

GAO

Report to the Chairman, Committee on
Energy and Natural Resources, U.S.
Senate

July 1988

MINERAL REVENUES

Information on Interior's Royalty Management Program



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United States
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Resources, Community, and
Economic Development Division

B-228947

July 22, 1988

The Honorable J. Bennett Johnston
Chairman, Committee on Energy and
Natural Resources
United States Senate

Dear Mr. Chairman:

This report responds to your request for information about the Department of the Interior's management of royalty collections and disbursements, particularly for offshore mineral leases, as performed by the Minerals Management Service (MMS). Specifically, it includes information on (1) collection and disbursement of royalties and other revenues from mineral leases on federal and Indian lands, (2) MMS mechanisms, such as audits, that help ensure that proper collections and disbursements are made, and (3) MMS initiatives to help strengthen its royalty management program.

MMS is required to ensure accurate and timely determination, collection, accounting for, and disbursement of revenues from mineral leases on federal and Indian lands. Each lease has at least one payor who determines what is owed, remits payment, and submits a payor report. When MMS receives a payment, the money is credited to the appropriate payor account, and the payor report is processed to determine the appropriate disbursement of revenues. Collection and disbursement data are unequal at any time because payments and related payor reports are processed separately.

Indians receive 100 percent of revenues from leases on their lands. States generally receive 50 percent of revenues from onshore leases, other than those on Indian lands. Revenues from offshore leases are not shared, except for leases within 3 miles of states' seaward boundaries, as described in section 8(g) of the Outer Continental Shelf Lands Act as amended. States receive 27 percent of revenues from the 8(g) portions of offshore leases.

Results in Brief

In fiscal year 1987, MMS collected \$3.72 billion and made regular disbursements of \$3.69 billion in revenues from federal onshore, Indian, and offshore mineral leases. In addition, MMS disbursed \$2.85 billion in previously escrowed offshore 8(g) revenues.

MMS audits payors to help ensure that proper collections have been made. Interior's Inspector General reported in April 1988, however, that less than 2 percent of the leases at the companies included in Interior's review had been comprehensively audited by MMS in fiscal years 1986 and 1987, and that this was inadequate. MMS responded to the Inspector General that it had developed an audit plan and that its recent audit strategy directed that comprehensive approaches be used in its 75 ongoing company audits. According to the Inspector General's staff, the strategy appears to incorporate the Inspector General's recommendations to improve audit coverage. MMS also uses various techniques to help ensure that supporting documents for collections are accurate, timely, and in accordance with rules and regulations. For example, MMS automated Production Accounting and Auditing System, which include all offshore leases and about 6 percent of the onshore leases, identifies underpayment or overpayment of royalties by comparing production volumes reported by lease operators with those reported as sold by royalty payors.

MMS has initiated several actions to improve its royalty management program. For example, MMS began systematically reconciling payor account balances by examining them in detail. MMS also established a systems improvement project to implement computer system enhancements and other operations improvements and contracted with Price Waterhouse to provide recommendations to strengthen its accounting controls and auditing processes.

Scope and Methodology

To obtain information for this report, we interviewed MMS Royalty Management Program officials and reviewed documents related to the royalty management program. We also obtained information and views from state and tribal auditors, Interior's Inspector General staff, and Price Waterhouse consultants. We did not test the accuracy of MMS computer-generated data because of an ongoing MMS contract with Price Waterhouse. The contract assesses and provides advice on improving the strength of internal controls, royalty document-processing operations, and agency compliance with generally accepted accounting principles. Appendix V describes our scope and methodology in greater detail.


Views of MMS Officials

The Director of the Minerals Management Service and other MMS officials commented orally on a draft of this report and generally agreed with the information presented. They suggested editorial and technical changes, which have been incorporated where appropriate.

Appendix I provides background on MMS' Royalty Management Program and the processes by which collections and disbursements are made. Appendix II contains information about fiscal year 1986 and 1987 collections and disbursements. Appendix III describes some of the mechanisms that MMS uses to help ensure that it collects and disburses the moneys it should, and provides results of those efforts. Finally, appendix IV discusses some MMS initiatives to help ensure that it is collecting and disbursing mineral revenues properly.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. If you have any questions, please contact me at (202) 275-7756. Major contributors to this report are listed in appendix VI.

Sincerely yours,

A handwritten signature in cursive script that reads "James Duffus III". The signature is written in black ink and is positioned above the typed name.

James Duffus III
Associate Director

Contents

Letter

Appendix I
Background Royalty Management Program

Appendix II
Collections and Disbursements Collections Disbursements 1

Appendix III
Mechanisms to Help MMS Ensure That Proper Collections and Disbursements Are Made Audits 1
Exception Processing 1
Automated Error Edits 1
Billed Receivables 2

Appendix IV
MMS Initiatives to Help Strengthen Assurances That Proper Collections and Disbursements Are Made Reconciliation of Payor Accounts 2
Systems Improvement Project 2
Assessment and Advice by Price Waterhouse 2

Appendix V
Objectives, Scope, and Methodology 2

Appendix VI
Major Contributors to This Report Resources, Community, and Economic Development 3
Division, Washington, D.C. 3
Denver Regional Office 3

Tables

Table I.1: Organizations Responsible for Leasing Federal and Indian Lands and Collecting and Disbursing Revenues From Mineral Leases on These Lands	6
Table II.1: Disbursements for Fiscal Years 1986 and 1987	11
Table III.1: Additional Royalties Collected by Production Accounting and Auditing System Exception Processing: Fiscal Years 1986 and 1987	17
Table III.2: Fiscal Years 1986 and 1987 Interest, Liquidated Damages, and Additional Royalties Collected Through Auditing and Financial System Exception Processing	18
Table III.3: Lines of Data and Dollars Processed by the Auditing and Financial System in February 1988	19
Table III.4: Billed Receivables at the End of Fiscal Years 1986 and 1987	22

Figure

Figure II.1: Fiscal Years 1986 and 1987 Royalties, Rents, and Bonuses From Onshore, Offshore, and 8(g) Leases, as Reported by Payors	10
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Abbreviations

BLM	Bureau of Land Management
GAO	General Accounting Office
IG	Inspector General
MMS	Minerals Management Service
OCS	Outer Continental Shelf

Background

The Department of the Interior is responsible for leasing federal and Indian lands and collecting, accounting for, and disbursing revenues from mineral leases on these lands. (See table I.1.) Interior's Bureau of Land Management (BLM) generally leases and administers federal onshore leases, even where other agencies, such as the U.S. Forest Service or U.S. Army Corps of Engineers, have primary jurisdiction. Interior's Minerals Management Service (MMS), created in 1982, has two functional subdivisions: the Offshore Minerals Management Program for offshore leasing activities and the Royalty Management Program for collecting, accounting for, and disbursing revenues from mineral leases on federal and Indian lands. This report addresses activities within the Royalty Management Program.

