**Minutes of DOE Bi-Monthly Teleconference**

**SUSTAINABLE ACQUISITION WORKGROUP**

**March 22, 2018, 11 am - Noon Eastern Time**

|  |
| --- |
| How can we help address human rights in Federal purchasing?**Check out the SF Tool for Responsible Business Conduct**<https://sftool.gov/plan/545/responsible-business-conduct> |

**TOPICS**

* Proposed updates in FY2019 Priority Products
* More sustainable ceiling tiles, no wax flooring, and LED lights
* Addressing human rights in Federal purchasing

**MINUTES**

**Welcome** – Shab Fardanesh (DOE-HQ Office of Sustainable Environmental Stewardship)

Shab notified everyone she will be on detail to the Council on Environmental Quality’s Federal Sustainability Office from April – September 2018. In turn, Una Song (who formerly headed the U.S. Environmental Protection Agency’s ENERGY STAR Program) will be on detail in Shab’s position for the six months.

DOE Site Sustainable Products Database should be used when seeking a specific product. This database can be found at: <https://www.fedcenter.gov/members/workgroups/sustainableacquisition/productsdatabase/>. There was discussion over whether the database should be password protected, presently the database is open access. It was decided that it should be password protected since this information is for DOE sites only. After the teleconference, DOE learned that making it password protected is technically complicated and so the database will remain as is unless issues arise.

DOE Sustainable Acquisition ListServ: If the information you seek is not in the database, then send a query to the DOE Sustainable Acquisition ListServ at:

sustainable-acquisition@fedcenter.gov

Sustainable Acquisition Online Training: Obtain Continuing Education Credits for completing the training at:

<https://www.wbdg.org/education/femp44.php>

**DOE Site Input on Potential Changes to FY2019 Priority Product List**

DOE sites received a draft on March 19, 2018 of the changes proposed for the FY2019 Priority Product list. The goal is to keep the list stable and yet at the same time current. The proposed changes for FY2019 reflect the current situation.

As more standards and guidelines become available, more options are being offered for DOE sites to achieve a goal toward the DOE GreenBuy Award. Typically the new standards are based on U.S. Environmental Protection Agency or Responsible Purchasing Network evaluations and recommendations. The types of changes to the FY2019 Priority Product list are based on

* Awareness of new issues with some products (example: compostability versus biodegradability of takeout dishware)
* Removal of goals because 1) they are being addressed in other standards or 2) the standard no longer exists
* Greater availability of products that meet a standard (example: dust suppressants certifying to Safer Choice)

**Sustainable Construction Materials** – Terry Foecke (Los Alamos National Lab)

Ceiling Tiles

Los Alamos National Lab (LANL) purchased ceiling tiles from two sources:

* Armstrong
	+ Link to <https://www.armstrongceilings.com/assets/global/resclgam/literature/downloads/Retail_Guide_Inspiration_en.pdf>
	+ Cradle to Cradle certified
	+ Low volatile organic compound emissions
	+ Up to 49% recycled content
* USG
	+ Link to <https://www.usg.com/content/dam/USG_Marketing_Communications/united_states/product_promotional_materials/finished_assets/radar-basic-data-sheet-en-SC2288.pdf>
	+ Low volatile organic compound emissions
	+ Greater than 50% recycled content

The key advantage for the above ceiling tiles is cost. The cost for each of these products is comparable to their non-sustainable versions. Also these brands seem to last longer, which is a big plus for security areas that require clearance. Escorting uncleared craft into security areas can be costly.

Flooring

The flooring installed at LANL was made by Tate Access flooring products:

* Link to <https://www.kingspan.com/us/en-us/product-groups/commercial-infrastructure-products/learning-center/sustainability>
* Offsets 100% of the electricity consumed at Tate’s three facilities
* No wax and therefore no hazardous wax-stripper or other hazardous cleaning materials required for floor care
* Low volatile organic compound emissions
* 49% recycled content of which 15% is post-consumer
* The advantage of no-wax flooring is the cost reduction of not paying staff to strip and wax floors—not to mention the avoidance of typically hazardous wax stripper.

The key advantage is the Tate understructure pedestals are rated as seismic-force resistant. LANL maintains a suite of nuclear facilities to support its defense and non-defense-related programs that require seismic controls. Using this type of flooring minimizes or eliminates the need for additional bracing which can be costly to buy and install (particularly at nuclear facilities).

