OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT

Annual Evaluation Report

for the

Regulatory and Abandoned Mine Land Reclamation Programs

Administered by the State

of

Texas

for

Evaluation Year 1999

(October 1, 1998 through September 30, 1999)

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1999 ANNUAL EVALUATION REPORT

I. Introduction

The Surface Mining Control and Reclamation Act of 1977 created the Office of Surface Mining Reclamation and Enforcement in the Department of the Interior. SMCRA provides authority to OSM to oversee the implementation of and provide Federal funding for State regulatory programs that have been approved by OSM as meeting the minimum standards specified by SMCRA. This report contains summary information regarding the Texas program and the effectiveness of the Texas program in meeting the applicable purposes of SMCRA as specified in Section 102. The evaluation period covered by this report is October 1, 1998 to September 30, 1999.

OSM continued its implementation of its new oversight policy, which was introduced in 1996. The primary focus of the new policy is an on-the-ground results-oriented strategy that evaluates the end result of State program implementation, i.e., the success of the State programs in ensuring that areas off the minesite are protected from impacts during mining, and that areas on the minesite are contemporaneously and successfully reclaimed after mining activities are completed. The new policy emphasizes a shared commitment between OSM and the States to ensure the success of SMCRA through the development and implementation of a performance agreement. Also, the new policy continued to encourage public participation as part of the revised oversight strategy. Besides the primary focus of evaluating end results, the oversight guidance makes clear OSM's responsibility to conduct inspections to monitor the State's effectiveness in ensuring compliance with SMCRA's environmental protection standards.

The new oversight guidance reemphasized that oversight is a continuous and ongoing process. To further the idea of continuous oversight, this annual report is structured to report on OSM's and Texas' progress in conducting evaluations and completing oversight activities, and on their accomplishments at the end of the evaluation period. Detailed background information and comprehensive reports for the program elements evaluated during the period are available for review and copying at the Office of Surface Mining, Tulsa Field Office, 5100 E. Skelly Drive, Suite 470, Tulsa, Oklahoma 74135-6547.

The following acronyms are used in this report:

AMLR	Abandoned Mine Land Reclamation
AVS	Applicant Violator System
EY	Evaluation Year
NOV	Notice of Violation
OSM	Office of Surface Mining Reclamation and Enforcement
RCT	Railroad Commission of Texas, Surface Mining and Reclamation Division
SMCRA	Surface Mining Control and Reclamation Act of 1977
TDN	Ten-Day Notice
TFO	Tulsa Field Office

II. Overview of the Texas Coal Mining Industry

The near-surface coal deposits (20 to 200 feet) in Texas are about 97 percent lignite. The remainder is bituminous coal. The potential coal reserves are 23.37 billion tons of lignite and 787 million tons of bituminous coal. The sulfur content ranges from .7 to 1.5 percent for lignite and 1.4 to 3.6 percent for the bituminous coal. Cannel coal is mined on three South Texas mines and has an average sulfur content of 2.2 percent. The coal seams mined in Texas average about 8 feet in thickness.

In the 1840's the first bituminous coal was mined along the Trinity River of Texas. As early as 1850, lignite was produced and used. Coal from both lignite and bituminous deposits was used by the railroads until the 1920's. In 1917, coal production in Texas was about 2.5 million tons, with approximately equal amounts of lignite and bituminous coal. From 1918 until 1950, only 18,000 tons of lignite were produced. In 1954, a lignite-fueled electric power-generating plant near Rockdale, Texas opened. Following that, annual coal production increased rapidly to meet the demand for electric power generation at additional plants. In 1998, 53 million tons of coal was produced in Texas from large surface mines using large equipment such as bucket-wheel excavators and cross pit spreaders in addition to draglines, scrapers, loaders, and trucks.

Most of the lignite production is used in the generation of electric power within the State. The lignite from one mine is used to produce activated carbon. The bituminous production has been used intrastate by the cement, lime and light-weight aggregate industry to fire kilns, and boilers. The cannel coal mined near Laredo, Texas, has been exported to Europe for fireplace coal, to South America for generation of electricity, and used within the State by various industries such as cement production. Texas is the Nation's fifth ranked coal-producing State and the largest lignite producer in the world. Daily employment at the 20 permitted operations exceeds 2,000.

Climate is not a limiting factor for reclamation in Texas. Some mines have encountered acid-forming materials in the overburden that has complicated reclamation activities. In some areas, where topsoil substitution is used, selective overburden handling techniques have proven successful in the reclamation of thousands of acres.

