

United States House of Representatives Committee on Natural Resources February 14, 2013

Full Committee Oversight Hearing on "The Past, Present and Future of the Federal Helium Program"

And

Legislative Hearing on HR 527 (Hastings, R-WA, Markey, D-MA, Flores R-TX and Holt D-NJ) "Responsible Helium Administration and Stewardship Act."

Testimony of Walter L. Nelson Air Products and Chemicals, Inc.

Introduction

Mr. Chairman, Ranking Member Markey, and members of the Committee, I appreciate the opportunity to testify before you today. My name is Walter Nelson, Director of Helium Sourcing and Supply Chain, at Air Products, based in Allentown, Pennsylvania, 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. Air Products is pleased to have the opportunity to contribute its views on helium and H.R. 527.

We applaud Chairman Hastings and Ranking Member Markey for recognizing that maintaining access to the BLM's helium reservoir is so important to commerce. We appreciate the chance to share our expertise with the widely shared goal of prudent, effective legislation that represents a good deal for the taxpayer and for the US economy.

While we understand that auctioning off all the helium may be sensible as a theoretical matter, we believe that implementation will cause a level of uncertainty among end users that will be far more disruptive than any inconveniences they have experienced to date. Alternatively, a partial auction of the non-allocated volume of BLM helium would, in our view, optimize the return for the taxpayer without hampering some of the biggest names in manufacturing, federal users, and the scientific community.

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 clean-

burning gasoline, hydrogen for fuel cell cars and buses, liquid hydrogen for NASA's 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 MRIs 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 50 countries.

Air Products is one of the leading suppliers of helium worldwide, and the largest refiner of helium on the BLM pipeline system. Just 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.

Air Products has experience second to none. 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 2002 that supplies the Bureau of Land Management'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, upgraded in 2010 and continues to operate to this day. Air Products subsequently constructed two more helium refining plants 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 LNG (liquefied natural gas). More recently Air Products, through a joint venture with Matheson, constructed a helium refining plant in Wyoming. This plant was completed in 2011 and it is expected to begin production later this year when our supplier's natural gas plant becomes operational.

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 companies have done just that.

Where does helium come from?

Growing up, we never had to think about helium. It is at the party store if we want balloons. We see the helium-filled blimps at sporting events. Supplying helium, however, is anything but child's play. On earth, helium is found in natural gas, and in only a few spots on the planet does helium exist in high enough concentrations to make it worthwhile to separate it from the natural gas.

There are no naturally-occurring underground reservoirs of pure helium. Helium is a rare gas and it only forms in locations where the radioactive decay of uranium occurs with the formation of natural gas. Not all natural gas fields contain helium; indeed, most do not. The largest natural gas fields that are known to contain helium, other than in the United States, are in Algeria, Qatar, Australia, Iran and Russia.

It is essential to keep in mind that no oil and gas extraction company goes out looking just for helium. No one! Helium is a unique commodity for this reason. There is little correlation between price and supply. We have been told that owners of LNG plants can make more from LNG sales in less than a day than they would make in helium sales in a year – a 400 to 1 ratio. Even if legislation resulted in the price of helium rising ten-fold – certainly nothing our customers think would be a positive development – that would have little bearing on the interest of large gas companies doing anything they are not doing today to identify helium reserves. Their gas fields are multi-billion dollar projects, and helium plants are a tiny part of them. They will not let the tail – or in our case the tip of the tail – wag the dog, so we are at their mercy for developing new helium projects.

Fortunately, in the case of Air Products, we are doing just that. We have a joint venture with Matheson in Wyoming. We have already built our helium refining plant, but because the operators of the gas field have yet to complete construction and otherwise have not gotten their production system in final form, we have had to bide our time since our own plant was ready to be put into service over a year ago. This is a reminder that much as Congress wants to do something about the helium shortage – caused by outages and delays in bringing new plants on line – the single thing that will precipitate more helium being found is a higher price for natural gas.

Air Products' role, like that of other industrial gas companies who are helium refiners, is to purchase crude helium from energy companies that are extracting it from natural gas, as well as to purchase helium from the federal government. Helium refiners purify (clean up and remove contaminants), liquefy (cool to minus 452 degrees Fahrenheit so that the gas takes liquid form) and then transport and sell helium into the global retail market. Once helium is extracted, purified, and liquefied, it has a short shelf life of only 45 days before it begins to warm up and turn back into a gas, so Air Products has developed transportation technologies necessary to transport the liquid helium from the refining plant to market. Gardner Cryogenics, a division of Air Products, has designed and constructed most of the liquid helium transportation and storage equipment used by the industry today.

