# Blue Ridge Environmental Defense League

3478 Murraytown Road, Burgaw, North Carolina 28425 ~ Phone (910) 259-7041 ~ Fax (910) 259-2643 ~ Email: bonnieclyde123@aol.com

September 3, 2002

Larry Howard, Chairman Duplin County Board of Commissioners PO Box 910 Kenansville, North Carolina 28349

## Re: Update on Solid Waste Thermal Gasification Units

#### Dear Commissioners:

I would like to update you on our findings on two solid waste gasification operations. One example is from Alaska, the other is from North Carolina.

### GWI Gasification Unit in Alaska Still Not Operational

Six years ago the North Slope Borough of Alaska submitted an air permit application to build a 30 ton per day starved-air gasification system for solid waste in Barrow. We have obtained documents from the State of Alaska which reveal that Global Waste International's solid waste gasification facility in Barrow continues to have problems and that the plant is still not functioning. State records show that repairs of control systems continue to plague the gasification system.

Operating Reports submitted to the state of Alaska show that during the second quarter of 2002 the incinerator operated for only 10 days. During this time it burned a total of 62 tons of waste, just 2% of its permitted capacity. Monthly operation logs for April, May, and June reveal intermittent operation over the entire quarter. Table A contains information from the most recent Quarterly Operational Report for the Barrow Thermal Oxidation System, Permit No. 9771-AC012, submitted to ADEC on July 29, 2002.

Table A. Barrow Thermal Oxidation System waste burned during the Second Quarter, 2002

During the Month Of	Tons of waste burned	Days of operation
April	0	0
May	36.75	6
June	25.40	4

Also, on July 29, 2002 the Mayor of Barrow, Alaska sent a letter to Alaska Department of Environmental Conservation (ADEC) which states, "We are still endeavoring to correct the mechanical problems with the primary ash conveyors and the secondary ash conveyors."

Based on the performance of the Barrow unit, we must conclude that the starved-air gasification technology which Global Waste International advocates is neither cost effective nor reliable.

#### Research Triangle Institute Gasification Permit Revoked in North Carolina

In 1995 Thermal Technologies, Inc. (TTI), a subcontractor to Research Triangle Institute, obtained NC DAQ air permit No. 8146 to build and operate a wood waste gasification unit. The purpose of the project was to determine the feasibility of producing fuel for an electrical generator from biomass. The EPA-funded plant operated at a site Camp Lejeune for less than two years and was shut down in 1998. Responsibility for the project and ownership of the equipment remained in limbo for several years. Failure to make payment of annual permits fees resulted in the termination of TTI's permit by the North Carolina Division of Air Quality on May 2, 2002. According to NC DAQ, TTI is no longer listed as a corporation doing business in North Carolina.

The gasification equipment is now owned by the U.S. Marine Corps at Camp Lejeune. But Camp Lejeune's Director of Environmental Management states that they have no plans to operate a gasification unit; they are salvaging the parts for other uses. A December 15, 2001 letter to NC DAQ states, "Camp Lejeune has no intention of using the biomass facility for its originally permitted uses and requests that the C&O Air Permit No. 8146 be allowed to expire."

The aborted project at Camp Lejeune indicates that wood waste gasification is not a viable alternative to diesel fuel for electric generation.

### **Summary**

Gasification and incineration of solid waste are poor alternatives to landfills. Waste-burners of all types eventually fail due to environmental pollution, negative public health effects, technical problems, and/or cost factors. Burning waste poisons the air. Landfills contaminate groundwater. The only logical solution to the solid waste problem is to reduce and eliminate waste. Before further precious resources are committed to failed waste technologies, Duplin county would do well to investigate the zero waste alternative.

Respectfully,

Claude Ward Blue Ridge Environmental Defense League