III. Overview of the Public Participation Opportunities in the Oversight Process and the State Program

A. Public Participation in OSM's Oversight

During the year, OSM held outreach meetings on the revegetation regulations throughout the United States. One of these meetings was held in Texas. In addition, TFO interacted with landowners on bond release inspections and other citizens through

informal telephone conversations. One special attempt to involve citizens was to develop and distribute citizen's complaint information cards that were designed to help citizens know about their rights and what to do if they had a concern about a mining operation. Citizen's complaint files were reviewed during the year to determine whether citizens had been afforded an opportunity to be involved in the regulatory program, and a special study was conducted that grew from citizen's complaints in EY 1998.

B. Public Participation in State Processes

RCT allows public input into the State program through several avenues. Citizens may comment on permit applications, be party to the proceedings, comment on amendments to the State program, or file complaints on mining operations. OSM's review of bond release procedures indicates that RCT has always extended the opportunity for public comment and taken appropriate measures to ensure that any comments are properly considered and implemented where possible.

C. Customer Service

The review of customer service in EY 1998 evaluated citizen's complaints and bond releases. The conclusion was the RCT had provided appropriate customer service.

In EY 1999, citizen's complaints, bond release, and permitting actions were the customer service topics. RCT's handling of four citizen's complaints was evaluated. In each case, RCT appropriately provided information to the complainant in a timely manner, inspected the mines as needed, met with the complainant, and resolved the complaint. OSM concluded that RCT handled each citizen's complaint appropriately. On all bond releases, RCT publicly announced the bond release applications and the date of the inspections. There were no cases where landowners or citizens complained that they had not had opportunity to offer comments on the bond release. On permitting actions, four recent permits were reviewed to determine whether the public had the opportunity to make meaningful comments on the pending action. In each case, the application was announced publicly, and comments that were received were thoroughly addressed. The comments were sent to the applicant and were addressed by RCT in its permit review. Each comment was addressed individually with an explanation of what was done in response to the comment.

OSM's conclusion is that RCT provided appropriate customer service.

IV. Major Accomplishments/Issues/Innovations in the Texas Program

A. Regulatory Program

During EY 1999, RCT was successful in operating its regulatory program so that there were no significant adverse environmental impacts from coal mining in Texas. The 1999 Director's Award was awarded to TXU for their exemplary prime farmland reclamation at the Monticello Winfield and Big Brown Mines located in Eastern Texas. TXU not only reclaimed existing prime farmland soils, they improved soils during reclamation that resulted in an additional 9,000 acres of highly productive prime farmland. In response to an inquiry, RCT determined that humate did not fall under the definition of coal; therefore, it is not subject to regulation. RCT also completed a major program amendment that implemented guidelines to determine revegetation success on reclaimed areas.

In response to a national concern, TFO reviewed the written findings that RCT makes when it issues a permit. The concern was whether the appropriate findings were made and whether the basis of the findings was documented. TFO found that RCT has made appropriate written findings for issuing permits. TFO also found that RCT's findings are based on a Technical Analysis document that describes how the permit was reviewed and how the written findings were derived.

B. Abandoned Mine Land Reclamation Program

The Texas AML program had an operating grant of $403,088 and a full-time staff of 10 in EY 1999. Having completed reclamation on all coal related sites, RCT is certified to use AML funds for the reclamation of noncoal abandoned mine lands.

During EY 1999 the AML program oversaw construction projects on surface uranium and underground cinnabar mines. No citizen complaints were received. RCT followed standard construction practices using State contracting procedures and conducted AVS checks on the violation status of bidders before contracts were awarded. RCT followed the provisions of its realty requirements. OSM's inspection of construction projects indicated that RCT completed projects on time and in a manner consistent with its approved reclamation plan. The projects that were reviewed exhibited an awareness and consideration for historical and natural resource values.

In EY 1999, RCT completed reclamation of 10 portals and 28 vertical openings associated with cinnabar mining in the western part of the State and initiated construction on two open pit uranium mines. During EY 2000, RCT anticipates

finishing construction on two uranium projects, initiating construction on one 82 acre uranium project as well as addressing 114 openings associated with underground cinnabar mining in west Texas.

V. Success in Achieving the Purposes of SMCRA as Measured by the Number of Observed Off-Site Impacts and the Number of Acres Meeting the Performance Standards at the Time of Bond Release

To further the concept of reporting end results, the findings from performance standard evaluations and public participation evaluations are being collected for a national perspective in terms of the number and extent of observed off-site impacts, the number of acres that have been mined and reclaimed which meet the bond release requirements for the various phases of reclamation. Individual topic reports are available in TFO which provide additional details on how the following evaluations and measurements were conducted.