For Air Products and every other industrial gas company in the United States, BLM's pipeline and storage system are an integral part of this global supply chain and infrastructure. Disrupt the BLM's pipeline, and it would be as if one-third of the world's supply of oil was instantly pulled off the market – chaos would ensue, and the price, in this instance specifically for helium, would skyrocket.

End users view helium akin to a utility

We ask the Committee to consider some essential facts. To our customers, helium is like a utility. Just like major electricity customers do not have to give much thought to how power is generated – they don't need to know about the fuel source or the power plant or the transmission lines, they just need to know the power is available when they need it – our customers have not had to know the helium business. All they have needed to know is that the helium is there when they need it, so they can manufacture their products on a just-in-time manner. They are entitled to their views on the wisdom of any legislation, but we feel a responsibility to make sure that whatever Congress does will be workable for end users from day one. Because, if it's not, we, and more importantly our customers, will experience intolerable disruptions. Because we understand the BLM system, and the implications of H.R. 527 or any other legislation, we feel an obligation to identify the implications in the real world. For us to instead stay silent in the face of a total overhaul in the way helium moves from the ground to our

customers, one that introduces needless risk, seems unwise. We trust that this Committee will understand our recommendations in this light.

The Federal Helium Reserve is essential to a stable helium market

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 two billion cubic feet of crude helium annually, which is about 30 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 29 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 (formerly the British Oxygen Company), and Colorado Industrial Gas (formerly owned by El Paso Energy and recently acquired by 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 companies were honored for excellence by the Secretary of Interior in 2004.

The BLM pipeline infrastructure today supports private industry by connecting six 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 two-thirds of the worldwide helium supply.

What is causing the helium shortage, and when will it end?

We estimate that helium production worldwide was operating in excess of 95% of capacity in 2011. Production was just sufficient to meet global demand; however, any blip in supply caused by a planned or unplanned outage anywhere in the world would have an immediate impact on the market by tightening up supply.

Beginning in late 2011 and continuing thus far in 2013, the industry has seen crude helium supplies decline; at the same time there have been disruptions affecting most of the world's helium refining plants. These supply disruptions have been caused by many factors primarily outside the control of the helium refiners, resulting in reduced helium supply to consumers. In the United States we have seen a decline in helium production as energy companies focus their drilling plans on natural gas that is rich in liquids rather than the dry gas which typically has more helium.

There have been planned and unplanned maintenance outages at natural gas processing plants, as well as continuing pipeline allocations on the BLM system during well maintenance that have restricted the supply of crude helium to the U.S. refiners. In Algeria and Qatar, production of helium has decreased due to the fragile worldwide economy, as well as maintenance work at gas plants. In addition, new helium refining projects have been slow to develop.

Helium supplies will continue to remain tight through 2013 and into 2014, until new helium production begins in Wyoming, Algeria and Qatar. The Wyoming project is expected to add an additional four percent to worldwide helium capacity, Algeria two percent, and the Qatar II project may add up to 18% capacity. Only after these three new plants are operational and existing plants are back running at full output will the global supply begin to fully stabilize.

This recent history of supply problems proves one thing: if the BLM system is off limits as soon as 2013, current shortages will be considered modest compared to the dire situation that helium users will face.

A 100% auction of BLM's helium may seem fine in theory, but we have concerns about it in practice

H.R. 527 is very much a step in the right direction compared to the discussion draft that was circulated in December 2012. Still, a 100% auction represents a major change from the status quo, and introduces tremendous risk for our customers. Today, helium customers know that helium will be delivered when they need it. In a 100% auction world, all bets are off. We understand the desire of the Committee to assure continued reliability of helium supplies, but no one has a crystal ball. No one can forecast, with certainty, who might bid for what, and therefore there is no certainty that helium will be the "utility" that our customers think of it as, today. Our comments, therefore, are offered because we know the Committee wants to get this right. Our concern is that there is no guarantee that we will avoid significant delivery disruptions, traceable to this legislation, if the bill were to be enacted. That is why we continue to seek considerable changes in the legislation.

