQ regulates the disposal of contaminated material due to spills from any above-ground storage tanks which a) contain motor fuel, gasoline, kerosene, diesel, or aviation fuel, and b) are not used for retail sales, that result in an environmental impact.
4. DEQ has responsibility for (removed) tanks that still contain fluids or sludge and are disposed of improperly.
5. DEQ has jurisdiction over releases from tanks which:
 - a. contain hazardous waste,
 - b. contain non-hazardous industrial waste, and sumps which receive this waste,
 - c. store used oil or non-commercial heating oil for consumptive use on the premises,
 - d. are located in underground areas such as basements, mine shafts, or tunnels,

¹ See 40 CFR (261.4(b)(10) regarding certain petroleum media and debris which is not regulated as hazardous waste.

- e. are used to collect storm water or wastewater,
 - f. are used as emergency backup tanks, or
 - g. are septic tanks for industrial or domestic wastewater.
6. DEQ has responsibility for determination of the need for air emission permits. Examples include VOC or toxic emissions (above de minimus levels) from soil remediation.

III. Transportation

A. Pipelines (including Booster Stations)

Under 52 O.S. 1994, § 139(B)(1)(h), OCC has exclusive jurisdiction regarding *"...the construction and operation of pipelines and associated rights-of-way, equipment, facilities or buildings used in the transportation of oil, gas, petroleum, petroleum products, anhydrous ammonia or mineral brine, or in the treatment of oil, gas or mineral brine during the course of transportation but not including line pipes associated with processing at or in any:*

- (1) *natural gas liquids extraction plant,*
- (2) *refinery,*
- (3) *reclaiming facility other than for those specified within subparagraph e of this subsection,*
- (4) *mineral brine processing plant, and*
- (5) *petrochemical manufacturing plant,..."*

[NOTE - "...subparagraph e of this subsection..." referred to in this quote gives OCC exclusive jurisdiction regarding *"...reclaiming facilities only for the processing of salt water, crude oil, natural gas condensate and tank bottoms or basic sediment from crude oil tanks, pipelines pits and equipment associated with the exploration, drilling, development, producing or transportation of oil or gas,..."*]

Examples of issues within DEQ's authority which are associated with pipeline transportation include:

- 1. waste mercury from meters and gauges,
- 2. pump lube oil (e.g., from booster stations, etc.), and
- 3. air emissions from engines in compressor service, glycol dehydration, storage tanks, other fuel burning sources.
- 4. transportation pipeline wastes and soil contamination that are hazardous waste (as defined by 40 CFR Part 261) and are not going to be treated on-site or transported off site for disposal.

B. Rail

DEQ has jurisdiction to regulate the transportation, discharge, or release of waste from trains or rail facilities.

C. Highway / Roadway

DEQ has jurisdiction to regulate the transportation, discharge, or release of waste during roadway transit, except ~~crude oil and "exempted"~~ oil field waste (see NOTE under I.C. above). Roadway transportation of ~~crude oil and exempted~~ oil field waste is regulated by OCC, including activities to contain and remediate spills of such materials.

D. Bulk Terminals

Under 52 O.S. 1994, § 139(B)(1)(g), OCC has exclusive jurisdiction regarding *"...tank farms for storage of crude oil and petroleum products which are located outside the boundaries of the refineries, petrochemical manufacturing plants, natural gas liquid extraction plants, or other facilities which are subject to the jurisdiction of the Department of Environmental Quality with regard to point source discharges..."* Exceptions to this exclusive jurisdiction include tanks ~~which may require air quality permits under the Clean Air Act~~, which are the responsibility of the DEQ.

1. Storm Water

52 O.S. 1994, § 139(B)(4) states that *"(F)or purposes of the Federal Clean Water Act, any facility or activity which is subject to the jurisdiction of the Corporation Commission pursuant to paragraph 1 of [O.S. 52 § 139(B)] and any other oil and gas extraction facility or activity which requires a permit for the discharge of a pollutant or storm water to waters of the United States shall be the subject to the direct jurisdiction of the United States Environmental Protection Agency and shall not be required to be permitted by the Department of Environmental Quality or the Corporation Commission for such discharge."*

2. Waste

OCC has jurisdiction for all exempt oil field waste and certain non-exempt non-hazardous waste, with the exception of that which is disposed of in a DEQ-regulated landfill. DEQ regulates hazardous waste and has approval authority for disposal of certain wastes in a DEQ-regulated landfill.

