

**DEPARTMENT OF ADMINISTRATION
Environmentally Preferred Purchasing**

The Department of Administration continues to promote the purchase and use of reusable, refillable, repairable, more durable, and less toxic supplies and products. As the Department progresses, more of these products are being added to statewide term contracts, agency specific term contracts, as well as awarded through open market bids. For more information visit the new Purchase and Contract Web site: <http://ncP&C.gov>

Solicitations advertised by the Division To Comply With the Session Laws 1993 (G.S. 130A - 309.14(a))

Presently, the bids advertised in the Division of Purchase and Contract contain a Recycling and Source Reduction paragraph in item #10 of Instructions to Bidders. When developing bid invitation language, requirements and specifications, purchasers are continuing to look at alternative methods and products, if such products result in waste reduction and their procurement is both practicable and cost-effective.

Recycling and Source Reduction information provided by the contractors on bids received during the 2006 to 2007 fiscal year indicate the sustainable features or criteria of those products. Table 1 lists the purchase awards by the type of bid for those commodities.

Table 1

Commodity Purchase Awards by Bid Type	Number Awards by Bid Type	Percentage Awards by Bid Type
Agency RFP	303	33.3%
Contractual Services	36	7.3%
Convenience Contracts	247	10.6%
Open Market	627	11.4%
Quotes	179	2.6%
Term Contracts	38	20.5
Waivers	300	14.3%
Total	1730	100.0%

NC E-Procurement @Your Service

NC E-Procurement @ Your Service, now in its sixth year of operations, continues to support Governor Michael Easley's "One North Carolina" vision. As of December 2007, the enterprise-wide system has over 55,800 vendors registered and over 14,400 users from more than 242 entities across the State including state agencies, hospitals, institutions, community colleges, K-12 public schools, universities and local governments. This year NC E-Procurement @ Your Service successfully integrated with its first university financial system, East Carolina University. NC E-Procurement @ Your Service also continues to contribute to a sustainable environment through significant reductions in hard copy document reproduction (paper, printers and supplies) through the use of electronic business transactions and electronic documents. This year, NC E-Procurement modified the informal bidding tool, eQuote, to allow only electronic vendor notification of bids and bid awards further reducing unnecessary hard copy documentation.

Purchasing Compliance Reviews

The North Carolina Administrative Code (01 NCAC 05B.1605) gives the Division of Purchase and Contract the authority to conduct compliance reviews. As of January 2006, most purchasing compliance reviews within the Division of Purchase and Contract are being conducted utilizing NC E-Procurement@Your Service. In previous years, compliance officers traveled weekly to conduct the reviews on-site at community colleges, state agencies, universities and prior to 2004, local school systems. Travel expenses (subsistence only) were approximately \$11,000 per year for three officers. Now, P&C compliance officers are able to conduct most of the compliance reviews at their desks. The

officers are reviewing much more data than in prior years due to the utilization of technology that was previously not available to us. Furthermore, the purchasing data for entities was not accessible in one location; it was very fragmented. The electronic information reviewed includes but is not limited to, approvals, eQuotes (competition sought), purchase orders, P-card expenditures, IPS (Interactive Purchasing System) formal bids, and payments (direct pays) that do not go through the purchasing offices.

Compliance reviews are conducted for all community colleges, state agencies, state institutions and hospitals, and universities. Currently, there is only one university that utilizes NC E-Procurement @ Your Service; therefore, reviews for universities are conducted on-site. Additionally, there are occasions when it is necessary for P&C compliance officers to conduct an on-site review at an agency, or community college.

Due to the utilization of technology, sustainable efficiencies or savings include reduction in paper, file cabinets/storage furniture, travel, fuel emissions, employee time, and operating costs. These are just a few examples of improved processes within P&C.

IPS (Interactive Purchasing System) & Vendor Link NC

The Division of Purchase and Contract continues to promote opportunities for vendors to do business with the state through electronic advertisement of goods, services and design/construction in IPS. The entities using this system consist of state agencies, institutions, universities, community colleges, K-12 public schools, and local governments.

Vendor Link allows vendors to register to receive electronic notification of solicitations. Vendor Link had 17,908 registered vendors as of June 30, 2007. The system continues to grow with the addition of users increasing from 148 Entities with 490 users as of June 30, 2007. This is an increased user base of 7% for the Entities and 5% for the users, which posted 6,105 solicitations.