LED Lighting

LED lights were installed on the exterior of the building. Several lessons learned resulted:

* It was unclear what to specify for lighting because each vendor has data in favor of the particular LED lighting they are selling.
* LANL set up a meter and gathered their own installation data but later discovered the energy meter was placed on the wrong circuit so no “before” data is available for comparison.
* The night sky pollution had to be calculated because it is extremely difficult to measure.
* Los Alamos was able to find appropriate fixtures—simple photo cell, but new fixtures have to be bought because misinformation was provided to the site by the vendor.

Because of these lessons learned, LANL plans in the future to contract with a vendor who will be responsible for all the details. Despite the set backs, the site has received lots of positive feedback about the brightness of the lights. The projected energy savings from installing the new light fixtures is 25 years, but an expert in this field from the Western Area Power Administration thinks the payback time will be 5-10 years, especially if the LEDs were replacing sodium lights. DOE sites are encouraged to contact Damian Sower (sower@wapa.gov) for help with LED installations.

The Strategic Petroleum Reserve (SPR) noted that SPR replaced their fluorescent tubes with LEDs and is in the midst of a study to evaluate the outdoor and security lighting. SPR will share the results of that study at a future teleconference.

**Bottom Line:** When tackling a major lighting retrofit, it pays to bring in experts to avoid unknown issues. The Western Area Power Administration has just such an expert to contact: Damian Sower (sower@wapa.gov).

**Ensuring Responsible Business Conduct and Addressing Human Rights in Federal Purchasing** – Cate Berard (DOE-HQ Office of Sustainable Environmental Stewardship)

Link to:

* SF Tool for Responsible Business Conduct

(<https://sftool.gov/plan/545/responsible-business-conduct>)

* U.S. National Action Plan on Responsible Business Conduct: (<https://www.state.gov/e/eb/eppd/csr/naprbc/index.htm>)
* Purchasers Guide for Addressing Labor and Human Rights Impacts in IT Procurements (http://greenelectronicscouncil.org/wp-content/uploads/2018/02/Purchasers\_Guide.pdf)

Sustainability is a balance between environmental, economical (including the DOE mission), and social. Federal efforts have generally focused on environmental sustainability, while responsible business conduct helps to address social sustainability to meet requirements of present and future generations.

Responsible business conduct promotes workers’ rights. Responsible business works to ensure there are safe working conditions (avoiding child labor) and preventing human trafficking and forced labor. Responsible business conduct also addresses security, privacy, land tenure and indigenous rights.

According to the General Services Administration Sustainable Facilities tool the following have been identified for being high risk sectors for labor and human rights issues:

* Agriculture/Food (for example, cattle, cocoa, coffee, cotton, fish, rice, sugarcane, tobacco, tropical fruit)
* Construction Materials (for example, bricks)
* Construction Services
* Electronics
* Extractives (for example, oil, gas, mining)
* Fishing and Aquaculture
* Forestry
* Furniture
* Healthcare
* Hospitality
* Housekeeping and Facilities Operations
* Internet and Telecommunications
* Security Services
* Textiles (for example, carpet, footwear, garments, workwear)
* Transportation

A great example is the electronics industry. There are issues with workers’ safety and rights in regards to component and product manufacturing and assembly, raw material extraction and refining and end of life processing and material recovery. There are issues with worker and public health issues in regards to workplace exposures and environmental contamination in communities. These are issues because of market conditions that are plagued by cost and time pressures for product delivery and shared, geographically diverse suppliers limiting brand influence. In addition these issues are caused by poor enforcement of laws at extraction, production and processing facilities and lack of follow-up and consequences following audit findings.

Currently there is increased use of procurement resources in the private sector and the international public sector and the U.S. Federal government has been expanding its resources and capability to try to address these issues. There are Federal requirements and guidance to help with these issues:

* Federal Acquisition Regulation, which requires contract clauses for combating trafficking in persons and child labor
* U.S. National Action Plan on Responsible Business Conduct to coordinate U.S government actions related to responsible business practices through policymaking, standard setting, and support of U.S. businesses
* General Services Administration’s Sustainable Facilities Tool which provides a framework for how best practices and resources for responsible business conduct can be incorporated within procurements

Before a contract is awarded, each DOE site should ensure all are aware of potential human rights issues. Risks by sector and risks by country should be identified. Contractors should be notified of risks with solicitation language. Contract requirements should be considered and tailored to the risks that have been identified.

