

OKLAHOMA FOLLOW-UP AND SUPPLEMENTAL REVIEW



**State Review of Oil and Natural Gas
Environmental Regulations, Inc.**

July 2005

TABLE OF CONTENTS

INTRODUCTION	1
EXECUTIVE SUMMARY	3
GENERAL CRITERIA	9
ADMINISTRATIVE CRITERIA.....	13
Permitting	13
Compliance Evaluation	19
Enforcement.....	23
Contingency Planning	25
Public Participation	28
Financial Assurance.....	30
Waste Tracking.....	32
Data Management.....	33
Personnel and Funding	33
TECHNICAL CRITERIA	39
Siting Criteria	39
Waste Characterization.....	41
Technical Criteria for Pits.....	42
Technical Criteria for Landspreading.....	43
Technical Criteria for Roadspreading.....	44
Technical Criteria for Commercial and Centralized Disposal Facilities.....	44
ABANDONED SITES.....	55
Definitions	55
Identification of Abandoned Sites	56
Funding for Abandoned Site Remediation	58
Criteria for Prioritizing Remediation.....	60
Standards for Remediation	61
Record of Remediation.....	63
Public Participation	63
NATURALLY OCCURRING RADIOACTIVE MATERIAL.....	67
PERFORMANCE MEASURES.....	67
APPENDIX A: GLOSSARY OF ACRONYMS.....	71
APPENDIX B: COMPLETED OKLAHOMA QUESTIONNAIRE.....	75

INTRODUCTION

In 1990, the Interstate Oil Compact Commission (IOCC) and the U.S. Environmental Protection Agency (EPA) jointly published a Study of State Regulation of Oil and Gas Exploration and Production Waste, which contained guidelines for the regulation of oil and gas exploration and production wastes by the IOCC member states (the “1990 Guidelines”). The published guidelines provided the basis for the State Review Program, a multi-stakeholder process by which state exploration and production (E&P) waste management programs are reviewed against the guidelines. The purposes of the State Review Process are to document the successes of states in regulating E&P wastes and to offer recommendations for program improvement. In 1994, the guidelines were updated and revised by the IOCC, now named the Interstate Oil and Gas Compact Commission (IOGCC). In 1999, administration of the State Review Program devolved to a non-profit, multi-stakeholder organization named State Review of Oil and Natural Gas Environmental Regulations, Inc. (STRONGER). STRONGER again revised, expanded and updated the Guidelines, which were accepted by the IOGCC and published in June 2000 as Guidelines for the Review of State Oil and Natural Gas Environmental Regulatory Programs (the “2000 Guidelines”).

The report of the initial review of the Oklahoma oil and gas regulatory program was published in June of 1992. The initial review was conducted at the offices of the Oklahoma Oil and Gas Conservation Division (OGCD) of the Oklahoma Corporation Commission (OCC). That initial report contained seventy-three (73) recommendations based on the 1990 Guidelines. The 1994 IOGCC updates and revisions to the 1990 Guidelines added new sections on Naturally Occurring Radioactive Materials (NORM) and Abandoned Sites. In March, 1995 an IOGCC contractor conducted a follow-up review of the OGCD to determine what actions the State agency had taken to address the recommendations of the 1992 report. No new recommendations were made as a result of that review.

In December, 2004 a ten-person team appointed by STRONGER conducted a review to evaluate the adequacy of the Oklahoma program compared to the 2000 Guidelines. The team consisted of six team members and four observers. Angie Burckhalter, Oklahoma Independent Petroleum Association; Charles McDonald, Devon Energy Corporation; Terri Lorenzon, Wyoming Environmental Quality Council; Hal Fitch, Michigan Department of Environmental Quality; Donald S. Garvin, Trout Unlimited; and Kathy Martin participated as Review Team members. Mark Carl, IOGCC; James Collins, STRONGER; John Ford, U.S. Department of Energy; and Steve Souders, U.S. Environmental Protection Agency participated as observers.

The process began with a questionnaire that was sent to the Oklahoma Oil and Gas Conservation Division. The questionnaire had been prepared by the STRONGER Board. STRONGER intended the questionnaire to capture the status of the Oklahoma program relative to the 2000 Guidelines. The OGCD prepared a response to the questionnaire which was then sent to the Review Team. Oklahoma’s response to the questionnaire is provided in Appendix B.

The Review Team conducted its first meeting, the in-state portion of the review, in Oklahoma City, Oklahoma at the OGCD offices on December 5–8, 2004. Ms. Lori Wrotenbery and Mr. Timothy Baker along with other Oklahoma Corporation Commission and OGCD staff members

responded to questions from the team and observers. Following the interviews and review of the written materials and backup documentation provided by the state, the Review Team compiled this review report.

This is the report of the review of the OGCD programs against the standards of the 2000 Guidelines. This report consists of six main sections according to the structure of the 2000 Guidelines: I. General Criteria; II. Administrative Criteria; III. Technical Criteria; IV. Abandoned Sites; V. Naturally Occurring Radioactive Materials (NORM); and VI. Performance Measures. Appendix A is a glossary of all acronyms used in the report. Appendix B contains Oklahoma OGCD's written response to the STRONGER questionnaire.

EXECUTIVE SUMMARY

A comprehensive review of the Oklahoma oil and gas environmental regulatory program has been completed by a multi-stakeholder Review Team that has concluded that the Oklahoma program is, over all, well-managed, professional and is meeting its program objectives. The Review Team also made recommendations for improvements in the program.

Program Strengths

The Review Team identified strengths of the Oklahoma program, which also are noted in several of the report's findings. The following offers an overview of the Oklahoma program's strengths.

Program Guidance

OCC and OGCD have developed and implemented several important guidance documents that are now essential elements of the state's regulatory program. These include a "Water Quality Standards Implementation Plan" (effective July 1, 2001), a "Guidance Document of Technical Measures to Prevent Pollution" (dated January 23, 2001), the "Guardian Guidance for the Assessment and Cleanup of Complex Crude Oil, Condensate, and Other Hydrocarbon Release Sites, Including Historically Impacted Sites" (effective October 1, 2002), and the 1992 "Oklahoma Corporation Commission Guidelines for Responding to and Remediating Spills".

Compliance Enforcement

The OGCD has enhanced enforcement compliance with the development and use of creative new technologies. These tools include the use of GIS systems, historic photographs, historic data, aerial photos, and current data to locate and investigate abandoned sites and possible sources of pollution including brine impacted soils, contaminated water, and old pits. Historic photos and data help locate responsible parties. GIS mapping capabilities enable the OGCD to sort through conflicting theories on the source of contamination. GIS mapping aids in identifying important geological features such as faults. All of the information gathered and mapped is used to build evidence for hearings and for documentation of sites for access to the well plugging fund. Field inspectors can use GIS maps and GPS devices to identify and find sampling locations.

Staff Expertise

The district offices now have hydrogeologists assigned to each district. All permitting processes are reviewed or referred to the central office for additional review. The Oklahoma City office also has a hydrogeologist on staff. The Review Team commends the OGCD for including hydrogeologists as a staffing priority.

Waste Characterization

The OCC expanded the "Waste Management Practices Reference Chart," OCC 165:10-7-24 to incorporate additional waste streams generated in E&P operations. The chart now includes waste oil and waste oil residues, water contaminated by crude oil or refined products, storm water, and hydrostatic test water, and provides for specific management practices for each. The OCC has an effective system for prioritizing and specifying waste management options.

Abandoned Sites

Overall, Oklahoma has an aggressive program for identifying and categorizing various abandoned sites related to oil and gas production. The Review Team was impressed with the State's efforts to identify, categorize, and effect remediation at abandoned oil and gas sites. The creation of the OERB has provided the state a funding mechanism to close all types of abandoned E&P facilities. All abandoned commercial facilities that do not have a responsible party or are not under litigation can be closed by the OERB. The OCC also actively applies for and obtains grants to conduct studies at sites that are potentially contaminated by historic oil and gas activities, and actively participates with other state agencies in reclamation of those sites.

Program Planning

The OCC is in the process of developing a major new agency-wide strategic plan. The Review Team received an excellent presentation on performance measures and the OCC's strategic planning effort from Dee Porter, Director of Administration. OGCD is participating in this planning effort, and their new strategic plan will include performance measures and be tied to the budget. OCC is required to have this new five year plan (for years 2006-2010) by statute. (Oklahoma Program Performance Budgeting and Accountability Act, Title 62 O.S. §45.1 through 45.10). The agency's goal is to complete the new strategic plan by July 1, 2005, and the process is already underway.

Public Outreach

The OGCD has an active public outreach program and a number of citizen advisory groups. The agency publishes pamphlets for the public; agency personnel travel to schools and groups to speak about the agency and its programs; the agency maintains a toll free phone number for complaints; the agency has a consumer services division with two full time positions; they maintain a mailing list of interested parties; the agency has a public information officer; and the agency works with many working groups that have stakeholders represented.

Complaint Resolution

The Oklahoma legislature established a priority goal for the agency to respond to citizen complaints in a timely fashion. The Field Operations Department tracked the number of complaints received, the average response time, the number of complaints resolved, the average resolution time, and the number of pending complaints for every district. They also tracked the same type of information for incidents, discoveries, and violations. They also track the number of times the field personnel witness well plugging, well tests, mechanical integrity tests, UIC inspections, and well-site inspections. OGCD set a goal for handling complaints in a timely fashion, and met its goal.

Program Recommendations

The following are the major findings and recommendations made by the Review Team for improvement of the Oklahoma program:

Permitting

2004 FINDING II.5

The OCC tried using a fixed term for commercial permits and found that the hearing that is required for a renewal was a burdensome requirement and abandoned the idea. In place of the fixed term requirements, the OGCD established a policy of reviewing facility permits for compliance on a periodic basis. Commercial sites are reviewed at least twice per year and pit permits are reviewed annually. If the OGCD sees a need for a new or modified permit condition, the condition can be added. Although the 1992 Recommendation II.5. has been met, the Guidelines requirement for fixed-term permits has not been met.

2004 RECOMMENDATION II.5

The OCC should issue individual permits for specific facilities or operations for a fixed term. (2000 Guidelines sections 4.1.1, 5.10.2.1.a)

2004 FINDING II.11

The OCC has not adopted rules setting forth the OCC's authority, or that of the OGCD, to deny a permit based on the compliance history of an operator, the officers of a company, or a board of directors. Neither is there a rule listing the criteria for denial of a permit. Although the OGCD staff believes that it can administratively deny permits in these circumstances or address past compliance in the financial assurance required, it does not have authority or criteria in rules. As operator information becomes available electronically, states should be able to access compliance information in other states. This adds impetus to have the legal authority to deny a permit when appropriate.

2004 RECOMMENDATION II.11

The 1992 Recommendation II.11 has not been met. The State should pursue statutory authority and rulemaking to establish criteria for denial of permits based on an operator's history of non-compliance that demonstrates an unwillingness or inability to comply with permit requirements. (2000 Guidelines section 4.1.1.)

2004 FINDING X.4

The 1992 Recommendation X.4 has not been met. The OCC does not believe a rule can be written to cover all the violations that may result in modification, revocation, or suspension under Oklahoma law. The agency believes cases that rise to this level of enforcement are too diverse to be captured in the rules. However, the lack of rules jeopardizes the agency's use of revocation, modification, or termination authority. Although enforcement cases are unique, they also share common elements and inconsistency in application of the law can put cases at risk.

2004 RECOMMENDATION X.4

The OGCD should adopt rules establishing the criteria for revocation, modification, and suspension. (2000 Guidelines 4.1.3.1.f)

Financial Assurance

2004 FINDING II.12

The OGCD and OCC are considering alternative financial assurances options, but the agency and the legislature have declined to change the bonding schedule in effect since 1992. Operators may cover one well or many wells for \$25,000. 1992 Recommendation II.12 has been met, but concerns about the amount of the blanket bond remain.

2004 RECOMMENDATION II.12

The OGCD should evaluate whether the financial assurance requirements, in concert with other regulatory requirements, are effective in reducing the number of wells that become a liability to the State. If OGCD finds that mechanisms are not effective, it should take steps, including consideration of an increase in the bonding requirements, to address the issue. (2000 Guidelines section 4.2.4.)

Program Funding

2004 FINDING I.7.b

It is difficult to determine whether the OGCD is funded at a level adequate to meet its goals and objectives because the agency is in the midst of great changes. This is partly due to the fact that the new director is currently hiring two of the four manager positions in her office. The elimination of a deputy director position also necessitates the distribution of the responsibilities formerly assigned to the deputy director. Working on a new strategic plan is an excellent step, however, until the managers are working and the plan is drafted, the level of funding necessary for the agency will not be known. Although an additional fee of from \$100 to \$300 per APD was initiated for “walk through” applications in 1996, the base fees have not been increased since 1988.

2004 RECOMMENDATION I.7.b

When the OGCD has completed the hiring process for the managers and has completed the strategic planning process, it should evaluate whether sufficient funds are available to successfully carry out the mission of the agency. This evaluation should be done on a continuing basis. (2000 Guidelines 4.3.2 and 3.1)

2004 RECOMMENDATION I.7.c

As the operations of the OGCD are now partially funded by fees, the agency should evaluate the fees it assesses and determine whether the fees cover the costs of the services. (2000 Guidelines 4.3.2.)

Siting Requirements

2004 FINDING III.3

By protecting Hydrologically Sensitive Areas (HSAs) the OGCD believes it is protecting wetlands. Work on appropriate standards for wetlands continues in the OWRB Wetlands Working Group, and the rules may be amended to accommodate recommendations from the working group. 1992 Recommendation III.3 has not yet been met.

2004 RECOMMENDATION III.3

As the regulation of wetlands continues to be evaluated in the working group, the OCC should determine whether siting requirements for wetlands are covered by the protection afforded to the broader category of sensitive areas—the HSAs. If wetlands are not protected under the Corps of Engineers and EPA federal requirements together with HSA protections, then siting requirements should be developed. (2000 Guidelines section 5.1.e.iv.)

2004 FINDING III.5

The OGCD has evaluated siting restrictions to meet this recommendation, but it has not amended the statute or rules to include the restrictions described above. Local government has authority for siting and many municipalities have siting and construction requirements applicable to E&P operations. Local regulations may vary. 1992 Recommendation III.5 has not been met.

2004 RECOMMENDATION III.5

Siting restrictions in accordance with the Guidelines should be adopted as rules to provide consistent protection for the public statewide. (2000 Guidelines section 5.1.e.iii)

Abandoned Sites Priorities

2004 FINDING 4.11

There is not a mechanism for the public to petition a state agency to change an abandoned site's priority status or remediation standard.

2004 RECOMMENDATION 4.11

The OCC should develop a mechanism to include the public (potentially affected property owners) early in the abandoned site evaluation process so they can have input on the priority of the site and level of remediation. (2000 Guidelines section 6.7)

Performance Measurement

2004 RECOMMENDATION 6.3b

The OCC should consider using additional environmental indicators as a basis for performance measurement. Examples might include the Clean Water Act 305b list of impaired streams, the number and frequency of fish kills reported annually, confirmed water supply contamination incident trends, and formal tracking and graphic representation of performance data/measures to support trend line analysis. (2000 Guidelines sections 8.1 and 8.2)

This page left blank

I. GENERAL CRITERIA (2000 Guidelines Section 3)

The purpose of the General Criteria section of the 2000 STRONGER Guidelines is to ensure that a state agency has the necessary elements and framework for an effective E & P regulatory program. These elements should include, at a minimum: adequate statutory authority detailing the agency's powers and duties; statutory authority to promulgate rules and regulations; statutes and regulations which adequately define necessary terminology; provisions to adequately fund and staff the program; mechanisms for coordination among stakeholders and other government agencies; technical criteria for E&P waste management practices; a clear statement of the program's goals and objectives; an effective waste management hierarchy system; and the ability to accommodate differences in climate, hydrology, geology, economics, and method of operation within the state. The Review Team finds that the Oklahoma oil and gas regulatory program meets the General Criteria of the 2000 Guidelines, as specifically discussed below.

General

As noted in the 1992 Oklahoma State Review, the Oil and Gas Conservation Division (OGCD), which has regulatory responsibility for all exploration and production waste operations in the State of Oklahoma, is a division of the Oklahoma Corporation Commission (OCC). Statutory authority for OCC and OGCD is contained in OS Title 52 § 139-153.

However, it was also pointed out in the 1992 initial Review that some cross-jurisdictional roles existed in the state's regulatory program involving E & P wastes. These peripheral roles involved primarily the Oklahoma Water Resources Board, the Oklahoma State Department of Health, and the Pollution Control Coordinating Board.

In 1993 the Oklahoma Legislature reorganized the state's environmental regulatory agencies. This legislation established a new Oklahoma Department of Environmental Quality (ODEQ) as an agency separate from the Oklahoma State Department of Health and eliminated the Pollution Control Coordinating Board (PCCB). In addition, many of the areas of jurisdiction of the Oklahoma Water Resources Board were transferred to the new DEQ.

As a result (as noted in the June, 1995 Oklahoma State Review Follow-Up), "The OCC has authority over all oil and gas production on private, state and, in most cases federal lands (excluding some Indian lands) in Oklahoma. This authority includes the specific responsibility to monitor and regulate, by the promulgation of rules and regulations and the issuance of orders, the location, operations, and reclamation of produced water and emergency pit facilities associated with oil and gas production. OCC also has authority over the regulation of E&P commercial facilities."

In September, 1995, the OCC and DEQ developed a "DEQ/OCC Jurisdictional Guidance Document" which further ratifies and clarifies OCC/OGCD authority for handling E & P wastes. In addition, OCC and OGCD have developed and implemented several important guidance documents that are now essential elements of the state's regulatory program. These include a "Water Quality Standards Implementation Plan" (effective July 1, 2001), a "Guidance Document of Technical Measures to Prevent Pollution" (dated January 23, 2001), the "Guardian Guidance for the Assessment and Cleanup of Complex Crude Oil, Condensate, and Other Hydrocarbon

Release Sites, Including Historically Impacted Sites” (effective October 1, 2002), and the “Oklahoma Corporation Commission Guidelines for Responding to and Remediating Spills”

1992 FINDING I.1.

The Memorandum of Understanding (MOU) with Oklahoma State Department of Health (OSDH) does not address all activities where the two agencies would benefit from a more coordinated set of procedures outlining areas of cooperation, e.g., disposal of E&P wastes into landfills, and SARA Title III reporting requirements for E&P waste facilities. (See Finding and Recommendation II.10 and VI.25)

1992 RECOMMENDATION I.1.

The MOU between the OCC and OSDH should include all activities coordinated between the agencies, including disposal of E&P wastes into landfills and SARA Title III reporting requirements.

1992 FINDING I.2.

The Review Team commends the efforts of the OCC to develop MOUs with other agencies having peripheral regulatory authority over specific oil and gas activities. The MOUs with OSDH concerning activities near hazardous waste disposal well locations and for applicable air quality emissions, and with DWC [Division of Wildlife Conservation] concerning Title 29 enforcement, have not been updated since 1989, 1989, and 1987, respectively.

1992 RECOMMENDATION I.2

Due to the continued proliferation of statutes and regulations addressing controls of activities in all pollution media, the OCC should initiate a regular MOU review process with each agency.

1992 FINDING I.3.

The PCCB [Pollution Control Coordinating Board] is the referral point for oil field complaints received by any agency other than the OCC. This process is a provision of each MOU.

1992 RECOMMENDATION I.3

The OCC should maintain a strong working relationship with each of the constituent agencies of the PCCB to effectively transfer complaints and resolve problems.

