September 12, 2008

Congressional Requesters

Subject: Mineral Revenues: Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put MMS Royalty Collections at Risk

The Department of the Interior’s (Interior) Minerals Management Service (MMS) collected the equivalent of over $9 billion in oil and gas royalties in fiscal year 2007, more than $5 billion of which it deposited in the U.S. Treasury; it dispersed the remaining approximately $4 billion to other federal, state, and tribal accounts. These royalties—payments made to the federal government for the right to produce oil and gas from federal lands and waters—represent one of the country’s largest nontax sources of revenue. The amount of oil and gas royalties MMS collects may increase if the price of energy increases and industry’s demand to drill on lands and in waters controlled by the federal government continues to trend upward. For example, the price of West Texas Intermediate—a type of oil commonly used as a benchmark—has risen by more than 100 percent since January 2007 and recently exceeded $140 per barrel, a price that, when adjusted for inflation, is at the highest level since 1980. Moreover, applications for onshore drilling permits at Interior’s Bureau of Land Management (BLM) continue to increase, from approximately 4,000 in 2001 to more than 10,000 in 2007. Similarly, offshore leasing activity overseen by MMS’s Offshore Energy and Minerals Management (OEMM) has also generally increased since 2001.

Companies that develop and produce oil and gas resources from federal lands and waters do so under leases obtained from and administered by Interior—BLM for onshore leases and MMS’s OEMM for offshore leases. Together, BLM and OEMM are responsible for ongoing oversight of oil and gas operations on more than 28,000 producing leases to help ensure that oil and gas companies comply with applicable laws, regulations, and agency policies. Among other things, BLM and OEMM staff inspect leases to verify that oil and gas production is accounted for as required by the Federal Oil and Gas Royalty Management Act of 1982\(^1\) and agency regulations and policies. These inspections typically include an examination of the meters and their calibration records. Additionally, BLM inspectors may review production records, forwarding any discrepancies to MMS for resolution. OEMM has a slightly different process; after reviewing all production records, its production verification team addresses any gas volume discrepancies itself, forwarding oil

volume discrepancies to MMS. The results of these inspections and reviews are recorded in the agencies’ management databases.  

As a condition of producing oil and gas under federal and Indian leases, companies are required to file two key monthly reports with MMS—one specifying the total production and disposition of oil and gas and the other stating the royalties due on that production. However, because of various leasing and development arrangements made by companies, these two reports are often submitted by different companies. The companies physically developing the lease, or the operators, are responsible for reporting the production volumes to MMS in their monthly production reports. The companies with a financial interest in that lease, or the payors, are responsible for reporting the cash royalty owed on the federal and Indian oil and gas production in their monthly royalty reports. Each month, payors calculate the royalty payment they owe to the federal government using the four key variables illustrated in the following equation:

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\text{Royalty payment} = (\text{sales volume} \times \text{sales price} - \text{deductions}) \times \text{the royalty rate}^5
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Companies enter the monthly production and royalty reports via a Web-based portal to MMS’s royalty information technology (IT) system and may make adjustments to those entries for up to 6 years after the initial reporting date. In addition to filing the royalty report with MMS, payors typically make the actual cash royalty payment via an electronic fund transfer to an account at the Department of the Treasury (Treasury). Once MMS reconciles the self-reported royalty payment data from the monthly royalty reports with the payments submitted to Treasury, MMS disburses the royalties from the Treasury account to the appropriate federal, state, tribal, and allotted accounts. All of these transactions are recorded and stored in MMS’s current royalty IT system, which went on line in 2001. Since then, MMS’s IT system has experienced several problems but has continued to improve. For example, MMS has worked for the past several years to

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5BLM records inspection information in its Automated Fluid Minerals Support System, while OEMM records its inspection information in its Technical Information Management System.

6Companies are required to self-report monthly production volumes to MMS on an Oil and Gas Operations Report (OGOR) form.

7Companies are required to self-report monthly royalty payments to MMS on the Report of Sales and Royalty Remittance Form, Form 2014.

5The royalty rate varies somewhat but is typically in the range of 12.5 percent to 18.75 percent. In other words, the federal government typically receives between 12.5 percent and 18.75 percent of revenue less allowable deductions, for oil and gas produced on federal lands and waters. Allowable deductions include payments to pipeline companies and other shipping costs required to transport the commodity to a market center, as well as adjustments made for the costs of processing natural gas.

6This system, also known as the Minerals Revenue Management Support System, is designed to store and support the collection, verification, and disbursement of royalty revenues from federal and Indian mineral leases. Indian leases do not have time restrictions on making adjustments.

