

# **Sustainable Waste Management for Orange County**

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A cooperative project of  
Orange County Voice  
Orange County Community Awareness  
Rogers-Eubanks Neighborhood Association

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Orange County Board of Commissioners  
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# DRAFT

## Sustainable Waste Management for Orange County

This report describes possible sites and alternatives to Orange County's plan to site a waste transfer station (WTS). It represents the collaborative work of three community groups: Orange County Voice (OCV), Orange County Community Awareness (OCCA), and the Rogers Road-Eubanks Neighborhood Association (RENA/CEER).

Our objective for developing this report is to consolidate information that we have already presented to Orange County's Board of County Commissioners (BOCC), and to encourage the BOCC to consider alternative sites and options for the WTS. We ask that the BOCC take the opportunity to start Orange County on a path to sustainable waste to energy production (WTE). We believe that Orange County should not invest in any option that is not sustainable and that commits us to impose our waste on another community for the long term.

Our community groups recognize that WTE is a long-term option for Orange County and may take as long as 5 years to implement. We also recognize that for WTE to be viable and cost effective, Orange County will need to partner with neighboring communities. Based on preliminary research, we believe that the site options included in this proposal will start us on a path to sustainability, while delivering an immediate WTS solution.

This report is organized into three major sections:

- **Alternative Site Possibilities** – a preliminary list of acceptable sites based on criteria identified by the EPA
- **Exclusion of Sites from the Olver Study** – and reasons these sites are unsuitable for Orange County's needs
- **Next Steps Including Options for Short-Term Waste Management** – essential steps and options for a decision that works for everyone

Our community coalition stands ready to work together and with the BOCC and staff to pursue the options and ideas described in this report.

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## **Alternative Site Possibilities:**

Together, the community groups identified nine possible sites for a waste transfer station using criteria identified by the EPA (see R-1) and verified in discussions with leading waste management vendors.

The criteria included sites of 10 acres or more, in industrial areas, near highways, and ideally near rail. To serve as an option for future Waste-to-Energy (WTE) (see W-1-3), sites should be close to substantial electrical grid infrastructure and this was included in our requirement. Sites were targeted away from rural or residential areas and floodplains where significant environmental impacts would be sustained.

Nine sites meet the initial criteria. The coalition partnership respectfully requests the BOCC to consider the following 4 sites as primary candidates for a WTS and long-term for WTE.

- 1. Mt Herman Church Rd, near NC 70 and I-85**
- 2. Site #1 East of Weigh Station on I-85**
- 3. Site #2 West of Weigh Station on I-85**
- 4. Carolina North as part of the sustainable, carbon-neutral new campus**

There are five additional sites that meet our criteria. However, like the sites that are already being reviewed by the BOCC, these five sites presented potential for community objections, land use restrictions or other encumbrances that would delay their approval and/or likely eliminate them completely. These sites are:

5. Millhouse Rd #1—concerns include continued traffic on Eubanks Road, clustering of impacts on one area and questions about designated use as soccer fields (See S-4)
6. Millhouse Rd #2— same as above (See S-5)
7. Millhouse #3 —same as above (See S-6)
8. Valley Forge Road – concerns include current traffic, bridge capacity and uncertain future land use (See S-7)
9. Washington Street – may be too far from waste centroid (See S-8)

Please note that there are additional parcels that could meet the EPA siting criteria, but the coalition has not had sufficient time to adequately research or develop them. Given more time, the coalition feels confident that additional viable sites could be delivered.

