



OFFICE OF  
**INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR

# **MINERALS MANAGEMENT SERVICE: ROYALTY-IN-KIND PROGRAM'S OIL VOLUME VERIFICATION PROCESS**





OFFICE OF  
**INSPECTOR GENERAL**  
U.S. DEPARTMENT OF THE INTERIOR

MAY 25 2010

Memorandum

To: Secretary Salazar

From: Mary L. Kendall  
Acting Inspector General

Subject: Final Audit Report: Minerals Management Service: Royalty-in-Kind Program's Oil Volume Verification Process (Report No. C-IN-MMS-0007-2008)

This memorandum transmits the final report of our audit of the Royalty-in-Kind (RIK) Program's oil volume verification process. The objective of this review was to determine if the RIK program (1) verifies oil volumes to ensure the government is receiving its share of royalties in kind, and (2) delivers the correct oil volume to the Department of Energy contractors for the Strategic Petroleum Reserve.

We identified six areas in the process requiring improvement to ensure the government is receiving all of its in-kind royalties.

Since the announced termination of the RIK Program in September 2009, RIK has taken a number of measures to alleviate some of our stated concerns in this report. Our report contains four recommendations to assist RIK in ensuring proper royalty collection during its program phase-out. Minerals Management Service (MMS) concurred with all four of our recommendations. Based on the response to the draft report, we consider Recommendations 1, 3, and 4 as resolved, but not implemented. We are therefore, referring them for tracking of implementation. We consider Recommendation 2 unresolved. We need additional information before we can consider this recommendation resolved.

Please provide us with your written response to this report within 30 days. The response should provide the information required in Appendix 4. Address your response to:

Ms. Kimberly Elmore  
Assistant Inspector General for Audits, Inspections, and Evaluations  
U.S. Department of the Interior  
Office of Inspector General  
1849 C Street, NW, MS 4428  
Washington, D.C. 20240

The legislation, as amended, creating the Office of Inspector General requires that we inform Congress semiannually on all audit reports issued, actions taken to implement our recommendations, and unimplemented recommendations.

Should you have any questions about this report, please contact me at (202) 208-5745.

---

# Table of Contents

Results in Brief .....	1
Introduction.....	2
Objective.....	2
Background.....	2
Findings.....	4
Incomplete and Untimely Imbalance Settlements .....	4
Properties with Systemic, Significant Imbalances not Addressed .....	6
Manual Calculation of Royalty Oil Owed Increases the Risk of Error.....	7
Inaccurate Performance Measure Results .....	8
No Verification of Volume Allocation Methods .....	9
Unjustified Imbalance Thresholds .....	9
RIK Response to DOE Recommendations .....	10
Recommendations.....	12
Appendix 1: Scope and Methodology.....	13
Scope.....	13
Methodology .....	13
Appendix 2: Definitions.....	14
Appendix 3: MMS Response to Draft Report.....	15
Appendix 4: Status of Recommendations.....	18

---

## Results in Brief

The Royalty-In-Kind Program (RIK), a part of the Minerals Management Service (MMS), takes royalties “in-kind” whereby companies pay their royalties in oil and gas volumes to the U.S. Government based upon their lease rate, usually 1/6 or 1/8 of the total production volume. RIK then sells those products competitively on the open market. In FY2008, MMS reported \$5 billion in sales revenue from oil and gas, about half from oil, through RIK. A portion of the royalty oil is transferred to the Department of Energy (DOE) to help fill the Strategic Petroleum Reserve.

We wanted to determine if the RIK program (1) verifies oil volumes to ensure the U.S. Government is receiving its share of royalties in-kind, and (2) delivers the correct oil volume to DOE contractors for the Reserve.

We found several areas where RIK could improve to ensure the proper accounting of oil royalties. In particular, we found:

1. Imbalance settlements were both incomplete and untimely. Imbalances are the result of an overdelivery or underdelivery based upon the amount of oil the U.S. Government is supposed to receive. This difference creates either a negative or a positive imbalance that will need to be resolved or settled, where either the company owes the U.S. Government or the U.S. Government owes the company.
2. Systemic, significant imbalances have not been addressed for years.
3. The risk of error when calculating royalties and imbalances increases due to RIK’s manual calculation process.
4. RIK overstated their performance measures related to property reconciliation.
5. RIK does not have a method for verifying volume allocations, especially for those properties with mixed leases whereby a lease may have in-kind royalties due, cash royalties due, and/or leases with royalty relief (no royalty required).
6. The thresholds used to prompt RIK to resolve the imbalance or settle with companies were not justified.

During our review, RIK made significant progress on several of the above items. As a result, we made four recommendations, which if implemented, should assist RIK in its operations and phaseout of the program.

---

# Introduction

## Objective

The audit's objectives were to determine if MMS' RIK Program (1) verifies oil volumes to ensure the U.S. Government is receiving its share of royalties in-kind, and (2) delivers the correct oil volume to DOE contractors for the Reserve.