2004 FINDINGS I.1, I.2, and I.3

The Oklahoma Legislature clarified the statutory authority and regulation of oil and gas E & P wastes in 1993. In 1995 OGCD’s jurisdiction was further clarified in the “DEQ/OCC Jurisdictional Guidance Document.” These actions have made cross-agency MOU’s unnecessary, and the PCCB has been eliminated. The recommendations from the initial review have been met. OCC and OGCD should be commended for the excellent guidance documents they have developed for administering their regulatory program (2000 Guidelines Sections 3.1.a, b, c and f).

Goals

§52-139 of the Oklahoma Statutes provides, under “Jurisdiction, powers and authority of Corporation Commission and Department of Environmental Quality”:

“A. The Corporation Commission is vested with exclusive jurisdiction, power and authority, and it shall be its duty, to make and enforce such rules and orders governing and regulating the handling, storage and disposition of saltwater, 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 and brine wells within this state as are reasonable and necessary for the purpose of preventing the pollution of the surface and subsurface waters in the state, and to otherwise carry out the purpose of this act”. (Emphasis added)

The Review Team finds that the OCC meets the criteria of Section 3.2 of the 2000 Guidelines.

Flexibility

The conditions under which oil and gas are produced in Oklahoma are relatively consistent across the state. Differences in plugging requirements by field are an example. The rules also include provisions for variances for specific situations. The Review Team finds that the Oklahoma regulatory program is flexible enough to address these variations and meets the criteria of Section 3.3 of the 2000 Guidelines.

This page left blank

I. ADMINISTRATIVE CRITERIA (2000 Guidelines Section 4)

Permitting

As was the case in 1992, the OGCD relies on a combination of regulatory mechanisms to manage E&P waste, but there have been changes. In 1992, commercial disposal and annular injection were the predominant methods of disposal. Now commercial facilities are dying out, with only two permits issued in the last ten years. Commercial disposal operations are predominantly large mud pits and there are only nine such facilities. All commercial permits are issued by an Oklahoma Corporation Commission (OCC) order and a hearing is required. After the 1992 review, the OCC tried using a fixed term for commercial permits and, in the process, found that advertising the renewal of a permit caused confusion for the public. Citizens who were interested, and came to the hearing, thought that the disposal site was being closed rather than the permit being renewed. Use of a fixed term was discontinued, as inspections and the citizen complaint process will bring compliance issues before the Commission. The OGCD has the authority to red tag, or shut down, a facility immediately if there is a public health or serious pollution issue. Commercial permits are reviewed annually and the OGCD staff may make recommendations for modifications. The commercial facilities are inspected at least every two months. If necessary, either the operator or the OGCD can request a hearing to address problems at a commercial facility.

In 2004, on-site disposal, burial, is preferred and landspreading is used for those drilling fluids hauled off-site. The land disposal areas are not commercial operations. The OCC revised OAC 165: 10-7-24, referred to as the waste management hierarchy, to clarify requirements for on-site burial of oil debris, filter media, iron sponge, molecular sieve, produced sand, and paraffin. The rule now specifies what can be buried. The waste management hierarchy has also been amended to cover over 40 waste streams. In 1992, the hierarchy was for approximately 5 waste streams.

A very small amount of E&P waste goes to landfills for disposal. The liner requirements for landfills are greater than they were in 1992, no liquids are allowed, and oil based muds and cuttings must be stabilized with fly ash. The operator is responsible for meeting the landfill requirements.

1992 FINDING II.1.

The OWRB [Oklahoma Water Resources Board] has issued permits for gas plant evaporation/retention pits and discharges of gas plant effluent even though these facilities fall with OCC jurisdiction. The OCC and OWRB have recently resolved this issue.

1992 RECOMMENDATION II.1.

The Review Team encourages the OCC to address these E&P waste management practices in its regulations to ensure that they are being adequately regulated and enforced. IOGCC Guidance Section 4.1.1.

2004 FINDING II.1

The OCC has jurisdiction over exempt E&P wastes with the exception of gas plant effluent. Jurisdiction over gas plant effluent is with the ODEQ, an agency with NPDES primacy. 1992 Recommendation II.1. has been met.

1992 FINDING II.2.

OCC rules allow the following E&P wastes to be disposed of by onsite burial without clear regulatory controls: oily debris; filter media; iron sponge; molecular sieve; produced sand; and paraffin. The list of disposal options in OAC165:10-7-24 identifies onsite burial as a disposal option for these wastes and references the rule on non-commercial pits. OAC165:10-7-16. However, this rule does not specify what standards and procedures apply to onsite burial of these wastes. In practice, some operators notify and obtain verbal authorization from the district office before burying these wastes onsite.

1992 RECOMMENDATION II.2.

The OCC should clarify the requirements for onsite burial of these wastes and, if necessary, develop additional requirements to ensure that these wastes are managed in an environmentally responsible manner consistent with IOGCC Guidance sections 4.1.1. and 5.5.2., and in a manner that will prevent pollution in accordance with IOGCC Guidance section 5.1.a.

2004 FINDING II.2

The OCC rules have clarified requirements for on-site burial of E&P wastes. 1992 Recommendation II.2 has been met.

1992 FINDING II.3.

OAC 165:10-7-24 provides a quick and easy reference to the authorized recycling and disposal options for E& P wastes. However, it does not address all E&P wastes and may not offer enough options for management of some E&P wastes. Unless regularly updated, it may discourage operators from considering improvements in waste management and waste minimization technology.

1992 RECOMMENDATION II.3.

The OCC should continue to review and revise this rule regularly to ensure that it covers all types of E&P wastes, recognizes a variety of environmentally sound management options, accommodates new technology, and reflects the hierarchy of preferred waste management practices identified in IOGCC Guidance section 5.1.e.

2004 FINDING II.3

The waste management hierarchy has been amended to cover over 40 waste streams. 1992 Recommendation II.3 has been met.

1992 FINDING II.4.

The district offices lack hydrogeologists or other environmental specialists to perform technical reviews of permit applications, and the technical staff in Oklahoma City does not regularly review permits issued by the district offices.

1992 RECOMMENDATION II.4.

To enhance the technical quality of permits issued by the district offices, professional environmental staff should review permit applications processed by the district offices. The Review Team supports OCC's current efforts to obtain funding to hire a hydrogeologist or environmental specialist for each district office. In addition, the Oklahoma City staff should oversee the permitting practices of the district offices to promote consistency statewide. IOGCC Guidance section 4.3.1. (see Recommendation I.11.)

2004 FINDING II.4

The district offices now have hydrogeologists assigned to each district. All permitting process are reviewed or referred to the central office for additional review. The Oklahoma City office also has a hydrogeologist on staff. The Review Team commends the OGCD for including hydrogeologists as a staffing priority. 1992 Recommendation II.4 has been met.

1992 FINDING II.5.

The OCC does not place fixed terms on all E&P waste management permits as recommended by IOGCC Guidance section 4.1.1. Many of the permitted facilities and activities are inherently short-lived. However, some that may exist indefinitely are: recycling/reuse pits, spill containment pits, truck yard pits, and commercial disposal pits. The OCC has no established procedures for periodically reviewing the permits for these facilities.

1992 RECOMMENDATION II.5.

The OCC should issue permits for long-term E&P waste management facilities and activities for fixed terms, or otherwise establish a procedure for periodically reviewing and, if necessary, revising these permits. IOGCC Guidance section 4.1.1.

2004 FINDING II.5

The OCC tried using a fixed term for commercial permits and found that the hearing that is required for a renewal was a burdensome requirement and abandoned the idea. In place of the fixed term requirements, the OGCD established a policy of reviewing facility permits for compliance on a periodic basis. Commercial sites are reviewed at least twice per year and pit permits are reviewed annually. If the OGCD sees a need for a new or modified permit condition, the condition can be added. Although the 1992 Recommendation II.5. has been met, the Guidelines requirement for fixed-term permits has not been met.

2004 RECOMMENDATION II.5

The OCC should establish fixed terms for individual permits for specific facilities or operations. (2000 Guidelines sections 4.1.1, 5.10.2.1.a)

1992 FINDING II.6.

With the exception of saltwater storage pits at enhanced recovery injection wells, all pits are reviewed through the drilling permit process, permitted individually, or authorized by rule. In Rule Making 59, the OCC has proposed a new rule for surface facilities at enhanced recovery projects. This new rule, which is similar to the existing rule for surface facilities at non-commercial disposal wells, would authorize saltwater storage pits at enhanced recovery injection wells by rule.

1992 RECOMMENDATION II.6.

The Review Team supports adoption of the new rule for surface facilities at enhanced recovery projects. IOGCC Guidance sections 4.1.1 and 5.3.2.

2004 FINDING II.6

Rule Making 59 was completed, and Rules OAC 165-10-7-20 and 165:10-7-30 were adopted and are currently in effect. 1992 Recommendation II.6. has been met.

The OGCD well permit application serves as notification to the agency of the location and construction of rule-authorized pits. Field inspectors work to inspect drilling sites at least weekly. These inspectors verify the location of the pits and the setting of surface pipe. It is routine for an inspector to have an operator come to a site to discuss pit location or other issues. If a problem is not addressed by the operator, the matter is referred to the central office. All permits are reviewed by a hydrogeologist to ascertain if a hydrologically sensitive area (HSA) will be affected.

The OGCD has developed a record of authorized pits that is maintained in the district offices. Inspections are conducted annually and these reports are filed in the district offices. Inspectors also place a high priority on witnessing pit closure. At this time, district personnel must still work with hard, or paper, copies of information that is filed at the Oklahoma City office. Part of the OGCD data management initiative is to provide efficient, electronic communications between the district and the central office. Field personnel will have the ability to readily access all information in the OGCD pertaining to a regulated facility or operator.

The OGCD has the authority to deny permits, and some of these decisions are made by the district managers. Permits can be denied administratively and, where a permit is issued by Commission order, the OCC can deny a permit. The OCC does not have a rule allowing permit denial based on the past performance or compliance history of an operator if the permit application meets the OCC requirements. The only exception is if an operator has an outstanding fine of \$2000 or greater. The OGCD staff that reviews the financial assurance for a company does research the history of the operator, officers, and the board of directors. Compliance is reviewed for Oklahoma only, but the staff does talk with other oil and gas producing states informally. The OGCD staff believes that should a company with a history of noncompliance or enforcement actions apply for a permit, then the staff could recommend the

permit be denied. The operator would then have to challenge this administrative decision in a hearing.

1992 FINDING II.7.

OCC rules do not require an operator to notify the OCC before constructing or using a pit authorized by rule. The OCC does not routinely review pits authorized by rule prior to construction or use.

1992 RECOMMENDATION II.7.

As suggested by IOGCC Guidance section 5.3.2., OCC rules should require an operator to notify the OCC before constructing and using a pit authorized by rule so that the OCC may ensure that the pit is properly constructed, operated, and closed. Also, the OCC needs notice of the pit in order to maintain complete records of pit locations consistent with IOGCC Guidance section 5.3.6.f.

2004 FINDING II.7

Prior notification of construction and use of all rule-authorized pits is met through the drilling permit process, and the permits are valid for six months. Rule-authorized permits are issued by the district offices and in lieu of prior notification; the inspectors visit drill sites at least weekly. At that time the location is verified and the site information evaluated. All permits are reviewed to determine if an HSA may be impacted by exploration and production activities, including handling of E&P wastes. District staff has the authority to change pit locations if necessary. Pit closure is witnessed by an inspector. 1992 Recommendation II.7 has been met.

1992 FINDING II.8.

The OCC permits a commercial disposal pit for the life of the pit. Although the OCC regularly inspects these pits and reviews their financial assurance instruments, the OCC does not have established procedures for periodically reviewing their permits.

1992 RECOMMENDATION II.8.

As suggested by IOGCC Guidance sections 4.1.1. and 5.7.2.1.a., the OCC should place five-year terms on commercial disposal pit permits, or otherwise establish a procedure for reviewing the revising, if necessary, these permits at least once every five years. (see Finding and Recommendation VI.4).

2004 FINDING II.8

1992 Recommendation II.8 has been met. See the discussion under Finding II.5, above.

1992 FINDING II.9.

OCC rules do not address all of the facilities used in crude oil reclamation operations. The OCC does not require crude oil reclaimers to submit financial assurance for facilities other than disposal wells and their associated pit and equipment.

1992 RECOMMENDATION II.9.

The OCC should adopt rules for crude oil reclaimers to ensure that their E&P waste management facilities are operated and closed in an environmentally responsible manner consistent with IOGCC Guidance section 4.1.1., and consistent with the pollution prevention and waste minimization goals of IOGCC Guidance sections 5.1.a. and 5.1.e. (See Recommendation VI.24.)

2004 FINDING II.9

The OCC adopted rules for crude oil reclamation under OAC 165:10-8-7. The OCC also developed the “Guardian Guidance for the Assessment and Cleanup of Complex Crude Oil, Condensate, and Other Hydrocarbon Release Sites, Including Historically Impacted Sites.” 1992 Recommendation II.9 has been met.

In 1992 and 1993, the Oklahoma legislature reorganized environmental agencies and consolidated environmental responsibilities in a new agency, ODEQ. The environmental authority of OSDH was transferred to ODEQ, including jurisdiction over landfills and SARA Title III. The legislature carefully delineated the jurisdiction of the OCC/OGCD and the ODEQ. The OCC does not believe that a memorandum of understanding is necessary between ODEQ and OCC, and the two agencies have instead written a “Field Guidance” document that lists typical wastes generated in the state, lists the agency that has jurisdiction, and recommends disposal options.

1992 FINDING II.10.

The OSDH reports that it approves municipal landfill disposal of some E&P wastes, such as solidified drilling mud, that are not authorized for municipal landfill disposal under OAC 165:10-7-24.

1992 RECOMMENDATION II.10.

Consistent with IOGCC Guidance, section 4.4., OCC and OSDH should more closely coordinate their requirements for landfill disposal of E&P waste, perhaps through expansion of their MOU. (See Finding and Recommendations II.1., II.3, and VI.24.)

2004 FINDING II.10

The new ODEQ/OCC Field Guidance document is used by the agencies and the public if jurisdictional questions should arise. 1992 Recommendation II.10 has been met.

1992 FINDING II.11.

Except for the rule on drilling permits, OCC’s statutes and rules do not address the OCC’s authority to refuse to issue or renew a permit because of the applicant’s poor compliance record.

1992 RECOMMENDATION II.11.

The OCC should adopt rules clarifying its authority and criteria for refusing to issue or renew a permit for an E&P waste management facility based on the compliance status and history of the applicant. Written criteria have the advantage of being both legally defensible and easy to apply consistently. IOGCC Guidance section 4.1.1.

52 O.S. Section 318.1 provides the OGCD with authority to review an operator's surety status for the purpose of seeking a change in classification from Category A to Category B, or to seek a change in the amount and/or nature of Category B surety up to the limit of \$100,000.00. The review of an operator's surety for increase or reclassification can be based on the existence of pollution or unplugged wells, or for other good cause shown after notice and hearing. The review of a current operator's surety may consider the actions of prior insiders, affiliates or control persons. These provisions are also found in the rule on operator surety, OAC 165:10-1-10. OGCD lacks, however, the specific authority to refuse to issue or renew a permit for E&P waste management based on the operator's compliance history.

2004 FINDING II.11

The OCC has not adopted rules setting forth the OCC's authority, or that of the OGCD, to deny a permit based on the compliance history of an operator, the officers of a company, or a board of directors. Neither is there a rule listing the criteria for denial of a permit. Although the OGCD staff believes that it can administratively deny permits in these circumstances or address past compliance in the financial assurance required, it does not have authority or criteria in rules. As operator information becomes available electronically, states should be able to access compliance information in other states. This adds impetus to have the legal authority to deny a permit when appropriate.

2004 RECOMMENDATION II.11

1992 Recommendation II.11 has not been met. The State should pursue statutory authority and rulemaking to establish criteria for denial of permits based on an operator's history of non-compliance that demonstrates an unwillingness or inability to comply with permit requirements. (2000 Guidelines section 4.1.1.)

Compliance Evaluation

The discussion of personnel and funding in this report addresses some of the issues raised by the findings and recommendations of the 1992 Review Team. The number of field inspectors has improved since the 20% reduction in staff the agency endured in 2003. The budget proposal for FY06 asks for an additional 3 field inspectors. Training and the inspector's field handbook are also discussed under the personnel and funding section.

1992 FINDING IX.1.

The number of field inspectors is not sufficient to routinely inspect all production and waste management facilities in the state to ensure that those facilities are in compliance with program requirements. IOGCC Guidance sections 4.1.2.1.b, (2) and 4.3.1.4. The lack of routine inspection and surveillance reduces the chances that violations of OCC rules are discovered by state inspectors; as a result, actual or potential pollution problems may go undetected. IOGCC Guidance section 5.1.a.

1992 RECOMMENDATION IX.1.

The number of field inspectors should be increased in order to achieve the goal for inspection of E&P waste management facilities. IOGCC Guidance sections 4.1.2. and 4.3.

2004 FINDING IX.1

The OGCD has more inspectors now than it had in 1992, and the agency is seeking three additional inspectors in this budget. The OGCD is rebounding from the 20% reduction in force in FY 2003. 1992 Recommendation IX.1. has been met.

1992 FINDING IX.2.

The OGCD's inspection programs are not funded sufficiently to provide members of the field staffs with necessary training and equipment. This lack of funding may affect the ability of the Division to carry out its statutory goal to prevent pollution.

1992 RECOMMENDATION IX.2.

Additional financial resources should be made available to increase the field inspection staffs at each of the four district offices, to increase mileage allowances, to purchase specialized vehicles for use in enforcement investigations, and to purchase equipment and other materials used in field investigations. IOGCC Guidance sections 4.3.1. and 4.3.2. (See Finding and Recommendation I.6.)

2004 FINDING IX.2

Additional resources are being used for training and equipment for District Offices. GIS training and equipment are being utilized for inspection and compliance work. Meetings of the districts every two months provide an opportunity for training in technology and issues pertinent to field work. As the budget is improving so is the training program. 1992 Recommendation IX.2 has been met.

1992 FINDING IX.3.

Expertise in hydrogeology and environmental sciences is needed in the district offices to respond to pollution incidents and complaints, and to address site reclamation and remediation actions now ordered by the Commission or its Administrative Law Judges. This expertise also is needed to complement the field inspection operations and legal support offered by the central office.

1992 RECOMMENDATION IX.3.

The Review Team agrees with OGCD officials that a hydrogeologist and/or environmental specialist should be hired and placed in each district office to support and enlarge the field staff's capabilities to monitor operator compliance with applicable rules and to provide documentation to assist in the successful prosecution of enforcement cases. IOGCC Guidance section 4.3.1.3. (See Findings and Recommendations I.11. and II.4.)

2004 FINDING IX.3

1992 Recommendation IX.3 has been met. See Finding II.4, above.

1992 FINDING IX.4.

Field inspectors are spending more time gathering documentation to prepare for enforcement cases than at any time in the past. Additional legal assistance, including clerical and paralegal staff, is needed to free the field inspectors to concentrate on their inspection and surveillance duties.

1992 RECOMMENDATION IX.4.

Additional legal support should be dedicated to the field staff to assist the inspectors in documenting and preparing for enforcement cases and pursuing remedies to violations in a timely manner. IOGCC Guidance section 4.3.1.2.

2004 FINDING IX.4

1992 Recommendation IX.4 has been met. See the discussion under Personnel and Funding, below .

1992 FINDING IX.5.

The Division's sweep inspection program helps the agency make comprehensive surveys of facilities and operations and conduct routine, unannounced inspections in order to verify compliance and to spot non-compliance. IOGCC Guidance section 4.1.2.b. (1) and (2).

