

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 2000

(October 1, 1999 through September 30, 2000)

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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, 1999 to September 30, 2000.

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

EY Evaluation Year

OSM Office of Surface Mining Reclamation and Enforcement

RCT Railroad Commission of Texas, Surface Mining and Reclamation Division

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SMCRA Surface Mining Control and Reclamation Act of 1977

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 1999, over 53 million tons of lignite and bituminous coal were 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. Over 99.5 percent of the production was lignite.

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 acidforming 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 EY 2000, OSM sent letters to citizens, landowners, and government agencies

asking for suggestions and comments on oversight. Only 2 responses were received. Both were from government agencies. One asked whether assessing water quality of runoff from mine sites and abandoned mine sites was part of our oversight. OSM responded that OSM conducted oversight inspections, and on those inspections OSM always reviewed water quality reports and the quality of any observed water discharges. The other stated that more oversight was needed on ensuring that the vegetation on reclaimed mines was more suitable for wildlife. OSM responded that the concern has been looked at previously and the vegetation species that are being approved are those that fit with the postmining land use plans. These plans are based on landowner plans for the land after reclamation has been completed. Neither comment identified new issues that prompted a need for an oversight evaluation of the topics.

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

Citizen s complaint files were reviewed in EY 1999 with a finding that RCT had handled all complaints appropriately. No review was deemed necessary in EY 2000. Permit files were also reviewed in EY 1999 with a finding that RCT had appropriately allowed public input in the permitting process and had appropriately addressed all comments. No review was deemed necessary in EY 2000.

In response to citizen s concerns about a new planned mining operation, RCT held a public meeting to hear the concerns and explain the mining permit review and public participation process.

OSM s conclusion is that RCT continued to provide appropriate customer service.

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

A. Regulatory Program

During EY 2000, RCT was successful in operating its regulatory program so that there were no significant adverse environmental impacts from coal mining and reclamation

in Texas. RCT received a petition to determine an area near a current mining operation unsuitable for mining. At the end of the year, the decision on the petition was pending. RCT also closed its laboratory after determining that it would be more cost effective to contract out soil and water analyses.

B. Abandoned Mine Land Reclamation Program

The Texas AML program had an operating grant of \$4,334,515 and a full-time staff of 9. Texas has completed reclamation on all coal related sites and is certified to use AML funds for the reclamation of noncoal abandoned mine lands.

During EY 2000 the AML program oversaw construction projects on open pit 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 in a manner consistent with its approved reclamation plan. The designs for projects reviewed exhibited an awareness and consideration for natural resource values.

In EY 2000, RCT completed reclamation of 3 portals and 110 vertical openings associated with cinnabar mining in the western part of the State and completed the construction phase on two open pit uranium projects and initiated construction on an additional open pit uranium project. During EY 2001, RCT anticipates initiating construction on a project to address various openings associated with underground cinnabar mining in western 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

Three off-site impacts were observed in EY 2000 at Texas coal mining and reclamation operations. One impact was encroachment on land and two were hydrologic impacts to

land and water. All of the impacts were moderate degree of impact. All were observed during State inspections. There were 338 State inspections and 15 OSM oversight inspections for a total of 353 opportunities for observations of off-site impacts. The impacts were recorded on 3 of 21 inspectable units; thus, 86 percent of the permitted sites produced no off-site impacts. This is an improvement over the 11 impacts observed during EY 1999, but it is a decrease from 90 percent of sites that produced no off-site impacts. The overall conclusion is that the State program and the permitted mining operations have been effective in minimizing off-site impacts (See Table 4).

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 2 bond release inspections with State inspectors.

During EY 2000, RCT released 9,341 acres under Phase I, meaning approximate original contour was restored, and topsoil or an approved alternative was replaced. Under Phase II, RCT released 6,169 acres indicating that surface stability and vegetation had been established. Phase III releases totaled 456 acres. On the 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 industrial/commercial or pastureland.

The lack of issues from the bond release inspections and the number of acres released from reclamation responsibility (bond release) indicate that RCT has ensured that the land has been reclaimed successfully. However, there are many acres at Texas coal mines that appear eligible for bond release but for which bond release has not been sought. OSM encourages RCT to pursue means that will increase bond release on areas that are eligible (See Table 5).

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. RCT did not request any technical assistance during EY 2000.

VII. General Oversight Topic Reviews

A. Mine-Site Evaluation

During EY 2000, TFO conducted 15 complete inspections and 2 bond release inspections on Texas mines. As a result of these inspections, OSM found no significant problems and did not identify any trends that would indicate concerns about the implementation of the State regulatory program.

