Mr. R. Lynnard Tessner Director, Office of Pipeline Safety Georgia Public Service Commission 244 Washington Street, S.W. Atlanta, Georgia 30334-5701

Dear Mr. Tessner

We have considered your letter of April 28, 1993, advising us that the Commission has granted Anheuser Busch a waiver from 49 CFR part 192 for a gas pipeline under the 1-75 highway. The purpose of the waiver is to allow use of the pipeline although it is made of plastic pipe that was not manufactured under a specification listed in part 192. Your letter also states the Commission's intent not to subject Anheuser Busch to inspections.

Based on the material, test, and construction data submitted with your letter, it appears the pipeline can be safely used to transport gas as long as it is operated and maintained under part 192 standards. Therefore, we have no objection to waiver of the material standard for plastic pipe in 49 CFR 192.59.

However, the Commission's decision not to inspect Anheuser Busch could be construed as waiver of the entire part 192. Although such a broad waiver may not have been the Commission's intent, for the record, we object to waiver of any standard other than § 192.59. The remaining standards in part 192, particularly those on operation and maintenance, are essential for public safety.

In this regard, we urge you to reconsider your decision not to inspect Anheuser Busch. Although the pipeline itself may not be accessible for direct inspection, the practices of Anheuser Busch to meet the applicable standards in part 192 are capable of inspection. Anheuser Busch should be subject to routine inspections by the Commission the same as other operators under the Commission's jurisdiction.

Sincerely, George W. Tenley, Jr. Associate Administrator for Pipeline Safety Georgia Public service Commission 244 WASHINGTON STREET, S.W. ATLANTA, GEORGIA 30334-5701

April 28, 1993

Mr. Cesar De Leon Director, Office of Regulatory Programs Office of Pipeline Safety 400 7th Street, S.W. Room 8417 Washington, DC 20590

Dear De Leon:

On April 20, 1993 the Georgia Public Service commission approved the request of Anheuser-Busch Company for a waiver on their gas pipeline under 1-75 highway. They requested that the existing non-code pipe be allowed to be used and that they not be subjected to inspections by this office.

The request was approved for the following reasons:

- 1) The gas line will operate at only 50 psig. It was tested at 90 psig for thirty hours.
- 2) The six inch gas line is inside a twelve inch PVC casing rated at 200 psig.
- 3) The twelve inch casing is inside an eight foot culvert pipe, all buried very deeply, thirty feet approximately, under 1-75.
- 4) If the six inch line were to rupture the twelve inch casing would vent the escaping gas at its ends which are beyond the right-of-way of 1-75.
- 5) Also, Biogas has a high percentage of Carbon Dioxide so it should dissipate at a faster rate than pure methane if a leak should occur.
- 6) Since the six inch P.E. pipe under 1-75 will be double encased any inspection by this office would be of an extremely limited effectiveness.

I hope you and your office support us on this problem. If not, please advise us as to what approach we should take in regards to the non-code pipe. Estimate cost to replace the pipe is \$100,000 plus.

Your truly, R. Lynnard Tessner Director, Office of Pipeline Safety Georgia Public service Commission 244 WASHINGTON STREET, S.W. ATLANTA, GEORGIA 30334-5701

## **MEMORANDUM**

TO: Energy Committee

B. B. Knowles Bob Evans

FROM: Lynnard Tessner

DATE: February 11, 1993

SUBJECT: WAIVER OF INSPECTION REQUIREMENTS

The Anheuser-Busch Company is building a plant in Cartersville, Georgia and has built a sewage treatment plant to pretreat their waste water. A by product of that treatment is Biogas, which is a mixture of methane, carbon dioxide and other trace gases. Biogas gas has a lower BTU content than normal natural gas, 650 average verses 1020 average. The company has installed piping to conduct the gas from the treatment plant to the brewery where it will be used as a boiler fuel.

Normally, we would not inspect such facilities because they would be considered process facilities. However, in their case, the gas line from the treatment plant to the brewery passes under I75, a public right-of-way. A gas line in a public right-of-way is subject to both State and Federal regulations.

The company was not aware of this fact or the Part 192 code, when they installed the gas line, therefore, they did not install code rated pipe.

The company had completed the installation of the gas line before we knew of it's existence. They are now seeking a waiver, to operate the gas line as currently installed, and without State inspection.