1992 RECOMMENDATION IX.5.

The sweep inspection program should be continued and possibly expanded. The program should not, however, be conducted to an extent that it diverts field inspectors from their routine responsibilities for long periods of time.

2004 FINDING IX.5

The use of sweep inspections has continued, but not expanded due to limited funding. 1992 Recommendation IX.5 has been met.

1992 FINDING IX.6.

Many routine inspections are not being recorded by Division field inspectors or recorded at district offices. Such records of routine inspections are needed for general documentation purposes. IOGCC Guidance section 4.1.2.1.

1992 RECOMMENDATION IX.6.

Records of all inspections should be made and maintained for a specified period, but for no less than three years, so that they will be available for review by the public, including operators, at the appropriate district office. IOGCC Guidance section 4.2.2.1.

2004 FINDING IX.6

1992 Recommendation IX.6 has been met. See the discussion under Data Management, Finding VIII.1, below

1992 FINDING IX.8.

The range of responsibilities delegated to field inspectors is consistent with inspector duties outlined in IOGCC Guidance section 4.1.3.2. The spill response and clean-up guidelines provide technical criteria to help field inspectors direct cleanup activities. Based on the Review Team's brief review of the inspector handbook, some of the material in the handbook appears to be outdated.

1992 RECOMMENDATION IX.8.

The inspector's handbook should be reviewed and updated periodically to include the spill clean-up guidelines, summaries of currently applicable rules and other useful information. IOGCC Guidance sections 4.3.1.3. and 4.3.1.4.

2004 FINDING IX.8

Field personnel rely heavily on the OGCD field inspector manual, however this manual has not undergone a comprehensive review and update since the first review. The revision process was underway when the reduction in force sidelined the effort. The handbook update is back on the work schedule. 1992 Recommendation IX.8 has not been met.

2004 RECOMMENDATION IX.8

The OGCD should complete revision of the field inspector manual and develop a schedule for regular updates. (2000 Guidelines sections 4.3.1.3, 4.3.1.4, 4.3.1.5.)

Training for field inspectors has been provided by the agency on a bimonthly basis and it includes that provided by industry or state or federal agencies. In addition to this training, the OGCD: pays a bonus to inspectors who take and pass a national inspector certification exam developed by the Interstate Oil and Gas Compact Commission (IOGCC); provides a H₂S specialist for regular safety training; provides GIS training to field personnel in part to provide documentation for plugging and enforcement actions; and provides funding to send personnel to out of state workshops and seminars.

1992 FINDING IX.9.

The training received by inspectors who attend industry-sponsored training programs and who participate in the mock trial programs is an important method of keeping field inspectors abreast of changes in regulations, policy, and technical issues and of investigative techniques, and increasing the professionalism of the field staff. However, the Review Team is concerned that the Division has no formal training program for field inspectors, nor a continuing education or in-service training requirement as a condition of continued employment,

1992 RECOMMENDATION IX.9.

The Division should continue the training now provided to field inspectors, especially the mock trial enforcement training program, which should be instituted on a periodic basis. The Division should also develop and institute its own formal training program for field inspectors. The program should emphasize proper sampling and investigative procedures associated with enforcement proceedings and increased understanding of current rules

and policies as well as sound environmental practices. IOGCC Guidance sections 4.3.1.1. and 4.3.1.4.

1992 FINDING IX.10.

District inspection staff members appear to have limited advanced training and education in environmentally related fields.

1992 RECOMMENDATION IX. 10.

District office inspection staff members should receive advanced training and education in environmental and appropriate public health fields. IOGCC Guidance section 4.3.1.4.

2004 FINDINGS IX.9, IX.10

The OGCD has continued to provide the training that was available in 1992 despite funding limitations. Prior requests for additional training funds have not been successful. The agency states that it has met this recommendation, as training that is critical to the staff has been provided and increased funding will help make professional workshops and seminars available. 1992 Recommendations IX.9 and IX.10 have been met. While the OGCD has met the recommendations, OGCD is urged to establish a process to ensure that their training programs are adequate and effective.

Enforcement

Enforcement has taken a step forward at the OGCD with the use of GIS technology and creativity. The OGCD staff uses the GIS systems, historic photographs, historic data, aerial photos, and current data to locate and investigate abandoned sites and possible sources of pollution including brine impacted soils, contaminated water, and old pits. Historic photos and data help locate responsible parties. GIS mapping capabilities enable the OGCD to sort through conflicting theories on the source of contamination. GIS mapping aids in identification of important geological features such as faults.

All of the information gathered and mapped is used to build evidence for hearings and for documentation of sites for use of the well plugging fund. Field inspectors can use GIS maps and GPS devices to find sampling locations repeatedly. The OGCD and OCC are justifiably proud of this work.

1992 FINDING X.I.

In developing the fine schedule for Rule Making 58, the OCC considered factors identified in IOGCC Guidance section 4.1.3.2., such as the harm to the environment, the economic benefit to the operator, and the timeliness of corrective action. Although the proposed rules do not yet address all types of violations, the OCC plans to add specific fines for other types of violations.

1992 RECOMMENDATION X.1.

The Review Team encourages OCC's efforts to establish a fine schedule for violations. Use of the fine schedule will not only ensure consistency in the assessment of fines, but also, expedite the enforcement process.

2004 FINDING X.1

1992 Recommendation X.1 has been met, and the agency reports that the fine schedule has been proven to be a useful tool in gaining compliance in a short amount of time.

1992 FINDING X.2.

Under the general state garnishment statute, the OCC may garnish the proceeds of oil and gas production in order to collect an administrative fine; however, the process is cumbersome because the OCC must obtain a new garnishment order from the district court every month.

1992 RECOMMENDATION X.2.

The OCC should seek a special statutory provision allowing it to garnish the proceeds of oil and gas production more efficiently. IOGCC Guidance section 4.3.2.

2004 FINDING X.2

The OCC pursued legislation that would simplify the collection process but was unsuccessful. As an alternative, the OCC has hired a full time employee to collect from operators who have not paid their fines. Collections have improved. 1992 Recommendation X.2 has been met.

1992 FINDING X.3.

The OCC has authority to use the revolving fund to address other types of emergencies. 52 O.S. §139-140. Currently, however, no funds have been appropriated for this purpose.

1992 RECOMMENDATION X.3.

The state should provide a dedicated and continuing source of funds for use by the OCC to address emergency situations. IOGCC Guidance sections 4.3.2. and 4.1.3.1.c. (See Findings 1.8. and 1.10., and Recommendation 1.10.)

2004 FINDING X.3

The OGCD has proposed several options for establishing an emergency fund, but it has been unsuccessful. 1992 Recommendation X.3 has not been met.

2004 RECOMMENDATION X.3

The OGCD and OCC should evaluate whether an emergency fund is necessary or whether other funds can be accessed if needed, in particular for an emergency that will be expensive to stop and remediate. If such funding is not currently available, the effort to establish an emergency fund or the ability to access other funds for emergencies should be renewed. (2000 Guidelines section 4.2.1.1.b.)

1992 FINDING X.4.

Neither state statutes nor OCC rules establish standards and procedures for revoking, modifying, or suspending all types of permits. The absence of these provisions may leave the agency open to challenge when it takes this type of enforcement action.

1992 RECOMMENDATION X.4.

The OCC should incorporate into its rules specific standards and procedures for revoking, modifying, or suspending all types of permits for violations or other good cause. IOGCC Guidance section 4.1.3.1.f.

2004 FINDING X.4

1992 Recommendation X.4 has not been met. The OCC does not believe a rule can be written to cover all the violations that may result in modification, revocation, or suspension under Oklahoma law. The agency believes cases that rise to this level of enforcement are too diverse to be captured in the rules. The Review Team believes that the lack of rules jeopardizes an agency's use of revocation, modification, or termination authority. Enforcement cases are unique, but they also share common elements, and inconsistency in application of the law can put cases at risk.

2004 RECOMMENDATION X.4

The OCC should adopt rules establishing the criteria for revocation, modification, and suspension. (2000 Guidelines 4.1.3.1.f)

1992 FINDING X.5.

Although the OCC already has an array of enforcement tools available to it, the state of Oklahoma has no environmental crimes statutes. Criminal sanctions, including fines and imprisonment, are among the possible enforcement actions identified in IOGCC Guidance section 4.1.3.1.

1992 RECOMMENDATION X.5.

The state should consider whether special criminal penalties for violations of OCC's environmental regulations might be needed in some circumstances.

2004 FINDING X.5

1992 Recommendation X.5 has been met. Oklahoma adopted an environmental crimes statute under which environmental crimes are referred to the Attorney General for prosecution. The OCC has twice proposed legislation establishing criminal penalties specific to oil and gas violations, but has been unsuccessful.

Contingency Planning

1992 FINDING V.2.

The reports required within 10 days of discovery of a discharge may be written or oral.

1992 RECOMMENDATION V.2.

Although the IOGCC Guidance does not address whether these reports should be in writing, the Review Team believes the agency should require that all spill reports, with the exception of the initial notification, be in writing.

2004 FINDING V.2

STRONGER guidance in section 4.2.1.1. and 4.2.1.2. does not require notification, or spill reports, to be in writing. The OGCD reviewed this recommendation and concluded this requirement is not necessary. The field inspector who responds to a spill notification will write a report, and the District Manager has the option of requiring a written report. Further documentation is provided by the spill tracking system. 1992 Recommendation V.2 was beyond the scope of the Guidelines.

1992 FINDING V.4.

Federal requirements under the Federal Water Pollution Control Act (FWPCA) 33 U.S.C. 351, state that all oil spills to waters of the U.S. must be reported.

1992 RECOMMENDATION V.4.

The OCC should evaluate whether the 10 barrel spill reporting requirement of OAC 165:10-7-5 is in compliance with the federal reporting requirements under the FWPCA. The federal requirement under the FWPCA, that discharges to waters of the U.S. be reported, may be more stringent than OCC's reporting requirement for discharges to the waters of the state.

2004 FINDING V.4

165:10-7-5 (c)(1)(A)(ii) provides; "Any discharge of a deleterious substance, regardless of quantity, to the waters of the State" must be reported. OGCD evaluated the 10 barrel spill reporting requirement and determined that, because all spills to waters of the State must be reported, it is not less stringent than the federal reporting requirements. 1992 Recommendation V.4 has been met.

1992 FINDING V.5.

The OGCD has given spill response a high priority. The OCC and OGCD disseminate information on the spill and complaint reporting phone numbers through the use of brochures.

1992 RECOMMENDATION V.5.

The brochures giving the public information on spill reporting should be continually updated and provided to the public.

2004 FINDING V.5

The OGCD reviews the brochures periodically and updates them as necessary. The brochures have been expanded to provide UIC data on waste management and are now also distributed to elementary schools. 1992 Recommendation V.5 has been met.

The focus of the STRONGER Guideline 4.2.1. is on spill reporting to the state and remediation. The Guidelines do not specifically state that parties affected by a spill must be notified, although it can be inferred and it is good practice. The OGCD maintains that identification and notification of affected parties is a burden properly placed on the party responsible for the spill - the operator, and it states it does not have the resources to undertake this responsibility. The OGCD does not require any document that certifies the operator notified affected parties. Such a requirement would provide affected parties with notice without imposing the burden on the agency.

1992 FINDING V.6.

The regulations require notification of the OGCD when a spill occurs, but there is no mechanism to ensure that affected parties are notified of a spill.

1992 RECOMMENDATION V.6.

The OCC should consider developing a mechanism for identification and notification of affected parties. IOGCC Guidance section 4.2.1.

2004 FINDING V.6

Although this recommendation has not been met, it is outside the scope of the Guidelines.

1992 FINDING V.7.

Although OAC 165-10-7-5 requires the filing of a report that contains information on the method of spill clean-up undertaken and completed, the regulations do not require post clean-up sampling or follow-up reports to the agency on the success of the clean-up.

1992 RECOMMENDATION V.7.

The OCC should consider adopting additional sampling and reporting requirements as part of the spill response program. IOGCC Guidance section 4.2.1.

2004 FINDING V.7

The OGCD believes it does not need additional reporting or sampling requirements as the District Manager may require both sampling and written progress reports at any time. A spill investigation will not be closed until the OGCD is satisfied that it has been properly remediated. The "Guardian Guidance" on remediation of spills provides recommendations for a sampling and reporting process. The OGCD has determined that the Guardian Guidance, along with current agency authority, provides sufficient tools to deal with post clean-up issues. 1992 Recommendation V.7 has been met.

1992 FINDING V.8.

The OCC does not require a contingency plan. In the circumstance where an operator does not undertake cleanup of a spill, the OGCD must seek an order from the OCC enforcing compliance with a remediation plan. To avoid a delay in spill response, the OCC may take whatever action is necessary, without notice and hearing, to address environmental or public safety concerns. 52 O.S. §139.

1992 RECOMMENDATION V.8.

The OCC should consider requiring an operator to comply with a general contingency plan approved by the state, or individually prepare and maintain a contingency plan for waste release prevention and control. IOGCC Guidance section 4.2.1. In light of developing SPCC regulations, the OCC should consider the federal requirements when developing its contingency planning provisions.

2004 FINDING V.8

The OGCD has not developed a state contingency plan nor has it adopted the EPA SPCC requirements. Instead, the State defers to federal requirements. The OGCD believes this is an efficient and effective means of managing contingency planning. Adopting state standards would be duplication. The OGCD has implemented spill prevention requirements for commercial oil reclaiming facilities under OAC 165:10-8-6. As the state has considered the recommendation and adopted contingency planning requirements for some facilities, 1992 Recommendation V.8 has been met.

Public Participation

1992 FINDING IV.2.

The OCC provides for at least 15 days public notice before hearings on rules, orders, and permits. A 15-day notice period may not allow for the effective participation of members of the public in OCC proceedings.

1992 RECOMMENDATION IV.2.

The OCC should evaluate whether the minimum 15-day notice period provides an adequate opportunity for citizen participation, particularly in complex matters. IOGCC Guidance section 4.2.2.1.

The 15-day notice is a statutory requirement for rules and orders. The OCC argues that it is sufficient given the procedural delays that are a part of the hearing process. The OGCD did change the notice requirements for commercial facility permit from 15 days to 30 days. The new 30-day notice period is an improvement in the commercial facility permit program. The team recognizes that changing a statutory deadline is a difficult task, but urges the OGCD to not lose sight of this issue and work to get more generous notice provisions for the public.

2004 FINDING IV.2

1992 Recommendation IV.2 has been met

1992 FINDING IV.3.

The OCC provides a two-stage hearing process. This process gives the citizen the opportunity to challenge the agency's action while not requiring that citizen to proceed directly to district court.

1992 RECOMMENDATION IV.3.

The OCC is encouraged to continue to utilize the administrative hearing process to resolve disputes concerning agency action.

2004 FINDING IV.3

The state continues to use the two-stage administrative hearing process. Appeals from OCC decisions are made directly to the Oklahoma Supreme Court. 1992 Recommendation IV.3 has been met.

1992 FINDING IV.4.

The OGCD issues some permits without notifying the affected public of the agency's intent to issue the permit.

1992 RECOMMENDATION IV.4.

The OCC should develop a mechanism to provide notice of the agency's intent to issue all E&P waste management permits to all affected parties. IOGCC Guidance section 4.2.2.1.

2004 FINDING IV.4

Oklahoma's Surface Damage Act (Title 52, Section 318, OS 2004) requires prior written notice to the surface landowner before drilling operations commence. For noncommercial pits (i.e., drilling pits) the affected public is the surface owner. 1992 Recommendation IV.4 has been met.

The OGCD has an active public outreach program and a number of citizen advisory groups. The agency publishes pamphlets for the public; agency personnel travel to schools and groups to speak about the agency and its programs; the agency maintains a toll free phone number for complaints; the agency has a consumer services division with two full time positions; they maintain a mailing list of interested parties; the agency has a public information officer; and the agency works with many working groups that have stakeholders represented. A summary of the government work groups was provided to the Review Team.

The Review Team received a list of members on four advisory boards, and it was not clear how often or why the groups are convened. The person who managed this part of the OGCD operation left the agency several years ago and the position is vacant. While the staff knows that the Industry Advisory Committee (IAC) has met to discuss proposed regulations, the last meeting of the Citizen Advisory Committee (CAC) was scheduled and canceled as only a few of the 22 members appeared for the meetings. The CAC is the only board that has members who represent environmental organizations or are without ties to any industry, and it has floundered. The list of advisory committee members is dated 1999.

1992 FINDING IV.5.

The OCC's and OGCD's work with advisory committees facilitates public participation in agency activities. This process meets the IOGCC criteria.

1992 RECOMMENDATION IV.5.

The OCC and OGCD should continue to use advisory committees for rule development that includes members of the public at large and representatives of other state agencies that have responsibilities for E&P wastes. IOGCC Guidance section 4.2.2.3.

2004 FINDING IV.5

The advisory group process has suffered from a lack of attention, and these groups need a staff member to manage the process. In particular, the CAC needs to be revitalized, reorganized, and reconstituted. It was found that these groups do not meet and/or coordinate on a routine basis. Advisory groups are useful for many reasons, including providing an informal review of proposed regulations and program changes. They should not be abandoned.

2004 RECOMMENDATION IV.5

The OCC and OGCD should revitalize the advisory committee process and, when doing so, should assure that all stakeholders are included on an advisory group that looks at proposed regulatory changes, program changes, or policy changes. (2000 Guidelines 4.2.2.3)

Financial Assurance

The OGCD has proposed revising the financial assurance requirements contained in Title 52 O.S. Section 318.1 and these proposals included a state bonding or environmental fund that would allow operators to join for a minimum annual fee and a system similar to that established in Texas. Suggestions for alternative financial assurance have been made to the OCC and legislators to no avail.

The OCC continues to have the authority to increase a bond based on an operator's history of non-compliance. A bond may be increased to \$100,000, and it may be lowered from \$25,000 under certain circumstances. A bond for a commercial operation is calculated based on the costs of closure. An operator may submit a financial statement annually that shows a net worth in Oklahoma of \$50,000 or more. Currently 50% of the operators in Oklahoma use financial statements for financial assurance. In past years the percentage using this bonding option has ranged from 60-70%.

If an operator does not submit a financial statement, he or she must submit a blanket surety bond, an irrevocable commercial letter of credit, or a cashier's check or other approved negotiable instrument in the amount of \$25,000. The OGCD had concerns about the blanket bond amount in 1992 and the amount of the bond (\$25,000) has not changed. In recent years, commercial bonds have become increasingly difficult to obtain. Given the difficulties in obtaining bonds and the increased price of equipment, labor, and materials, this Review Team has concern whether a blanket bond set prior to 1992 can cover the costs of well plugging.

In 1994, the Oklahoma legislature, at the suggestion of oil and gas industry representatives, created a unique state agency to remediate the surface area at abandoned or orphaned oil and gas exploration and production sites. The Oklahoma Energy Resources Board (OERB) was created as a state agency but it is funded by a voluntary tax on production at the well head. The oil and gas industry voluntarily pays 0.1% of production (about \$4.6 million in the last fiscal year) to remediate surface facilities throughout the state. A 21 member board that runs the agency is composed of oil and gas company representatives and royalty owners. Almost half of the funding for the OERB is spent on publicity intended to inform citizens of the availability of the

funds for remediation and generate information on site locations. In the first decade of operation, the OERB has reclaimed over 6,000 sites, most of which are on private land.

The OERB does evaluate sites for immediate threats to public health or the environment, but it does not currently distribute money according to a site priority list. The OERB has been able to clean up all sites that have been identified.