A summary of the features of these sites is provided on the following pages:

**Mt Herman Church Road - 163.59 acres (See S-1)**

Off Interstate 10 and SR 1812

- In-between population centers (see R-2)
- Close to major highways I-85 and NC-70
- Duke Energy substation is across NC-70 from the location for WTE connection to power grid
- Would be ideal for cooperative efforts on WTE. Since it is on the Orange -Durham county line, no outside trash would need to be long-hauled into Orange County
- 9.3 miles from Eubanks Rd and ~ 5 miles from Hillsborough
- Has many access routes including interstate highway access so that no one route would be overcrowded with traffic.
- Not a residential or agricultural area.
- Neighboring businesses are an awning manufacturer, golf driving range, auto repair and paving company.
- Fire Station is close by
- The site would not be seen from any major roads and has sufficient land for buffer if needed
- A variety of types of access roads may negate the need for re-tooling of county garbage trucks' drive-trains
- Sited on rail for connection to population centers, allowing use of rail instead of trucks, lowering traffic and carbon footprint
- Not in a protected watershed

Consideration: Unsure about water and sewer services.

**Weigh Station East site #1 87.4 acres (see S-2)**

- Willing seller
- Close to major highways – I-85 and NC-70
- Neighboring property also for sale
- Rail is close to property
- High-tension power lines close to property
- 14 miles from present landfill

**Weigh Station West #2 site 52.5 acres (see S-3)**

- Rail is close to property
- High-tension power lines close to property
- Neighboring property also for sale
- Close to major highways – I-85 and I-70
- 14 miles from present landfill

## **Carolina North**

- Close to population center
- Available land given the recent relocation of municipal services
- Opportunity to demonstrate UNC's commitment to sustainability and clean, renewable energy
- Opportunity to eliminate the coal-fired co-generation plant.

These sites are excellent candidates for Orange County's WTS and are more appealing to the environment and the community than the sites that are currently under consideration. They also appear to be well-suited for WTE for the long term.

We respectfully request that the BOCC include these sites in your evaluation. We further request that you allow the community to continue to search for possible sites on your behalf.

## **Basis for Exclusion of Sites from Olver Study**

The BOCC, working with the consulting firm Olver, has been evaluating possible sites for a WTS. This effort has faced continual community objection, which is documented in meeting minutes, reports and media accounts. Our community groups agree that none of the sites identified in the study are acceptable for a Waste Transfer Station. The facts and considerations underlying are opinion are provided in this section of the report.

In addition to the inadequacies of these sites for our WTS needs, none of the sites offer the potential to transition to WTE in the long term.

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### **Exclusion of NC 54 / Bingham Sites 056, 779, 759, 696, 010, 717**

The NC 54/Bingham sites reside in a rural community far from the waste population centroid and without sufficient infrastructure, including water and sewer. Residents of Bingham Township have already been forced to accept Cane Creek Reservoir and sludge dumping. The incursion of a WTS imposes additional environmental assaults and demonstrates that Bingham Township is a target for environmental injustice.

None of the Bingham township sites fit the EPA Criteria (see R-1):

- **Farthest from source of trash and collection routes.** Not near population centers (see R-2). Distance and fuel use increases costs and carbon footprint. Local residents haul their own trash to collection centers. It is unjust that rural residents are the recipients of municipal waste.
- **Lack of infrastructure and support services**
  - No water, sewer, major highway, rail or adequate fire fighting resources (especially water during periods of drought)
  - Demonstrated inability of land to perk. (see E-1)
  - Frequent and sometimes extended power outages
- **Traffic danger and noise on rural roads,** i.e. danger to bicyclists, school buses, farm equipment, resident pedestrians and traffic. NC 54 has a very rural nature. There are **200** private driveways and roads entering Hwy 54 in the 7 miles between Carrboro Plaza and the proposed sites on NC 54. Trash trucks are geared to drive slower than 40mph. The speed limit is 55mph and traffic moves at 60mph. There are few passing lane areas for other vehicles on the road. Orange Grove Rd and Dodson's Crossroads are narrow, windy and rural, also with numerous driveways, no shoulders and blind access.

From the DOT website's (<http://ncdot.gov/doh/>) Annual Daily Traffic report: Based on the traffic volume between Carrboro and Orange Grove Road, with an increase of up to 300 trucks per day, we estimate an increase in traffic volume of 5% - 6.9% per day. As this increase in traffic would come from non-emission controlled heavy diesel trucks, there would be an additional negative environmental impact.