IV. Oil Field Service

Oil field service companies handling exempted wastes (~~see NOTE under I.C. above~~) are the responsibility of OCC. Exceptions to OCC's responsibility over oil field service companies include those listed for E&P (Section I). OCC will notify DEQ when OCC has reason to believe that non-exempted wastes have been co-mingled with exempted wastes.

V. Miscellaneous

A. Open Burning

DEQ prohibits burning of hazardous waste without prior DEQ approval and generally prohibits *open burning of refuse* or other combustible material. Exceptions include:

1. fires set to remove a fire hazard which cannot be safely removed any other way.
2. the burning of hydrocarbons which are spilled or lost as a result of pipeline breaks or other accidents involving the transportation of such materials or which are generated as wastes as the result of oil exploration, development, refining, or processing operations if the following conditions are met:
 - a. the material is not hazardous waste cannot be practicably recovered or otherwise lawfully disposed of in some other manner;
 - b. the burning must not be conducted within a city or town or in such proximity thereto that the ambient air of such city or town may be affected by the air contaminants being emitted;
 - c. the initial burning may begin only between three hours after sunrise and three hours before sunset and additional fuel may not be intentionally added to the fire at times outside the limits stated above; and,
 - d. the burning must be controlled so that a traffic hazard is not created as the result of the air contaminants being emitted.
3. burning of wasted petroleum products in safety release flares when the flares are correctly designed and operated as smokeless atmospheric flares.
4. fires set to remove toxic or hazardous materials when no other safe or legal way is possible. These fires must be approved in advance by DEQ-AQD and must comply with the following requirements:

- a. burning does not begin before 3 hours after sunrise and the fire is put out before sunset, and
 - b. smoke or other products of burning do not cause a traffic hazard on nearby roads or highways.
- 5. fires set during training of fire-fighting personnel, when authorized by the appropriate governmental entity, including the local fire department, and the local DEQ Representative or the Enforcement Section of DEQ's Air Quality Division.

B. Sewage Disposal Systems

Oklahoma law requires sewage disposal systems to be constructed and operated in accordance with DEQ rules and regulations. All septic tank/lateral line sewage disposal systems must have a soil percolation test performed by a qualified person and a final inspection and approval by DEQ prior to backfilling the system. This requirement includes temporary or permanent oilfield sites if sewage disposal facilities are included on site. NOTE: "Rat holes" are not an acceptable means of sewage disposal.

C. Public Water Supplies

Any system which provides drinking water to 25 or more persons is considered a Public Water Supply (PWS) under DEQ regulations. A PWS must be permitted through DEQ's Water Quality Division, and meet its requirements for both construction and operation.

NOTE: Use of groundwater or surface water supplies may require securing water rights through the Oklahoma Water Resources Board.

D. NORM

There are currently no State or Federal regulations which specifically regulate the disposal of Naturally Occurring Radioactive Materials (NORM). Questions regarding disposal of NORMs may be directed to the Waste Management Division at DEQ or Pollution Abatement at OCC.