The OGCD informs the OERB of sites that should be reclaimed and both agencies have worked with the ODEQ, EPA, the Army Corps of Engineers, and other state and federal agencies to address large areas. One interagency working group developed a plan for site remediation in the Lake Oologah area, and funding came from a federal fund. Similarly, an oil reclaimer site on a river was remediated by a federal-state agency group. The state estimates that approximately 500,000 wells have been drilled in Oklahoma. Although the OERB and OGCD stop leaks to ground and surface water and remediate spills on the surface, neither agency has the mandate or funding to address groundwater contamination.

1992 FINDING II.12

The OCC has found that the required amount of financial assurance is not always sufficient to cover the costs of plugging wells and closing associated surface facilities.

1992 RECOMMENDATION II.12

Consistent with IOGCC Guidance section 4.2.3., the state of Oklahoma should review and, if necessary, revise its financial assurance requirements to ensure that they provide adequate resources to the state to plug wells and restore sites should the operator fail to meet its legal obligations. The state may need to consider alternative types of financial assurance if it finds that oil and gas operators would not be able to comply with increased bonding requirements.

2004 FINDING II.12

The OGCD and OCC are considering alternative financial assurances options, but the agency and the legislature have declined to change the bonding schedule in effect in 1992. Operators may cover one well or many wells for \$25,000. 1992 Recommendation II.12 has been met, but concerns about the amount of the blanket bond remain.

2004 RECOMMENDATION II.12

The OGCD should continue to evaluate whether the financial assurance requirements, in concert with other regulatory requirements, are effective in reducing the number of wells that become a liability to the State. If OGCD finds that mechanisms are not effective, it should take steps, including consideration of an increase in the bonding requirements, to address the issue. (2000 Guidelines section 4.2.4.)

1992 FINDING II.13

The OCC is reviewing and updating the financial assurances for the older commercial disposal pits that are still active.

1992 RECOMMENDATION II.13

The Review Team encourages this effort. IOGCC Guidance section 4.2.3.

2004 FINDING II.13

The OGCD reviews the surety requirements for commercial facilities annually and, if enforcement action is taken against the operator of a commercial site, the financial assurance amount may be increased. 1992 Recommendation II.13 has been met.

1992 FINDING II.14

The OCC is seeking legislation giving it a priority lien on well site equipment to help defray the costs of well plugging and site restoration.

1992 RECOMMENDATION II.14

The Review Team supports the OCC's efforts to obtain the ability to salvage well site equipment when it plugs a well and restores the site. IOGCC Guidance section 4.3.2.

2004 FINDING II.14

1992 Recommendation II.14 has been met. The OCC was successful in getting authority from the legislature to file a lien on equipment left on site.

Waste Tracking

1992 FINDING VII.2.

The OCC does not have a waste tracking program to document the movement of wastes from the site of origin to final disposition. An OGCD official said they do not anticipate developing a waste tracking system in the near future.

1992 RECOMMENDATION VII.2.

The OCC should develop a waste tracking program to regulate the transportation of E&P wastes to commercial or centralized disposal facilities. The waste hauler licensing program already in place is an integral part of such a program; however, additional waste tracking program elements, as specified in section 4.2.5 and 5.7.2.3. of the IOGCC Guidelines, should be adopted.

The new rules issued under OAC 165:10-8 require the operator of the recycling and reclaiming or receiving facility to maintain a daily log of the volume, date, source (generator) and the type of material. In addition, copies of any chemical analysis of the materials, such as the DOT Material Safety Data Sheets (MSDS) for each material, shall be maintained. The Transportation Division of OCC has agreed to amend the waste hauler's manifest ticket to include a statement about not hauling or dumping illegal wastes.

2004 FINDING VII.2.

1992 Recommendation VII.2 has been met. The OCC rules identify recordkeeping and reporting requirements at hydrocarbon recycling and reclaiming facilities (see OAC 165:10-8) and commercial disposal facilities (see OAC 165:10-9). These rules include daily recordkeeping requirements and the submittal of annual reports to OCC. In addition, the rules require that these records are made available for review by OCC at

all times, and that the information be kept by the facility operator for a specified amount of time based on the type of facility. The review of manifests is a routine field inspector activity. The rules provide OCC authority to place additional requirements on the facility operator upon a showing of good cause.

In addition, the Transportation Division of OCC has rules in place (OAC 165:30) to regulate E&P waste haulers. These rules include a variety of requirements such as licensing, insurance, deleterious substance transportation permits, documents for shipping, recordkeeping, safety measures, and pollution prevention. The rules also address enforcement. Also, see the discussion of waste tracking in conjunction with centralized and commercialized facilities below in Technical Criteria.

Data Management

Building a better electronic data management system is a priority for the OGCD and a budget request to fund the resources to accomplish this goal has been prepared. The OGCD states that it must first address the electronic communication gap between the district offices and the central office. In addition, there are plans to make more OGCD data available on line.

1992 FINDING VIII.1.

The OGCD has mainframe data management capabilities for tracking oil and gas well activities. These capabilities have not been expanded to include E&P waste information.

1992 RECOMMENDATION VIII.1.

The OCC should expand its data management system to include E&P waste permitting, operating, and monitoring information. Such information would assist in making cost-effective, risk-based program management decisions and trend analyses (i.e. causes of spill, types of complaints, etc.). IOGCC Guidance section 4.2.7.

2004 FINDING VIII.1

The OGCD is in the process of expanding the data system to include all permitting, inspection, investigation, and remediation information available on each site. E&P waste activities will be a part of this database. The OCC has developed a data management system since the 1992 review and the system now needs improvement to meet the constant push to have all agency information and services available on line. 1992 Recommendation VIII.1 is being met.

Personnel and Funding

By 1992 the OGCD had reduced the number of staff at the central office by 50% rather than reduce the number of positions in the districts. This trend could not continue and eventually the reduction in force affected the field personnel. In recent years the agency has been unable to fill as many as 10 vacant field positions. When a reduction in force was required in FY 2004, each district office lost the assistant district manager and one clerical support staff for a total of 8 positions. These reductions equate to 20% fewer field personnel than were working for the agency in 1992. With revenue that has been available recently, the shortage of field inspectors

has been addressed and the agency is only seeking funding for 3 additional inspectors in the next budget.

Despite the reduction in force, the OGCD hired hydrogeologists for the districts, and these positions continue to be a part of the agency. The OGCD reported that the addition of hydrogeologists had been very helpful to the agency and the hydrogeologists have provided training for other field personnel. A hydrogeologist has also been hired for the central office.

Since the 1992 review, the legal support for the OGCD has improved. The OGCD has 5 experienced attorneys available for its use. The Office of General Counsel for the OCC assigned at least one attorney to each district for enforcement action and the OCC formed cross functional teams comprised of district personnel, attorneys, the comptroller and the office of administrative hearing. This group evaluates enforcement and recommends changes to the procedures. The OGCD reports that an outcome of these changes to the legal support is more timely enforcement actions.

The management staff also took addition cuts and at the time of this review, the OGCD had a new director and one manager. There had previously been five managers and a deputy director. The director was in the process of hiring a Technical Services Manager and a Field Operations Manager to supervise the work of the district offices. The field operations manager position has been vacant for three years. There are no plans to hire a new deputy director.

At the same time the workforce was reduced, the legislature set the top priority for environmental agencies as citizen pollution-related complaint response and resolution. The dedication of personnel to citizen response and tracking of the agency response, when combined with a reduction in staff, resulted in less time for overseeing pit construction, for plugging wells, for mechanical integrity tests at well closure, and other regulatory activities.

The OGCD is a different agency than it was in 1992 and current revenue allows the director to hire a management staff and develop goals through the strategic planning process. It has been a difficult time for the OGCD but now there is an opportunity to evaluate the work of the agency and plan for the future.

1992 FINDING I.9.

At the time of review, only two of six attorneys assigned to OGCD were actually available to the Division. OGCD staff and the Deputy General Counsel assigned to the Division both expressed concern about the ability of the legal staff to keep up with the current enforcement caseload and the future workload generated by a stricter penalty assessment program just being instituted through regulation.

1992 RECOMMENDATION I.9.

The legal support available to OGCD should be increased to carry out program goals and objectives, including enforcement. (see Recommendation X.4)

2004 FINDING I.9

1992 Recommendation I.9 has been met.

1992 FINDING I.11.

The OGCD staff indicated that some of the field inspectors hold degrees in petroleum geology, petroleum land management, or business. In addition, the Division would like to place a hydrogeologist or environmental specialist in each district office to coordinate E&P waste management regulatory activities and investigate special environmental problems if funding becomes available. Inspectors with geology or engineering degrees, in addition to experience in oil and gas, help to strengthen the E&P waste management regulatory program.

1992 RECOMMENDATION I.11.

The OGCD is encouraged to maintain this level of professional expertise, and is further encouraged to place hydrogeologists or environmental specialists in each district office. The Review Team recommends that the OGCD increase, where appropriate, the education and training of field inspectors.

2004 FINDING I.11

See Finding and Recommendation IX.8, above.

The OGCD is in the process of rebuilding a program that has been significantly reduced since the 1992 review. The program was reduced because of declining revenues in the state, a situation that led to changes in the source of funding for the OCC and the OGCD. In 1992, the major source of funding for the OCC was a petroleum excise tax. This tax was levied on the volume of oil and gas sold. Of the .095% assessed, .085% was dedicated to the conservation fund which was the primary source of money for the OGCD. The remaining .01% of the tax funded the well plugging program.

The 1992 review recommended that the OCC consider broadening the base of funding for the agency as a tax based on the sale of oil and gas would subject the agency to the vagaries of the oil and gas market. In 1992, the Oklahoma legislature created the Oil and Gas Conservation Division Revolving Fund which is dedicated for oil and gas regulation. Fees that had been allocated to the Commission's Revolving Fund for the general use of the agency are now sent to the Division Fund for its use only. The legislature abolished the petroleum excise tax in 1997 and funded the OGCD through fees collected by the division and the state general fund.

1992 FINDING I.4.

The Review Team found that funding available for E&P waste management regulation has decreased and may not be sufficient to allow OGCD to accomplish all of its goals in pollution prevention. IOGCC Guidance section 4.3.2. This fact was most poignantly brought forward by the acknowledgement from OGCD staff that current program funding may be exhausted at the beginning of the last quarter of Fiscal Year (FY) 1992, and supplemental funding would be needed.

1992 RECOMMENDATION I.4

New sources of funding are needed to increase staff levels at both the central office and district offices in order to ensure that program goals and objectives are fulfilled. (see Recommendation I.6.)

1992 FINDING I.6.

All general fund allocations to the OCC are used to finance broad-based program support throughout the agency. The OGCD charges fees for most permitting, processing, and information distribution activities related to its regulatory programs, including E&P waste management. However, revenues from these activities, along with penalty payments for operator non-compliance, are reallocated to all OCC activities and only a small portion goes back to the OGCD whose regulatory activities generated the fees and penalties.

1992 RECOMMENDATION I.6

The OCC should consider one or more of several alternate funding options to place the OGCD in a more stable financial position and maintain flexibility in seeking funding levels commensurate with the cost of the program. The Review Team suggests the following options:

- (a) Seek changes necessary to allow the OGCD to set the petroleum excise tax by regulation. Such flexibility would allow OGCD to increase or decrease the rate based on program needs. The legislature and the Governor would still have an opportunity to be involved through the regulation review process.
- (b) Seek a statutory change to restructure the excise tax to apply to a mill rate per production unit (barrel of oil or mcf of gas), thus eliminating the vulnerability to price.
- (c) Reallocate most fee income and penalty payment income back to OGCD funded activities. This approach would allow OGCD to charge fees in line with services rendered, and also have dedicated program funding to use as a match for current and future federal grant money.

1992 FINDING I.7.

The OGCD staff indicates the estimated amount of time and money spent on E&P waste activities is hard to separate from other duties, particularly for field personnel. The OGCD has, however, developed a computerized time accounting program that shows personnel and operational expenses for E&P waste management programs, and includes individual district effort. The Review Team was provided a printout which showed expenditure of 31 man-years and \$1,053,623 for FY 1990-1991.

1992 RECOMMENDATION I.7.

In the past, when cut-backs in staff resources were necessary due to funding shortfalls, the OGCD reduced central office staff by one-half and maintained field management staffing levels at full force. The Review Team views this as a reasonable management decision given the fiscal realities; however, the ability to maintain this commitment in the long-term is of great concern, particularly if program responsibilities increase. The use

of time accounting techniques should be a viable tool in predicting desired shifts in program funding.

State revenues have increased due to the health of the oil and gas industry and the legislature has increased funding for the OGCD in FY05. This funding will be used by the agency to address the reduction in force that took place in FY04, although the agency does not anticipate replacing all positions that were eliminated. The FY05 budget for the agency is approximately \$7,500,000 of which about \$900,000 is from fees and fines. About \$700,000 will go into the plugging fund and cannot be used for general operations.

As the revenue stream has increased, the OGCD has the opportunity to set priorities for the growth of the agency. The agency does not anticipate filling all positions that have been lost or following the same procedures. Instead the OGCD has started a new strategic planning process to guide the agency through the building process. When asked, the OGCD said the priority at this time is data management. The agency is looking at getting more of its records on line and at expanding its electronic capabilities. The staff in the district offices and the field staff cannot access information at the central office electronically. While technology cannot replace personnel, it can improve efficiency thus allowing the staff to focus on needs more critical to the agency and the public.

The OGCD is requesting additional general fund money to hire 3 additional field inspectors, 3 oil and gas specialists, and 2 administrative positions for technical services in its FY 06 budget. There will also be a detailed request for people and funding for data management.

2004 FINDINGS I.4, and I.6

The OGCD and OCC were successful in expanding the funding sources for the OGCD programs, including E&P waste management. Fines and fees now go to the OGCD exclusively and general funds have replaced the excise tax on oil and gas. Although the State of Oklahoma is still affected by the price of oil and gas, the agency is no longer directly dependent on a tax on the volume of the oil and gas sales. 1992 Recommendations I.4, and I.6 have been met.

2004 FINDING I.7.a

The 1992 recommendation suggested using time accounting techniques to predict shifts in program funding and generally approved of the emphasis on maintaining an adequate field staff. Since the 1992 review there have been significant changes to the OGCD's funding and staffing level. The decisions on which staff positions to fill and how to set work priorities will be addressed in the current strategic planning process. This process should guide the agency in meeting all of its obligations and measuring the time spent on each goal.

2004 RECOMMENDATION I.7.a

The OGCD should use the strategic planning process to evaluate the percentage of time the agency spends on E&P waste management as well as other obligations. The information gathered should be used to set priorities for central office and field staff to assure that the agency is meeting its mandate and that funding is adequate. (2000 Guidelines 3.2 and 4.2.3)

2004 FINDING I.7.b

It is difficult to determine whether the OGCD is funded at a level adequate to meet its goals and objectives because the agency is in the midst of great changes. This is partly due to the fact that the new director is currently hiring two of the four manager positions in her office. The elimination of a deputy director position also necessitates the distribution of the responsibilities formerly assigned to the deputy director. Working on a new strategic plan is an excellent step, however, until the managers are working and the plan is drafted, the level of funding necessary for the agency will not be known. Although an additional fee of from \$100 to \$300 per APD was initiated for “walk through” applications in 1996, the base fees have not been increased since 1988.

2004 RECOMMENDATION I.7.b

When the OGCD has completed the hiring process for the managers and has completed the strategic planning process, it should evaluate whether sufficient funds are available to successfully carry out the mission of the agency. This evaluation should be done on a continuing basis. (2000 Guidelines 4.3.2 and 3.1)

2004 RECOMMENDATION I.7.c

As the operations of the OGCD are now partially funded by fees, the agency should evaluate the fees it assesses and determine whether the fees cover the costs of the services. (2000 Guidelines 4.3.2.)

Siting Criteria

This section appeared under Administrative Criteria in the 1992 Report, but is being covered in the Technical Criteria section of this Follow-up Review Report, below.

III. TECHNICAL CRITERIA (2000 Guidelines Section 5)

This section basically outlined construction and closure rules, policies and practices utilized by the agency to manage various types of E&P waste disposal.

Siting Criteria

This discussion originally appeared under Administrative Criteria in the 1992 Report, but is being covered in the Technical Criteria section of this Follow-up Review Report.

Oklahoma has identified hydrologically sensitive areas (HSAs) in the state. As mentioned previously, all permits issued by the OGCD are evaluated to determine if an HSA may be affected. The OGCD and the Oklahoma Geological Survey have prepared information on and a list of the HSAs is available to the public.

The Oklahoma Water Resources Board (OWRB) established a Wetlands Working Group and the OGCD is an active member of the board. This board has been studying state and federal wetlands requirements and setting the standards for wetlands in Oklahoma.

1992 FINDING III.2.

There is no narrative definition of HSA in the General Provisions Section of the OCC rules or those rules in which HSAs are a siting consideration. Operators are directed in applicable rules to those areas defined as HSAs by the OGCD's Technical Department, and based upon Oklahoma Geological Survey maps to determine if a site is considered an HSA.

1992 RECOMMENDATION III.2.

The OCC's rules should provide a narrative definition for HSAs (including wetlands, if appropriate; see Finding and Recommendation III.3), as well as reference to the Oklahoma Geological Survey maps in the General Provisions Section of the OCC rules in order to aid operators in determining whether their proposed activities are in an HSA. IOGCC Guidance section 5.3.3.

2004 FINDING III.2

The OCC has published the "Guardian Guidance for the Assessment and Cleanup of Complex Crude Oil, Condensate, and Other Hydrocarbon Release Sites, Including Historically Impacted Sites" and this guidance document contains a narrative definition of HSAs in an appendix. This guidance was effective as of October 1, 2002. Oklahoma meets the Guidelines in that the siting requirements address potential impacts on groundwater, wetlands, floodplains, drinking water supplies and other environmentally sensitive areas. Oklahoma Water Quality standards(Rule 785: 45-5-25 Implementation Policies for the Anti-degradation Policy Statement).

1992 FINDING III.3.

There is no provision specifically within the OCC's rules to address siting of E&P waste facilities.

1992 RECOMMENDATION III.3.

Rule 165: 10-7-16 should be amended to establish siting restrictions for E&P waste facilities in wetlands. IOGCC Guidance section 5.3.3.

2004 FINDING III.3

By protecting HSAs the OGCD believes it is protecting wetlands. Work on appropriate water quality standards for wetlands continues in the OWRB Wetlands Working Group, and the rules may be amended to accommodate recommendations from the working group. 1992 Recommendation III.3 has not yet been met.

2004 RECOMMENDATION III.3

As the regulation of wetlands continues to be evaluated in the working group, the OCC should determine whether siting requirements for wetlands are covered by the protection afforded to the broader category of sensitive areas—the HSAs. If wetlands are not protected under the Corps of Engineers and EPA federal requirements together with HSA protections, then siting requirements should be developed. (2000 Guidelines section 5.1.e.iv.)

1992 FINDING III.4.

The OCC has identified siting restrictions for any “environmentally sensitive areas” such as WPAs, HSAs, alluvial fills or terrace deposits, areas within one mile of an active municipal water well, or in any area subject to frequent flooding.

1992 RECOMMENDATION III.4.

The OCC should review its rules and determine if, where appropriate, any other environmentally sensitive areas may need to be delineated and included in applicable rules. IOGCC Guidance section 5.3.3.

2004 FINDING III.4

The OGCD reviewed the rules and discussed the rules with its Industry Advisory Committee (IAC). The conclusion reached was that current rules sufficiently cover environmentally sensitive areas of the state. If water quality standards change, the rules will be reviewed again. 1992 Recommendation III.4 has been met.

