

**North Carolina Association of County Commissioners  
2005-06 Ralph W. Ketner Employee Productivity Awards Application**

County: Orange Employee: Blair L. Pollock for Bob Taylor Email: bpollock@co.orange.nc.us

County Department: Solid Waste Mgmt. Employee Title: Solid Waste Planner

County Phone: 919-968-2788 County Mailing Address: PO Box 17177, Chapel Hill NC 27516 (Solid Waste Dept. only)

Is this project being submitted on behalf of two or more employees? NO  YES

If yes, please provide below a listing of all project employees in Number 6. Employee & title as listed above should be for lead team member.

Fair Labors Standards Act Designation: In order for your project to be eligible, you MUST indicate one of the following. If you do not know, please contact your personnel director.

EXEMPT:  NON-EXEMPT:  BOTH (if applicable to a team):

<b>1.</b>	<b>Productivity Improvement Title:</b>	Toxicity Reduction Improvements Program (TRIP)
<b>2.</b>	<b>Implementation Date (must be between January 1, 2005 and December 31, 2005)</b>	
<b>3.</b>	<b>Please describe the productivity improvement. (Please limit response to these 2 pages.)</b>	
<p>Orange county's overall Toxic (Waste) Reduction Improvements Program (TRIP) has been ongoing for several years and encompasses four elements: Electronic and computer waste, hazardous household wastes, automotive waste and dry cell household batteries. The overall costs of managing these types of materials is typically quite high when compared with conventional recyclables. These high prices often inhibit local govern-ments from maximizing their efforts to keep these materials out of landfills.</p>		
<p>Orange County has worked closely with its six TRIP contractors, local retailers, other County Departments, town governments within Orange County and local artists to keep program costs down and service levels high. We have been able to extend services to other units of local government and citizens of adjoining counties while keeping costs per unit of material collected and per participant the same or lower than in previous years. Most of the program's costs are covered by the Basic or B part of the County's annually levied 3-R fee. The fee revenue is supplemented by landfill tip fee surpluses and recycling sales revenues.</p>		
<p>At the time period that this application covers, the TRIP services offered to citizens of Orange County included: hazardous household waste collection every Wed., Thurs, Fri., 10 am to 6 pm, and Sat. 7:30 am to noon at the landfill; electronics collection at the landfill and all six solid waste convenience centers and all four local government garages; and dry cell battery collection at all six solid waste convenience centers and six other retail outlets and a large retirement home. The three towns' curbside bulky goods collection programs all segregate electronics for disposition at the electronics recycling area, as they don't pay for disposal as materials are not being buried.</p>		
<p>According to the State Division of Pollution Prevention and Environmental Assistance, Orange County ranks highest in the state in reported per capital recovery of electronics' waste and is reported as among the top programs in the nation in pounds per person recovered.</p>		

**4. Please describe why this project was initiated or what problem it addressed:**

The program is an integrated effort to collect and divert a wide variety of hazardous and toxic wastes from the Orange County landfill. TRIP is made up of the four programs defined above in #3. It is environmentally sound to keep hazardous and toxic materials out of landfills and properly recycle, incinerate or neutralize them. Allowing more toxics into the landfill increases the likelihood of future groundwater contamination and increased liability for cleanup costs. Reducing toxic wastes and providing more convenient and "free" opportunities to recycle them may reduce future potential for environmental degradation due to leaking or failing landfills, etc.

As the amount of obsolete and broken electronics grows, it becomes more critical to address that component of the waste stream due to concerns about heavy metals (most notably lead, cadmium and beryllium). Recovering these materials also has resource value, as mining for these materials is a highly environmentally destructive activity. Thus, the more refined metals that can be recovered from waste, the less environmental degradation occurs.

Finally, the convenience of the program and encourage more people to participate in it.

**5. Please quantify the improvement's results in terms of cost savings, cost avoidance and/or a higher level of services provided.**

*(Please indicate what resources were used to achieve your results, and what was done with the time savings, if any accrued).*

An overall summary table comparing collection in FY04-05 to FY05-06 is attached. Cost per unit collected went down 8% and participation increased 8%. Tonnage increased 22%. Program costs increased 12% overall. The level of service for electronics recycling increased and tonnage went up 55% from 187 tons to 290 tons. It now includes providing trailers at all six solid waste convenience centers. The trailers for electronics are then hauled by staff to the landfill processing site when full. Once there, materials are carefully unloaded by staff, sorted and processed to minimize disposal costs and maximize market value. Monitors and televisions are separately shrink wrapped, CPUs, boards, and other high value materials are segregated; batteries and toner cartridges are removed from printers, cords are clipped from items that are going to be recycled (not reused).

We added more retail stops for dry battery recycling. Tonnage increased in that program by 235% from 4.2 tons to 9.9 tons. Prices for disposal of motor oil, filters and lead acid batteries have dropped, or in some cases gone to zero, as market value for metals and petroleum have risen. Our constant contact with our contractors has enabled us to keep on top of market fluctuations and adjust our contract rates accordingly.

Overall program tonnage increased 22% from 488 tons to 594 tons, and cost per unit declined 8% from \$0.245 per pound to \$0.224

**6. Please provide any other descriptive information you would like to be considered by the review committee.**

To further promote the TRIP program, we installed bus placards on all city buses and at all recycling dropoff sites inside county government buildings. We have an informal arrangement with a local scrap metal artist, Riley Foster of Orange County, to regularly remove all the helium tanks and other inert gas tanks at no cost. He converts them to 'sunbursts' (photo attached), which he then sells to the public at low cost (approx. \$30). He consistently sells all 150 or more he collects each year. Thus, the county gets rid of a potentially costly item for free, a local artist conveniently gets material he can use, and the public gets popular and affordable original art.

**Robert S. Taylor**, Recycling Operations Manager, is the lead person and the potential awardee. Other involved include: Jason Tate and Lyle Obie collected and managed materials, Paul Spire is Rob's supervisor, Terry Edmoson is the Public Works Department's Solid Waste Manager and coordinates collections of electronics from convenience centers..

<b>County Manager's Name:</b>	<b>John Link</b>	<b>Supervisor's Name:</b>	<b>Paul Spire</b>
-------------------------------	------------------	---------------------------	-------------------

Return by July 21, 2006 via email [Rebecca.Troutman@ncacc.org](mailto:Rebecca.Troutman@ncacc.org).