Attachment A

Oil and Gas Exploration and Production

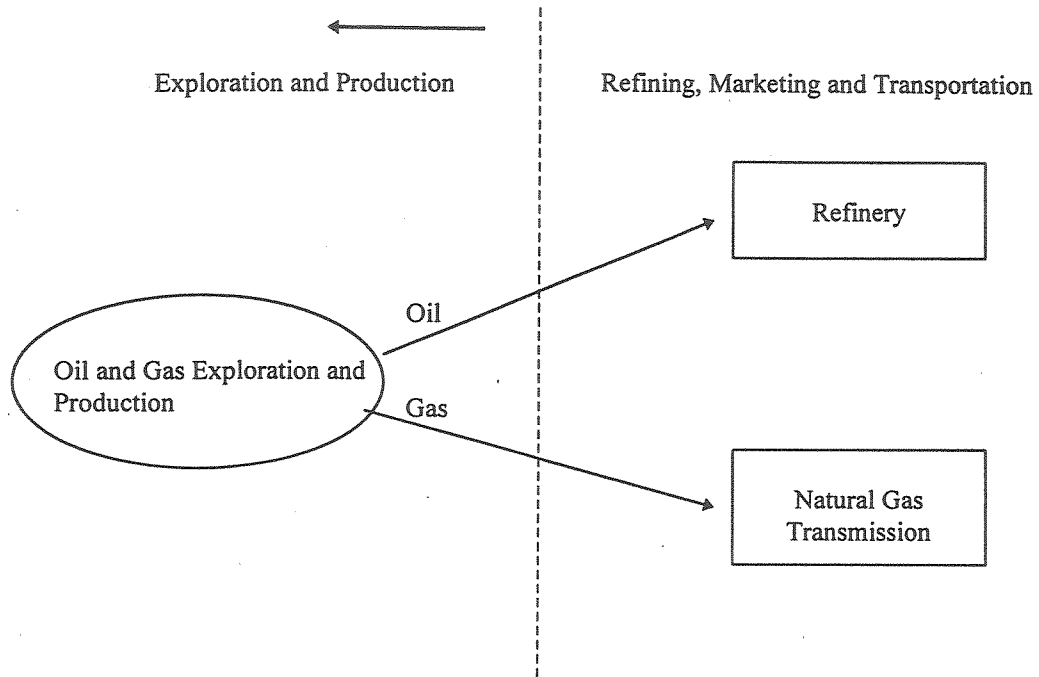


FIGURE 1

The figure above illustrates the distinction between Oil and gas exploration and production (E&P) and other segments of the oil industry, including Transportation and Refining & Marketing. The following table lays out E&P, as it is described by Oklahoma Statutes, Title 52, Section 139 (B) (1) (a) through (k), and 139 (B) (2).

Table 1: Exploration and Production Activities**Title 52 Section 139 B(1)****Common Activities Include:**

a. the conservation of oil and gas	oil, gas and salt water disposal well spacing and location
b. field operations for geologic and geophysical exploration for oil, gas and brine, including seismic survey wells, stratigraphic test wells and core test wells	test borings and seismic survey wells for oil and gas exploration
c. the exploration, drilling, development, producing or processing for oil and gas on the lease site	drilling or producing wells on a lease
d. the exploration, drilling, development, production and operation of wells used in connection with the recovery, injection or disposal of mineral brines produced from geological strata three hundred (300) feet in depth from the surface,	mineral extraction and associated activities from brine wells
e. reclaiming facilities only for the processing of salt water, crude oil, natural gas condensate and tank bottoms or basic sediment from crude oil tanks, pipelines, pits and equipment associated with the exploration, drilling, development, producing or transportation of oil or gas	crude oil reclaiming facilities
f. injection wells known as Class II wells under the federal Underground Injection Control Program. Any substance that the United States Environmental Protection Agency allows to be injected into a Class II well may continue to be so injected,	oil and gas salt water disposal and enhanced recovery wells
g. tank farms for storage of crude oil and petroleum products which are located outside the boundaries of the refineries, petrochemical manufacturing plants, natural gas liquid extraction plants, or other facilities which are subject to the jurisdiction of the Department of Environmental Quality with regard to point source discharges	tank farms located outside refineries and gas processing plants
h. the construction and operation of pipelines and associated rights-of-way, equipment, facilities or buildings used in the transportation of oil, gas, petroleum, petroleum products, anhydrous ammonia or mineral brine, or in the treatment of oil, gas or mineral brine during the course of transportation but not including line pipes associated with processing at or in any: (1) natural gas liquids extraction plant, (2) refinery, (3) reclaiming facility other than for those specified within subparagraph e of this subsection, (4) mineral brine processing plant, and (5) petrochemical manufacturing plant	pipelines located outside refineries, gas processing plants
i. the handling, transportation, storage and disposition of salt water, mineral brines, waste oil and other deleterious substances produced from or obtained or used in connection with the drilling, development, producing and operating of oil and gas wells, at: (1) any facility or activity specifically listed in paragraphs 1 and 2 of this subsection as being subject to the jurisdiction of the Commission, and, (2) other oil and gas extraction facilities and activities	disposal, transportation and storage of salt water and all other substances produced from drilling, repair or producing oil and gas wells
j. spills of deleterious substances associated with facilities and activities specified in paragraph 1 of this subsection or associated with other oil and gas extraction facilities and activities	all spills from facilities associated with oil and gas production facilities except for unused products such as unspent acid

Table 1: Exploration and Production Activities

Title 52 Section 139 B(1)

Common Activities Include:

k. subsurface storage of oil, natural gas and liquefied petroleum gas in geologic strata

liquefied petroleum gas storage fields and associated surface operations

2. ... the construction, operation, maintenance, site remediation, closure and abandonment of the facilities and activities described ... [above].

Surface and groundwater remediation and abandonment activities associated with the activities described above.