Jordan Jones & Goulding 2000 CLEARVIEW AVE., N.E. ATLANTA, GEORGIA 30340

Mr. R. Lynnard Tessner Pipeline Safety Director Georgia Public Service Commission 244 Washington Street, S.W. Atlanta, Georgia 30334

RE: Anheuser-Busch Pretreatment Facility
Cartersville, Georgia
Biogas Line in Tunnel Under 1-75

## Dear Mr. Tessner:

Following up on our January 11, 1993 correspondence with you, please accept this letter as the Owner's request for variance of the compressed digester gas (biogas) line installation in the tunnel under 1-75 in Cartersville, Georgia. As we understand this matter, the pipe issues to be considered include (a) the biogas piping material, (b) the pipe welding certification, and (c) safety operations related to the pipeline classification.

We have previously (8-26-92) transmitted to you at your request, three (3) staking and utilities plans showing the length and routing of the 6-inch biogas line. The biogas polyethlene line originates outside the compressor room of the Anheuser-Busch, Inc. (ABI) Pretreatment Facility and is routed north through the tunnel under 1-75 to the brewery. The line conveys biogas generated by treating brewery waste at the pretreatment plant back to the brewery on the other side of 1-75. The property on both sides of 1-75 is owned by ABI. The pretreatment facility and the brewery are operated by ABI. The biogas is used to fire boilers at the pretreatment plant and at the brewery. When the pretreatment is producing biogas, the current operating scheme calls for supplying the brewery with compressed and dryed gas at a pressure of 50 psi.

If the brewery has no need of the biogas, it is burned in the pretreatment plant boilers or burned at the waste gas flares also located at the pretreatment plant. Technical information is as follows:

- Diameter of biogas line: 6 inches
- Material type: PE 3408 high molecular weight polyethylene pipe, ASTM D1248 SDR 133, ASTM D2513 butt or socket heat fusion fittings.
- Length of pipe in tunnel: 700 ft.
- Length from south end of tunnel to steel line: 180 ft.
- Biogas composition: 75% methane ( $CH_4$ ), 24% carbon dioxide (CO2), 0.15% hydrogen sulfide, saturated ( $H_2S$ ), water vapor balance; K = 1.304, molecular weight 22.61
- BTU content: 599 800/cubic foot (range); 650/cubic foot (avg)
- Maximum operating temperature: 90°F.
- Biogas pipe pressure: 50 psig

We have enclosed sheets 2 of 8 through 5 of 8 which shows the tunnel details. Sheet 4 of 8 shows the tunnel size and construction. The 8-foot diameter tunnel is constructed with tunnel liner plates which are provided with grout plugs to pressure grout external voids. Upon completion of the liner plates, the three lines and five PVC casings were installed in the tunnel. The remaining space was grouted solid with concrete. The biogas line in question was later installed inside a 12-inch PVC casing which provide the pipe with a large degree of safety, in excess of pipe alone. The approximate length of the tunnel is 700 feet.

The installation of the biogas pipe is complete and any changes would result in significant delays and expense. The Owner is requesting this variance for the following reasons:

- 1. The contractor has furnished and installed polyethylene pipe conforming to and labelled as ASTM F714. The pipe manufacturer asserts the installed pipe was produced with the same materials as ASTM D2513 pipe. It is quite likely the installed pipe would meet the hoop stress and burst tests required under ASTM D2513. Please refer to the attached letter from the manufacturer, Poly Pipe Industries.
- 2. The contractor has advised that his pipe installers were trained in the proper use of the pipe fusion equipment. The pipe manufacturer recommended heat fusion joining procedures reference DOT Title 49, Part 192, for qualifying joint fusion. The contractor has tested the entire biogas pipe using air as the test medium. The line was tested at 90 psig for approximately 30 hours without any pressure drop.
- 3. The existing installation consists of a gas production facility (pretreatment plant) serving a gas using facility (brewery) through the 6-inch biogas pipeline, all located on property owned and operated by ABI. The property is crossed by interstate highway 1-75 under which the pipeline runs in a utility tunnel. Based on the scope of 49CFR192 (see 192.1, (b), (2)) it would appear that Part 192 does not apply. Therefore, operating requirements listed in Subpart L Operations, would not apply.

Please advise if additional information or action is needed to process this variance request. Please contact Mr. Ed Clark, Vice President, or me, if we may be of further assistance. Thank you.

