

# DEPARTMENT OF ADMINISTRATION

## Environmentally Preferred Purchasing

The Department of Administration continues to promote the purchase and use of sustainable, efficient supplies and products. As the Department progresses with this effort, 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 Purchase and Contract Web site: <http://www.ncpandc.gov/>

### **Solicitations advertised by the Division to Comply with the Session Laws 1993 {G.S. 130A - 309.14(a3)}**

Presently, 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 that result in waste reduction, if their procurement is both practicable and cost-effective.

Recycling and Source Reduction information provided by the contractors on bids received during the 2013-14 fiscal year indicate the sustainable features or criteria of those products. Sustainable attributes include Reduction, More Efficient, More Durable, Longer Lasting, Reusable, Refillable, Refurbished, Repairable, Recyclable, Washable, and Less Toxic than their traditional counterparts. Efficient resource use includes Energy Star for electric energy demand and reduced water consumption.

Refer to the Examples of Sustainable Open Market Awards and the listing of the Statewide Term Contracts with the applicable sustainable features identified.

Table 1 lists the IPS purchase awards by the type and dollar amounts awarded by the Division of Purchase and Contract.

**Table 1**

IPS Commodity Purchase Awards by Bid Type	Number Awards by Bid Type	Percentage Number Awards by Bid Type	Awarded Dollars by Bid Type	Percentage Awarded Dollars by Bid Type
Agency RFP	270	20.06%	\$153,720,409.34	20.68%
Contractual Services	2	0.15%	\$811,201.00	0.11%
Agency Specific Term Contracts	129	9.58%	\$130,407,718.37	17.54%
Open Market Purchases	375	27.86%	\$81,693,870.47	10.99%
Quotes	211	15.68%	\$30,905,016.04	4.16%
Agency Wavier	1	0.07%	\$487,500.00	0.07%
Term Contracts	27	2.01%	\$206,079,431.63	27.72%
Waivers	331	24.59%	\$139,356,174.08	18.74%
<b>Grand Totals</b>	<b>1346</b>	<b>100%</b>	<b>\$743,461,320.93</b>	<b>100.00%</b>

### **NC E-Procurement @ Your Service**

As of June 30<sup>th</sup>, 2014, the enterprise-wide system has 49,530 registered vendors, and 9,207 users representing 193 entities across the State. This includes state agencies, hospitals and institutions, community colleges, K-12 public schools, universities and local governments. NC E-Procurement @ Your Service 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. NC E-Procurement also continues to support State priorities for environmentally preferable products with over 75,046 catalog items clearly marked as "Recycled" of the total 183,830 catalog items, as of October 2, 2014.

## **Purchasing Compliance Reviews**

North Carolina Administrative Code (01 NCAC 05B .1605) mandates that the Division of Purchase and Contract conduct compliance reviews on purchasing practices of all state agencies (institutions, hospitals, community colleges, universities, and state agencies). All compliance reviews, except universities, are conducted utilizing data from the NC E-Procurement System. Electronic data reduces the necessity of conducting most phases of the analysis on-site; thereby increasing efficiency, as well as reducing travel costs, fuel emissions, and operating expenses.

## **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 NC allows vendors to register to receive electronic notification of solicitations. Vendor Link had 28,329 registered vendors as of June 30, 2014. The system continues to grow with the addition of users increasing to 552 agencies, schools and institutions with 1606 purchasers registered in the system, who posted 1,121 completed solicitations using the database from July 1, 2013 to June 30, 2014.

## **EXAMPLES OF SUSTAINABLE OPEN MARKET AWARDS**

**Used Workstations** – Refurbished workstations were purchased in the amount of \$52,123.68 for the Division of Employment Security Commission offices. The purchase included an 80% discount for the refurbished equipment. This is an example of reuse of recycled resources.

**Recycled Printing Paper** – State Transportation Maps were purchased for the Department of Transportation in the amount of \$435,000.00. The paper employed was 50% pre-consumer and 50% postconsumer content. This is an example of the use of recycled materials.

**Water Quality** – Four water quality meters with multi-parameter measurements were purchased for the Department of Environmental and Natural Resources. Measurement parameters available include PH level, dissolved oxygen, water conductivity, water temperature and depth. Instrumentation purchased for \$29,808.20 will be used to measure water quality related to the February 2014 coal ash spill investigation. This is an example of efforts to conserve the quality of the State's natural resources.