It is also very important to point out that this legislation (or any other) will not make more helium molecules available for end users. Almost like "squeezing a balloon", a 100% auction of BLM helium will redistribute the declining supply – simply creating supply uncertainty for end users without any upside potential for increased molecules. This uncertainty will serve to reduce effective supply to end users as all points in the value chain will need to be more conservative with their inventory management and scheduling.

H.R. 527 will require new or amended BLM helium contracts. Actually, our current BLM helium purchase and delivery contract (Storage Contract) does not expire until October 1, 2015, so any new system implemented prior to that date would require the US Government to either renegotiate and amend that contract, or break it. Breaking these contracts could create a legal mess, potentially causing disruptions within the helium supply chain. That said, BLM should be able to develop new regulations and contract amendments between now and then.

Providing sufficient time to change the system and implement an auction is crucial

H.R. 527 as written delays the effective date for the initial auction until one year, and potentially up to one and a half years, after the date of enactment. While we still have concerns about whether all the bugs will be worked out by then – we know that BLM conducts auctions of various things, but crude helium has unique characteristics quite different to typical commodities subject to a standard BLM

auction – it is important to have as much time as possible to perfect the auction and delivery mechanisms. The risk of an imperfect system is that crude helium will not be reliably delivered or refined and put into commerce in a timely manner. If there are flaws in the system, and the helium cannot be delivered, US manufacturers will pay the price. We believe that the optimal system would call for any new method for selling BLM's helium to be implemented coincident with the expiration of the current contracts between the BLM and helium refiners in October 2015.

We fear perfection being the enemy of the good

Indeed, we have larger concerns that we are coming to the end of the "useful life" of the BLM helium reserve, at least for commercial purposes. As the chart attached to my testimony depicts, by the time H.R. 527 is to be fully implemented, BLM helium would be well down the steep and immutable decline curve. There would not be that many years' worth of commercial helium supplies as of then. We are concerned that we may be letting perfection be the enemy of the good here. "Perfection" would be some optimal price for the taxpayer. In the interest of achieving that, however, we may be causing instability regarding supplies for high-end manufacturing that will be destabilizing for those companies, and for the broader US economy. "Good" is the ability to receive a market price for helium while maintaining a reliable supply of helium from the BLM reserve to our customers.

While we understand the desire to improve on the 1996 Act, it would be unfortunate if we took a step backward with regard to the reliability that has been essential to so many large helium-dependent manufacturers, companies whose names are synonymous with success in the US. With so many risks facing the economy that we cannot control, this, which we can control, feels like a needless risk to us. That is why we think Congress should do everything it can to optimize price so that the taxpayer gets optimal return, but in balance with the effects on the helium-dependent customers being given suitable weight.

Existing helium inventory in storage and priority for delivery must be addressed

Regardless of whether the BLM helium is sold through an auction, a sale of allocated amounts as is the case today, or a combination of the two, there are a lot of moving pieces that need to be harmonized to make the system work, including assigning volumes to be owned and refined, applying storage charges, and penalties for non-delivery. For H.R. 527 to function without risk to end users, it will require new regulations, contracts, measurement systems, accounting and management, but these are not addressed in the legislation. Any new legislation must establish the rules for determining the priority of helium delivery from inventory in storage. Today there is about a one year's supply of privately owned helium already in storage. We recommend that Congress establish pipeline delivery protocols and implement the well established inventory accounting practice of FIFO (first in – first out) for the delivery of helium from storage. The first helium purchased has priority for delivery based on the capacity constraints of the system.

An annual auction would pose less risk to end users than a quarterly or semi-annual auction

Moving to a semi-annual auction, a change from the discussion draft to H.R. 527, is preferable to a quarterly auction, but we think an annual auction would be even better. Why? Because a quarterly auction, which would effectively represent a spot sale and would not provide the certainty and reliability of supply that manufacturers need. It would also create stresses on the supply chain, where on a quarterly basis manufacturers would have to adjust plant operations, inventory management and

logistics activities. The molecule uncertainty will cascade through all these subsequent steps between the BLM and end users, who will not enter into contracts on a quarter to quarter basis. Helium end users insist that reliable long-term supply contracts are essential to their current business models. For the most part, the same is true for semi-annual auctions as well. If they could not know, from one half year to the next, where their helium would be coming from, they could not develop predictable business plans. We believe, however, that while a semi-annual auction is better than quarterly, an annual auction of the non-allocated helium provides the highest level of reliability and product supply certainty to end users.

