



U.S. Department
of Transportation
**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

January 17, 2024

Ms. Melanie Barnes
State Director, New Mexico
US Bureau of Land Management
301 Dinosaur Trail
Santa Fe, New Mexico 87508

Dear Ms. Barnes:

In a letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA) dated October 4, 2023 [Reference No.: 3745(0060/910)], you requested PHMSA provide a written response to the Bureau of Land Management (BLM) with respect to PHMSA's potential oversight of the Federal Helium System. Specifically, PHMSA evaluated whether the helium pipeline falls within the scope of the gas pipeline safety regulations at 49 Code of Federal Regulations (CFR) § 192.1.

As stated in your letter, BLM has been working with the General Services Administration (GSA) to dispose of all facilities, equipment, and other real and personal property, and all interests in the same, held by the United States in the Federal Helium System. During the transition from government to private ownership there is a potential for regulating bodies to provide oversight within their jurisdiction. BLM is requesting information on the potential oversight by regulating bodies to provide open, transparent, and advanced knowledge of all aspects of future ownership to potential buyers, the Congress, and taxpayers.

Background

Your letter provides the following information regarding the Federal Helium System (System). The System is located near Amarillo, Texas and includes a helium storage reservoir, enrichment plant, helium pipeline (also referred to as the Federal Helium Pipeline), and other infrastructure owned, leased, and managed under contract by the Secretary of the Interior for the storage, transportation, withdrawal, enrichment, purification, or management of helium.

The System supplies crude helium to private helium refining companies, which in turn refine the helium and market it to consumers. It also stores privately owned crude helium gas within the helium reservoir that must be delivered to its owners under contractual agreements. The helium pipeline has been in service since the early 1960s and transports a mixture of 75 percent helium

The Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety provides written clarifications of the Regulations (49 CFR Parts 190-199) in the form of interpretation letters. These letters reflect the agency's current application of the regulations to the specific facts presented by the person requesting the clarification. Interpretations are not generally applicable, do not create legally-enforceable rights or obligations, and are provided to help the specific requestor understand how to comply with the regulations.

and 25 percent nitrogen gas from the helium enrichment plant to a private processing facility in Bushton, Kansas, along with other customers on its route. The helium pipeline operates between 600 and 1500 pound per square inch (psi) and has a maximum allowable operating pressure of 1800 psi.

You described the helium pipe material as coal tar-asbestos coated, carbon steel mains. You stated that the pipeline is approximately 425 miles in total length with the following segments:

- 187.5 miles of 8-inch diameter pipe;
- 227 miles of 4-inch diameter pipe; and
- 12 miles of 3-inch diameter pipe.

You mentioned that the helium pipeline was designed and constructed in accordance with the ASME/ANSI B31.8 standard. While presently used to transport helium, you noted it could be suitable for conversion to a “gas transmission” pipeline system without significant modification. You also provided certain design, welding, and valve specifications for the helium pipeline system.

You asked PHMSA the following questions, and PHMSA’s response follows each question.

Question 1: Given all information provided here and in the reading room, does PHMSA have any regulatory oversight to any portion of the Federal Helium System? If so, can you please provide in detail to what extent and for which corresponding portion of the Federal Helium System?

Response to 1: The Federal pipeline safety regulations are applicable to the transportation of gas by pipeline facility operators. The gas pipeline safety regulations in 49 CFR Parts 191 and 192 define *gas* to mean “natural gas, flammable gas, or gas which is toxic or corrosive.” Helium is an inert, non-flammable, non-toxic, non-corrosive noble gas. Nitrogen is an inert, non-flammable, non-toxic, non-corrosive gas. Therefore, based on the regulatory definition of “gas,” PHMSA would not apply or enforce the pipeline safety regulations against an operator of the helium pipeline you described with the composition of 75 percent helium and 25 percent nitrogen gas

You mentioned in your letter that the helium pipeline was designed and constructed to specifications such that it would be suitable for conversion and use as a “gas transmission” pipeline. If the pipeline is intentionally converted for use in the transportation of a regulated “gas,” or the gas stream composition changes such that it meets the definition of a regulated “gas,” including but not limited to methane or natural gas, the pipeline would likely fall under the Federal pipeline safety regulations in 49 CFR Part 192, including requirements for conversion to service at 49 CFR § 192.14. A conversion to service would only be required if the pipeline transports a regulated product.

Question 2: Should the Federal Helium System ownership be transferred/sold to a private entity will PHMSA still provide regulatory oversight to the Federal Helium

System? If so, can you please provide in detail to what extent for which corresponding portion of the Federal Helium system?

Response to 2: For the reasons articulated above in the Response to Question 1, PHMSA would not apply or enforce the pipeline safety regulations against the Federal Helium Pipeline because it is not engaged in the transportation of a regulated “gas.”

Question 3: Should PHMSA become/maintain regulating authority over any portion of the Federal Helium System how long will the new purchaser/owner be initially given to safely bring the current Federal Helium System to the regulating standard?

Response to 3: For the reasons articulated above in the Response to Question 1, PHMSA would not apply or enforce the pipeline safety regulations against the Federal Helium Pipeline because it is not engaged in the transportation of a regulated “gas.”

PHMSA would encourage the new purchaser/owner to communicate early-on with PHMSA regarding any future plans to convert the helium pipeline to a regulated gas transmission pipeline in compliance with the Federal pipeline safety regulations.

If we can be of further assistance, please contact Tewabe Asebe at 202-366-5523.