7An allotted account is an account set up to receive royalties for any land held in trust or restricted status by the Secretary of the Interior, on behalf of one or more Indians.
enhance the royalty IT system by both refining and increasing the number of edit checks designed to prevent companies from entering incorrect royalty and production data. As an additional check on the accuracy of both the company-reported production and royalty data, MMS conducts either audits or compliance reviews on these data within 3 years of their submission. For example, during fiscal year 2008, MMS is conducting compliance work on calendar year 2005 payments. Audits are an assessment of the accuracy and completeness of the self-reported production and royalty data compared against third-party documents, such as sales contracts and oil and gas sales receipts from pipeline companies. By contrast, compliance reviews assess the data’s reasonableness—a quicker, more limited check of the accuracy and completeness of a company’s self-reported data—and they do not include a systematic examination of underlying third-party documentation. In addition, some states and tribes that receive royalties collected by MMS have agreements with MMS authorizing them to conduct either audits or compliance reviews on federal and Indian producing leases within their jurisdictions. Under current law, MMS has 7 years in which to make monetary demands on federal royalty payors. Historically, MMS has annually assessed its overall compliance performance on the basis of whether it has conducted compliance activities—either full audits or compliance reviews—on leases or companies that are responsible for generating a predetermined percentage of royalty payments within 3 years after the royalty payment is due. This approach resulted in MMS auditing many of the same high royalty paying companies and leases year after year, while conducting only limited compliance work on other companies during that same time period. To ensure greater compliance coverage on both companies and leases, MMS is now in the process of implementing a new risk-based compliance approach that will assist in selecting companies to audit or review based on factors in addition to royalties paid.

Given the financial importance of royalty management, MMS has been the subject of considerable scrutiny through the years by entities such as GAO; Interior’s Inspector General (IG); and the Royalty Policy Committee (RPC), a group empanelled by the Secretary of the Interior and charged with providing advice on managing federal and Indian leases and revenues. For example, the RPC issued a report in December 2007 that included more than 100 recommendations to strengthen Interior’s royalty collections by improving BLM’s and OEMM’s production accountability practices, MMS’s compliance efforts, and MMS’s and BLM’s interagency coordination. As part of Interior’s response to these recommendations, it convened staff from the relevant agencies and developed detailed plans for addressing these recommendations, some of which it has already implemented. In addition, in March 2008, we testified before the House Committee on Natural Resources, Subcommittee on Energy and Mineral Resources, on our preliminary findings on Interior’s royalty collection program. This report follows up on our prior work and includes recommendations to strengthen Interior’s royalty collections program. Specifically, you asked us determine (1) whether Interior has adequate assurance that

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8Eleven states (Alaska, California, Colorado, Louisiana, Montana, New Mexico, North Dakota, Oklahoma, Texas, Utah, and Wyoming) and seven tribes (Blackfeet Nation, Jicarilla Apache Tribe, Navajo Nation, Shoshone and Arapaho Tribes, Southern Ute Indian Tribe, Ute Mountain Ute Tribe, and the Ute Indian Tribe) conducted compliance work under cooperative agreements with MMS in fiscal year 2007.

9Indian leases are not subject to the same 7-year time restriction for making monetary demands.
federal oil and gas are measured accurately, (2) whether MMS’s royalty IT system and royalty collection and verification processes provide sufficient assurance that all royalties are being collected, and (3) the extent to which MMS’s compliance efforts provide an adequate check on industry’s self-reported data.

To address Interior’s oil and gas production measurement accountability practices, we reviewed OEMM’s and BLM’s documentation on policies and procedures for conducting production inspections and production verification work. In addition, we interviewed MMS inspectors in the Gulf of Mexico, Pacific, and Alaska regional offices and toured oil and gas production facilities in the Gulf of Mexico. We further interviewed BLM state officials in five states with significant federal oil and gas production and interviewed BLM officials from five BLM field offices selected from a nonprobability sample of the 27 BLM field offices overseeing oil and gas production in those five states. The BLM field offices were selected based on geographic location, the number of violations of regulations, and the number of oil and gas volume errors identified during production inspections. We also toured oil and gas production facilities in Wyoming and Colorado. To assess MMS’s royalty IT system and royalty collection and verification processes, we reviewed MMS’s documentation and processes for collecting royalty and production data and examined how that information is stored and manipulated in MMS’s royalty IT system. We also interviewed MMS staff regarding these processes. Finally, to assess MMS’s compliance efforts, we reviewed MMS’s audit and compliance manuals and its newly revised procedures, interviewed compliance staff, and attended several demonstrations of MMS’s compliance IT system. We also sent questionnaires addressing production, royalty data, and compliance issues to the 11 state and 7 tribal members of the State and Tribal Royalty Audit Committee; 9 states and 5 tribes responded. We conducted this work from April 2007 to July 2008 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Summary