Table I.1: Organizations Responsible for Leasing Federal and Indian Lands and Collecting and Disbursing Revenues From Mineral Leases on These Lands

Type of lands	Leasing	Revenue collection or disbursement
Federal:		
Offshore	MMS	MMS
Onshore	BLM	MMS
Indian	BLM/BIA ^a	MMS/B

^aBureau of Indian Affairs.

Royalty Management Program

The Federal Oil and Gas Royalty Management Act of 1982; the Outer Continental Shelf (OCS) Lands Act, as amended; the Minerals Leasing Act of 1920; the Mineral Leasing Act for Acquired Lands of 1947; and other acts require Interior to ensure accurate and timely determination, collection, accounting for, and disbursement of revenues from mineral leases. Revenues include

- royalties, which are amounts paid by lessees for minerals produced, usually calculated as a percentage of their value;
- rents, which are amounts paid by lessees for leases which are not producing, calculated at a rate-per-acre basis; and
- bonus bids, which are payments made to acquire leases over and above administrative fees.

MMS' Royalty Management Program has over 600 staff. All accounting operations and most other personnel are located in Lakewood, Colorado. Auditors from the Royalty Compliance Division, which audits royalty payors, are located in regional offices in Lakewood and in Dallas and Houston, Texas; and at 13 residency audit sites at major royalty payor companies. The program's other divisions include

- the Royalty Valuation and Standards Division, which handles matters related to the valuation of minerals for royalty purposes;
- the Fiscal Accounting Division, which operates the two automated revenue-accounting systems and controls revenues received by MMS;
- the Production Accounting Division, which operates the automated system which records minerals production; and
- the Systems Management Division, which develops automated systems and manages the data.

Mineral royalty payors—oil, gas, and coal companies, for example—make royalty payments to MMS based on the value of the minerals produced. Payors and MMS are generally governed by requirements stated in laws, federal regulations, and Interior orders. Royalty payments are due at the end of the month following the month during which minerals are produced. Each lease has at least one payor who determines what is owed, remits a royalty payment, and submits a royalty report.¹

When MMS receives a royalty payment, it credits the moneys to the payor's account. Although a payment may apply to multiple leases, MMS records on the payor's account only the total paid. It does not record whether onshore or offshore lands were involved, or whether oil, gas, or solid minerals were sold. MMS separately processes moneys received and payor reports which show the basis for the amounts paid.

Various federal laws require that the federal government share mineral revenues with states and Indians. States generally receive 50 percent and Indians 100 percent of onshore revenues collected, including interest received by MMS from late royalty payments for most onshore oil and gas leases. Revenues from offshore leases are not shared, except for those collected on land within 3 miles of states' seaward boundaries, as described in section 8(g) of the OCS Lands Act, as amended. Most 8(g) leases are only partly within the 8(g) boundaries. States receive 27 percent of revenues collected from the 8(g) portions of such leases. The federal share of revenues is disbursed to the U.S. Treasury's General Fund and to other designated funds, such as the Land and Water Conservation Fund, for the acquisition and development of land and water areas and facilities, and the Historic Preservation Fund, for projects such as preservation of historic properties.

¹Some leases have more than one payor. For example, several different companies may sell minerals produced from a single lease.

The royalty disbursement process involves two phases: distribution and disbursement. MMS' Auditing and Financial System distribution cycle identifies recipients by checking payor reports against information stored about each lease in the system. Then, when MMS has determined that sufficient funds are available in a payor's account to cover the disbursement, it authorizes the Treasury to disburse funds to recipients. Hereafter, when this report refers to MMS disbursements, it refers to this two-step process.

MMS must disburse revenues from

- onshore leases by the last business day of the month in which moneys collected are warranted (acknowledged as received) by the U.S. Treasury;
- offshore, including 8(g), leases by the last business day of the month following the month in which moneys are deposited in the Treasury; and
- Indian lands no later than the last business day of the month in which MMS receives payment.

Several mechanisms help ensure that royalties are correctly determined, collected, and disbursed, including (1) audits of payor-reported data, which MMS accepts subject to audit verification, (2) exception processing, which tests the reasonableness of reported data by comparing it with information stored in MMS systems about the leases involved, and (3) automated edits, which examine each line of data for errors shortly after payor reports are input into the Auditing and Financial System. These mechanisms are discussed in section 3.

Collections and Disbursements

In fiscal year 1987, MMS collected \$3.72 billion and disbursed \$3.69 billion in revenues from federal and Indian mineral leases.¹ MMS collects royalties, rents, bonuses, interest, and penalties from payors. Disbursements, on the other hand, are payments which MMS authorizes (1) the Treasury to make to the General Fund, other federal agencies, and state governments and (2) BIA to make to Indians.

Collection and disbursement data are unequal at any time. This imbalance occurs because payments and payor reports sometimes do not arrive simultaneously; they are sometimes different; they are processed and tabulated separately; and interruptions in processing may occur for various reasons, such as error correction and appeals.