Attachment B

Air Quality Permitting Issues in the Petroleum E & P Industry

Air emissions or potential for air emissions required or requested to be permitted under the Clean Air Act are under the jurisdiction of the Department of Environmental Quality. All sources of air emissions of regulated pollutants from oil and gas exploration and production which are less than Title V major source thresholds are the jurisdiction of OCC except those which may be covered by NSPS, NESHAPs, PSD, or other applicable federal regulations requiring an air quality permit. Any source under OCC jurisdiction which elects to submit a permit application or applicability determination request to DEQ may do so.

For equipment that currently is in existence, Title V permitting may be required. If a source either (1) has the potential to emit (PTE) over the major source level: 100 tons/year of any regulated pollutant or 10/25 tons/year of any/all hazardous air pollutants (HAPs), (2) is subject to a New Source Performance Standard (NSPS), (3) is subject to a National Emission Standard for Hazardous Air Pollutants (NESHAP), or (4) is an affected acid rain source. Each of these applicability criteria is delineated in OAC 252:100-8-3(a)(1)-(5).

Typical equipment with emissions of criteria or hazardous air pollutants include the following:

- | | |
|--|---|
| ➤ Tanks and Vessels <ul style="list-style-type: none">- hydrocarbon- non-fired separators- produced water | ➤ Fugitive Sources <ul style="list-style-type: none">- valves- flanges- compressor seals- threaded fittings- relief valves |
| ➤ External Combustion Sources <ul style="list-style-type: none">- line heaters- heater treaters- glycol dehydrators burners- incinerators- boilers | ➤ Flares |
| ➤ Internal Combustion Engines (reciprocating or turbine) <ul style="list-style-type: none">- compressors- pumps- generators- pumping units | ➤ Glycol Dehydrator Reboiler Vents |
| | ➤ Sulfur Recovery Unit <ul style="list-style-type: none">- sulfur removal units |
| ➤ Tank Truck Loading | ➤ Miscellaneous <ul style="list-style-type: none">- sump tanks- waste water ponds- bleed-type controllers- cooling towers- vents not included above |

Each of these emission sources would be included or exempt from ODEQ jurisdiction and the concurrent Title V permitting process based, not on the type of source, but rather on the emission rate.

The following flow chart shows the permitting path. As mentioned previously, if a

source has the potential to emit greater than the major source threshold, it would be subject to Title V. The State of Oklahoma allows sources that can limit their PTE to below major source levels to do so with a synthetic minor or state operating permit. This would avoid subjecting them to the full battery of Title V requirements, if no other criteria applies. If a source cannot achieve emission levels below the major source level or is subject to one of the other requirements listed above, then a synthetic minor permit could not be an option. The flow chart shows that if a source is not subject to