1992 FINDING III.5.

The OCC's rules do not directly address siting issues regarding non-commercial pits in proximity to residential, commercial, or public buildings.

1992 RECOMMENDATION III.5.

Rule 165:10-7-16 should be amended to establish the non-commercial pit siting and construction requirements for E&P facilities near residential, commercial, and public buildings. IOGCC Guidance section 5.3.3.

2004 FINDING III.5

The OGCD has evaluated siting restrictions to meet this recommendation, but it has not amended the statute or rules to include the restrictions described above. Local government has authority for siting and many municipalities have siting and construction requirements applicable to E&P operations. Local regulations may vary. 1992 Recommendation III.5 has not been met.

2004 RECOMMENDATION III.5

The OGCD should review the siting restrictions in the Guidelines and adopt rules to provide consistent protection for the public statewide (2000 Guidelines section 5.1.e.iii)

Waste Characterization

1992 FINDING VI.2.

The reference chart identified 12 different "disposal options." OAC 165:10-7-24. Some disposal and management options authorized for use in Oklahoma are not listed in the chart. The Review Team found, for instance, that not all waste oil and waste oil residues or hydrocarbon-contaminated fluids are included in the waste stream portion of the reference chart. The chart does not include storm water or hydrostatic test water either.

1992 RECOMMENDATION VI.2.

Although not within the IOGCC Guidelines, the Review Team determined the reference chart should be amended to redefine the listed "disposal options" as waste management practices, and should be expanded to include all E&P waste streams generated in the state and all waste management practices authorized by the Commission. Waste oil and waste oil residues, hydrocarbon-contaminated fluids, storm water and hydrostatic test water, should be added to the waste management reference chart.

2004 FINDING VI.2

The OCC expanded the "Waste Management Practices Reference Chart," OCC 165:10-7-24 to incorporate additional waste streams generated in E&P operations. The chart now includes waste oil and waste oil residues, water contaminated by crude oil or refined products, storm water, and hydrostatic test water, and provides for specific management practices for each. The OCC has an effective system for prioritizing and specifying waste management options. 1992 Recommendation VI.2 has been met.

Technical Criteria for Pits

1992 FINDING VI.4.

No sampling or analysis is performed of non-commercial pit contents prior to closure under OAC 165:10-7-16, unless a waiver of the closure requirements is requested or the pit contents are removed to a commercial pit or soil farm or are land applied.

1992 RECOMMENDATION VI.4.

The OGCD should evaluate its sampling and analysis requirements for closure of non-commercial pits and determine if additional requirements are appropriate.

The OGCD evaluated the sampling requirements and determined that the current requirements are appropriate for Oklahoma. The OGCD prefers to focus on site and facility construction requirements and sample on enforcement actions. In addition, the field inspector has the option to check the mud logger and drilling reports for additional information to ensure that the drilling conditions reflect the type pit required for that permit. If the chloride concentrations do not reflect the approved type of pit construction, the District Office can require the operator to haul off or rebury the pit contents.

2004 FINDING VI.4

The OGCD has evaluated the need for more complete sampling of pit contents, in compliance with the 1992 Recommendation. Oklahoma has effective surveillance and enforcement tools to prevent introduction of hazardous waste into pits. OAC 165-10-7-16 covers sampling requirements for determination of pit liner requirements. Oklahoma requires certification of laboratories. The 2000 Guidelines do not categorically require sampling, but state that pits should be sampled “when appropriate.” The OGCD practice and policy of monitoring drilling operations and sampling pits for enforcement purposes satisfies that requirement. 1992 Recommendation VI.4 has been met.

1992 FINDING VI.5.

There is no provision within the OCC rules that requires the removal of free oil from pits either during operations or at closure.

1992 RECOMMENDATION VI.5.

OCC should amend its pit rules to require that free oil be removed from the pit during operations and at closure.

The OGCD expanded OAC 165:10-7-24 to clarify disposal options for free oil. It is believed that the new rule specifying disposal options for hydrocarbons on reserve pits will address the issue of removing free oil.

2004 FINDING VI.5

The OGCD states that free oil is removed before closure of a drilling pit. OAC 165:10-7-24 lists recycling, underground injection, landspreading, burning, and on-site remediation as options for disposal of hydrocarbons in reserve pits. However, the rules do not explicitly require removal of free oil from pits.

2004 RECOMMENDATION VI.5

OCC should amend its rules to require that free oil be removed from drilling pits at the cessation of drilling and completion operations. (2000 Guidelines section 5.5.5.c)

1992 FINDING VI.6.

OCC rules do not contain requirements for fencing, flagging, and caging of pits as necessary to protect wildlife and waterfowl.

1992 RECOMMENDATION VI.6.

The OCC should establish area or statewide regulations for pits as may be necessary to protect wildlife and waterfowl. Fencing, flagging, and caging requirements are options for such regulations.

The OGCD reviewed the advisory rule with the Industry Advisory Committee and the Oklahoma Department of Wildlife Conservation. The OGCD decided the current advisory rule to require netting on tanks should not be modified to a statewide regulation. It should be noted that there is a growing number of operators that are installing closed top tanks at new and reworked facilities. The OGCD does require sufficient protection for migratory birds at the oil reclaiming facilities.

2004 FINDING VI.6

There are some oil reclaimers that utilize pits, and OCC does require wildlife protection for those facilities. The OCC does not allow production pits, but some open top tanks are still used. The advisory notice, OAC 165:10-7-3(c), notes there are federal penalties for causing certain bird fatalities, and encourages operators to take protective measures. OGCD states that the US Fish and Wildlife issues fines for bird fatalities. However, there are no enforceable preventive requirements in state law for open tanks.

2004 RECOMMENDATION VI.6

The OGCD should require that open tanks be equipped with netting or other means to protect migratory birds and other wildlife (2000 Guidelines section 5.9.3.b)

Technical Criteria for Land-spreading

1992 FINDING VI.8.

Removal of free oil by mechanical means is not required prior to one-time land application of fluids from earthen pits under OAC 165:10-7-19.

1992 RECOMMENDATION VI.8.

The OCC should amend its regulations to require the removal of free oil by mechanical means from wastes prior to land application.

The OGCD considered this recommendation and believes the removal of free oil by mechanical means is a less desirable method than allowing it to biodegrade naturally. The OGCD continues to believe one of the best disposal options available for the disposal of free crude oil that may accumulate on the surface of a pit is land application. Land application rules do not allow pooling of free oil which tends to minimize the risk of a problem with free oil. When applied at the approved rates, the OGCD has experienced no problems associated with this process.

2004 FINDING VI.8

The OCC has extensive requirements for land-spreading criteria; however, the OCC has not changed its regulations to require the removal of free oil prior to land application.

2004 RECOMMENDATION VI.8

The OCC should amend its regulations to require the removal of free oil by mechanical means from wastes prior to land application. (2000 Guidelines section 5.6.3.a.)

Technical Criteria for Road-spreading

1992 FINDING VI.10.

OCC rules for road-spreading of E&P wastes do not require testing for ignitability. Neither do the rules require that road applied E&P wastes be consistent in density and metal content with approved road oils or mixes.

1992 RECOMMENDATION VI. 10.

The OCC should conduct further waste characterization of road applied E&P wastes to determine if they meet ignitability and road oil or road mix standards.

The OGCD discussed road mix standards and tank bottoms with the Oklahoma Department of Transportation (ODOT). Tank bottoms, as viewed by ODOT, are such poor quality to use as construction material that they are not used in this manner, nor are there mix standards for tank bottoms. The minimum requirements are that the material will not foam or ignite at 150 degree Fahrenheit. Tank bottoms meet both of these requirements. Staff believes it is more important that the composition of the tank bottoms be closely monitored to ensure refined product wastes are not disposed of in this manner. OGCD allows such material to be incorporated into lease roads and around well locations but not into dikes.

2004 FINDING VI.10

Tank bottoms meet ignitability standards. Oklahoma does not appear to have applicable density and metal content standards for road oil. However, road spreading on county roads requires approval of the county commissioners and a permit issued by OGCD. On lease roads, approval of the landowner is required. The intent of Recommendation VI.10 has been met.

Technical Criteria for Commercial and Centralized Disposal Facilities

The OCC has jurisdiction over commercial waste disposal facilities. The rules governing commercial recycling, reclaiming and disposal facilities are found in OAC 165:10-8 and 165:10-9.

Fourteen technical criteria recommendations associated with commercial facilities were identified in the initial review and were re-evaluated in 1995 and in 2004. All of the recommendations were addressed through implementation of administrative procedures, field operation changes, policy or rule changes, and statutory amendments. The following provides information of the findings and recommendations of each review.

This section covers the state's technical and regulatory requirements for commercial facilities. The OCC has rules in place governing commercial recycling, reclaiming and disposal facilities.

OAC 165:10-8 specifically covers exploration and production (E&P) hydrocarbon recycling and reclaiming facilities. The scope of the rules includes permitting, surety, design, construction, operation, maintenance, reporting, closure, variances, and additional requirements that may be required by OCC.

OAC 165:10-9 covers commercial disposal facilities such as commercial pits, commercial soil farming, and commercial disposal well surface facilities. Generally, the scope of the rules includes permitting, restrictions, surety, design, construction, operation, maintenance, reporting, closure, variances, and additional measures that may be imposed to address the operation of a particular facility. For soil farming, additional requirements include sampling and analysis, and application rates.

Permitting

This section covers permits, acceptable wastes, waste characteristics and waste disposal.

1992 FINDING VI.12.

The OGCD determined that waste characterization of the contents of commercial mud pits can be limited to analyses for chlorides. This determination was based on the evaluation of pit contents and soil borings at selected sites. It was also based on the regulatory requirement for liners (compacted soil or plastic) for all new (post-1987) commercial pits.

1992 RECOMMENDATION VI.12.

The OCC should periodically reevaluate the analytical requirements for waste disposed at commercial drilling mud disposal facilities to verify that chloride is the indicator chemical constituent for leachate from mud pits. This reevaluation should take into consideration the facts that some hydrocarbons may be present in drilling wastes, and most drilling wastes contain a complex mixture of trace metals. Based on this reevaluation, waste characterization at commercial pit disposal site should include, as appropriate, testing for organics, pH, hydrogen sulfide content, and ignitability. IOGCC Guidance sections 5.1.f. and 5.7.2.2.d.vi.

Since the receiving facility must test each incoming load for chlorides, field analytical methods that are quick and inexpensive must be used. However, some constituents of concern, such as trace metals, are not amenable to onsite testing. For those constituents, waste analyses must be done at offsite laboratories.

The State's response in 1995 was that the OCC sampled the monitoring wells at all active commercial mud disposal facilities for hydrocarbons and did not detect any hydrocarbon contamination. In some enforcement cases, the OCC has required sampling for metals and have found that metals have not been an issue in ground water contamination cases. The OCC states that with the exception of hydrocarbons, sodium chloride will migrate many times faster in ground water than metals. The OCC believes that monitoring chlorides is appropriate. The OCC believes that running the scope of analysis set forth in this recommendation is unnecessary.

The OCC rules identify "acceptable" wastes that operators of recycling, reclaiming, and disposal facilities can receive. The OCC rules require facility operators to maintain a daily log that includes date, volume, source (generator), and type of material. Copies of any chemical analysis of materials or material safety data sheets are required to be maintained by the facility operator. The operator of a hydrocarbon reclaiming and recycling facility at a salt water disposal facility is required to maintain load tickets for saltwater and other deleterious substances received at the disposal facility for a minimum of three years. This information can be reviewed by OCC field inspectors at any time. In addition, an annual report is required to be filed with OCC for commercial facilities.

If OCC encounters problems with a commercial facility, the rules allow OCC to place additional requirements on a commercial facility operator upon a showing of good cause. The OCC has the authority to shut down a facility, if needed.

2004 FINDING VI.12

The OCC has established a basis for their waste characterization. 1992 Recommendation VI.12 has been met. (2000 Guidelines 5.10.2.2.d.)

1992 FINDING VI.13.

Testing of wastes entering a commercial disposal pit facility for chemical constituents other than chlorides may be appropriate to gain a more complete knowledge of the range of hazardous and toxic substances, if any, that are in the waste, and as an additional protection against the un-permitted disposal of E&P wastes other than water-based muds and salt-contaminated soils.

1992 RECOMMENDATION VI.13.

Although the IOGCC Guidance does not recommend more than onsite testing of waste prior to disposal, the Review Team believes that more sophisticated waste testing prior to disposal should be evaluated for the reasons stated above. The Review Team concurs with OCC's suggestion that it consider requiring composite sampling and analyses of waste prior to their transport to a commercial disposal pit. The waste generator and transporter could be required to furnish proof of the analysis to the commercial facility operator, and all parties could be required to maintain the analytical records for later inspection by Commission personnel.

As noted above, commercial pits may receive only water-based drilling muds and salt-contaminated soils. If the waste streams eligible for disposal at these facilities were enlarged to

accommodate other E&P wastes, such as oily sludges and tank bottoms, oil-based cuttings or hydrocarbon contaminated soils, commercial pits could provide more services to the industry while reducing onsite disposal and lessening the volume of E&P wastes going to municipal solid waste landfills.

In the 1995 follow-up review, OCC indicated that lack of staffing prevented this recommendation from being implemented. They believe it is a priority activity but better control of commercial facilities is a staff-intensive program.

2004 FINDING VI.13

In numerous ground water contamination cases investigated by staff, chlorides are the number one indicator. The OCC has not expanded the categories of wastes allowed to be disposed of in these facilities. Therefore requirements for more extensive sampling are not justified. 1992 Recommendation VI.13 has been met. (See 2004 Finding VI.12)

1992 FINDING VI.14.

The number and range of wastes allowed for disposal at commercial pit facilities could be expanded if additional controls are established by regulation.

1992 RECOMMENDATION VI.14.

The Division should consider enlarging the wastes that may be disposed of at commercial pits. If additional waste streams were to be added to the lists of wastes accepted at these facilities (OAC 165:10-7-24), more stringent pollution prevention standards should be imposed. IOGCC Guidance section 5.1.a.

OCC rules (OAC 165:10-7-24) provide a waste management reference chart that is based on EPA's policy on source reduction, recycling, treatment and proper disposal. In addition, OAC 165:10-8 was created to regulate hydrocarbon recycling and reclaiming facilities.

2004 FINDING VI.14

1992 Recommendation VI.14 has been met. See Finding VI.13, above.

The creation of the OERB has provided the state a funding mechanism to close all types of abandoned E&P facilities. All abandoned commercial facilities that do not have a responsible party or are not under litigation can be closed by the OERB. The OCC also actively applies for and obtains grants to conduct studies at sites that are potentially contaminated by historic oil and gas activities, and actively participates with other state agencies in reclamation of those sites.

1992 FINDING VI.15.

Operating permits (i.e., Commission orders) for commercial pits are open-ended, having no expiration or renewal date. Commercial pits are operated until they fill up.

1992 RECOMMENDATION VI.15.

A permit for a commercial or centralized facility should be in force for a finite period. IOGCC Guidance section 5.7.2.1.a. Permits for commercial mud pits which are large facilities that receive wastes from a number of offsite sources, should be reviewed and, if

necessary, revised no less frequently than every five years. IOGCC Guidance section 4.1.1. (See Finding and Recommendation II.8 in Permitting.)

By agency policy, commercial permits are reviewed at least semi-annually. The OCC can require additional or revised permit conditions based on the review plus problems identified by District Field Inspectors. The OCC field inspectors conduct site inspections of commercial facilities every other month. These inspections are unannounced. If OCC encounters problems with a facility, it has the authority to shut down a site. In addition, OCC has adopted a policy of ensuring that all new orders authorizing commercial mud disposal facilities allow the Oil and Gas Conservation Division to review the status based on compliance history of the facility or operator.

It should be noted that OCC legal staff is assigned to each District Field office. The Oil and Gas Division staff stated that legal staff (different department) is very responsive to their needs if problems arise.

There are a total of 9 commercial mud disposal facilities in the state. Only two facilities have been approved in the past 10 years. OCC implemented 5 year permit limits for both of these facilities. The OCC stated that the renewal process created an additional burden on staff because the renewal process is basically a new application which requires an approved OCC order. The renewal process created concern among the general public in that there was a concern the commercial facility would be shut down.

The OCC procedural rules provide steps the OCC must follow to obtain an approved order. This includes appropriate notice, comment period, hearing, and approval of the order by the OCC Commissioners. Changes to the “order” process would require a change to the procedural rules which would have to be approved by the legislature.

2004 FINDING VI.15

1992 Recommendation VI.15 has been partially met. OCC has established a policy of periodically reviewing existing waste management facility permits for compliance, but does not issue permits for fixed terms.

2004 RECOMMENDATION VI.15

See Recommendation II.5, above.

Waste Tracking

1992 FINDING VI.17.

These record keeping and reporting requirements are consistent with the waste tracking (section 5.7.2.3.) and location of closed disposal sites (section 4.2.6.) provisions of the IOGCC Guidance, except as discussed later in this report in Section VII, Waste Tracking.

1992 RECOMMENDATION VI.17.

If additional waste characterization requirements are imposed by regulation on each incoming waste load (see Findings and Recommendations VI.12. and VI.13.), record

keeping should be expanded to include data on the additional chemical parameters required.

In the State's 1995 response, OCC indicated that additional waste characterization requirements were not imposed by regulation; however, additional record keeping requirements were enacted for crude oil reclaiming facilities under OAC 165: 10-8.

2004 FINDING VI.17

1992 Recommendation VI.17 has been met. See the 2004 follow-up finding for VI.12.

1992 FINDING VI.20

OCC's waste management reference chart indicates that oil-based drill cuttings can be disposed by land application at commercial soil farms. OAC 165: 10-7-24(b)(5). OCC's rules for commercial soil farms allow land application of water-based drilling muds and cuttings, but expressly prohibit soil farming of oil-based muds and cuttings. OAC 165: 10-9-2(i)(4).

1992 RECOMMENDATION VI.20.

The waste management reference chart (OAC 165:10-7-24 (b)(5)) should be amended to be consistent with the waste management practices prescribed in the OCC soil farming regulations.

2004 FINDING VI.20

Rule OAC 165:10-7-24 (b)(5) was amended and only allows water-based mud cuttings to be disposed of under these provisions. 1992 Recommendation VI.20 has been met. (2000 Guidelines section 5.6.3.)

1992 FINDING VI.21.

The technical requirements for commercial soil farms are generally consistent with IOGCC criteria for both land-spreading (5.4.3.) and commercial and centralized facilities (5.7.2.2.), with the exception that the waste analyses of Commission Rule OAC 156:10-9-2(e) do not include hydrogen sulfide content or ignitability.

1992 RECOMMENDATION VI.21.

The Commission should continue its practice of periodically reviewing the technical bases for its regulations governing commercial soil farming operations. Attention should be given to further verification of waste characterization requirements, including testing for hydrogen sulfide content and ignitability, where appropriate. IOGCC Guidance sections 5.1.f., and 5.7.2.2.d.v. and vi.

The OCC rules for commercial soil farming (OAC 165:10-9) limit the wastes to water-based muds and/or cuttings. Materials to be soil farmed are required to be sampled and analyzed for pH, TDS, oil and grease, heavy metals. These samples are required to be analyzed at a laboratory operated by the State of Oklahoma or certified by the Oklahoma Water Resources Board. The rules also specify recordkeeping requirements for this type of information, and the submittal of annual reports to OCC. To date there is only one commercial soil farming operation

that has been approved. This site was approved for low chloride mud and has been inactive for several years. This type of operation has seldom been requested and permitted in Oklahoma.

