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U. S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL

REPORT ON MATTERS IDENTIFIED AT  
THE STRATEGIC PETROLEUM RESERVE  
DURING THE AUDIT OF THE DEPARTMENT'S CONSOLIDATED  
STATEMENT OF FINANCIAL POSITION  
AS OF SEPTEMBER 30, 1995

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AS OF SEPTEMBER 30, 1995

Audit Report Number: CR-FS-96-03

SUMMARY

The Government Management Reform Act of 1994 requires that the Department of Energy (Department) submit audited financial statements to the Office of Management and Budget annually, beginning with the statements as of September 30, 1996. In preparing for this effort, we planned to audit the Consolidated Statement of Financial Position as of September 30, 1995, to determine whether it presented fairly, in all material respects, the Department's financial position. With the assistance of an independent public accounting firm who applied agreed-upon procedures, we conducted a portion of the Departmentwide audit at the Strategic Petroleum Reserve and its integrated management and operating contractor, DynMcDermott Petroleum Operations Company (DynMcDermott). For crude oil inventories, the Strategic Petroleum Reserve Project Management Office (Project Office) is responsible for the financial accounting records, and DynMcDermott maintains quantitative records. For property, DynMcDermott maintains financial accounting records, and the Project Office is responsible for the account balances entered into the Department's core accounting system.

The audit disclosed errors and control weaknesses as of September 30, 1995, which impacted two Departmental accounts, Petroleum Inventories and Completed Property, Plant and Equipment.

We recommended that adjustments be made to the accounts and improvements be made to the internal controls. Management generally concurred with the findings and recommendations and agreed to make adjusting entries in accordance with Departmental Headquarters direction.

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Office of Inspector General

PART I

APPROACH AND OVERVIEW

## INTRODUCTION

The Government Management Reform Act of 1994 significantly expanded the provisions of the Chief Financial Officers Act of 1990 and requires that audited financial statements covering all accounts and associated activities of the Department of Energy (Department) be submitted to the Office of Management and Budget annually. The first submission involves financial statements as of September 30, 1996. In preparing for this effort, the Office of Inspector General planned to audit the Department's Consolidated Statement of Financial Position as of September 30, 1995, by examining internal controls, assessing compliance with laws and regulations, and testing selected account balances at various Departmental facilities.

The objective of the Departmentwide effort was to determine whether the Department's Consolidated Statement of Financial Position as of September 30, 1995, presented fairly, in all material respects, its financial position. Departmentwide issues are addressed in Audit Report No. IG-FS-96-01.

The purpose of this report is to inform the Strategic Petroleum Reserve Project Management Office (Project Office) of matters that came to the attention of the Office of Inspector General during the audit at the Project Office and DynMcDermott Petroleum Operations Company (DynMcDermott), its integrated management and operating contractor. In managing the Strategic Petroleum Reserve (Reserve), DynMcDermott maintains financial accounting records for property, and the Project Office is responsible for the account balances entered into the Department's core accounting system. For crude oil inventories, the Project Office is responsible for the financial accounting records, and DynMcDermott maintains the quantitative records.

## SCOPE AND METHODOLOGY

Audit work was conducted from June 1995 through November 1995 at activities managed by DynMcDermott with operations at Bayou Choctaw, Weeks Island, West Hackberry and St. James Terminal in Louisiana, and Bryan Mound and Big Hill in Texas. With the assistance of an independent public accounting firm who applied agreed-upon procedures, we examined internal controls, assessed compliance with applicable laws and regulations, and tested selected account balances. These accounts were Petroleum Inventories; Completed Property, Plant and Equipment; and Accumulated Depreciation.

Audit work was performed in accordance with generally accepted Government auditing standards for financial audits. Since we relied on computer-generated data, we evaluated the general control environment of applicable systems and tested the reliability of data.

Because audit work was limited, it would not necessarily disclose all the internal control weaknesses that exist.

Furthermore, because of inherent limitations in any internal control structure, errors or irregularities may nevertheless occur and not be detected. The issues addressed in this report represent our observations of activities through the end of field work. Projection of any evaluation of the structure to future periods is subject to the risk that procedures may become inadequate because of changes in conditions or that the effectiveness of the design and operation of policies and procedures may deteriorate.

