

**Memorandum**

August 11, 2023

TO: Board of Selectmen, Town of New London

FR: Gerald Coogan, Chair, Waste Reduction Committee (WRC)

G.C.

On July 25, 2023 four members of the WRC traveled to the Wheelabrator Technologies (WTI) facility in Penacook, NH. Penacook is a village in the City of Concord. WTI is a waste to energy facility that accepts solid waste from several municipalities in central and southern New Hampshire.

Attached is a report on the site visit prepared by Gerard Gold. The WRC wishes to share this information with the Board in the event that you may decide to explore this as a possible alternative. While the WRC does not recommend this approach at this time, we feel that it is worth the effort to explore and analyze. Please let me know if we can provide you with any additional information.

CC: WRC

Kim Hallquist, Town Administrator

Bob Harrington, Director, DPW

NH State Rep Karen Ebel

NH State Dan Wolf

## **7/25/23 Site Visit to WTI (Wheelabrator Technologies) Concord NH**

### **New London Waste Reduction Committee Site Visit to WTI (aka Wheelabrator Technologies) Concord (Penacook) NH Tuesday, July 25th, 2023**

**MEMBERS PRESENT:** Liz Meller, Gerry Gold, Chris McKee, Jerry Coogan

**MEMBERS ABSENT:** Joy Kubit, Maureen Prohl,

**OTHERS PRESENT:** Representing WTI were Matt, Plant Manager; Josh, Day Supervisor; Dan, Operations and Maintenance Manager; and Haley, Public Affairs.

The site visit was at the waste-to-energy WTI plant, 11 Whitney Road, Penacook section of Concord, NH. After introductions the visit commenced about 1:05PM with a meeting room discussion and Power Point presentation. It was followed by a short hard-hat walk in the main building: furnace, processing pipe room and computer control desk.

#### **OVERVIEW of plant operations:**

Wheelabrator Technologies (WTI) owns and operates 15 waste-to-energy (W2E) incinerators in the United States. The Concord NH facility was built in 1989 and upgraded in 2013 with a state-of-art particle filtration system that leaves only steam as the final by-product. The upgraded current plant burns up to 575 tons of waste daily. Municipal wastes are received from homes and businesses.

- The Concord facility generates 14MW of electric power. That electric power runs the plant with excess power sold to the New England grid.
- Paper, plastics, metals, glass, food wastes not separated and recycled at municipal collection stations all go into the incinerator, becoming either fuel or ash.
- Medical and construction waste materials are not accepted or incinerated at Concord or other WTI W2E plants.
- Ferrous and non-ferrous metals are collected and sold for reprocessing. Residues, approximately 10 percent of original weight, are trucked to a WTI ash pit in Shrewsbury, Massachusetts. SEE: [www.wtienergy.com/plant-locations/ash-landfill/wheelabrator-shrewsbury](http://www.wtienergy.com/plant-locations/ash-landfill/wheelabrator-shrewsbury)

o WTI Concord was built in 1989 on what is now considered a small industrial site north of the city, close to I-93 exit 17 (US 4) and removed from populated areas. Recently an abutting shopping and office strip mall centered on a Market Basket food store was constructed. The location lacks the site size that could permit construction of a neighboring industrial facility that could use the WTI plant's steam as co-generation power. Co-generation power is now typical of new, larger waste-to-energy projects.

o This compares to the much larger Baltimore, MD, facility which daily converts up to 2,250 tons of post-recycled waste from Baltimore area homes and businesses to generate as much as 64.5 gross MW of electricity sold to the local utility.

#### **Essential points of information:**

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o The current WTI facility in Concord (with its 2013 filtration system) is now considered world-class state-of-the-art incineration for municipal waste. When we asked what would be designed and built differently were an entirely new plant built at the current location, we were told a new plant would be no different from the present plant. We were also told that many western European countries are prioritizing W2E for renewable energy and building W2E plants specifically in urban centers for efficient feeding of energy to grids and to co-generation plants. European planners are visiting the WTI Concord facility as a role model. W2E is categorized as "renewable" in Europe but not in the United States.

o Waste-to-Energy (W2E) accounts for only 13 percent of municipal waste processing in the US. Landfills are the primary competitors to WTI and W2E generally because land availability and prices in the US are cheaper than in Europe. Therefore, W2E is very cost saving in Europe and less so here.

**Q:** Could New London's municipal waste be delivered to the WTI Concord plant? **YES.** Details would be negotiated with WTI sales team.

**Q:** If the WTI plant is operating at full capacity, how could the plant accept New London waste? The answer: same as WTI did with a new 10-year, fixed-price (with annual inflation adjustments) contract accepting all muni-waste from City of Concord: To make room for new waste deliveries, WTI headquarters in Portsmouth, NH, reassigns more distant customers to another WTI facility, which most likely would be the Millbury, MA, plant. SEE: [www.cityofconcordnhblog.com/post/concord-new-solid-waste-contracts](http://www.cityofconcordnhblog.com/post/concord-new-solid-waste-contracts)

**Q:** Is there a plan for future growth of the WTI Concord plant? **NO.** But the corporate future growth will be by consolidating hauling to be competitive with Casella and other haulers. Landfill sites are the present competition to W2E. As landfill fees become more costly, and as landfill capacity ends, it is assumed the market will turn to Waste-to-Energy.

The discussion and power-point presentation was followed by a 15-minute tour of the plant's furnace, computer control desk, and heat transfer rooms.

**NEXT MEETING DATE:** Next Waste Reduction Committee meeting is scheduled for July 27 (8/24/23) Thursday at 10:00AM at Town Offices Syd Crook meeting room,

Respectfully submitted by Gerard Gold  
Town of New London