## Background

The RIK Program, originally a pilot program in 1998, was formally established in 2004. RIK takes royalties on crude oil and natural gas production in product, or in-kind, from operators on federal leases rather than a cash payment or in-value.

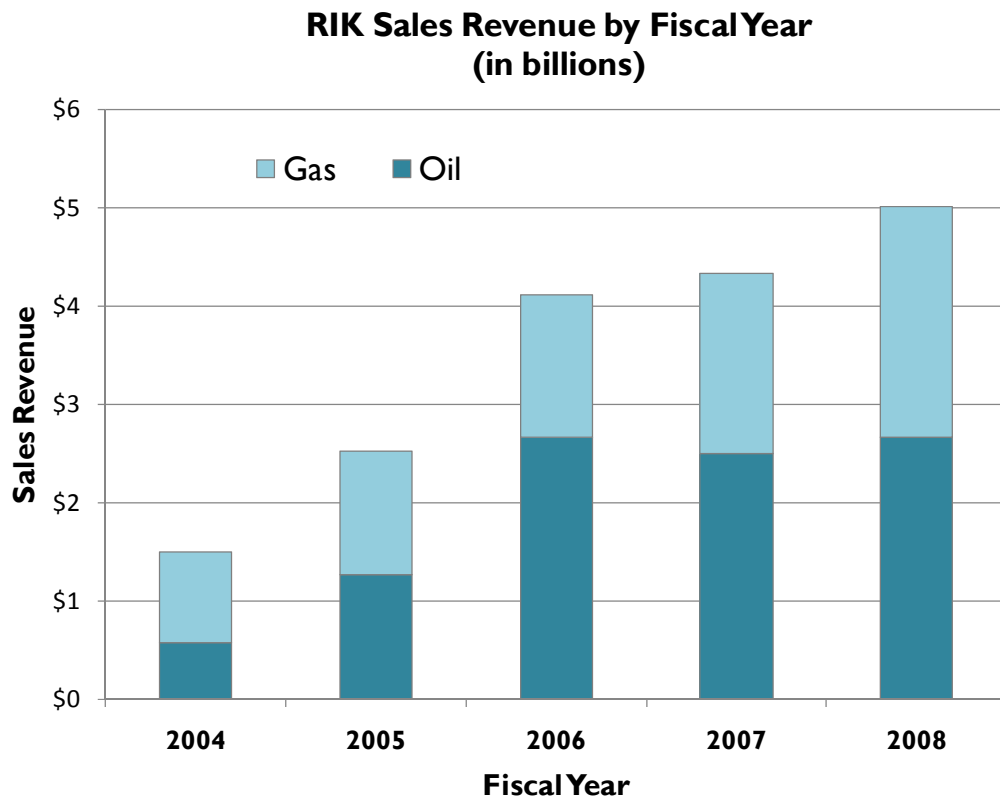


Figure 1

The royalty is usually 1/6 or 1/8 of the total volume dependent upon lease provisions. RIK then sells that crude oil or natural gas competitively on the open market. In FY2008, MMS reported \$5 billion in sales revenue from oil and gas, about half from oil, through the RIK Program (See figure 1 above.).

RIK is also responsible for delivering some of the royalty oil to DOE to fill the Reserve. In 2008, \$1.6 billion in royalty oil, about 16.2 million barrels, was delivered to DOE. The Reserve has several storage sites throughout the Gulf

Region with a total capacity of 727 million barrels. As of December 2009, the Reserve was near capacity. Figure 2 outlines the delivery process.