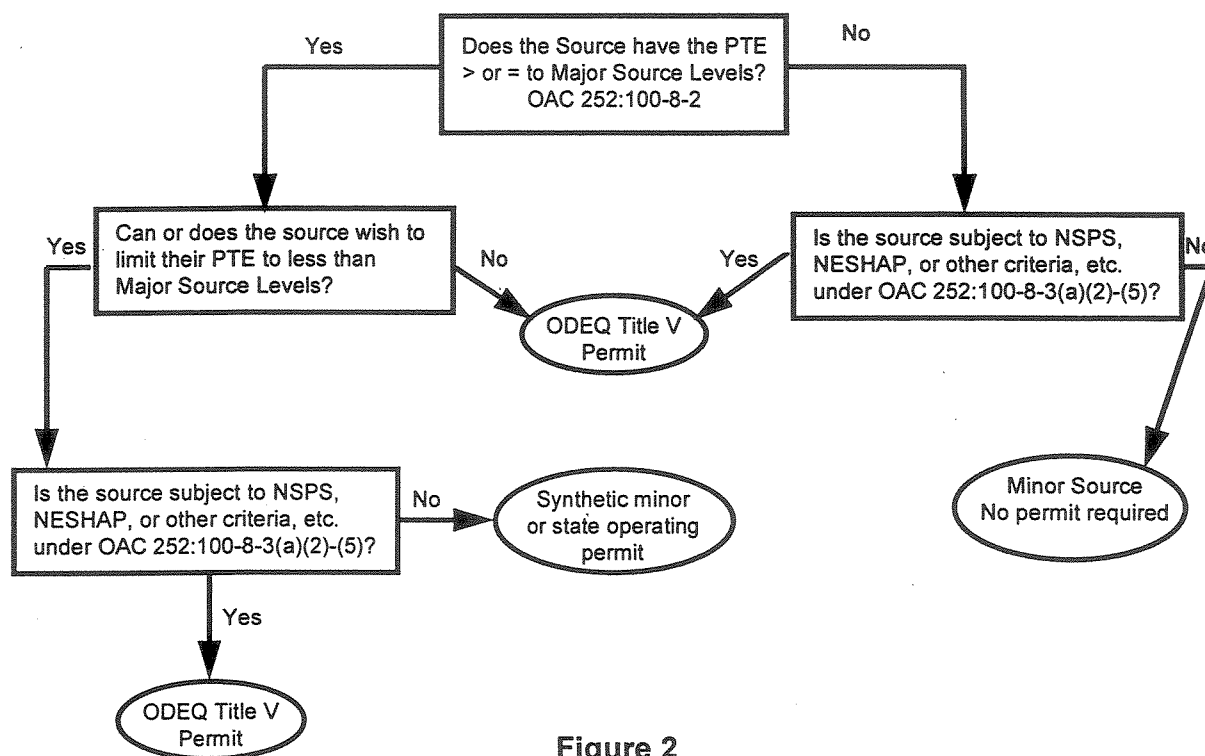


Figure 2

Title V in any respect, no permit would be required.

CAUTION! To determine if the listed requirement does apply, you must refer to the referenced regulation, because certain exemptions are available.

The following table lists the common types of oil and gas exploration and production equipment and what permitting requirements could apply. In air quality permitting, the emissions are evaluated from various sources within a facility. Therefore, to determine whether a facility needs a permit or not, the applicant must know what emission sources exist at their facility. One or more of these sources might require the facility to have a permit. For example, if a facility has a stationary gas turbine compressor engine with greater than 10 MMBTU/HR of fuel input, it is subject to an NSPS. Since it is subject to an NSPS, then it must have a permit. Therefore the purpose of the table is to provide a reference for the general types of equipment in the industry that need to be permitted, and what triggers that need. There often may be

sources where the determination for the need for a permit is not entirely straightforward. Upon request, the DEQ will make an **applicability determination** for a source based on relevant data submitted by the facility.

Table 2: Air Emissions Sources Associated with E&P

Equipment Type	Equipment Size/Capacity	Type of DEQ Air Quality Permit Required	Citation of Applicable Regulations
Petroleum Liquid Storage Tank	≥251.5 Barrels or ≥10,566 gallons	NSPS	40 CFR Part 60 Subpart K, Ka, or Kb (Production tanks generally qualify for an exemption)
Organic Material* Storage Tank	≥9.5 Barrels or ≥400 gallons, but <10,566 gallons	Minor Source Applicability Determination Permit Optional	OAC 252:100-7 Jurisdictional agreement with OCC
	<9.5 Barrels or <400 gallons	No Permit Required	Below <i>de minimis</i> levels
Internal Combustion Compressor Engine (Caution! Potential to emit does vary widely between engines of similar horsepower.)	>75 hp, but <500 hp (approximate)	Minor Source Applicability Determination Permit Optional	OAC 252:100-7 Jurisdictional agreement with OCC
	>500 hp, but <1250 hp (approximate)	Major source (synthetic minor or Title V)	OAC 252:100-8, 40 CFR Part 70
	>1250 hp (approximate)	PSD Source (Major) - Title V	OAC 252:100-8, 40 CFR Part 70
Stationary Gas Turbine Compressor Engine	≥10 MMBTU/hr	NSPS	40 CFR Part 60 Subpart GG
	<10 MMBTU/hr	Minor or Major Applicability Determination	OAC 252:100-7 OAC 252:100-8, 40 CFR Part 70
Glycol Dehydrator	No minimum or maximum	Minor or Major Applicability Determination	OAC 252:100-7 OAC 252:100-8, 40 CFR Part 70
Fugitive Emissions	If the equipment which the fugitives are from is in VOC service (process fluid contains at least 10% VOC by weight)	NSPS	40 CFR Part 60 Subpart VV and KKK (Onshore natural gas processing plants)
	pump or compressor handling organic materials	NSPS, or Minor or Major Applicability Determination	40 CFR Part 60, Subpart GGG OAC 252:100-7 OAC 252:100-8, 40 CFR Part 70
Natural gas treatment vents, SO ₂ , H ₂ S emissions	No minimum or maximum	Minor or Major Applicability Determination	OAC 252:100-7 OAC 252:100-8, 40 CFR Part 70
Flares	No minimum or maximum	NSPS, or Minor or Major Applicability Determination	40 CFR Part 60, Subpart Kb OAC 252:100-7 OAC 252:100-8, 40 CFR Part 70

* Organic Material" means chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.