Neither BLM nor OEMM is meeting statutory obligations or agency targets for conducting inspections of certain leases and metering equipment used to measure oil and gas production, raising uncertainty about the accuracy of oil and gas measurement. Moreover, when these inspections have been conducted, BLM and OEMM have at times recorded inspections inaccurately in their databases. Specifically, although BLM and OEMM are statutorily required to annually inspect leases producing “significant quantities of oil or gas” and those with a “history of noncompliance,” the Secretary has defined these terms for onshore leases but not for offshore leases. Understanding the meaning of these terms is necessary to implement the act and is critical to the agencies’ ability to prioritize inspections. Although BLM is able to prioritize its inspections, according to BLM officials, they are not completing all of the inspections required by law and agency policy, in part because their workload has substantially grown because of increased onshore drilling. OEMM, on the other hand, is not able to prioritize its inspections because the statutory terms have yet to be defined by the Secretary. Moreover, OEMM is not meeting its agency
targets for inspections because, according to OEMM officials, inspectors are still conducting cleanup activities in the Gulf of Mexico—where almost all of the offshore oil and gas production occurs—in the wake of Hurricanes Katrina and Rita in 2005. Finally, although it is important that data are recorded accurately, when both BLM and OEMM conduct production inspections, neither agency is consistently doing so. Officials from both BLM and OEMM told us that some inspection and data entry staff are relatively inexperienced and do not always record the inspections in their databases as procedures require. Accurate data are necessary not only to monitor progress throughout the year to determine whether annual goals are achieved, but also to assist MMS in its royalty compliance activities. We are making several recommendations to the Secretary of the Interior to provide greater certainty that oil and gas produced from federal lands and waters are measured accurately.

MMS’s royalty IT system and processes for collecting and verifying royalty data have improved, but they continue to lack several capabilities that would provide greater assurance that royalties are being accurately collected. For example, MMS’s royalty IT system cannot monitor adjustments made to production and royalty data by companies. While MMS is working to address this issue, companies may continue to adjust their previously self-reported production and royalty data without prior MMS approval or review. This includes adjustments made by companies to data after MMS completes its compliance work, meaning that while the royalties paid were accurate at the close of the audit, they may not remain accurate. Furthermore, MMS is unable to identify, in a timely manner, instances in which a royalty report has not been submitted by a company, and, as a result, MMS cannot be entirely confident it is receiving all of the royalties when they are due. Finally, MMS lacks a clear process to determine that royalties are accurately paid in instances when OEMM or BLM identify volume discrepancies during their production inspections and verification work. For example, when BLM identifies an over- or under-reporting of production volumes, BLM notifies the production reporting section of MMS. While MMS staff may work to correct the production numbers, staff do not relay this information to the royalty reporting section so that staff can check that the appropriate royalties were paid. To provide greater assurance that MMS is accurately collecting royalties in a timely manner, we are making several recommendations aimed at improving its royalty IT system and royalty collection and verification processes.

While MMS continues to strengthen its compliance efforts, MMS’s use of compliance reviews, which are more limited in scope than audits, has led to an inconsistent use of third-party documents to verify that self-reported industry production and payment data are correct, thereby placing royalty collections at risk. MMS has historically relied on audits to determine whether a company accurately paid its royalties by examining third-party documents that contained information on prices, volumes, and deductions. More recently, MMS has transitioned to relying heavily on compliance reviews that assess whether the royalties paid by a company are reasonable, and do not always include an examination of third-party documents. Furthermore, while MMS’s compliance reviews of offshore leases include a systematic comparison between a company’s reported production volumes and independent pipeline company documents, an analogous process does not exist for onshore leases, in part because of the significantly greater numbers of leases and pipelines for which data would have to be collected. The absence of a
consistent check on self-reported data—such as comparing the data with third-party
documents—when conducting onshore compliance reviews raises questions about the
accuracy of royalty payments. To address this issue, we are recommending that MMS
require that third-party documents be reviewed when conducting onshore compliance
reviews.

BLM and OEMM Are Not Completing the Required Production Inspections,
Leaving the Accuracy of Oil and Gas Measurements in Doubt

Interior lacks adequate assurance that federal oil and gas volumes are being measured
accurately because neither BLM nor OEMM is fully inspecting leases and metering
equipment as required by law and agency policies; the agencies also are not always
entering accurate inspection data into their databases. BLM is charged with inspecting
approximately 20,000 producing onshore leases annually to ensure that oil and gas
volumes are accurately measured. However, BLM’s state inspection and enforcement
coordinators from Colorado, Montana, New Mexico, Utah, and Wyoming, which are
responsible for more than 95,000 wells, reported that only 8 of the 24 field offices in the
five states completed both their (1) required annual inspections of leases that are high-
producing and those that have a history of violations—terms defined by Interior’s policies
for onshore leases so that BLM can implement the Federal Oil and Gas Royalty
Management Act and (2) inspections every third year on all remaining leases as required
by BLM policy. According to the BLM state inspection and enforcement coordinators, the
number of completed production inspections varied greatly by field office. For example,
while BLM inspectors were able to complete all of the production inspections in the
Kemmerer, Wyoming, field office, inspectors in the Glenwood Springs, Colorado, field
office were able to complete only about one-quarter of the required inspections. Officials
in three of the five field offices in which we held detailed discussions with inspection staff
told us that they had not been able to complete the production inspections because of
competing priorities. For example, BLM officials told us activities related to drilling,
including drilling inspections, take priority over completing production inspections.
Further, with the significant number of wells being drilled, drilling-related activities
demand much of the inspectors’ time. BLM officials also discussed the high turnover rate
for inspection staff caused by the high-pressure work environment, the ability to make

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Although we considered the production inspection results from all 27 BLM field offices in these five states,
we excluded production inspection results from two BLM field offices where BLM state inspection and
enforcement coordinators could not validate production inspection numbers because they felt that the data
in BLM’s Automated Fluid Minerals Support System—the database used to track production inspections—
were unreliable. We excluded one additional BLM field office because it is implementing a pilot project
inspection program using different selection and prioritization criteria; therefore, it is not comparable with
the other BLM field offices.

