Broome County
Issue Paper #1
EPP and Recycled-Content Procurement Policies
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Section

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Issue Paper #1
Environmentally Preferable Purchasing and Recycled-Content Procurement Policies

1.1 Definition and Purpose of EPP

Environmentally preferable purchasing (EPP) is a practice that encourages communities to purchase materials and services that, in some way, are preferable to the environment and/or to human health, relative to "traditional" materials and services that serve the same purpose. EPP policies are implemented at the state, local, and federal level, as well as by individual businesses. Policies often focus on encouraging the purchase of recycled-content materials, but can also encourage the purchase of products that:

- Result in lower toxicity;
- Reduce greenhouse gas emissions;
- Are made with renewable energy;
- Contain the highest possible percentage of post-consumer recycled-content;
- Reduce air and water pollution;
- Reduce waste (e.g., by being reusable, lasting longer, or serving several functions);
- Are manufactured by suppliers who have adopted EPP and can document their supply chain and impacts of their efforts; and
- Are recyclable or compostable.

EPP policies can be implemented in part or in whole through state or local ordinances, executive orders, resolutions or policies (such as company or institutional policies). Ordinances have more "teeth" than resolutions. Policies are also often seen as less mandatory than ordinances. In some cases environmentally preferable purchasing is just one activity that supports a more broad sustainability policy. National, state and local governments as well as businesses and institutions can facilitate EPP through the use of various tools that assist local governments, residents, and businesses in identifying opportunities to "buy green."

Per Executive Order 13101[1], "environmentally preferable" means products or services that have a lesser or reduced effect on human health and the environment when

[1] Source: Office of the Federal Environmental Executive, Executive Order 13101, September 1998. http://www.ofee.gov/eo/13101.asp

compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service.

Many states and local governments have based their definition of EPP on the federal definition. The federal government sees the benefits of an EPP program to include:

- Improved ability to meet entity's environmental goals and/or ethics;
- Improved worker safety and health;
- Reduced liabilities;
- Reduced health and disposal costs; and
- Increased availability of environmentally preferable products in the marketplace.

Other potential benefits of an EPP program are:

- Reduced energy use;
- Strengthened markets for recycled materials;
- Reduced costs due to decreased use of water, energy, or due to the use of more durable items and reduced disposal costs;
- The potential to increase local reuse/recycling markets and the use of locally manufactured or remanufactured products, thus improving the local economy; and
- The opportunity to enhance an entity's image through the implementation of environmentally beneficial activities and programs.

1.2 Implementation Requirements

Implementation of EPP would require the adoption of an EPP policy – either through resolution, ordinance, executive order or a combination thereof. When considering stakeholders to include in the policy development and implementation process, it is important to remember that not all purchasing entities have knowledge about the environment, health, and the potential impacts certain materials can have on human health and the environment. Similarly, the stakeholders that have knowledge about potential environmental and health impacts of products may not know of the availability of products and performance requirements. Therefore, it would be beneficial to form a "team" of stakeholders to consider the policy language and implications. Many state and local governments form "green teams" when developing their EPP policies, to ensure that environmental, purchasing, and product expertise are all incorporated in the process. The steps typically required to implement an EPP program include:

- Inform stakeholders of intent to develop the policy;
- Solicit stakeholder input;
- Identify goals of the policy;
- Develop the policy;

- Inform stakeholders of the policy;
- Present/adopt the policy;
- Develop policy tools;
- Educate stakeholders about policy tools; and
- Evaluate the effectiveness of the policy and supporting programs (ongoing basis).

Stakeholders that the County might consider involving in the process include:

- Individuals responsible for making purchasing decisions;
- End users of products that would be considered for inclusion in the EPP program;
- Manufacturers of qualifying products;
- Individuals that are knowledgeable about the environmental and health benefits of environmentally preferable products and services;
- Local economic development specialists; and
- Individuals who are knowledgeable about the existence and suitability of environmentally preferable products and services.

1.3 Policy Considerations

There are several options the County should consider when deciding on the details of an EPP policy. They include:

1.3.1 Include Source Reduction Strategies

Many EPP policies stipulate that agencies should include waste minimization efforts when possible. Generally these policies are geared toward avoiding the consumption of natural resources, as well as cost savings. Examples include:

- Using email instead of printed correspondence when possible;
- Printing on both sides of paper;
- Streamlining forms;
- Purchasing rechargeable batteries;
- Printing reports as requested instead of anticipating demand;
- Choosing durable, long-life products (in lieu of disposable – including dishes, utensils, glasses, etc.);
- Leasing or sharing equipment that is not used frequently;
- Buying in bulk, when storage is available;
- Reducing the weight of products (e.g., using lighter weight paper when appropriate or buying cleaning products as concentrates and diluting on-site, etc.); and

- Reusing items as much as possible (such as file folders, office furniture, etc.).

There are many opportunities for agencies, offices and departments to purchase refurbished items or have items they currently own refurbished instead of purchasing new items. It is often suggested that departments consider refurbished items as long as the practice is compatible with safety, quality, and cost goals. Examples include:

- Carpet tiles – replace the soiled or worn tiles only, instead of the entire area;
- Remanufactured toner cartridges – many communities not only decrease the amount of plastic disposed, but also save money by refurbishing toner cartridges;
- Re-treaded tires instead of new tires;
- Refurbished furniture;
- Re-refined antifreeze and oil; and
- Refurbished office equipment.

It is important that equipment purchased by departments and agencies is compatible with waste minimization efforts – for example, that copy machines and printers are capable of easily printing on both sides of paper.

1.3.2 Consider Ownership Costs Instead of Initial Purchase Costs

In some cases, products and services that offer environmental benefits may appear to be more costly, however the initially higher purchase cost is offset by lower maintenance and upkeep costs and/or a longer product lifespan. One example is artificial turf, which is costly to install but can be more cost-effective when lower maintenance costs are considered. Similarly, hand dryers may be more costly to purchase than paper towel dispensers, however they eliminate the need to purchase and dispose of paper towels, as well as eliminate the labor required to re-stock the dispensers and clean-up and dispose of used paper towels. When considering ownership costs, one should consider all costs incurred during the useful life of the item, including:

- Initial acquisition costs;
- Warranty costs;
- Operation costs;
- Maintenance costs; and
- Disposal costs.

Costs for options should be compared for the same time period.

The term “lifecycle costs” refers to a more complex calculation, including costs from resource extraction, production, material use, and disposal. It is not common practice to consider lifecycle costs in EPP programs.

1.3.3 Recycled-Content Products

Most EPP policies include some type of recycled-content procurement policy. The U.S. EPA guidelines provide suggested recycled-content levels for various types of products. For example, the EPA suggests that many types of printing and writing papers (reprographic paper, offset paper, tablet paper, forms bond, envelope paper, cotton fiber paper, text and cover papers) contain 30 percent post-consumer fiber. Some types of paper (white and colored, supercalendered, machine finish groundwood, and check safety paper) should contain 10 to 20 percent post-consumer fiber. The guidelines can be found at the following website:

http://www.epa.gov/epawaste/conserve/tools/cpg/products/index.htm.

The U.S. EPA indicates that the following items are commonly purchased products that contain recycled-content:

- Carpet
- Concrete
- Engine coolants
- Office products
- Paper
- Parking stops
- Plastic lumber
- Re-refined motor oil
- Retread tires
- Toner cartridges
- Traffic cones
- Trash bags

1.3.4 Consider Attributes Beyond Recycled-Content

Several state and local governments have EPP policy directives that specifically focus on material attributes other than recycled-content (although also include recycled-content directives). Examples (some of which may overlap with each other) include:

- Pollutant releases;
- Waste generation;
- Energy consumption/efficiency;
- Depletion of natural resources;
- Potential impact on human health and environment;
- Greenhouse gas emissions;
- Recyclability;
- Durability;
- Toxic material content (for example, low-VOC, dioxin-free, chlorine-free, etc.);

- Reduced packaging;
- Reduced transportation (e.g., sourced locally);
- Made of renewable resources (including energy);
- Bio-based;
- Biodegradable;
- Carcinogen-free;
- Persistent Bioaccumulative and Toxic (PBT)-free;
- Heavy metal-free (i.e., no lead, mercury, cadmium); and
- Reduced pollutant releases.

Many state and local governments direct purchasing entities to consider some of these product characteristics when making purchasing decisions and developing request for bids (RFBs) for products and services.

1.3.5 Consider Other Departments' Specification Requirements

Specific departments often have very specific product needs. For example, in most counties and states the Department of Transportation (DOT) is required to specify products, such as aggregate, etc., to be used for a project. DOTs have expertise in the area of road and highway construction, and contractors must use what the DOT specifies in order to fulfill the requirements of the project. If a city or county wanted to incorporate the use of more recycled materials (such as recovered aggregate, asphalt containing recycled glass cullet, rubber-derived asphalt, recycled-content parking stops, etc.) they should work with the specifying agency in order to identify opportunities for rewriting specifications. Local DOTs sometimes adopt specifications from other local entities if projects have a positive history and assuming weather and soil conditions in the neighboring jurisdiction are similar. Similarly, some local jurisdictions may adopt specifications developed by the state DOT. Often state DOTs have more resources available for alternative material testing. When developing EPP specifications it is important that the needs of specific purchasing entities are incorporated into the specifications.

