



**United States House of Representatives
Committee on Natural Resources**

Subcommittee on Energy and Mineral Resources

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**Oversight Hearing on
"The Helium Stewardship Act and the Path Forward"**

**Testimony of
Walter L. Nelson
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Introduction

Mr. Chairman, Ranking Member Lowenthal and members of the Committee, I appreciate the opportunity to testify before you again today. My name is Walter Nelson, VP and General Manager of Global Helium at Air Products and Chemicals, Inc. based in Allentown, Pennsylvania. Air Products is a global industrial gas company, one of the leading suppliers of helium worldwide and the largest refiner of helium with connections to the BLM pipeline system.

We appreciate the chance to share our expertise with the widely shared goal of prudent, effective implementation of the new legislation that represents a good deal for the taxpayer and for the US economy. Today, I'd like to address two issues: First, I'd like to give you my thoughts regarding the BLM's implementation of the Helium Stewardship Act. Second, I want to address issues raised by the U.S. Government Accountability Office (GAO) in its recent report and again just last week by Chairman Bishop and Congressman Grijalva in a letter to the BLM.

Implementation status of H.R. 527: Helium Stewardship Act of 2013

Today there is over \$250 million of privately owned helium sitting in the BLM reservoir. This helium has already been purchased and paid for by private industry and it carries a guarantee by the US Government that that helium will be delivered. However, on September 10, 2014, the BLM sent a cancellation notice to all Storage Contract holders and unilaterally terminated all existing Helium Storage Contracts effective October 1, 2015. This action would never be acceptable in private industry - those agreements define the terms and conditions under which the US Government received \$250 million dollars from helium purchasers with the agreement that it would store and deliver that helium under agreed upon terms. Subsequent to the termination notice - those BLM Storage Agreements are now scheduled to terminate in less than 90 days, creating great uncertainty for those in the industry that rely on the BLM helium system, and the helium

industry is now scrambling to negotiate a new storage contract with the BLM to salvage its huge investment before that time runs out.

The BLM issued its initial draft for a new agreement on March 25, 2015. Unfortunately, the initial draft was inconsistent with the law that Congress enacted and it did not preserve rights for the delivery of the helium already purchased and sitting in storage. The BLM opened a comment period on the initial draft through May 15, 2015 and following this period, the BLM issued a second draft of the contract last week on June 30, 2015. We are currently reviewing this second draft. The BLM has requested final comments by next week on July 17, 2015. A preliminary review indicates that the second draft is a significant improvement over the initial draft, although there are still a handful of issues that must be addressed.

Our major concern is the BLM's method for prioritizing its deliveries of helium from the system during a time of shortage. According to BLM statistics - the BLM was in a condition of shortage and allocated the delivery of helium for all of FY 2012, all of FY 2013, most of FY 2014 and thus far 27 days in FY 2015. The method the BLM uses to allocate helium during a shortage period is extremely important to US manufacturers and US jobs and the BLM must comply with the Helium Stewardship Act and get this right as it drafts the new storage contracts.

As passed by the US Congress and signed into law by the President, the HSA sets forth parameters meant to ensure delivery of helium through the Federal Helium Pipeline. Specifically, Sec. 5(e)2 of the HSA requires the development of a schedule providing priority access only for in-kind sales to federal users and further requires BLM to ensure timely delivery for helium sold at auction and sale.

While we do not dispute the structure under which federal users of in-kind helium receive priority delivery as the HSA requires, we disagree with its initial plan for deliveries to other users. We have a very good working relationship with the BLM and are in regular discussions with the agency, but continue to be extremely concerned about its proposed initial plan that would reduce deliveries to some private helium owners but not others in the event that capacity in the pipeline is inadequate to meet total expected delivery requests during a period of shortage.

This proposed framework is contrary to the HSA's very clear provisions. Section 5(e)(2) of the HSA directs the BLM to develop a delivery schedule that ensures timely delivery of crude helium to helium users. The law includes three instructions:

- 1) Provide priority access to the pipeline for in-kind sales to Federal users;
- 2) Ensure timely delivery of helium purchased at auction; and
- 3) Ensure timely delivery of helium purchased by means other than an auction.

In setting out these requirements, the HSA provides for priority delivery of only one category of helium – helium for federal users. It requires “timely delivery” of all other categories of helium on an equal basis. The prioritization plan initially proposed by the BLM, however, does not follow this formula.

The HSA is very clear and I urge that you require the BLM to follow the law and not assign a higher priority to helium purchased after enactment of the law or by non-refiners in preference to those helium purchasers who have made significant investment over the years in helium that would be stranded in the reserve. I also suggest to you that it would be contrary to the HSA to deliver the full allotment of requested helium during periods of capacity shortage to some helium owners while prorating the requested helium deliveries to others. The HSA requires that, during periods of capacity shortage, all non-federal storage contract holders

receive the same level of priority. Along the same lines, if helium delivery requests are to be prorated, they must be prorated on an equivalent basis, regardless of the type of owner or the date of purchase.