Collections

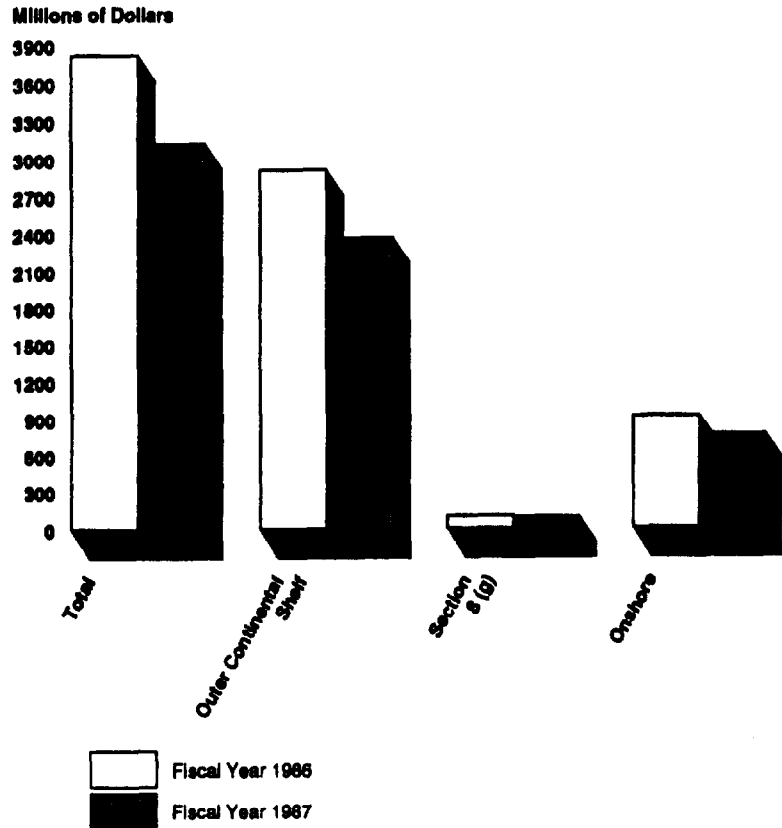
MMS collection statistics are based on two different sources—moneys received and amounts reported by payors as due to MMS on their monthly payor reports. MMS credits moneys received to payor accounts without differentiating the types of minerals involved or sources of production. Therefore, actual collections can only be reported as total moneys received. MMS bases statistics about the types of leases (onshore, offshore, or offshore 8(g)) from which collections are made on payor reports. Because payments received from payors do not always match with amounts shown as due on payor reports, and because there may be timing differences and interruptions in processing payments and reports, such data are not interchangeable.

Collections declined from fiscal year 1986 to fiscal year 1987. MMS officials attribute the decline primarily to lower oil and gas prices. Total collections for fiscal year 1986 were \$4.2 billion, which included \$186 million collected through audits, exception processing, and other billings. For fiscal year 1987, collections were \$3.7 billion, including nearly \$90 million from audits, exception processing, and other billings.

When payments arrive, MMS does not distinguish whether moneys are collected from onshore, offshore, or 8(g) leases. However, MMS staff generated the following data for us on the basis of payor reports. (See fig. II.1.)

¹In addition, MMS disbursed \$2.848 billion accumulated in escrow between 1978 and 1986, awaiting federal and state agreement about disbursement of 8(g) revenues. In April 1986 the Congress ordered disbursement of 8(g) moneys.

Figure II.1: Fiscal Years 1986 and 1987 Royalties, Rents, and Bonuses From Onshore, Offshore, and 8(g) Leases, as Reported by Payors



Disbursements

MMS must disburse all the funds it collects, including money from initial payments and assessments resulting from error identification, exception processing, and audits. Disbursements to states include sharing of interest collected on late payments for most onshore oil and gas revenues and interest on late disbursements by MMS of most onshore moneys. MMS disburses payments to various recipients, including the General Fund of the U.S. Treasury, BIA, other federal agencies, and states. Disbursements to states and Indians are accompanied by an Explanation of Payments, which shows the type of payment being made, the period covered, the source of payment, production amounts, the unit value, and the royalty rate.

Similar to collections, disbursements declined from fiscal year 1986 to fiscal year 1987. Again, MMS officials attribute the decline primarily to lower oil and gas prices. (See table II.1.)

Table II.1: Disbursements for Fiscal Years 1986 and 1987

Dollars in millions				
Type of disbursement	Fiscal year 1986		Fiscal year 1987	
Regular:				
Federal:				
General fund	\$2,205		\$1,862	
Other ^a	1,625		1,369	
State:				
Onshore	422		375	
Offshore 8(g)	3		22	
Indian	136	4,391	67	3,695
8(g) settlement:				
Federal	2,954		2,188	
State	894 ^b	3,848	660 ^c	2,848
Total		\$8,239		\$6,543

^aIncludes disbursements to federal land management agencies, to the Internal Revenue Service for windfall profits tax, and to the Land and Water Conservation Fund and the Historic Preservation Fund.

^bRepresents initial 8(g) settlement payments to six states in April 1986.

^cIncludes the first of 15 yearly 8(g) settlement payouts made in April 1987 and Louisiana's initial 8(g) settlement payment of \$640.7 million on October 1, 1986.

Interest

MMS must pass on interest it collects on late payments from onshore leases in the same proportions that it shares royalties. In addition, except for royalties on 8(g) offshore leases, it must pay interest to states on moneys that it disburses late. MMS is required to invest moneys from 8(g) leases awaiting disbursement and pay states the interest earned. States do not receive interest on 8(g) revenues because, according to Interior and MMS officials, funds are disbursed so rapidly after they are identified as 8(g) funds that such short-term investment is not possible.² However, Interior's Inspector General (IG) has recommended procedures that would enable MMS to pay interest on these moneys.³

²When 8(g) leases were established by law, MMS placed revenues associated with those leases into escrow until the federal and state share of those revenues could be established. When MMS disbursed the escrowed moneys, accumulated interest was also disbursed to the states.

³Mission Accomplishment, Fiscal Accounting Division, Royalty Management Program, Minerals Management Service, U.S. Department of the Interior Office of Inspector General, 88-61, Apr. 1988.

Interest Collected From Payors

MMS shares interest that it collects from late payments on most onshore oil and gas leases with the states and Indians, as required by the Federal Oil and Gas Royalty Management Act. In addition to interest paid on initial late payments of royalties, MMS assesses interest on amounts subsequently determined to be due. MMS disbursed about \$3.2 million in such interest in fiscal year 1986 and about \$3.9 million in fiscal year 1987.