1.3.6 Price Preference

Many communities include a price preference into their EPP polices – e.g., such that environmentally preferable products can still be considered to be cost-effective if their price is within a certain range (usually 5 to 15 percent) of the "traditional" goods or service. According to a U.S. EPA document[2], some officials believe that price preferences can actually limit the market penetration of green products by encouraging prices for green products to remain higher than those of traditional products. The intent, however, is to provide leeway (or directive) for an agency or department to

[2] U.S. EPA, "State and Local Government Pioneers: How State and Local Governments are Implementing Environmentally Preferable Purchasing Practices," November 2000.

select a "green" product over a traditional product, even if the pricing is somewhat higher than a traditional product, due to the fact that some environmental and/or health benefit is derived from the product's use. Others cited in the EPA document indicated that they were not mandated to purchase the environmentally preferred product, so they simply made decisions based on price. In other words, only those making purchasing decisions that are committed to promoting EPP took advantage of the price preferential. Other communities indicate that they simply specify the type of product the department seeks to purchase (e.g., describing its environmentally preferable characteristics, such as low-toxicity cleaning products) and the price factor becomes irrelevant, as the lower-cost products that do not meet the other specifications can simply be disregarded.

1.3.7 Provide Clarity Regarding Potential Concerns about EPP Policy

There are concerns and fears about EPP policies from the perspective of purchasing agencies, which are discussed in more detail below. The County should consider including limitations to the EPP policy, or verbage to counteract such concerns, in the EPP Policy. For example, California's definition of EPP is very similar to the federal government's definition, however California's statute provides clarity on potential concerns about EPP. It states explicitly that EPP cannot supersede recycled-content laws, require purchase of poorly performing goods, exclude adequate competition, or require unreasonable prices or lead times. Similarly, in order to alleviate fears of "greenwashing" (the dissemination of false information pertaining to EPP issues), some states use environmental specifications developed by a third-party certifier. Pennsylvania, for example, reportedly uses Green Seal's standards when purchasing paint, degreasers, and cleaning products.[3]

1.3.8 Incentive Programs

Some local and state governments participate in or establish their own incentive or award programs to encourage the environmentally preferable purchasing decisions. Such reward programs are critical to promoting the program, stressing the benefits of the EPP policy, recognizing the hard work and successes that have stemmed from the program, and generating enthusiasm and encouragement for others to consider and implement EPP options. One existing program that the County might consider participating in is the National Association of Counties (NACo) Environmental Achievement Awards Program.

Examples of incentive programs that other communities have implemented include:

- Providing staff bonuses and an "employee of the month" program for EPP involvement (Lee County, Florida's vehicle fleet management);
- Including environmental performance as part of the annual review process for city department directors and management staff (Phoenix, AZ, pilot program);

[3] Ibid.

- "On-the-Spot" award program, for employees that recommend ways to improve environmental performance (Phoenix, AZ);
- "Lead by Example" program that provides grant funding for agencies to try new, environmentally preferable products (MA DEP and Hennepin County, MN); and
- Requiring communities to establish EPP program in order to be eligible for recycling implementation grant funds (MA DEP).

1.4 Capital and Operating Expenses

Implementing an EPP policy is not expected to require capital expenditures, however will likely require some staff time. Simply developing and implementing a policy are activities that may be part of existing staff time, requiring no additional expenditures. However, it is possible that involving stakeholders, developing tools, and possibly evaluating the policy on an ongoing basis may require additional resources, such as additional staff time, possible use of consultants, and costs associated with holding stakeholder meetings, if desired.

1.5 Education Tactics

Educating stakeholders (primarily purchasing entities) about a County-wide EPP program before the policy is implemented is critical, in order to obtain key stakeholder feedback and support. Once the policy has been adopted, multiple education tactics should be implemented in order to educate County agencies, departments, and offices regarding:

a. Requirements of the policy;
b. Expected benefits of the policy;
c. Resources available (including state purchasing contracts that local governments may be able to participate in);
d. State and County purchasing contracts;
e. Product specifications;
f. Technical assistance; and
g. Model EPP policies for companies to adopt.

Education and outreach tools can be developed to focus on particular types of products (such as cleaning products) or particular types of settings (such as an office, where multiple types of products might be discussed, such as copy and print paper, ink and toner cartridges, computers and janitorial paper, and cleaning products). Disseminating education might be done through:

- Website/Intranet/Internet (which can be used to convey various types of information as well as provide access to some of the other tools listed below);
- List serve;

- Email bulletin;
- Conferences/seminars/workshops (e.g., to inform purchasers of the policy, provide a forum for manufacturers and distributors of environmentally preferable products to interface with purchasers and perhaps demonstrate their products);
- Fact sheets (e.g., detailing requirements of the policy, alternatives to specific toxic or wasteful commodities, or industry-specific fact sheets);
- EPP product and services directory (to let purchasers of particular items know what vendors are available);
- Technical assistance (e.g., potential users/purchasers of a product may need assistance in identifying environmentally preferable options, and determining whether the product(s) will be suitable for their needs. Often state or county agencies assist in providing technical assistance to demonstrate the suitability of a product through demonstration sites, case studies or product testing, for example.); and
- Information about County or state contracts (so that individual agencies can "join in" on the state or County contracts to obtain favorable pricing).

It is suggested that, to the extent possible, all education and outreach materials be offered electronically in order to minimize waste and expenses. The primary audiences for the education and outreach would be those who make purchasing and specification decisions in County departments, offices and agencies. A secondary audience would be private businesses that wish to obtain EPP products and services. Some education tactics might be relevant to the general public – citizens who desire to minimize their environmental impact through their individual purchasing decisions. Also, it is beneficial for the County to educate businesses, institutions and individuals about the County's EPP policy and progress made with regard to the policy, so that the County's dedication to minimizing health and environmental impacts is conveyed.

1.6 Diversion Potential

There are many potential benefits to an EPP policy, as described above. While the potential to divert waste is not expected to be the primary benefit of an EPP policy, it can indeed be one of the benefits of such a policy. Waste can be diverted, for example, through the purchase of more durable or upgradeable products, purchasing goods with reduced packaging or in bulk, using locally generated materials (such as yard waste for mulch rather than disposing of it and purchasing mulch elsewhere). It can also result in the disposal of less toxic waste, which can reduce disposal costs and reduce environmental and health risks at the landfill. Some EPP policies also include waste reduction measures. For example, one of the goals of Rutgers University's "Green Purchasing Policy and Guidelines" is to "reuse packing materials and plastic bags." Another goal is to "turn used paper into scratch pads for distribution to departments on campus." Their Green purchasing policy also includes several goals to recycle specific types of items (ink and toner cartridges, fluorescent bulbs, mercury-

type bulbs, wood pallets, lead acid batteries) which increases the amount of waste the University diverts from disposal.

1.7 Case Studies

Provided below are two county EPP case studies (King County, WA and Alameda County, CA) and one state (New York) case study. Additional case studies for the states of Minnesota and Massachusetts are included in Appendix A of this paper.

1.7.1 King County, Washington

1.7.1.1 Introduction

King County, Washington, first implemented its EPP policy in 1989, in hopes of strengthening markets for newly collected recycled materials. In 1995 the program was expanded, in order to target other environmentally preferable products. The county expanded the policy to consider multiple product attributes, including:

- Toxicity;
- Durability;
- Emissions;
- Energy efficiency;
- Recycled-content; and
- Conservations of natural resources.

In addition, the policy considers:

- Price;
- Performance; and
- Availability of the product.

King County's EPP Program is mandatory for all county agencies, offices and departments, as well as contractors. Through the program, county personnel are provided with information and technical assistance to help them identify, evaluate, and purchase economical and effective environmentally preferable products and services. In 2007, the county estimates that their agencies purchased $41 million worth of environmentally preferable products and services. The largest purchases of EPP products (in terms of total expenditures) included:

- Ultra-low sulfur diesel ($22.8 million);
- Biodiesel ($8.2 million);
- Recycled-content paper and paper products ($3.7 million); and
- Computers ($3.4 million).

It is estimated that EPP purchases resulted in cost savings of $875,000 over the purchase of conventional products. Estimated cost savings include:

- Aggregates (avoided purchase costs for reuse of asphalt and concrete that are stockpiled, then used as fill material in road projects) – $300,000;
- Toner cartridges – $275,000;
- Tire re-treading – $275,000;
- Antifreeze – $17,000; and
- Plastic lumber – $10,000.

1.7.1.2 Policy Highlights

The King County's EPP Policy highlights include requirements that all departments, offices, and agencies:

- Use, and require their contractors and consultants to use, products manufactured with the maximum practicable amount of recovered material, especially post-consumer material.
- Use, and require their contractors and consultants to use, environmentally preferable products whenever cost effective and to the extent practicable.
- Establish a price-preference of up to fifteen percent (15%) for recycled paper products and up to ten percent (10%) for re-refined lubricating oil.
- Ensure that they and their contractors use recycled paper in printed material, and that it bears an imprint identifying the recycled-content of the paper, whenever practicable.
- Ensure that they and their contractors use both sides of paper sheets whenever practicable.
- May specify recycled-content at levels higher than the minimum content standards.

Under the Policy, the Purchasing Agency and Solid Waste Division are responsible for providing departments with information to facilitate their evaluation and purchase of designated products, and to inform them of their responsibilities under the policy. They are also responsible for revising minimum standards as necessary, to ensure consistency with the other government entities, ensure that EPP are designated whenever practicable, transmit minimum content standards to departments, and provide an annual report to the county council. The county departments, offices and agencies must assign staff to:

- Ensure that contracting procedures do not discriminate against recycled products without justification;
- Evaluate each designated product to determine the extent to which it may practicably be used by the agency and its contractors;

- Revise contracting procedures to maximize the specification of designated products whenever practicable;
- Compile data on the purchase of designated products by the agency and its contractors; and
- Provide evaluation results and procurement data to the Purchasing Agency by July 30 each year for inclusion in the annual report to the county council on the status of policy implementation.

