



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, D.C. 20590

JUL 14 2009

Viridis Clean Energy Group
Luong Nguyen
General Manager
7500 San Felipe, Suite 600
Houston, TX 77063

Dear Mr. Nguyen:

In a letter to the Pipeline and Hazardous Materials Safety Administration (PHMSA) dated February 5, 2009, you requested an interpretation regarding the applicability of 49 CFR Part 192 of the Federal pipeline safety regulations to a pipeline used to transport landfill gas (methane) in Los Angeles County, California. You stated that the pipeline runs between Bradley Landfill and Penrose Landfill Gas to Energy Power Plant (LFGTE). You stated that the pipeline starts from Bradley Landfill to Valley Power Station which is owned by Los Angeles Department of Water and Power (LADWP). Then it continues to Sheldon Arleta Landfill. Finally, the pipeline delivers the gas to LFGTE for electricity generation. You stated that the pipeline is about five miles in length with varying diameter ranging from eight inches to ten inches and is constructed of sections of fiberglass, steel and high density polyethylene (HDPE) piping materials.

Pursuant to Chapter 601, Title 49, United States Code, PHMSA has established design, construction, operation, and maintenance standards and regulations for transportation of natural and other gas pipelines and has responsibility for enforcing these requirements. The Part 192 regulations include requirements for:

- Maintaining construction records, material information, pressure testing records, survey records, joining/welding procedures.
- Corrosion control and records.
- Ensuring piping and components used in the system are compatible with the constituents in the gas stream.
- Removal of byproducts that have the potential to damage the piping.
- Odorization of gas.
- Public education (i.e., is the public aware of the smell of the natural odor?)
- ASTM D-2517 standard requirements for fiberglass piping.
- ASTM D-2513 standard requirements for HDPE piping.

You requested an interpretation for the following:

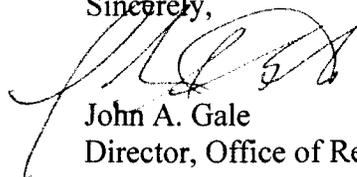
- (i). Is the abovementioned pipeline from the LFG Delivery Point to the Penrose LFGTE Plant subject to 49 CFR Part 192?
- (ii). Specifically, does the abovementioned pipeline satisfy the exclusion criteria provided in 49 CFR Part 192.1(b)(5)(ii)?
- (iii). If the pipe is subject to 49 CFR Part 192, would the pipe meet the criteria of a gathering line, transmission line, distribution line or service line as defined in 49 CFR Part 192.3?
- (iv). Would the section of the pipeline within the LADWP compound be considered internal process piping and, therefore, falls outside the definition of transmission line, distribution line or service line as defined in 49 CFR Part 192?

Based on the information you provided, our responses to your interpretation requests are as follows:

- (i). Yes, the above-described pipeline is subject to 49 CFR Part 192.
- (ii). No, the pipeline does not meet the exclusion under § 192.1(b)(5)(ii) because the pipeline is not located entirely on the customer's premises. Moreover, § 192.1(b)(5)(ii) applies only to transportation of petroleum gas or petroleum gas/air mixture but in this case, the pipeline transports methane gas.
- (iii). The pipeline meets the definition of a transmission line under § 192.3.
- (iv). Without a field review of the LADWP facility, a determination cannot be made regarding facility piping at this time. In general, however, the demarcation point between a pipeline and facility piping is the device where pressure control is transferred from the pipeline to the facility piping such that facility operations can no longer affect the pipeline pressure. As we understand your letter, the pipeline simply crosses the LADWP facility (i.e., the facility does not have equipment for use or storage of any gas). Therefore, there is no pressure control device and it appears the section crossing the LADWP facility remains within the definition of a transmission line.

I hope that this information is helpful to you. If I can be of further assistance, please contact me at (202) 366-4046.

