



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



Immediate Action Needed to Stop the Inappropriate Use of Cooperative Agreements in BLM's Helium Program

REPORT NO. WR-IV-BLM-0003-2008 / OI-CO-07-0206-I

AUGUST 2008



United States Department of the Interior Office of Inspector General

Washington, DC 20240

Memorandum

AUG 19 2008

To: James Caswell
Director, Bureau of Land Management

From: Earl E. Devaney
Inspector General

Subject: Immediate Action Needed to Stop the Inappropriate Use of Cooperative Agreements
in BLM's Helium Program (WR-IV-BLM-0003-2008 /OI-CO-07-0206-I)

This report presents the results of a joint review by the Office of Inspector General's Office of Inspections and Evaluations and Office of Investigations. In response to an initial hotline complaint, we reviewed the Bureau of Land Management (BLM) Helium Program (the Program) at the Bush Dome Reservoir, which is managed by the Amarillo field office (field office). We focused on two 15-year cooperative agreements that should have been procurement contracts and found several weaknesses that leave the Government vulnerable to fraud, mismanagement, and potentially large monetary losses. In addition, we learned of overcharging, possible double billing, costly short-term financing, and unjustified allocating of equipment costs.

During the review, we came to realize that immediate action is paramount and suspended our work to be able to provide the Department with the information it needs to act quickly. Because BLM is currently reviewing the renewal of both cooperative agreements, the Department has an opportunity to intervene, stop misuse of the agreements, and research and address the other irregularities we identified.

This report contains five recommendations that, if implemented, should stop existing inappropriate use of the agreements and allow costs, if they are determined to have been improperly paid, to be recouped. We would appreciate being kept apprised of the actions the Department takes on our recommendations as we will track the status of their implementation. Please forward within 30 days a written response to this Office that identifies plans to address the findings and recommendations cited here.

We thank the Department and bureau staff for their cooperation and assistance. If you have any comments or questions regarding this report, please do not hesitate to contact me.

WHY WE DID THIS REVIEW

We received a hotline complaint that alerted us to inappropriate activities occurring between the BLM Amarillo field office and a company (the contractor) that represents several large helium refiners on the BLM helium pipeline. The complaint discussed a less-than-arms-length relationship between BLM and the contractor, as well as actions the BLM Amarillo field office has taken that allowed circumvention of procurement regulations.

DEVELOPMENT OF THE HELIUM PROGRAM

While helium was essentially unknown before the 20th century, today helium plays a prominent role in space, defense, and energy programs. Some of its uses include pressurization of liquid propellants for the space shuttle, weapons development, and nuclear fusion reactor experiments. Helium is extracted from natural gas, and all natural gas contains at least trace amounts of helium. Most helium production is done in Texas, Oklahoma, Kansas, Colorado, Utah, and Wyoming, as these areas produce natural gas that is richer in helium than in other parts of the country.

The Program was created in 1925 to ensure supplies of helium to the U.S. Government for defense, research, and medical purposes. In 1960, the Helium Act Amendments directed the Secretary of the Interior to acquire and conserve helium using funds borrowed from the U.S. Treasury. Over time, the Program evolved into a conservation program with a primary goal of supplying the U.S. Government with high-grade helium for research and aerospace endeavors. In 1996, the U.S. Congress passed the Helium Privatization Act¹ (the Act), which required the termination of federal helium refining and selling-off of the stored helium, but allows the continued operations of storing and transporting helium and evaluating of the Nation's helium resources.

By 1995, the Helium Program owed the U.S. Treasury over \$1 billion on money borrowed to purchase helium.

Currently, the BLM Amarillo field office manages the Program, and all Program costs are funded with income from helium sales and management of the conservation pipeline. Excess funds are returned to the U.S. Treasury for application against Program debt. In 2007 alone, DOI returned around \$150 million in excess funds to the U.S. Treasury.