1.7.1.3 Tools Utilized

In order to inform county agencies, suburban cities, and the community-at-large about opportunities to purchase environmentally preferable products, the county focuses on the dissemination of information and technical assistance. Specific tools include:

- **Educational Seminars** – The Agency provides seminars on specific opportunities for EPP.
- **Environmental Purchasing Bulletin** – The Agency produces electronic "Environmental Purchasing Bulletins" to share information about EPP products, events, contracts, etc. There are over 1,000 direct email recipients of the Bulletin. Past Bulletin topics included:
  - Greenwashing;
  - Porous Concrete;
  - Green Procurement Case Studies;
  - Natural Vegetation Management (use of goats); and
  - Hybrid Bus Purchase.

An index of past bulletins is available at the following Website:

http://your.kingcounty.gov/procure/green/bulindex.htm.

- **Waste Prevention Forum** – An online discussion group managed by the King County Solid Waste Division, and part of the National Waste Prevention Coalition.
- **Website** – Through the county's website, the Purchasing Agency shares information with county departments, offices and agencies. The Agency keeps in contact with many communities throughout the nation, and stays abreast of EPP issues through several Internet discussion groups. The website includes information about green building, EPP products, contact information for local vendors, some case study information regarding EPP products, and links to other resources for additional information. King County EPP staff also serve on the steering committee for the Responsible Purchasing Network, which has a mission to promote environmentally preferable purchasing policies.
- **Annual Report** – Agencies, Offices and Departments are required to report EPP activities, (environmentally preferable materials purchased, quantities purchased, dollar amount spent, and any cost savings realized over traditional materials) to

the Purchasing Agency by July 30. The Purchasing Agency compiles a report for the county council on the status of policy implementation. The 2007 Report is available online at http://your.kingcounty.gov/procure/green/2007annrep.pdf.

- **Technical Assistance** – The EPP Program staff provides policy development and implementation strategies to other jurisdictions, businesses, and non-profit agencies. The program staff also assists buyers and user agencies in the development of specifications and contracts, and provide technical assistance to facilitate evaluation and adoption of environmentally preferable products and applications by county agencies. In addition, the staff researches and communicates information about price, performance, availability and potential benefits of environmentally preferable products.
- **Supply Contracts** – The county negotiates contracts for EPP products and services. Local governments within the county and non-profit entities are eligible to use the contracts.

1.7.1.4 Materials Targeted

Materials that are highlighted as EPP materials include:

- Recycled-content paper;
- Remanufactured toner cartridges;
- Refined antifreeze and motor oil;
- Ultra-low sulfur diesel;
- Biodiesel fuel;
- Hybrid Vehicles;
- Bio-based oils;
- Plastic lumber;
- Compost;
- Shredded wood waste; and
- Tire re-treading services.

1.7.2 Alameda County, California (Partnering with StopWaste.Org)

1.7.2.1 Introduction

The Alameda County Waste Management Authority and Recycling Board (also known as StopWaste.Org) is a joint powers authority that is controlled by two boards. The county itself has not passed an EPP policy specifically, but has passed several ordinances and policies which relate to and encourage EPP activities. StopWaste.Org has passed their own EPP policy which governs them as a public agency, and has developed a model policy which seven of their 14 member agencies have adopted.

StopWaste.Org had been focusing on buying recycled-content products, but in 2003 made a push to further their involvement in EPP. The Agency works with their members, including the county and municipalities within the county, to help implement EPP programs, as described below.

1.7.2.2 Policy Highlights

Alameda County has adopted a vision which has five areas (one being environment and sustainability) and goals and strategies pertinent to each area. For example, one goal for county operations and services is to "Ensure that the county's operations and services are consistent and comprehensive in prioritizing environmental protection." Another goal is to "Demonstrate a commitment to environmental stewardship in county policies." The county's General Services Agency (GSA)'s comprehensive sustainability efforts include actions to:

- Fight global climate change;
- Produce clean energy and conserve energy;
- Reduce waste, reuse, recycle and compost;
- Build and operate green buildings;
- Reduce toxics; and
- Purchase alternative-fuel vehicles and environmentally preferable products.

The County's GSA has undertaken several efforts regarding EPP which have resulted in the annual purchases of over $20 million in goods annually with environmental specifications. The county sees incorporating EPP criteria in purchasing decisions (at both the county and private-sector levels) as vital to helping the county achieve their goal of 75 percent waste diversion. (The current rate of waste diversion is 50 percent.) The county indicates that they have included environmental specifications when purchasing paper, furniture, computers, janitorial supplies, and vending machines.
The county has passed several policies/legislation regarding EPP including:

- **Resolution No. 2008-213** – Resolution Establishing a Goal of 75 percent Reduction in Waste Going to Landfills by 2010 for Unincorporated Areas and Civic Operations of the County of Alameda. This is the mission of StopWaste.Org, which has been successful in getting all member agencies to pass resolutions establishing a goal of 75 percent waste reduction.
- **Green Building Ordinance** – Adopted in 2003, this ordinance states that all county projects must be built to a minimum U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Silver standard and divert construction debris from the landfill. StopWaste.Org has been successful in encouraging many member agencies to pass similar ordinances for civic projects. Some grant funding is dependent upon their passing this ordinance.
- **Persistent Bioaccumulative Toxins Resolution** – Adopted in 2002, this resolution requires elimination or reduction of PBTs, such as mercury, lead, and dioxins, through purchasing and disposal standards.

- **Bay-Friendly Landscaping Resolution and Integrated Pest Management Resolution** – Adopted in 2008 and 2001 respectively, these resolutions require a whole systems approach to pest management, where chemicals are a last resort for pest prevention, both indoors and out.

These policies are in compliance with and support the county's Climate Change Leadership Strategy and the county's Strategic Vision.

Highlights of the Waste Reduction Resolution include:

- The Community Development Agency is to provide practicable assistance to local waste and recycling service providers to help them reach the 75 percent goal in unincorporated areas;
- The Board of Supervisors directs the General Services Agency to develop strategies to achieve the 75 percent goal for county operations in cooperation with all employees and agencies, which will be measured through internal inventories;
- All agencies will report annually on their efforts to minimize waste generation and promote recycling within their agencies and for services provided to them by outside contractors;
- County employees are expected to recycle and reuse all materials for which recycling programs are available, and consider the full lifecycle of products when using materials; and
- The county will partner with StopWast.Org, recycling companies, local businesses, and sustainability advocates to strengthen the county's economy by stimulating sustainable local enterprises that use discarded products and to develop strategies to advance "upstream" waste prevention strategies such as product redesign, process re-engineering, and low-impact lifestyles.

The ultimate goal of the resolution is for the county to review adopting a Zero Waste goal once the 75 percent goal is achieved.

1.7.2.3 Tools Implemented

StopWaste.Org's website, www.stopwaste.org, provides many resources that are well-suited for member agencies as well as private businesses. They may also benefit other local governments that are not agency members and provide additional assistance. The resources provided by StopWaste.Org include:

- **Product Guides** – The county has developed specific product guides and vendor contact information for specific types of EPP products, including:
  - Compostable food service and kitchen products; and
  - Recycled paper.
- **Fact Sheets** – The county has published fact sheets regarding different types of materials that can be considered in an EPP Program, and provides information regarding what to look for in the product (e.g., toxicity level, percent post-consumer content, etc.) and specifications. Several fact sheets appear to be county-specific (e.g., "How to Purchase Recycled Paper in Alameda County"),

however even those fact sheets contain information of value to those located outside the county.

- **Model Policy –** The county has developed a model policy that is available online. The policy is intended to be used by local governments and businesses. This Model Policy is provided as Appendix B to this report.
- **Guide to Green Maintenance and Operation** – This publication describes how and why to implement green maintenance and operation practices. Specific topics discussed include lighting, paint, flooring, furniture, appliances, water-efficient products, mechanicals (HVAC maintenance), janitorial cleaning and supply products, and landscaping.
- **Technical Assistance** – StopWaste.org provides technical assistance to businesses and agencies as well as municipal governments to help them identify and implement strategies to implement EPP policies and minimize waste.
- **Information about State and Other Programs** – StopWaste.Org provides information about upcoming state and regional conferences and events relating to EPP and often pays registration fees for member agencies. One example is a green building conference, West Coast Green. Another example is partnering with the Association of Bay Area Governments, a nine-county organization that will host an EPP workshop in the spring. StopWaste.Org will help sponsor the event and will pay the registration fee for member city purchasers.
- **Workshops –** From time to time, StopWaste.Org will host workshops for member agencies and private businesses where EPP vendors can discuss the benefits of their products to potential products. Past products highlighted have been rubber sidewalks and green building products.

In addition to the StopWaste.Org activities, the county develops county contracts that support EPP. In many cases member cities can be included in the contract.

1.7.3 The State of New York

1.7.3.1 Introduction

New York's governor signed Executive Order No. 4, "Establishing a State Green Procurement and Agency Sustainability Program," in April 2008. The Order directs state agencies, public authorities and public benefit corporations to "green" their procurements and to implement sustainability initiatives. The Order established an Interagency Committee on Sustainability and Green Procurement that is co-chaired by the Commissioner of General Services and the Commissioner of the Department of Environmental Conservation. The Interagency Committee is charged with identifying an annual list of product categories and specific products and services for which specifications will be developed and issued for greener procurements. The Committee is also charged with establishing goals for reductions in the amount of paper used and solid waste generated, and with the development of coordination, reporting and training programs to support agency sustainability efforts. The final list of product and service categories, issued in September 2008, includes:

Electronics/Appliances:

- Desktop computers
- Laptop computers
- Copiers
- Room air conditioning
- Refrigerators
- Washers (domestic and commercial)
- Vacuum cleaners
- Dishwashers (domestic and commercial)
- Printers (network and multifunction)

Transportation:

- Traffic safety equipment
- Traffic Paint
- Glass Beads
- Treated road salt
- Passenger vehicles
- Aggregate for road construction
- Asphalt mixes
- Concrete
- Engine block heaters
- Re-refined motor oil
- Re-refined hydraulic oil
- Traffic message boards

Office and Building Operations:

- Toner cartridges
- Printing services
- Carpet
- Fluorescent lamps (compact and traditional)
- Interior paint
- Drinking water fountains
- Pest management
- Cleaning products
- Recyclables collection and disposal service
- Turf management

In addition, there have been additional policies passed that relate to EPP. They include:

- Executive Order Number 142, "Establishing New Waste Reduction and Recycling Initiatives for State Agencies," which was passed in 1991; and
- Executive Order Number 134, "Directing State Agencies to Reduce the Impact of Cleaning of State Facilities," which was passed in 2005.