OPEN MARKET AWARDS

- **Hybrid Electric School Buses** - Two plug-in hybrid electric school buses were purchased in North Carolina for the purposes of education, training and research. The Plug-in Hybrid Electric School Bus Project is a collaborative effort led by the Advanced Energy Corporation for the Hybrid Electric School Bus Buyers Consortium with the goal of transforming the nation's school bus market by introducing plug-in hybrid technology. Reference: <http://www.hybridschoolbus.org/>
- **Electric Utility Trucks** - Six electric road worthy trucks were purchased for the Department of Environment And Natural Resources that are capable of a speed of 25 mph and a minimum 30 miles driving range.
- **Recycled Plastic Lumber** - 63,400 Board feet of the product manufactured with minimum of 95% recycled HDPE (both post industrial and post consumer) were purchased for the Department of Correction. As an alternative to standard treated lumber, redwood and western cedar, the recycled plastic lumber conserves natural resources, require no maintenance or treatment for pests or rot, and poses fewer environmental risks than traditional products. The use of the recycled materials reduces our landfill space and the need to extract and process virgin wood. Products require reduced maintenance (sealers or paints) and do not suffer from any of the traditional issues with wood, such as cracking, splitting, or warping.
- **Shucked Oysters Shells** - 21,000 Bushels of cured, clean, whole, eastern oyster (*crassostrea virginica*) shells from shucked oysters were purchased for the Division of Marine Fisheries for oyster bed restoration.
- **Ultra-Bright LED Lights** - Three hundred and fifty headband light assemblies were purchased for the Department of Crime Control And Public Safety. Each product consisted of 24 custom ultra-bright LED's to enable a 40 feet range of panoramic vision without a shadow zone. Product is easily recharged and allows better visibility for the examination of commercial motor vehicles during night inspection.

NEW STATEWIDE TERM CONTRACT

- The Division of Purchase and Contract has established a new Statewide Term **Contract for Neighborhood Electric Vehicles**. Neighborhood Electric Vehicles (NEV) are battery operated vehicles that are "street legal" for use on roads with a posted speed limit of 35 MPH or less. There are 6 different NEV models available from this contract from two suppliers offering GEM and E-Ride vehicles. The contract vehicles are offered with a price range of \$10,887 to \$18,713 and include an extended warranty. These vehicles could be fueled (recharged) by an alternate to most carbon derived fuel sources. It is estimated that NEVs cost 3 to 5 cents per mile to operate. These vehicles are considered good additions to agency fleets to help meet petroleum reduction goals. This contract may be viewed at the following website www.doa.state.nc.us/PandC/070n.pdf and includes links to the manufacturers' sites.

STATEWIDE TERM CONTRACTS

As existing term contracts are re-bid and new term contracts are developed, the Division of Purchase and Contract continues to improve the contracts by offering a wide range of sustainable or environmentally friendly products. Examples of the improved sustainable features of these term contracts are listed below.

- ❑ **Air Conditioners, Room, 031A** - Items available through this contract were awarded based on the lowest energy efficiency cost, meeting specifications. The majority of the items awarded are Energy Star Compliant, containing recycled materials and packaging.
- ❑ **Domestic Appliances, 045A** - All refrigerators, washers and dishwashers are "Energy Star" qualified. This is a fairly stringent measurement of energy efficiency, which is monitored by the Department of Energy. The payoff is a more efficient appliance, which use less energy over the lifetime of the product.
- ❑ **Batteries, Storage, 060B** - Battery casings are made from recycled material (96%). Batteries are exchanged as a core and picked up by the vendor. In addition the contractor will pick up and properly dispose of junk batteries on quantities less than 20. Core (junk) batteries are considered to be an environmental hazard and are otherwise expensive to properly remove.
- ❑ **Tire, Automotive, Recapping and Repairing, 060E** - The retread tire provided should be a premium retread that will provide optimum tire mileage/service and safety. Recycling of tires through retreading and repairing reduces the new purchases and disposal of tire casings.
- ❑ **Passenger Cars, 070A; Law Enforcement Vehicles, 070B; Trucks/Vans/Utility Vehicles, 070G** – Passenger car awards included an alternate fuel vehicle (AFV) and two models of gasoline /electric hybrid vehicles. Limited availability restricted award of the AFVs for the passenger cars, especially the Law Enforcement and Trucks/Vans/Utility Vehicles. According to the Steel Recycling Institute, 67.7% of a vehicle is steel or iron. Of that steel or iron, 26.6% is post consumer material. Therefore, 18% of a vehicle is made from post consumer recycled material.
- ❑ **Neighborhood Electric Vehicles, 070N** - Neighborhood Electric Vehicles (NEV) are battery operated vehicles that are "street legal" for use on roads with a posted speed limit of 35 MPH or less. There are 6 different NEV models available from this contract from two suppliers offering GEM and E-Ride vehicles. The contract vehicles are offered with a price range of \$10,887 to \$18,713 and include an extended warranty. Because these vehicles do not consume fuel they produce zero emissions. It is estimated that NEVs cost 3 to 5 cents per mile to operate. These vehicles are considered good additions to agency fleets to help meet petroleum reduction goals.