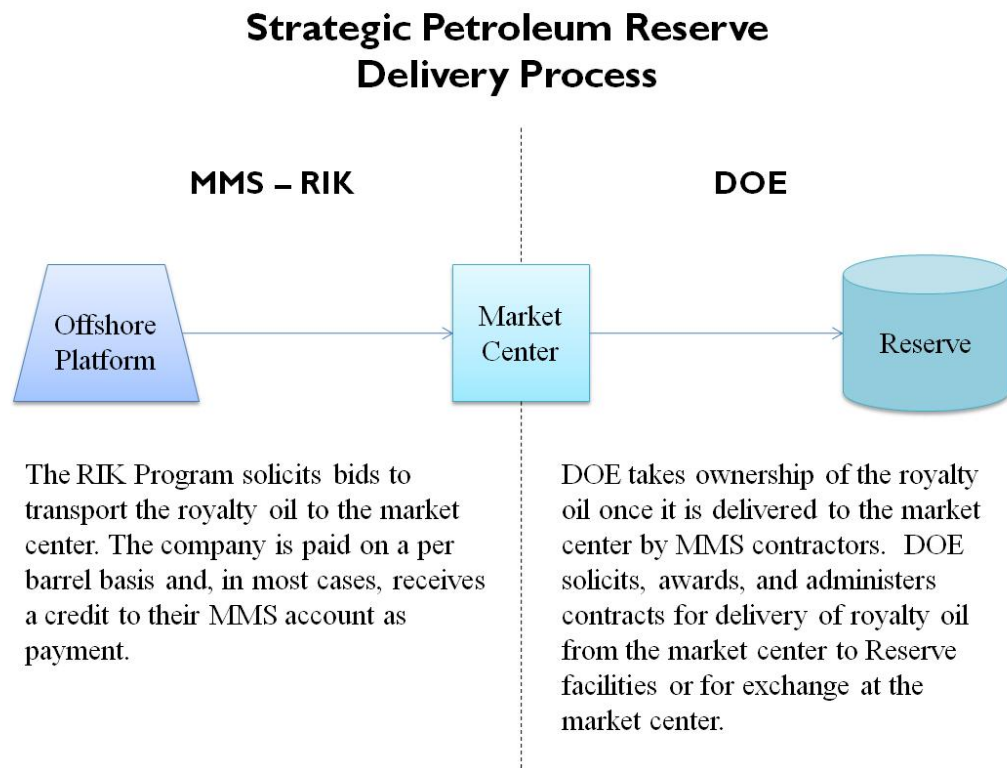


Figure 2

In September 2009, Secretary of the Interior Ken Salazar, announced the termination of the RIK Program. A RIK official estimated the program phaseout to take approximately two to three years. As RIK's sales contracts expire, the royalty will convert from in-kind to in-value. Deliveries to the Reserve ended as of December 31, 2009.



---

## Findings

This review stemmed from a DOE Office of Inspector General (OIG) report<sup>1</sup>, identifying several issues related to the Reserve and MMS' role in the process. We began this audit in June 2008<sup>2</sup> to determine if RIK (1) verifies oil volumes to ensure the government is receiving its share of royalties in-kind, and (2) delivers the correct oil volume to DOE contractors for the Reserve. (See appendix 1 for our scope and methodology.)

We identified six areas in RIK's volume verification process that did not assure that the U.S. Government is receiving all of its royalties. These include incomplete and untimely imbalance settlements; properties with systemic, significant imbalances not addressed; manual calculation of royalty volume increasing risk of error; inaccurate performance measure results; no verification of volume allocation methods; and unjustified imbalance thresholds. We also determined the status of DOE OIG's recommendations requiring collaboration between DOE and MMS to verify Reserve deliveries.

Since the announced termination of the RIK Program, RIK has taken a number of measures to alleviate some of our concerns. We identify those areas RIK has already improved.

The reader can follow the flow of the verification process in figure 3, and can note the location where RIK can make improvements (labeled 1 through 6). These are also in order of importance. (For definitions of terms in figure 3, see appendix 2.)

### Incomplete and Untimely Imbalance Settlements

**1** Lengthy delays in settling imbalances may result in millions of dollars in interest on overdelivered or underdelivered royalties. In response to a 2007 internal review of imbalances, RIK identified 13 properties requiring settlement with the companies. As of September 2009, none of these had been completed. Since 2007, the number of properties requiring a settlement increased from 13 to 41. In this same time, only two imbalance settlements were completed and payments totaling \$2.8 million were received from the companies. Less the two settlements completed, the total net settlement amount for the remaining 39 properties was \$1.3 million owed to the companies.

Some of these settlements have been accruing significant interest for years; some as far back as April 2004. For example, a company underdelivered during a three year period. The company owes the U.S. Government \$10.9 million in royalties and approximately \$2.4 million in interest.

---

<sup>1</sup> Office of Inspector General, Dep't of Energy, No. DOE/IG-9786, Department of Energy's Receipt of Royalty Oil, (2008).

<sup>2</sup> We postponed work on this review from July 2008 – February 2009 to respond to a Congressional request.