The New York State Department of Transportation (NYSDOT) also has a Solid and Hazardous Waste Reduction Policy in place, which was implemented in 1999. The policy expresses DOT's commitment to reducing waste and pollution by:

- Source reduction (eliminating or reducing the volume and toxicity of waste through good operating practices, product substitution, and procedure substitution);
- Reuse and Recycling (reusing material for its original purpose, or recycling when reuse is not possible);

- Using recycled-content products in all DOT projects "where reasonable and feasible;" and
- Implementing a preferred management hierarchy for waste management. The hierarchy is:
    - Source reduction;
    - Recycling;
    - Energy recovery;
    - Treatment; and
    - Disposal.

The types of programs implemented by NYSDOT that support the DOT's EPP Policy include the use of:

- Environmentally friendly solvents for cleaning pavement-marking painting equipment;
- Eliminating the use of chlorinated solvents (e.g., for degreasing);
- Using reduced VOC traffic marking and bridge paints;
- Reducing the use of herbicides;
- Reducing the use of salt;
- Purchasing recycled products such as:
    - Paper;
    - Lead-acid batteries;
    - Re-tread tires;
    - Antifreeze;
    - Lubricating oil; and
    - Plastic cones.

1.7.3.2 Policy Highlights

Highlights of Executive Order Number 4 include:

- Establishes an interagency committee on sustainability and green procurement.
- Charges the Committee with selecting a minimum of three "priority categories" and products and services within those priority categories for which the Committee will develop "green procurement lists." The Committee is directed to focus on goods and services that will:
    - Reduce or eliminate the health and environmental risks from the use or release of toxic substances;
    - Minimize risks of discharge of pollutants into the environment;
    - Minimize the volume and toxicity of packing;

  - Maximize the use of recycled-content and sustainably-managed renewable resources; and
  - Prove other environmental and health benefits.
- Charges the Committee with developing procurement specifications and new solicitations for priority commodities, services and technology. The Committee is to consider the specific product attributes, including reduction of greenhouse gases, waste reduction, recyclability, durability, and others.
- Charges the Committee with establishing specific waste reduction goals and strategies.
- Stipulates that each state agency and authority shall develop and implement a sustainability and environmental stewardship plan.
- Stipulates that all copy paper, janitorial paper and other paper supplies purchased by each State agency or authority shall be composed of 100 percent post-consumer recycled-content to the maximum extent practicable, and shall be chlorine-free to the extent practicable.
- Stipulates that all public agencies and authorities shall use 100% post-consumer recycled paper for publications, to the extent practicable, or non-recycled-content should be from sustainably-grown trees.
- Directs state agencies and authorities to rely on and use the procurement lists and specifications issued by the Committee when developing new solicitations and contracts for the procurement of commodities, services and technology, unless there are cost or function issues or a compelling emergency.
- Directs state agencies and authorities to implement effective programs to source separate recyclable materials, to the extent practicable, as well as waste reduction programs, and to use locally available compost, mulch and soil amendments from recovered materials and recovered materials in construction.
- Stipulates that State agencies and authorities must assign an employee to serve as a sustainability and green procurement coordinator.
- Directs that the Committee shall design and implement training and outreach programs for coordinators.
- States that the Committee must develop a format for a progress report to be used by State agencies and authorities.
- States that each state agency and authority shall annually submit a progress report to the Committee describing the agency/authority's efforts and progress regarding green procurement, waste reduction, etc.
- Stipulates that the Committee must submit a report to the Governor each year compiling the information submitted by state agencies pursuant to Executive Order 4.
- Calls for the formation of a Sustainability and Green Procurement Advisory Council, consisting of 11 members appointed by the Governor who have

experience in the fields of green procurement, public health, waste prevention and recycling, energy efficiency, workplace safety, labor relations, environmental protection, environmental justice, or chemical manufacturing.

1.7.3.3 Tools Utilized

New York State has utilized the following tools in order to implement their Green Procurement Policy:

- **Development of Product Specifications** – The Committee has developed specifications for purchasing many priority materials. Three specifications have been finalized (computers, engine block heaters, and passenger vehicles). Several others are in draft form.
- **DEC Green Schools Program** – Provides resources (including grants) and information that allows schools to implement actions to be more "green." Assistance is available for pest management, toxics reduction, solid waste reduction and recycling, and stormwater management.
- **Recognition and Awards Programs** – NY DEC has a Green Schools Awards Program which rewards schools for implementing exceptional environmental programs. In addition, the DEC sponsors a NYS Environmental Excellence Awards Program which recognizes businesses, schools, organizations, individuals and others for "improving and protecting New York State's environment.
- **Roundtable Discussions** – NY DEC hosted a series of roundtable discussions in 2008 about chemicals. Key topics included but were not limited to: moving away from chemical-by-chemical approaches, prioritizing chemicals for evaluation, maximizing information sharing, promoting green chemistry and considering substitutions and restrictions for hazardous chemicals.
- **NYSDOT GreenLITES Program** – This NYSDOT program recognizes transportation project designs that incorporate a high level of environmental sustainability. GreenLITES (Leadership in Transportation and Environmental Sustainability) is a project rating system, similar to the USGBC's LEED system. Projects are rated based on the extent to which they incorporate sustainable design choices. This is primarily an internal management program for NYSDOT to measure performance, recognize good practices, and identify and improve where needed. The program also serves to provide the department with a way to demonstrate to the public how NYSDOT is advancing sustainable practices.

There have been no annual reports submitted to the governor to date regarding Executive Order Number 4.

1.8 Addressing Stakeholder Concerns

Stakeholder concerns regarding EPP policies may include:

- Lack of familiarity with the use of many environmentally preferable products, and how to specify them effectively, or apply them as substitutes for more traditional materials;

- Fear that the costs associated with EPP purchases will be higher than the costs associated with traditional materials;
- Fear that quality of recycled-content products may be inferior or lack standards and specifications;
- Greenwashing – the dissemination of false information pertaining to EPP issues; and
- The fear of overly onerous data collection.

Means of addressing these issues are discussed below.

1.8.1 Lack of Familiarity

The marketplace is continuously changing. There are new products and new versions of products constantly being developed. The Broome County Division of Purchasing or other County staff can facilitate the conveyance of knowledge about such products via the Internet, list serves, email lists, etc. There are many organizations and list serves in existence that share information on such topics, and could serve as a valuable resource to Broome County. Several are listed in Section 3.10 - "Resources" of this paper. In addition, many government entities, as described in the case studies, have implemented programs that encourage and assist agencies with learning about and purchasing EPP products. They include:

- Workshops/vendor conferences;
- Roundtable discussions;
- Technical assistance to demonstrate or test the suitability of a product or product type;
- Development of case studies; and
- "Before You Buy" programs and other grant programs to pay for or partially pay for the product.

1.8.2 Costs

Some environmentally preferred products and services may be more costly than "traditional" products and services, however some actually result in a cost savings. For example, King County, Washington, actually saved money over purchasing "traditional" materials through its use of:

- Reused aggregates;
- Refurbished toner cartridges;
- Tire re-treading (versus purchasing new tires);
- Antifreeze (re-refined versus new); and
- Plastic lumber.

In some cases, lifetime cost analyses are more accurate means of assessing costs than simply considering purchasing costs. For example, synthetic turf fields may cost more to install, initially, however they are less costly to maintain over time, so the lifecycle cost analysis may be favorable. Similarly, plastic lumber may be more costly initially, but due to its durability and lack of maintenance, can be more cost-effective in the long run.

It is also important that EPP policies be implemented with cost-effectiveness in mind. While some communities' EPP policies provide a cost preferential for specific material types (for example, King County provides a cost preferential of 15 percent for recycled-content paper, and 10 percent for re-refined motor oil), other communities provide a cost preferential for all types of commodities. In some emerging markets product manufacturers are not always adept at identifying the needs of potential customers, marketing, and distributing products. The Purchasing Agency or Department, in some cases, can help facilitate these activities through conferences and workshops that bring product manufacturers and purchasers (as well as potential purchasers) together to share information and experiences.

In California, the California Integrated Waste Management Board (CIWMB) states that EPP = Environment + Price + Performance. As the "Price" component of this equation, the CIWMB acknowledges that "EPP is best value. When a product creates too much pollution this impact is a cost to those who have to clean it up or get sick from it. The lowest price isn't necessarily the lowest cost. That is what EPP tries to sort out." In other words, the economic externalities associated with "traditional materials" are not always considered in the purchase price.

1.8.3 Product Quality

Broome County once again can look to other communities for information regarding types of products and their quality. Some purchasers may be familiar with a prior "generation" of a product, and may be unaware of changes in manufacturing environmentally preferable products that have taken place. Further, Broome County may be able to borrow language regarding product specifications from other communities to help ensure that the products meet their needs.

Some manufacturers of environmentally preferable products have begun to see the value of third-party standards and testing, and are engaging in developing standards and having independent laboratories conduct testing on their products. The County could also help educate departments about the successful use of certain products by researching what has been used with success in other counties and states, and by developing those into case studies. Similarly, as described above, the County might also develop a pilot test for a product or product type.

