Risk Assessment & Design of a Performance Measurement Strategy for the MRM RIV Compliance Program

Prepared for

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CONFIDENTIAL

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1. INTRODUCTION

Minerals Management Services (MMS) has responsibility for collecting, accounting for, and distributing revenues associated with mineral production from leased federal and Indian lands. Central to this responsibility is MMS' strategic goal to ensure that federal and Indian mineral revenues are timely and correctly reported and paid by the industry in compliance with applicable laws and regulations. To support this goal, the Minerals Revenue Management program (MRM) awarded a contract to Lukens Energy Group (LEG), a Black & Veatch Company, to assess the risks associated with the Royalty in Value (RIV) compliance program and develop initial recommendations on compliance performance measurement strategies and approaches.

Following is a summary of the scope of work:

- Identify the major areas of risk within MRM's compliance program, and assign relative magnitudes for these risks. Understanding of such risks is critical to the effective development of performance measurement metrics with respect to the Fair Market Value (FMV) benchmark.
- Collaborative consultation regarding strategies and performance measures for fulfilling compliance responsibilities and expectations over the compliance RIV property universe.
- The scope covers oil, gas and coal related compliance activities.

This report addresses the items outlined in the scope by providing the following:

- Identifies the key risk drivers that impact the RIV compliance program
- Evaluates MRM's current risk-based compliance strategy for oil, gas, and coal leases
- Assesses the appropriateness of MRM compliance performance measures as proposed in the MRM compliance business plan
- Introduces a conceptual risk-based performance measurement strategy
- Provides recommended approaches to implement risk-based performance measurement

2. BACKGROUND

MRM collects mineral royalties either in the form of cash payments (royalty-in-value (RIV)), or in production volumes, (royalty-in-kind (RIK)). In FY 2005, MRM reported total royalty revenues in the amount of $8.7 billion. Oil and gas royalties accounted for 89% of the total revenues, coal related payments represented 6%, and natural gas liquids (NGLs) and other commodities generated the remaining 5% of the total revenues.

The mineral royalty universe can be broken down into four major areas:

- Onshore Oil and Gas
- Offshore Oil and Gas
- Indian Oil and Gas
- Solids & Geothermal

As indicated in the table below, over 95% of royalty revenues are derived from the federal onshore and offshore areas.

Figure1: Reported Royalty Revenues by Category – FY 2005 (in $ Million)

	American Indian	Federal Offshore	Federal Onshore	Total
Coal (ton)	$ 84.74	-	$ 457.49	$ 542.23
Gas (mcf)	257.78	$ 3,247.10	1,646.07	5,150.95
NGL (gal)	6.86	167.57	111.29	285.72
Oil (bbl)	76.91	2,118.77	398.64	2,594.32
Other Royalties	13.50	1.24	117.95	132.70
Subtotal	**$ 439.80**	**$ 5,534.68**	**$ 2,731.45**	**$ 8,705.92**
Rents	1.15	223.54	59.21	283.90
Bonus	-	564.94	733.21	1,298.14
Other Sales Volume	-	-	-	-
Other Revenues	1.30	1.95	1.58	4.83
Subtotal	2.45	790.43	794.00	1,586.88
Total	**$ 442.24**	**$ 6,325.11**	**$ 3,525.45**	**$ 10,292.80**

In FY2005, approximately 2,600 companies paid royalties associated with mineral production from approximately 27,800 leases. Federal onshore leases account for about

79% of all producing leases, federal offshore leases represent about 8% of the total, and Indian leases account for the remaining 13%. Ninety-seven percent of all producing leases correspond to oil and gas production. Coal is produced in over 200 leases.

MMS' Compliance and Asset Management (CAM) program oversees the collection and reporting of federal royalty payments to ensure that the reported amounts are accurate and compliant with applicable regulations. Every year, CAM performs audits and compliance reviews on a large number of payors and properties. As indicated in Figure 2, CAM performed over 600 audits in FY 2005 with a compliance funding of about $35 million.

Figure 2: Number of Audits and Compliance Resources

	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Audits Completed*	470	311	466	163	632
* Audits often span fiscal years. Audits completed in early FY2005 reflect substantial effort to close prior year audits.					
Compliance Funding ($MM)	$ 32	$ 33	$ 33	$ 34	$ 35
Compliance Staffing	435	424	421	394	387
MMS Auditors	(165)	(164)	(162)	(151)	(152)
State / Tribal Contract Auditors	(98)	(99)	(98)	(98)	(96)

MMS has cooperative agreements with 11 states and 7 tribal governments to share the responsibility of verifying royalty payments and meeting MRM compliance objectives.

The large number of properties in MRM's universe prevents it from reviewing all properties and payors. Over the last 6 years, CAM has focused its compliance efforts on

(b)(2) high (b) (5)

As shown in Figure 3, MRM has increased its 3-year compliance coverage based on the

(b)(2) high (b) (5) since FY 2002.