Once the contract is awarded, compliance should be validated through verification and remedying deficiencies. Contractors should be educated. New approaches require education, evaluation and repetition.

Challenges such as delving into the supply chain, complex international issues and sensitivities, and new and unfamiliar area of focus for purchasing and contracts need to be acknowledged. However, there is significant value in improving our social sustainability. The benefits to addressing those challenges lead to improvement of the integrity of operations through risk reduction, and sustainability is addressed more completely.

Are you working on IT contract in the near future? Do you want to incorporate responsible business conduct practices? AU-21 wants to help any DOE site interested in piloting the Green Electronics Council’s Guide for Addressing Labor and Human Rights Impacts in IT Procurements.

**Bottom Line:** If your site would like to pilot incorporating human rights in your next IT contract, contact Cate Berard (cate.berard@hq.doe.gov, 202-586-2334).

**Adjourn**

**Next teleconferences**

* Dates for 2018 - May 24, Jul 26, Sep 27, Nov 29
* Notification reminder will be sent as a calendar invite
* Potential topics for the next teleconference. Please share your ideas with Una Song (una.song@ee.doe.gov) and Sandra Cannon (cannon@ecopurchasing.com)

**Contact Information for March 22, 2018 Teleconference**

Office of Sustainable Environmental Stewardship

Moderator: Shab Fardanesh – shabnam.fardanesh@hq.doe.gov, 202-586-7011

Technical Support: Sandra Cannon – cannon@ecopurchasing.com, 509-529-1535

Sustainable Construction Material

Terry Foecke - tfoecke@lanl.gov, 505-695-3876

Addressing Human Rights in Federal Purchasing

Cate Berard – cate.berard@hq.doe.gov, 202-586-2334

**RESOURCE MATERIALS AND UPDATED**

**SUSTAINABLE ACQUISITION INFORMATION**

**NEWLY DESIGNATED RECYCLED PRODUCT AND NEW DEFINITION**

**Begin Specifying in Contracts and Other Purchasing Vehicles by September 15, 2008**

* Fertilizer
* Compost (new definition)

Web Info: http://www.epa.gov/epaoswer/non-hw/procure/products.htm

**NEWLY DESIGNATED BIOBASED PRODUCTS**

Regulations: <http://www.biopreferred.gov/ProposedAndFinalRegulations.aspx>

\* May overlap with recycled content requirements. Recycled content requirements have precedence.

**Begin Specifying in Contracts and Other Purchasing Vehicles by Jun 11, 2014**

**(**http://www.biopreferred.gov/files/Round\_10\_Final\_Rule.pdf**)**

* Cleaners/Solvents
	+ Aircraft – 48%
	+ Boat – 38%
	+ Corrosion removers – 71%
	+ Metal cleaners (not stainless steel) – 56%
	+ Metal cleaners for stainless steel – 75%
	+ Microbial drain maintenance – 45%
	+ Microbial general cleaners – 50%
	+ Microbial waste water maintenance – 44%
* Composite Panels
	+ Countertops – 89%
* Fleet
	+ Auto care products (buffing compound, degreaser, interior cleaners, leather care products, polish, soap, tire and wheel cleaners wax) – 75%
	+ Gasoline fuel additives – 92%
* Lubricants
	+ \*Engine crankcase oil (4-cycle & diesel) – 25%
	+ Water bearing turbine oil – 46%
* Operations
	+ Paint remover – 41%

**Begin Specifying in Contracts and Other Purchasing Vehicles by Nov 19, 2013**

**(**http://www.regulations.gov/#!documentDetail;D=OPPM\_FRDOC\_0001-0002**)**

**CLEANERS/SOLVENTS/CUSTODIAL**

* Specialty precision cleaners & solvents – 56%

**GROUNDS/LANDSCAPING**

* Dethatcher products – 87%

**OPERATIONS/FLEET**

* Fuel conditioners – 64%

**MISCELLANEOUS**

* Agricultural spray adjuvants (improve effectiveness of pesticides, herbicides) – 50%
* Animal cleaning products – 57%
* Deodorants – 73%
* Leather, vinyl, rubber care products – 55%
* Lotions and moisturizers – 59%
* Shaving products – 92%
* Sun care products – 53%
* Wastewater systems coatings – 47%
* Water clarifying agents - 92%