2004 Finding VI.21

OCC indicated they have continued this practice. Verification of waste characterization requirements is done where the division staff feels it is appropriate. The 1992 Recommendation VI.21 has been met. (2000 Guidelines section 5.10.2.1.c)

1992 FINDING VI.25.

The technical and administrative requirements imposed by OSDH on solid waste landfills are generally consistent with the IOGCC criteria for commercial and centralized disposal facilities. IOGCC Guidance section 5.7.2.2. Waste characterization requirements exceed the IOGCC criteria. IOGCC Guidance sections 5.1.f. and 5.7.2.2.d.vi. OSDH requirements also meet IOGCC criteria for disposal of E&P wastes in solid waste landfills when no better disposal options are available. IOGCC Guidance section 5.1.d.

1992 RECOMMENDATION VI.25.

Both the OSDH and OCC are encouraged to continue to review the practice of allowing E&P waste disposal at solid waste landfills in light of the recommendation of the IOGCC criteria that “disposal of drilling muds into municipal waste facilities should not be considered when better disposal options are available.”

In 1995, the OCC and the ODEQ indicated that they do not encourage the disposal of drilling fluids at municipal landfills. They prefer disposal whenever feasible, with a secondary option of then hauling the waste to an OCC permitted commercial disposal facility. The 2000 Guidelines now address waste minimization and encourage on-site waste management, and on-site waste management is preferred in Oklahoma.

2004 FINDING VI.25

The 1992 Recommendation VI.25 has been met.

Commercial Pits

1992 FINDING VI.16.

The establishment of numerical requirements for soil and synthetic liners for commercial pits is consistent with the IOGCC Guidance section 5.7.2.

1992 RECOMMENDATION VI.16.

The Division should continue to periodically evaluate construction requirements for liners to ensure that commercial pits are designed and constructed to prevent or minimize releases of wastes or waste byproducts to underlying soils and groundwater. IOGCC Guidance sections 5.1.a., 5.7.2., and 5.7.2.2.c.

OAC 165:10-9-1(e), amended in 1992, contains requirements for pit liners. This includes permeability testing, soil amendments to meet permeability requirements, and field compaction test or a post construction permeability test. The rules also have geo-membrane liner

requirements that include a minimum geo-membrane thickness of 30 mils, the membrane shall be compatible with the waste material, and it shall meet certain installation requirements. In addition, the rules require the installer to certify the liner was installed in accordance with OCC rules along with the submittal of supporting documentation.

2004 FINDING VI.16

The liner requirements were last reviewed by OCC in 1999 and construction requirements were found to be adequate. The 1992 Recommendation VI.16 has been met.

1992 FINDING VI.18.

Although the IOGCC Guidance does not address inactive or abandoned sites, the Review Team finds that OGCD's inactive commercial pit ranking system is an important first step toward identifying abandoned commercial pit sites that may pose risks to public health and the environment. The lack of funds to address these sites inhibits OGCD from taking additional steps to assess and remediate the sites.

1992 RECOMMENDATION VI.18.

The state should appropriate monies to the Commission's revolving fund for use by the Division to close and clean up, as necessary, inactive commercial pit facilities in the absence of a viable responsible party. IOGCC Guidance section 5.1.a.

2004 FINDING VI.18

The creation of the OERB has provided the state a funding mechanism to close all types of abandoned E&P facilities. All abandoned commercial facilities that do not have a responsible party or are not under litigation can be closed by the OERB. Currently, OERB has closed 7 abandoned commercial facilities. In addition, with the creation of stricter surety requirements for existing facilities the OCC has greatly reduced the potential environmental risk of inactive commercial pits. The intent of the 1992 Recommendation VI.18 has been met.

1992 FINDING VI.19.

The lack of waste testing or soil and groundwater monitoring at inactive commercial pit sites prevents OGCD from determining the relative environmental and public health risks posed by these facilities.

1992 RECOMMENDATION VI.19.

The Commission should allocate resources to the Division for selected waste testing and environment monitoring at inactive facilities to determine if certain inactive commercial pits are causing pollution, and to verify with field data the Division's ranking system. These efforts are needed to determine if statutory and regulatory prohibitions on pollution are being met. 52 O.S. §139 and OAC 165:10-7-5. IOGCC Guidance sections 5.1.a. and 5.7.2.

The OCC actively applies for and obtains grants to conduct studies at sites that are potentially contaminated by historic oil and gas activities which may include abandoned commercial pits. OAC 165:10-7-4(d), provides: Monitoring of sites. Before consideration for closure by the

Conservation Division or the Commission, the responsible party shall monitor a remediation project subject to implementation of the water quality standards for a period of one (1) year, unless: (1) Otherwise provided by Commission order, or (2) As directed by the Manager of Pollution Abatement or designated Conservation Division staff. The OCC actively participates with other state agencies to conduct water sampling and evaluate contaminated water bodies associated with historic oil and gas activities. In addition, the OCC uses GIS, topographic maps, and aerial photos to identify and locate historic oil and gas sites that may be a potential problem. The OCC has committed significant resources to addressing surface pollution.

2004 FINDING VI.19

Although the OCC has made progress to identify abandoned commercial sites and conducts selective investigations of potentially contaminated historic sites, it does not have a comprehensive plan for waste testing and environmental monitoring at inactive facilities to determine if certain inactive commercial pits are causing pollution. The 1992 Recommendation VI.19 has not been met.

2004 RECOMMENDATION VI.19

OCC should continue to seek and allocate resources to conduct waste testing and monitoring at inactive commercial facilities that have not been tested by a responsible party. (2000 Guidelines sections 5.10.2.2.e., 6.6.2.)

1992 FINDING VI.22

The lack of provisions for site security at commercial soil farming facilities may lead to illegal disposal of wastes, especially at those facilities that are not operating. Illegal disposal could result in pollution and violations of the state's prohibitions against pollution.

1992 RECOMMENDATION VI.22.

The commercial soil farming regulation should be amended to require site security during operations and during periods of temporary shut down. IOGCC Guidance section 5.7.2.2.d.viii.

Currently, one commercial soil farming facility is active in the state. This facility is operated in conjunction with a commercial pit and is used more as a commercial pit than a soil farming operation. The entire facility is fenced. Commercial pits are required to be fenced and dumping into a commercial pit can only occur when a facility representative is onsite. OAC 165: 10-9-2(i)(3) These facilities are locked when the representative is not onsite.

2004 FINDING VI.22

Although the 1992 Recommendation was beyond the scope of the 1990 IOGCC Guidelines, the 2000 Guidelines address security at commercial and centralized facilities.

2004 RECOMMENDATION VI.22

OGCD should require a security plan as part of the operating plan required for centralized and commercial facilities. 2000 Guidelines Section 5.10.2.2.d.vii.

1992 FINDING VI.24.

Crude oil, tank bottom, and BS&W reclamation facilities are not subject to permitting, construction, operational, or closure requirements by OGCD. These facilities are considered commercial and/or centralized facilities within the definitions given in IOGCC Guidance section 5.7.1.

1992 RECOMMENDATION VI.24.

The Commission should permit and, by order, adopt technical requirements for the construction, operation, and closure of crude oil, tank bottom, and BS&W reclamation facilities in the same manner and to the same extent as its existing rules that regulate the other three types of offsite, commercial disposal facilities. Regulations governing these facilities should include appropriate elements taken from the Commission's rules for commercial pits, commercial soil farms, and surface facilities at commercial disposal wells, and otherwise should include requirements for commercial facilities set forth in section 5.7.2. of the IOGCC Guidance.

2004 FINDING VI.24

In 1994, OAC 165:10-8 was issued as a new regulation pursuant to this recommendation. The 1992 Recommendation VI.24 has been met.

This page left blank

IV. ABANDONED SITES (2000 Guidelines Section 6)

At the time of the Oklahoma State Review of 1992, the Guidelines for the Review of State Oil & Natural Gas Environmental Regulatory Programs did not contain a section on Abandoned Sites. During the 1992 Follow-Up and Supplemental Review, the issues related to Abandoned Sites were addressed in the Follow-Up Questionnaire and during the agency interview process. A review was made of Oklahoma Corporation Commission (OCC) agency regulations, guidance documents, and goals and objectives of the appropriate divisions within the agency. In addition, an interview of the Oklahoma Energy Resources Board (OERB) was made with respect to that agency's activities related to cleanup efforts on abandoned oil and gas sites.

Introduction

Overall, Oklahoma has an aggressive program for identifying and categorizing various abandoned sites related to oil and gas production. Sites are generally divided between pre-recordkeeping and post-recordkeeping/permitting. Older sites are identified in the field by OCC Field Inspectors and citizen reporting. Newer sites are identified internally in the agency by following status of permits and other databases. OCC has a system to divide abandoned sites into those that can be closed properly via the original owner/operator, those that can be acquired by new owner/operators, and those that have no viable responsible party. If surety or other financial instrument is available, the OCC has regulatory authority to acquire those funds to assist in plugging wells once the agency criteria for abandoned sites is satisfied. If no funds are available, the agency has access to a Plugging Fund to pay for the plugging of wells that threaten the environment, emphasis on waters of the state. Sites that have surface debris, equipment and environmental issues can be referred for surface restoration to another state agency, the Oklahoma Energy Resources Board.

2004 FINDING 4.1

Overall the Review Team was impressed with the State's efforts to identify, categorize, and effect remediation at abandoned oil and gas sites. (2000 Guidelines section 6.1)

Definitions

In Oklahoma, the definitions of abandoned sites are derived from statute, legal case precedents, lien law, and surety requirements. A site is not considered abandoned until it meets criteria of non-production, developmental status of the well, occurrence of other producing wells on the oil/gas lease, and imminent threat to public health and safety.

Specific definitions are included in the Well Plugging Act of 1965, OK Statute Title 52, Section 308-318.1, and in Oil and Gas Conservation Rules Chapter 10, Subchapter 11 with respect to "produce or plug" deadlines based on non-production and exemptions from plugging based on either the developmental status of a well or the use of a permit for temporary abandonment.

Abandoned sites are also defined and regulated by the Surface Trash and Debris Act enacted in 1981 and subsequent OCC regulations, OAC 165:10-3-17. Under the statute, abandonment is

presumed if, "[f]or longer than one (1) year, the well has shown no activity in terms of production, injection, disposal or testing, and has not otherwise been maintained in compliance with plugging rules; and ... the last operator of record is without valid surety... and cannot be located by the [OCC] after diligent search, or ... the last operator of record has plugging liability in excess of the amount of such operator's surety as filed with the [OCC]."

The OCC does not have the authority to determine lease status; it must be determined in district court. However, the OCC does have authority by Statute to issue a Certificate of Record search to determine if there has been production in a six-month period. If no production is reported, the OCC can assume that the lease is not producing and begin the process of ensuring that the well is properly plugged and the site restored.

If the lease contains a single well, then one year is allowed for non-production before plugging is required. If a multiple-well lease, then one producing well can keep the lease alive and allow the operator to avoid the one-year plugging requirement. This process is authorized by statute but no regulations have been written to further explain the agency procedure.

Case law refers to issues related to the operator's intent to abandon the site. Many concerns must be addressed, including the royalty owners' desire to continue production when economically feasible, and the agency's need to protect the public health and environment. There are provisions in the permitting program, OAC165:10-11-9, to allow temporary abandonment for a period of up to five years using one-year extensions issued by the agency. The first year is awarded without additional information, but subsequent time extension requests must include information as requested by the agency for their evaluation of environmental hazards. The operator has the opportunity to petition the agency and request a hearing if the agency requires plugging.

An abandoned well on a producing oil and gas lease can be ordered plugged by the agency only if it poses an imminent threat to the public health and safety and only after a public hearing before the OCC or an Administrative Law Judge. Oklahoma Statute Title 17, Section 53.

2004 FINDING 4.2

The agency does not have a singular definition of "abandoned" but has a complex series of sources and criteria that must be met before a site is listed as "abandoned" that meets the requirements of the Guidelines. (2000 Guidelines section 6.2)

Identification of Abandoned Sites

Beyond the legal issues of determining whether or not a well is considered abandoned and whether or not there is a responsible party, the agency has several formal and informal methods of identification, inventory and ranking of sites that must be plugged and/or restored. Wells that have a Form 1000 (Intent to Drill) can be tracked by computer database. Wells drilled prior to agency record-keeping are generally identified by field inspectors and citizen reporting. In addition, the OERB has a public education program that instructs citizens on how to report oil and gas related pollution, abandoned sites, and public health and environmental concerns.

Once the well is considered legally abandoned, it is put on one of two lists - the plugging fund list (currently 568 wells) or the orphaned well list (1298 wells), which are wells that could be put back into operation. If the well is not a threat to the environment, the agency has a mechanism to list the orphaned wells on their website so other operators can pursue lease(s) for these potentially productive but abandoned well(s). There are tax incentives for new operators that take over abandoned leases.

Wells that are legally abandoned and pose a potential threat to the environment must be plugged either by the responsible party or by the agency. Wells that are to be plugged by the agency are ranked internally based on risk to waters of the state. No formal rules have been promulgated to define this procedure, but considerable time has been spent developing agency policy. With the use of the Plugging Fund and the work performed by OERB, most of the known historically abandoned sites have been at least initially addressed with respect to surface remediation. The identification and remediation of abandoned sites is an on-going process. The OERB does not have a method to inventory and rank sites that have groundwater contamination. Occasionally, groundwater samples may be obtained, and in such instances, where elevated levels are encountered, the results are forwarded to OCC for further review and consideration. There are no funds available for expensive or long-term environmental cleanup, especially related to groundwater pollution.

Abandoned sites with responsible parties and environmental issues are evaluated by the OCC Pollution Abatement Division using risk models and cleanup criteria developed by the agency and published in the "Guardian Document" (effective April 1998 and updated in 2000 and October 1, 2002). Sites are ranked using a Petroleum Risk Factor Index Table that divides sites into Low Risk, Moderate Risk and High Risk based on input parameters of spill volumes, proximity to groundwater, distance to potable water wells, background water quality (total dissolved solids), subsurface materials/barriers, precipitation, and a point system. Remediation of the site is then determined by using the total Risk Level points and the Category Cleanup Table, which further evaluates a site by chemicals of concern and maximum cleanup concentrations needed to protect human health primarily and the environment secondly. The agency is authorized to either monitor or require the responsible party(ies) to monitor subsurface materials, ground water and surface water, including installation of monitoring wells.

The agency has access to several GIS programs to identify and evaluate oil and gas pollution sites that can be used to map out known well sites based on permitting records and locate older well sites using historic aerial photos that show indications of former well sites, such as surface disturbance and drilling rig shadows. The GIS information is used in administrative proceedings to acquire state funds to plug abandoned wells. Actual well locations can be pinpointed by GIS and compared to reported locations listed in permits, leases, and other sources. Surface conditions as shown in aerial photos around abandoned sites can be mapped along with specific receptors, such as water wells and surface waters and used to develop a remediation strategy.

Oklahoma statute clearly identifies which state agencies have authority over oil and gas production sites. No Memorandum of Understanding is needed because the Oklahoma Corporation Commission has primacy with respect to all environmental aspects of oil and gas production sites.

2004 FINDING 4.3

OCC has a system in place to identify abandoned sites.

2004 FINDING 4.4

An abandoned well on a producing oil and gas lease can be ordered plugged by the agency if it poses an imminent threat to the public health and safety only after a public hearing before the OCC or an Administrative Law Judge. Oklahoma Statute Title 17, Section 53.

2004 RECOMMENDATION 4.4

Although sites that pose an imminent threat can be ordered plugged after notice and hearing, emergency protocols should be established by OGCD, so that remedial action can be initiated prior to legal notice on sites that are judged to present an immediate threat to the public health or environment. 2000 Guidelines section 6.3.

2004 FINDING 4.5

Historically abandoned sites have been addressed with respect by well plugging and surface restoration. However, sites that are likely to have groundwater or subsurface pollution issues have not been inventoried and ranked according to risk and cleanup needs.

2004 RECOMMENDATION 4.5

OCC and OERB should develop a method to inventory and rank sites with groundwater issues according to risk and cleanup needs so that they are not "lost" once the surface is restored. (2000 Guidelines section 6.3)

Funding for Abandoned Site Remediation

There are three main funding mechanisms available - forfeiture of financial assurance, the OCC Plugging Fund and the OERB Restoration Fund. First, the financial assurance is exhausted, followed by equipment liens and then the plugging fund is used to make up the difference. The Plugging Fund is funded by the petroleum excise tax and its use is limited to wells that are abandoned and have no responsible party. The OERB Restoration Fund is funded by a voluntary tax, and its use is limited to surface restoration of sites with no viable responsible party that have already had all wells plugged by OCC.

The lien law allows OCC to secure any valuable equipment on site. If the plugging liability is in excess of the financial assurance, the OCC can determine that a well is subject to a lien to cover the difference. Specifically, the OCC can file a lien on abandoned "oil and gas well-site equipment situated on a lease site, including but not limited to production and storage structures, along with their contents, in the amount equal to the cost of plugging all wells associated with said lease and restoring the site." The lien attaches only to abandoned oil and gas well-site equipment "located on or affixed to an oil or gas well which has been required to be plugged, re-plugged, or repaired by the rules of the Commission."

The Oil and Gas Conservation Division's Fiscal Year 2004 Goals and Objectives includes the goal to "Identify abandoned wells that have no financially viable operator and plug as many as possible with the available funds." The OCC Objective states "Ensure that state funds are used only on wells that have no financially viable operator, prioritize the wells plugged by threat to the environment and health and human safety, and maintain and update the abandoned (orphaned) well list to supply to service companies and operators that might assume operations of those wells to produce or plug for salvage". In 2004, OCC had 470 wells with estimated plugging costs totaling \$1,946,569 in various stages of the bidding process, 67 wells pending orders with estimated plugging costs totalling \$240,079, and 37 wells plugged at a cost of \$92,308. On average, the OCC plugs about 200 wells per year.

In October 1993, the OERB Restoration Fund was originally based on a two cent per barrel crude assessment that created a fund of \$1.7 million annually. In September 1996, the funding was changed to one tenth of one percent charge on the value of oil and natural gas sold, which created a fund of \$4-6 million annually. The 1996 change allowed for a voluntary assessment of the fee that could be refunded to the operator upon submission of an annual written request. A relatively small percentage of the fees paid is actually requested back as a refund. The Fund is split between education (50%) and remediation (50%) by statute and is allocated by the OERB, which is a 21 member volunteer board representing oil and gas independents, majors, purchasers and royalty owners. The Fund portion set aside for remediation can be used to perform surface remediation on sites recommended by the OCC and sites submitted by landowners.

Projects within the OERB authority, can be dealt with quickly due to the simplicity of the agency, its use of a subcontracted environmental firm to handle assessment issues, and a public bidding process to find appropriate companies to perform the actual site remediation. Projects that cost more than \$20,000 must be approved by the Board, and lesser projects can be handled without Board approval.

The OERB actively pursues other sources of funding, such as through federal grants in the Brownfields Program. Those monies are not used for remediation but can be used for site investigation, such as Phase I and Phase II Site Assessments.

2004 FINDING 4.6

There are mechanisms in place to fund site remediation but they are limited to well plugging and surface restoration. The OERB has restored the surface of over 5,505 sites, but it has no funding mechanism to remediate existing subsurface or groundwater pollution. However, the OERB can identify pollution source boundaries and excavate to prevent any future groundwater pollution.