Figure 3: Compliance Coverage

(b)(2) high (b) (5)

3. RISK ASSESSMENT OF THE MRM COMPLIANCE PROGRAM

An independent assessment of the MRM compliance process was conducted to identify underlying risk drivers and the uncertainties impacting royalty revenue collected through the RIV process. The assessment was performed based on our knowledge of commercially accepted practices as well as the statutory/regulatory requirements of fair market value. Collaborative discussions held with CAM personnel enabled us to obtain a better understanding of the types and relative impacts of risks faced in the MRM compliance program. The assessment also included a comparison between the risk drivers in the RIV and RIK programs based on previous work performed for MMS. Our assessment utilized the following approach:

- Identification of major risk areas
  - This process identified risk drivers by reviewing the goals of the MRM compliance group and the existing compliance review processes.
- Assessment of relative magnitudes of risk for MRM compliance
  - This process assessed both quantitative and qualitative drivers to determine their relative magnitude of risk for MRM compliance. The factors were analyzed to determine whether they (1) present a recognizable risk, (2) are quantifiable, and (3) are transparent.
- Utilization of a structured methodology to review and assess the RIV risk drivers and any existing metrics in relation to the statutory/regulatory requirements of fair market value

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(b)(2) high (b) (5)

- The current compliance practice utilized by MRM (b)(2) high (b) (5) (b)(2) high (b) (5)

- MRM's current focus on (b)(2) high (b) (5) (b)(2) high (b) (5)

- MRM's resource constraints prevent it from performing audits on all payors / properties. For this reason, MRM relies on compliance reviews, which can enhance revenue and property coverage while utilizing fewer resources. Compliance reviews are either limited scope or full scope. A full scope compliance review compares the (b)(2) high (b) (5) (b)(2) high (b) (5) (b)(2) high (b) (5) Compliance reviews facilitate MRM's compliance mission by assisting in determining how to allocate resources in the most efficient manner. For example, a limited scope review could lead to an audit (b)(2) high (b) (5) To ensure a uniform implementation of the compliance process, MRM should (b)(2) high (b) (5) (b)(2) high (b) (5)

- Currently, MRM staff is focused on completing all compliance processes – compliance reviews, audits, audit referrals, etc. – within a 3-year horizon for a given property. However, given MRM's resource limitations, the program cannot fully review all properties within this timeframe. (b)(2) high (b) (5)

  (b)(2) high (b) (5)

- MRM has responsibility for the risk of non-compliance within the existing cooperative agreements with States and Tribes, but has limited control. Given this risk exposure, adequate control of facilitation contracts and standardized training of federal, State and Tribal staff is essential to implement a successful compliance strategy.

- The potential (b)(2) high (b) (5)

  (b)(2) high (b) (5)

- Data management tools are very important for the success of compliance activities. Currently, MRM (b)(2) high (b) (5)

  (b)(2) high (b) (5)

- MRM should review its existing practice of having residency audit programs at the larger payors. The residency audit programs should (b)(2) high (b) (5) (b)(2) high (b) (5) In recent years, many large companies have sold properties and retain only a few of their large properties; thereby potentially changing the overall compliance risk profile of the payor. These companies should be (b)(2) high (b) (5) (b)(2) high (b) (5)

- When comparing the RIV program with the RIK program, we find that the RIK program has (b)(2) high (b) (5) (b)(2) high (b) (5)

- While the above observations apply to the MRM compliance program as a whole, we must note certain differences in the compliance programs (b)(2) high (b) (5) (b)(2) high (b) (5)
  - (b)(2) high (b) (5)

3.2. Risk of Non-Compliance

In order to carry out an assessment of the risk factors faced by the MRM compliance program, we must first define what constitutes the risk of non-compliance. As with all types of risk, the risk of non-compliance arises from the presence of uncertainty. Based on our assessment, we identified four uncertainties that define the risk of non-compliance:

(b)(2) high (b) (5)

1.

2.

3.

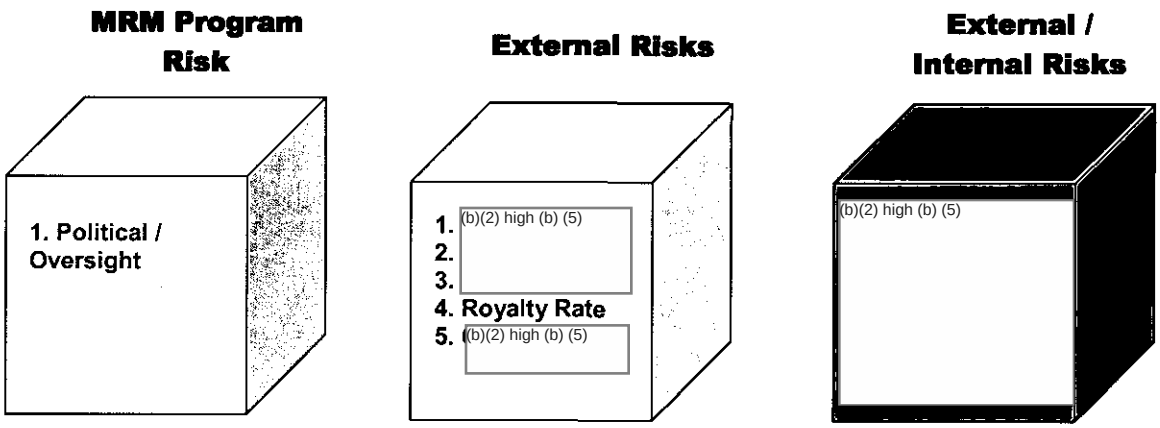
4.