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To gain a balance of perspectives of how BLM field offices conduct production inspections, we chose a
nonprobability sample of five field office locations—Meeker, Colorado; Vernal, Utah; Farmington, New
Mexico; Pinedale, Wyoming; and Buffalo, Wyoming. In choosing these field offices we sought to ensure we
visited BLM field offices that represent a range of BLM state office jurisdictional policies. While this
nonprobability sample allowed us to learn about many important aspects of production inspections, it was
not designed to be representative of all inspection activities at BLM field offices. As such, the findings cannot
be generalized to sites we did not visit.
more money in the private sector, and the high cost of living in many areas where BLM has field offices. Importantly, BLM officials from all five field offices told us that when they have conducted production inspections, they have identified numerous violations. For example, BLM staff in four of the five field offices identified errors in the oil and gas production volumes reported by operators to MMS by comparing production reports with third-party source documents. Additionally, BLM staff from one field office we visited showed us a bypass built around a gas meter that could allow gas to flow around the meter without being measured. BLM staff subsequently ordered the operator to remove the bypass but did not fine the operator. Staff from another field office told us of a case in which BLM had to remove illegal gas lines that routed gas to private residences. Finally, in one of the field offices we visited, BLM officials told us of an instance in which a company maintained two sets of conflicting production data—one used by the company and another reported to MMS. In this instance, BLM ordered the company to correct and resubmit production data to MMS.

Similarly, OEMM, which is responsible for inspecting offshore production facilities that include oil and gas meters, did not complete inspections of offshore oil and gas royalty meters as required by its policy or applicable law in 2007. OEMM officials responsible for inspecting royalty meters in the Gulf of Mexico—meters that measure oil and gas for determining royalty payments—told us they completed about half of the required 2,700 royalty meter inspections in 2007. This is far less than required under OEMM's 1994 Gulf of Mexico production inspection policy, which requires all oil and gas royalty meters be inspected annually. Meter inspections are an important aspect of the offshore production verification process because, according to OEMM officials, one of the most common violations identified during inspections is missing or broken meter seals. These seals are required to be kept in place to prevent tampering with measurement equipment. When seals are broken, without closer inspection and testing, it is not possible to determine whether the meter is correctly measuring oil or gas production. OEMM officials explained that one reason OEMM failed to complete its required inspections was the continuing cleanup work related to Hurricanes Katrina and Rita in 2005. Furthermore, the Federal Oil and Gas Royalty Management Act instructed the Secretary of the Interior to inspect leases annually that are producing or expected to produce significant quantities of oil or gas in any year or that have a history of noncompliance with applicable law or regulations. While Interior has defined these terms for onshore oil and gas leases, it has not yet done so for offshore oil and gas leases. As a result, when production inspectors are unable to inspect all royalty meters as required by their policy, they lack the criteria for effectively prioritizing inspections based on production volumes or concerns about noncompliance. Therefore, the Secretary cannot be assured that federal oil and gas production is being measured accurately.

Moreover, when BLM and OEMM do complete production inspections, staff are not always accurately recording this work in their databases. For example, of the 27 BLM field offices in five states we reviewed, 2 field offices had fiscal year 2007 production inspection data that could not be validated by the state’s inspection and enforcement coordinator, and 6 field offices had instances of production inspection data changing after the end of the fiscal year, in violation of BLM’s policy. For example, Wyoming’s state inspection and enforcement coordinator could not validate a field office’s inspection numbers because
the coordinator lacked confidence in that field office’s ability to correctly identify high production leases. The coordinator explained that because of MMS and BLM data transfer issues caused by ongoing Indian trust fund litigation, BLM staff may not be able to easily or accurately identify high producing leases. Additionally, 6 field offices revised their completed production inspection data after the end of the fiscal year. For example, officials in a Montana field office reported that 20 additional inspections were entered into the database for fiscal year 2007 because staff identified inspections that had been completed and documented in paper files but had not been entered into their database. Finally, in a number of instances, the inspection priority changed during the year. For example, one of the field offices in Montana adjusted the number of high-priority inspections downward after staff realized they had initially incorrectly identified the high-priority inspections because of database shutdowns caused, again, by the ongoing Indian trust fund litigation.

Similarly, according to interviews with OEMM officials, OEMM staff do not consistently check the accuracy of the production inspection data entered. For example, OEMM data indicated that at one facility no meters were available for inspection, yet 16 meter inspections had occurred during calendar year 2007, which an OEMM official confirmed was an error. An OEMM official explained that one reason for errors may be data entry problems (a clerk, not the inspectors themselves, enter the data). OEMM officials state they are currently implementing new procedures to ensure that valid data are entered into the database. Accurate and timely data are critical for monitoring ongoing progress and whether annual goals and targets are met. However, because of the errors identified in both BLM’s and OEMM’s data, we cannot report the precise number of production inspections completed.