¹ The Helium Privatization Act of 1996 (P.L. 104-273) required the Bureau of Mines (later BLM) to divest itself of all helium sales operations, with the exception of the helium storage facility at Cliffside Field. It allows the Secretary to store, transport, and withdraw crude helium and to maintain and operate crude helium storage facilities. It also requires that all monies received under this Act be credited to the Helium Production Fund, which is to be available without fiscal year limitations for carrying out the provisions of this Act.

As part of storage privatization efforts, the field office signed agreements with several helium refiners to construct, operate, and maintain equipment needed to store and recover the private- and Government-owned helium and surrounding natural gas.

WHAT WE FOUND

We found that BLM circumvented the procurement process by improperly issuing two 15-year cooperative agreements,² one for the construction and operation of compression units and one for construction and operation of a crude helium enrichment unit. Such impropriety reflects a questionable relationship and could cost the Government over \$100 million by 2015, the year the agreements are expected to finally end. It allowed the contractor to 1) charge the Government fees that will more than double actual equipment costs; 2) invoice for costs BLM may have already paid; 3) use tens of thousands of Government dollars as a means of short-term financing, all to the potential detriment of the Government.

In addition, the private refiners insisted on certain conditions of the arrangement, which were granted. These included:

- allowing the private refiners' contractor to finance and build the equipment — as opposed to BLM;
- adding a significant investment return fee to the cost structure that is not allowed under cooperative agreements; and
- having a 15-year agreement term so the refiners could earn this investment fee profit.

A former Amarillo field office manager stated that BLM accommodated all of these points because it did not want to fight the refiners, who had lobbied the Congress for the Privatization Act. By any standard, such accommodation also indicates a questionable relationship between BLM and the refiners.

These problems stem from a lack of oversight on the part of BLM's New Mexico State office and Fluid Minerals Division, an all-around lack of communication by the field office, and an accompanying sense of autonomy by field office staff that allows them to do whatever they think is necessary to run the Helium Program, regardless of protocol. For example, without consulting appropriate BLM procurement officials, Program field staff repeatedly established annual budgets in private meetings with the helium refiners and arbitrarily adjusted overhead cost rates to decrease refiners' costs. We found no evidence that BLM managers ever questioned whether these Program staffers had the authority to act in this capacity.

² The compression unit agreement has no dollar limit but had already obligated \$6.8 million at the time of this review. According to BLM officials involved, the enrichment unit agreement has a not-to-exceed amount of \$35 million, which is estimated to be spent by October 2008.

IMPROPERLY USING COOPERATIVE AGREEMENTS

BLM inappropriately issued two cooperative agreements for the construction, operation, and maintenance of two large groups of equipment that are instrumental to helium storage operations. Neither met cooperative agreement requirements because they were used for BLM program operations on federal land to fulfill its requirement to operate the Helium Storage Program, as stipulated by the Helium Privatization Act.

Both agreements should have been contracts, a position supported in a 2005 BLM Acquisition Management Review. They were used in place of procurement contracts to acquire mission-related services and were therefore contrary to one of the primary purposes of the Federal Grant and Cooperative Agreement Act of 1977 (31 U.S.C. 6303), namely, to curb the misuse of financial assistance agreements in procurement situations.