Sincerely, JORDAN, JONES, & GOULDING, INC. Neal D. Stubblefield, P.E. Design Manager – Mechanical Jordan, Jones & Goulding 2000 CLEARVIEW AVE., N E ATLANTA, GEORGIA 30340

January 11, 1993

Mr. R. Lynnard Tessner Pipeline Safety Director Georgia Public Service Commission 244 Washington Street, S.W. Atlanta, Georgia 30334

RE: Anheuser-Busch Pretreatment Facility
Cartersville, Georgia
Biogas Line in Tunnel Under 1-75

Dear Mr. Tessner:

The following is the information you have previously requested.

1. The pipe material used by the contractor conforms to F-714 specifications and is produced from the same machine used for producing the pipe, conforming to ASTM D2513. There is a good likelihood that the installed pipe meets the ASTM D2513 specification; however, the pipe is stamped F-714.

We have enclosed a letter from the pipe manufacturer elaborating on this subject.

- 2. We understand from the contractor that his workmen were trained to use the fusing equipment properly. However, no certification was provided.
- 3. As we discussed with you this morning, the biogas line is installed in a 12-inch PVC casing. This casing is in turn installed in a 96-inch tunnel along with other lines and casings. The areas inside the tunnel between the pipes and the casings have been filled solid with concrete grout.

The installation of the pipe tunnel is completed and any change of the biogas piping would result in delays and significant expense.

I hope that the information we have provided is responsive to your request. We would like to propose a meeting with you and Mr. Bob Evans, Engineering Director, to discuss how we can obtain a variance on this installation.

Sincerely, JORDAN, JONES, & GOULDING, INC. Edward A. Clark Vice President Poly Pipe Industries, Inc. P.O. Box 380 Gainesville, Texas 76241-0390

December 21, 1992

Dear Tim:

The purpose of this letter is to provide you with additional information concerning the 6" SD R 13.5 pipe purchased by Barge Wagner from Poly Pipe in September of 1990.

The total length of pipe purchased was 2,070 feet (46 x 45' stalk). According to our inventory records, this P114 was produced at our Gainesville facility on September 10 and 11 of 1989 to ASTM T714 specifications. After review of our production and Quality Control records for this pipe, we have determined the wall thickness dimensions did in fact comply with the requirements of ASTM D251.3. However, of the 156 stalks produced, the first 10 stalks were 0.009 inches below the ASTM 1)2513 outside dimension specifications. The remaining 146 stalks were all within the dimensional specifications of ASTM D2513.

Furthermore, after the production run of the 6" &DR 115, we produced SDR 11 pipe &mu the same extruder which was produced to ASTM 02.513 specifications. This pipe did pass the ring tensile test which is not required under ASTM F714, and was not tested on the 6" SCAR 13.5 pipe.

Please note the only guaranteed method of verifying the specification to which your pipe was made is by the code on the printilne. This code includes the date of manufacti.zre and the specification to which the pipe was produced,

I hope this information is sufficient for your needs. Please feel free to call myself or Mr. Will Bezner if you have any questions or if we can he of further assistance.

Sincerely, Monty H. Fisher Poly Pipe Industries, Inc. P.O. Box 380 Gainesville, Texas 76241-0390

November 30, 1992

Mr. Mageaes Jordan, Jones and Goulding Atlanta, GA

RE: ABI Pre-treatment Plant - 10" and 12" IPS HDPE Pipe

Dear Mr. Mageaes:

Per your request, the purpose of this letter is to address the differences in HOPE pipe made in accordance with ASTM D2513 and .flat pipe made in accordance with ASTM F714. A brief summary of the differences includes:

Pipe made in accordance with ASTM D2513 must be quick burst as a QC procedure. This test method is utilized to determine flaws such as knit lines.

There is a slight difference in the allowable tolerance on the outside diameters. Example: 10" IPS per ASTM F714 shall be 10.75" OD +/- .048". Per ASTM D2513 10" IPS shall be 10.75" OD +/- .015".

There is a slight difference in the maximum allowable wall thickness. Example: 10" IPS SDR 17 has a minimum of .633" plus .076" minus 0 per ASTM D2513 and when utilizing F714 the minimum wall for 10" IPS SDR 17 is .632" plus 12% of the actual measured minimum wall.

It should be noted that the material requirements for both specifications are very similar. We confirm that the PE3408 is identical to the materials utilized in the pipe marked as being in accordance with ASTM D2513.

If further questions arise or if we can be of assistance on any other endeavor, please feel free to give me a call.

Sincerely, W.A. Bezner, P.E.