MMS does not, however, share interest collected on late payments on 8(g) leases because the OCS Lands Act, as amended, does not contain provisions for MMS to do so. MMS cannot share interest unless specifically provided for by law. According to an official in MMS' Fiscal Accounting Division, if states had been receiving a share of such interest, they would have received \$13,800 in fiscal year 1986 and \$43,559 in fiscal year 1987.

Interest on Late Disbursements

The 1982 act requires MMS to pay states interest on late disbursements of revenues collected from most onshore leases. Interest must be paid on funds not disbursed by the last business day of the month in which such funds are warranted (acknowledged as received) by the U.S. Treasury. In addition, MMS must pay interest on funds held while awaiting resolution of disputes with payors. MMS, however, does not pay interest to states for late disbursement of revenues collected from offshore leases because the OCS Lands Act does not authorize it to do so.

In fiscal year 1986, MMS paid states \$295,859 in interest on late disbursements. In fiscal year 1987, MMS paid \$388,873 in interest, which included a \$137,907 adjustment for fiscal year 1986. Additional interest accrues because MMS must await either an appropriation for interest payments to states or authorization to reprogram funds for such purposes. As a result, MMS paid \$110,791 in interest that accrued on interest that it owed the states during fiscal years 1984 through 1987.

Interest on Invested Revenues

The OCS Lands Act, as amended, requires that (1) MMS deposit revenues from offshore 8(g) leases with Treasury, (2) Treasury invest those funds while they are awaiting disbursement, and (3) the interest earnings from investment be shared with the states. According to MMS and Interior Solicitor's Office officials, because MMS does not know whether moneys received from payors are for onshore, offshore, or 8(g) leases until MMS has processed the payor reports, all incoming royalties are deposited into a Treasury suspense account until they are identified.

Once they are identified and Treasury is notified to transfer the funds to a disbursement account, Treasury disburses the funds immediately. The Chief of MMS' Royalty Accounting Branch said that under current procedures, it is impossible to invest identified 8(g) funds. Therefore, states have received no interest on 8(g) revenues.

In an April 1988 report, Interior's IG recommended that because the act requires investment of 8(g) moneys and disbursement of interest, MMS should either (1) require payors to separately report and pay 8(g) revenues and deposit the states' shares of these revenues into an interest-bearing account or (2) deposit an estimated amount of states' shares of 8(g) revenues into interest-earning Treasury securities, which could be adjusted once actual shares are determined.⁴ MMS disagreed with the first alternative because of the reporting burden that would be placed on payors and did not explain its objection to the second alternative.

⁴See footnote 3.

Mechanisms to Help MMS Ensure That Proper Collections and Disbursements Are Made

MMS uses several mechanisms to help ensure that it properly collects and disburses revenues. Audits of royalty payors and exception processing of payor reports are performed to help ensure that proper royalty payments are made. However, Interior's IG reported in April 1988 that MMS' audit coverage was inadequate.¹ Exception processing helps MMS identify reported information that may not be reasonable, and automated error edits help ensure that information on payor reports is correct. Chiefly as a result of audits, exception processing, and edits, MMS bills payors for additional moneys owed to MMS.

Audits

As the Internal Revenue Service does, MMS also accepts data submitted by payors, subject to audit. MMS conducts audits to help ensure that proper royalty payments are made. Because of MMS' emphasis on audits of payor companies, rather than individual leases, MMS is unable to readily say how many leases have been audited. However, as discussed below, the Interior IG reported in April 1988 that less than 2 percent of the leases at the five companies reviewed by the IG had been comprehensively audited in fiscal years 1986 and 1987; an additional 16 percent of the leases had been audited on specific issues.²

The MMS Royalty Compliance Division is responsible for royalty audits, as well as other compliance activities. The Division must complete some nondiscretionary work, such as follow-up work on prior IG audits, and review of refund requests by payors on offshore leases within specific time frames. According to MMS' audit strategy document, in the past, nondiscretionary work consumed so many audit resources, there were few remaining for planned audits of payors.³ MMS' nondiscretionary audit work fell from 85 percent in fiscal year 1986 to 75 percent in fiscal year 1987. According to the strategy document this, and expansion of the audit staff in 1987, allowed MMS to develop a strategy for audit that documents an approach to performing royalty compliance audits.

Royalty Compliance Division Scope and Staff

In 1987 the Royalty Compliance Division was responsible for ensuring the accuracy of mineral revenues collected from approximately 25,500 producing and producible leases (of which 1,541 were offshore), with

¹Mission Accomplishment, Royalty Compliance Division, Royalty Management Program, Minerals Management Service, U.S. Department of the Interior Office of Inspector General, 88-43, Apr. 1988.

²See footnote 1.

³This nondiscretionary audit work includes resolution of IG audit findings, review of offshore refund requests, and account reconciliations.

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

2,000 payors. (Payors often report and remit royalties on multiple onshore and/or offshore leases. In addition, one lease may have multiple payors.) Generally, MMS auditors review payor company systems and only examine selected aspects of sample leases.

In June 1987 MMS' Royalty Compliance Division was composed of 164 auditors, of whom 21 had graduate degrees and 33 were Certified Public Accountants. MMS hired 50 additional auditors in 1987.

In addition, the Federal Oil and Gas Royalty Management Act provides for sharing information and auditing, inspection, and investigation authorities and responsibilities with states and Indian tribes through cooperative agreements and delegation. Nine states and three tribes have such arrangements with MMS to audit minerals revenues.

**Past Audits of Offshore
Leases**

Because the Royalty Compliance Division usually audits payor companies rather than individual leases, it is unable to readily identify how many offshore leases it has audited. Division staff said that the Division performed reviews on some aspects of 1,250 leases from 1981 to November 1987, but those 1,250 include some leases reviewed more than once.

According to the Lakewood Compliance Office director, the number of audit findings is generally fewer for offshore than for onshore payors, in part because offshore payors are generally large companies with sophisticated systems that promote accuracy. In addition, MMS has resident auditors at 13 of these large companies whose presence helps ensure accuracy of payments. The director told us, however, that because of the size of many offshore operations, an offshore audit finding may be for a larger dollar amount than a similar onshore finding.