Thankfully the June 30, 2015 second draft puts forward a proposal for the delivery of helium during a shortage period that is more consistent with the law whereby

“in the event of a shortage, the Authorized Officer will allocate the delivery capacity of the Federal Helium System in excess of the needs of Federal users among all parties storing helium in the Federal Helium System. That allocation will be calculated as a percentage of the remaining production capacity of the Federal Helium System according to the proportion of each storage contract holder’s stored volume to the total volume stored by all storage contract holders as of the preceding October 1.”

While we believe this inventory pro-rata methodology is fair and reasonable, calculating the allocation percentage once a year effective on the preceding October 1 is not accurate enough. The BLM has all of the information necessary to make this calculation on a monthly basis and BLM should be required to report the allocation percentage to each storage contract holder monthly.

Our second concern with the draft storage contract relates to the Government’s liabilities for the delivery of private helium and its intent to transfer those liabilities for the delivery of private helium to some unknown party at some time in the future after 2018 when the BLM gets out of the helium business. Private industry will have paid potentially hundreds of millions of dollars for helium that is stuck in storage and the US Government cannot simply walk away from its obligations. The US Government has already accepted payment for this helium and at a minimum must reimburse private industry for all helium purchased and paid for but not delivered when the BLM ultimately shuts its doors. We will continue to work with the BLM in an attempt to develop fair and reasonable contract language that respects the rights and obligations of all parties.

The BLM has also issued two new Federal Register Notices (FRN’s): the first was the Bureau of Land Management’s Notice of Revision of Approved Information Collection; OMB Control No. 1004-0179 published on April 16, 2015, Vol. 80, No. 73., which governs the collection of information on the sales of In-Kind helium to federal users as well as the collection of information related to qualifying sales and purchase transactions by storage contract holders. The initial draft of this FRN was reasonable and logical and we submitted comments to the BLM on June 15, 2015. Our comments related to clarifying that information provided would only be for Qualifying Domestic Helium Transactions as defined in the HSA.

The second FRN was the Bureau of Land Management’s Notice of Proposed Action: Crude Helium Sale and Auction for Fiscal Year 2016 Delivery; OMB Control No. 2015-14487 published on June 12, 2015, Vol. 80, No. 113., which governs the rules for the 2016 helium auction and sale. The thirty day comment period for this FRN ends on July 13, 2015; we expect that the industry will provide extensive comments, because similar to the initial draft of the Storage Contract, this initial FRN is not consistent with the HSA.

Most importantly, Section 3, which discusses the Delivery of Helium in FY 2016, must be revised to reflect the delivery language in the storage contract where the pipeline priority allocation will be calculated as the pro-rata share of private helium in storage.

Further, Section 1 of the FRN concerning the calculation of the conservation helium price is inconsistent with the HSA and it must be revised. The initial draft states that BLM will calculate the FY 2016 Phase B sale price using the weighted average price of the crude helium sold in the FY 2016 Phase B auction.

This is in direct conflict with the law which states that “The Secretary shall annually establish, as applicable, separate sale and minimum auction prices under subsection (a)(1) and paragraphs (1) and (2) using, if applicable and in the following order of priority:

- (A) The sale price of crude helium in auctions held by the Secretary under paragraph (2); and
- (B) Price recommendations and disaggregated data from a qualified, independent third party who has no conflict of interest, who shall conduct a confidential survey of qualifying domestic helium transactions; and
- (C) The volume-weighted average price of all crude helium and pure helium purchased, sold, or processed by persons in all qualifying domestic helium transactions; and
- (D) The volume-weighted average cost of converting gaseous crude helium into pure helium.

The BLM is working hard to get this right and we appreciate the oversight by this Committee to ensure the new Storage Contract and the two Federal Regulations comply with the Helium Stewardship Act of 2013.

Criticism by the U.S. Government Accountability Office (GAO)

The GAO has recommended that BLM issue a rulemaking to collect additional information about Refiners attempts to negotiate tolling agreements. The BLM disagrees with this recommendation and Air Products supports the BLM’s position. Selling government helium at a “Market Price” for the benefit of the US taxpayer has been the goal articulated time and time again by the 2010 NAS Committee, both The House of Representatives and the US Senate, and numerous OIG and GAO reports. Somehow this goal of achieving market price has been misinterpreted to mean mandated tolling for non-refiners. It is not about tolling – it is about competition. The FY2015 auction results clearly demonstrate that market competition will deliver the best value for the US taxpayer. The FY2015 auction saw thirteen competitors bid for government helium that delivered pricing far higher than anyone expected. Indeed, the GAO and this committee complained the prices are “outrageously high”, however the 2015 helium auction confirmed that an auction will create competition amongst refiners and non-refiners alike and the open auction will deliver the best value for the US taxpayer.