### RIK Oil Volume Verification Process

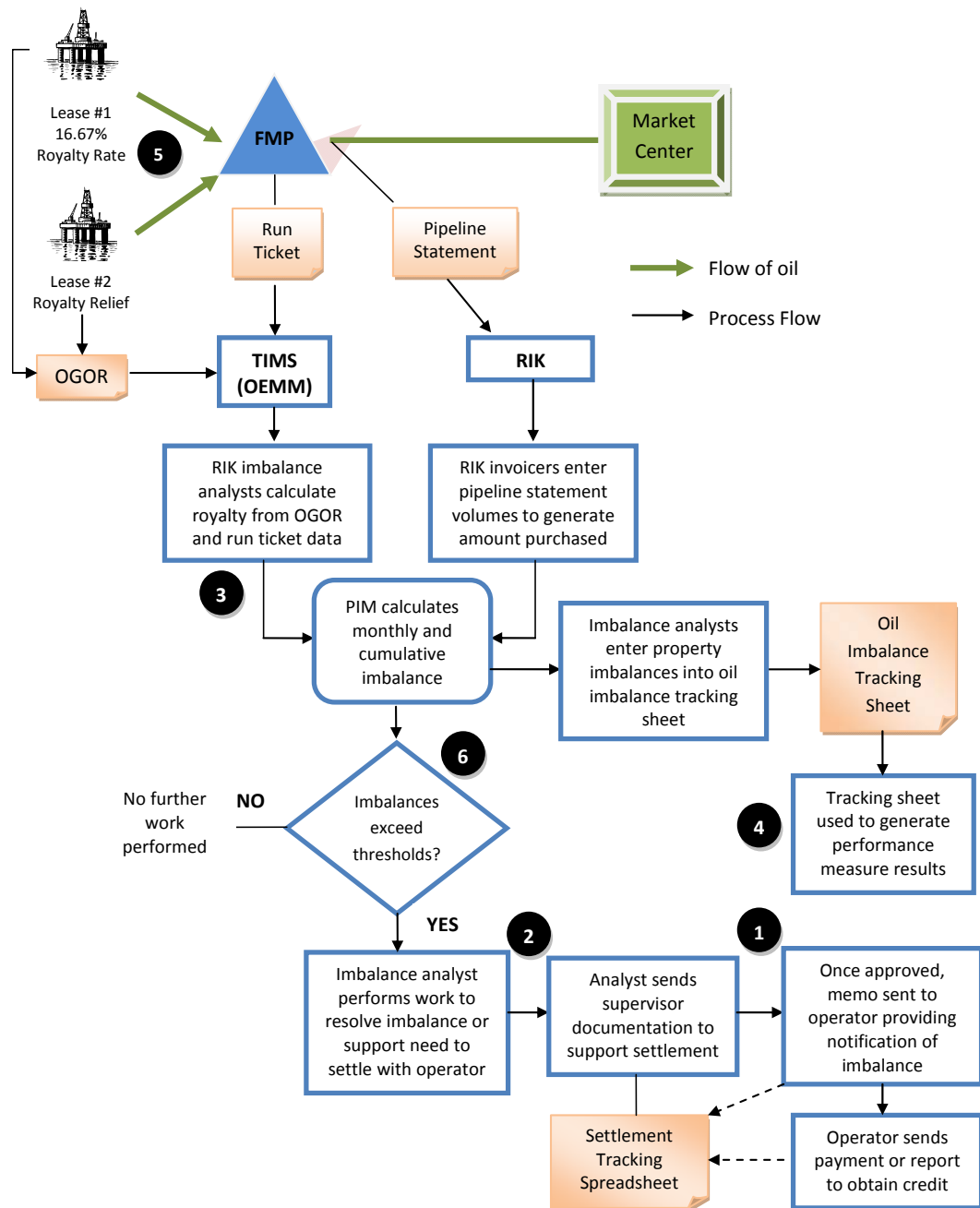


Figure 3

The problem is twofold. First, supervisory reviews have not been timely. Typically, analysts develop the settlement methodology and support and forward this to the imbalance supervisor for approval. Some settlements had been waiting almost a year for approval. Of the 41 settlements, only seven (17 percent) had been approved and a memorandum sent to the companies.

Second, no follow-up process was in place with companies after sending an imbalance notification memo. Once the supervisor reviewed the support and approved the settlement, RIK sent a memorandum to the company notifying them of the imbalance and the amount due the U.S. Government or owed to the company. The company is responsible for claiming a credit by submitting the appropriate report. The company has 30 days to respond with payment or to dispute the imbalance. Of the seven instances where RIK sent a memo, only two cases were closed and payments received. For the remaining five cases, the dates of the original notification went back two years, and had yet to be settled. Further, the memorandum was informational only. RIK took no action to follow up the memorandum with a demand letter if the company was unresponsive.

Subsequent to the announcement of RIK's phase-out, and to address concerns raised during our audit, RIK took steps to improve the imbalance function. RIK developed a strategy with additional procedures<sup>3</sup> outlining RIK's approach to reconciling and resolving imbalances. The strategy defined roles and responsibilities for the imbalance and invoicing staff to ensure appropriate separation of duties in the imbalance resolution process. For instance, RIK realigned the oil imbalance function under a new supervisor with crude oil experience. The supervisor and the program manager for Asset Sales and Accounting (formerly the deputy RIK manager) now review and approve all settlements. The new procedures also eliminated the informational memo, when the companies owe the U.S. Government, and replaced it with a demand letter.

These new procedures will substantially improve the imbalance resolution process. Significant work is still ahead, however, because the RIK oil imbalance group is reviewing all oil properties (approximately 250) included in the program since 2004. This effort will substantially increase the workload of the imbalance staff and will require diligence to make certain all royalties are collected. The imbalance supervisor estimated a full closeout of all properties would take about one year.

As of February 2010, RIK expected to complete a full reconciliation of 30 properties by April 2010. There are still 47 active properties that cannot be closed until after the contracts terminate. The last contract terminates in September 2010.