**Retro-fit Mobile Command Center** – A retro-fit of a Department of Justice mobile command center for observation and long term investigations included plumbing, electrical and communications updates for interoperability with existing equipment. A \$14,700 savings were negotiated from the original cost estimate. The \$152,288.00 total cost of the retro-fit was a significant reduction from the \$750,000.00 cost for a new mobile command center. This is an example of reuse of resources.

**Reconditioned Washer Extractor** – A reconditioned Braun 200/250 was purchased for \$47,687.50 to replace an existing washer extractor currently used to process hospital linens in Cape Fear Valley, Johnston, Highsmith, and Bladen areas. Extractors remove water from laundry to reduce dryer times and lower natural gas costs. Additionally, it means finishing operations will require less cycle time and less energy. The savings of the reconditioned equipment was \$35,267.19 less than a new unit.

**Recycled Plastic Lumber** – An agency specific term contract was bid for recycled plank stock needed by the Department of Public Safety for use in products manufactured by Correction Enterprises. Plank stock is manufactured with a range of 95% postindustrial and postconsumer recycled HDPE (high density polyethylene). This multi-layered non-porous material resists deterioration from moisture, UV light exposure and is inherently resistant to wood penetrating insects. Material is also very durable with a stain resistant surface that also serves to resist permanent markings such as graffiti. Lumber is provided with a 50 year warranty for surface defects. This is an example of using recycled materials that are longer lasting in an outdoor environment.

**Vehicle Light Bars** - A three year agency specific term contract was awarded to supply traffic warning LED type vehicle bar lights to the Department of Transportation. These bar lights offer more functionality (light patterns other than available with only strobe lamps employed), energy efficiency (reduced electrical load on the car's alternator and battery), and significantly decrease maintenance (long life solid state LED display eliminates lamp replacement due to mechanical

vibration). Secondary benefits may include increased life for the lead acid automotive battery and potentially decreased automotive fuel consumption. This is an example of the use of energy efficient products.

**Virtual Reality Welding Trainer Unit** - Educational training tool that is designed to accelerate welding training of various types of simulated welding equipment through the utilization of virtual reality was purchased for Robeson Community College. Unit allows students to practice their welding technique in a simulated and immersive environment. Trainer reduces material waste (base welding material, welding consumables, electrodes, shielding gas, consumable parts) and saves energy from the welding process. There are no welding fumes or exhaust of environmentally conditioned air during the simulated welding process. This is an example of reduction in materials and energy consumption.

**Electrofishing Equipment** - A three year agency specific term contract was awarded to supply electrofishing equipment for sampling fisheries' stock for the Wildlife Resources Commission, Marion Fish Hatchery. Equipment includes the control box, generator, booms, arrays, dropper tubes, and junction box. This unique system uses the most advanced technology and safety features on the market. Fisheries biologists are able to use incrementally pulsed current rather than preset pulsed current thus less risk for spinal damage to fish when entering the electric field. The hatchery captures fish to restock the public water to sustain and supplement natural populations. Fish are also captured for abundance of fish studies and create fisheries none naturally exist. This is an example of efforts to conserve and supplement the quality of the State's natural resources.

**Used Caterpillar 320DL Excavator** – A 2007 long reach excavator was purchased for the Department of Wildlife Resources for \$134,000.00. The average price of a new 2013 Caterpillar 320DL is \$207,000.00. The used vehicle was determined to meet the user's needs at a significant savings. This is an example of reuse of resources.

**Used Sterling LT-8500 Dump Truck** – A tandem dump truck was purchased for the Department of Wildlife Resources for \$60,032.50. The estimated price of a new 2013 model 320DL is \$135,500.00. The used vehicle was determined to meet the user's needs at a significant savings. This is an example of reuse of resources.

**Used Clamshell Bucket** – A 20 yard heavy equipment bucket was purchased for the NC State Ports Authority for \$76,891.23. The price of a new piece of bucket of the same size and capacity is \$180,552.33. The used vehicle was determined to meet the user's needs at a significant savings. This is an example of reuse of resources.

**Used Featherlite Enclosed Dry Van Office Trailer** – A 2008 trailer was purchased for the Department of Public Safety for \$260,000.00. A new trailer with the same specifications was estimated to cost \$680,000.00 to \$1.2 Million. The used vehicle was determined to meet the user's needs at a significant savings. This is an example of reuse of resources.