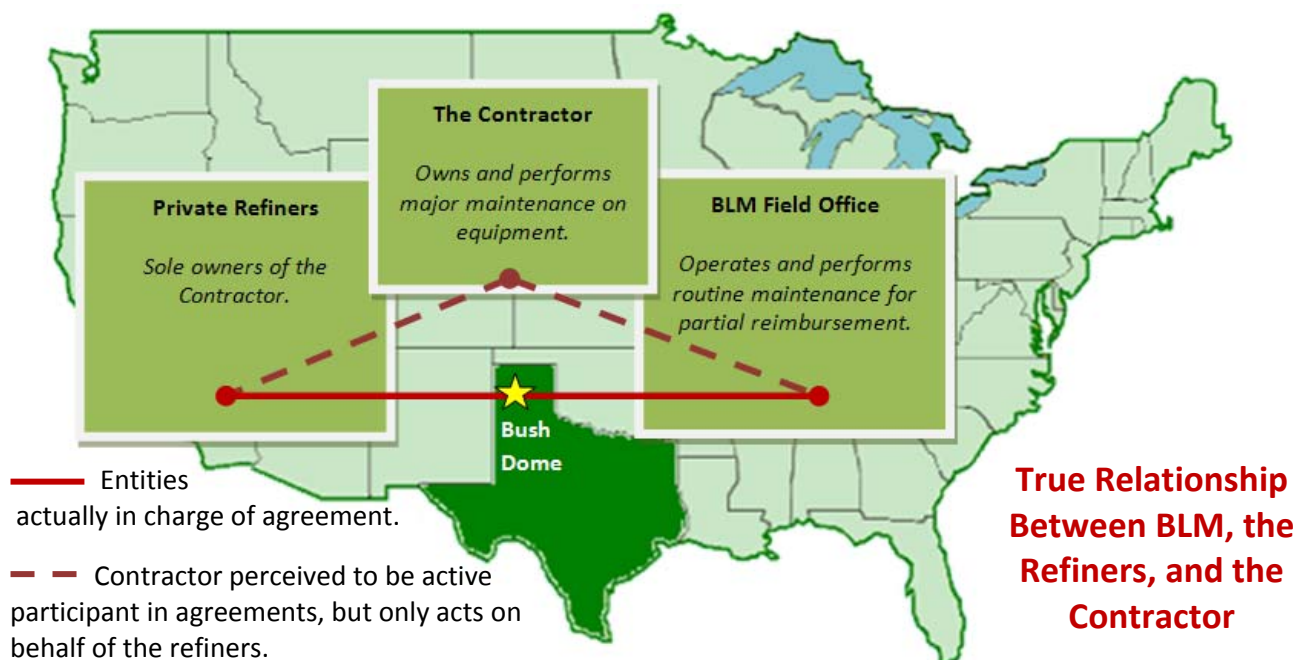
We found that all four refiners on the helium pipeline acted together to create what appears to be a shell company for the sole purpose of entering into the two agreements with BLM. In effect, the contractor acts as an intermediary between the field office and the refiners, the sole owners, to provide a service for the Government. The contractor owns title to all the equipment that BLM needs to operate the Program and is paid by BLM to perform major

Cooperative agreement — the contractual instrument used to “convey dollars to recipients, who convert the dollars to a variety of goods and services, such as scientific research ... on non-federal land, which are related to carrying out, supporting, or stimulating a public purpose, as authorized by law.”

2007 OIG Report

Procurement Contract — the required legal instrument when the primary purpose is to obtain property or services for the direct benefit or use of the Government.

Grant and Cooperative Agreement Act of 1977



maintenance work, while the BLM field office alone operates the equipment under the agreements. Because these agreements were not competed and the contractor now owns the equipment, BLM will be forced to use sole source contracts to continue work as the agreements are being renewed. The benefit of full and open competition will be lost.

OTHER IRREGULARITIES

Government exposure to mismanagement and misuse of federal monies also increased because BLM used the wrong contractual instrument. In one example, the contractor is charging the Government fees that will ultimately more than double actual equipment costs; may be invoicing BLM for costs already paid for by BLM; and is able to use BLM-provided funds as a means of short-term financing, due to a complex billing scheme it created with BLM. In another example, BLM appears to have allocated costs in a way that benefits the contractor at the Government's expense. While varying in monetary impact, together these irregularities could cost the Government over \$100 million by 2015.

OVERCHARGING

As part of the enrichment unit cooperative agreement budget, the contractor included a capital charge (to recoup the cost of building the equipment), as well as an undefined investment fee, which we see as akin to a profit. The original capital cost incurred by the contractor amounted to less than \$20 million, but the investment fee is estimated to reach over \$40 million by 2015.

The Amarillo field office did not use its own funds to directly pay for the equipment because it would look bad.