**MMS’s Royalty Information Technology System and Processes Are Improving but Still Lack Key Functions That Could Provide Greater Assurance on the Accuracy of Royalty Collections**

While MMS continues to improve its current royalty IT system, which went online in 2001, and its royalty collection processes, it still lacks several key functions and processes that could provide greater assurance that royalties are accurately collected, including, (1) the ability to maintain the accuracy of production and royalty data entered by companies, (2) the ability to identify missing royalty reports in a timely manner, and (3) a process to ensure that accurate royalties are paid on volume discrepancies identified by OEMM and BLM during their production inspections.

MMS’s ability to maintain the accuracy of production and royalty data is hampered because companies can make adjustments to their previously entered data without prior approval. Companies may legally make changes to both royalty and production data in

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12 In the *Cobell v. Norton* litigation—now *Cobell v. Kempthorne*—concerning the government’s management of Native American trust funds, a U.S. District Court judge, on December 5, 2001, ordered the Department of the Interior to disconnect from the Internet all information technology systems that house or provide access to individual Indian trust data. The last of the systems was allowed to reconnect to the Internet in May of this year.
MMS’s royalty IT system for up to 6 years after the initial reporting month, and these changes may necessitate changes in the royalty payment.\textsuperscript{13} According to MMS, most adjustments are made within the first several years after initial reporting. For example, MMS’s analysis of adjustments made to royalty reports in fiscal year 2007 show that 75 percent of all accepted adjustment lines were reported within 3 years of their corresponding sales month. However, MMS’s royalty IT system currently allows companies to make adjustments to their data beyond the allowed 6-year time frame. MMS examined data from September 2002 through July 2007 to determine the number of adjustments made outside the 6-year time frame. The results of this analysis suggested that more than 81,000 adjustments were made to data outside the time frame, though according to MMS officials, some of these adjustments were retroactively approved. As a result of the companies’ ability to make these retroactive changes, within or outside of the 6-year time frame, the production data and required royalty payments can change over time, complicating efforts by agency officials to reconcile production data and ensure that the proper royalties were paid. Furthermore, changes made to the data do not necessarily trigger a review to determine their reasonableness or whether the adjustments impact the royalties due. According to agency officials, these adjustments are investigated by staff only if the company or lease is selected for an audit or compliance review. This is problematic for several reasons. First, current law is that companies may make adjustments to their federal royalty payment data up to 6 years after the production reporting month.\textsuperscript{14} MMS issues monetary demands for unpaid royalties up to 7 years after the last adjustment made by a company. However, the law, which provides that a demand be made within 7 years from the date an obligation becomes due, could be interpreted as giving MMS only 7 years from the initial month of the production reporting date.\textsuperscript{15} This interpretation would, in some cases, allow MMS only 1 year to identify any erroneous adjustments and issue a monetary demand for any additional royalties due. Second, companies may change production and royalty data after an audit or compliance review has been completed, making it unclear whether these audited royalty payments remain accurate after they have been reviewed. MMS typically conducts compliance work approximately 3 years after companies initially report the data, at which point, according to MMS officials, companies have made the majority of their adjustments. However, companies have several additional years after MMS typically completes its compliance work to adjust their royalty data, and current MMS policies do not require that all subsequent postcompliance work adjustments be reviewed. MMS is aware of these issues and is in the process of addressing the issues over which it has authority. Specifically, MMS is developing requirements to modify its royalty IT system to monitor adjustments. The stated goal is for the royalty IT system to automatically identify adjustments that have been made to data outside of the allowable 6-year time frame and to monitor adjustments made within the allowable time frame after MMS closes an audit or compliance review.

\textsuperscript{13}The Federal Oil and Gas Royalty Simplification and Fairness Act of 1996, Pub. L. No. 104-185, § 5(a) (1996), provides a 6-year adjustment window.

\textsuperscript{14}30 U.S.C. § 1721a.

\textsuperscript{15}30 U.S.C. § 1724(b).
Further, MMS’s royalty IT system is unable to automatically detect instances when a royalty payor fails to submit the required royalty report in a timely manner. MMS relies on two critical pieces of data in verifying the accuracy of royalty payments: the production report, which operators submit to document the total oil and gas production from a particular lease or several combined leases, and the royalty report, payors submit to document the royalty paid on oil and gas production. With few exceptions, MMS should receive a corresponding royalty report or reports for each production report it receives. When MMS’s current royalty IT system went online in 2001, it was not able to reliably detect either missing production or royalty data. In 2004, MMS modified its royalty IT system to automatically detect missing production data. As a result, MMS has identified a backlog of approximately 300,000 missing production data records, which includes both entire production reports and missing wells on those production reports. MMS subsequently established teams to research the missing records and told us that the goal was to resolve all missing record issues older than 90 days by the end of 2008. More recently, however, MMS has revised its goal downward to address 80 percent of the missing records by the end of 2008. Preliminary results, according to agency staff, suggest that many of the issues can be explained by BLM staff delays in entering well and production reference data and sharing that data with MMS, and not necessarily by a company’s failure to submit the required report. However, MMS’s royalty IT system continues to lack the ability to automatically detect cases in which an expected royalty report has not been filed in a timely manner. As a result, cases in which a company stops filing royalty reports and stops paying royalties may not be detected until more than two years after the initial reporting date, when MMS’s royalty IT system completes a reconciliation of volumes reported on the production reports with the volumes on their associated royalty reports. Therefore, it remains possible under MMS’s current strategy that the royalty IT system may not identify instances in which a payor stops reporting until several years after the report is due. This creates an unnecessary risk that MMS may not be collecting accurate royalties in a timely manner.