3.3. Identification of Major Risk Drivers

Part of the risk assessment process is identifying key risk drivers through a review of the RIV program, the statutory requirements and regulations governing the RIV program, and within the context of existing oil, gas and coal markets. Figure 5 indicates the nine risk drivers that were identified in our assessment. They represent factors that drive the highest risk for the MRM compliance program. We have placed each of the nine drivers in the following general categories:

- Program Level Risk
- External Risks
- External / Internal Risks

Figure 5: Risk Drivers



Political Oversight

MMS has to meet certain statutory and regulatory guidelines in carrying out its obligation to collect royalty payments. Consequently, MMS is subject to oversight of its activities by various internal and external stakeholders of the RIV compliance program including Congress and oversight committees, OMB, GAO and the OIG's office. MMS' decisions, strategies, and performance are under the ongoing scrutiny of stakeholders. This program-level risk represents a significant exposure to the entire MRM compliance program.

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(b)(2) high (b) (5)

Implementation of the Compliance Process

Well defined compliance processes and procedures, comprehensive training and detailed management information systems are essential for the uniform implementation of compliance practices. (b)(2) high (b) (5)

(b)(2) high (b) (5)

3.4. Assessment of Relative Magnitudes of Risk

Following the identification of the major risk drivers, we analyzed the relative magnitude of their impacts on MRM based on two criteria: the likelihood of occurrence and the potential severity of loss in the event of an occurrence.

As illustrated in Figure 6, (b)(2) high (b) (5) that the MRM compliance program faces are (b)(2) high (b) (5) In a dynamic market, increased (b)(2) high (b) (5), (b)(5) and (b)(2) high (b) (5), (b)(5) (b)(2) high (b) (5), (b)(5) (b)(2) high (b) (5) (b)(2) high (b) (5) (b)(2) high (b) (5) Therefore, these two factors represent the (b)(2) high (b) (5) to the compliance program.

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(b)(2) high (b) (5)

Royalty rate and political oversight are not considered to represent risks that MRM needs to focus on or manage independently. Uncertainty associated with verifying the accuracy of the royalty rate is (b)(2) high (b) (5) any variation in royalty rate is infrequent and easily verified. The uncertainties associated with political oversight are (b)(2) high (b) (5) the MRM comes under the oversight of various administrative and political entities. Although, political oversight can have significant impacts on MRM operations, the severity of loss driven by political oversight is (b)(2) high (b) (5) Managing the risks associated with the other risk drivers also helps MRM to manage the risk exposure arising from political oversight.

4. RISK-BASED APPROACH FOR PERFORMANCE MEASUREMENT

For MRM to meet future program challenges and performance expectations, we believe it is essential to develop a risk-based performance methodology that reflects MRM's business objectives. B&V/LEG has developed a risk-based approach to performance measurement. The following section describes how such an approach could be developed and implemented.

4.1. Risk-Based Performance Measurement – Objectives & Principles

The proposed risk-based approach described in this section uses the following objectives and principles as the pillars of its design.

Objectives

- Provide MMS with a structured, well-defined risk-based methodology to support a comprehensive compliance strategy
- Enhance coverage of audit/compliance reviews by incorporating the (b)(2) high (b) (5), (b)(5)
- Provide analytical tools to better manage and allocate limited resources
- Identify and quantify the factors that drive the risk of non-compliance among (b)(2) high (b) (5), (b)(5)

The risk-based performance measurement methodology is guided by the following principles:

Principles

The Risk-Based Performance Measurement (RBPM) should

- Adhere to statutory requirements in meeting compliance objectives
- Allow for an enhanced process to ensure "substantial" compliance
- Be based on transparent data or market intelligence, as much as possible
- Provide a framework for the inclusion of States and Tribes in the design and implementation of a comprehensive compliance strategy
- Allow flexibility based on changes in commodities, regional considerations, and market practices and trends.
- Allow diversity and flexibility in the identification and utilization of risk drivers
- Have reasonable labor requirements, and provide a practical approach that allows for the deployment of limited resources in the most efficient manner
- Prescribe maintaining relevant documentation within a performance measurement system

4.2. Proposed Compliance Footprint for Risk-Based Performance Measurement

(b)(2) high (b) (5)

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