ATTACHMENT C: DISPOSAL OF OIL AND GAS WASTES

DESCRIPTION OF WASTE ITEMS	RCRA EXEMPT STATUS	OCC DISPOSAL OPTIONS NOTE: SEE OAC 165:10-7-24 FOR LEGAL REQUIREMENTS	TREATMENT OR TESTING REQUIRED BY DEQ FOR LANDFILL DISPOSAL	WRITTEN APPROVAL OF DEQ FOR LANDFILL DISPOSAL ¹
Glycol filters	YES	Recycle; landfill (as approved by DEQ); underground injection	Recommendation: Drain; air dry 48 hrs; TPH**; total benzene*	YES
Dehydration filter media	YES	Recycle; landfill (as approved by DEQ); underground injection; burial	Recommendation: Drain; air dry 48 hrs; TPH**; total benzene*	YES
Gas condensate filters	YES	Recycle; landfill (as approved by DEQ); underground injection	Recommendation: Drain; air dry 48 hrs; TPH**; total benzene*	YES
Molecular sieves	YES	Landfill (as approved by DEQ); burial	Recommendation: Cool in nonhydrocarbon, inert atmosphere; hydrate in ambient air 24 hrs; TPH**; total benzene*	YES
Amine filters	YES	Recycle; landfill (as approved by DEQ); underground injection	Recommendation: Drain; air dry 48 hrs; TPH**; total benzene*	YES
Iron sponge	YES	Landfill (as approved by DEQ); burial	Allow to oxidize completely to prevent threat of combustion.	YES
Saltwater filters	YES	Recycle; landfill (as approved by DEQ); underground injection	Recommendation: Drain; air dry 48 hrs; pH; chlorides**; TPH**	YES
Cooling tower filters	YES	Recycle; landfill (as approved by DEQ); underground injection	Recommendation: Drain; air dry 48 hrs; total chromium*	YES
Ferrous sulfur, elemental sulfur & soil contaminated with sulfur	YES	Recycle; landfill (as approved by DEQ); underground injection; burial	If uncontaminated; recover & sell as raw material. If contaminated; requires case-by-case approval.	YES
Water treatment backwash solids; and filters	YES	Recycle; landfill (as approved by DEQ); underground injection; burial (except filters)	Total metals*; NORM	YES
Produced sand	YES	Landfill (as approved by DEQ); underground injection; burial; land application; bioremediation	TPH**; total benzene*; NORM	YES
Pipe scale and other deposits removed from piping & equipment	YES	Recycle; landfill (as approved by DEQ); underground injection; land application; bioremediation; burial	TPH**; TOX**; total metals*; NORM	YES
Hydrocarbon bearing soils (crude oil)	YES	Recycle; road application; land application; on-site bioremediation	TPH**; total benzene*	YES
Hydrocarbon bearing soils (lube oil)	NO	Determine if hazardous; if hazardous - DEQ regulated; if not hazardous - on-site bioremediation	Determine if hazardous; TPH**; total benzene*; PCB**	YES
Pigging waste from gathering lines	YES	Recycle; landfill (as approved by DEQ); underground injection; burial	TPH**; total benzene*; total metals*; NORM; MSDS sheets for common inhibitors	YES