Finally, MMS lacks a consistent process to ensure that the appropriate royalties are paid when either OEMM or BLM identifies volume discrepancies while conducting production inspections and other production verification activities. To verify that oil and gas production is accurately reported to MMS, BLM sometimes and OEMM always compares the volumes reported on the production report to other third-party documents that contain production information, such as a pipeline statement. When they find discrepancies between these two documents, they typically forward the information to MMS, which then takes steps to reconcile and correct the discrepancies. For example, BLM’s policy is for staff to forward all volume discrepancies to MMS’s royalty reporting section, which then attempts to correct the volume error by talking to operators. In some instances, MMS may request that the operator submit a corrected production report. However, MMS staff in the production reporting section do not automatically notify the royalty reporting staff so that they may check to ensure that the correct royalties were paid. In other words, these newly reconciled data are not automatically and systematically compared in a timely manner with the reported sales volume in the royalty report previously entered into the royalty IT system. While a comparison between these revised production data and the production data included in the royalty report may occur several years later via MMS’s production and
royalty report volume reconciliation process, or if the royalty payor’s property has been selected for an audit or compliance review, without a timely systematic comparison of all such records, MMS cannot ensure that the initial royalty payment is accurate.

**MMS Does Not Consistently Review Third-Party Documents for Onshore Compliance Reviews to Verify Company-Reported Royalty and Production Data Are Accurate**

While MMS is currently strengthening its process for selecting companies or leases to review, its increased use of compliance reviews—which are more limited in scope than audits—has led to an inconsistent use of third-party documents to verify that self-reported royalty data are correct, putting accurate royalty collections at risk. According to MMS, compliance reviews can be conducted much more quickly and require fewer resources than audits, largely because they represent a more limited reasonableness check of the accuracy and completeness of a company’s self-reported data and do not include a systematic examination of underlying third-party documentation. Audits, on the other hand, are more time- and resource-intensive, and they include the review of third-party documents, such as sales revenue data, transportation and gas processing costs, and production volumes, to verify whether company-reported data are accurate and complete. Finally, a 2006 Interior IG audit found that MMS’s data tracking the number of completed audits and compliance reviews were inaccurate, and as such, we are unable to provide this information.

Currently, OEMM requires that companies submit pipeline production data for oil and gas produced offshore. MMS then uses the data when conducting compliance reviews for offshore properties. Additionally, MMS recently assessed the effectiveness of its offshore compliance reviews. For calendar year 2002, MMS compared the results of 100 out of about 700 compliance reviews of offshore leases and companies with the results of audits conducted on those same leases or companies. As a result of this evaluation, MMS now plans to improve its compliance review process by, for example, ensuring that it includes a step to check that royalties are paid on all royalty-bearing products, including other petroleum-based products such as retrograde—a liquid product that condenses out of natural gas.

In contrast, because of the significantly greater number of onshore leases and pipelines, BLM collects only a limited amount of pipeline and other third-party data for onshore production. Furthermore, because MMS itself does not routinely request these data from the companies, it does not systematically use third-party data when conducting onshore compliance reviews. In 2006, Interior’s IG reviewed MMS’s compliance process and made a number of recommendations to strengthen it. The IG recommended, among other things, that MMS examine 1 month of third-party documentation as part of each compliance review to provide greater assurance that both the production and allowance data are accurate. To address this recommendation, MMS revised its compliance review guidance to include suggested steps for reviewing third-party source production data, when available, for both offshore and onshore oil and gas. However, the revised guidance falls short of making these steps a requirement for onshore compliance reviews. And while MMS completed a study comparing the results of compliance reviews with those of audits
for offshore properties and leases, MMS could not provide us with a similar study for onshore properties and leases.

Moreover, as noted above, as of 2001, MMS began using compliance reviews in addition to audits to meet its performance goal of completing compliance activities on a specified percentage of royalty payments within 3 years of the initial royalty payment. For example, in 2006, MMS reported that it had achieved its goal by confirming reasonable compliance on 72.5 percent of all calendar year 2003 royalties.\footnote{MMS conducts other types of compliance work, such as limited scope compliance reviews, which examine, among other things, one or more of the variables—sales price, sales volume, and royalty rate—of the royalty equation. MMS did not count these reviews towards its performance goal.} However, Interior’s IG found in a 2006 audit that MMS did not track the extent to which it achieved its performance goal through audits that systematically rely on third-party documents, as opposed to compliance reviews that do not. Additionally, the IG found that MMS’s data on completed audits and compliance reviews were inaccurate and incomplete. When we examined MMS’s compliance program in 2007, MMS did not yet have reliable data on either the numbers of audits and compliance reviews completed or their respective contribution to the annual performance goal. MMS is now in the process of implementing Interior’s IG recommendation and should have these data available for reporting purposes in 2009. During the same audit, Interior’s IG also found that to help meet its performance goal, MMS had historically conducted compliance reviews or audits on the leases and companies that generated the most royalties, with the result that the same leases and companies were reviewed year after year. Accordingly, many leases and companies have gone years without having been audited, though some were subject to a more limited review. To address this compliance gap, Interior’s IG recommended that MMS develop risk criteria for selecting leases and companies to conduct either compliance reviews or audits. MMS responded by working with a contractor to identify the necessary criteria for developing a risk-based approach for selecting companies and leases for either audits or compliance reviews. MMS is now implementing a pilot project, after which it will assess the results to further refine its new compliance approach.