**Refurbished Surgical Light** - Two refurbished Amsco SQ240 dual ceiling mounted surgical lights were purchased for Coastal Carolina Community College including installation and delivery. Ceiling mount suspension light fixtures provide 360 degree rotational positioning, cool, shadow reduced, color corrected illumination appropriate for surgical procedures. Recycled fixtures are used for training purposes in education programs.

**Energy Efficient Lighting** – Interior strip lights purchased for \$85,013.60 were supplied for the retrofit of some Central Prison's older facilities. Strip fixtures containing high-output, energy efficient LEDs are configured for retrofit of fluorescent 2 foot long, T5 and T8 diameter lamps in a compact, low-profile form factor. LED strip lamps offer long life, high lumen outputs and are available in various lengths. This is an example of the selection of reduced energy consumption lighting.

## **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 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.
- **Appliances, Domestic, 045A** – The majority of refrigerators, washers, and dishwashers covered by this contract are Energy Star Qualified.

- **Automotive, Industrial Parts and Supplies, 060A** - Some products included have recycled materials with 10%-20% post consumer content.
- **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 10. Core (junk) batteries are considered to be an environmental hazard and are otherwise expensive to properly remove. The Division of Surplus, State Surplus Property collected state-wide from state agencies and local governments 604,000 pounds of wet cell batteries that were recycled during the 2012 to 2013 fiscal year. Recycled quantities data has not been provided for the 2013-14 fiscal year.
- **2014 Models Passenger Cars, 070A** – Cars are available in 4 and 6 cylinder gasoline engines with flex fuel (E85) compatible models. Contract includes a plug-in hybrid car (Ford Fusion).
- **2014 Law Enforcement Vehicles, 070B** - Cars are typically four door, available in 6 and 8 cylinder engines and some are flex fuel (E85) compatible. According to the Steel Recycling Institute, 67.7% of a vehicle is steel or iron. Of that steel or iron, 26.6% is postconsumer material...
- **Conventional School and Activity Buses, 070C; Conventional Activity Buses, 070D** – Vehicles typically contain approximately 20% postconsumer recycled material by weight and 80% of the vehicle by weight is recovered for reuse. Used school buses are usually sold or are used for spare parts.
- **2014 Model Year Trucks, Vans, Utility Vehicles, Crossovers-Conventional Fuels and AFVs, TC # 070G** – All diesel trucks and vehicles are required to additionally operate using B20 bio-diesel fuel. Gasoline fueled vehicles were also bid with flex fuel as an alternative category. Awarded flex fuel vehicles comply with the intent of Senate Bill 2051. Vehicles noted as Flex Fuel or E85 can use both pure gasoline and E85 fuel.
- **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 14 different NEV models available from this contract from eight suppliers offering the brands; GEM, E-Ride, Columbia, Cushman, Polaris, and Star brand vehicles. The contract vehicles are offered with a price range of \$10,232 to \$30,123 and include an extended warranty. Because these vehicles do not consume hydrocarbon fuel they produce zero direct emissions. These vehicles are considered good additions to agency fleets to help meet petroleum reduction goals.
- **Golf Cars, 070P** – Electric and gas fueled vehicles are available with two, four and six passenger models. Models are made with components of 85-90% recycled steel, plastic and aluminum.
- **Light Transit Vehicles, 070U** – Vehicles accommodate public transportation needs and are Americans with Disabilities Act (ADA) compliant. Engines meet current EPA emissions guideline. Alternate fuel/engine options include flex fuel (E85), propane and gas/electric motor hybrid engines.
- **Remanufactured Toner Cartridges, 207A** - Currently common use Hewlett Packard and Lexmark cartridges are remanufactured to equivalency with the original OEM performance. New Brother Brand drum assemblies and toner hopper assemblies were also added. Product specifications are being transitioned from mandated construction requirements to the use of 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. This contract reduces the number of reusable cartridges added to the waste stream.
- **Ballasts, 285B** – Ballasts of all types are available, including electronic types that are more energy efficient, support variable illumination and reduce electromagnetic 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. Electronic ballasts contain no PCB's and can be disposed of in the trash. Reduced product shape and size (form factor) also minimizes packaging and metal enclosure requirements.
- **LED Lighting, 285C** – Contract consists of lamps for cove lighting, area lighting, downlights, troffers and wall packs employing LED illumination for energy savings. Packaging is 60% recycled materials. Technology utilizes LED illumination for energy savings.