ATTACHMENT C: DISPOSAL OF OIL AND GAS WASTES					WRITTEN APPROVAL OF DEQ FOR LANDFILL DISPOSAL ¹
DESCRIPTION OF WASTE ITEMS	RCRA EXEMPT STATUS	OCC DISPOSAL OPTIONS NOTE: SEE OAC 165:10-7-24 FOR LEGAL REQUIREMENTS	TREATMENT OR TESTING REQUIRED BY DEQ FOR LANDFILL DISPOSAL		
Pigging waste from transmission lines	NO	Test to determine if hazardous; if hazardous; as approved by DEQ; if not hazardous; on-site bioremediation; bioremediation	Test to determine if hazardous; TPH**; total benzene*; total arsenic*; NORM; MSDS for corrosion inhibitors	YES	
Waste Used oil filters: 1) entire unit is inside metal container 2) replaceable inside units (paper/fiber)	NO	Recycle; DEQ regulated	Separate & recycle oil & metal parts. Drain thoroughly of oil for 24 hrs; total metals *	YES	
Plastic pit liners	YES	Recycle; burial; landfill (as approved by DEQ)	Clean well.	NO	
Unused pipe dope	NO	Recycle; DEQ regulated	Recycle if possible. Otherwise; Test to determine if hazardous; MSDS sheets.	YES	
Drill cuttings	YES	Water based: commercial disposal Oil based: land fill (DEQ approval); road appl. For BOTH types: recycle; burial; underground injection; land appl.	Only cuttings; no fluids. MSDS sheets for additives; chlorides** may be a problem.	YES	
Unused mud additives	NO	Recycle; DEQ regulated	Approval only for small quantities. Determine if hazardous; MSDS sheets.	YES	
Sacks of unused drilling mud	NO	Recycle	Return to vendor or use at other site if usable. If unusable; determine if hazardous; MSDS sheets.	YES	
Sorbent pads (crude oil & other exempt wastes)	YES	Recycle; landfill (as approved by DEQ); burial	TPH**; total benzene *	YES	
Sorbent pads (lube oil & other non-exempt wastes)	NO		Determine if hazardous; TPH**; total benzene* totals for metals of concern	YES	
Uncontaminated concrete from production facilities	NO	Burial	None required unless contaminated.	Can be disposed in unpermitted site; if uncontaminated	
Contaminated concrete from gas plants, compressor stations & other oil & gas facilities	NO	Burial if non-hazardous. If hazardous, DEQ regulated	Testing determined on case-by-case basis.	YES	
Asbestos; asbestos - contaminated waste material	YES	DEQ regulated	Comply with federal and state regulations for asbestos materials. Remove asbestos from steel pipe and boilers-recycle steel.	NO dispose only in sites approved to take asbestos	
Paper, paper bags	NO		Bags must be empty.	NO	
Soiled rags/gloves	NO		None. If contaminated with non-exempt waste, make hazardous waste	NO	

ATTACHMENT C: DISPOSAL OF OIL AND GAS WASTES

DESCRIPTION OF WASTE ITEMS	RCRA EXEMPT STATUS	OCC DISPOSAL ACTIONS NOTE: SEE OAC 165:10-7-24 FOR LEGAL REQUIREMENTS	TREATMENT OR TESTING REQUIRED BY DEQ FOR LANDFILL DISPOSAL	APPROVAL OF DEQ FOR LANDFILL DISPOSAL ¹
Wooden pallets	NO		None unless contaminated. If contaminated with non-exempt waste, Must be empty-recycle if possible.	NO
Detergent buckets	NO	Recycle; landfill (as app. by DEQ)		NO
Grease buckets	NO	Recycle; landfill (as app. by DEQ)	Must be empty-recycle if possible (scrap metal)	NO
Empty containers	NO	Recycle; landfill (as app. by DEQ)	Must be empty-recycle if possible (scrap metal)	NO
Barrels/drums; 5-gallon buckets	NO	Recycle; landfill (as app. by DEQ)	Recycle if possible. Must be RCRA exempt. Must comply with DEQ rules.	NO
Metal plate; metal pipe; metal cable	NO	Recycle; landfill (as app. by DEQ)	Recycle as scrap metal. Hazardous waste determination.	NO
Junked pumps; valves; etc.	NO	Recycle; landfill (as app. by DEQ)	NORM; recycle	NO
Uncontaminated brush & vegetation from clearing land	NO		None	NO
Fiberglass tanks	NO		Must be empty; Recommendation: cut up or shred	NO
Unused fracturing fluids or acids	NO	Recycle	Provide MSDS, make hazardous waste determination.	YES ²
Gas plant cooling tower cleaning wastes	NO		Testing determined case by case, make hazardous waste determination.	YES ²
Painting wastes	NO		Determine if hazardous; Metals; semi-volatiles; volatiles or MSDS; TCLP	YES
Oil & gas service company wastes such as empty drums; drum rinsate; vacuum truck rinsate; sandblast media; painting wastes; spent solvents; spilled chemicals and waste acid	NO	Determined on a case by case basis	Testing determined case by case. Make hazardous waste determination.	YES ²
Vacuum truck and drum rinsate and drums transporting or containing non-exempt waste	NO		Testing determined case by case. Make hazardous waste determination.	YES ²
Refinery waste	NO		If not listed; case by case testing, make hazardous waste determination.	YES
Liquid and solid wastes generated by crude oil and tank bottom reclaimers	NO	Recycle; underground injection; road application; land application; on-site bioremediation	Testing determined case by case. Make hazardous waste determination.	YES ²