1.8.4 Greenwashing

Greenwashing is a deceptive use of green public relations or green marketing. As the demand for "environmentally preferable" products has grown, so has the need to use caution when evaluating manufacturers' claims regarding the environmental benefits

of their products or services. Some specific types of greenwashing to be aware of include:

- Fluffy yet meaningless language – language that sounds "green" but has no real meaning (for example, "eco-friendly," "green" and "environmentally sound");
- Overly scientific language, that is not understandable;
- Pictures that provide a "environmentally friendly" feeling with no real connection to the product or service;
- Statements that give the appearance of a third-party endorsement when one does not actually exist;
- Focusing on a small benefit when larger, more significant negative environmental impacts exist; and
- Making claims without providing evidence.

Products, companies and claims should be researched using resources and organizations that aim to safeguard against false claims regarding environmental benefits. Some resources include:

- The Green Washing Index (EnviroMedia and the University of Oregon) http://www.greenwashingindex.com/index.php
- StopGreenwashing.org http://www.stopgreenwashing.org/
- Greenpeace http://stopgreenwash.org/
- The U.S. Green Building Council (USGBC) http://www.usgbc.org/

Also, sharing information on list serves and through email and reading industry trade journals are other means of becoming aware of false "green" claims. Also, before entering into a contract with a manufacturer, it is important to conduct research. Read the company's annual report, interview other purchasers, and tour a manufacturing facility, if possible.

1.8.5 Overly Onerous Reporting Requirements

While it can seem time consuming and costly to track data on EPP programs, it is important to track certain information to garner support and understand the progress that is being made. Also, analyzing information can point out specific strengths and weaknesses within the EPP program. To the extent possible, it is best to incorporate tracking within the existing system – for example, in some communities a certain two-digit number preceding the entry indicates that the item is an EPP purchase. In Minnesota, for example, the Department of Administration provides specific codes where EPP purchases can be tracked on an ongoing basis. This made it unnecessary for Authority of Local Purchase (ALP) buyers to submit quarterly reports. At the end of the year, it is relatively simple to track EPP purchases and tally corresponding cost

savings and expenditures. Up-front planning with the entity's accounting system will help ensure that reporting is as automatic as possible.

1.9 Benefits and Drawbacks

The implementation of an EPP policy has benefits as well as drawbacks (real or perceived), as outlined below.

1.9.1 Benefits

- Adopting a procurement policy that gives preference to recycled-content products, reducing toxicity, and reducing consumption represents an opportunity for the County to lead by example in their recycling effort, thus conveying to the community and agencies the County's dedication to recycling and reducing environmental and health impacts.
- Purchasing post-consumer recycled-content materials encourages markets for recycled products.
- Adopting a procurement policy that gives preference to products with other environmental attributes (such as lower toxicity) can:
  - Reduce liabilities;
  - Increase employee health; and
  - Increase environmental health.
- Including provisions for more durable goods, reduced packaging (or buying in bulk) can lead to increased waste diversion, thus reducing disposal costs.
- Including provisions for recycling or reducing the use of certain goods can lead to increased waste diversion, thus reducing disposal costs.
- Including provisions for products and services that use fewer resources (such as water and energy) saves natural resources and expenditures on those resources.
- It is expected that no capital expenditures would be required to develop such a policy.

1.9.2 Drawbacks

- In meeting the goals and requirements of an EPP, the County may be required to change vendors and products in some cases.
- The County will likely spend resources initially, in the form of staff time, developing an EPP policy.
- The County may spend resources on an ongoing basis, in the form of staff time, conferences, etc., in developing tools to facilitate the implementation of an EPP policy.

- The County may spend resources on an ongoing basis, in the form of staff time and potentially software upgrades, to develop tools to track progress in EPP programs.
- Some departments may see tracking and reporting the amount and type of EPP products purchased as burdensome.

1.10 Resources

There are many resources available on EPP and recycled-content products. Provided below are links to websites for accessing some of these resources.

Alameda County, California, Waste Diversion Resolution.
http://www.acgov.org/gsa/75_Waste_Diversion_Resolution_06-2008.pdf.

Alameda County, California, Strategic Vision.
http://www.acgov.org/pdf/strategicvision.pdf.

The California Integrated Waste Management Board, EPP Best Practices.
http://www.green.ca.gov/EPP/Introduction/default.htm.

The Center for a New American Dream (website/organization that "helps Americans consume responsibly to protect the environment, enhance quality of life, and promote social justice." – includes the "Responsible Purchasing Network" listed below, and other campaigns and programs).
http://www.newdream.org/

Electronic Product Environmental Assessment Tool (EPEAT) (a tool for evaluating the environmental performance of electronics throughout their life cycles).
http://epeat.net/.

The Green Meetings Industry Council (GMIC) (a non-profit organization that aims to transform the meeting industry through sustainability).
http://www.greenmeetings.info/.

Inform, (a non-profit agency that disseminates information about environmental issues, including EPP-related topics).
http://www.informinc.org/.

King County, WA, Environmental Purchasing Program.
http://your.kingcounty.gov/procure/green/index.htm.

King County, WA, EPP Annual Report, 2007.
http://your.kingcounty.gov/procure/green/2007annrep.pdf.

King County, WA, EPP Bulletins.
http://your.kingcounty.gov/procure/green/bulindex.htm.

Massachusetts DEP, Environmentally Preferable Purchasing Guide.
http://www.mass.gov/Aosd/docs/EPP/VOL_26_SEC_2_OCT_2007.doc.

Massachusetts DEP, EPP Product Fact Sheets (in development, please check back) and Buyer Update Newsletters.
http://www.mass.gov/?pageID=osdsubtopic&L=4&L0=Home&L1=Buy+from+a+Contract&L2=Environmentally+Preferable+Products+(EPP)+Procurement+Program&L3=Download+Publications%2c+Reports+and+Tools&sid=Aosd.

Minnesota Pollution Control Agency, 2006 Biennial Report to the Legislature.
http://www.pca.state.mn.us/publications/reports/lrp-gen-3sy-07.pdf.

Minnesota Pollution Control Agency, "Buying Green," (quarterly newsletter about EPP).
http://www.pca.state.mn.us/oea/epp/newsletter.cfm.

Minnesota Pollution Control Agency, EPP Guide.
http://www.rethinkrecycling.com/government/eppg/tools.

Minnesota Pollution Control Agency, Recycled Products Directory (provides information about products made from recycled materials).
http://www.pca.state.mn.us/oea/rpdir/index.cfm.

National Association of Counties (NACo) (award programs, case studies and peer advice).
http://www.naco.org/

National Institute of Government Procurement (has a "Green Knowledge Community" available to members, which can provide additional resources regarding EPP policies).
http://www.nigp.org/communities/about.htm.

Natural Resources Defense Council, (information regarding company-wide EPP policies).
http://www.nrdc.org/enterprise/greeningadvisor/gpp-purch_policy.asp

New York State Department of Transportation, GreenLITES Program.
https://www.nysdot.gov/programs/greenlites.

New York State Department of Transportation, Solid and Hazardous Waste Reduction Policy.
https://www.nysdot.gov/divisions/engineering/environmental-analysis/repository/wastered.pdf.

New York State Department of Transportation, Specifications.
https://www.nysdot.gov/main/business-center/engineering/specifications/2008-standard-specs-us.

New York State Office of General Services, Green Procurement Information.
http://www.ogs.state.ny.us/ExecutiveOrder4.html.

New York State, Executive Order Number 4, "Establishing a State Green Procurement and Agency Sustainability Program."
http://www.ogs.state.ny.us/EO4/pdf/FinalGreenProcurementEO.pdf.

Responsible Purchasing Network (an international network of buyers dedicated to socially responsible and environmentally sustainable purchasing).
http://www.responsiblepurchasing.org/.

Rutgers University, Green Purchasing Policy and Guidelines. http://purchasing.rutgers.edu/green/images/Rutgers%20Green%20Purchasing%20Policy.pdf.

Solid Waste Management Coordinating Board's (SWMCB) Environmentally Preferable Purchasing Guide (developed by the SWMCB which serves six metropolitan counties in the Minneapolis-St. Paul, Minnesota region). http://www.rethinkrecycling.com/government/eppg.

Solid Waste Management Coordinating Board's Sample EPP Resolution. http://www.rethinkrecycling.com/government/eppg/tools/sample-epp-resolution.

StopWaste.Org, Compostable Food Service Product List. http://www.stopwaste.org/docs/bioplastics_products-distrib.pdf.

StopWaste.Org, EPP fact sheets (topics include: Environmentally Preferable Cleaning Products, Recycled Paper, Toner Cartridges, Janitorial Paper Supplies, Park and Recreation Products, Environmentally Preferable Traffic Control Products, Using Rechargeable Batteries, and Biodiesel Fuel Use in Heavy Duty Vehicles). http://www.stopwaste.org/home/index.asp?page=372.

StopWaste.Org, Environmental Purchasing Links (provides links to information regarding specific products and product types geared for purchasers as well as consumers from the general public). http://www.stopwaste.org/home/index.asp?page=532.

StopWaste.Org, EPP Implementation Guide. http://www.stopwaste.org/home/index.asp?page=468.

StopWaste.Org, Guide to Green Maintenance and Operations. http://www.stopwaste.org/docs/gbmg-dec-20-07ltr.pdf.

U.S. EPA, Comprehensive Procurement Guidelines. http://www.epa.gov/epawaste/conserve/tools/cpg/index.htm

U.S. EPA, Environmentally Preferable Purchasing. http://www.epa.gov/epp/index.htm

U.S. EPA, "State and Local Government Pioneers: How State and Local Governments are Implementing Environmentally Preferable Purchasing Practices," November 2000. http://www.epa.gov/epp/pubs/case/statenlocal.pdf

U.S. EPA, "Federal Pioneers: Environmentally Preferable Purchasing Success Stories From the Federal Government," September 2000. http://www.epa.gov/epp/pubs/case/FedPioneers.pdf

U.S. EPA, Green Meetings Information. http://www.epa.gov/oppt/greenmeetings/.

