

# STATE OF NEW HAMPSHIRE

Inter-Department Communication

DATE: August 08, 2011

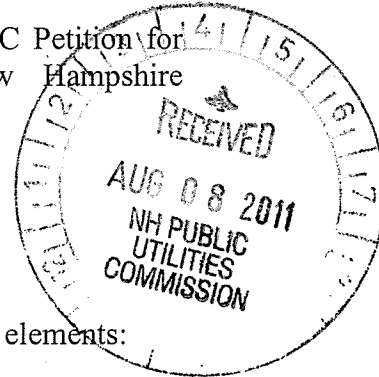
AT (OFFICE): NHPUC

FROM: Randy Knepper, Safety Director



SUBJECT: Docket No. DG 11-157 Gorham Paper and Tissue LLC Petition for License to Cross Public Waters in Berlin, New Hampshire (Landfill/Methane Gas)

TO: Debra Howland, Executive Director  
Steve Frink, Assistant Director, Gas and Water Division  
Alex Speidel, Staff Attorney



The Safety Division review of the above petition consisted of the following elements:

- Petition contents and history
- Review of land ownership on each side of the river crossing
- Review of CFR Part 192 requirements as described in Puc 500 rules
- Review of public need and public impact, including applicability of other State regulations
- Conclusions and Recommendations

1. **Petition contents and history.**

On July 18, 2011, Gorham Paper and Tissue, LLC (GPT), filed a petition, pursuant to RSA 371:17 and RSA 371:20, to construct and maintain a single methane gas pipeline supplied from a landfill in Success, NH with pipeline routing over and across the Androscoggin River in the City of Berlin to provide service to GPT's Gorham Paper Mill. GPT proposes to locate the methane gas pipeline on a disused railway bridge owned by GPT in order to supply methane for boilers providing steam as used in the papermaking process. GPT states that the proposed construction will help enhance the economic viability of the Gorham Paper Mill, by providing low-cost fuel for GPT's operations, without imposing negative impacts on the public use and enjoyment of the Androscoggin River.

GPT included in its Attachment C of the petition a write-up of the proposed scope of work for the repairs needed for the bridge prior to the installation of the natural gas pipeline, for which a crossing license was granted by the Commission by Order *Nisi* in Order No. 25,255 (July 26, 2011) under Docket No. DG 11-138, and prior to the installation of the methane gas pipeline petitioned for in this docket. It is Staff's understanding that the existing

railroad bridge will be retrofitted and repaired so as to be structurally sound prior to construction of the methane gas pipeline.

On July 26, 2011, GPT representatives and Staff met and reviewed site plans that supplemented its original submission with site plans shown on Sheets C401, C402, C403, C404, C405, with a plan view, profile view and details of the river crossing. In addition, a site plan was submitted for a nearby Metering and Regulating Station that is proposed for siting adjacent and upstream of the river crossing.

## **2. Review of the proposed crossing of the Androscoggin River, Berlin.**

The proposed methane gas pipeline will transport methane gas at an operating pressure ranging from 30 psig to 20 psig. The pipeline maximum flow rate was not specified. The pipeline will consist of 6 inch nominal diameter ASTM A333, Grade 6 Schedule 40 steel with properties of 60,000 psi tensile strength and 35,000 psi yield strength. Protective coating will be applied using Pritec coating. The pipeline across the bridge will consist of a vertical stack arrangement using insulated supports and guides to maintain proper alignment. Maximum spacing of the supports is shown as approximately 16 feet with typical spacing of 13 feet. Guide spacing is set at a maximum of 39 feet with smaller spacing appropriately configured near the expansion bellows.

Thermal expansion of the pipeline will be compensated by a bellows fitting within the pipeline and the pipeline will be isolated electrically from the railroad bridge using insulated roller supports.

The bridge itself will undergo repairs to make it structurally sound to carry the weight of up to two additional gas pipelines (including the natural gas pipeline licensed ), and the bridge will have fencing at each end to limit access to the general public.

GPT has provided sufficient documentation to demonstrate that all easements are in place that allow for the gas pipeline to be built on the eastern shore of the Androscoggin River. The parcel on the western shore of the Androscoggin River is currently owned by GPT.

GPT has also represented that the proposed pipeline crossing will not interfere with public rights to use and enjoyment of the Androscoggin River. As planned, the pipeline will not extend below the existing bridge, thereby enabling recreational river users to pass below the bridge without hindrance.

## **3. Review of safety requirements as described in Puc 500.**

The N.H. Code of Administrative Rules Puc 506.01 Pipeline Safety Standards:

(a) All utilities shall comply with those pipeline safety regulations established by the United States Department of Transportation which are set forth in 49 C.F.R. Parts 191, 192, 193, 198 and 199, including future amendments thereto.

(b) Where Puc 500 or Puc 800 establishes more stringent requirements than those pipeline safety regulations adopted pursuant to (a) above, the more stringent requirement set forth in Puc 500 or Puc 800 shall apply.

GPT's petition does not explicitly state that the applicable portions of administrative rules of Puc 500 will be met, only referring to Puc 508.04 (f), but does provide engineering details that show overall compliance.

The Safety Division review of the petition and attachments submitted to date found the proposed attachments to be in conformance with the applicable sections of the Puc 500 and CFR Part 192.

#### **4. Recommendations and Conclusions.**

The Safety Division recommends approval of GPT's petition by Order *Nisi* under RSA 371:17 and RSA 371:20 to the Commission with the following conditions, to be included in the Order *Nisi*:

- a. Staff recommends that the approval be limited to the GPT methane gas pipeline under consideration in this docket.
- b. The type of protective coating shall be submitted to the Safety Division for its review, including the millimeter thickness of the coating. Staff recommends that an ultraviolet resistant coating be selected and technical data sheets be supplied to the Commission that verify the adequacy of protection, including for those coatings applied to welded joints. As of this date Staff is still verifying if the Pritec coating will be sufficient for full outdoor exposure (as opposed to limited exposure).
- c. Shut-off valve(s) must be installed upstream (in terms of gas flow) of the bridge crossing to provide adequate shutoff capability. The upstream valve may be located at the outlet side of the M&R station, which will be situated in the vicinity of the bridge crossing. Staff will not require a shut-off valve downstream of the bridge crossing with the expectation that the nearby public highway crossing north of the railroad bridge will be accessible at all times to emergency response personnel. GPT shall include provisions in its operating and maintenance procedures to address measures to shut down the pipeline promptly from either side of the Androscoggin River, as required during periods when emergency response vehicle and personnel accessibility is limited or delayed because of any future bridge maintenance projects or rehabilitation. Alternatively, GPT can install a downstream shut-off valve to ensure adequate shutoff capability at all times.
- d. Staff recommends that the bridge crossing be visually inspected and leak surveyed at a minimum 3 times per year in accordance with Puc 508.04(f)

and accessible records kept on file subject to any inspections of the Safety Division.

- e. Pursuant to Puc 506.01 GPT shall be subject to the Safety Division's monitoring with inspection of the construction, installation, operation and maintenance of the methane gas pipeline on the bridge crossing.
- f. GPT shall operate and maintain the crossing in conformance with the latest version of the Puc 500 rules and latest CFR Part 192 amendment. All future alterations to the crossing that may impact the public shall conform to the Puc 500 rules as well as CFR Part 192 latest amendment that are in place at time of submittal of the alteration.

If these safety-related engineering conditions are met, the Safety Division is of the opinion that the proposed methane gas pipeline will meet all current safety standards; safe ongoing operation of a public waters crossing installation is an inherent component of the RSA 371:20 public rights standard.