Key helium official

Payment of the investment fee is questionable because cooperative agreements are reimbursement-based³ and because we found no evidence in the field office files — whether created by BLM or submitted to BLM by the contractor — that the contractor incurred the investment fee. We estimate that the fee will more than double the total construction costs of the enrichment unit and that BLM may end up paying over \$32 million more⁴ than it should have had to pay by the time the agreement ends.

Documents in the field office files indicated that the helium operations fund had more than enough money to pay for all the equipment directly. Instead, the cooperative agreement enabled the contractor to build the equipment at a substantial profit. When asked why the field office did not use helium operations fund money, the former field office manager replied that they thought it would be a hard sell politically and would look bad so soon after the

³ OMB Circular A-110, one of the circulars that prescribes the administrative requirements for financial assistance, states that reimbursement is the preferred method of payment to a financial assistance recipient when certain specific requirements cannot be met.

⁴ The estimated total investment fee is over \$40 million; however, BLM is only responsible for 80 percent of these costs as 20 percent of the costs are reimbursed by the private refiners through separate helium storage contracts.

Privatization Act was passed. In addition, he explained that the field office used the cooperative agreements to bypass the lengthy timeframe normally associated with the traditional procurement process.

BLM should not continue paying any capital charges in the new award instrument absent an analysis on the costs paid to-date. This analysis should determine if the Government has already paid for the equipment in its entirety. If so, the renewed award instrument should not be allowed to include the capital cost line items.

POSSIBLE DOUBLE BILLING

Each of the cooperative agreements included a budget and allocation of expected costs. One of the items in those budgets is “Major Maintenance,” which is the responsibility of the contractor. Major Maintenance is a fixed-fee category that covers major repairs, and BLM pays the contractor for it each month. The contractor accumulates these payments in a “contingency account” and is supposed to use the funds when major repairs are needed.

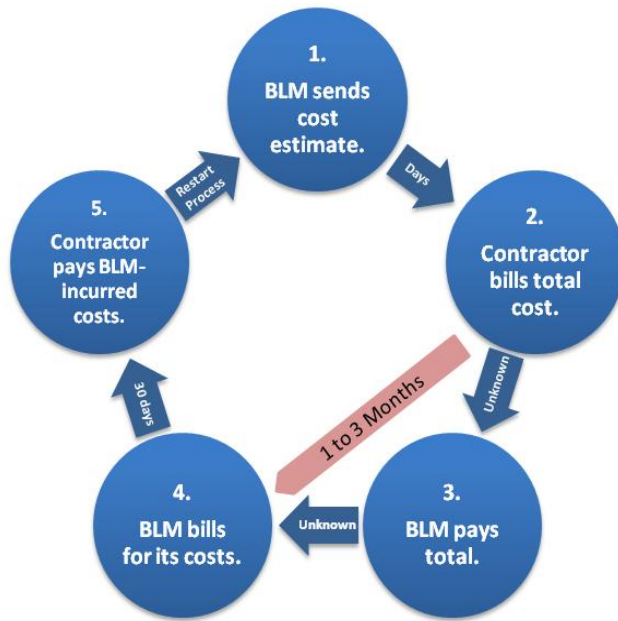
Documents in the files, however, indicate that BLM has been modifying the agreements by adding money to pay the contractor (and through the contractor the refiners) for major repairs or changes to the equipment. On a form that requested additional monies (to be paid to the contractor) for repair work, a former agreements officer stated that the monies should be taken from existing funds. The reason stated was that the requested maintenance fell in the same maintenance category covered in the agreement and, thus, should not be paid for separately.

Based on our limited review, we found no documentation in the files to indicate whether the contractor was using any of the Major Maintenance funds for their intended purpose.⁵ However, if the work done with additional funds is determined to fall in the Major Maintenance category, BLM will have paid for the same work twice — at a potential cost of as much as \$5.6 million.