## **Properties with Systemic, Significant Imbalances not Addressed**

**2** Throughout this review, we identified properties continuing to have significant imbalances. In some instances, the operator continued to overdeliver or underdeliver a substantial number of barrels – in some cases thousands of barrels each month – and it continued for years before RIK began to research the issue. Resolving these imbalances would (1) reduce the

---

<sup>3</sup> Royalty-In-Kind, Royalty In-Kind Operator Imbalance Phase Out Strategy & Procedures, (Oct. 2009).

need to perform a settlement, and (2) reduce the price risk associated with these imbalances. Price risk is the monthly fluctuation in the oil price that could result in a company cumulatively underdelivering when prices are low, and then overdelivering when prices are higher, resulting in the U.S. Government owing the company. For example, for one of the settlements, MMS owes the operator \$3.7 million but the operator had underdelivered 9,000 barrels. The monthly pricing and the fluctuation in the overdeliveries and underdeliveries resulted in this situation.

Figure 4 below provides a hypothetical, albeit simple, situation. Here, an operator might underdeliver 7,000 barrels over several months, but MMS could owe the company \$30,000 because of the fluctuation in pricing and significant overdeliveries and underdeliveries for those months.

Month	Over (Under) Delivery	Monthly Price	Total Owed to Company (MMS)
1	3,000	\$60	\$180,000
2	(20,000)	\$45	(\$900,000)
3	10,000	\$75	\$750,000
	(7,000)		\$30,000

Figure 4. Hypothetical Underdelivery

RIK recently took action to address properties having significant imbalances. In particular, one company had nine properties with considerable imbalances over several years. At the time of our review, the estimated value of the imbalances for eight of the nine properties was \$17.9 million owed to the company for overdelivery of oil. Over the last few months, RIK has worked with the company to reconcile the volumes and resolve the imbalances. As of February 2010, RIK had resolved a majority of these imbalances and expects to have only minimal imbalances once they have verified all of the numbers.

#### Recommendation

- I. RIK should establish a tracking system for each property to ensure timely and proper reconciliation and resolution of imbalances.

## Manual Calculation of Royalty Oil Owed Increases the Risk of Error

3

In some cases, oil imbalance analysts manually calculate the royalty owed. This is done when volume adjustments are needed to account for

properties with leases that have different royalty rates, royalty relief, or when the lessee pays its royalty in-value. In one of our samples, RIK did not subtract royalty relief volumes from the total volumes resulting in an error of volume owed to the U.S. Government and a difference in the imbalance. While the error was not significant, the risk still exists that RIK is not calculating volumes correctly.

As the oil imbalance analysts reconcile the 250 properties, new procedures recently initiated include documenting the monthly royalty and imbalance calculations in a spreadsheet along with documentation to support the volume figures. This should help to complete the reconciliation file. In addition, RIK developed a checklist to be completed by each imbalance analyst to ensure all

### Recommendation

2. RIK should appropriately document royalty calculations and ensure procedures are in place for a verification review of these calculations, especially for those properties with various royalty rates, royalty relief, and in-value leases.

## Inaccurate Performance Measure Results

**4** RIK did not accurately report performance measure results. There are two performance measures related to the timely reconciliation and resolution of imbalances. The first performance measure includes a percentage of property reconciled within 180 days following the month of production. The percentage goal for FY 2008 was 87 percent. The second performance measure includes total reconciliation of 100 percent of RIK properties within 18 months following the production month.

The above measures include the settlement process, if applicable. Based on our review, RIK overstated the results because they did not accurately account for all unreconciled properties or properties with unresolved imbalances. For example, for one month in 2008, RIK reported that 100 percent of the 114 oil properties were reconciled. Based on our review, we determined that 11 (or 10 percent) of those properties were not reconciled because they were still in settlement status with the company, could not be reconciled because not all information was available, or had a significant imbalance that remained unresolved. We performed the same analysis for all months in 2008 and identified similar issues for every month.

In our draft report, we recommended RIK ensure accurate tabulation of performance results. MMS' response to the draft (see appendix 3) indicated that this recommendation is not relevant because, due to the phaseout of the RIK

program, RIK will no longer be tracking these performance measures. We, therefore, eliminated this recommendation in the final report.

## No Verification of Volume Allocation Methods

**5** A property could have leases with different royalty rates, leases with royalty relief, or leases that are part of the in-value program. We estimate that approximately 24 percent of oil properties have “mixed” leases. MMS relies on the volume reported on the Oil and Gas Operations Report (OGOR), a company generated report, to determine how lease operators allocate volumes by lease. We found an example where an oil company conducted an internal review and determined they were misallocating oil between a royalty relief well and a royalty bearing well. As a result, the company reallocated barrels from the royalty relief well to the royalty bearing well and calculated they owed MMS \$2.4 million in royalties. RIK and the Offshore Energy and Minerals Management (OEMM) program both stated that their processes would not have caught this allocation error. Because no one is verifying that the companies are appropriately allocating volumes at the lease level, this situation could be occurring elsewhere and MMS could potentially be losing royalties.

This issue is not isolated to in-kind royalties, but applies to in-value royalties as well. The same company noted above also had to adjust the royalty owed on its in-value gas royalties. An official in MMS’ Audit and Compliance Management<sup>4</sup> program stated that they would not have identified the allocation error through a compliance review or audit. He also stated that such a review of allocation methods, in some cases, would be very cumbersome.

