U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

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

SEP 28 2015

Mr. Anthony P. Caruso Jr., C.M.
Airport Director
Bangor International Airport
73 Harlow Street
Bangor, Maine 04401

Dear Mr. Caruso:

In response to the City of Bangor request of August 17, 2012, by letter dated February 18, 2014, the Pipeline and Hazardous Materials Safety Administration (PHMSA) provided the City of Bangor with information concerning the regulatory status of a hazardous liquid pipeline that transports jet fuel from a tank facility to the fuel hydrant system at the Bangor International Airport. The February 18, 2014, letter advised the City of Bangor that the exemption in 49 CFR 195.1(b)(3)(ii) for certain low stress pipelines that serve terminal facilities does not apply to the pipeline.

In a subsequent letter to PHMSA dated March 25, 2015, you stated that the city is evaluating options to alter its pipeline from a pressurized system to a gravity type system. The city would relocate the pumps downstream to a location inside the airport's fence line. The resulting relocation would, by your evaluation, create a low-stress gravity feed system.

In addition, in a May 7, 2015, letter you responded to questions asked by Mr. Steve Nanney of PHMSA's engineering staff. One of your responses provided PHMSA with an elevation profile of the pipeline. The elevation profile shows the lowest elevation point to be in the middle of the pipeline. Also, flow into the pipeline from the storage tank would involve the assistance of a remote suction pump. Based on the information you provided on the elevation profile and the use of a suction pump, the pipeline would not be considered a gravity pipeline.

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

Sincerely,

John A. Gale
Director, Office of Standards
and Rulemaking

BGR
BANGOR
INTERNATIONAL AIRPORT

APR 0 1 2015

March 25, 2015

Mr. John Gale
Director, Standards and Rulemaking
Pipeline and Hazardous Materials Safety Administration (PHMSA)
Department of Transportation (DOT)
1200 New Jersey Avenue SE
Washington, DC 20590

Re: Bangor International Airport Fuel Pipeline – exemption from DOT regulations request.

Dear Mr. Gale:

The City of Bangor owns and operates the Bangor International Airport (BGR). As part of the operation on the airport, BGR uses a fuel pipeline to transfer jet fuel from storage tanks, located outside of the airfield, to a hydrant system on the airfield. Less than one (1) mile of this pipeline falls on land located outside of the airfield and accessible to the general public.

After a significant period of investigation and discussion, the Eastern Regional office of PHMSA has determined that the pipeline falls under DOT jurisdiction. However, after further discussions with DOT officials and the City's contracted pipeline specialist, it was recommended that the City may wish to request an exemption ruling from you on this subject.

As we understand, 49 C.F.R. #195 (b) lists a number of exceptions regarding DOT jurisdiction of pipelines. These exceptions apply to pipelines that are:
1) Are low-stress.
2) Serve refining, manufacturing, or truck, rail, or vessel terminal facilities.
3) Are less than one mile long (measured outside facility grounds).
4) Do not cross an offshore area or a waterway currently used for commercial navigation (195(b) (3) (ii).

Following the exemptions listed above, the City is evaluating options to alter our fuel pipeline from a pressurized system to a gravity type system. We would relocate the pumps to a location inside the airport's fence line and hence eliminate the crossing of roadways and other public spaces. The transportation of a hazardous liquid will be through this system. The result would create a low-stress, gravity feed system.

An additional exemption the City is reviewing is stated in section #195.2(9), transportation of a hazardous liquid or carbon dioxide: (i) by vessel, aircraft, *tank truck*, tank car, or other non-pipeline mode of transportation; or (ii) through facilities located on the grounds of a materials transportation terminal if the facilities are used exclusively to transfer hazardous liquid or carbon dioxide between non-pipeline modes of transportation or between a non-pipeline mode and a pipeline. Our facility does not include any device and associated piping that are necessary to control pressure in the pipeline under #195.406(b). Our system transfers fuel to tank trucks and hydrant trucks. These hydrant trucks are the same design and specifications utilized by the United States Air Force. As determined by the Government, their system utilizes, and is deemed a "truck". Please see attached document.