- ❑ **Remanufactured Toner Cartridges, 207A** - Currently common use Hewlett Packard and Lexmark cartridges are remanufactured to equivalency with the original OEM performance. Fewer cartridges are added to the waste stream. Product specifications are being transitioned from mandated construction requirements to product and vendor performance requirements. This is expected to allow a wider variety of brands and models to be covered as requested by the contract users.
- ❑ **Coolers, Water, Electric, 225A** - Packaging, refrigerant and metal components are recyclable.
- ❑ **Large & Specialty Lamps, 285A** - Some of the lamps contain up to 65% recycled content including glass and mercury. Some of the packaging contains 73% recycled content. Some of the lamps are low mercury (TCLP compliant), non-hazardous.
- ❑ **Ballasts, 285B** - Electronic ballasts are more energy efficient, support variable illumination on demand and reduce electro magnetic radiation. A link is provided to Federal Energy Management Program (FEMP) that illustrates a return on investment for retrofitting with more energy efficient lamps and ballasts. Ballasts contain no PCB's and can be disposed of in the trash. Reduced product shape and size also minimizes packaging and metal enclosure requirements.
- ❑ **Carpet, 360A** - Recycled content required is either (1) minimum 5% postconsumer content except that vinyl-backed and other similar hardbacked products contain 20% by weight of postconsumer recycled content, (2) minimum 15% by weight of recovered materials (both preconsumer and postconsumer), or (3) minimum of 25% by weight of recyclable content.
- ❑ **Paper, Computer and Labels, 395B** - Computer paper contains 50% recycled with 30% post consumer content.
- ❑ **Recycled Motor Oil, 405H, 405J** - State Surplus Property disposes of waste oil and antifreeze under contract.
- ❑ **Bio-Diesel Fuel, 405L** - B20 blended fuel contains 80% diesel fuel and 20% virgin soy or reprocessed vegetable oil. Approximately 1,840,000 gallons purchased with 368,000 gallons from recycled biomass reduces crude oil consumption.
- ❑ **Gasohol, 405M** - E-10 blended fuel contains 90% unleaded gasoline and 10% ethanol. Approximately 9,456,942 gallons were purchased with 945,694 gallons from ethanol.
- ❑ **Ultra-lo Sulfur Diesel Transport, 405P** - This new term contract has replaced the 405B lo sulfur diesel. 405P offers 15 ppm of sulfur content compared to 500 ppm sulfur content on the lo sulfur diesel. Transport loads are over 6,000 gallons per delivery, and is typically used heavily by DPI and DOT. Approximately 21,897,810 gallons were purchased annually. This will help with clean air mandates.
- ❑ **Ultra-lo Sulfur Diesel Tankwagon, 405Q** - This new contract has replaced the 405C lo sulfur diesel tankwagon. As in above this offers 15 ppm sulfur content vs 500 ppm sulfur content on the previous contract. Tankwagon loads are less than 6,000 gallons down to a minimum of 500 gallons. Approximately 851,690 gallons were purchased annually. This will help with clean air mandates.
- ❑ **Furniture, Metal, Folding Chairs, Tables, Storage Units, Wood Library Furniture, 420 - Furniture, Desks (Wood), Credenzas, Conference Tables, Etc. & Bookcases, Furniture, 425B & C** - Contractors support sustainability through different practices. Mechanical parts can be recycled or replaced, thereby extending service of item. Packaging is recycled and recyclable. Products may be ground up into particleboard. Packaging may contain up to 40% post consumer waste and is reusable. Wood, plastic and metal contain recycled post consumer content and are recyclable.
- ❑ **Furniture, Chairs, Ergonomic, 425E** – Fabric and chair cushions may contain up to 100% post consumer recycled content. Packaging contains post consumer waste, is reusable and recyclable after use.