The GAO has recommended that BLM issue a rulemaking to collect additional details about, among other things, to collect information about refiners' attempts to negotiate tolling agreements. Air Products has done everything possible to fulfill this requirement. Air Products issued its first FY2014 Tolling Request for Proposal (RFP) on January 10, 2014 to nine companies. Only two proposals were received and after careful consideration both proposals were deemed commercially unacceptable. Again on July 25, 2014 Air Products issues it’s FY2015 Tolling Request for Proposal (RFP) to eighteen companies (end users, non-refiners and refiners alike) and again only two proposals were received. After careful consideration both proposals were deemed commercially unacceptable. Once the new FY2016 BLM storage contract and BLM delivery rules have been finalized, Air Products intends to again offer tolling services at its refineries for FY2016.

Future of the BLM System

At this point in time, it is difficult to predict the final disposition of the BLM helium system. The reservoir is currently in depletion and the changing gas composition and falling reservoir pressure will at some point

render the existing helium plant un-operational. The reservoir itself has unique geologic properties that make it ideal for helium storage; however going forward into the future it may not be economical to transport helium to the reservoir for storage. The reservoir will continue to contain recoverable quantities of natural gas beyond 2021, so it is possible that a gas producer or midstream energy company may be interested in the obtaining the mineral leases to enable continued natural gas production (and potentially helium production), however at greatly reduced rates. The 450 mile high pressure pipeline that runs from Texas, across the Oklahoma panhandle and into Kansas, could continue in helium service or it could be converted to natural gas or CO2 service.

It is important to recognize that the BLM does not own the Amarillo Helium Enrichment Plant and associated equipment. The plant is actually owned by the Cliffside Refiners Limited Partnership and the relationship between the US Government and the Partnership is governed by negotiated agreements.

One of those agreements covers the helium compression station #1 installation and that agreement reaches the first termination date as of January 31, 2016. The BLM has funded this contract with Cooperative Agreement Supplement #7 authorizing funds through December 2015. The agreement has a "one-year" notice to terminate that could have been given to the CRLP by February 2015, since the BLM did not give such notification, the compression station #1 agreement will now continue in evergreen for an additional five year period to January 31, 2021.

Another agreement which covers the compression stations #2 & #3 as well as the Crude Helium Enrichment Unit runs through January 31, 2019. The CHEU agreement (at Section #7) offers the BLM three options after the termination date. Note: The agreement does not address termination obligations or rights for the extended term. After the "Basic Term" the BLM may either negotiate a revised "fixed fee", purchase the CHEU at "fair market value", or require CRLP to remove the CHEU at CRLP's expense.

Air Products and its background in the helium market

Air Products, with revenues of roughly \$10 billion per year, is an American corporation with a global industrial gas business. The company provides hydrogen for oil refineries so they can produce cleaner-burning gasoline, hydrogen for fuel cell cars and buses, liquid hydrogen for space launches, oxygen for patients in hospitals and to steel mills for use in blast furnaces, nitrogen to enable the manufacture of computer chips, and helium for MRI scanners and semiconductor manufacturing. In short, its core business is helping major industries operate more cleanly and efficiently. Air Products has more than 20,000 employees in over 50 countries.

Air Products is one of the leading suppliers of helium worldwide, and the largest refiner of helium on the BLM pipeline system. To be clear, helium is a byproduct of natural gas. We don't own the gas fields or operate the natural gas plants. Energy companies in that business extract the helium, and it's through our refineries that we supply helium to a wide range of manufacturers. The Company's equipment processes more than half of the helium extracted from the earth globally, and it has pioneered many of the processes critical to getting helium from the ground to vital customers, such as extraction, production, distribution, and storage technologies used in the helium industry today.

That expertise was recognized by virtue of the United States government's selection of Air Products to engineer and construct the first helium extraction units when the federal government began its helium conservation program in 1959. More recently, Air Products designed and constructed the helium enrichment plant in 2003 that supplies the BLM's helium pipeline system, which continues to operate to this day.

Air Products decided to build its first helium refining plant over 30 years ago in the northern panhandle of Texas. The plant, designed and built by Air Products with proprietary technology, was first operational in 1982, expanded in 1985 and upgraded in 2010. Air Products subsequently constructed two more helium refining plants on the BLM pipeline system adjacent to a third party natural gas processing plant near Liberal, Kansas. The first plant started production in 1991 and the second plant, when completed in 1999, was the largest helium refining plant in the world. In 1995, Air Products became the first company to design and build a helium refining plant that used crude helium that had been extracted during the production of liquefied natural gas (LNG).