- **Impact on neighborhood character.** Sites are within 2-mile radius of Historical White Cross School and cottage businesses. Surrounding real estate is likely to be devalued by the presence of a WTS and permanently increased and constant heavy truck traffic.
- **Zoning** - Sites zoned rural/ agricultural.
- **Impact on existing businesses.** Sites are next to Rigmor House Retreat Center, already suffering from toxic water problems. Noise and incremental pollution would likely destroy the business, an established retreat center known for its natural areas, fishpond, surrounding wildlife, and above all, its peace and quiet. (see E-9)
- **Extra costs** would be incurred involved in building infrastructure and/ or hauling water for cleaning and removing leachate to treatment centers elsewhere. There is the irretrievable cost of abandoning or converting structure once its use is done.

- **Environmental Risks**

The 54/Bingham sites have already incurred environmental assaults and would face permanent cumulative adverse impacts from the traffic, noise and operations of a WTS. The sites and surrounding areas have already been negatively impacted with the spreading of sludge by OWASA for many years. (See E-7) The community is already dealing with impaired water quality (See E-6).

Further introduction of toxic elements from the fuel and lube oil spills and contaminated wastewater runoff and disruption of sludge fields will create incremental toxicity in local hydrological systems and protected watersheds. The sites lie in the already impaired Collins Creek watershed, which runs into the Haw River and Jordan Lake. This area holds endangered species protected by NC Natural Heritage Program. (See E-2-3 A/B)

The WTS introduces environmental risks to ground water and related hydrological systems from possible leaks in fuel, chemical, and waste water storage tanks, faulty septic drain fields, leaky waste water removal trucks and lube oil and fuel spills from all WTS vehicles and machinery. These unpredictable problems occur, even in well-run facilities like Orange County's award winning landfill on Eubanks Road (e.g. breach in liners, tanks, etc. See contamination plume E-8).

The preexisting environmental conditions in Bingham Township, combined with the permanent and increasing cumulative adverse environmental impacts of a WTS, mandates a

full scale Environmental Impact Statement that integrates considerations from the National Environmental Justice Advisory Council, the Endangered Species Act, the Migratory Bird Conservation Act, the Wild and Scenic Rivers Act, the Federal Clean Water Act and the National Historic Preservation Act, among other Federal and State considerations, as well as integrating input from local community development organizations and concerned community, environmental, and environmental justice organizations before a siting decision can be considered.

**Specific risks:**

- Additional pollution to already impaired Collins Creek and Haw watersheds
- Land and drinking water already polluted (see E-6)
- Potential additional pollution of groundwater for local residents if septic field is involved and/or from routine lube oil and fuel spillage
- Evidence of state endangered species Brook Floater and Creeper, etc. (see E-2-5) which could be threatened by a WTS
- Determination of jurisdictional protected wetlands (site 779 has been identified as wetlands and is pending for protected status See E-10)
- Community already impacted by OWASA sludge fields (See E-7)
- Air and noise pollution from truck exhaust fumes and trucks backing up
- Loss of wildlife habitat with clearing trees and pollution. Danger to wildlife on roads.
- Attracting pests – vultures, rats, insects

South West Orange County is a community of residents who value their land and their unique lifestyle. They share a vision for land conservation – and have invested heavily to protect the area from overdevelopment and pollution. The area is rich in important natural resources and provides the headwaters for most of the drinking water in Orange County and beyond. It cannot be the target for continual environmental assaults such as waste, sludge, and even possible airports. The community accepts its responsibility to act as stewards for this unique and important resource and works continually to protect the land for all, including land use restrictions that protect the water supplied to the municipalities. Its time for the BOCC and residents to join the south west Orange community to acknowledge this important role and protect this area from these assaults which benefit no one.

## Exclusion of Sites on Eubanks Road

The Rogers Road/Eubanks Road community has been the unwilling host to Orange County's landfill for nearly 40 years. The community has suffered illegal dumping and contamination, traffic impacts, vermin and other pests, and other assaults. It is time to reverse these burdens rather than add to them.