The Secretary needs the greatest possible discretion to avoid market disruption and to assure legitimate purchasers of BLM helium

We applaud the discretion given to the Secretary to adjust the percentages to be auctioned so as to minimize market disruption while maximizing revenue. While we understand the objective of having bidding that is as active as possible, so too must Congress take full account of the need of helium end users to know they can get helium when they need it. The leeway provided to the Secretary in this regard is essential to sensible implementation of any auction.

The provision in H.R. 527 that limits any one entity from purchasing more than 30% of the helium in an auction will, we believe, prove to be unworkably low. The purchasing limit should be raised to no more than 50%, along with the stipulation that the Secretary has the authority to adjust this limit accordingly to adapt to changing market conditions.

Insisting that only qualified bidders, those with a demonstrable stake in the helium market, with the ability to receive the helium, be able to engage in the auction process is another improvement in H.R. 527. We have concerns that speculators might see helium as the latest commodity that falls prey to investment instruments that would curl one's hair. We do not want an arbitrageur or a sovereign wealth fund to be able to have standing to bid. Taking every step possible to guard against that is critical.

Selling and delivery of helium must be harmonized, and the In-Kind program should not be jeopardized

As we enter the sunset phase of life for the BLM reservoir, where the amount of deliverable helium is declining at rates of 15-20% each year, the BLM must adapt its sales methodology and only offer for sale each year the amount of helium that can actually be delivered from the reservoir to consumers. This decline curve tends to exacerbate problems with a 100% auction. For example, a 100% auction is inconsistent with the federal In-Kind program, which provides essential helium to researchers and federal agencies. Today, helium refiners essentially "loan" helium to the In-Kind program for six to nine months. But without any certainty that helium refiners will have helium from one auction to the next, this "loan" will no longer be a certainty, exposing federal agencies to great risk. Worse, as the volume of BLM helium declines, there will be inevitable conflict between the In-Kind program and the bids by private companies for scarce BLM helium. An auction of nonallocated helium together with allocated sales can address this important objective, but that it is almost impossible for a 100% auction to be workable in this regard.

The auction is also inconsistent with the so-called helium conservation "flywheel" that allows refiners to inject helium back into the BLM storage system during refining plant outages or during periods of excess

global supply, rather than venting precious helium molecules to the atmosphere. If 100% of the BLM helium is auctioned, and if the auctioned helium is given first priority for delivery through the pipeline, we are concerned that we will have a hard time accessing the helium that we have conserved by reinjecting into the system. We believe a partial auction combined with an allocated sale, married to rules for pipeline deliveries, can address this concern.

A major possible snag that we urge the Committee to avoid is a disconnect between the sale of helium and its delivery. Think of helium from the BLM reservoir as if it were water moving through a garden hose that was left running until the well ran dry. The winner of any auction would need to fill up its pail from that hose and then have its pail replaced by another winner's pail, and so on. In a 100% auction, the winners would need to take delivery of their helium prior to the next auction. Otherwise the bid winners would risk never being able to take delivery. Today, there is the ability to store helium because the refiners are not gambling on whether there will be helium available from one auction to the next, they purchase the helium that is offered for sale and then take regular deliveries of the helium to satisfy demand.

New reporting requirements are an intrusion of privacy

H.R. 527 imposes many new and comprehensive reporting requirements for the BLM, the owners of the helium enrichment plant, and the private refiners connected to the BLM pipeline system. While we agree that governmental proceedings should be as transparent as possible, these new reporting requirements create bureaucracy, will increase costs, and intrude on private, confidential business planning.

Our helium refining plants are constructed adjacent to private natural gas plants (literally across the fence line). They are not dedicated exclusively to the BLM system. We have entered into long-term contracts with private natural gas producers under which we purchase all of the helium they may produce as a byproduct of natural gas production. We have constructed, installed and dedicated sufficient refining capacity at these plants to support these long-term contracts to ensure that we can receive and process all of the helium they produce today or into the future. Requiring the private refiners to report production, production capacities, future capacities and other commercial transactions unrelated to the purchase of crude helium from the BLM, and then posting that information on the Internet without restriction, is an intrusion of privacy that must not be legislated. There must be far less intrusive ways for Congress to understand how much refining capacity is available, especially since the amount of BLM helium is declining so rapidly.