Appendix A
Additional EPP Case Studies

A.1 State of Minnesota

A.1.1 Introduction

The Materials Management Division and Minnesota Pollution Control Agency (MPCA) are committed to helping state agencies purchase environmentally preferable products that:

- Contain fewer toxic materials;
- Minimize waste;
- Contain recycled content;
- Conserve energy and water; and
- Contain plant-based materials.

The MPCA is the lead agency in promoting EPP.

A.1.2 Policy Highlights

Through statute and executive order, the state of Minnesota has mandated that state agencies must purchase certain materials that contain recycled content, as well as reduce toxicity by purchasing specific "less toxic" products. For example:

- **Recycled Copier Paper** – All copier paper purchased by state agencies must contain at least 10 percent post-consumer recycled material (per Chapter 16B.122, "Purchase and Use of Paper Stock; Printing").
- **All Other Recycled Products –** State agencies must buy products made with recycled material when the price does not exceed comparable non-recycled products by more than 10 percent (per Chapter 16B.121, "Purchase of Recycled, Repairable, and Durable Materials").
- **Less Toxic and Reusable Products –** State agencies shall put special emphasis on using products that are less toxic and generate less waste. State agencies are to promote the waste hierarchy by selecting products that reduce the quantity and toxicity of materials in waste. The commissioner, and state agencies when purchasing under delegated authority, in developing bid specifications, must also consider the extent to which a commodity or product is durable, reusable, or recyclable and marketable through the state resource recovery program and the extent to which the commodity or product contains post-consumer material (per Chapter 16B.121, "Purchase of Recycled, Repairable, and Durable Materials").

- **Mercury Thermometers Prohibited –** Effective January 1, 2002, thermometers that contain mercury can no longer be sold or distributed in the state. The law covers mercury-based fever thermometers, as well as those used for outdoor temperature readings and cooking (per Chapter 116.92, "Mercury Emissions Reduction").
- **Mercury Emissions Reduction, Product Bans, and Disposal Bans –** Minnesota has taken a number of steps to keep mercury out of the environment, such as banning the sales of games, toys, and clothing containing mercury; and prohibiting the disposal of mercury-containing fluorescent lamps, thermostats, thermometers, switches, appliances, and medical or scientific instruments (per Chapter 116.92, "Mercury Emissions Reduction").
- **Printing Guidelines –** Whenever practicable, public entities shall comply with the printing guidelines by choosing recyclable paper, reducing paper waste and selecting less toxic inks (per Chapter 16B.122, "Purchase and Use of Paper Stock; Printing").
- **Implementation of Pollution Prevention and Resource Conservation by State Governments –** This Executive Order called for the formation of an Interagency Pollution Prevention Advisory Team. One of their tasks – state agencies shall encourage pollution prevention through their purchasing policies and specifications. (Per Executive Order – 99-4).

A.1.3 Tools Utilized

The MPCA has developed several tools to assist local governments, state agencies and businesses to implement the state's EPP policy. Some tools serve multiple purposes, taking a somewhat holistic approach and educate about and promote a wide audience about multiple environmental issues. The tools include:

- **EPP Guide** – This guide provides information about environmentally preferable products, vendors of products, and product specifications.
- **Recycled Products Directory** – An online recycling markets directory is available to inform purchasers of recycled-content products made in Minnesota.
- **Recycling Markets Directory** – An online directory that helps Minnesota businesses and recyclers find companies that collect or accept recyclable materials. This directory also helps brokers, processors and manufacturers identify sources of recycled feedstocks that can be used to make new products containing recycled materials.
- **Living Green Expo –** The Living Green Expo is a two-day event that showcases products, services, and activities that help people "live green." During the event in 2006, there were over 19 major sponsors, 14,000 visitors, and 2,200 visitors made a commitment to take environmental action. The Expo is geared more toward individuals and families than governmental entities.
- **Healthy Sustainable Schools** – The MN Pollution Control Agency helps schools incorporate sustainable practices through grant assistance. In 2006, three schools

received this assistance enabling them to implement programs and practices that resulted in reducing waste, toxicity, pollution, and increasing energy efficiency.

- **Governor's Awards for Pollution Prevention** – Each year outstanding environmental projects and programs throughout the state are recognized through the Governor's Awards for Excellence in Waste and Pollution Prevention. Awards are presented to businesses and non-profit organizations. Another award program, the MnGREAT Awards program, recognizes public organizations and agencies.
- **Buy Green Power Campaign** – The MPCA works with the Department of Commerce and others to encourage consumers to support clean energy by purchasing renewable energy from their electrical utility provider. The MPCA is modeling environmental stewardship by making a three-year commitment to purchase 450,000 kilowatt hours per year of green power at the St. Paul office, matching the new green power purchases of its employees.
- **The Eco Experience** – A 12-day exhibit at the Minnesota State Fair (co-sponsored by the Fair and the MPCA) partners with more than 140 businesses to present environmental messages to the public at the 12-day Minnesota State Fair. Highlights include a wind turbine, an "eco-home," a working hydrogen fuel cell, a waste reduction exhibit, wind and solar demonstrations, as well as water monitoring demonstrations.
- **MN Technical Assistance Program (MnTAP)** – The Minnesota Technical Assistance Program, which has been in existence for more than 20 years, has focused on pollution prevention assistance to manufacturing and service industries. Industry specialists help identify efficiency gains and material/ chemical substitutions that result in less risk. Outcomes include reduced spending, waste, water consumption, waste disposed, and energy consumption.

  MnTAP also operates the Minnesota Materials Exchange program which is a free service that links organizations that have reusable goods they no longer need to those who can use them. By providing a business reuse network, the Materials Exchange program helps prevent usable materials from becoming waste. In the last five years, the Materials Exchange program has helped businesses save over $7 million and exchange over 30 million pounds of material.
- **Involvement in EPEAT** – The MPCA staff has been instrumental in the development and implementation of the national Electronic Product Evaluation and Assessment Tool (EPEAT). This tool enables purchasers to evaluate and select information technology products that meet their green standards – using less energy, incorporating recycled content, and incorporating other environmental attributes. Agency staff worked with the state Office of Enterprise Technology to incorporate EPEAT into procurement standards that are now available for public entity purchasing in Minnesota, including college and university system purchasing.
- **"Buying Green" Newsletter** – The MPCA develops a quarterly newsletter that is distributed via email and through the MPCA website to interested parties. The

newsletter aims to inform governmental and institutional purchasers about EPP opportunities, and provides a forum for communities, agencies and institutions to share their successes with regards to EPP activities. The newsletter also provides an opportunity for MPCA to share additional EPP resources.

- **Develop Specifications** – The MPCA works with the MN Materials Management Department to develop specifications for environmentally preferable products.
- **Workshops** – When the state budget allows, the MPCA coordinates workshops which are held in different counties to provide an opportunity for vendors and purchasers to come together and share information.
- **Cooperative Purchasing** – The Department of Materials Management allows counties, cities, schools and certain non-profits to participate in state purchasing contracts.

A.2 The Commonwealth of Massachusetts

A.2.1 Introduction

The primary goal of Massachusetts' Recycled Materials Procurement Plan is to use the Commonwealth's purchasing power to reduce the environmental and public health impact of state government and foster markets for EPPs. The Program is a collaborative effort among the Executive Office of Environmental Affairs, the Department of Environmental Protection (DEP) and the Operational Services Division. The Program was launched in May 1988 with the issuance of Executive Order #279, which directed the state's Purchasing Agent to develop a Recycled Materials Procurement Plan, implement a statewide buy recycled program, and establish regulations to guide the program. This effort to establish detailed direction for recycled product procurement was one of the first in the nation. Since that time, additional executive orders have been passed, and procurement reform took place in 1997, promulgating new purchasing regulations which included environmental guidelines. Executive Order 438 established a state sustainability program in 2002. The most recent EPP-related policy passed is Executive Order Number 484, which is described below.

A.2.2 Policy Highlights

Executive Order Number 484 – Established in April 2007. "Leading by Example – Clean Energy and Efficient Buildings." The program encompasses all of Massachusetts' executive agencies and public institutions. The Order establishes higher energy efficiency standards in the operation of state buildings, setting short and long-term targets and goals to advance clean energy and efficiency, and reduce greenhouse gas emissions that contribute to global warming. It promotes sustainability activities within state government including waste reduction, water conservation, green buildings, alternatives fuels, efficient transportation, and recycling.

A.2.3 Tools Utilized

- **EPP Products Guide and State Contracts** – Massachusetts has developed a guide to provide information about environmentally preferable products purchased by the state, and for which state contracts exist.
- **EPP Buyer Update** – The Buyer Update is an electronic newsletter that informs citizen consumers and purchasing agents about news in the EPP arena.
- **Fact Sheets** – The MA DEP is in the process of developing two-page fact sheets on specific products and product types.
- **MA Lead By Example Program Award Program** – Recognizes outstanding efforts among Commonwealth agencies, public higher education institutions, and municipalities.
- **MA Environmental Purchasing and Sustainability Awards Program** – Recognizes outstanding efforts in purchasing EPPs and implementing other sustainable practices among Commonwealth public sector entities and businesses (stems from Buy Recycled Awards program).
- **Annual EPP Vendor Fair and Conference** – The annual Vendor Fair (typically held in October) brings together vendors of EPP products and potential purchasers.
- **"Try Before You Buy" Program** – In previous years (FY 1997 through FY 2006) funding was made available to assist purchasing agencies and departments in "trying out" a new recycled product or innovative technology. The objective was to gather information concerning product performance and acceptability, and to promote the acceptance of environmentally preferable products that have widespread applications throughout the state.