RENA/CEER and the Rogers Road communities are at a crossroad. The proposed transfer station will contribute to the burden of environmental hazards on a community. Thirty-five years of broken promises and environmental racism has had a detrimental impact on public health, quality life, and the sustainability of the Rogers Road/Eubanks Road community.

A statement from the local community group just about says it all: "We, RENA/CEER and the Environmental Justice Community Members, do not want a Waste Transfer Station in the Rogers /Eubanks and Millhouse Road area. We must decide which path is right for all Orange County. We the citizens, working together with government, can do the right thing for the communities and the environment."

The community coalition supports RENA/CEER in their opposition and asks that, as part of their plans to close the Eubanks Road landfill and continue with capital improvements to the area, BOCC in concert with the municipalities begin to deliver on the amenities promised to this community. (See E-12)

(See E-11 for Groundwater Monitoring Program documents)

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## Exclusion of Hillsborough Sites

The Town of Hillsborough already provided a letter and a resolution to BOCC explaining why Hillsborough sites are not suitable for the WTS and should be eliminated from study.

(See <http://www.hillsboroughnc.org/WasteTransferStationAdvisoryCommittee.asp> )

The draft resolution, *Petition Regarding Proposed Waste Transfer Station Siting*, was offered to the Orange County Board of Commissioners, October 3, 2008. (See R-3)

- **Damaging Environmental Impacts:** Sites 857 and 573 are in a floodplain according to Orange County Floodplain map (2008), FEMA and NFIP (National Flood Insurance Program) maps, impacting Cates Creek and its tributary. This would impact

Cornwallis Hills, Millstone and other nearby areas with severe flooding issues, as well as impacting the protected Neuse River.

- **Damaging to the Economic Development of Hillsborough:** Both proposed sites are located at the "Gateway Entrance" of Hillsborough, and in the designated EDD for Orange County. The EDD purpose is to bring in economic development, not to be used as a site for public facilities. The negative impact to Hillsborough of a Waste Transfer Station has already been evidenced by the withdrawal of a contract to purchase a Waterstone parcel for development of a business, and the specific reason given was the possibility of a WTS.

- **Impact to high-density neighborhoods:** Numerous high-density neighborhoods are near the two proposed sites. Diesel fuel has been proven through numerous studies to negatively impact children and the elderly, in particular increasing the incidents of asthma and other illnesses. The sites are also near or across from one church and three schools.

- **Impact on local business:** Would severely impact local fishery and truffle farm (only such in the Southeast) adjacent to proposed sites.

- **Traffic impact:** New 86 and Old 86 are both 2-lane highways. This poses a danger to bicyclists, resident pedestrians and traffic, as garbage trucks are not meant to travel over 40mph, much below the speed limit

- School bus traffic with frequent stops and garbage trucks would severely impact traffic flow and increase the risk of accidents. (Middle and elementary school located on New 86; High school and elementary school located off Orange Grove Rd)
- Use by garbage trucks coming from Chapel Hill off New 86 would require left turn onto I-85 with an additional left turn lane onto Old 86 to access sites. This would pose serious backups over a 2-lane bridge (with no left turn lane) over I-85, which already suffers from weight-bearing issues due to peak traffic jams. Traffic turning left off the exit ramp from I-85 onto Old 86/Churton St. backs up onto I-85 during peak hours due to congestion.

- **Extra costs:** - Old 86 and New 86 are both two-lane highways, as is Orange Grove Rd, all of which would be used to access the proposed Hillsborough sites.

- **Infrastructure of water and sewer is lacking (not existent)**

- **Parcels represent prime real estate and are expensive.** Plus the WTS is likely to devalue surrounding properties.

- **Owners not willing to sell**

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## **Next Steps Including Options for Short Term Waste Management**

The coalition recognizes that the BOCC is concerned about timetables and risks of delaying a WTS site decision. The current landfill is projected to be full by May, 2011. Yet none of the sites being considered by the BOCC meet even the most basic criteria established by the EPA, industry leaders, or the community.

The community groups offer the following recommendations to enable the BOCC to quickly secure a suitable site and proceed with the WTS project.