In fiscal year 1986, offshore leases accounted for 20 percent of the \$77.6 million in additional royalties and interest collected as a result of audits. In fiscal year 1987, 45 percent of the total \$38.4 million in additional royalties and interest resulted from audits of offshore leases. The Royalty Compliance Division Director said that the decrease in additional royalties and interest reflects an increase in appeals, and in surety bonds and letters of credit posted in lieu of payment while awaiting the outcome of appeals. There are 40 producing leases covered under section 8(g) of the OCS Lands Act, and one audit was conducted on an 8(g) lease; the finding is under appeal.

Strategy for Audit

Additional auditor staff and a reduction in nondiscretionary work has allowed MMS to develop a strategy for a systematic approach to performing royalty compliance audits. The 6-year strategy, dated April 1988, complements the Federal Oil and Gas Royalty Management Act's 6-year record retention requirement, and targets companies paying the largest amounts of royalties for audit while calling for sampling of smaller payors. It also forecasts staff-year allocations for discretionary and non-discretionary work. In addition, the Royalty Compliance Division has separately developed a schedule of when each targeted company will be audited.

As mentioned earlier, MMS shares audit authority with nine states and three Indian tribes through cooperative agreements and delegation. State and tribal auditors met with MMS managers to provide input to the strategy, including the staff levels that they expect to contribute for planning implementation and forecasts of when they will audit specific companies. These auditors expressed satisfaction that their views were heeded by MMS, and said that the strategy was a positive step toward effective audit coverage.

**Strategy for Auditing Offshore
Leases**

The strategy for auditing offshore leases prescribes covering 99 percent of offshore revenues. Specifically, it provides for

- ongoing audits by MMS resident auditors at the 13 companies which pay 75 percent of offshore oil and gas revenues,
- audits on a 6-year cycle of other major payor companies that pay 24 percent of offshore oil and gas revenues,
- selective audits of the payor companies that account for the remaining 1 percent of offshore oil and gas revenues,
- resolution of referrals from exception processing programs and from the MMS offshore operations staff, and
- audits of offshore 8(g) leases with audit participation by affected states as appropriate.

**IG Review of Audit
Coverage and Reaction to
the Strategy for Audit**

The Interior IG assessed the Royalty Compliance Division as part of a comprehensive Royalty Management Program review. Its April 1988 report stated that MMS' audit coverage was inadequate.⁴ The IG found that MMS had conducted comprehensive audits for less than 2 percent of all leases at the five residency locations that it reviewed for fiscal years

⁴See footnote 1.

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

1986 and 1987 and had done specific issue-based audits on an additional 16 percent of the leases. The report noted that 38 percent of MMS' resources had been spent on certain nondiscretionary work. In addition, the report noted that MMS had neither developed an audit plan nor allocated resources according to lease revenues. MMS responded to the IG that an audit plan had been developed and that its audit strategy directed that comprehensive approaches be used in the 75 ongoing company audits. Subsequently, IG staff told us that MMS has made considerable progress toward developing an adequate audit plan.

Exception Processing

Exception processing helps ensure that proper royalty payments are made by checking whether payor reports are accurate, timely, and in accordance with rules and regulations. Exception processing for MMS' Production Accounting and Auditing System generated additional royalties of about \$13.44 million for fiscal years 1986 and 1987. Exception processing for MMS' Auditing and Financial System generated additional royalties and interest, and liquidated damages of about \$17.15 million for fiscal years 1986 and 1987.

Production Accounting and Auditing System

MMS' automated Production Accounting and Auditing System exception processing identifies underpayment or overpayment of royalties by comparing production volumes reported by lease operators with those reported as sold by payors. Discrepancies are resolved by notifying the payors and/or operators, who are required to submit corrected reports and additional royalty payments if warranted. The system presently includes all offshore leases, 6 percent of the onshore oil and gas leases, and all solid mineral leases.

Additional royalties for fiscal years 1986 and 1987, identified and collected as a result of Production Accounting and Auditing System exception processing, are shown in table III.1.

Table III.1: Additional Royalties Collected by Production Accounting and Auditing System Exception Processing: Fiscal Years 1986 and 1987

Dollars in thousands		
Source of collection	Fiscal years	
	1986	1987
Onshore	\$123	\$153
Offshore 8(g)	365	582
Other Offshore	5,987	6,231
Total	\$6,475	\$6,966

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

Auditing and Financial System

Auditing and Financial System exception processing consists of computer programs that match “expected” results with data submitted by royalty payors. It identifies payment and reporting irregularities on federal and Indian leases. For example, exception processing in this system notes when a payment is received late and bills the payor for interest.

Interest, liquidated damages, and additional royalties are collected as a result of Auditing and Financial System exception processing. (See table III.2.) However, MMS does not fully differentiate between amounts collected from onshore, offshore, or 8(g) leases.

Table III.2: Fiscal Years 1986 and 1987 Interest, Liquidated Damages, and Additional Royalties Collected Through Auditing and Financial System Exception Processing

Category	Fiscal years	
	1986	1987
Interest	\$5,878	\$7,666
Liquidated damages for nonrespondents ^a	469	(38)
Additional royalties from underpayment ^b	93	3,433
Total	\$6,440	\$10,711

^aDuring fiscal year 1987, MMS credited or refunded all or part of 1,800 nonrespondent bills issued during fiscal year 1986.

^bAbout 95 percent is identified manually.

Automated Error Edits

In order to help ensure that information on the payor reports is correct, each line of data undergoes automated edits shortly after it is entered into the Auditing and Financial System. MMS differentiates between what it terms “fatal errors” and “warning errors.” Lines of data without errors and lines with warning errors are accepted, allowing distribution of associated funds. Lines of data that require resolution by MMS personnel before funds can be distributed are termed “fatal errors” and are rejected. MMS assesses payors between \$3 and \$10 per line for rejected lines because of fatal errors, depending on the volume of errors and conditions under which they occur. Assessment begins after 5 percent of the lines in one month, under one payor code, have fatal errors. If a payor has a good reporting history—i.e., the payor has not been assessed for errors in the past 6 months—a warning letter, rather than an assessment, is issued.