Sincerely,



John A. Gale
Director, Office of Regulations



02-09-09A11:42 HSL
VIRIDIS
CLEAN ENERGY GROUP

5 February 2009

Mr. Chris Hoidal
PHMSA Pipeline Safety
Western Region Office
12300 W. Dakota Ave
Suite 110
Lakewood, CO 80228

Dear Mr. Hoidal,

RE: PIPELINE INTERPRETATION - Interpretation regarding applicability of 49 CFR Part 192 to pipeline used to transport landfill gas between Bradley Landfill and Penrose Landfill Gas to Energy Power Plant

SUBJECT

The purpose of this letter is to seek an interpretation from Pipeline and Hazardous Materials Safety Administration ("PHMSA") regarding the applicability of 49 CFR Part 192 to a pipeline used to transport landfill gas between Bradley Landfill and Penrose Landfill Gas to Energy Power Plant ("LFGTE"). Penrose LFGTE plant is located at 8301 Tujunga Avenue, Sun Valley, CA 91352.

FACTS

Penrose Landfill Gas Conversion, LLC ("Penrose") purchases landfill gas from the Bradley landfill which is owned and operated by Waste Management ("WM"). Penrose is a member of Viridis Energy Group.

The landfill gas is:

- (i) collected by a network of wells and collector pipe work installed in the Bradley landfill which is owned and operated by WM; then
- (ii) compressed and chilled to remove moisture and some contaminants in a compression facility also owned and operated by WM and located at the landfill.

The network of wells and collector pipe work and the compression facility are collectively considered the "production facility".

The landfill gas is delivered and sold to Penrose at the outlet of the compression facility, immediately prior to the gas entering a pipeline (the "LFG Delivery Point"). That is, the LFG Delivery Point is at the outlet of the "production facility".

WM is the "supplier" of landfill gas and Penrose is the only "customer" (receiver) of the landfill gas. Title to, control and possession of, and risk of loss of landfill gas changes from WM to Penrose at the LFG Delivery Point.

The gas is then transported along a pipeline operated by Penrose from the LFG Delivery Point to a LFGTE power plant owned by Penrose (the "Penrose LFGTE Plant"), where it is used as a fuel to generate electricity. The pipeline is approximately 5 miles in length. The pipeline consists of several

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sections of varying diameters, ranging from 8" to 10", and of different materials: fiberglass, steel and high density polyethylene (HDPE). The pipeline operating pressure is 50 psi.

From the Bradley landfill, the pipeline first crosses land below ground to the Valley Power Station owned by Los Angeles Department of Water and Power ("LADWP"). This section of the pipeline is fiberglass. The pipeline within the LADWP station is made of steel and mostly above ground. Only a small section (about 600 feet) is underground. After leaving the LADWP compound, the pipeline continues underground following the right of way of LADWP's transmission lines to Sheldon Arleta landfill. This section of the pipeline is fiberglass. From Sheldon Arleta to Penrose the pipeline is High Density Polyethylene ("HDPE") and follows the right of way designated by the City of Los Angeles.

The pipeline between Bradley landfill and Sheldon Arleta landfill was constructed in early 1980s to supply landfill gas from both landfills to fuel the LADWP power station.

A aerial view of the pipeline route is included in Attachment 1 of this letter.

QUESTIONS

We respectfully request an interpretation from PHMSA for the following:

- (i) Is the abovementioned pipeline from the LFG Delivery Point to the Penrose LFGTE Plant subject to 49 CFR Part 192;
- (ii) Specifically, does the abovementioned pipeline satisfy the exclusion criteria provided in 49 CFR Part 192.1(b)(5)(ii); and
- (iii) If the pipe is subject to 49 CFR Part 192, would the pipe meet the criteria of a gathering line, transmission line, distribution line or service line as defined in 49 CFR Part 102.3.
- (iv) Would the section of the pipeline within the LADWP compound be considered internal process piping and therefore falls outside the definition of transmission line, distribution line or service line as defined in 49 CFR Part 192?