- **Energy Saving Devices, 285D** – Contract includes T8 size tubular fluorescent retrofit kits, LED exit signs, LED exit sign retrofit kits, occupancy/vacancy sensors, electronic dimmable ballasts, and controls. Products utilize LED illumination and dimmable ballasts for energy savings.
- **Paper, Computer and Labels, 395B** - Computer paper contains from 30% to 50% recycled with 30% post consumer content.
- **Propane Tankwagon, 405A** – Contract vendors have reported 4,520,477 gallons were purchased last year of this clean burning fuel.
- **Oils, Lubricants, Greases, and Antifreeze, 405H** – The following synthetic, bio-degradable, and recycled lubricants were reported as supplied under this contract: Biodegradable Bar & Chain Oil (48 gallons), Biodegradable Two Cycle Oil (36 gallons), Synthetic Motor Oil (1,669 gallons), Biodegradable Hydraulic Oil (1180 Gallons), Synthetic Gear Lubricant (15,955 Pounds), Synthetic Automatic Transmission Fluid (1,717 Gallons), and Synthetic Grease (2,715 Pounds). Additional synthetic type oils and transmission fluids have been added to the contract to allow increased service life to reduce consumption and decrease maintenance cycles. This year 26,515 gallons were purchased of Diesel Exhaust Fluid (DEF), an aqueous urea solution used in diesel engines to lower nitrogen oxides concentration in exhaust emissions. Nitrogen oxides, like hydrocarbons, are precursors to the formation of ozone and also contribute to the formation of acid rain. Covered by an agency specific contract the Division of Surplus, State Surplus Property collected and disposed of waste oil and antifreeze with 321,000 gallons of motor oil recycled for the 2012-13 fiscal year. Waste oil and antifreeze data has not been provided for the 2013-14 fiscal year.
- **Propane Transport, 405K** – Contract vendors have reported 1,752,028 gallons were purchased last year of this clean burning fuel.
- **B-20 Transport, 405L** - B20 blended fuel contains 80% diesel fuel and 20% virgin soy or reprocessed vegetable oil. This means that of the reported 6,737,604 gallons of B20 blended fuel purchased, 1,347,520 gallons were produced from plant mater. This results in a reduction of crude oil consumption.
- **Gasohol, E-10 Transport, 405M** - E-10 blended fuel contains 90% unleaded gasoline and 10% ethanol. This means that of the 9,109,122 gallons of E10 blended fuel reported as purchased, 910,912 gallons were derived from ethanol. This results in a reduction of crude oil consumption.
- **Pipeline Natural Gas, 405N** – Contract vendors have reported 3,232,977 dekatherms as purchased last year of this clean burning fuel.
- **Ultra-Low Sulfur Diesel Transport, 405P** – Contract offers 15 ppm of sulfur content compared to 500 ppm sulfur content on the previous low sulfur diesel contract. Transport loads are over 6,000 gallons per delivery, and are typically used heavily by the Department of Public Instruction and the Department of Transportation. Approximately 2,958,744 gallons were reported as purchased. This will help to provide compliance with clean air mandates.
- **Ultra-Low #2 Sulfur Diesel Tankwagon, 405Q** - Identical to the 405P contract except in form of delivery. Tankwagon loads are less than 6,000 gallons down to a minimum of 500 gallons. Approximately 150,357 gallons were reported as purchased. This will help to provide compliance with clean air mandates.
- **E-85 Flex Fuel, 405R** - E-85 blended fuel contains 15% unleaded gasoline and 85% ethanol derived from corn production. This alternative fuel is provided in transport quantities of 6000 gallons or more. This means that of approximately 59,928 gallons of the blended E85 fuel reported as purchased 50,938 gallons were derived from ethanol which reduces crude oil consumption.
- **E-10 Tankwagon, 405S** - E-10 blended fuel contains 90% unleaded gasoline and 10% ethanol. Tankwagon loads are less than 6,000 gallons down to a minimum of 500 gallons. This means that of approximately 64,072 gallons of the blended E10 fuel purchased, 6,407 gallons were derived from ethanol which reduces crude oil consumption.