- ❑ **Lateral and Vertical Filing Cabinets, 425F & 425G** - Cabinets contain from 10% to 30% recycled content. Corrugated boxes have a minimum of 50% post consumer waste and are recyclable. Contractor will purchase back files at end of their use.
- ❑ **Storage, Combination Storage/Wardrobe and Wardrobe Cabinets, 425H** - Cabinets have a minimum of 10% recycled metals. Packaging contains post consumer waste, is reusable and recyclable after use.
- ❑ **Industrial, Medical and Specialty Gases, 430A** - Are delivered statewide in reusable cylinders and are exchanged when replacement cylinders are needed.
- ❑ **Disinfectants and Odor Counteractants, 435A** - Plastic bottles and shipping boxes are 100% recyclable. Plastic containers for deodorant cake can be recycled after cake evaporates.
- ❑ **External Defibrillators, 465B** - Defibrillators can be refurbished and packaging materials can be recycled.
- ❑ **Incontinent Care Products, Disposable, 475C** - Disposable washcloths (wipes) contain a minimum 50% of fully biodegradable paper (cellulose fibers).
- ❑ **Indoor And Outdoor Waste Receptacles, Food Prep Containers, Pails, and Related Items, 485F** - Most plastic products contain 15% post consumer recycled content. Packaging contains 10% post consumer recycled content. Some containers are sold to customers to assist with sustainability management. For example, the aluminum can recycle bins support recycling procedures recommended to users. Metal parts contain recycled content.
- ❑ **Brooms, Mops, Brushes, and Other Cleaning Implements, 485G** - Products may contain up to 60% post consumer recycled content. Packaging may contain up to 40% post consumer recycled waste. All cotton mops are made of cotton waste. Shipping boxes are recyclable. Broom handles can be used as wooden dowels for multiple purposes, such as garden stakes, hanging banners in classroom, etc. Forty-five percent of broom material is biodegradable.
- ❑ **LED Vehicle Traffic Signal Modules, 550A** - Traffic signals employing the high efficiency light emitting diode (LED) technology consume 90% less energy than conventional signals, while providing greater reliability, longer life, and low-maintenance performance. Signals are certified for ENERGY STAR for reduced energy consumption.
- ❑ **Material Handling Carts/Trucks, 560A** - Very few products are made from virgin steel. Products are not shipped in cartons.
- ❑ **Musical Instruments and Accessories, 580B** - New designs use recyclable plastics. Band instruments may be traded in to be reconditioned and re-sold. Donations of trade-in instruments to the Links Program for the needy promotes music education. Plastic and brass parts may be recycled for future part replacement. Cardboard and pallets are recyclable.
- ❑ **Calculators, 600A** - Packaging material may be recycled.
- ❑ **Dictation/Transcription Equipment, 600C** - New digital recorders employ internal electronic storage media for constant reuse without cassette tapes. Voice recordings may be easily downloaded for dictation transcription, copied to disc (cd or dvd) and transmitted to distance or remote locations. Only proofed or edited recordings are achieved to (cd or dvd). Archived recordings facilitate applications such as offline lectures and training events. Electronic storage media has a long lifetime before replacement. Contract also offers voice to text digital transcription software that serves the traditional state users or nonprofits for the physically impaired.
- ❑ **Office Supplies, 615A** - Contractors are required to the extent feasible and practical, to offer recycled products, including packaging, especially those having post-consumer waste content. Wherever possible and practical, such products should be identified as such.