### Recommendation

3. MMS should establish a process to verify volume allocation methods used by companies on offshore leases.

## Unjustified Imbalance Thresholds

**6** RIK did not justify the thresholds used to initiate imbalance resolution or settlement of the imbalance. The threshold for a monthly imbalance, by property, was one percent of gross production and the cumulative threshold by property was 2,000 barrels or \$100,000, using a \$50 average cost per barrel.

MMS was valuing the monthly and cumulative imbalances by a fixed \$50 per barrel instead of a more accurate price, such as the monthly index price. This was significant especially in 2008, when the monthly average cost per barrel ranged in price from \$37 to \$131.

<sup>4</sup> MMS’ Audit and Compliance Management program is responsible for ensuring that the nation’s federal and Indian in-value royalties are accurately reported and paid in compliance with laws, regulations, and lease terms. They accomplish this through compliance reviews and audits.

As part of its new procedures, RIK established a new cumulative threshold for its imbalances based on an internal cost benefit analysis. The new threshold is based on the estimated amount of time it takes RIK to reconcile and resolve any imbalances for each property. The amount also includes the estimated time spent to research and respond to company appeals. In addition, RIK is valuing the imbalance based on the per barrel contract price paid by the purchaser rather than the previous \$50 per barrel. This method accurately reflects the imbalance value. For those properties that do not exceed the threshold, the imbalance analyst and the imbalance supervisor will certify as such and include their certifications in the properties' reconciliation files.

#### **Recommendation**

4. RIK should update its "Royalty-In-Kind Operator Imbalance Phase Out Strategy & Procedures" dated October 7, 2009 with additional process improvements, such as the threshold certification form, property checklist, and royalty calculation spreadsheet. This will ensure a comprehensive closeout strategy.

### **RIK Response to DOE Recommendations**

In its January 2008 report regarding Reserve deliveries, DOE OIG included two recommendations requiring collaboration between DOE and MMS:

- Verify, to the extent practicable, past royalty receipts through supporting documentation or reconciliation with MMS.
- Provide MMS with DOE royalty oil receipts and work collaboratively with MMS to reconcile actual delivery and receiving reports at the market centers so that each agency knows the actual amounts of oil shipped and delivered.

In response to the first recommendation, RIK performed, to the extent possible, a reconciliation of all Reserve deliveries from 2002-2005 (there were no deliveries in 2006). RIK and DOE were unable to reconcile 53,000 barrels, which accounted for less than one percent of the total barrels delivered to the Reserve during that period. Due to the insignificant volumes, DOE OIG considered the recommendation closed.

In response to the second recommendation, in September 2007, RIK revamped its Reserve reconciliation process with DOE and issued new procedures to ensure verification and reconciliation of delivery estimates with actual deliveries. These procedures required more communication between RIK and DOE and agreement by both agencies on the amount of oil delivered to the Reserve's contractors. We reviewed the reconciliation files for one month and found support for almost all

estimates and actual deliveries. In addition, the file contained support for resolution of a discrepancy between RIK's figures and DOE's figures. Overall, we found this reconciliation process to be effective.

The issues noted in our report affect the deliveries to the Reserve contractors as well. Imbalances occur in Reserve deliveries when the shipper delivers more or less oil than that owed to the U.S. Government. Upon reviewing one Reserve contract in 2008, we found that for the 6-month contract term, approximately 30,000 barrels were underdelivered to the Reserve contractors. While this appears to be significant, RIK shippers delivered about 11.5 million barrels to the Reserve contractors during that period. The underdelivery accounts for about 0.3 percent of the total volume delivered.



---

# Recommendations

## Recommendations

Because of the program termination announcement, we reassessed our original recommendations, which focused on long-term program solutions, to focus on short-term solutions for RIK's close out of existing sales contracts and royalty volume verification. In the last six months, RIK has taken action on some of the issues noted in our report. Therefore, our recommendations supplement the newly developed procedures and processes for volume verification and imbalance resolution.

1. RIK should establish a tracking system for each property to ensure timely and proper reconciliation and resolution of imbalances.
2. RIK should appropriately document royalty calculations and ensure procedures are in place for a verification review of these calculations, especially for those properties with various royalty rates, royalty relief, and in-value leases.
3. MMS should establish a process to verify volume allocation methods used by companies on offshore leases.
4. RIK should update its "Royalty-In-Kind Operator Imbalance Phase Out Strategy & Procedures" dated October 7, 2009 with additional process improvements, such as the threshold certification form, property checklist, and royalty calculation spreadsheet. This will ensure a comprehensive closeout strategy.

---

# Appendix I: Scope and Methodology

## Scope

Our scope included RIK oil transactions and volume verification processes for unrestricted, small refiner, and Reserve sales from July 1, 2007 to February 2010. Our audit focused on the processes and procedures of RIK's Back Office (now referred to as Oil Accounting and Verification), which is responsible for verifying oil royalty volumes and reconciling Reserve deliveries with DOE.