An exit conference was held with the Project Office and DynMcDermott on November 17, 1995.

#### OBSERVATIONS

During our audit, we found errors and control weaknesses that impacted Petroleum Inventories and Completed Property, Plant and Equipment account balances for the Reserve as of September 30, 1995. Problems with the Petroleum Inventories account involved lack of accruals for loss contingencies, timing differences, and duplication of effort. The Completed Property, Plant and Equipment account had problems related to obsolete property, incomplete capitalization, and inadequate documentation.

The following conditions were noted in relation to the Petroleum Inventories account. Loss contingency costs were not accrued for degasification and cooling operations required to draw-down crude oil or for the planned decommissioning of Weeks Island. Adjustments to crude oil quantity could be (and were) made in a different period than the accompanying adjustments to value. Also, efforts were unnecessarily duplicated because the same information on crude oil quantity adjustments was being independently entered into two separate systems.

The Property, Plant and Equipment account was affected by three noted conditions. Unused and excess property with minimal net realizable value was classified in the property records as in-service and included in the accounting records at net book value. Property records did not always reflect the effect of contract modifications on capitalized assets. In addition, accounting transactions were not always properly documented.

Management generally concurred with our findings and recommendations and initiated, completed, or acknowledged that corrective actions were needed to address each of our recommendations. Part II of this report provides additional details concerning the audit results and management's comments.

#### PART II

#### AUDIT RESULTS

Finding 1: Degasification and Cooling Costs

Background

The Reserve's 1994 Assurance Memorandum to the Secretary of Energy disclosed a higher-than-normal gas content in some of its crude oil. This apparently resulted from years of intrusion of methane from the surrounding salt formations and absorption of nitrogen from cavern pressure integrity tests as well as elevated temperatures of some of the crude oil due to geothermal heating. Based on detailed chemical and physical analyses, it appears that as much as 144 million barrels of the Reserves inventory may require degasification treatment. According to Project Office personnel, the estimated cost to treat the conditions noted is \$64 million. Of this amount, about \$40 million was obligated as of the end of Fiscal Year 1995, according to Project Office personnel.

#### Details of Finding

Statement of Financial Accounting Standard No. 5, Accounting for Contingencies, states that a loss contingency should be accrued if it is probable that an asset has been impaired or a liability has been incurred at the balance sheet date and the amount of the loss is reasonably estimable. However, the Reserve had not accrued a loss for degasification and cooling costs that are required to maintain crude oil draw-down capability. According to Project Office personnel, the unfunded degasification and cooling liabilities were approximately \$24 million.

#### Recommendation

We recommend that the Project Office recognize the remaining loss contingency (unfunded liability) for the degasification and cooling of the impacted crude oil reserves in the amount of \$24 million as of September 30, 1995.

#### Management Comments

The Project Office concurred with the finding and recommendation and plans to make an adjusting entry.

#### Auditor Comments

Management's actions are responsive to the recommendation.

#### Finding 2: Weeks Island Decommissioning Costs

##### Background

In February 1994, the Weeks Island Mine Integrity Management Group (Integrity Group) was formed to begin an investigation of the Weeks Island sinkhole and the increasing brine accumulation in the storage chamber and to develop recommendations regarding integrity of the mine for continued oil storage. Based upon extensive geotechnical investigations, the Integrity Group concluded that the storage chamber was, almost certainly, in communication with the surface water aquifer, and established that there would be an increased escalation of costs for maintaining Weeks Island mine integrity. Accordingly, the

Integrity Group concluded that the storage facility is not suitable for continued long-term oil storage. It also recommended continuation of diagnostics, mitigation of known anomalies and monitoring to identify other developing anomalies with a view to assuring the most economical, safe, and environmentally acceptable crude oil draw down and decommissioning of the facility.

In December 1994, the Department announced its intent to decommission the Weeks Island storage facility because of the geotechnical problems that pose a significant risk of environmental damage and potential oil loss. According to Project Office personnel, the estimated cost of decommissioning Weeks Island is \$90.7 million. Of this amount, about \$13.3 million was obligated as of the end of Fiscal Year 1995, according to Project Office personnel.