Finally, representatives from the states and tribes who are responsible for conducting compliance work under agreements with MMS have expressed concerns about the quality of self-reported production and royalty data they use in their reviews. As part of our work, we sent questionnaires to all 11 states and 7 tribes that conducted compliance work for MMS in fiscal year 2007. Of the 9 state and 5 tribal representatives who responded, 7 reported that they lack confidence in the accuracy of the royalty data. For example, several representatives reported that because of concerns with MMS’s production and royalty data, they routinely look to other sources of corroborating data, such as production data from state oil and gas agencies and tax agencies. Finally, several respondents noted that companies frequently report production volumes to the wrong leases and that they must then devote their limited resources to correcting these reporting problems before beginning their compliance reviews and audits.
Conclusions

Interior has been subject to significant examination and oversight of its royalty management programs over the years, which has resulted in GAO, Interior’s Inspector General, and the Royalty Policy Committee issuing numerous recommendations to improve royalty collections. So far, Interior has been responsive to these recommendations and, as an example, is currently implementing an action plan to address the Royalty Policy Committee’s recently issued recommendations. As a result, many of Interior’s processes and systems are in flux, and the outcome of these potential improvements will not be known for some time. However, given high oil and gas prices and the increased interest on the part of oil and gas companies in the nation’s oil and gas resources, it is important that we have a royalty collection system going forward that can assure the American public that the government is receiving accurate and timely royalty payments. Critical to this is that both BLM and OEMM complete and accurately document their production inspection and verification work. Furthermore, collections of accurate royalties will remain at risk as long as companies may make unverified adjustments to royalty and production data after MMS completes its compliance activities. Increasing this risk is uncertainty regarding the statutory time frames for MMS to collect unpaid royalties, which under one interpretation may leave just 1 year for MMS to identify an improper adjustment. Ultimately, Interior’s royalty IT system and policies should provide adequate assurance that the federal government receives appropriate value for oil and gas produced from federal lands and waters. This royalty collection process should also rely less on companies providing accurate information on production and royalties owed, and more on a system with the ability to conduct thorough and independent verification of what is owed to the government, using third-party data where available at reasonable cost, and more systematically examining company source documentation.

Recommendations for Executive Action

To help provide greater assurance that federal oil and gas is being measured accurately, we recommend the Secretary of the Interior take the following three actions:

- Report to Congress any year in which OEMM and BLM have not met their legal and agency requirements for completing production inspections, along with the cause and a plan for achieving compliance.

- Define the terms “lease sites producing or expected to produce significant quantities of oil or gas in any year” and “lease sites which have a history of noncompliance with applicable provisions of law or regulations” for offshore oil and natural gas leases.

- Direct BLM and OEMM to evaluate both the accuracy and completeness of production inspection data in their databases, including the timeliness of data entry, and amend relevant policies and procedures as necessary.
In addition, we recommend that the Secretary of the Interior direct MMS to take the following three actions to improve its royalty IT system and royalty collection and verification processes:

- Conduct a study on the Federal Oil and Gas Royalty Simplification and Fairness Act’s effect on MMS’s capacity to efficiently and accurately collect federal royalties due by analyzing both the (1) 6-year timeframe for allowing companies to make adjustments to their federal royalty data and (2) MMS’s 7-year time frame for issuing monetary demands for additional royalties. This study should identify an appropriate time period cutoff for allowing companies to make adjustments without MMS’s prior approval to their royalty and production data and related payments, address the need for clarification on when the 7-year time period begins for issuing a monetary demand, and report the findings to Congress.

- Finalize the adjustment line monitoring specifications for modifying its royalty IT system and fully implement the IT system so that MMS can monitor adjustments made outside the legal 6-year time frame, and ensure that any adjustments made to production and royalty data after compliance work has been completed are reviewed by appropriate staff.

- Develop processes and procedures by which MMS can automatically identify when an expected royalty report has not been filed in a timely manner, and contact the company to ensure it is complying with both applicable laws and agency policies.

Finally, to improve its compliance program, we recommend that the Secretary of the Interior direct MMS to require that the onshore compliance review process include the review of a sample of third-party documentation in instances when BLM has not already collected this information to provide additional assurance that self-reported data are correct.