## Methodology

We conducted this audit in accordance with generally accepted government auditing standards. We believe that the work performed provides a reasonable basis for our conclusions and recommendations. As part of our audit, we completed the following:

- Reviewed the DOE OIG report<sup>5</sup> and interviewed DOE OIG staff.
- Reviewed applicable laws, regulations, and RIK policies and procedures including newly developed procedures for phasing out the RIK program.
- Conducted on-site work at RIK's program office in Lakewood, Colorado where we interviewed MMS and RIK managers and staff, performed walkthroughs of RIK's invoicing and imbalance processes, and reviewed Reserve reconciliation and imbalance settlement files.
- Reviewed RIK's Reserve reconciliation files to verify that reconciliation efforts between MMS and DOE were supported through documentation, and if any discrepancies between MMS and DOE figures were explained and supported.
- Reviewed and analyzed RIK's Reserve reconciliation efforts for Reserve deliveries between 2002 and 2005 to satisfy DOE OIG's report recommendation.
- Analyzed and tested the reliability of the information in MMS' systems by selecting monthly oil transactions during our scope's timeframe.

---

<sup>5</sup> Office of Inspector General, Dep't of Energy, supra note 1

---

## Appendix 2: Definitions

The following definitions are to guide the reader through the process flowchart and points of deficiencies described in the report, p. 5.

Facility Measurement Point (FMP) – the volume measurement point for royalty determination. Also, it is commonly the point of royalty-in-kind oil purchase or transfer of oil to a Strategic Petroleum Reserve shipper (also referred to as a property).

Imbalance – the difference between the volume owed to the U.S. Government and the volume delivered to the RIK purchaser or shipper. This may be a positive or negative imbalance (also referred to as an operator imbalance).

Monthly Imbalance – the difference for one month of production.

Cumulative Imbalance – a running total of monthly imbalance amounts.

Oil and Gas Operations Report (OGOR) – used by companies to report all operations on a lease or agreement during a specific production month; includes gross production numbers. A majority are submitted electronically.

Oil Imbalance Tracking Sheet – Excel spreadsheet used by oil imbalance analysts to track monthly and cumulative imbalances by property.

Property Imbalance Module (PIM) – a module within RIK’s system that calculates a property’s monthly and cumulative imbalances.

Pipeline Statement – “third party” documentation received from the purchaser supporting the amount of oil received from the operator. The pipeline company transporting the oil provides this document to the purchaser. The purchaser submits the pipeline statement to RIK, which is used to create an invoice for the purchaser.

Run Ticket – document supporting the measurement of production at the FMP. The FMP operator submits this document to the Offshore Energy and Minerals Management program. A run ticket is the most reliable measure for production information used to calculate royalties.

Settlement “Cash Out” Tracking Sheet – Excel spreadsheet used by the RIK Back Office to track open and closed imbalance settlements.

Technical Information Management System (TIMS) – a computer system application that provides the means to collect and analyze offshore lease information, provide data for environmental studies, and collect and analyze information from inspections of offshore platforms and drilling rigs. Information collected also includes OGOR and run ticket volumes.

# Appendix 3: MMS Response to Draft Report



## United States Department of the Interior

MINERALS MANAGEMENT SERVICE  
Washington, DC 20240



APR 15 2010

### Memorandum

To: Assistant Inspector General for Audits, Inspections and Evaluations

Through: Wilma A. Lewis *W. A. Lewis*  
Assistant Secretary – Land and Minerals Management

From: S. Elizabeth Birnbaum *S. Elizabeth Birnbaum*  
Director

Subject: Response to Draft Audit Report *Minerals Management Service: Royalty-In-Kind Program's Volume Verification Process* (C-IN-MMS-0007-2008)

Thank you for the opportunity to review and comment on the Office of Inspector General (OIG) draft audit report entitled, *Minerals Management Service: Royalty-In-Kind Program's Volume Verification Process* (C-IN-MMS-0007-2008). We have reviewed the draft audit report and generally agree with its findings. We concur with four of the five listed recommendations. However, due to the scheduled phase-out of the Royalty-in-Kind (RIK) Program, we have changed our performance reporting such that Recommendation 2 is no longer relevant; therefore, we do not concur with Recommendation 2. Attached is a summary of planned actions, target dates, and titles of the officials responsible for implementation of each recommendation.

We appreciate the OIG's insight and recommendations to assist the Minerals Management Service (MMS) in ensuring proper and complete accounting of oil royalties during the phase-out of the RIK Program. If you have any questions about this response, please contact Andrea Nygren, MMS Audit Liaison Officer, on (202) 208-4343.