A. Off-Site Impacts

Using both State and Federal inspections, 11 off-site impacts were observed from 320 inspections (State and Federal, partial and complete). When a Federal observation led to a State observation, it was counted only once. No types of sites were excluded and 4 observations resulted in NOV's. Four observations were self reported by coal companies of exceeding water effluent limitations, which are not considered violations by the State. Six of the 11 off-site impacts identified were impacts to water of which, 4 were moderate and 2 were minor. One impact was related to encroachment into a church buffer zone, 3 impacts were caused by water to land resources, and 2 were impacts to structures. All of the reported impacts were minor to moderate events. These numbers represent a decrease from the 16 that were reported in EY 1998. All of the impacts were found on 2 mines, which means that the remaining 18 mines, or 90 percent, were free from off-site impacts. OSM concluded that the State program has been successful in preventing off-site impacts.

B. Reclamation Success

In the evaluation of the effectiveness of the Texas program in ensuring successful reclamation on lands affected by surface coal mining operations, OSM jointly conducted 3 bond release inspections with State inspectors. OSM approved a program amendment that added revegetation success guidelines to the State program.

During EY 1999, RCT released 6,313 acres under Phase I, meaning approximate original contour was restored, and topsoil or an approved alternative was replaced. Under Phase II, RCT released 6,431 acres indicating that surface stability and vegetation had been established. Phase III releases totaled 2,542 acres. On the final

Phase III releases, vegetative cover, productivity, and ground and surface water quality were restored to the current State policy requirement. Most of the Phase III released mine land was reclaimed to pastureland or hay producing land.

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VI. OSM Assistance

OSM provided financial assistance to Texas in the form of grants, for 50 percent of the operational budget for RCT's activity as the regulatory authority and 100 percent of RCT 's activity in AMLR. RCT has access to and uses equipment provided by OSM for the Technical Information Processing System. OSM provided information on several topics during the course of the year.

VII. General Oversight Topic Reviews

A. Mine-Site Evaluation

During EY 1999, TFO conducted 16 complete inspections and 3 bond release inspections on Texas mines. As a result of the oversight inspections, TFO sent one TDN. The TDN was resolved with a permit revision.

B. Ground Water Hydrology

In 1998, during the oversight review of customer service, the TFO reviewer noticed that most of the citizen's complaints involved water wells — diminished water quantity and/or quality. During that review, the reviewer was interested in how RCT processed and resolved citizens' complaints and not with the topics of the complaints. As a result, the topic of groundwater hydrology was included in the 1999 Performance Agreement for review in 1999.

During the 1999 review, TFO reviewed the citizen's complaint files from 1998 and 1999 that were complaints about groundwater. All of those files showed that RCT appropriately resolved the groundwater concerns brought up in the citizens' complaints. From oversight inspections in 1999, TFO identified problems with several groundwater monitoring wells; groundwater monitoring wells had not been properly installed and/or maintained to protect groundwater from contamination. These problems were promptly corrected by the mine operators without the need for State action. Groundwater monitoring reports for 1999 were also reviewed. These reports do not identify problems with groundwater quantity or quality. The conclusion is that RCT appropriately determined that the Texas coal mining and reclamation operations are not causing significant adverse impacts to groundwater hydrology, and where there were impacts, those impacts were mitigated properly.

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Appendix A: Tabular Summaries of Data

These tables present data pertinent to mining operations and State and Federal regulatory and AMLR activities within Texas. They also summarize funding provided by OSM and current Texas staffing. Unless otherwise specified, the reporting period of the data contained in all tables is October 1, 1998, to September 30, 1999. Additional data used by OSM in its evaluation of Texas' performance is available for review in the evaluation files maintained by TFO.

TABLE 1

COAL PRODUCTION
(Millions of short tons)

Period	Surface mines	Underground mines	Total
Coal production[A] for entire State:			
Calendar Year			
1996	54.4	0	54.4
1997	53.5	0	53.5
1998	52.9	0	52.9

[A] Coal production as reported in this table is the gross tonnage which includes coal that is sold, used or transferred as reported to OSM by each mining company on form OSM-1 line 8(a). Gross tonnage does not provide for a moisture reduction. OSM verifies tonnage reported through routine auditing of mining companies. This production may vary from that reported by States or other sources due to varying methods of determining and reporting coal production.