In addition, as mentioned above, less than one (1) mile of the length of the fuel pipeline is located outside of the airport fence line. The pipeline does not cross an offshore area or a waterway that is used for commercial navigation.

The City of Bangor is respectfully requesting your review and ruling of the request for an exemption from DOT regulations as defined by the above criteria. Please feel free to contact me should you have any questions or concerns. We appreciate your review and guidance on this matter.

Very Kind Regards,

Anthony P. Caruso Jr., C.M.
Airport Director
Bangor International Airport

Attachment: Fuel Truck Technical specification designation.

CC: Byron Coy P.E., Director
Karen Gentile, Community Assistance & Technical Services (CATS) Manager
John Theriault, City of Bangor Engineer
Wynne Guglielmo, Environmental Coordinator
Robbie Beaton, Superintendent of Airport Operations
Gil Merchant, Fuel Farm Supervisor

BGR
BANGOR
INTERNATIONAL AIRPORT

May 7, 2015

Mr. Steve Nanney, PHSMA
PHMSA Pipeline Safety
Southwest Region Office
8701 S. Gessner Road, Suite 1110
Houston, TX 77074

Re: Bangor International Airport - 12-inch Diameter Jet Fuel Pipeline - Interpretation Letter (2)

Dear Mr. Nanny,

The Bangor International Airport (BGR) is pleased to respond to the questions you posed in your email of May 4, 2015 concerning our underground jet fuel pipeline. Please see below and the attached diagram for items which address these questions and concerns.

DOT Questions & Responses:

1. What is the 12-inch pipeline proposed maximum operating pressure (MOP) in psig? Note: various MOPs were in email.

   a. The MOP for the system is set at 150 PSI. Our fuel system is designed to shut down automatically if the pressure exceeds 150 PSI. The normal operating pressure is 85 PSI.

2. What was the maximum and minimum pressure of the 8-hour pressure test?

   a. During the DOT hydro test, the starting pressure was 164 PSI. In the first four (4) hours of the test, the pressure increased to 175 PSI, due to thermal expansion. Following the next four (4) hours we reduced the pressure to 124 PSI, and it only reached a max pressure of 139 PSI, thus confirming a tight pipeline. Max pressure = 175 psi, Min pressure = 124 psi.

3. How man tests/inspections were conducted on the pipeline to determine the pipe wall thickness, grade, and seam type? Where were they taken?

   a. BGR performed two tests of the pipe thickness as documented. When we replaced a valve at lateral #1, the pipeline was measured for thickness and the seam was checked. We also had the pipe tested when we repaired the low point drains at lateral #2 and #3. The 12" pipe that was removed was sent to our contractor and pipe was measured for thickness and seam checked.

4. Do you have any other information on the pipe properties?

   a. No additional documentation has been discovered. However, we do have blueprints of the pipeline from 1956, but they do not contain and pipe specifications.

5. Will the pump be located at the end of the pipeline just prior to the pipeline tying into the tank near the airport ramp?

a. We plan to locate the pump inside the fence line on the 10" pipeline that is connected to the 12" pipeline in lateral #5. The pump will be located on the inlet piping, downstream of the filter vessels, behind the containment building.

6. What is the elevation difference between the starting and endings points of the pipeline?

a. The low points of the fuel system are at laterals #3 and #4. Both ends of the line are slightly higher than those points. This is where we drain the line to empty the line for maintenance.

b. Elevations are provided on the attached diagram.

7. Do you have an elevation profile along the pipeline route?

a. Elevations are provided on the attached diagram.

Please review the enclosed material and let me know if you have any questions or need any additional information for your determination for exemption status. Thank you for your consideration of this matter.

Very Kind Regards,

Anthony P. Caruso Jr., C.M.

Airport Director

Bangor International Airport

- Attachments: Bangor International Airport – Proposed Pump Station aerial diagram.