**Begin Specifying in Contracts and Other Purchasing Vehicles by April 4, 2013**

**(**<http://www.biopreferred.gov/files/Round_8_Final_Rule.pdf>**)**

**CLEANERS/SOLVENTS**

* Asphalt and tar removers – 80%
* Electronic components cleaners – 91%
* Furniture cleaners and protectors – 71%

**CONSTRUCTION**

* Asphalt restorers – 68%
* \*Floor coverings (non-carpet) – 91%
* \* Insulating materials – 74%
* Wood and concrete stains – 39%

**LUBRICANTS**

* Pneumatic equipment lubricants – 67%

**SHIPPING**

* \*Packing materials – 74%

**MISCELLANEOUS**

* Air fresheners and deodorizers – 97%
* Blast media – 94%
* Candles and wax melts – 88%
* Foot care products – 83%
* Inks
	+ Specialty – 66%
	+ Sheetfed Color – 67%
	+ Sheetfed Black – 49%
	+ Printer toner <25 ppm – 34%
	+ Printer toner =>25 ppm – 20%
	+ News – 32%

**Begin Specifying in Contracts and Other Purchasing Vehicles by July 23, 2012**

**(**http://www.biopreferred.gov/files/Round\_7\_Final\_Rule.pdf?SMSESSION=NO**)**

**CLEANERS/SOLVENTS**

* Bath products (bar soaps, liquids, gels) – 61%
* Bioremediation materials – 86%
* Concrete and asphalt cleaners – 70%
* Dishwashing products – 58%
* Floor cleaners and protectors – 77%
* Oven and grill cleaners – 66%

**CONSTRUCTION**

* \*Paints and coatings – Interior
	+ Latex, waterborne alkyd paints and coatings – 20%
	+ Oil-based and solventborne alkyd paints and coatings – 67%

**LANDSCAPING**

* Compost activators/accelerators – 95%
* Erosion control materials – 77%

**LUBRICANTS**

* \*Lubricants - Slide way – 74%

**SHIPPING**

* Thermal shipping containers (insulated containers for shipping temperature sensitive materials)
	+ Durable – 21%
	+ Non-durable – 82%

**MISCELLANEOUS**

* **Animal repellents – 79%**
* Cuts, burns, and abrasions ointments – 84%
* Hair care products
	+ Shampoos – 66%
	+ Conditioners – 78%

**Begin Specifying in Contracts and Other Purchasing Vehicles by October 18, 2011**

**(**<http://www.biopreferred.gov/files/Round_6_Final_Rule.pdf>**)**

**CLEANERS/SOLVENTS**

* Expanded polystyrene foam recycling products (Products formulated to dissolve EPS foam to reduce the volume of recycled or discarded EPS items) – 90%%
* Ink removers and cleaners – 79%

**COOLANT**

* Heat transfer fluids (coolants/refrigerants) – 89%

**DISHWARE**

* Disposable tableware (not including cutlery, made from or coated with plastic resin) – 72%

**LANDSCAPING**

* \*Mulch and compost materials – 95%

**LUBRICANTS**

* \*Multipurpose lubricants (not greases or task specific lubricants such as cable, chain, gear lubricants) – 88%
* Turbine drip oils – 87%

**MISCELLANEOUS**

* Topical pain relief products – 91%

**Begin Specifying in Contracts and Other Purchasing Vehicles by October 27, 2010**

**(**<http://www.biopreferred.gov/files/Round_5_Final_Rule.pdf?SMSESSION=NO>**)**

**CLEANERS/SOLVENTS**

* Food cleaners – 53%
* General purpose household cleaners – 39%
* Industrial cleaners – 41%
* Multipurpose cleaners – 56%
* Parts wash solutions – 65%

**LUBRICANTS**

* Chain & cable lubricants – 77%
* Corrosion preventatives – 53%
* Forming lubricants – 68%
* \*Gear lubricants – 58%