TABLE 2

INSPECTABLE UNITS
(As of September 30, 1999)

Coal mines and related facilities	Active or temporarily inactive		Inactive: Phase II bond release		Inactive: Abandoned		Inactive: Totals			Permitted acreage[A] (hundreds of acres)		
	IP	PP	IP	PP	IP	PP	IP	PP	Insp. Unit[D]	IP	PP	Total
STATE and PRIVATE LANDS	**REGULATORY AUTHORITY: STATE**											
Surface mines	0	19	0	1	0	0	0	20	20	0	2,483	2483.00
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0.00
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0.00
Subtotals	0	19	0	1	0	0	0	20	20	0	2,483	2483.00
FEDERAL LANDS	**REGULATORY AUTHORITY: STATE**											
Surface mines	0	0	0	0	0	0	0	0	0	0	0	0
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0
Subtotals	0	0	0	0	0	0	0	0	0	0	0	0
ALL LANDS [B]												
Surface mines	0	19	0	1	0	0	0	20	20	0	2,483	2,483
Underground mines	0	0	0	0	0	0	0	0	0	0	0	0
Other facilities	0	0	0	0	0	0	0	0	0	0	0	0
Totals	**0**	**19**	**0**	**1**	**0**	**0**	**0**	**20**	**20**	**0**	**2,483**	**2,483**

Average number of permits per inspectable unit (excluding exploration sites) 1

Average number of acres per inspectable unit (excluding exploration sites) 12,414

Number of exploration permits on State and private lands: 0 On Federal lands: 0 [C]

Number of exploration notices on State and private lands: . 43 On Federal lands: 0 [C]

IP: Initial regulatory program sites.
PP: Permanent regulatory program sites.

[A] When a unit is located on more than one type of land, includes only the acreage located on the indicated type of land.

[B] Numbers of units may not equal the sum of the three preceding categories because a single inspectable unit may include lands in more than one of the preceding categories.

[C] Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to a Federal lands program. Excludes exploration regulated by the Bureau of Land Management.

[D] Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some State programs.

TABLE 3

STATE PERMITTING ACTIVITY
(As of September 30, 1999)

Type of application	Surface mines			Underground mines			Other facilities			Totals		
	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres[A]	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	0	0	0	N/A	N/A	N/A	1	0	0	1	0	0
Renewals	4	3	30,448	N/A	N/A	N/A	0	0	0	4	3	30,448
Incidental boundary revisions		1	9		N/A	N/A		0	0		1	9
Revisions (exclusive of incidental boundary revisions)		316			N/A			0			316	
Transfers, sales and assignments of permit rights	0	3		N/A	N/A		0	0		0	3	
Small operator assistance	0	0		N/A	N/A		0	0		0	0	
Exploration permits	0	0		N/A	N/A		0	0		0	0	
Exploration notices[B]		43			N/A			0			43	
Totals	4	366	30,457	N/A	N/A	N/A	1	0	0	5	366	30,457

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions 4

[A] Includes only the number of acres of proposed surface disturbance.

[B] State approval not required. Involves removal of less than 250 tons of coal and does not affect lands designated unsuitable for mining.

TABLE 4

OFF-SITE IMPACTS

RESOURCES AFFECTED		People				Land			Water			Structures		
DEGREE OF IMPACT		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting												
	Land Stability												
	Hydrology	10			2	1		2	4		1		
	Encroachment	1										1	
	Other												
	Total	11	0	0	0	2	1	0	2	4	0	1	1	0

OFF-SITE IMPACTS ON BOND FORFEITURE SITES There are no bond forfeiture sites.

RESOURCES AFFECTED		People				Land			Water			Structures		
DEGREE OF IMPACT		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF IMPACT AND TOTAL NUMBER OF EACH TYPE	Blasting												
	Land Stability												
	Hydrology												
	Encroachment												
	Other												
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

The objective of this Table is to report all off-site impacts identified in a State regardless of the source of the information. Report the degree of impact under each resource that was affected by each type of impact. Refer to guidelines in Directive REG-8 for determining degree of impact. More than one resource may be affected by each type of impact. Therefore, the total number of impacts will likely be less than the total number of resources affected; i.e., the numbers under the resources columns will not necessarily add horizontally to equal the total number for each type of impact. As provided by the Table, report impacts identified on bond forfeiture sites separately from impacts identified on other sites. If bond forfeitures sites were not evaluated during the period, clearly note the table to indicate that fact. Impacts related to mine subsidence or other areas where impacts are not prohibited are not included in this table. **Refer to report narrative for complete explanation and evaluation of the information provided by this table.**

TABLE 5

ANNUAL STATE MINING AND RECLAMATION RESULTS

Bond release phase	Applicable performance standard	Acreage released during this evaluation period
Phase I	•Approximate original contour restored •Topsoil or approved alternative replaced	6313.11
Phase II	•Surface stability •Establishment of vegetation	6431.35
Phase III	•Post-mining land use/productivity restored •Successful permanent vegetation •Groundwater recharge, quality and quantity restored •Surface water quality and quantity restored	2542.19
	Bonded Acreage Status[A]	
	Total number of bonded acres at end of last review period (September 30, 1998)[B]	146165.58
	Total number of acres bonded during this evaluation year	134290.00
	Number of acres bonded during this evaluation year that are considered remining, if available	
	Number of acres where bond was forfeited during this evaluation year (also report this acreage on Table 7).	0.00

[A] Bonded acreage is considered to approximate and represent the number of acres disturbed by surface coal mining and reclamation operations.

