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U.S. House of Representatives Committee on Natural Resources
Subcommittee on Energy and Mineral Resources
"Helium: Supply Shortages Impacting our Economy, National Defense, and Manufacturing"
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Mr. Chairman and Members of the Committee, I am Tom Thoman and I serve as the Division President of Gases Production for Airgas, Inc., headquartered in Radnor, Pennsylvania. Thank you for the opportunity to testify before you today on the very important issue of helium supply.

Founded in 1982, Airgas now operates the largest national distribution network in the packaged gas industry. This includes industrial, medical, and specialty gases, as well as hardgoods like welding equipment and safety supplies. The company is a leading producer of atmospheric gases, commercial-use carbon dioxide, dry ice, and nitrous oxide, and is a leading distributor of refrigerants, ammonia products, and process chemicals. Airgas employs more than 15,000 people across the country, and maintains an operational presence in all 50 states. In terms of helium alone, Airgas, in purchasing the package gas supply chain assets of two of the refiners on the BLM pipeline, is the largest distributor in the country, and supplies 22% of all helium delivered to the U.S.-based end-user community. With an investment of more than $500 million in over 2 million helium cylinders, 5,000 liquid helium containers, 88 high-pressure bulk storage trailers, 90 helium filling locations, and more than 1,100 total locations throughout the U.S., Airgas operates the largest domestic infrastructure and supply chain for delivering helium to U.S. hospitals, research centers, and many other vitally important segments of the national economy that need and depend upon this vital resource.

As the Committee is well aware, our nation currently faces a helium shortage that is having an adverse effect on the domestic economy and its ability to create jobs. By way of example, the supply chain is stretched so thin that Airgas has been forced to place our contract customers on reduced resource allocations, and to cease deliveries to non-contract customers for the simple reason that we are unable to procure the necessary supplies. For our customer base, the restricted supplies have had significant real world consequences. Whether that means decreased economic activity for manufacturers, welders, and petrochemical refiners; constrained MRI scans for health care providers; or limitations on research, the fact of the matter is that the helium shortage is impacting most Americans whether they realize it or not. In our view, this is not a tenable situation.

Paradoxically, this shortage is not resultant from a lack of resources, but rather a lack of access to the supplies in this distorted market. A sufficient amount of helium is available in the U.S. to satisfy domestic demand, however, it is not fairly priced, nor is it reaching the U.S. businesses and research centers that rely on it. Specifically at issue is the access arrangement allowed for by the U.S taxpayer-owned Federal Helium Reserve (which provides 50% of domestic helium supplies) and the 1996 Helium Reserve Privatization Act (henceforth referred to as the "Act").

To understand how this situation arose, it is important to review the history of the Reserve and the 1996 Act. Helium is a lighter-than-air, non-flammable, inert gas. Because of its strategic use in dirigibles during World War I, the U.S. Government declared helium to be a critical defense asset and subsequently created the Federal Helium Reserve in 1925. While the decades that followed reduced its application as a protected national security material, the Reserve itself compiled a significant compounding debt to the Treasury for failure to repay the initial loan used in its establishment. In order to address its debt obligation and ostensibly begin a shift toward privatization, the Congress passed the Helium Privatization Act of 1996 to phase-out and sell off the surplus helium in the Reserve. The intent of the Act was to shift away from the bloated cost and inefficiency of government ownership and operation by utilizing market forces to ensure an optimal return to the taxpayers, while reducing the debt to the Treasury.

Though the Act is succeeding in closing the Reserve's debt gap (and will likely do so by the summer of 2013), it has failed to facilitate a robust commercial marketplace due to its reliance on an artificial, legislatively-set pricing formula which prevents the true price discovery of the commodity. This is because the Act specifically designed the pricing formula to alleviate the debt obligation, rather than reflect the value of the resource itself, which of course, can only be established by legitimate competition. Also, the Act created a sales construct whereby the taxpayer-owned crude helium can effectively only enter the marketplace after first being sold to one of the four companies with refining facilities on the BLM pipeline. In part, it is that protected "middle-man" role which has created a monopoly and added to the distortion in the helium market. Taken together, the restricted access to the resource and the manufactured price, have created a situation where a substantial portion of taxpayer owned helium is being sold overseas at significant profit while our domestic end-user community is suffering from supply shortages. To be clear, Airgas is certainly not opposed to exports in a fair and free marketplace, but unfortunately, that description does not apply to our domestic helium market.

To address this problem, Airgas recommends that the Congress provide open access to the Reserve's resources, thereby enabling market forces to determine a fair and proper price which inevitably will result in more supply being made available to our domestic end-user community.