2004 RECOMMENDATION 4.6

OCC should pursue resources for remediating subsurface and groundwater pollution. (2000 Guidelines section 6.4)

Criteria for Prioritizing Remediation

Many of the historic abandoned sites are/were located near metropolitan areas (Oklahoma City and Tulsa) and priority is given to finding those sites. Abandoned sites that threaten waters of the state are given high priority for well plugging funds. Abandoned sites that pose public safety hazards are given high priority for surface remediation. Funds are limited so that only the most serious public health and safety issues can be addressed.

2004 FINDING 4.7

OCC has mechanisms in place for prioritizing abandoned sites for remediation that meet the criteria of the Guidelines section 6.5. However, because of limited funding for implementation, they are unable to adequately address subsurface and groundwater pollution issues.

2004 RECOMMENDATION 4.7

Regardless of funding availability, a list of criteria should be developed to rank abandoned sites within the database with high potential for subsurface and groundwater contamination. (2000 Guidelines section 6.5)

Goal for Remediation

Abandoned site remediation goals are realistically limited to funds available and relative risk to public health and environment. OCC can spend some monies on site investigation (ground and surface water sampling, subsurface or soils sampling) to assist staff in analyzing risk but cannot perform detailed plume delineation or implement comprehensive groundwater cleanup protocols. As such there are no established site remediation goals for groundwater contamination. Goals focus on removing the pollution source (plug well or close pit), salvage of surface equipment, removing debris that pose a serious public hazard, and revegetating the surface soil.

2004 FINDING 4.8.a

The agency does have goals for site remediation with respect to well plugging and surface restoration.

2004 FINDING 4.8.b

Staff clearly understands groundwater pollution issues and has concerns about water quality, but have no significant funding sources to use to attempt cleanup of subsurface or groundwater contamination.

Liability for Remediation

The state's liability scheme includes financial assurance, permit programs to acquire information about owner/operators, the ability to place liens on property, and the authority to pursue financial

reimbursement in court. In addition, the state has in-house database access to all permitted well activity plus access to other types of data from outside sources that are used to track related information, such as names of operating company officers and investors.

2004 FINDING 4.9

OCC has developed some creative methods for finding responsible parties but are still hampered by the economic health of the industry and any one party's ability to pay. The 2000 Guidelines criteria at section 6.5.2 have been met.

Standards for Remediation

OCC regulations for Drilling, Developing, and Producing wells (OAC165:10-3-1) includes requirements for developers and operators to reduce or minimize environmental impacts during exploration and production activities and sets minimum standards for construction of drilling mud pits, well completion and integrity, site maintenance/security, product storage, brine production, and well spacing/deviation. These rules are used to prevent future abandoned site problems by insuring adequate measures are taken at active sites.

OCC regulations for Pollution Abatement (OAC 165:10-7-1) includes requirements for protection of municipal water supplies, prohibition of pollution, noncommercial pits, surface discharges, land application, noncommercial disposal wells, waste oil, drill cuttings, seismic, reclamation/recycle of produced waters. These rules emphasize water quality standards, pit liners related to groundwater protection strategies, closure of pits, allowable discharges, land application limitations to protect soil use and waters of the state, and many other details that could be borrowed or otherwise relied upon to prepare a site remediation plan for an abandoned site.

OCC regulations for Plugging and Abandonment (OAC 165:10-11-1) include requirements for licensing prior to pulling pipe and plugging wells, duty to plug and abandon, agency oversight during plugging activities, plug construction and appropriateness, and temporary exemption from plugging.

The OCC has developed the Guardian Document which includes standards for cleanup using a risk-based approach that focuses on protecting water quality.

A second document titled, "Guidance Document for Technical Measures to Prevent Pollution" dated January 23, 2001 contains some information that could be used as guidance during site remediation, including some references to applicable rules and statutes. Emphasis is on protection of beneficial use and adherence to anti-degradation of waters of the state with reference to OCC Water Quality Standards Implementation Plan (WQSIP). The document covers many subjects, including but not limited to the need for permits to drill, spill prevention plans, issuance of fines for noncompliance, and operator responsibility to have adequate safety and environmental controls.

A third document titled, "DEQ/OCC Jurisdictional Guidance Document" dated September 15, 1995 outlines all aspects of oil and gas exploration, production, and marketing and identifies the appropriate environmental agency and their jurisdiction for each area.

A fourth document titled, "OCC Guidelines for Responding to and Remediating Spills" contains guidance on spills of salt water, crude oil, and refined products to either soil or surface water, Appendix A-Remediation Factors, and Appendix B Fertilizer Requirements. This document can be used to evaluate the environment in which the spill occurred (soil and vegetation types, depth to groundwater and beneficial use) and the type and quantity of the spill (volume and salinity of spill as compared to geographical concerns).

2004 FINDING 4.10

The above rules and guidance documents meet the criteria of the 2000 Guidelines section 6.6.

Wellbore Remediation

OCC regulations for plugging and abandonment (OAC165:10-11-3) includes specific plug construction criteria and minimum standards depending on the type of well and potential to pollute. Field Inspectors handle plugging procedures on abandoned sites and have authority to design the plugging procedure and variations thereof as appropriate. Field staff meet quarterly to compare plugging strategies to insure they are uniform across the state whenever feasible. The common denominator is protection of waters of the state, specifically groundwater with TDS less than 10,000 ppm. Higher standards are used to protect potable water sources and highly sensitive areas as established in the Oklahoma Water Quality Standards.

2004 FINDING 4.11

The agency clearly uses their discretion in the field during plugging operations to adjust requirements to meet site-specific conditions. The criteria of the Guidelines have been met. (2000 Guidelines section 6.6.1)

Site Remediation

Surface remediation of abandoned sites is addressed in several ways, prior to exploration and production, during operation, after all financial surety is exhausted. The surface owners have opportunities during initial drilling contracts to specify land restoration after abandonment, including lease road maintenance, revegetation, pit closure, surface trash and debris, and environmental protection. OCC has mechanisms during operation of the site to prevent pollution and to cause the site to be maintained with respect to debris, spills prevention and cleanup, and proper closure of pits, wells, and other exploration and production activities that can be interpreted as limiting ultimate problems should an active site be abandoned for economic or other reasons. OCC has mechanisms to determine how a well is plugged depending on type of well and potential for harm to public or environment that can be interpreted also as preventing or minimizing problems should abandonment occur.

The majority of surface remediation at abandoned sites is overseen by a separate state agency called the Oklahoma Energy Resources Board, which is specifically authorized by the Legislature. Potential sites can be submitted by the landowner and OERB spends a considerable amount of its funding to educate the public on what OERB can do for them and how to access the agency. Some provisions are available for potential reclamation sites located on Indian land. Sites must be recommended to the OERB from OCC to insure that all financial assurance and other liability concerns have been addressed to the full extent of the law, including the plugging of abandoned wells. Priority is given by OERB to orphaned and abandoned sites that pose a safety hazard.

The types of projects OERB funds includes removal of trash and debris (concrete pads, anchors, flowlines, equipment, and other miscellaneous debris), tank batteries, salt scars, pits, hydrocarbons, and lease roads and location pads. The OERB does not perform any well plugging, groundwater assessment, or groundwater cleanup.

The OERB uses a subcontracted environmental firm to establish a ranking system and to evaluate each site submitted to OERB for restoration. An Assessment Process is used that is broken down into four phases: review of available data and site visit, sampling and analysis, construction/restoration, and progress review with final report.

2004 FINDING 4.12

The combined efforts of OCC and OERB meet the guidelines for surface restoration. (2000 Guidelines section 6.6.2.)

Record of Remediation

The OCC maintains a computer database of all plugged wells that are a part of the permanent public record.

During the interview with OERB representatives, it became unclear whether or not the agency maintained a summary database of remediated sites or just kept individual records of each site that has been restored. It did not appear that there was a simple way for the public to access a full reporting of the agency's activities statewide. It did appear that the public could inquire about a specific site.

The OERB does not have a method to inventory and rank sites with groundwater issues. Occasionally, groundwater samples may be obtained, in such instances, where elevated levels are encountered, the results are forwarded to the OCC for further review and consideration.

2004 FINDING 4.13

The OCC and OERB both maintain reports of abandoned sites that have been addressed.

Public Participation

The OCC provides for public participation in rulemaking, administrative hearings, and citizen councils. Wells plugged with state funds are required to be approved by a Commission Order,

which means public notice is provided for the Commission Meetings via the posted agenda. They are published in the county in which the well is located and in Oklahoma County. Notice of the hearing is given and oral and written testimony is given at the hearing. OCC is a constitutional court of record pursuant to Oklahoma Constitution, Article IX, Section 19; therefore it maintains a separate procedural code; OAC 165, Chapter 5, Rules of Practice, that governs its proceedings. Agency rulemaking follows the Oklahoma Administrative Procedures Act (APA).

During the interview of OERB it did not appear that public participation, other than the property owner was invited or encouraged, with respect to how a site is remediated. The OERB Board is composed of 21 members that serve three year terms on a voluntary basis and are producers and royalty owners, but no citizen or environmental representatives. The members are appointed by the Governor, House and Senate leaders (6 each), plus one member appointed by purchasers and royalty owners and the last member nominated by the Oklahoma Independent Producers Association (OIPA). This is the first agency of its kind in the country and has only seven staff members (administration, public education, and cleanup supervision). The majority of its work is performed by a subcontracted environmental firm, currently Beacon Environmental, in response to a request for proposal every five years. The main interaction with the public is one-on-one consultation with the affected surface landowner.

The OERB encourages and seeks the participation from private landowners concerning the restoration of their properties and routinely consults with the Oklahoma Corporation Commission, the Natural Resource Conservation Service, the Oklahoma Conservation Commission and other agencies concerning property restoration. Occasionally, there are instances in which a landowner has requested restoration that is not feasible or practical. In such instances, the OERB has no alternative but to propose what is feasible. The landowner is under no obligation to have his/her property restored if they do not concur with the proposed restoration activities.

2004 FINDING 4.14

Although OERB encourages landowner input, there is no mechanism for either a landowner or an interested citizen to petition a state agency to change an abandoned site's priority status or remediation plan.

2004 RECOMMENDATION 4.14

The OGCD should develop a statutory or regulatory mechanism to involve the public, including potentially affected property owners, early in the abandoned site evaluation process so they can have input on the priority of the site and level of remediation. (2000 Guidelines section 6.7)

2004 FINDING 4.15

While the OERB's state-wide report record may contain the elements required by section 6.7.1 of the 2000 Guidelines, it is not easily available to the public.

2004 RECOMMENDATION 4.15

OERB should establish a state-wide compilation that is easily accessible by the public of all sites that have been addressed, including such information as, location, type of surface issue, ranking or risk category, methods used to restore sites, landowner satisfaction measures, and need for further investigation with respect to subsurface and/or groundwater issues. (2000 Guidelines section 6.7.1)

This page left blank

V. NATURALLY OCCURRING RADIOACTIVE MATERIAL (2000 Guidelines Section 7)

The Oklahoma Department of Environmental Quality (DEQ) is responsible for the control of radioactive substances including Naturally Occurring Radioactive Materials (NORM). DEQ formed a NORM subcommittee composed of DEQ and OCC staff to develop regulations which were adopted in 1994. Oklahoma doesn't have any commercial waste disposal facilities that handle NORM wastes.

The Oklahoma DEQ is required by State statute to investigate complaints concerning NORM. The DEQ doesn't require registration of individuals or companies that handle NORM. When they receive questions concerning NORM clean-up, they suggest following the State of Texas's NORM regulations.

2004 FINDING 5.1

Although the Review Team recognizes that an advisory board was formed to review NORM issues in the state of Oklahoma, no consensus could be reached on how to proceed to address NORM issues.

2004 RECOMMENDATION 5.1.a

Oklahoma should conduct a survey to determine the locations, concentrations, and the amount of oilfield NORM waste located in the state of Oklahoma. (2000 Guidelines section 7.2)

2004 RECOMMENDATION 5.1b

If Oklahoma finds that there is a need to address NORM, an action level for NORM should be developed to provide E&P operators and those in the decontamination and remediation industry an action level that is more consistent than an informal policy that anything above 2 to 5 times background is considered NORM waste. (2000 Guidelines section 7.3.2)

2004 RECOMMENDATION 5.1c

OCC should provide written guidance for the oil and gas industry and royalty/land owners to properly dispose of and store NORM-contaminated equipment. (2000 Guidelines section 7.3.10)

2004 FINDING 5.2

The Review Team recognizes that the DEQ doesn't currently have the resources to address NORM waste.

2004 RECOMMENDATION 5.2

The state should clearly assign responsibility for oversight of NORM and provide that agency with the resources to implement the program. (2000 Guidelines section 7.3.11)

This page left blank

VI. PERFORMANCE MEASURES (2000 Guidelines Section 8)

The 2000 Guidelines state, “Beyond the general, technical and administrative criteria set forth elsewhere in this guidance document, an effective program for the regulation of E&P waste should periodically evaluate whether the program is meeting the goal of protecting human health and the environment in accordance with section 3.2” (2000 Guidelines, Section 8.1).

The OGCD has a current basic strategic plan with goals and objectives and it prepares an annual report of its activities. For the last ten years the performance measures used have been almost strictly output measures, but some efficiency measures have been utilized as well. The OGCD tracks activities conducted by the Field Operations, the Pollution Abatement, and the Technical Departments. The Field Operations Department has three main goals; identify abandoned wells that have no financially viable operator and plug as many as possible with available funds; help the field personnel become more sensitive to the needs of the public and the industry; and respond to complaints in a timely manner and accomplish other duties allocated to field personnel. The Department tracks such items as the number of wells plugged along with the associated plugging costs, and the number of complaints received, the complaint response times, the number of cases resolved, the resolution time, and the number of pending resolutions. They also tabulate the number of times the field personnel witness well plugging, well tests, MITs, UIC inspections, and well-site inspections. OGCD set a goal for handling complaints in a timely fashion, and met its goal.

The Technical Department’s goals are to prevent waste and assure the maximum economic recovery of the state’s petroleum resources; protect the correlative rights of all entities having an economic interest in oil and gas production; minimize the reporting requirements imposed on industry consistent with statutory responsibilities; and ensure that complete and accurate production and well testing data is available to the public in a timely manner. The Technical Department monitors document handling activities, engineering and geological activities, production and proration issues, surety and well records.

The Pollution Abatement Department’s goals are to ensure all petroleum related pollution occurrences are properly investigated and resolved; review all applications pertaining to waste disposal; and to comply with the EPA Underground Injection Control program. The Department tracks such items as the number of applications received, approved orders, dismissal orders, pending applications, inspections conducted, and testing activities.

The Oklahoma Corporation Commission (OCC) is in the process of developing a major new agency-wide strategic plan. The Review Team received an excellent presentation on performance measures and the OCC’s strategic planning effort from Dee Porter, Director of Administration. OGCD is participating in this planning effort, and their new strategic plan will include performance measures and be tied to the budget. OCC is required to have this new five year plan (for years 2006-2010) by statute. (See the Oklahoma Program Performance Budgeting and Accountability Act, Title 62 O.S. §45.1 through 45.10). The agency’s goal is to complete the new strategic plan by July 1, 2005, and the process is already underway.

The new OGCD strategic plan will be developed at the same time it is hiring new managers and staff. This timing will allow the agency to bring its new managers into the planning process immediately and make changes in the structure of the organization or the allocation of work as they see necessary. In addition the effort to build an improved data management system will facilitate the ability to record and track performance measures. There is a great deal of change going on at the OGCD, a positive aspect of such change is that the agency has an opportunity to develop a system of tracking the progress of the agency. For example, the OGCD can evaluate spill sites to determine the cause of the spill; whether the cause is an isolated problem; whether the agency should change regulations or procedures to address the cause of contamination; and whether the site can be remediated.

OGCD tracks information and data dealing with many aspects of the agency's operations. However, they have not currently linked these figures to the goal of improvement in human health and the environment. Dee Porter told the Review Team that OCC and OGCD is thinking about what performance measures might be meaningful in relationship to improvement of human health and the environment, as part of the new planning process. She further said that the agency was interested in looking at the STRONGER Guidelines in this area as they develop their new plan.

2004 FINDING 6.1

The Oklahoma program meets all the Performance Measurement criteria of the 2000 Guidelines, Section 8, except where otherwise noted.

2004 FINDING 6.2

The OCC is commended for successfully setting and implementing goals for handling complaints in a timely fashion.

2004 FINDING 6.3

The OCC has a current operating strategic plan with goals and objectives and is in the process of developing a new and expanded five-year strategic plan. The agency admits it has a better handle on tracking outputs rather than actual performance indicators relating to the protection of human health and the environment. The OCC has some performance measures in place that include input and output analysis, and is currently working on developing additional measures relative to improvement in human health and the environment.

2004 RECOMMENDATION 6.3.a

The OCC is commended for instituting the new strategic planning process and the agency should complete and implement this process. (2000 Guidelines sections 8.1 and 8.2)

2004 RECOMMENDATION 6.3.b

The OCC should consider using additional environmental indicators as a basis for performance measurement. Examples might include the Clean Water Act 305b list of impaired streams, the number and frequency of fish kills reported annually, confirmed water supply contamination incidents, any recognizable trends related to oil and gas

releases, and formal tracking and graphic representation of performance data/measures to support trend line analysis. (2000 Guidelines sections 8.1 and 8.2)

This page left blank

APPENDIX A: GLOSSARY OF ACRONYMS

BCF	Billion cubic feet
OGCD	Oil and Gas Conservation Division
E&P	Exploration and production
EPA	United States Environmental Protection Agency
GIS	Geographic Information System
GPS	Global Positioning System
H ₂ S	Hydrogen sulfide
IOCC	Interstate Oil Compact Commission
IOGCC	Interstate Oil and Gas Compact Commission
IT	Information Technologies
MOA	Memorandum of Agreement
NORM	Naturally occurring radioactive material
NOV	Notice of violation
NPDES	National Pollutant Discharge and Elimination System
PDA	Personal Digital Assistant
RBDMS	Risk-based Data Management System
RCRA	Resource Conservation and Recovery Act
STRONGER	State Review of Oil and Natural Gas Environmental Regulations
TDS	Total Dissolved Solids
UIC	Underground Injection Control
OCC	Oklahoma Corporation Commission

This page left blank

APPENDIX B

QUESTIONNAIRE FOR FOLLOW-UP AND SUPPLEMENTAL REVIEW OF STATE OIL AND GAS ENVIRONMENTAL REGULATORY PROGRAMS

State: **Oklahoma**

Completed by: Tim Baker

Organization: Oklahoma Corporation Commission

Address: P O Box 52000, Oklahoma City, OK 73152

Telephone: 405/522-2763 or 405/521-2302

INSTRUCTIONS: The primary bases for this review are the Guidelines for State Review of Oil and Natural Gas Environmental Regulatory Programs (June 2000), referred to as the "Guidelines," and the recommendations of the report of the initial review your state's oil and gas regulatory program. The major objectives of this follow-up review are to evaluate your state's responses to the initial review recommendations, and to evaluate the regulatory program against changes made to the Guidelines since the initial review.

Please answer the questions as completely as reasonably possible, keeping the purposes of the follow-up review in mind. Avoid supplying extensive background information, data, regulations or statutes that do not address issues in the review recommendations or the Guidelines, or are not related to the state's oil and gas environmental programs. (For example, regulation of underground fuel storage tanks is not addressed in this review.) The purpose of this questionnaire is to elicit information that will provide a fair and balanced characterization of the state's regulatory program, rather than an exhaustive inventory of waste management facilities. Terms used in this questionnaire have meanings consistent with those contained in the Guidelines. Citations that appear in brackets (e.g., [5.3.]) following each question refer to the applicable section or sections of the Guidelines.