Appendix B
Model Green Purchasing Ordinance
StopWaste.Org

ENVIRONMENTALLY PREFERABLE PURCHASING
MODEL POLICY - REVISED—9/26/06

PREPARED BY STOPWASTE.ORG
(ALAMEDA COUNTY WASTE MANAGEMENT AUTHORITY
AND SOURCE REDUCTION & RECYCLING BOARD)

1.0 STATEMENT OF POLICY

It is the policy of [organization] to:

- institute practices that reduce waste by increasing product efficiency and effectiveness,
- purchase products that minimize environmental impacts, toxics, pollution, and hazards to worker and community safety to the greatest extent practicable, and
- purchase products that include recycled content, are durable and long-lasting, conserve energy and water, use agricultural fibers and residues, reduce greenhouse gas emissions, use unbleached or chlorine free manufacturing processes, are lead-free and mercury-free,
  and use wood from sustainably harvested forests.

2.0 PURPOSE

This Policy is adopted in order to:

- conserve natural resources,
- minimize environmental impacts such as pollution and use of water and energy,
- eliminate or reduce toxics that create hazards to workers and our community,
- support strong recycling markets,
- reduce materials that are landfilled,
- increase the use and availability of environmentally preferable products that protect the environment,
- identify environmentally preferable products and distribution systems,

- reward manufacturers and vendors that reduce environmental impacts in their production and distribution systems or services,
- create a model for successfully purchasing environmentally preferable products that encourages other purchasers in our community to adopt similar goals.

3.0 SPECIFICATIONS

3.1 Source Reduction

3.1.1 [Organization] shall institute practices that reduce waste and result in the purchase of fewer products whenever practicable and cost-effective, but without reducing safety or workplace quality.

3.1.2 [Organization] shall purchase remanufactured products such as toner cartridges, tires, furniture, equipment and automotive parts whenever practicable, but without reducing safety, quality or effectiveness.

3.1.3 [Organization] shall require all equipment bought after the adoption of this policy to be compatible with source reduction goals as referred to in this section (3.1), when practicable.

3.1.4 All buyers shall consider short-term and long-term costs in comparing product alternatives, when feasible. This includes evaluation of total costs expected during the time a product is owned, including, but not limited to, acquisition, extended warranties, operation, supplies, maintenance, disposal costs and expected lifetime compared to other alternatives.

3.1.5 Products that are durable, long lasting, reusable or refillable are preferred whenever feasible.

3.1.6 [Organization] requests vendors to eliminate packaging or use the minimum amount necessary for product protection, to the greatest extent practicable.

3.1.7 Packaging that is reusable, recyclable or compostable is preferred, when suitable uses and programs exist.

3.1.8 Vendors shall be encouraged to take back and reuse pallets and other shipping and packaging materials.

3.1.9 Suppliers of electronic equipment, including but not limited to computers, monitors, printers, and copiers, shall be required to take back equipment for reuse or environmentally safe recycling when [organization] discards or replaces such equipment, whenever possible.

3.1.10 [Organization] shall consider provisions in contracts with suppliers of non-electronic equipment that require suppliers to take back equipment for reuse or environmentally safe recycling when [organization] discards or replaces such equipment, whenever practicable.

3.1.11 All documents shall be printed and copied on both sides to reduce the use and purchase of paper, whenever practical.

3.2 Recycled Content Products

3.2.1 All products for which the United States Environmental Protection Agency (U.S. EPA) has established minimum recycled content standard guidelines in the Agency's Comprehensive Procurement Guidelines, such as those for printing paper, office paper, janitorial paper, construction, landscaping, parks and recreation, transportation, vehicles, miscellaneous, and non-paper office products, shall contain the highest postconsumer content practicable, but no less than the minimum recycled content standards established by the U.S. EPA Guidelines.

3.2.2 Copiers and printers purchased shall be compatible with the use of recycled content and remanufactured products.

3.2.3 In accordance with California Public Contract Code, Sec. 10409, [organization] shall purchase re-refined lubricating and industrial oil for use in its vehicles and other equipment, as long as it is certified by the American Petroleum Institute (API) as appropriate for use in such equipment.

3.2.4 When specifying asphalt concrete, aggregate base or portland cement concrete for road construction projects, [organization] shall use recycled, reusable or reground materials when practicable.

3.2.5 [Organization] shall specify and purchase recycled content transportation products, including signs, cones, parking stops, delineators, channelizers and barricades, which shall contain the highest postconsumer content practicable, but no less than the minimum recycled content standards established by the U.S. EPA Comprehensive Procurement Guidelines.

3.2.6 All pre-printed recycled content papers intended for distribution that are purchased or produced shall contain a statement that the paper is recycled content. Whenever feasible, the statement should indicate the percentage of postconsumer recycled content it contains.

3.3 Energy and Water Savings

3.3.1 Where applicable, energy-efficient equipment shall be purchased with the most up-to date energy efficiency functions. This includes, but is not limited to, high efficiency space heating systems and high efficiency space cooling equipment.

3.3.2 When practicable, [organization] shall replace inefficient interior lighting with energy efficient equipment.

3.3.3 When practicable, [organization] shall replace inefficient exterior lighting, street lighting and traffic signal lights with energy-efficient equipment. Exterior lighting shall be minimized where possible to avoid unnecessary lighting of architectural and landscape features while providing adequate illumination for safety and accessibility.

3.3.4 All products purchased by [organization] and for which the U. S. EPA Energy Star certification is available shall meet Energy Star certification, when practicable. When Energy Star labels are not available, [organization] shall choose energy-efficient products
that are in the upper 25% of energy efficiency as designated by the Federal Energy Management Program.

3.3.5 [Organization] shall purchase water-saving products whenever practicable. This includes, but is not limited to, high-performance fixtures like toilets, low-flow faucets and aerators, and upgraded irrigation systems.

3.4 Green Building

3.4.1 All building and renovations undertaken by [organization] shall follow Green Building Practices for design, construction, and operation, where appropriate, as described in the LEED™ Rating System.

3.5 Landscaping

3.5.1 All landscape renovations, construction and maintenance performed by [organization], including workers and contractors providing landscaping services for [organization], shall employ Bay-Friendly Landscaping or sustainable landscape management techniques for design, construction and maintenance whenever possible, including, but not limited to, integrated pest management, grasscycling, drip irrigation, composting, and procurement and use of mulch and compost that give preference to those produced from regionally generated plant debris and/or food waste programs.

3.5.2 Plants should be selected to minimize waste by choosing species for purchase that are appropriate to the microclimate, species that can grow to their natural size in the space allotted them, and perennials rather than annuals for color. Native and drought-tolerant plants that require no or minimal watering once established are preferred.

3.5.3 Hardscapes and landscape structures constructed of recycled content materials are encouraged. [Organization] shall limit the amount of impervious surfaces in the landscape, wherever practicable. Permeable substitutes, such as permeable asphalt or pavers, are encouraged for walkways, patios and driveways.

3.6 Toxics and Pollution

3.6.1 To the extent practicable, [organization] shall purchase, or require janitorial contractors to supply, industrial and institutional cleaning products that meet Green Seal certification standards for environmental preferability and performance.

3.6.2 To the extent practicable, [organization] shall purchase, or require janitorial contractors to supply, vacuum cleaners that meet the requirements of the Carpet and Rug Institute “Green Label” Testing Program – Vacuum Cleaner Criteria, are capable of capturing 96% of particulates 0.3 microns in size, and operate with a sound level less than 70dBA. Where possible and as applicable, other janitorial cleaning equipment shall be capable of capturing fine particulates, removing sufficient moisture so as to dry within 24 hours, operate with a sound level less than 70dBA, and use high-efficiency, low-emissions engines.

3.6.3 The use of chlorofluorocarbon and halon-containing refrigerants, solvents and other products shall be phased out and new purchases of heating/ventilating/air conditioning, refrigeration, insulation and fire suppression systems shall not contain them.

3.6.4 All surfactants and detergents shall be readily biodegradable and, where practicable, shall not contain phosphates.

3.6.5 When maintaining buildings and landscapes, [organization] shall manage pest problems through prevention and physical, mechanical and biological controls. [Organization] may either adopt and implement an organic pest management policy and practices or adopt and implement an Integrated Pest Management (IPM) policy and practices using the least toxic pest control as a last resort.

3.6.6 When maintaining buildings, the [organization] shall use products with the lowest amount of volatile organic compounds (VOCs), highest recycled content, and low or no formaldehyde when practicable when purchasing materials such as paint, carpeting, adhesives, furniture and casework.

3.6.7 [Organization] shall reduce or eliminate its use of products that contribute to the formation of dioxins and furans. This includes, but is not limited to:

- Purchasing paper, paper products, and janitorial paper products that are unbleached or that are processed without chlorine or chlorine derivatives, whenever possible.
- Prohibiting purchase of products that use polyvinyl chloride (PVC) such as, but not limited to, office binders, furniture, flooring, and medical supplies whenever practicable.

3.6.8 [Organization] shall purchase products and equipment with no lead or mercury whenever possible. For products that contain lead or mercury, [organization] shall give preference to those products with lower quantities of these metals and to vendors with established lead and mercury recovery programs.

3.6.9 [Organization] shall specify that desktop computers, notebooks and monitors purchased meet, at a minimum, all Electronic Product Environmental Assessment Tool (EPEAT) environmental criteria designated as “required” as contained in the IEEE 1680 Standard for the Environmental Assessment of Personal Computer Products, whenever practicable.