B. Contemporaneous Reclamation

During EY 2000, OSM evaluated contemporaneous reclamation at Texas coal mining and reclamation operations. The evaluation was included in the EY 2000 oversight plan because of the trend in increasing numbers of delays in reclamation through backfilling and grading variances and temporary cessations of operations. State inspection reports show that almost every mine has a number of acres under backfilling and grading variances and most also have areas under temporary cessation of operations.

In the study, OSM looked at three mining and reclamation operations that had areas under approved backfilling and grading variances and areas in temporary cessation of operations. On one mine, some areas had been in temporary cessation for a number of years. On another operation, backfilling and grading variances had been used to delay reclamation until decisions were made on the final reclamation plans. From field observations, the study concluded that none of the delays was causing significant environmental harm. The only problem is that reclamation has not always been timely.

RCT appropriately processes backfilling and grading variances and temporary cessations of operations as administrative revisions to the reclamation plan. Each request or notice is reviewed thoroughly and if modifications are needed, RCT requires the information that is needed before it approves the revisions. OSM did not identify a programmatic problem with contemporaneous reclamation but encourages RCT to find ways to ensure that reclamation is more timely.

C. Program Amendments

On August 12, 1999, OSM approved a program amendment that revised the revegetation success standards and identified husbandry practices on lands waiting bond release.

The following program amendments are being processed:

TX-047-FOR Backfilling and grading, remining. OSM is processing the amendment. The public comment period ended on September 27, 2000.

TX-046-EXP Bond release timing. An informal amendment is expected by January 31, 2001.

TX-048-EXP Valid Existing Rights. An informal amendment is expected by January 31, 2001.

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, 1999, to September 30, 2000. 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) **Underground** Surface **Total** Period mines mines Coal production^A for entire State: Calendar Year 1997 0 53.5 53.5 0 52.9 1998 52.9 0 1999 53.0 53.0

^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.

					ABL1							
Coal mines and related	Active or temporarily inactive		Inactive Phase II bond		Abandon ed		Totals			Permitted acrea		_
facilities	IP	PP	rele IP	PP	IP	PP	IP	PP	Insp. Unit ^D	IP	PP	Total
STATE and PRIVATE LA	NDS		REGUL	ATORY	Y AUTH	ORIT	Y: STA	ATE		1		
Surface mines	0	17	0	4	0	0	0	21	21	0	2,550	2550.00
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	17	0	4	0	0	0	21	21	0	2,550	2550.00
FEDERAL LANDS			REGU:	LATOI	RY AU	гнов	RITY:	STA	TE			
Surface mines	0	0	0	0	0	0	0	0	0	0	0	o
Underground mines	0	0	0	0	0	0	0	0	0	0	0	O
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	17	0	4	0	0	0	21	21	0	2,550	2,550
Underground mines	0	0	0	0	0	0	0	0	0	0	0	q
Other facilities	0	0	0	0	0	0	0	0	0	0	0	O
Totals	0	17	0	4	0	0	0	21	21	0	2,550	2,550
Average number of peri							tion si	tes) .	• • • • • •			
Number of exploration perm	its on S	tate and	private la	ands:	0		On	Fede	ral lands:		0	c
Number of exploration notice	es on S	tate and p	orivate la	nds: .	43	43	On	Fede	eral 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.												
 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. Includes only exploration activities regulated by the State pursuant to a cooperative agreement with OSM or by OSM pursuant to Federal lands program. Excludes exploration regulated by the Bureau of Land Management. Inspectable Units includes multiple permits that have been grouped together as one unit for inspection frequency purposes by some content of the preceding categories and inspectable unit may include lands in more than one of the preceding categories. 												
State programs.	muitip	re permit	o urat na	ve occii	grouped	ogenie	i as one	unnt	ioi inspect	wii iicqt	ione y pur	poses by som

TABLE 3

STATE PERMITTING ACTIVITY (As of September 30, 2000)

Type of	Surface mines		Underground mines		Other facilities			Totals				
application	App. Rec.	IssuedI	su k eaches	App. Rec.	Issued	Acres ^A	App. Rec.	Issued	Acres	App. Rec.	Issued	Acres
New permits	2	1	2,700	N/A	N/A	N/A	1	0	0	3	1	2,700
Renewals	6	4	25,584	N/A	N/A	N/A	0	0	0	6	4	25,584
Incidental boundary revisions		1	107		N/A	N/A		0	0		1	107
Revisions (exclusive of incidental boundary revisions)		259			N/A			0			259	
Transfers, sales and assignments of permit rights	0	0		N/A	N/A		0	0		0	0	
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	8	308	28,391	N/A	N/A	N/A	1	0	0	9	308	28,391

OPTIONAL - Number of midterm permit reviews completed that are not reported as revisions ____5