SHORT-TERM FINANCING

Under the 2001 compression units cooperative agreement, BLM has allowed the contractor to use federal monies as a float or short-term financing vehicle, which is possible due to a complex billing process. In the first step of the process, BLM provides the contractor with an estimate of the BLM-incurred monthly cost for the operation and maintenance of the compressors. The contractor then bills BLM the entire cost to operate and maintain the compressors, which

⁵ As cooperative agreements are reimbursement based, this contingency fund should not exist.



Compression Unit Agreement
Monthly Billing/Payment Process

includes both the contractor's amortized capital costs and BLM's estimated operations costs. BLM pays the contractor's bill, then — up to 3 months later — bills the contractor to recoup the portion of the bill it already paid. Finally, the contractor pays the BLM-incurred cost.

By adhering to this process, BLM will have provided the contractor with a continuous, average, short-term cash flow of over \$17,000 a month for 15 years. The contractor will be left with interest totaling almost half of the amount BLM made available (approximately \$8,000). See the flow chart provided for an outline of the back and forth activity between BLM and the contractor.

SEEMINGLY UNJUSTIFIED COST ALLOCATING

When the Government and the refiners created the compression units cooperative agreement, the parties agreed that the helium storage contract holders would bear all costs. When the same parties created the enrichment unit cooperative agreement, however, they agreed to split the costs to construct and operate the unit 80 percent (Government) to 20 percent (refiners). We were told that this ratio reflected ownership of stored helium at the time the agreement was signed.

As the Act requires, the amount of helium the Government owns has been reduced over time, while the amount the refiners own has increased. Unfortunately, the Government continues to pay 80 percent of the cost of the enrichment unit, and the refiners pay significantly reduced costs to operate and maintain their own equipment. At no point during the life of the enrichment unit, does BLM intend to adjust the ratio of costs to reflect the true beneficiary of the enrichment unit (increasingly, the private refiners).

By 2015, the total operating cost for the enrichment unit is estimated to reach almost \$140 million — with over \$110 million (80 percent) to be paid by the U.S. Government and less than \$30 million (20 percent) to be paid by the contractor.

In a 1991 report,⁶ the U.S. Government Accountability Office (GAO) recommended that private refiner costs be increased to cover the degradation of helium due to an excessive extraction rate by the helium refiners. The Bureau of Mines, which operated the Helium Program prior to 1996 when the Program was transferred to BLM, issued a memorandum stating the actions it intended to take to address the GAO recommendation. Instead of spending money on a study, the private refiners had agreed to construct and operate a process unit that would upgrade helium purity and, thus, reduce the degradation of the helium. This did not occur. From the time this response was provided to satisfy the GAO recommendation until the time the enrichment unit was formalized in a cooperative agreement, the private refiners were, somehow, allowed to pay only 20 percent of the costs — a significant difference than that agreed to in order to satisfy the GAO report recommendation. A key BLM official gave a probable reason for this marked change: the refiners no longer wanted to pay for the enrichment unit in its entirety because the Helium Privatization Act increased their costs. This reasoning is speculative and insufficient.

RECOMMENDATIONS

There are five immediate actions that the Department should take to correct the problems we identify in this report and to reduce the potential for fraud, mismanagement, and continued monetary loss. We recommend the following:

1. Immediately stop the renewal of both cooperative agreements and replace them with appropriate contract(s).
2. Choose the proper contractual instrument using appropriate procurement guidelines. This includes a) reviewing and properly establishing indirect cost rates, processes for appropriate billing, clear guidelines as to what is to be considered major maintenance and when work is to be considered outside the scope of the contract; b) adjusting the ratio of costs to reflect the percentage of ownership in the assets as they change over time; and c) performing a critical review of profit fees.
3. Perform a thorough review of all agreement costs paid to determine allowability and appropriateness and recoup those costs determined to be unallowable or inappropriate, including any double billed costs.
4. Review the BLM/contractor payment billing process and implement a process that eliminates any repetition of the existing arrangement.
5. Determine whether the Government has already reimbursed the contractor for the entire amount of actual costs incurred to build the equipment. If so, the new contractual instrument should not include these capital cost line items.