CC: John Gale, Director, Standards & Rule Making

Byron Coy P.E., Director

Kay McIver, PHSMA

Karen Gentile, Community Assistance & Technical Services (CATS) Manager

John Theriault, City of Bangor Engineer

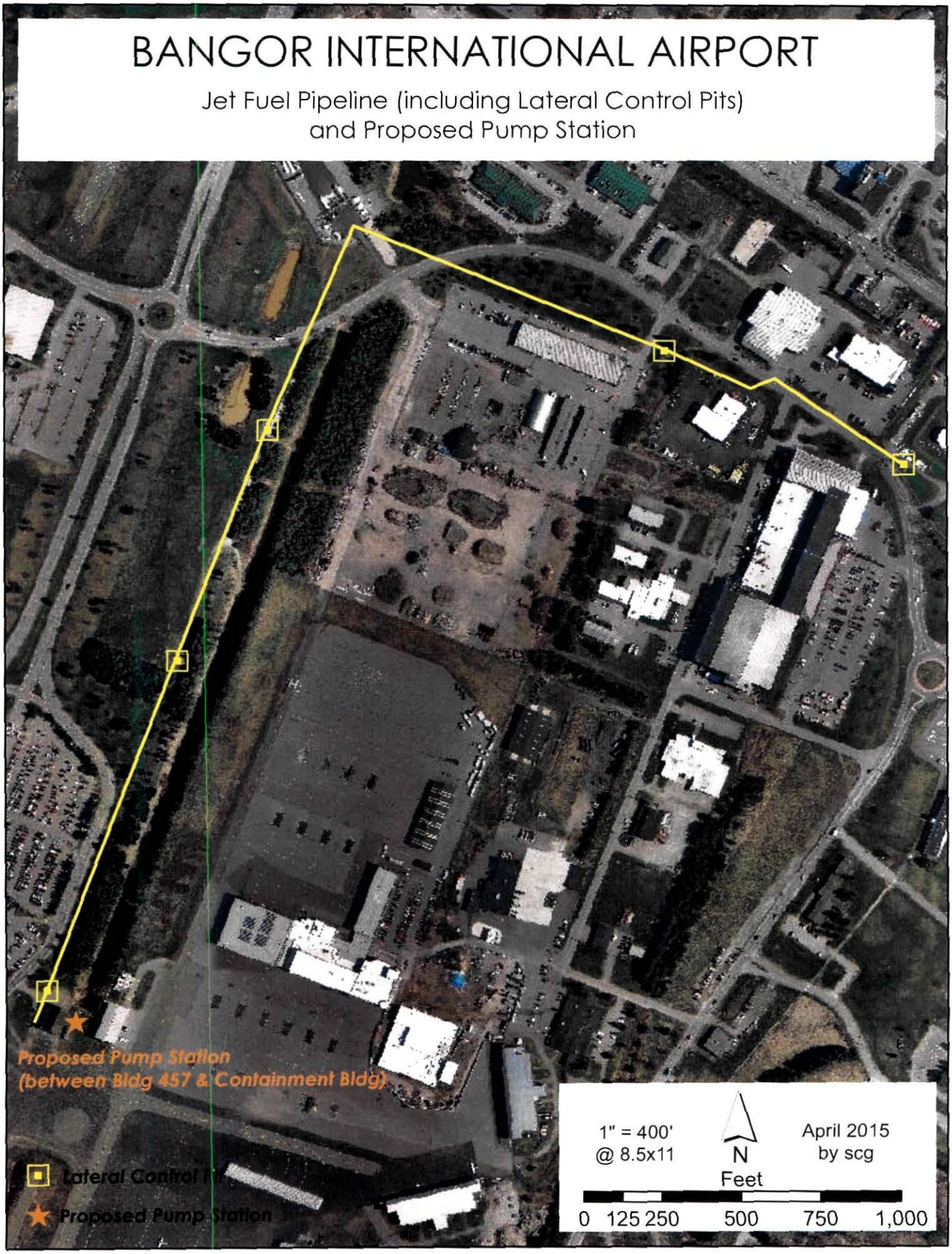
Wynne Guglielmo, City of Bangor Environmental Coordinator

Robbie Beaton, Superintendent of Airport Operations

Gil Merchant, Fuel Farm Supervisor

BANGOR INTERNATIONAL AIRPORT

Jet Fuel Pipeline (including Lateral Control Pits)
and Proposed Pump Station



BANGOR INTERNATIONAL AIRPORT

Jet Fuel Pipeline Elevations (estimated)