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

					OF	F-SITE	E IMPAC	CTS						
RESOURCES AFFECTED				People		Land			Water			Structures		
DEGREE	OF IMPACT		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF	Blasting													
IMPACT	Land Stability	3					1			2				
AND TOTAL NUMBER OF	Hydrology													
EACH TYPE	Encroachment													
	Other													
	Total	3					1			2				
	OF	F-SITE	IMPAC	TS ON BO	OND FO	RFEITU	JRE SITES	S The	re are no	bond forfe	iture site	es.	•	
RESOU	JRCES AFFECTE	ED		People			Land			Water			Structure	S
DEG	REE OF IMPACT		minor	moderate	major	minor	moderate	major	minor	moderate	major	minor	moderate	major
TYPE OF	Blasting													
IMPACT	Land Stability													
AND TOTAL NUMBER OF	Hydrology													
EACH TYPE	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	9340.84
Phase II	'Surface stability 'Establishment of vegetation	6169.00
Phase III	'Post-mining land use/productivity restored 'Successful permanent vegetation 'Groundwater recharge, quality and quantity restored 'Surface water quality and quantity restored	456.45
	Bonded Acreage Status ^A	
	Total number of bonded acres at end of last review period (September 30, 1999) ^B	134290.00
	Total number of acres bonded during this evaluation year	9549.00
	Number of acres bonded during this evaluation year that are considered remining, if available	0.00
	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).

SUMMARY OF MINING AND RECLAMATION RESULTS October 1, 1999 to September 30, 2000

Reclamation Activity	Acreage
Backfilled/Graded to AOC and drainage reestablished	9,340.84
Topsoil Replaced	6,169.00
Vegetation Reestablished	456.45

Reclaimed Land Use	Acreage	Reclaimed Land Use	Acreage
Cropland	0	Developed Water Resources	33.11
Pasture/Hayland	187.68	Public Utilities	0
Grazingland	0	Industrial/Commercial	208.60
Forestry	0	Recreation	0
Residential	0	Remined	0
Fish and Wildlife Habitat	27.06	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	

STATE BOND FORFEITURE ACTIVITY (Permanent Program Permits)

	Sites	Dollars	Acres
Bonds forfeited as of September 30, 1999	None		
Bonds forfeited during EY 00	None		
Forfeited bonds collected as September 30, 1999	None		
Forfeited bonds collected during EY 2000	None		
Forfeiture sites reclaimed during EY 2000	None		
Forfeiture sites repermitted during EY 2000	None		
Forfeiture sites unreclaimed as of September 30, 2000	None		
Excess reclamation costs recovered from permittee	None		
Excess forfeiture proceeds returned to permittee	None		

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

^B Cost of reclamation, excluding general administrative expenses.

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

Function	EY 2000
Regulatory program	
Permit review	16.00
Inspection	13.80
Other (administrative, fiscal, personnel, etc.)	11.00
Sub-total	40.80
AML Program	9.00
TOTAL	49.80

TABLE 9

FUNDS GRANTED TO TEXAS BY OSM								
	pe of rant	Federal funds awarded	Federal funding as a percentage of total program costs					
Regulatory	Administration and enforcement	\$1,441,853.00	50%					
	Small operator assistance	\$0.00	100%					
Regulatory Totals		\$1,441,853.00						
AMLR	Administration and construction	\$4,334,515.00	100%					
AMLR Total		\$4,334,515.00						
Total Regulatory and AMLR		\$5,776,368.00						

ABANDONED MINE LAND RECLAMATION NEEDS AND ACCOMPLISHMENTS SINCE PROGRAM APPROVAL

Problem nature	Unit	Coal-related problems			Noncoal-related problems		
		Abatement status			T	Abatement status	
		Unfunded	Funded	Complete d	Total	Funded	Complete d
Priority 1 & 2 (Protection of pu	blic health, safety	and general welfa	are)	1			1
Clogged streams	Miles						
Clogged stream lands	Acres						
Dangerous highwalls	Lin Feet			3,285	3,285	3,500	38,830
Dangerous impoundments	Count						
Dangerous piles and	Acres			987	987		474
Dangerous slides	Acres						
Gases: hazardous/explosive	County						
Underground mine fires	Acres						
Hazardous equip. & facilities	Count						
Hazardous water bodies	Count			5	5	1	9
Industrial/residential waste	Acres						
Portals	Count			6	6		52
Polluted water: agric. & indust.	Count						
Polluted water: human	Count						
Subsidence	Acres			6	6		
Surface burning	Acres						
Vertical opening	Count			21	21		314
Priority 3 (Environmental restor	ration)						
Spoil areas	Acres			152	152	88	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

All changes that were suggested by RCT have been made.