A partial auction of the BLM helium accomplishes all important objectives

As the discussion around BLM helium has unfolded, there have been several important objectives that have been identified: (1) assuring transparency around how BLM sets a price for helium so it is no longer a "black box; " (2) optimizing return for the US taxpayer on the sale of helium; (3) assuring reliability of supplies so that end users can enter into long-term contracts; and (4) providing an incentive for refiners to enter into tolling agreements, to refine helium purchased by nonrefiners. It is our view, based on experience with the BLM system, that auctioning off the nonallocated portion of BLM helium is the best method for achieving each of these objectives in a way that does not compromise any of them.

We recognize that various independent sources have concluded that BLM is not charging high enough prices for its helium. While we think there is considerable evidence that undercuts this conclusion, we

are prepared to stipulate that higher prices for the taxpayer are a legitimate objective for Congress. To us, the way to accomplish this is for full transparency regarding how the BLM arrives at its price. That includes a thorough market survey, outside experts with the statistical and economic expertise that BLM may not have, and the added component of a price to be derived from the auction of the nonallocated amount of helium the BLM currently puts on the market for purchase by nonrefiners.

This has several advantages. Provided there is pipeline allocation dedicated to the auction of this nonallocated amount of helium, there will be fierce competition among bidders for this volume. Whether bidders are end users or nonrefiners, if there is pipeline allocation associated with this auctioned amount, there will be new competition and a change from the status quo that will undoubtedly prompt helium refiners to compete aggressively for that business. Tolling contracts between the parties, when commercially necessitated, will be facilitated naturally.

But if there is no pipeline allocation, tolling is not an attractive enterprise. Imagine if a Burger Company A set up shop next to Burger Company B, and asked Company B to fry up burgers for Company A, so that A could sell them to its own customers. A would pay B for its efforts, but that would not be a good business proposition for B, allowing A to sell burgers to more of A's customers, increasing A's market share at the expense of B. Perhaps A could pay B a high enough price to fry those burgers to make it worth B's while, but that price would have to be high enough to compensate B for losing market share. Some nonrefiners are willing to pay that price for tolling agreements today, but some are not.

Auctioning off only the nonallocated portion also provides certainty to helium end users. They will have the assurance that comes with long-term contracts, which themselves are predicated on contracts between refiners and BLM. They could continue, indeed, to think of us as a utility. The alternative – uncertainty about who will get helium from where, and how timely, each time the auction is conducted – is hardly a system upon which Fortune 500 companies, as well as the federal government and leading scientists, can predicate their enterprise.

Legislation should not mandate allocations or tolling of helium, which is a bailout for companies that did not invest in their own refining capacity

Some have been heard to argue that BLM has set up what is essentially an oligopoly, and that Congress, in statute, should therefore force refiners on the BLM pipeline to allocate a percentage of their refining capacity to process helium owned by non-refiners, at set fees. The answer to this is simple: any party can negotiate to buy helium from a refiner, but Congress should not insert itself into the middle of commercial transactions. Commercial arrangements are entered into all the time that allow those without helium refineries to buy agreed-upon quantities of helium from those that do have refineries. These are referred to as tolling arrangements. But surely it is not the role of Congress to pass statutes that force refiners to sell at a set price, or to force refiners to share their substantial investment in refining capacity with companies that have made their own strategic choice not to build their own refinery.

The refiners made enormous investments at the time they built refineries on the BLM pipeline. Several industrial gas companies chose not to make such an investment. Those industrial gas companies that chose not to make similar investments presumably made what to them were sound business decisions, and spent their capital elsewhere. For Congress in 2013 to give those companies the ability to force the refiners to sell at a set price would be totally un-American and contrary to the basic principles of

capitalism. Nothing in law stands in the way of any company entering into a tolling arrangement at a mutually agreed-upon price.

Consider the analogy of a small petroleum company, lacking its own refinery, but looking to get its hands on petroleum out of the Strategic Petroleum Reserve and getting that to market as gasoline. If that small petroleum company petitioned Congress to force the large oil company, in statute, to use some of its refining capacity to process petroleum of its competitor, no one would conceivably take this position seriously, and it has no more merit in the context of helium. Of course, the small petroleum company could negotiate with the large oil company to have its petroleum refined at its plant. This has happened for years in the helium context. But forcing refiners to use scarce capacity for a competitor in statute? No one could possibly think this is an appropriate role for Congress.