ATTACHMENT C: DISPOSAL OF OIL AND GAS WASTES

DESCRIPTION OF WASTE ITEMS	RCRA EXEMPT STATUS	OCC DISPOSAL OPTIONS NOTE: SEE OAC 165:10-7-24 FOR LEGAL REQUIREMENTS	TREATMENT OR TESTING REQUIRED BY DEQ FOR LANDFILL DISPOSAL	WRITTEN APPROVAL OF DEQ FOR LANDFILL DISPOSAL ¹
Used equipment lubrication oils	NO	Recycle	Metals; TPH <u>Make hazardous waste determination.</u>	YES ²
Waste compressor oil; filters; and blowdown	NO	Recycle; landfill (as app. by DEQ); burial (except filters)	Metals; TPH <u>Make hazardous waste determination.</u>	YES ²
Used hydraulic fluids	NO		Metals; TPH <u>Make hazardous waste determination.</u>	YES ²
Waste solvents	NO	Recycle	MSDS; or demonstrate not listed/characteristic <u>Make hazardous waste determination.</u>	YES ²
Waste in transportation related pits	NO	Determine if hazardous; If hazardous - as app. by DEQ; If non-hazardous - OCC approval	BTEX; TPH; others case by case <u>Make hazardous waste determination.</u>	YES ²
Caustic or acid cleaners	NO	Recycle	pH; MSDS; others case by case <u>Make hazardous waste determination.</u>	YES
Boiler cleaning wastes	NO		Metals; others case by case <u>Make hazardous waste determination.</u>	YES ²
Boiler scrubber fluids; sludges; and ash	NO		Metals; others case by case <u>Make hazardous waste determination.</u>	YES ²
Incinerator ash	NO		Metals; others case by case <u>Make hazardous waste determination.</u>	YES
Laboratory wastes	NO		MSDS; or demonstrate not listed/characteristic <u>Make hazardous waste determination.</u>	YES
Sanitary wastes	NO		Can be landfilled only if treated	YES ²
Pesticide wastes	NO		MSDS; or demonstrate not listed/characteristic <u>Make hazardous waste determination.</u>	YES ²
Radioactive tracer wastes	NO		NOT allowed in landfill	N/A
Trash and Debris	NO	Burial as approved by OCC; landfill (as app. by DEQ)	Testing determined case by case	YES

EXPLANATION OF ABBREVIATIONS:

MSDS Material Safety Data Sheet (s)
 NORM Naturally Occurring Radioactive Materials
 PCB Polychlorinated biphenyls (or polybrominated biphenyls)

TCLP Toxicity characteristic leaching procedure
 TOX Total organic halogen (halide)
 TPH Total petroleum hydrocarbons (EPA Method 8015 modified)

** Results of the following analyses must be within the limits stated for disposal in a municipal solid waste landfill:

* If a total analysis (i.e. Total Lead, Total Benzene, etc. exceeds the limits listed below, then TCLP must be performed and TCLP results must not exceed the stated limits:

Analyte	Total Limit	TCLP Limit
Benzene	10 mg/Kg	0.5 mg/L
Arsenic	100 mg/Kg	5.0 mg/L
Barium	2000mg/Kg	100 mg/L
Cadmium	20 mg/Kg	1.0 mg/L
Chromium	100 mg/Kg	5.0 mg/L
Lead	100 mg/Kg	5.0 mg/L
Mercury	4 mg/Kg	0.2 mg/L
Selenium	20 mg/Kg	1.0 mg/L
Silver	100 mg/Kg	5.0 mg/L

Analyte	Limit
TPH	>1000 mg/Kg - requires disposal on composite liners

PCB's < 50 mg/Kg

¹Original waste generators must complete nonhazardous Industrial Waste Disposal Request Forms, submit appropriate analytical, and sign accompanying certification. The waste is nonhazardous.

²Liquids Restriction - Liquid Wastes can only be accepted by landfills which have a Bulking plan specifically approved by the DEQ

Attachment D

RCRA-Exempt Exploration and Production Wastes¹

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 wastes
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 or 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 Exploration and Production Wastes¹

Unused fracturing fluids or acid
Gas plant cooling tower cleaning wastes
Painting wastes
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
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

¹As listed by EPA guidance in Federal Register notice, Wednesday, July 6, 1988, Volume 53, Number 129, on pages 25453 and 25454 & 58 fr 15284, March 22, 1993.