Attachment



**Office of Inspector General Draft Audit Report, Minerals Management Service: Royalty-In-Kind Program's Volume Verification Process (C-IN-MMS-0007-2008)**

**Recommendation 1:** *The RIK should establish a tracking system for each property to ensure timely and proper reconciliation and resolution of imbalances.*

**Response:** Concur

In October 2009, to replace the tracking system that had been in place previously, Minerals Management Service (MMS) began development of a new comprehensive Microsoft Project tracking sheet that lists all offshore Facility Measurement Points that have been in the Royalty-in-Kind (RIK) Program from April 2004 forward. This tracking sheet serves as a robust framework for identifying and tracking progress on the resolution of all oil volumetric imbalances at the facility management point level. The tracking sheet highlights key milestones in the imbalance reconciliation process, such as when a request is made for invoicing documentation and when entitlements have been confirmed.

**Target Date:** Quarter 3 FY 2010

**Responsible Official:** Gregory J. Gould, Associate Director, Minerals Revenue Management (MRM)

**Recommendation 2:** *The RIK should ensure accurate tabulation of performance results. This tabulation should include properties not reconciled, those that have unresolved imbalances, and those in settlement status.*

**Response:** Do not concur

This recommendation is no longer relevant because the performance measures have been changed due to the phase-out of the RIK Program. Beginning in FY 2010, MMS no longer tracks and reports the Government Performance and Results Act (GPRA) performance measures associated with the percentage of properties reconciled within 180 days following the month of production and total reconciliation of 100 percent of the properties within 18 months following the production month due to the phase out of the RIK Program. The program measures tracking sheet in our response to Recommendation 1 has replaced the tracking of these GPRA performance measures.

**Target Date:** Not Applicable

**Responsible Official:** Gregory J. Gould, Associate Director, MRM

**Recommendation 3:** *The RIK should appropriately document royalty calculations and ensure procedures are in place for a verification review of these calculations, especially for those properties with various royalty rates, royalty relief, and in-value leases.*

**Response:** Concur

The MMS has enhanced its process to appropriately document royalty calculations and source data. Imbalance analysts are required to complete spreadsheets that demonstrate the calculations made to determine royalty volumes. The close-out file must include appropriate documentation, such as the time the property was in RIK, royalty rates, and royalty relief status (as applicable),

as well as support for mixed royalty rates, allocation percentages, and assurance that entitlements for all leases are accurate.

**Target Date:** Quarter 3 FY 2010

**Responsible Official:** Gregory J. Gould, Associate Director, MRM

**Recommendation 4:** *The RIK should update its "Royalty In-Kind Operator Imbalance Phase Out Strategy & Procedures" dated October 7, 2009, with the additional process improvements, such as the threshold certification form, property checklist, and royalty calculation spreadsheet. This will ensure a comprehensive, closeout strategy.*

**Response:** Concur

The MMS is in the process of updating its oil imbalance procedures to address recent improvements and provisions that have been added since October 2009. We have developed new checklists and certification forms for entitlements, and write-offs are now an integral part of the imbalance reconciliation and close-out process. Informal procedures are already in place, including email instructions to the imbalance analysts regarding components of the close-out process.

**Target Date:** Quarter 3 FY 2010

**Responsible Official:** Gregory J. Gould, Associate Director, MRM

**Recommendation 5:** *The MMS should establish a process to verify volume allocation methods used by companies on offshore leases.*

**Response:** Concur

Consistent with a recent, similar Government Accountability Office recommendation related to natural gas, MMS will conduct a risk-based analysis to help determine the best method and tools available for verifying volume allocations for facility measurement points with mixed royalty rate leases. Once the analysis is complete, MMS will establish a process to verify volume allocation methods used by companies for offshore leases.

**Target Date:** Quarter 2 FY 2011

**Responsible Officials:**

Gregory J. Gould, Associate Director, MRM

Chris Oynes, Associate Director, Offshore Energy and Minerals Management

---

## Appendix 4: Status of Recommendations

In response to our draft report, MMS concurred with all four of our recommendations and agreed to implement them. In Recommendation 2, MMS stated that they have enhanced their process to appropriately document royalty calculations and source data. MMS' response did not address procedures for verifying royalty calculations; therefore, we consider this recommendation unresolved.

Recommendation(s)	Status	Action Required
1, 3, 4	Resolved, Not Implemented	None.
2	Unresolved	Please provide additional information in the final report response regarding procedures to verify royalty calculations.



## **Report Fraud, Waste, and Mismanagement**



Fraud, waste, and mismanagement in government concern everyone: Office of Inspector General staff, Departmental employees, and the general public. We actively solicit allegations of any inefficient and wasteful practices, fraud, and mismanagement related to Departmental or Insular Area programs and operations. You can report allegations to us in several ways.



---

### **By Mail:**

U.S. Department of the Interior  
Office of Inspector General  
Mail Stop 4428 MIB  
1849 C Street, NW  
Washington, D.C. 20240

### **By Phone:**

24-Hour Toll Free  
Washington Metro Area

800-424-5081  
703-487-5435

### **By Fax:**

703-487-5402

### **By Internet:**

[www.doioig.gov/hotline](http://www.doioig.gov/hotline)