**Agency Comments and our Evaluation**

We provided a draft of this report to the Department of the Interior for review and comment. The Department of the Interior provided written comments that are presented in Enclosure I. DOI generally agreed with our findings and conclusions. In addition, they concurred with six of the seven recommendations, and partially concurred with the other recommendation. For the recommendation on which they partially concurred regarding reporting to Congress on production inspections annually, DOI agreed with the need to report to Congress when production inspections were not completed as required, but disagreed on the nature of the reporting we recommended in our draft report. Specifically, Interior commented that it would be more useful to provide Congress with a report only in years in which they fail to meet their inspection requirements rather than providing Congress with an annual report on whether production inspections were completed along with an explanation as to the why the inspections were not completed. We modified the recommendation in response to this comment.
We are sending copies of this report to the Secretary of the Interior, appropriate congressional committees, and other interested parties. We will also make copies available to others on request. In addition, this report will be available at no charge on the GAO Web site at http://www.gao.gov.

If you or your staffs have any questions about this report, please contact either Frank Rusco at (202) 512-3841 or ruscof@gao.gov, or Jeanette Franzel at (202) 512-9471 or franzelj@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Contributors to this report include Jon Ludwigson (Assistant Director), Paul Kinney (Assistant Director), Ron Belak, Ben Bolitzer, Lisa Brownson, Melinda L. Cordero, Nancy Crothers, Glenn C. Fischer, Cindy Gilbert, Tom Hackney, Barbara Kelly, Sandra Kerr, Jennifer Leone, Barbara Timmerman, and Mary Welch.

Frank Rusco  
Acting Director, Natural Resources and Environment  

Jeanette Franzel  
Director, Financial Management and Assurance
List of Requesters

The Honorable Jeff Bingaman
Chairman
Committee on Energy and Natural Resources
United States Senate

The Honorable Nick J. Rahall, II
Chairman
Committee on Natural Resources
House of Representatives

The Honorable Tom Davis
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

The Honorable Darrell Issa
Ranking Member
Subcommittee on Domestic Policy
Committee on Oversight and Government Reform
House of Representatives

The Honorable Carolyn Maloney
House of Representatives
Enclosure I

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240
AUG 28 2008

Mr. Frank Rusco
Acting Director, Natural Resources and Environment
Government Accountability Office
441 G Street, NW
Washington, D.C. 20548

Dear Mr. Rusco:

Thank you for the opportunity to review and comment on the Government Accountability Office draft report entitled, “MINERAL REVENUES: Data Management Problems and Reliance on Self-Reported Data for Compliance Efforts Put Royalty Collections at Risk” (GAO-08-893R), which follows up on prior GAO work. We generally agree with your findings and concur with six of the seven recommendations in the draft report. We partially concur with the report’s first recommendation to report annually to the Congress the extent to which we have met legal and agency requirements for completing production inspections. Reporting on exceptions rather than instituting an additional annual report as recommended by the GAO provides more relevant information to the Congress. Exception reporting (such as when a goal is missed in the event that yearly production inspection requirements are not met) highlights the exception making the report more relevant and useful. The MMS already provides annual reports to the Congress on minerals revenue management. Therefore, instead of an additional annual report to the Congress, a report will be sent to the Congress with an explanation of the circumstances contributing to missed goals. We would be happy to provide any report requested by Congress.

GENERAL COMMENTS

As noted in your draft report, the Department of the Interior’s Minerals Management Service and Bureau of Land Management are responsible for the administration and oversight of oil and gas operations, including revenue collection from more than 28,000 producing Federal leases onshore and offshore. The MMS and the BLM work together to ensure that oil and gas companies comply with applicable laws and pay their correct royalty on Federal oil and gas leases.

The draft report notes that the MMS royalty information technology system and processes continue to improve. At the same time, the MMS continues to strengthen its compliance efforts. Recently, the MMS developed and deployed a risk-based analysis tool to focus its resources on auditing and reviewing companies and properties with the greatest risk of underreporting oil and gas production and the resulting royalties due to the Federal Government.

As you noted, the Department has been responsive to recommendations made by various oversight groups. For example, the draft report notes that Secretary of the Interior Kempthorne appointed the Royalty Policy Committee, Subcommittee on Royalty Management, to conduct an independent, bipartisan examination of the minerals revenue management program. The
Subcommittee, co-chaired by former Senators Bob Kerrey (D-NE) and Jake Garn (R-UT), developed a report with more than 100 recommendations to improve the Department’s mineral royalty program. The Department is aggressively implementing the Subcommittee’s recommendations and has already taken steps to enhance the recommendations related to production accountability and collections.

The draft report recognizes that the MMS and the BLM collect third-party and source documentation to validate the accuracy of the royalty and production data reported by Federal and Indian oil and gas lessees. However, both agencies can enhance the use and timeliness of this information to provide greater assurance that royalties are being accurately collected.

CONCLUSION

We are committed to securing America’s energy future and quality of life while protecting the environment. The DOI promotes energy, the economy, and the environment. We look forward to continuing to work with you to improve the accuracy of royalty data collections, and we will provide any reports that Congress requests. If you have any questions about this response, please contact Andrea Nygren, MMS Audit Liaison Officer, at (202) 208-4343.

Sincerely,

[Signature]

C. Stephen Allred
Assistant Secretary
Land and Minerals Management