In fiscal year 1987, the Auditing and Financial System processed nearly 2.4 million lines of oil and gas data. Seventy-three percent of the total had no errors, 5 percent had fatal errors, and 22 percent had warning errors.

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

MMS does not retain on-line automated historical data that differentiate errors associated with onshore, offshore, and 8(g) leases. However, we reviewed current data for the month of February 1988, which differentiated errors by type of lease. Lines with errors can be associated either with instances where payors owe money (positive lines), or where payors claim MMS owes them money (negative lines). Thus, there are both positive and negative values of lines processed and rejected. Table III.3 shows the total, or absolute value of both positive and negative lines of data, and the net value of those lines.

Table III.3: Lines of Data and Dollars Processed by the Auditing and Financial System in February 1988*

Lines of data	Onshore		Offshore		8(g)	
	Number	Percent of total	Number	Percent of total	Number	Percent of total
Total processed:						
Lines	159,901.0	77	48,602.0	23	1,161.0	0.6
Absolute dollars (millions)	205.0	30	482.8	70	32.8	4.8
Net dollars (millions)	84.7	30	202.2	70	6.8	2.4
With fatal errors:						
Lines	6,396.0	82	1,394.0	18	29.00	.4
Absolute dollars (millions)	10.4	37	18.0	63	.12	.4
Net dollars (millions)	5.2	93	.4	7	-.02	-.4
With warning errors:						
Lines	31,681.0	76	10,174.0	24	460.0	1.1
Absolute dollars (millions)	84.7	42	115.1	58	4.9	2.5
Net dollars (millions)	30.7	40	45.3	60	1.4	1.8

*Percentages do not add to 100 percent because 8(g) data are included in offshore data.

Because lines contain as many as 17 data fields subject to error edit, each line may contain multiple errors. The total of 49,645 lines with warning or fatal errors contained a total of 76,433 errors, or an average of more than 1.5 errors per line. Nineteen percent of the warning errors and 16 percent of the fatal errors were for payments from offshore leases, and 1 percent of warning and 0.4 percent of fatal errors were from 8(g) leases.

MMS differentiates between fatal and warning errors because agency managers said they had insufficient resources to deal with all errors and still make timely disbursements. Data accepted with warning errors are judged by MMS to contain sufficient information to permit distribution of

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

revenues but are noted because less critical data elements are inconsistent, incorrect, or do not meet expectations on the basis of system reference data about the leases. MMS generally does not take any action on warning errors. For example, there have been no changes since December 1985 in the number of error codes, nor in whether errors are designated as warning or fatal. Both MMS' Lakewood Evaluation Unit (internal review) and Interior's IG have concluded that MMS could do more to increase error edit effectiveness.

In 1987 the Lakewood Evaluation Unit found that MMS currently

- spends computer resources on warning errors without realizing any apparent benefit,
- forgoes the opportunity for early detection of certain underpaid royalties,
- permits retention of errors in the database, and
- exposes the agency to criticism.

In addition, the Evaluation Unit Director said that assessments against payors for erroneous reporting would stimulate payors to correct problems, with only short-term impact on MMS' resources.

An April 1988 IG report found that uncorrected errors could generate exceptions that would require resolution.⁵ Another April 1988 IG report stated that this would impede Production Accounting and Auditing System comparison of production data with Auditing and Financial System sales data, which is discussed below.⁶ In addition, by not treating warning errors the same as fatal errors, MMS forgoes assessments against payors. MMS is working with Price Waterhouse to develop a methodology to systematically prioritize error edits, so that MMS can apply its resources to edits most critical to proper royalty collection.

Billed Receivables

Billed receivables are additional moneys owed to MMS that result chiefly from audits, exception processing, and royalty-in-kind billings.⁷ Billed

⁵Mission Accomplishment, Production Accounting Division, Royalty Management Program, Minerals Management Service, U.S. Department of the Interior Office of Inspector General, 88-62, Apr. 1988.

⁶Mission Accomplishment, Fiscal Accounting Division, Royalty Management Program, Minerals Management Service, U.S. Department of the Interior Office of Inspector General, 88-61, Apr. 1988.

⁷Some lease operators are required to pay royalties by transferring equivalent amounts of oil to federally approved refineries. MMS then bills refiners for the "royalty oil" made available to them.

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

receivables can include additional royalties, as well as interest, penalties, and damages. MMS' Payor Accounting Branch is responsible for issuing and managing these bills.

Billed receivables grew from \$100.4 million at the end of fiscal year 1986 to \$186.4 million by the end of fiscal year 1987. MMS officials told us that there were two major reasons for the increases. First, excluding royalty-in-kind billings, new billings grew by about \$61 million in fiscal year 1987, including an increase in the dollar amount of audit and exception processing bills issued. Second, as a result of a 1986 Interior Board of Land Appeals decision, MMS was required to accept surety bonds and letters of credit guaranteeing payment for billings that are under appeal by payors.⁸ Previously, most companies paid appealed amounts, and then requested refunds if their appeals were granted. During fiscal year 1986, about 56 percent of the value of exception processing bills and 30 to 40 percent of amounts outstanding for audit bills were appealed. In fiscal year 1987, 33 percent of exception processing and 50 percent of the audit bills were appealed. Meanwhile, the amounts appealed continue to be listed as billed receivables, and companies are charged interest on unpaid balances if appeals are lost.

MMS does not maintain separate data for 8(g) receivables, which are included in offshore data. However, the data they could provide did not indicate any significant differences in those categories compared with total receivables. Outstanding receivables from offshore leases are about 68 percent of the total. Those associated with 8(g) leases are less than 1 percent. Current and noncurrent billed receivables for fiscal years 1986 and 1987 are shown in table III.4.

⁸IBLA 85-783, Jan. 30, 1986.