- **Ultra-Low Sulfur Diesel #2 Emergency Transport, 405T** – Contract offers 15 ppm of sulfur content compared to 500 ppm sulfur for the standard diesel #2 fuel. This contract is used in emergency cases when there is a pipeline interruption. The ultra-low sulfur content will help to provide compliance with clean air mandates. No sales were required from this contract during the fiscal year.
- **E-10 Emergency Transport, 405U** – E-10 blended fuel offers 90% unleaded gasoline and 10% ethanol. This contract is used in emergency cases when there is a pipeline interruption. The ethanol blend can reduce crude oil consumption. No sales were required from this contract during the fiscal year.
- **Bio-Diesel Fuel, B-20 Tankwagon, 405V** – B20 blended fuel contains 80% diesel fuel and 20% virgin soy or reprocessed vegetable oil. Tankwagon loads are less than 6,000 gallons down to a minimum of 500 gallons. This means that of 236,347 gallons purchased, 47,269 gallons are derived from plant mater. This results in a reduction of crude oil consumption.
- **E-85 Tankwagon, 405X** - E-85 blended fuel contains 15% unleaded gasoline and 85% ethanol derived from corn production. Tankwagon loads are less than 6,000 gallons down to a minimum of 500 gallons. From the approximately 19,458 gallons reported sold of the blended E85 fuel, 16,539 gallons were derived from ethanol which reduces crude oil consumption.
- **Aviation Fuels, 405Y** - Contract includes aviation gasoline (avgas) and Jet A fuels. The aviation gasoline provided has a lower lead content of the fuel. Lead from engine exhaust fumes is classified an irreversibly neurotoxin and the lower lead content gasoline would be less toxic than the traditional formulation. An estimated 7,435 gallons of avgas and 8,504 gallons of Jet A were delivered based upon E-Procurement sales data for the contract during the fiscal year.
- **Furniture, Metal, Folding Chairs, Tables, Storage Units, Wood Library Furniture, 420A - 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 recyclable. Products may be ground up into particleboard. Packaging may contain from 15% to 75% post consumer waste and is reusable. Wood, plastic and metal contain recycled post consumer content and are recyclable. Product offerings are using more sustainable backs are now becoming available and is more environmentally friendly because it is made partly from soybeans, a renewable methods because they offer a competitive price advantage over those who use all virgin materials. Soy foam in chair seats and backs are now becoming available and is more environmentally friendly because it is made partly from soybeans, a renewable resource.
- **Furniture, Library, Wooden, 420D** – Packaging is recycled. Wood scraps from the manufacturing process are either mulched for recycled materials or converted into energy. Manufacturing may use a water based top coat in wood finishing process.
- **Furniture Contracts, 425A & 425D** - Product offerings are using more sustainable methods because they offer a competitive price advantage over those who use all virgin materials. Soy foam in chair seats and backs are now becoming available and is more environmentally friendly because it is made partly from soybeans, a renewable resource.
- **Bedding Mattress Term Contract, 420E** - Mattresses comprised of innersprings (similar to the type used primarily in the residential and hospitality bedding industries) now require successful evaluation to the 16 CFR Part 1633, the Consumer Product Safety Commission’s new mattress flammability testing standard, “Standard for the Flammability (Open Flame) of Mattress Sets”. Successful evaluation of products offered continue to require the 16 CFR Parts 1632, Standard for the Flammability of Mattresses and Mattress Pads (directed toward cigarette ignition of mattresses). The revised specifications promote increased safety and durability to extend product life.
- **Furniture, Chairs, Ergonomic, 425E** – Fabric and chair cushions may contain up to 100% post consumer recycled content. Packaging contains post-consumer materials, is reusable and recyclable for continued use. Product offerings are using more sustainable methods because they offer a competitive price advantage over those who use all virgin materials. Some manufacturers are now offering soy foam in chair seats and backs as well as recycled wood components. Fabric and chair cushions contain up to 100% post-consumer recycled content with approximately 40% total recycled content for the complete product. Packaging contains up to 100% recycled materials and is recyclable.