- ❑ **Napkins, Bathroom Tissue, and Paper Towels, 640A** - Contains 100% recycled fiber, 40% post-consumer recycled fiber.
- ❑ **Office Paper, 645A** - Various products contain both 100% and 50% post consumer and chlorine free copy paper. Other recycled and virgin paper products including envelopes are supported.
- ❑ **Cameras, Digital & Film, 655A** - The metal camera bodies, plastic parts and packaging materials can be recycled. Contract also includes the digital cameras and electronic storage media that promote reduction, reuse, and recycling and reduced environmental impact. Soft copy images can be easily transmitted to distant locations. Chemicals used in manufacturing and processing of the film are eliminated. Typically only proofed images are printed. Electronic storage media has a long lifetime before replacement. Even when the images are printed, the user can decide if high cost paper and toner are required. Disposal of the images on paper has less environmental impact than the toxic metals contained in film.
- ❑ **Bags, Plastic, Trash, 655B** - Liners contain a minimum of 10% post-consumer or 10% pre-consumer reprocessed copolymer. All the liners awarded were thoroughly evaluated for strength and performance.
- ❑ **Laminators & Laminating Film, 665A** - Some of the film contains 5% post consumer content. Packaging contains 25%-80% post consumer content.
- ❑ **Ammunition, 680A** - Brass shell casings can be saved and recycled and others can be reloaded.
- ❑ **Wiping Cloths, 735A** - All items are second-hand textiles. Vendors resell waste instead of sending to landfills. All recycled textile rags can be sold to make paper products. All rags can be re-laundered.
- ❑ **Ice Machines and Dispensers, 740A** - Products are evaluated based upon initial bid, cost of energy and cost of water to provide the required ice harvest rate per day. Packaging, refrigerant and metal components may contain recycled content and are recyclable.
- ❑ **Vending Machines And Money Changers, 740B** - Packaging, refrigerant and metal components may contain recycled content and are recyclable.
- ❑ **Markerboards, Tackboards and Accessories, 785A** - Metal and wood components contain recycled materials.
- ❑ **Paper, Drawing and Construction, Newspaper, 785B** - Various products as indicated typically contain 25% to 100% recycled paper fiber.
- ❑ **Television/Video Equipment, 840A** - Most video products are certified "Energy Star" to denote efficient energy use.
- ❑ **Teaching Equipment, Electricity/Electronics Courses, 924A** - Office paper, cardboard and metal enclosures have recycled content. Documentation provided in soft copy instead of hard copy printed materials.
- ❑ **E-85 Fuel, 405R - Agency Specific Contract for use by Motor Fleet Management.** E-85 blended fuel contains 15% unleaded gasoline and 85% ethanol. Fuel is used in the flex fuel vehicles compatible with E85 fuel. Approximately 311,111 gallons were purchased with 264,444 gallons from ethanol.
- ❑ **Electronic Equipment Recycling Services, 926A** - Assists agencies and local governments with CRT disposal prohibition and in diverting surplus or discarded electronic products from landfill disposal.

Items Aiding Waste Reduction Purchased By State Agencies Through Term Contracts and Open Market

The following items purchased by State agencies meet the criteria for aiding waste reduction by being reusable, refillable, repairable, more durable, and/or less toxic than their traditional counterparts:

Reusable

Digital Cameras (reduces need for film and chemicals)
Refrigerant Recovery System (filters reusable refrigerant)
Musical Instruments
Rechargeable Dry Cell Batteries
Recycled Carpet
Recycled Paper
Recycled Content Furniture (not traditional wood)
Printers
Solvent Degreaser (reuses solvent)
Tire Recapping & Repairing Service
Uniforms, Vacuum Bags, Wiping Cloths

More Durable

Above-Ground Vaulted Fuel Storage Tanks
Classroom Furniture, Electronic Lamps & Ballasts
Vacuum Cleaners, Floor Polish, Grader Blades
Grader Slope Attachment, Kindergarten Furniture
Paint Brushes, Plastic Lumber, Mattresses
Plastic Tableware, Staplers
Vertical File Cabinets, Wood Case goods
Wood library furniture

Energy Star – Reduced Energy Consumption

Audio Visual System,
Changeable Message Signs – Solar Powered
Domestic Appliances
Lighting Fixtures,
Room Air Conditioners,
Sonography Equipment
Television & Video Equipment, Lamps
Traffic Signals – LED,
Ultrasound Scanner
Ultrasound Training Simulator Equipment
Warning Lights - Vehicles Safety
Water Coolers

Used - Automobiles and trucks

Refillable

Ammunition - Cartridge Refills
Batteries - Vehicle & Storage
Drums – Steel, Fire Extinguishers
Cylinders for Welding, Medical & Specialty Gases
Fuel Tanks, Liquid Hand Soap
Self-Contained Breathing Apparatus

Repairable

Defibrillators, Musical Instruments
Tire Recapping & Repairing Service

Refurbished/Rebuilt

Aircraft Engines, Ferry Engine Repair Parts
Medical Diagnostic Equipment & Instrumentation
Remanufactured Toner Cartridges for Laser
Scientific Equipment, Sewing Machines

Less Toxic

Alternative Fuel Vehicles, Correction Fluid
Dry Cell Batteries, Electronic Lamps & Ballasts,
Fertilizers/Farm Chemicals, Inks for printing (using non-petroleum based inks) Instructional Art Materials, Markerboard Markers, Mattresses, Scientific Products (eliminating Freon), Refrigeration and A/C Equipment

Longer Lasting

Floor Maintenance Machine Batteries, Library Furniture, Aluminum Nuts and Bolts – non-rusting alloys, Fluorescent electronic ballasts permit longer lamp life

Recyclable

Commodity Packaging, Commodity Metal enclosures & parts, Plastics, Steel & Reinforced Concrete Pipe, Chain Link Fencing, Electrical Wire, Treated Lumber, Motor Oil – refined, HVAC & Refrigeration Equipment - Refrigerants

Washable - HVAC Filters Wiping Cloths