The Department proposes to stabilize the empty mine by controlled flooding of the chambers with brine and plugging of the mine shafts and boreholes. Filling the mine with brine will apparently allow for recovery of 95 to 98 percent of the residual 350,000 to 700,000 barrels of oil through skimming operations. Approximately 10,000 to 30,000 barrels of crude will not be recovered.

#### Details of Finding

Statement of Financial Accounting Standard No. 5, Accounting for Contingencies, states that a loss contingency should be accrued if it is probable that an asset has been impaired or a liability has been incurred at the balance sheet date and the amount of the loss is reasonably estimable. However, the Reserve had not accrued a loss for the remainder of estimated costs for the ongoing decommissioning of Weeks Island or the unrecoverable crude oil. As a result, the Reserve's unfunded decommissioning expenses and liabilities related to closure of Weeks Island were understated by about \$77.4 million.

#### Recommendations

We recommend that the Project Office recognize the remaining loss contingency (unfunded liability) for the decommissioning of Weeks Island in the amount of about \$77.4 million as of September 30, 1995. We further recommend that that the loss due to unrecoverable crude be recorded at such time that the amount can be reasonably estimated.

#### Management Comments

The Project Office concurred with the finding and recommendations and plans to make an adjusting entry.

#### Auditor Comments

Management's proposed actions are responsive to the recommendations.

### Finding 3: Quantity and Cost Adjustments

#### Background

DynMcDermott maintains the quantity tracking system for crude oil inventory, and the Project office maintains a separate cost tracking system (financial accounting system) for the crude oil inventory.

#### Details of Finding

Sound business practices require that the effect of physical inventory adjustments be recorded in the financial accounting system in a timely manner. During Fiscal Year 1995, the quantity tracking system was adjusted by about 7,200 barrels to reconcile with physical tank adjustments; however, the cost tracking system was not adjusted for these changes in the same fiscal year. Recording quantity changes without recording the corresponding value is a break-down of internal controls that could result in errors in the financial statements. For example, as a result of this particular instance, the crude oil inventory was overstated by about \$130,000, according to Project Office personnel. Moreover, the potential for greater impact exists.

#### Recommendation

We recommend that the Project Office ensure that controls are implemented to avoid a similar occurrence in the future.

#### Management Comments

The Project Office concurred with the finding and recommendation.

#### Auditor Comments

Management's actions are responsive to the recommendation.

### Finding 4: Timing Differences

#### Background

On behalf of the Department, the Defense Fuel Supply Center enters into contracts with various oil companies to purchase crude oil. These contractual agreements require that invoices be sent to Departmental Headquarters for payment. Headquarters sends a copy of the invoices to the Maintenance and Logistics Division in New Orleans where the invoices are reviewed and approved for payment. Payment to the contractor is made after the approved invoices are returned to Headquarters. Access to the obligated funds for purchasing the crude oil is retained at Headquarters, and purchase costs are transferred to the Project Office by transfer documents. Upon receipt of the transfer document, the Project Office records a debit to crude oil inventory and a credit to "transfers-in."

#### Details of Finding



Sound business practices require timely recording of both the quantity and cost of purchased inventories. However, a cost and quantity timing difference exists in recording crude oil purchases. The Project Office does not record the purchase cost of crude oil inventory until receipt of a transfer document from Headquarters while quantities of purchased crude oil are recorded on receipt. As a result, purchases are recorded without corresponding values, and inventories are understated until the adjustment is recorded.

#### Recommendation

We recommend that the Project Office implement procedures that allow for crude oil purchase quantities and costs to be recorded concurrently.

#### Management Comments

The Project Office concurred with the finding and stated that procedures to accrue crude oil inventory acquisition costs would be reviewed and revised as appropriate.

#### Auditor Comments

Management's proposed actions are responsive to the recommendation.

#### Finding 5: Duplication of Effort

##### Background

DynMcDermott maintains the quantity tracking system for crude oil inventory, and the Project Office maintains a separate cost tracking system (financial accounting system) for the crude oil inventory. To provide an integrated system of inventory volumes and dollars, DynMcDermott implemented a system that combined the features of both systems. This cost/quantity system provided the ability to maintain a moving weighted average cost per barrel by complex and type. Additionally, this system provided the capability to generate supporting reports and documents on both dollars and volumes from one source and avoid duplication of effort. This system was in demand because deficiencies in the cost tracking system did not allow it to maintain both dollars and volumes.