- **Metal Cabinets, Lateral, Vertical and Storage, 425H** - Cabinets contain from 10% to 30% recycled content. Corrugated boxes have a minimum of 50% post consumer waste and are recyclable.
- **Industrial, Medical and Specialty Gases, 430A** - Are delivered statewide in reusable cylinders and are exchanged when replacement cylinders are needed.
- **Disinfectants, Janitorial Cleaners, Environmental Cleaners, and Odor Counteractants, 435A** – Numerous environmentally friendly janitorial cleaners are available through this contract that are Certified Compliant to Green Seal GS-37 Environmental Standard For Cleaning Products For Industrial and Institutional Use, dated September 2011, or the EcoLogo Certification Criteria Document CCD-146, Environmental Standard for Hard Surface Cleaners, dated August 2011. These products include General Purpose Cleaner, Environmentally Friendly Neutral Cleaner, Environmentally Friendly Window and Glass Cleaner, Environmentally Friendly Hydrogen Peroxide, and Environmentally Friendly Cleaner Degreaser. Premoistened towelettes are available to provide an alternative for chemicals from being aerosoled or dispensed in the indoor air. Disinfectants included contain various active ingredients and end use concentrations to allow proper selection for limiting contact and exposure to amounts required to be efficacious for specific pathogens targeted. All disinfectants are EPA registered for efficacy of pathogens identified by the NC Statewide Program for Infection Control and Epidemiology within health care related facilities. Chemical dilution control equipment for designated products is supported to improve sanitation quality, deliver accurate recommended product dilution and control costs. Contractors are required to provide the product use training and MSDS sheets.
- **Maintenance, Repair & Operation Supplies, 445B** – Items which were offered under the following contracts are now covered under this contract: Lamps, Large & Specialty (285A), Material Handling Carts/Trucks (560A), Low-Flow Plumbing Fixtures (670A), and Safety Equipment, Eye/Face Protectors (345A). Lamps may contain up to 65% recycled content including glass and mercury. Lamp packaging that may contain 73% recycled content. Some of the lamps are low mercury (TCLP compliant), non-hazardous. Low-flow plumbing fixtures are offered to reduce water consumption.
- **Locks, Locking Devices & Accessories, 450B** – Product metal content includes 26-31% pre-consumer recycled materials and 4-6% postconsumer recycled materials. Some models support the material and resources credits for Leadership in Energy and Environmental Design (LEED) building certifications.
- **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).
- **Grounds Maintenance Equipment, 515B** – Contract includes, walk behind products/equipment, mowers and lawn & garden tractors, hand held equipment (hand-held type), hand held equipment, tractors, utility vehicles, golf & turf equipment, and other equipment. Equipment is manufactured with typically 20% recycled steel and plastic.
- **LED Vehicle Traffic Signal Modules, 550A** - Traffic signals and crosswalk notification 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 certification for reduced energy consumption.
- **Traffic Signal Equipment, 550D** - Lenses and signal head hardware are compatible with energy efficient LED lamps. Depending on brand, aluminum components may have up to 85% recycled content.
- **Traffic Cones and Drums, 550F** – Contract includes caution drums and cones with up to 35% recycled content in the plastic body and up to 100% post consumer recycled content for the rubber support base for either product.
- **Trailer-Mounted Solar Powered Flashing Arrow Board, 550G** - Agency specific term contract provides availability of a trailer mounted, solar charged 15 lamp LED array arrow board and related parts for the NC Department of Transportation. Amber lights on panel board are electronically actuated to form various configurations to signal, control, and direct high speed vehicle traffic. Portable solar powered unit includes energy efficient lamps and controls.