We have used another analogy as well to explain why we oppose the idea that Congress should force refiners to toll for nonrefiners, at a price set by Congress. Suppose that a small foreign car manufacturer approached Congress with the following proposition: we like selling cars in the US, but we would rather not invest in building the manufacturing plants that would allow us to make these cars, so Congress should force a large American manufacturer, at a price set by Congress, to use some of its manufacturing capacity to build cars for the foreign company. A laughable proposition, right? Yet that is what we hear some nonrefiners asking of Congress. Those of us with refining plants invested millions of scarce dollars at a time when the nonrefiners invested elsewhere. It appears that they now regret this decision. They could build a helium refinery on the BLM system today, and H.R. 527 guite explicitly provides that there is no barrier to this investment, and that they would be eligible for an allocation for BLM helium should they do so. But instead of doing this, they are asking Congress to bail them out from the consequences of a business decision they made many years ago, and by forcing a private party to toll for them at a price to be set by Congress. We doubt that there are many members of this Committee who thought that imposing federal price controls on a private industry was a desirable public policy when they ran for Congress. Congress should not take this idea seriously. This House objects to bailouts, and forced tolling would represent the ultimate in bailouts.

The 1996 Act did not restrict access to the BLM pipeline or impose restrictions on who could purchase helium from the federal government. Any third party company that wanted to enter the helium refining business and purchase helium from the federal government could have made investments as early as 1996, and could do so to this very day and into the future. Surely, it is not the role of Congress to turn back the hands of time and allow companies that opted not to make such investments to enjoy the benefits accruing to those who did.

The 1996 Act does not impose any restrictions on who can purchase helium from the federal government. Instead, the Department of Interior, under Administrations of both parties, limits the sale of helium from the federal reservoir to what it calls "qualified buyers" – an entity that must have the ability to receive and process the crude helium sold by the government. Any company can enter the helium refining business with the requisite commitment of its resources. BLM's interest in selling to qualified buyers is to prevent companies from stockpiling crude helium. BLM determined that helium refiners were in the best position to process the crude helium, which requires purification and liquefaction prior to being introduced into the helium wholesale or retail market.

Interestingly, BLM initially offered 90 percent of the helium in the reservoir to the refiners and left 10 percent as unallocated, to be purchased by companies that were not refiners. But there was very little demand for the unallocated portion. Since BLM's desire was not to sit on unnecessarily large quantities

of helium in the reservoir, BLM raised the allocated amount to 94 percent. Any suggestion that this level poses an obstacle to any company wishing to purchase helium for its customers simply does not comport with the facts. The 1996 Act and any successor statute does not and should not set the allocation level; BLM does, and for reasons that benefit the U.S. taxpayer and the users of helium.

Conclusion: The time for Congress to act on helium is now

We are encouraged to see action on the helium issue. This is not an issue where Congress can kick the can down the road or take action retroactively. There will be serious consequences to the American economy if the BLM reserve is off limits after the end of the current fiscal year.

There is no need whatsoever to let this happen. This issue has been bipartisan in both bodies of Congress over the past year, and there is no reason that Congress cannot develop a workable, sensible bill that accomplishes the objectives that congressional leaders have identified. Air Products appreciates the opportunity to testify again on this issue, and 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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2500 Last direct withdrawal from high purity helium wells Jun 2011 HPA \$1.3B debt is fully repaid spring 2013 Field pressure drops below plant minimum suction pressure Centralized or modular compression is required Potentially \$10MM project - 18 month duration 2000 HPA expires 31 Dec 2014 Refiner's contracts with BLM terminate 1 Oct 2015 1500 Field production drops below 20MMCFD lowest plant turn-down Either more wells must be drilled or new plant equipment installed Potentially \$15-\$20MM project - 24 month duration 1000 Reservoir is fully depleted except 3 BCF strategic reserve Plant operates only when critically necessary 500 Note: PRODUCTION DATA IS PRELIMINARY AND SUBJECT TO CHANGE 0

Annual Production - Million cubic feet per year

Bush Dome Helium Production

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029