3.6.10 When replacing vehicles, [organization] shall consider less-polluting alternatives to diesel such as compressed natural gas, bio-based fuels, hybrids, electric batteries, and fuel cells, as available.

3.7 Forest Conservation

3.7.1 To the greatest extent practicable, [organization] shall not procure wood products such as lumber and paper that originate from forests harvested in an environmentally unsustainable manner. When possible, [organization] shall give preference to wood products that are certified to be sustainably harvested by a comprehensive, performance-based certification system. The certification system shall include independent third-party audits, with standards equivalent to, or stricter than, those of the Forest Stewardship Council certification.

3.7.2 [Organization] encourages the purchase or use of previously used or salvaged wood and wood products whenever practicable.

3.8 Bio-Based Products

3.8.1 Vehicle fuels made from non-wood, plant-based contents such as vegetable oils are encouraged whenever practicable.

3.8.2 Paper, paper products and construction products made from non-wood, plant-based contents such as agricultural crops and residues are encouraged whenever practicable.

3.8.3 Bio-based plastic products that are biodegradable and compostable, such as bags, film, food and beverage containers, and cutlery, are encouraged whenever practicable.

3.8.4 Compostable plastic products purchased shall meet American Society for Testing and Materials (ASTM) standards as found in ASTM D6400-04. Biodegradable plastics used as coatings on paper and other compostable substrates shall meet ASTM D6868-03 standards.

3.8.5 Proof of compliance with ASTM standards for compostable, biodegradable and degradable plastic products shall be provided by vendors of such products, upon request. One acceptable proof of compliance for compostable plastic products will be certification by the Biodegradable Products Institute (BPI).

4.0 PRIORITIES

4.1 The health and safety of workers and citizens is of utmost importance and takes precedence over all other policies.

4.2 [Organization] has made significant investments in developing a successful recycling system and recognizes that recycled content products are essential to the continuing viability of that recycling system and for the foundation of an environmentally sound production system. Therefore, to the greatest extent practicable, recycled content shall be included in products that also meet other specifications, such as chlorine free or bio-based.

4.3 Nothing contained in this policy shall be construed as requiring a department, purchaser or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition, or are not available at a reasonable price in a reasonable period of time.

4.4 Nothing contained in this policy shall be construed as requiring the [organization], department, purchaser or contractor to take any action that conflicts with local, state or federal requirements.

5.0 IMPLEMENTATION

5.1 The [Director of Purchasing, Director of Finance, other responsible director] shall implement this policy in coordination with other appropriate [organization] personnel.

5.2 As applicable, successful bidders shall certify in writing that the environmental attributes claimed in competitive bids are accurate. In compliance with State law, vendors shall be required to specify the minimum or actual percentage of recovered and postconsumer material in their products, even when such percentages are zero.

5.3 Upon request, buyers making the selection from competitive bids shall be able to provide justification for product choices that do not meet the environmentally preferable purchasing criteria in this policy.

5.4 Purchasers shall include businesses certified by the Bay Area Green Business Program in requests for products and services.

5.5 Vendors, contractors and grantees shall be encouraged to comply with applicable sections of this policy for products and services provided to the [organization], where practicable.

6.0 PROGRAM EVALUATION

6.1 The [Director of Finance, Director of Purchasing, other position responsible for implementing this policy] shall periodically evaluate the success of this policy's implementation.

7.0 DEFINITIONS

7.1 "American Society for Testing and Materials" means ASTM International, an open forum for the development of high quality, market relevant international standards use around the globe.

7.2 "Bay Area Green Business Program" is a partnership of governments and businesses that certifies the environmental performance of government agencies and businesses.

7.3 "Bay-Friendly Landscaping" means working with the natural ecosystems of the San Francisco Bay Area to foster soil health, to reduce runoff and pollution, prevent and reuse plant waste, conserve water and other natural resources. Bay-Friendly Landscaping practices are described in the Bay-Friendly Landscape Guidelines, by StopWaste.Org.

7.4 "Bio-Based Products" means commercial or industrial products (other than food or feed) that utilize agricultural crops or residues but does not include products made from forestry materials.

7.5 "Biodegradable plastic" means the degradation of the plastic must occur as a result of the action of naturally occurring microorganisms.

7.6 "Biodegradable Products Institute" (BPI) is a multi-stakeholder association of key individuals and groups from government, industry and academia, which promotes the use, and recycling of biodegradable polymeric materials (via composting). BPI does not create standards but certifies products that demonstrate they meet the requirements in ASTM D6400 or D6868, based on testing in an approved laboratory.

7.7 "Buyer" means anyone authorized to purchase or contract for purchases on behalf of [organization] or its subdivisions.

7.8 "The Carpet and Rug Institute" (CRI) is the national trade association representing the carpet and rug industry. CRI has developed and administered the "Green Label" indoor air quality testing and labeling program for carpet, adhesives, cushion materials and vacuum cleaners. The "Green Label Plus" testing program incorporates additional requirements to meet California's Collaborative for High Performance Schools low emitting materials criteria.

7.9 "Chlorine free" means products processed without chlorine or chlorine derivatives.

7.10 “Compostable plastic” means plastic that is biodegradable during composting to yield carbon dioxide, water and inorganic compounds and biomass, at a rate consistent with other known compostable materials and leaves no visually distinguishable or toxic residues.

7.11 “Contractor” means any person, group of persons, business, consultant, designing architect, association, partnership, corporation, supplier, vendor or other entity that has a contract with [organization] or serves in a subcontracting capacity with an entity having a contract with [organization] for the provision of goods or services.

7.12 “Degradable plastic” means plastic that undergoes significant changes in its chemical structure under specific environmental conditions.

7.13 “Dioxins and furans” are a group of chemical compounds that are classified as persistent, bio-accumulative, and toxic by the U.S. Environmental Protection Agency (EPA).

7.14 “Energy Star” means the U.S. EPA’s energy efficiency product labeling program.

7.15 “Energy Efficient Product” means a product that is in the upper 25% of energy efficiency for all similar products, or that is at least 10% more efficient than the minimum level that meets Federal standards.

7.16 “Electronic Product Environmental Assessment Tool” (EPEAT) is a procurement tool to help institutional purchasers in the public and private sectors evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes.

7.17 “Federal Energy Management Program” is a program of the Department of Energy that issues a series of Product Energy Efficiency Recommendations that identify recommended efficiency levels for energy-using products.

7.18 The “Forest Stewardship Council” is a global organization that certifies responsible, on-the-ground forest management according to rigorous standards developed by a broad variety of stakeholder groups.

7.19 “Green Building Practices” means a whole-systems approach to the design, construction, and operation of buildings and structures that helps mitigate the environmental, economic, and social impacts of construction, demolition, and renovation. Green Building Practices such as those described in the LEED™ Rating System, recognize the relationship between natural and built environments and seeks to minimize the use of energy, water, and other natural resources and provide a healthy productive environment.

7.20 “Green Seal” is an independent, non-profit environmental labeling organization. Green Seal standards for products and services meet the U.S. EPA’s criteria for third-party certifiers. The Green Seal is a registered certification mark that may appear only on certified products.

7.21 “Integrated Pest Management (IPM)” is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are

needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and nontarget organisms, and the environment.

7.22 “LEED™ Rating System” means the most recent version of the Leadership in Energy and Environmental Design (LEEDTM) Commercial Green Building Rating System, or other related LEEDTM Rating System, approved by the U.S. Green Building Council and designed for rating new and existing commercial, institutional, and high-rise residential buildings.

7.23 “Organic Pest Management” prohibits the use and application of toxic chemical pesticides and strives to prevent pest problems through the application of natural, organic horticultural and maintenance practices. All pest control products shall be in keeping with, but not limited to, those products on the approved list of California Certified Organic Foods (CCOF).

7.24 "Postconsumer Material" means a finished material which would normally be disposed of as a solid waste, having reached its intended end-use and completed its life cycle as a consumer item, and does not include manufacturing or converting wastes.

7.25 “Practical” and “Practicable” mean whenever possible and compatible with local, state and federal law, without reducing safety, quality, or effectiveness and where the product or service is available at a reasonable cost in a reasonable period of time.

7.26 “Preconsumer Material” means material or by-products generated after manufacture of a product is completed but before the product reaches the end-use consumer. Preconsumer material does not include mill and manufacturing trim, scrap, or broke which is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process.

7.27 “Recovered Material” means fragments of products or finished products of a manufacturing process, which has converted a resource into a commodity of real economic value, and includes preconsumer and postconsumer material but does not include excess resources of the manufacturing process.

7.28 “Recycled Content” means the percentage of recovered material, including preconsumer and postconsumer materials, in a product.

7.29 “Recycled Content Standard” means the minimum level of recovered material and/or postconsumer material necessary for products to qualify as “recycled products.”

7.30 “Recycled Product” means a product that meets [organization’s] recycled content policy objectives for postconsumer and recovered material.

7.31 “Remanufactured Product” means any product diverted from the supply of discarded materials by refurbishing and marketing said product without substantial change to its original form.

7.32 “Reused Product” means any product designed to be used many times for the same or other purposes without additional processing except for specific requirements such as cleaning, painting or minor repairs.

7.33 “Source Reduction” refers to products that result in a net reduction in the generation of waste compared to their previous or alternate version and includes durable, reusable and remanufactured products; products with no, or reduced, toxic constituents; and products marketed with no, or reduced, packaging.

7.34 “U.S. EPA Guidelines” means the Comprehensive Procurement Guidelines established by the U.S. Environmental Protection Agency for federal agency purchases as of May 2002 and any subsequent versions adopted.

7.35 “Water-Saving Products” are those that are in the upper 25% of water conservation for all similar products, or at least 10% more water-conserving than the minimum level that meets the Federal standards.

8.0 EFFECTIVE DATES

8.1 This policy shall take effect on [date].