Statement on WasteTo Energy (WTE)
To the Solid Waste Advisory Board, March 5, 2009
By Orange County Voice

Thank you for the opportunity to speak about the viability of waste to energy for Orange County. We know that SWAB has already shown strong leadership in this area and asked the county to pursue WTE months ago. Our comments tonight are based on research with vendors, and on the objective we share with SWAB and Orange County for a sustainable waste management solution that is environmentally, socially and fiscally responsible.

Our research suggests that WTE is not an option for short-term waste management (i.e. within the next 2-3 years when the landfill will be full). However, we believe that the county, working with other counties, business partners, the state and leading waste and energy companies should launch a project to define options and opportunities for WTE - including a discussion of sites and waste streams. The result of that project will provide the basis to siting a Waste Transfer Station. Consultant/developers such as Energy Answers, could be good partners to facilitate the effort.

Orange County Voice began researching waste to energy last November at the suggestion of residents from West Stockbridge, Massachusetts – who are looking at shifting from landfill disposal to using the award-winning mass burn facility in nearby Pittsfield. That community put us in touch with Energy Answers (EA), who helped to educate us and has provided several documents for the SWAB. I also want to recognize Waste Management professionals, who are here tonight and have also been very helpful in educating us about waste-related issues and options.

Here's a summary of Energy Answer's statements:

- EA does not believe that it is cost effective to convert UNC's co-generation plant to WTE. They've indicated that it will generate about ¼ of the power. Also, since the plant is in a residential neighborhood, there's likely to be an insurmountable backlash if UNC converts the coal shipments into a waste stream – even if they use the railcars. They did suggest that UNC explore technologies that convert biosolids for use as a coal-like fuel.

- EA has provided SWAB with a statement on WTE. It's in your packet. EA is committed to integrated resource recovery facilities – WTE facilities sited with complementary recyclers in an eco-industrial park - a total of 20 acres. They are designing 1000 ton per day facilities using their own Processed Refuse Fuel (PRF) technology – which I believe is a proprietary version of RDF technology and includes waste treatment, energy recovery and materials recovery. They claim that this technology is cleaner than mass burn and produces less residual ash for recovery. They are working toward a goal of zero disposal.

- EA and others have experience with rail tipping cars and can help the county sort through options to use our unique rail network in our long-term waste management program.

Of course the EPA, EA and others recommend siting a WTE facility on a true highway – like I-40 or I-85 with water, sewer, and road infrastructure, on the power grid and near rail. Good siting helps to keep the costs within the $100- 200 million range. When we visited the Greensboro facility – we were struck by its suitability for WTE – including being surrounded by building materials companies who could recycle the residual ash.

All indications suggest that WTE complements and possibly enhances our recycling goals – which are critical as due to your work – we have just surpassed a 50% recycling recovery rate.

In addition to EA's PRF technology, there are mass burn technologies and emerging technologies for plasma gasification. (Mr. Gershman's report explained this well.). Plus there's a rash of unproven technologies coming to market. It's certainly a hot topic and probably a good time to profile technologies -- today and tomorrow - and determine what's viable and what's not. Lou Cicero, a plasma expert and advocate from Georgia Tech, would be happy to speak to us if the county agrees to covers his travel expenses.

In North Carolina, WTE is not currently classified as a renewable form of energy (although converting poultry and hog waste in a polluting process is a renewable energy resource.) So it will be important to engage state and possibly federal legislators in the discussion.

We hope that the following factors will be included in your study of WTE.

- **Handling all of the county's solid waste streams** –including those that can be converted to energy. In addition to household waste, sludge, tires and construction debris can potentially be converted to energy. Plasma advocates claim that even medical waste can be converted to energy - which of course is a big deal for UNC.

- **Trends in WTE technologies** including waste streams handled, emissions and residual byproducts, and cost trends. A great deal of money is being invested into this area and we should identify the current and emerging technologies that will work best for our community.

- **Size and siting of facility**. Siting in an industrial area near a real highway, power, rail and water and sewer –and where collection trucks will have minimal impact on residential communities. We further hope you'll seriously pursue options for an eco-industrial model to minimize the transport of materials. Experts seem to agree that 1000 tons/day or larger is the optimal size for a mass burn facility. Plasma sites are smaller and riskier.

- **Environmental impacts** including facility emissions (and improvement trends) and the impacts of diesel trucks transporting waste and/or residual ash.

- **Options/opportunities** to use rail for collection and disposal.

- **Economics** include resale of energy and residual ash, incentives for renewable energy, potential revenue for Orange County and other partners.

- **State and federal government regulations**, particularly the treatment of WTE as a renewable energy resource

As a final point, Orange County Voice believes that the county should discontinue all work on siting a waste transfer station in rural Orange County. Instead, it should empower SWAB to aggressively explore WTE and provide funding for expert opinion and research.

For our short term waste needs, we suggest that the county engage local vendors to handle our waste disposal, requiring no immediate siting decisions and saving millions to county taxpayers.

Orange County Voice is committed to assist with community education and other services as needed.