A computer disk containing the questionnaire in Word 2000 has been provided to facilitate your preparation of the document.

REQUESTED BACKGROUND INFORMATION

- I. Please revise and update, as appropriate, the introductory material in the report of the initial review.
- II. Please provide brief descriptions of the main developments in your state program since the last state review. (See Attachment A)
- III. Please provide a listing of the recommendations from the previous review, and your responses to each. The listing should include any implementation or action plans.
- IV. Please provide the following in the format or formats most readily available to you:
 - A. References to all statutes, rules, regulations, orders, and other documentation reflecting changes made in response to recommendations contained in the report of the initial state review. (See Attachment B)
 - B. Organization chart(s) showing the structure of all agencies responsible for abandoned oil and gas sites, and oilfield NORM (naturally occurring radioactive materials).
 - C. Descriptions of references to all statutes, rules, regulations and orders applicable to abandoned oil and gas sites, or NORM from oil and gas production.
 - D. Any memoranda of understanding or similar agreements between state agencies or between the state and any other governmental entities (BLM, EPA, Indian Tribes, local jurisdictions) pertaining to abandoned sites, or NORM from oil and gas production.
 - E. Any written mission statement(s), goals, objectives or policies applicable to abandoned sites, or NORM from oil and gas production.
 - F. An updated estimate of the volumes of produced water, drilling muds and cuttings, and any other associated wastes generated in the state.

SPECIFIC SUBJECT MATTER INFORMATION

SECTION 3 – GENERAL CRITERIA

- 3-1. Were there any changes to state law, regulations or programs that would impact the findings and recommendations from the initial review of your state program with respect to the general criteria of the Guidelines?

Yes, in 1993 the Oklahoma Legislature redefined the jurisdictional areas of each environmental agency in the state. The Oklahoma State Department of Health was separated from the new Oklahoma Department of Environmental Quality (ODEQ)

and the Pollution Control Coordinating Board (PCCB) was abolished. In addition, many of the areas of jurisdiction of the Oklahoma Water Resources Board were transferred to the new DEQ. The OCC was given exclusive jurisdiction concerning E&P operations, including off site tank-farms and all pipelines (regardless of product) from the well site to the refinery gate. With the new DEQ, and the OCC the primary agencies that regulate industry (other than agricultural), there has been little need for new MOUs between the agencies.

- 3-2. Do the **goals and objectives** of the state's waste management program encourage waste minimization and source reduction? Please provide reference to the appropriate document(s). [3.2] [1994]

Yes, waste minimization is referenced in OCC 165:10-7-24, and public information brochures. (in packet)

SECTION 4 – ADMINISTRATIVE CRITERIA

- 4-1. Were there any changes to state law, regulations or programs that would impact the findings and recommendations from the initial review of your state program with respect to administrative criteria of the Guidelines?

No.

- 4-2. When the operator of an E&P waste management facility changes, does the state consider the **new operator's financial responsibility and compliance history**? [4.1.1] [1994]

The state does consider the financial responsibility of an operator in the event the operator has outstanding fines or has not complied with a Commission order. OCC 165:10-1-15(C) & 165:10-1-10(b).

- 4-3. Do E&P waste permits provide **notice of the permittee's obligation** to comply with other federal, state or local requirements? [4.1.1] [1994]

The statement is provided by general rule, however it is not provided in the permit. OCC 165:10-7-3.

- 4-4. Has the state adopted a **state contingency plan** for response to spills and releases? If so, briefly describe, including volumes that trigger a response, time in which notification and clean up is to occur, and criteria (i.e., cleanup standards) used to assure that remediation was accomplished. Please provide reference to applicable portions of the state plan. [4.2.1.1.a] [1994]

The reportable quantities in OK are 10 bbls to land and any amount to water. In addition, any reportable quantity that falls under CERCLA. OCC 165:7-5(c). The OGCD has also written cleanup guidance incorporated in the Guardian Guidance.

- 4-5. Describe any **funding** provisions to enable the state to respond to spills and releases in the event a responsible operator cannot be located or is unwilling or unable to respond, and any provisions for reimbursement of the state for moneys so expended. [4.2.1.1.b] [1994]

There is no special funding provision to enable the state to respond to spills in the

event a responsible operator cannot be located. The OCC would use money out of the OGCD general fund. If a responsible party can be determined the OGCD does have authority to pursue reimbursement through contempt proceedings.

4-6. Describe the state's **strategic planning process**, both short-term and long-term, for defining goals and objectives, setting priorities, and evaluating the effectiveness of the program. [4.2] [1994]

4-7. Does the state require **financial assurance** sufficient to cover the cost of appropriate facility decontamination, reclamation and closure of **commercial and centralized facilities**? [4.2.4] [1994]

Yes, for commercial facilities. OCC 165:10-8-5.

4-8. Describe the state's **training program for agency personnel** regarding the regulations, policies and criteria applicable to E&P waste management. [4.3.1.5] [1994]

Training for field inspectors is incorporated in their field training program. It is also addressed in the field inspector's manual. District meetings are held every other month in which training is provided on new rules and policies on waste management procedures.

4-9. Describe the **data collected and compiled by the state program**, the state's procedures for tracking and maintaining these data sets, how the state develops and maintains electronic data management systems, and any policies for data access, dissemination and cost allocation, and for the protection and backup of captured data. [4.2.8.] [2000]

The data collected electronically are three primary areas. The first is inspection discoveries and citizen complaints. This data is stored on the OGCD server in OKC. Each complaint is assigned a number, it is tracked until the case is resolved. The district office or the OKC office can track the status of any complaint. The second data base is the case processing system. If the case is brought to court, then the Office of Administrative Proceedings tracks all hearings through the case processing system. This data base is quite large in the fact that it is the same case processing system used for spacing and allowable determinations for oil and gas conservation and the protection of correlative rights. The third data base is the well data. All data on wells is stored in the well data maintenance system. This data consists of all the information on all wells drilled in the state which is tracked from the date the notice to spud is filed until the well is plugged.

All data bases are designed in house by the OCC IT department. Some of the larger projects may be contracted out by the IT Department, however due to budget constraints this is not common. The allocation of cost is determined on the data management needs of each Division. The needs are prioritized by the Commissioners then funding is dependent upon the Division's resources. All information is available to the public. The well data is available via the website.

SECTION 5 – TECHNICAL CRITERIA

- 5-1. Were there any changes to state law, regulations or programs that would impact the findings and recommendations from the initial review of your state program?

There were no changes in state law or rules that would negatively impact the recommendations from the initial review. The rules were modified to expand coverage of more waste streams generated in the E&P industry OCC 165:10-7-24. In addition, new rules were written to address crude oil reclaiming facilities 165:-1-8 “Hydrocarbon Reclaiming Facilities” and facilities at saltwater disposal and injection operations, OCC 165:10-7-20. New rules were also written to address land application of water-based fluids from earthen pits (165:10-7-19), road spreading (165:10-7-22), and hydrocarbon based fluids and cuttings (165:10-7-26).

- 5-2. Describe the state’s E&P waste management facility **siting criteria**. [5.1.e] [1994]
- 5-3. Describe the state’s **waste characterization requirements**. [5.2] [1994]
- 5-4. Describe the mechanisms used by the state to encourage the selection of E&P waste management options consistent with the **waste management hierarchy**. [5.3] [1994]
- The OCC expanded the Waste “Management Practices Reference Chart”, OCC 165:10-7-24, to incorporate additional waste streams generated in the E&P industry and referenced specific management practices for specific waste materials.**
- 5-5. Describe the **liner requirements for various types of pits**. [5.5.3.e] [1994]
- 5-6. Is **landspreading of E&P wastes** subject to **loading rates, location restrictions, and/or other appropriate requirements** that promote biodegradation, prevent pooling, ponding, or runoff, prevent contamination of groundwater or surface waters, and protect air quality? [5.6.3.d] [1994]
- 5-7. Upon **closure of a landspreading site**, how does the state ensure that waste constituents are not present at levels that pose a significant risk to human health and the environment? [5.6.3.i] [1994]
- 5-8. Is **on-site landspreading of waste containing NORM** above action levels prohibited? [5.6.1.c] [1994]
- 5-9. Does the state prohibit roadspreading of **E&P wastes that do not exhibit properties similar to commercial road oils, mixes, dust suppressants, or road compaction or de-icing materials**? [5.8.1] [1994]
- 5-10. Is **roadspreading of waste containing NORM** above action levels prohibited? [5.8.1] [1994]
- 5-11. Is **roadspreading of E&P waste** subject to **loading rates and/or other appropriate requirements** that prevent pooling, ponding, or runoff, prevent contamination of groundwater or surface waters, and protect air quality? [5.8.3.b] [1994]

Yes. This is found in OCC 165:10-7-22

- 5-12. Give references for any statutory or **regulatory definitions of E&P waste tanks** used in your state. [5.9] [1994]

There are no statutory or regulatory definitions of E&P waste tanks in OGCD rules.

- 5-13. Describe any requirements pertaining to the **location, use, capacity, age and construction of E&P waste tanks**, including registration, inventories, etc. How are the tanks that treat, store or dispose of E&P waste regulated differently, if at all, from tanks used exclusively for processing or storage of petroleum products? [5.9] [1994]

There are no specific regulations on the types of tanks used in E&P operations.

- 5-14. Describe any **pollution prevention requirements relating to tanks**. [5.9.2.c] [1994]

There are no pollution prevention requirements related to tanks other than the commission's general rule under 165:10-7-5 "Prohibition of Pollution".

- 5-15. Briefly list any **operational requirements as they apply to E&P waste tanks** (give reference to any statutes or regulations). [5.9.3] [1994]

OCC 165:10-7-21 (b) states "Chemicals, gasolines, oil and other deleterious substances shall be stored , where necessary, in tanks or containers of a material and of a construction and in a manner that will prevent the escaping, seepage, or draining of such liquids into any fresh water." This is the only reference to operational requirements for tanks in the regulations.

- 5-16. Describe any **tank removal and closure requirements** and provide reference to the statutes or regulations. [5.9.4] [1994]

The OGCD has no regulations specific to tank removal and or closure.

- 5-17. Describe the **sampling and reclamation requirements applicable at the time of closure** of commercial disposal facilities and centralized disposal facilities of comparable nature or size. Also describe the **post-closure monitoring** and maintenance requirements applicable to these facilities, including the duration of post-closure care and financial assurance release schedules. [5.10.2.2.e] [1994]

There are no rules that require post closure monitoring of commercial facilities. However, most all of the commercial disposal facilities have monitor wells. (Some small facilities that do not have unloading pits are not required to have monitor wells). If the monitor wells have shown contamination, closure sampling is designed around the data obtained from the monitor wells. This would be addressed in the closure plan.

- 5-18. Do state regulations or permits require **groundwater monitoring for centralized and commercial facilities** where wastes are placed on the land? Is air monitoring or other monitoring required for these facilities? Do state regulations or permits require minimization plans for air emissions; public information plans; and environmental, health and safety plans for commercial disposal facilities? [5.10.2.2.d.] [1994] [2000]

Yes, if any pits are used in the process. This is found in OCC 165:10-9-3(c)(6).

- 5-19. Is a commercial disposal facility operator required to **certify** that the facility is authorized to accept waste delivered by the waste hauler? [5.10.2.3.] [2000]

No.

SECTION 6 – ABANDONED SITES

- 6-1. Were there any changes to state law, regulations or programs that would impact the findings and recommendations from the initial review of your state program?

No.

- 6-2. Does your state have a program to **inventory, prioritize and remediate** (as necessary) abandoned oil and gas sites? [6.1] [1994]

There are three categories of abandoned oil and gas sites in Oklahoma that are recognized. The OGCD maintains two of the categories and the third is referred to the Oklahoma Energy Resources Board OERB. The OGCD maintains a state funds plugging list. These are wells that are deemed to be a potential environmental risk and should be plugged, these wells have been found not to have any responsible party. The second list, are wells that are abandoned and have no know responsible party but are not necessarily an environmental risk. These wells are listed on the OCC web site in order for operators to have the opportunity to investigate opportunities in obtainning leases for these wells. Both lists are generated upon reccomendations by the field inspectors. The District Managers will periocically review the lists in order to determine if plugging priorities should change. The last list of sites are abandoned oil and gas sites that have left surface debris or environmental problems and there are no responsible parties. The sites are discovered by the OGCD field inspector and referred to the OERB for site restoration. Many of these sites are also reported by land owners via advertisements televised by the OERB.

- 6-3. Provide reference to any **definitions** pertaining to abandoned sites or your abandoned well site program, including the types of facilities included in the definitions. [6.2] [1994]

OGCD regulations have no definitions of abandoned sites.

- 6-4. Briefly describe your program for **identifying, inventorying and ranking** of abandoned sites. [6.3] [1994]

Please read 6-2.

- 6-5. Briefly describe **funding** mechanisms available to the state for abandoned site remediation. [6.4] [1994]

There are two funding sources for restoring abandoned sites. The OCC has the state well plugging fund that is funded by the petroleum excise tax. This fund is restricted by statute to be used solely for plugging abandoned wells. The second fund is the OERB environmental restoration fund that is a voluntary tax on oil and gas production and royalty owners. It is voluntary from the stand point that operators and royalty owners do have the opportunity to ask for a refund at the beginning of the year. However, most people do not request refunds. At least 51% of the money generated must go to environmental restoration. The other 49% is used for education of the general public

about the oil and gas industry.

- 6-6. Briefly describe the criteria used in your **abandoned site prioritizing** system. [6.5] [1994]
In years past the OGCD has developed prioritizing criteria for plugging wells. However, in recent years there has been little money to address the number of wells that should be plugged. Therefore wells that are considered immediate threats consume the majority of the money and an elaborate prioritization scheme has not been required.
- 6-7. What are the state's abandoned site remediation **goals**? How does the state measure progress? [6.5.1] [1994]
The OGCD is charged with the responsibility of plugging wells in which there are no responsible parties. The primary goal of the OGCD is to protect waters of the state.
- 6-8. Briefly describe the state's program relating to establishing **liability** for the remediation of abandoned sites. Provide references to any statutory or regulatory allocation of responsibility. [6.5.2] [1994]
The OGCD is charged by statute and thus is not liable for carrying out its duty.
- 6-9. Provide reference to any **standards for abandoned site remediation**. [6.6] See **Guardian guidance and field operations guidance on surface spills.**
- 6-10. Briefly describe the state's **abandoned well remediation** program, including any flexibility allowed in plugging procedures. [6.6.1] [1994]
Plugging procedures are designed by the District Managers. Common denominator is to insure waters of the state are protected. The OGCD has flexibility in designing any procedure to insure waters of the state are protected.
- 6-11. Briefly describe the state's program for **surface remediation** of abandoned sites, including any requirements regarding present or future land use and consultation with surface owners. [6.6.2] [1994]
See Guardian Guidance.
- 6-12. Briefly describe the state's program for **maintenance of records** of remediated sites. Describe how the state assures public access to such records. [6.6.3] [1994]
Plugging reports are stored in the well files, and are a permanent public record.
- 6-13. Describe any **public participation** activities associated with the abandoned sites program, including public access to information, public participation in rulemaking associated with the program, and participation regarding the priority of sites on the inventory and level of remediation. [6.7] [1994]
Wells plugged with state funds are required to be approved by Commission Order. Therefore they are published in the county in which the well is located and in Oklahoma Co. Notice of the hearing is given and all testimony is presented at the hearing. All rule makings are public hearing before the Commission and adhere to the Administrative Procedures Act.

SECTION 7 – NATURALLY OCCURRING RADIOACTIVE MATERIAL (NORM)

- 7-1. Were there any changes to state law, regulations or programs that would impact the findings and recommendations from the initial review of your state program?
- 7-2. Discuss any activities the state has undertaken to determine the **occurrence and need for regulation** of NORM. [7.2] [1994]
- 7-3. Briefly discuss the state's **program elements** as they apply to NORM (provide references for any statutory or regulatory requirements): [7.3] [1994]

SECTION 8 – PERFORMANCE MEASURES

- 8-1. Briefly describe how progress toward **achievement of program goals and objectives is measured**. [8.2] [2000]
- 8-2. Briefly describe **how information obtained from measurement of progress in achieving goals and objectives is used** to alter or refine program activities. [8.3] [2000]

Attachment A

The Oklahoma Corporation Commission Oil and Gas Conservation Division STRONGER Review

Developments in the state program subsequent to the state review in 1992.

House Bill 1010 – Clarifying jurisdiction of the Environmental Regulatory Agencies in Oklahoma.

House Bill 1010 was enacted in 1993, which among other things clarified jurisdictional areas between the Oklahoma Corporation Commission and other environmental agencies. It also created the Oklahoma Department of Environmental Quality and removed environmental regulation from the Oklahoma State Department of Health. The Secretary of Environment Position was created to coordinate regulatory efforts between environmental agencies. In addition, the Pollution Control Coordinating Board was abolished.

Creation of the Oklahoma Energy Resources Board.

The Oklahoma Legislature created the Oklahoma Energy Resources Board in 1993. The purpose of the new state agency is to restore abandoned oilfield sites in which there is no responsible party. The agency is funded by a tax at the well head one tenth of one percent (.01%) of the value of oil and natural gas sold. Royalty owners and operators contribute equally to the fund. The fund is voluntary in that a refund may be requested. The program is also devoted to educating the citizens of Oklahoma on the importance of the oil and gas industry in the state.

Water Quality Standards Implementation

In 1999, the Legislature required environmental agencies to incorporate Water Quality Standards procedures into their respective regulations. The OGCD accomplished this task in 2001. (Copies attached)

Attachment B

Rule Changes Made in response to Recommendations.

Surface Trash and Debris Act, Statutory Lien on Abandoned Equipment, 17 O.S. Section 53.3

The Surface Trash and Debris Act was enacted by the Oklahoma Legislature in 1981 (effective by emergency clause on April, 1981). The language of the lien statute, 17 O.S. Section 53.3, has remained much the same since 1981. The OCC can file a lien on abandoned "oil and gas well-site equipment situated on a lease site, including but not limited to production and storage structures, along with their contents, in the amount equal to the cost of plugging all wells associated with said lease and restoring the site." The lien attaches only to abandoned oil and gas well-site equipment "located on or affixed to an oil or gas well which has been required to be plugged, replugged or repaired by the rules of the Commission."

The statute provides that abandonment is presumed if: "[f]or longer than one (1) year, the well has shown no activity in terms of production, injection, disposal or testing, and has not otherwise been maintained in compliance with plugging rules; and . . . the last operator of record is without valid surety . . . and cannot be located by the [OCC] after diligent search, or . . . the last operator of record has plugging liability in excess of the amount of such operator's surety as filed with the [OCC]." The lien is perfected against equipment when "notice of the lien is filed in the office of the county clerk of the county or counties where equipment is situated." The lien is "subject to all prior perfected liens." The lien is assignable by the OCC. Last, the term "abandoned well" for the purposes of the act "shall mean those wells that are described and listed in a report published by the [OCC] identifying oil and gas well which have been determined to be abandoned or orphaned by the [OCC] as a result of a bankruptcy, inability to find the owner, or for other reasons."

The only change in the statutory language since 1992 occurred in 1995, when the phrases "is to be required" and "rules of" were added to the second sentence of subsection A, which previously provided that the lien would attach only to an oil or gas well which "has been plugged, replugged or repaired" by the OCC. The 1995 change permits the lien to be filed on equipment which has been required to be plugged, replugged or repaired by the effect of rule provisions and has been identified the report of the OCC as "abandoned or orphaned" for the reasons set forth in 17 O.S. Section 53.3(E), in addition to a well which has actually been plugged, replugged or repaired.