More recently, Air Products, through a joint venture with Matheson, constructed a helium refining plant in Wyoming. This plant initially began production in 2014, however it's currently not operating while we wait for feed gas from our supplier, who has announced that its natural gas plant will resume operations next year in 2016.

I'm also pleased to announce that Air Products last month began helium production at a new plant in southwest Colorado. This plant is the first of its kind constructed in the world, is large scale, and conducts on purpose helium extraction and liquefaction of helium originating from a naturally occurring CO₂ stream. Together these two new plants in WY and CO will replace more than 50% of the current BLM production as that system declines.

In short, Air Products is one of the most experienced operating companies in the world to have designed, built, and operated large commercial helium refining plants. That said, there is nothing stopping any company from building its own helium refining plants near the Bureau of Land Management's pipeline system in the United States, and indeed, several other companies have done just that.

The Federal Helium Reserve is essential to a stable helium market

The BLM today operates as a natural gas producer at the Cliffside field, where it extracts natural gas from wells, separates the gas, and then sells the natural gas and helium to private industry. BLM produces approximately 1.5 billion cubic feet of crude helium annually, which is now about 25 percent of the worldwide supply. The BLM system consists of the Bush Dome, an underground storage reservoir where the United States government stockpiled helium during the conservation period and into which companies that have refined helium can deposit the helium until it is used; together with multiple natural gas wells that are used to extract natural gas from the ground and a gathering system of pipes which connects all the wells together; a helium enrichment plant to process the gas; and a 450 mile crude helium pipeline system that extends from northern Texas across the panhandle of Oklahoma and into Kansas.

The crude helium enrichment plant is operated by the BLM, but the plant is owned by an entity called the Cliffside Refiners Limited Partnership (CRLP), a partnership made up of helium refiners that owned facilities on the BLM pipeline in 2000. The CRLP partners include Air Products, Praxair, Linde, and Kinder Morgan. The CRLP was formed in July 2000 with the charter to support the federal government in fulfilling the requirements of the Helium Privatization Act of 1996. The CRLP invested over \$26 million at the Cliffside field to fund design and construction of the crude helium enrichment plant. BLM operates the CRLP-owned plant today, enabling the sale of government helium and natural gas (methane, in this case) to private industry. The CRLP was honored for excellence by the Secretary of the Interior Gail Norton in 2004 – receiving the Four C's Award which exemplified Secretary Norton's Four Cs philosophy of consultation, cooperation and communication all in the service of conservation.

The BLM pipeline infrastructure today supports private industry by connecting eight private crude helium extraction plants and six private liquid helium refining plants to the BLM's reservoir at Cliffside. Without this pipeline system, private industry would not be able to efficiently deliver crude helium from the extraction plants to the helium refining plants in the region. The BLM pipeline system and the private industry helium plants together supply approximately 50% of the worldwide helium supply.

Helium privatization could not have been possible without private investments

In 1996 Congress decided it wanted to privatize the helium in the BLM reservoir. I would like to direct your attention to the diagram of the BLM helium system that is attached at the end of this testimony. What sat in the reservoir at that point – in the lower left of the diagram – was a mixture of helium with other gases. Government had injected helium into the reservoir decades before mainly for defense and scientific research purposes. When Congress decided to privatize the helium, the Cliffside helium enrichment unit, which is essential to refining the gas, did not exist. Private refiners invested millions of dollars to build it. Without that investment, the helium would still be in the ground. But once private refiners built that plant 2003, the helium started to flow.

The non-refiners (our competitors) did not invest in the helium enrichment plant, nor did they invest in their own helium refineries. They had the resources to do both, but they did neither. They invested elsewhere. These companies, many years later, now complain that we have an oligopoly. Their position is that Congress should legislate that we have to use our private property and our prior investments for their private benefit through tolling. When they urge Congress to force us to use our private resources to refine helium after they chose years ago not to invest in their own helium refinery, we hope you can understand why it does not feel fair to us. In fact, when we do have excess capacity and the commercial terms are right, we do already enter into "tolling agreements" with companies that do not have their own refining capacity.

Conclusion

Congress got it right when it established the federal helium reservoir and the surrounding infrastructure managed by BLM. The system has worked well for decades. Congress got it right again with the Helium Privatization Act of 1996, when it set in motion a process for selling off the helium previously captured in the federal reservoir. Congress got it right yet again by passing the Helium Stewardship Act of 2013 which authorized the Secretary of the Interior to continue to sell crude helium from the Federal Helium Reserve and prevented the world from going over the "Helium Cliff". Now - it's up to the BLM to responsibly manage the final drawdown and closure of the reservoir while minimizing market disruptions and maximizing the return to the US taxpayers.

Air Products appreciates the opportunity to testify again on this issue, and we will do everything we can with our know-how to advise Congress along the way to an outcome that everyone can be proud of.

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The BLM Helium System