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

**Table III.4: Billed Receivables at the End
of Fiscal Years 1986 and 1987**

Dollars in Thousands				
Category	Fiscal year 1986		Fiscal year 1987	
	Dollar amount outstanding	Percent of total	Dollar amount outstanding	Percent of total
Current				
Not delinquent	\$21,422	21	\$13,927	
Delinquent:				
1-90 days	7,714	8	19,850	1
91-360 days	39,237	39	78,594	4
Over 360 days	28,360	28	72,918	3
Total^a	75,311	75	171,362	9
Noncurrent (deferred) ^b	3,638	4	1,058	
Total	\$100,371	100	\$186,347	10

^aEighty-six percent of the delinquent amounts were covered by sureties and letters of credit in fiscal year 1986, and 92 percent in fiscal year 1987.

^bNoncurrent billed receivables are bills that will not become due for 365 days or more. The entire amount in this category results from deferred bonuses owed on coal and geothermal leases.

MMS has no policy regarding uncollectible billed receivables. According to the Chief of MMS' Fiscal Accounting Division, MMS is currently developing procedures to write off its uncollectible billed receivables from federal lands. Also, MMS plans to develop write-off procedures for uncollectible billed receivables related to Indian lands, as well as for small discrepancies between moneys received from payors and amounts reported as due.

Although uncollected billed receivables represent large amounts of revenue, the primary reason that these amounts are outstanding for long periods of time is because a large portion of the amount of MMS' findings is appealed by payors. (Eighty-eight percent of the total delinquent receivables at the end of fiscal year 1987 were under appeal.) The amount of billed receivables estimated to be uncollectible, however, is relatively insignificant. MMS is considering a procedural change to not classify appealed billed receivables as delinquent.

Through fiscal year 1987, the Payor Accounting Branch identified 295 delinquent bills of \$600 or less, totaling \$35,032, which should be reviewed to determine if they are potentially uncollectible. Sixty-one percent of the 295 bills (18 percent of the dollar amount) are less than

**Appendix III
Mechanisms to Help MMS Ensure That
Proper Collections and Disbursements
Are Made**

\$100. MMS' draft procedure would have MMS consider bills uncollectible if (1) the amount MMS is unable to collect is not substantial, (2) the debtor cannot be located, or (3) the costs to collect exceed the expected amount of recovery.

MMS Initiatives to Help Strengthen Assurances That Proper Collections and Disbursements Are Made

MMS has embarked on several initiatives to better ensure that collections and disbursements are made properly. Some of these initiatives include reconciling payor accounts, using a systems improvement project to implement computer system enhancements and other operations improvement initiatives, and strengthening accounting controls and auditing processes through a contract with a consulting firm, Price Waterhouse. MMS officials said that by converting the Auditing and Financial System from minicomputers to a mainframe computer system, issuing revised oil and gas valuation regulations, and reducing the backlog of nondiscretionary audit work, they have freed staff and acquired greater computer resources to allow progress on these initiatives.

Reconciliation of Payor Accounts

Payor accounts may be out of balance because of such things as unpaid or underpaid bills, misapplied cash, or changes to royalty values. In 1987 MMS began systematically reconciling payor accounts by examining them in detail to resolve any open items and by determining whether each payor owes MMS money or vice versa.

An April 1988 IG report found that 1,300 of the 2,000 active payor accounts had positive or negative balances as of December 31, 1986.¹ For example, one account had shown a \$1.7 million negative balance for over 2 years without MMS action.

The first major reconciliation was of Texaco, Inc., accounts because it had filed for bankruptcy. Although MMS concluded that Texaco is entitled to certain refunds, it also found that Texaco owes money to MMS that it must pay before MMS can issue refunds. In addition to the Texaco accounts, in October 1987 MMS began reviewing and reconciling, if needed, all of the approximately 2,000 accounts. The project is expected to be completed in July 1989. The project's priorities are to reconcile (1) accounts of payors undergoing bankruptcies, (2) accounts from which refunds are sought, (3) several accounts that MMS says are extremely out of balance, and (4) remaining accounts with unpaid and underpaid balances. After initial reconciliation, MMS' Lessee Contact Branch staff will keep the status of payor accounts current.

Between October 1987 and April 7, 1988, MMS reconciled 75 accounts in addition to the Texaco accounts and resolved 52 of these by billing payors a total of \$15,263 for underpayment, and refunding \$267,239 for

¹Mission Accomplishment, Fiscal Accounting Division, Royalty Management Program, Minerals Management Service, U.S. Department of the Interior Office of Inspector General, 88-61, Apr. 1988.

overpayment. An MMS Fiscal Accounting Division official explained the difference between billings and refunds as being due to focusing on refund requests by payors.

Systems Improvement Project

The Royalty Management Program established a systems improvement team in November 1986. This team has worked with state, tribal, and industry representatives on the Royalty Management Advisory Committee to determine the degree of royalty management program success, needed improvements in the program, and alternatives for accomplishing those improvements.

Alternatives for improvement were identified, and grouped into the following categories:

- Reduction in the number of royalty lines reported.
- Improved production and royalty data to be provided to states and tribes.
- Accelerated disbursements.
- Assumption by MMS of accounting responsibility for those leases and agreements which do not have standard royalty provisions, and those which Indian tribes negotiated directly with companies under the Indian Mineral Development Act.
- Improved effectiveness and efficiency of royalty management operations.

Royalty Management Program staff identified 49 alternatives through the Systems Improvement Project. MMS is completing a systems implementation plan that will include a feasibility study and cost-benefit analysis of all alternatives. MMS has completed seven short-term projects, and plans to complete seven more by the end of fiscal year 1988 such as raising the audit threshold from \$50,000 to \$250,000 for preauditing offshore royalty refund requests, which will reduce the resources required for this audit effort. MMS plans to complete the projects that are determined to be cost-effective by 1991. Among the improvements is the lease-based management information system described below.

Lease-Based Management Information System

MMS' Royalty Compliance and Systems Management Divisions are developing computer software requirements and studying the feasibility of a management information system that would provide easy, central access to pertinent information about leases. The lease-based system is an

information system, and would not replace present production accounting systems. Rather, software would consolidate data from various existing sources, such as the Auditing and Financial System, the Production Accounting and Auditing System, records of Royalty Compliance Division audit findings, and BLM's Automated Lands and Minerals Record System, which records land and minerals information for public lands.