##### Details of Finding

Sound business practice requires organizations to be operated in a cost-effective manner. In contrast, we noted duplication of effort when recording quantities and costs into the cost/quantity system. DynMcDermott is entering the same information into the cost/quantity system as that being independently entered into the cost tracking system and the quantity tracking system. As a result, additional costs are incurred.

#### Recommendation

We recommend that the Project Office direct DynMcDermott to create an automatic feed from the cost tracking system and the quantity tracking system to the cost/quantity system or implement other actions to alleviate this duplication of effort.

#### Management Comments

The Project Office partially concurred with the finding and took some corrective action by implementing an automated feed from the quantity tracking system. An automatic feed was not implemented from the cost tracking system because the cost tracking system does not contain crude oil inventory data broken down by site, type, and complex as required by the cost/quantity system.

#### Auditor Comments

Management's proposed actions are responsive to the recommendation to the extent that it was able to implement an automated feed from the quality tracking system.

#### Finding 6: Obsolete Property

##### Details of Finding

On September 25, 1995, consistent with the Federal Accounting Standards Advisory Board Exposure Draft for Accounting for Property, Plant and Equipment that would require Property, Plant, and Equipment that is removed from service to be valued at its expected net realizable value, the Department's Deputy Controller issued guidance requiring the write down of surplus physical assets to their net realizable value. At the time of the audit, there were four unused and excess disposal wells and related land on the Reserve's records that were classified as in-service real property. These disposal wells were plugged with cement and thus were unusable, having minimal, if any, net realizable value. As a result, the Property, Plant and Equipment account balance is in error by about \$3.2 million.

##### Recommendation

We recommend that the Project Office ensure that the disposal wells and related land be written down to their net realizable value and recognize a loss for Fiscal Year 1995.

#### Management Comments

The Project Office concurred with the finding and recommendation and plans to make an adjusting entry.

#### Auditor Comments

Management's proposed actions are responsive to the recommendation.

## Finding 7: Capitalization Procedures

### Details of Finding

Departmental Order 2200.4, Accounting Overview, requires that Property, Plant and Equipment be recorded at full cost. The full cost should include all costs incurred to bring the asset to a form and location suitable for the asset's intended use. Based on DynMcDermott Internal Audit property testwork, it was noted that real property records in the Real Property Department did not reflect all contract modifications maintained by the Procurement Department. After a contract is bid and awarded, the contract price is communicated to the Real Property Department where it is allocated among the related assets. Once the contract is complete the contract price is capitalized. Any modifications made to the contract are not necessarily communicated to the Real Property Department. This was caused by a breakdown of communication between the departments regarding contract modifications. As a result, the amounts capitalized by the Real Property Department were not always equal to the amount paid for construction projects.

### Recommendation

We recommend that the Project Office ensure that procedures be implemented to ensure that all contract modifications are communicated to the Real Property Department. A possible solution would be to have each department sign off on a final contract price representing the amount to be capitalized.

Management Comments

The Project Office concurred that the capitalized cost should equal the amount actually paid.

### Auditor Comments

Management's proposed actions are responsive to the recommendation.

## Finding 8: Inadequate Documentation

### Details of Finding

General Accounting Office, Standards for Internal Controls In The Federal Government, state that documentation of transactions should be complete and accurate and should facilitate tracing the transaction from before it occurs, while it is in process, to after it is completed. Also, the documentation must be available as well as easily accessible for examination. However, documentation of accounting transactions was not always evident within the Real Property Department. This is because there is an apparent lack of guidance on what constitutes an effective and clear audit trail. As a result, a clear and effective audit trail did not always exist.

### Recommendation

We recommend that the Project Office direct DynMcDermott to implement controls to ensure that all accounting transactions within the Real Property Department be supported such that an appropriate audit trail exists.

#### Management Comments

The Project Office concurred with the finding and recommendation. DynMcDermott Internal Audit will recommend implementing controls to improve the flow of data on real property files.

#### Auditor Comments

Management's proposed actions are responsive to the recommendation.