- Open the site evaluation to include the four alternative WTS sites identified in this proposal.
- Exclude the following sites from WTS site;
  - Bingham Township sites: 056, 779, 759, 696, 010, 717
  - Hillsborough sites as identified in this report
  - Rogers-Road Eubanks sites
- Consider long term options that place Orange County on a path to sustainable waste to energy production (WTE).
- Adopt a sustainable waste management policy that includes the WTS, WTE and landfill use that is consistent with delivering site locations that do not impose our waste on another community.

Our coalition further believes that in order to make a siting decision that is in the long-term interest of the community, the BOCC should pursue the following:

- Confirm whether the sites proposed in this report will work for a WTE facility.
- Meet with leaders from nearby municipalities to determine their interest, willingness and urgency to pursue a shared WTE resource. This can be as simple as talking with Durham or Alamance county leaders or seeking a more complex regional option
- Speak to energy and waste management vendors (See R-4) to understand basic services and costs. Potentially invite vendors to visit Orange County, propose options and ideas, and arrange community educational briefings.
- Plan options, phasing, costs and timetables for implementing a WTS station as a first step for WTE in one of the sites under consideration.

We believe that with our assistance, most of this work can be completed within 3 months. Given the extent of the community involvement, possible new sites can be identified quickly and widely for community-wide acceptance. In addition, our members have already made contact with leading vendors and can work with county staff and others to arrange vendor visits and secure information on phasing, costs and options.

We have already compiled a list of vendors and others that can handle our waste in the unlikely event that we are unable to site a WTS before our landfill is full. We are beginning to model options to decentralize our waste management services and possibly send waste to different vendors in Durham, Morrisville and other locations. (See R-6) More than enough capacity is available for our needs.

Some vendors believe that, if we are serious about WTE, we may even have the option to not site a WTS at all. The capital cost savings could underwrite any additional hauling costs and our leaders and staff would be free to focus on the longer-term sustainable solution. This option is a major departure from the county's current plan –but might be worth evaluating as the other work is ongoing.

We also believe that the county should to continue to research options to use rail. Given the intra-county network of rail spurs, there may be an option to develop a rail-based hauling network at a reasonable cost. This may hold an opportunity where the unique assets of Orange County may open the way to cost effective ideas that are not routinely considered. Certainly it's worth considering – in parallel to the other activities.

Orange County, under the leadership of our BOCC, has the option to take a few more months to clarify options and tradeoffs to properly site a WTS. The risk of this short delay is more than offset by the potential benefit which is the opportunity to select a WTS site that respects the community and the environment, contains costs to build and use, and offers an opportunity to accelerate our transition to WTE. In the unlikely event that this delay extends our timetable beyond the closing of the Eubanks landfill, we have solid contingency plans to use resources and capacity from nearby communities and private vendors.

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## In Summary

Instead of fighting each other, our community groups have chosen to work together to find sustainable waste solutions that work for all of us. It is in this same spirit that we would like to continue to work with the Board of County Commissioners and the county staff. We are confident that we will quickly identify a WTS site that works for everyone.

In addition, the community groups agree with each other, the Solid Waste Advisory Board (see R-5), Mr. Gershman, and members of the Board that the time is now to look toward sustainable

waste and energy solutions. The task remains to find waste management, energy and other vendors to shape options that can work for our communities in the long term. We have already spoken to representatives from Duke Energy and others, who are excited about the potential that this important initiative offers. We strongly believe that the municipalities and neighboring counties should take part in these discussions and solutions.

Orange County has long been a leader in sustainability for North Carolina and much of our country. Our new federal government is ready to sponsor bold and decisive moves toward progressive renewable energy and other sustainable initiatives. WTE offers this opportunity for Orange County. Strategically siting our WTS is an important first step.

Thank you for considering our solutions. We look forward to working with you and the county staff to create this exciting future for Orange County.

**Orange County Voice**  
**Rogers Eubanks Neighborhood Association**  
**Orange County Community Awareness**