With full implementation of this system, MMS managers, compliance auditors, MMS internal review and external auditors, and state and tribal personnel would no longer have to go to numerous sources to obtain information about a lease. MMS officials believe the system would facilitate monitoring the accuracy and completeness of collections and disbursements.

MMS expects to develop the system with requested funding. If approved, officials expect to begin partial implementation in fiscal year 1989, with more information to be added to the system as additional needs are identified and software developed.

Assessment and Advice by Price Waterhouse

In an effort to achieve a higher degree of assurance that it is meeting its mission of collecting and disbursing revenues from mineral leases on federal and Indian lands, MMS contracted with Price Waterhouse to assess limited segments of MMS operations and to offer expert advice on how to strengthen those operations. Since December 1987, Price Waterhouse consultants have concentrated their work on

- determining whether the Auditing and Financial System is in compliance with Generally Accepted Accounting Principles;
- improving the strength of internal controls within the Auditing and Financial System, including defining transaction cycles, developing a flowchart for the System, identifying objectives and techniques for key control points, and performing approximately 20 to 30 tests of key control points within each transaction cycle;
- assessing MMS' inventory of computer programs to ensure system integrity since conversion to the new mainframe computer in September 1987;
- improving the use of automated error edits by working with MMS to develop a methodology to systematically prioritize edits to provide sound, justified resource allocations;

**Appendix IV
MMS Initiatives to Help Strengthen
Assurances That Proper Collections and
Disbursements Are Made**

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- assessing the adequacy of an “audit trail” in the Auditing and Financial System to enable MMS, states, Indians, or others to trace data contained in MMS’ explanations of payments;
 - evaluating the efficiency and effectiveness of royalty document-processing operations; and
 - providing advice on MMS’ credit management and debt collection plan.

On the basis of their findings, Price Waterhouse will provide MMS with recommendations and broad estimates of the resources and time required for corrective actions.

Objectives, Scope, and Methodology

In response to a request by the Chairman, Senate Energy and Natural Resources Committee, we are providing information about Minerals Management Service's collection and disbursement of royalties, especially from offshore leases. As a result of the request and subsequent discussions with his office, we agreed to furnish the following:

- The requirements and processes for royalty determination, collections, and disbursements.
- Fiscal years 1986 and 1987 data about
 - overall collections;
 - collections through MMS assessments for additional royalties, interest, penalties, and damages identified through edits, exception processing, and audits;
 - disbursements; and
 - interest paid to states on late disbursements.
- Current and proposed mechanisms to better ensure that MMS is collecting and disbursing what it should, including past and planned offshore audit coverage.

We performed our work at the MMS Royalty Management Program offices in Lakewood, Colorado, from September 1987 through April 1988. We interviewed and obtained documents from the Associate Director and Deputy Associate Directors for the Royalty Management Program, and directors and staffs of the following divisions: Royalty Compliance, Fiscal Accounting, Production Accounting, Systems Management, and Royalty Valuation and Standards. We also met with the directors of the Lakewood Evaluation Unit (internal review) and the Lakewood Compliance Office.

In addition, we gathered information from Interior IG staff based in Washington, D.C., and Lakewood; Price Waterhouse consultants located in Denver, Colorado, and Washington, D.C.; and state and tribal auditors.

To determine requirements and processes for collections and disbursements, we researched legislation, Auditing and Financial System documentation, Department of the Interior orders, notices to lessees, MMS' Payor Handbook, and payor training materials. We also spoke with MMS staff about how they carry out those requirements and processes.

To obtain data and other information about collections, disbursements, interest, automated edits and exception processing, and billed receivables, we examined monthly reports of MMS operations, MMS reports to the U.S. Treasury, and specially prepared reports about offshore lease activity; and proposed write-off procedures. We also reviewed prior GAO work, opinions of Interior's Solicitor, the Royalty Management Advisory Council Systems Improvement Working Panel report, the MMS Lakewood Evaluation Unit study on warning error edits, and systems and organization handbooks. In addition, we talked with MMS managers and staff about the processes, data, and operational constraints.

To obtain information about Royalty Compliance Division audit activities, we reviewed auditor job descriptions, lists of auditors on the staff, and records of their qualifications and training. We interviewed division and regional office managers and examined documents about prior audit work and results. Finally, we reviewed the 1988 Strategic Audit Plan; interviewed Royalty Compliance Division and Lakewood Evaluation Unit officials; and spoke with state, tribal, and IG auditors about their reaction to the Plan.

We gathered information about MMS' reconciliation of payor accounts through discussions with IG and MMS staff. We reviewed documentation of the reconciliation of Texaco's accounts and MMS' strategy for reviewing the remaining accounts. We learned about the lease-based management information system through discussions with MMS directors.

To obtain information about work being performed by Price Waterhouse consultants, we reviewed their MMS contract and its modifications. We spoke with Price Waterhouse managers to determine their scope, methodology, and work status.

We learned of other MMS initiatives by reviewing MMS' Management Action Plan for the Royalty Management Program and subsequent status reports. We also reviewed the results of the MMS Systems Improvement Project and attended a conference of MMS officials with the state, tribal, and industry Royalty Management Advisory Council at which project recommendations were discussed.

When existing MMS reports did not contain the detailed data we needed to meet our objectives, MMS Systems Management Division staff and personnel from other divisions who work with the data designed ad-hoc reports where possible. In some cases, they were unable to furnish data that we sought. For example, data differentiating whether errors are

related to offshore or onshore leases are deleted from the system after monthly totaling; therefore, historic data about these categories are unavailable.

Our work was performed in accordance with generally accepted government auditing standards. We did not test the accuracy of MMS computer-generated data because of related ongoing Price Waterhouse work on assessing and providing advice on improving the strength of internal controls, royalty document-processing operations, and agency compliance with generally accepted accounting principles.

We obtained oral comments on a draft of this report from the Director of MMS and other MMS officials. Generally, MMS agreed with the information presented in the report. MMS did suggest some technical and editing changes, which have been incorporated where appropriate.

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