A 2010 report from the National Academy of Sciences' (NAS) National Research Council (NRC) found that, "[t]he managers of the Reserve should shift to a market-based pricing policy to improve the exploitation of this important national asset." It went on to make the following recommendation: "The Bureau of Land Management (BLM) should adopt policies that open its crude helium sales to a broader array of buyers and make the process for establishing the selling price of crude helium from the Federal Helium Reserve more transparent. Such policies are likely to require that BLM negotiate with the companies owning helium refining facilities connected to the Helium Pipeline the conditions under which unused refining capacity at those facilities will be made available to all buyers of federally owned crude helium, thereby allowing them to process the crude helium they purchase into refined helium for commercial sale."

Airgas believes that the NRC hit the nail right on the head and that any legislation should be guided by its recommendations.

The objection sometimes offered by the four refiners that a tolling agreement is akin to "mandated manufacturing" ignores the fact that this is not a privately owned good, but rather a publicly owned resource to which they have enjoyed preferred access. Our history is replete with examples of mitigating that preferred access through revised open access and/or tolling agreements.

For example, throughout most of our history the United States has imposed open access requirements on entities upon which it bestowed a government benefit—railroads and the Interstate Commerce Act of 1887 being a prime example. More recently, the Congress and the Federal Energy Regulatory Commission (FERC) combined to impose open access requirements on interstate natural gas pipelines. That regime has benefitted producers, consumers and even the interstate pipelines themselves. It would be wholly appropriate and not administratively complex to impose a tolling requirement upon the four helium refiners who currently enjoy practical control of the resource. Such a requirement would open the bidding market for crude helium, thus enabling American taxpayers to receive a fair, market-based price for this vital resource, while ensuring that successful bidders for crude helium are afforded refining services on terms and conditions commercially negotiated with the refiners themselves.

An additional component of the open access solution is to provide successful bidders the opportunity to build a new refining plant on the pipeline system. Such a plant (along with its requisite economic development and associated job creation) has been infeasible since 1996 because the current construct prevents new market entrants from effectively competing for the resource. If the Congress chooses to enable this investment opportunity, we are confident the market would respond favorably.

In the absence of a commercially negotiated tolling arrangement, it is possible that BLM itself could contract directly with the refiners for tolling services and then auction off the refined product through an open access auction into the commercial marketplace. Since most estimates indicate that the Reserve will exhaust its commercially available supply in 15 to 20 years, an arrangement wherein BLM auctions off refined product would not require a long term expansion of the Reserve, nor would it require new infrastructure. In fact, it would likely result in greater revenues for the Treasury as the value of the refined product will exceed that of the crude helium. To allow for full price transparency, the terms and pricing of the previously arranged tolling would be made available as part of the auction. The resulting market price would be more in line with the true value of the resource. And perhaps most importantly, more helium would be available to domestic end-users.

Under any open access auction scenario, Airgas believes that true price discovery and full value for the taxpayer, can only arise from a sealed-bid auction. Under a sealed-bid auction the buyers place closed bids through a formalized and transparent auction mechanism, and the highest bidder wins the good at the bid price. It is the truest form of a competitive market-based auction and it is similarly aligned with the management of other federally run resource auctions.

Because Airgas has no direct access to the Reserve's helium, the current shortage is causing us to lose business and it is damaging our relationship with our customers, perhaps irreparably. Airgas is not asking for a handout. We do 99 percent of our business in the U.S., supporting millions of U.S. jobs. We pay taxes in the U.S. at close to the highest corporate rate. We are simply asking for an equal opportunity to bid on the taxpayer-owned helium so that our customers will have a better chance of receiving the helium they need. Given the opportunity to compete for the nation's helium resources, Airgas, along with others in the industry who are currently excluded from the process, would readily participate in the auction and potentially invest in new capital projects associated with the open market; and, by de-linking the Reserve helium from the artificial pricing mechanism, Congress can unlock additional investment in private sector helium development which is otherwise reluctant to engage in a distorted market. If Airgas is successful in competing for a greater share of the nation's helium resources, our domestic packaged helium supply chain would be able to more fully meet the requirements of U.S. businesses, and we would no longer be forced to cease deliveries or reduce supply allocations to our customers.

By increasing market competition, allowing commercial forces to take root, and enabling private sector judgments to spur economic development and greater investment, the Congress can greatly benefit the industry, the end-user community, and the American taxpayer.

Airgas strongly believes that by allowing free market forces to work, we can alleviate the current supply constraints and facilitate a competitive environment which will result in greater infrastructure investment, increased resource supply, and improved economic development.