⁶ GAO/RCED-92-44 Mineral Resources: Federal Helium Purity Should Be Maintained, November, 1991.

We conducted several interviews with key helium program officials, former BLM procurement staff involved in the agreement process, and current BLM procurement staff at the headquarters, state, and field office level who are involved in agreement administration and/or oversight. In addition, we reviewed agreement and contract documentation on a limited basis and relevant laws, policies, and other applicable criteria.

We did not analyze any supporting documentation for the agreements and associated invoices, as none were submitted in response to our multiple data requests. Neither did we visit the offices of the contractor or refiners or perform follow-up interviews to verify assumptions or re-issue requests for data.

As stated in this report, we discontinued our review to recommend that BLM take immediate action to stop the misuse of these cooperative agreements. Therefore, we include in our recommendations that Departmental budget and procurement staff should perform, as the new procurement instruments are established, a continuing, thorough review of all the agreement and cost issues noted in the report.

We performed our work in accordance with the President's Council on Integrity and Efficiency (PCIE) and the Executive Council on Integrity and Efficiency (ECIE) "Quality Standards for Inspections."

Based on history provided by helium program staff, at the start of World War I, the U.S. Navy maintained a supply of helium for balloons at three small plants in Fort Worth and Petrolia, Texas. The first full-scale U.S. helium production plant was built near Fort Worth in 1921 and operated commercially for the Navy until the Helium Act of 1925 passed. This Act authorized the Bureau of Mines (BOM) to build and operate a large-scale helium extraction and purification plant, which continued operating until 1929 when the Petrolia gas field neared depletion. BOM built a new plant near Amarillo, Texas, to extract helium from the natural gas found in the Bush Dome reservoir. BOM also purchased the gas rights to the field and, subsequently, the storage rights. Helium uses through World War II were still mostly for lifting gases, but helium was crucial in the development of the atom bomb.

When the cold war and the space race began in the 1950s, helium's importance to the Nation's defense increased. Because natural gas is the only economical source of helium, and helium is wasted when natural gas is burned, many in the scientific and defense communities began to fear that future helium supplies were in jeopardy. As a result, the Congress enacted the Helium Act Amendments of 1960, which directed the Secretary of the Interior to acquire and conserve helium using funds borrowed from the U.S. Treasury. Fortunately, the BOM already had helium extraction facilities in the Texas Panhandle near the World's largest known gas field, which also contained high concentrations of helium. The partially depleted Bush Dome reservoir was ideal for storage, and BOM built a 425-mile, high-pressure gas pipeline to facilitate storage of helium in the Dome. The Helium Act also permitted purchase of commercial crude helium and private helium production, so several private oil and gas producers entered into contracts to sell helium to the Government. They also built five helium extraction plants.

By 1973, with the Space Program at an end and the Government needing much less helium than had been forecasted, the helium purchase contracts were canceled. In 1996, the Congress passed the Helium Privatization Act, which required the cessation of the Government's helium refining capabilities and sell-off of the conservation helium in storage. However, it authorizes continued operation of the storage and transportation of helium and continued evaluation of the Nation's helium resources. The Act also requires federal agencies to obtain their helium requirements from the conservation helium. This Program requires federal agencies to purchase their major helium requirements from a "qualified Federal helium supplier," who, in turn, purchases the same amount from the conservation helium in storage.

Today's helium operations include not only the original storage and pipeline system, but a crude helium enrichment unit operated by the BLM and owned by private industry refiners. The major programs that have developed from the Act include:

- Storage and transmission of crude helium in the crude helium pipeline system.
- Collection of helium royalties and fees for helium produced on federal lands.
- Sale of helium through the In-Kind Program and open market sales.
- Operation of the crude helium enrichment unit and its related functions.
- Continuous evaluation of world helium resources.

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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 800-424-5081
Washington Metro Area 703-487-5435

By Fax:

703-487-5402

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