Sincerely,

John A. Gale
Director, Office of Standards
and Rulemaking



United States Department of the Interior



BUREAU OF LAND MANAGEMENT
New Mexico State Office
301 Dinosaur Trail
Santa Fe, New Mexico 87508
<https://www.blm.gov/new-mexico>

October 4, 2023

In Reply Refer To:
3745(0060/910)

Your Reference:
Federal Helium System Oversight

Benjamin Fred
Assistant Chief Counsel, Pipeline Safety (PHC-20)
USDOT, Pipeline and Hazardous Materials Safety Administration
1200 New Jersey Ave SE,
Washington, D.C. 20590
Bejamin.Fred@DOT.gov

Dear Counsel Fred:

This letter is to notify your office that the Bureau of Land Management (BLM) is requesting a written response regarding the Pipeline and Hazardous Materials Safety Administration's oversight to the Federal Helium System.

The BLM has been working with the General Services Administration (GSA) to execute Phase D of the Helium Stewardship Act of 2013. This Phase requires that the Secretary of Interior dispose of all facilities, equipment, and other real and personal property, and all interests in the same, held by the United States in the Federal Helium System. As a result, BLM and GSA are working to sell the Federal Helium System.

The government recognizes that during this transition of ownership from government to private entity there is a potential for regulating bodies to step in and provide oversight, that may or may not be already in place within their jurisdiction. It is the intention of the BLM to provide open, transparent, and advanced knowledge of all aspects of future ownership to potential buyers, the Legislative Branch, and taxpayers. The BLM is requesting your agency thoroughly review the following information and questions, then provide a response for each question below.

BACKGROUND-

The BLM operates and maintains a helium storage reservoir, enrichment plant, and helium pipeline system near Amarillo, TX, that supplies over 20% of the domestic and 9% of the global demand for helium, an inert non-combustible gas. The BLM supplies crude helium to private helium refining companies which in turn refine the helium and market it to consumers. The BLM also stores privately owned crude helium gas within the reservoir that must be delivered to its

owners under contractual agreements between the Federal Government and the owners of the helium. It is the responsibility of the Federal Government to deliver this crude helium in accordance with these storage contracts. The storage contracts will be assigned to the purchaser of the helium system. This new property owner will be responsible for carrying out the remaining contractual delivery obligations set forth by said contracts, until the contract expiration date of 30 SEP 2027.

The Federal Helium System is comprised of the following:

1. Federal Helium Reserve,
2. Cliffside Field,
3. Federal Helium Pipeline, and
4. All other infrastructure owned, leased, or managed under contract by the Secretary of the Interior for the storage, transportation, withdrawal, enrichment, purification, or management of helium.

The BLM Amarillo Field Office (AMFO) crude helium pipeline system has been in service since the early 1960's and transports a mixture of 75% helium and 25% nitrogen gas from the Amarillo Crude Helium Enrichment Unit to the OneOK LP Processing Facility in Bushton, KS, along with other customers on its route. The pipeline operates between 600 and 1,500-psi, has an 1,800-psi maximum allowable operating pressure, and consists of 187.5 miles of 8-inch pipe; 227-miles of 4-inch pipe; and 12-miles of 3-inch pipe. All pipe is coal tar-asbestos coated, carbon steel mains, approximately 425-miles in total length.

The Crude Helium Pipeline was designed and constructed in accordance with the ASME/ANSI B31.8 standard and is suitable for conversion to a gas transmission pipeline system without significant modification. The Crude Helium Pipeline System Operations & Maintenance Manual explains the pipeline system was designed to an exceptionally high standard at the time of construction. The designers acknowledged that the requirements of the American Standards Association for Pressure Piping, Gas Transmission and Distribution Piping Systems (ASA B31.8-1958, now ASME B31.8) did not apply since helium is an inert gas, but not only was this standard rigorously incorporated, all pipeline welding was completed to API 1104 7th edition (1961) specification, and 100% of the welds were radiographically inspected (x-ray NDT).

Likewise, the valve specification calls for ASA/API 6D valves with emphasis on positive sealing under dry-helium pressure. The designers recognized the immense value of crude helium and specified the inclusion of mainline block valves "commensurate with the value of crude helium contained per interval." (O&M p. I-B-7) The valves installed along the pipeline are Grove through-conduit, ASA Series 900, gate valves equipped with Shafer hydraulic-pneumatic actuators with automatic line break controls such that they automatically close in case of a pipeline failure. The approximate spacing of these mainline block valves is 10-miles. (O&M p. II-A-4) The actuators are designed and set to close at 1-inch per second where, on 8-in mainline, the valve will close in 8 seconds and, on 3-in mainline, it will close in 3-seconds. (O&M p. III-B-I).

QUESTIONS-

1. Given all information provided here and in the reading room, does The Pipeline and Hazardous Materials Safety Administration have any regulatory oversight to any portion of the Federal Helium System? If so, can you please provide in detail to what extent and for which corresponding portion of the Federal Helium System?
2. Should the Federal Helium System ownership be transferred/sold to a private entity will The Pipeline and Hazardous Materials Safety Administration still provide regulatory oversight to the Federal Helium System? If so, can you please provide in detail to what extent for which corresponding portion of the Federal Helium System?
3. Should The Pipeline and Hazardous Materials Safety Administration become/maintain regulating authority over any portion of the Federal Helium System how long will the new purchaser/owner be initially given to safely bring the current Federal Helium System to the regulating standard?

If you have further questions regarding the project, please feel free to contact me at (505) 954-2222 or mgbarnes@blm.gov. Thank you in advance for your timely response and for your assistance in the matter. I look forward to hearing from you.

Sincerely,



Melanie G. Barnes
State Director

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