- **Office Supplies, 615A** - Contractors are required to the extent feasible and practical, to offer recycled products, including packaging, especially those having postconsumer waste content. Wherever possible and practical, such products should be identified as such.
- **Napkins, Bathroom Tissue & Paper Towels, 640A** – All products on the contract are certified to Green Seal standards GS-1 or GS-9, or Ecologo CCD-084 or CCD-086. Paper products are manufactured from 100% recycled fiber, with 40% to 80% of that recycled content being from post consumer content. Products are manufactured using either elemental chlorine-free or chlorine-free systems. This is an example of the use of recycled materials.
- **Office Paper, 645A** - Various products contain both post consumer recycled content from 100% to 30%, and chlorine free copy paper. Other recycled and virgin paper products including envelopes are supported.
- **Laminators & Laminating Film, 665A** - Some of the film contains 5% post consumer content. Packaging contains 25%-80% post consumer content.
- **Bags, Plastic, Trash, 665B** - 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.
- **Ammunition, 680A** - Brass shell casings can be saved and recycled and others can be reloaded.
- **Vending Machines and Money Changers, 740B** - Vending machines were purchased for the Department of Health and Human Services are twice as energy efficient as machines made 5 years ago. Equipment features high-efficiency refrigeration, foam-injected insulation and LED display lighting. Refrigerated versus chilled storage space allocation is adjustable for varied product dispensing. Wireless monitoring systems boost efficiency with 24/7 communication and report diagnostics including amount of product needed to refill unit. This is an example of reduced energy consumption with the reduced cost of service/refill trips on an as needed basis. Packaging, refrigerant and metal components may contain recycled content and are recyclable.
- **Construction Equipment, 760H** – Construction Equipment covers excavators, wheel excavators, track loaders, compact track loaders, wheel loaders, skid steer loaders, backhoe loaders, crawler dozers, crawler loaders, wheel dozers, motor graders, utility cranes, and compactors. Appropriate attachments or equivalent products are included in the contract. Equipment manuals and parts catalogs are provided in hard copy and electronic copies. Engines meet current EPA Tier and emissions guidelines.
- **Forestry Equipment, 760L** – Equipment includes feller bunchers, knuckleboom loaders, forestry swing machines, and harvesters. Appropriate attachments are included in the contract. Equipment manuals and parts catalogs are provided in hard copy and electronic copies. Engines meet current EPA Tier requirements.
- **Tires and Tubes, 863A** - Tires depending on manufacturer may contain from 1.55% to 2.5% of recycled materials based on the product attributes, speed rating and performance criteria.
- **Teaching Equipment, Electricity/Electronics Courses, 924A** - Office paper, cardboard and metal enclosures have recycled content. Documentation may be provided in soft copy instead of hard copy printed materials.
- **Recycling Services for Fluorescent Lamps, Ballasts & Other Mercury Containing Devices, 926B** – Contract assists agencies and local governments with contracted disposal of discarded electronic products that are diverted from landfill disposal.

- **Electronic Equipment Recycling Services, 926C** – The State of North Carolina requires that its recycled electronics not contribute to unsafe and environmentally damaging processing practices. The purpose of this contract is to assist Agencies in complying with the State’s electronic recycling requirements by providing recycling service options for end-of-life electronic equipment, including the collection, de-manufacturing, and recycling of computer monitors, televisions, desktop CPUs, laptop computers, printers, scanners, keyboards and mice, copy machines, DVD players, VCRs, stereo systems, tape players, CD players, radios, telephones, cell phones, readers, network equipment, servers, fax machines, electronic games, and other consumer electronics generated by State of North Carolina agencies and other eligible users. Eligible contract users include county and municipal governments, local education agencies, community colleges, state universities, and other local public agencies or authorities. Some recycled products generate a revenue stream that may be used to pay for the recycling of other products. The Division of Surplus, State Surplus Property resold or recycled 595,000 pounds of computer and electronic equipment during the 2012-13 fiscal year. Recycled electronics data has not been provided for the 2013-14 fiscal year.

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

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**

Refrigerant Recovery System (filters reusable refrigerant), Recycled Carpet fiber, Recycled Paper fiber, Recycled Content Furniture (not traditional wood), Printers, Tire Recapping & Repairing Service, Uniforms, Wiping Cloths

**More Durable**

Classroom Furniture, Electronic Lamps & Ballasts, Vacuum Cleaners, Floor Polish, Grader Slope Attachment, Plastic Lumber, Mattresses, Vertical File Cabinets, Wood Case goods, Wood library furniture

**Energy Star – Reduced Energy Consumption**

Changeable Message Signs – Solar Powered, Domestic Appliances, Lighting Fixtures, Room Air Conditioners, Lamps, Traffic Signals – LED, Warning Lights - Vehicles Safety, Water Coolers

**Flow Plumbing Fixtures for Reduced Water**

**Consumption** – 0.5 GPM lavatory facet nozzles and 1.5 GPM showerheads support the Governor’s water conservation initiative during severe water restrictions throughout the state.

**Recycled Metals** – The Division of Surplus, State Surplus Property resold 1,175,000 pounds of scrap metals collected state-wide from state agencies, and local governments during the 2012-13 fiscal year. Recycled metals data have not been provided for the 2013-14 fiscal year.

**Used** - Automobiles and trucks

**Washable** - HVAC Filters, Wiping Cloths

**Refillable**

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

**Repairable**

Defibrillators, Musical Instruments, Tire Recapping & Repairing Service

**Refurbished/Rebuilt**

Medical Diagnostic Equipment & Instrumentation, Remanufactured Toner Cartridges, Scientific Equipment, Sewing Machines

**Less Toxic**

Alternative Fuel Vehicles, 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, and Motor Oil – refined, HVAC & Refrigeration Equipment – Refrigerants.