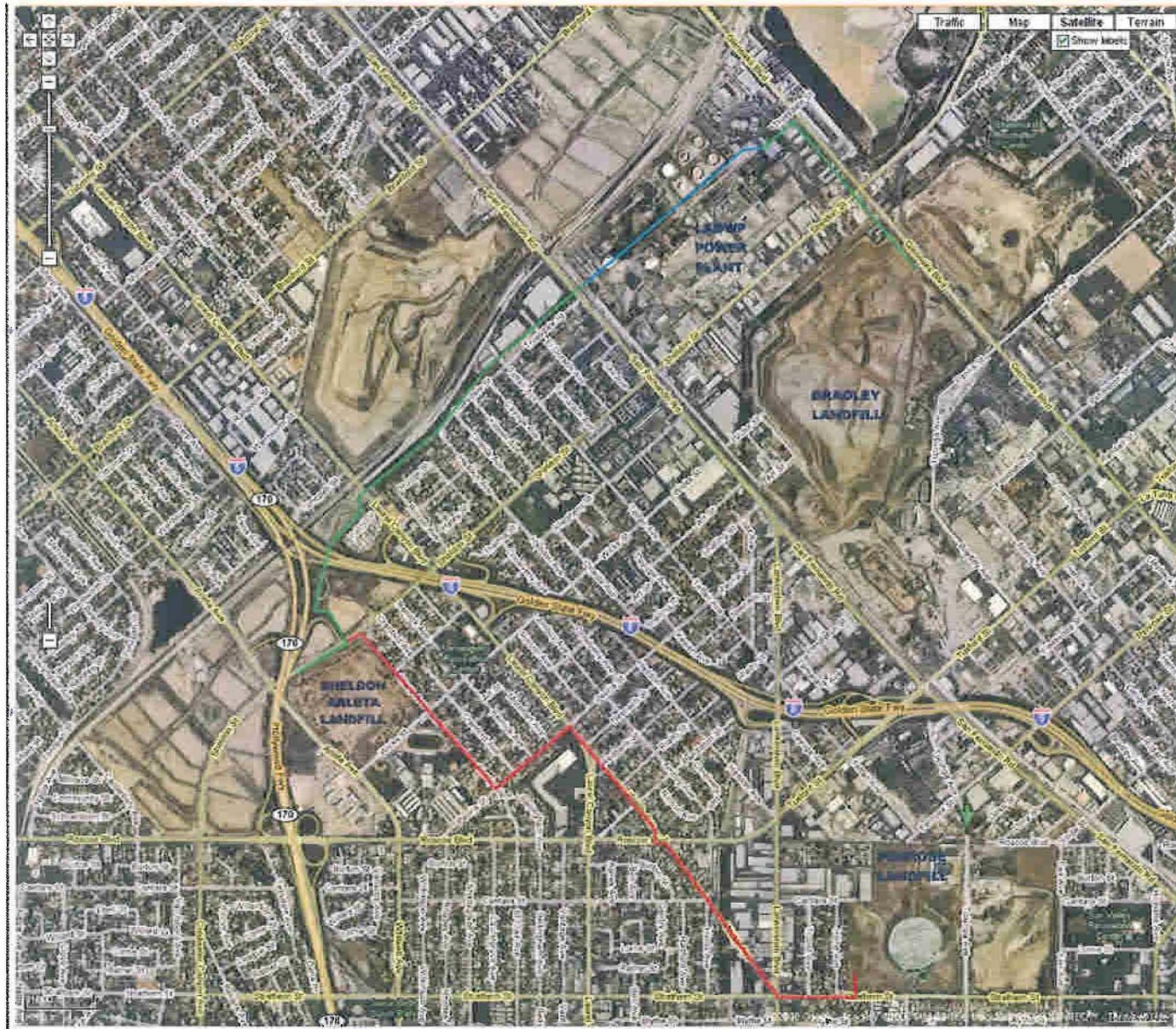
Please do not hesitate to contact me either by phone on 713 781 1126 or by email luong.nguyen@viridisenergy.com to discuss any aspect of our request.

Yours sincerely



Luong Nguyen
General Manager

ATTACHMENT 1: Aerial view of Pipeline between Bradley Landfill and Penrose Landfill Gas to Energy Power Plant



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