[B] Bonded acres in this category are those that have not received a Phase III or other final bond release (State maintains jurisdiction).

TABLE 6

SUMMARY OF MINING AND RECLAMATION RESULTS October 1, 1998 to September 30, 1999

Reclamation Activity	Acreage
Backfilled/Graded to AOC and drainage reestablished	**6,313.11**
Topsoil Replaced	**6,431.35**
Vegetation Reestablished	**2,542.19**

Reclaimed Land Use	Acreage	Reclaimed Land Use	Acreage
Cropland	0	Developed Water Resources	108.46
Pasture/Hayland	1,708.80	Public Utilities	0
Grazingland	0	Industrial/Commercial	69.34
Forestry	183.08	Recreation	0
Residential	0	Remined	0
Fish and Wildlife Habitat	472.51	Undisturbed	0
Undeveloped		Other	

Crop Production	Yield	% Orig Yield	Crop Production	Yield	%Orig Yield
Corn (bu/ac)			Hay (lb/ac)		
Beans (bu/ac)			Other		
Wheat (bu/ac)			Other		

Cover Type	% Cover/Stem/Ac	Cover Type	% Cover/Stem/Ac
Forest		Industrial/Commercial	
Fish and Wildlife Habitat		Recreation	
Grazingland		Remined	
Residential		Other	

TABLE 7

STATE BOND FORFEITURE ACTIVITY
(Permanent Program Permits)

	Sites	Dollars	Acres
	None		
	None		
Forfeited bonds collected as September 30, 1998	None		
	None		
Forfeiture sites reclaimed during EY 1999	None		
	None		
Forfeiture sites unreclaimed as of September 30, 1999	None		
	None		
	None		

[A] Includes data only for those forfeiture sites not fully reclaimed as of this date.

[B] Cost of reclamation, excluding general administrative expenses.

TABLE 8

TEXAS STAFFING
(Full-time equivalents at end of evaluation year)

Function		EY 1999
Regulatory program		
Permit review		17.00
Inspection		18.25
Other (administrative, fiscal, personnel, etc.)		9.50
	Sub-total	44.25
AML Program		10.00
	TOTAL	54.75

TABLE 9

FUNDS GRANTED TO TEXAS BY OSM

	Type of grant	Federal funds awarded	Federal funding as a percentage of total program costs
Regulatory	Administration and enforcement	$1,414,116.00	50%
	Small operator assistance		
Regulatory Totals		$1,414,116.00	
AMLR	Administration and construction	$403,088.00	100%
AMLR Total		$403,088.00	
Total Regulatory and AMLR		$1,817,204.00	

TABLE 10

ABANDONED MINE LAND RECLAMATION
NEEDS AND ACCOMPLISHMENTS SINCE PROGRAM APPROVAL

Problem nature	Unit	Coal-related problems				Noncoal-related problems	
		Abatement status			Total	Abatement status	
		Unfunded	Funded	Completed		Funded	Completed
Priority 1 & 2 (Protection of public health, safety, and general welfare)							
Clogged streams	Miles						
Clogged stream lands	Acres						
Dangerous highwalls	Lin Feet			3,285	3,285	8,100	30,730
Dangerous impoundments	Count						
Dangerous piles and	Acres			987	987	102	372
Dangerous slides	Acres						
Gases: hazardous/explosive	County						
Underground mine fires	Acres						
Hazardous equip. & facilities	Count						
Hazardous water bodies	Count			5	5	2	7
Industrial/residential waste	Acres						
Portals	Count			6	6	49	49
Polluted water: agric. &	Count						
Polluted water: human	Count						
Subsidence	Acres			6	6		
Surface burning	Acres						
Vertical opening	Count			21	21		204
Priority 3 (Environmental restoration)							
Spoil areas	Acres			152	152		196
Benches	Acres						
Pits	Acres						
Gob piles	Acres			8	8		
Slurry ponds	Acres						
Haul roads	Acres						
Mine openings	Count						
Slumps	Acres						
Highwalls	Lin Feet						
Equipment/facilities	Count						
Industrial/residential waste	Acres						
Water problems	Gal/min						
Other							

Appendix B: State Comments on Report