**Begin Specifying in Contracts and Other Purchasing Vehicles by May 14, 2009 except where denoted**

**(**<http://www.biopreferred.gov/files/Round_2_Final_Rule.pdf?SMSESSION=NO>**)**

**(**<http://www.biopreferred.gov/files/Round_3_Final_Rule.pdf>**)**

**(**<http://www.biopreferred.gov/files/Round_4_Final_Rule.pdf>**)**

**CLEANERS/SOLVENTS**

* Adhesive and mastic removers – 58%
* Bath and spa cleaners – 74%
* Carpet and upholstery cleaners
	+ General purpose cleaners – 54%
	+ Spot removers – 7%
* Floor strippers – 78%
* Glass cleaners – 49%
* Graffiti and grease removers – 34%
* Hand cleaners and sanitizers
	+ Hand cleaners – 64%
	+ Sanitizers – 73%
* Laundry products
	+ General purpose laundry – 34%
	+ Pretreatment/spot removers – 46%

**CONSTRUCTION**

* \*Carpets - 7%
* \*Insulating foam (plastic) for residential and commercial construction – 7%
* \*Panels - composite panels
	+ Acoustical composite panels – 37%
	+ Interior panels – 55%
	+ Plastic lumber composite panels – 23%
	+ Structural interior panels – 89%
	+ Structural wall panels – 94%
* Release fluids - concrete and asphalt – 87%

**DISHWARE**

* Cutlery - disposable – 48%
* \*Disposable containers – 72%

**LUBRICANTS**

* 2-cycle engine oils – 34%
* Firearm lubricants – 49%
* Greases
	+ Food grade -42%
	+ Multi-purpose – 72%
	+ Rail track – 30%
	+ Truck – 71%
	+ Unspecified – 75%
* Metalworking fluids—straight oils
	+ Straight oils – 66%
	+ General purpose soluble, semi-synthetic, synthetic – 57%
	+ High performance soluble, semi-synthetic, synthetic – 40%

**SEALANTS**

* Wood and concrete sealers
	+ Membrane concrete sealers – 11%
	+ Penetrating liquid sealers – 79%

**OTHER**

* De-icers - general purpose de-icers – 93%
* Dust suppressants – 85%
* \*Fertilizers - 71%
* Films
	+ Non-durable – 85%
	+ \*Semi-durable (plastic bags) – 45%
* Fluid filled transformers
	+ Synthetic esterbased transformer fluids – 66%
	+ Vegetable oil-based transformer fluids – 95%
* \*Hydraulic fluids - stationary equipment – 44%
* Lip care products – 82%
* \*Sorbents – 89% (proposed 52%)

**Begin Specifying in Contracts and Other Purchasing Vehicles by March 16, 2007 except where denoted**

**(**<http://www.biopreferred.gov/files/Round_1_Final_Rule.pdf>**)**

* Lubricants, penetrating – 68% biobased content by weight
* Diesel fuel additives – 90%
* Urethane roof coating/sealant – 20%
* Hydraulic fluids for mobile equipment (tractors, etc.) – 44%
* Bedding, bed linens, towels **(November 20, 2007 preference compliance date)** – 12%
* Water tank coating/sealant **(November 20, 2007 preference compliance date)** – 59%

**SOURCES OF INFORMATION**

**DOE’s “Sustainable Acquisition Program” website for access to template language for contracts, teleconference agendas and minutes, and other sources of helpful information**

U.S. Department of Energy

<http://www.fedcenter.gov/sustainableacquisition>

**Acquisition - Buying Green**

FedCenter

http://www.fedcenter.gov/programs/buygreen/

**GENERAL PRODUCT INFORMATION**

**Compilation of Designated Products**

General Services Administration

<http://www.sftool.gov/Account/LogOn?ReturnUrl=%2fImplement>

**Priority Products**

U.S. Department of Energy

<http://sftool.gov/green-products/35/greenbuy-program-doe-optional?agencyId=7>

**Environmentally Preferable Products**

U.S. Environmental Protection Agency

<http://yosemite1.epa.gov/oppt/eppstand2.nsf>

**Alternative Fuels and Vehicles**

U.S. Department of Energy

<http://www1.eere.energy.gov/femp/program/fedfleet_management.html>

**Biobased Products**

U.S. Department of Agriculture

<http://www.biopreferred.gov/?SMSESSION=NO>

**Construction**

Whole Building Design Guide -- Technical Guidance for Implementing the

Guiding Principles for Federal Leadership in High Performance and

Sustainable Buildings Memorandum of Understanding

http://www.wbdg.org/

The Federal Green Construction Guide for Specifiers with more than

60 model green construction spec sections

<http://fedgreenspecs.wbdg.org>

**Energy/Water Efficient Products**

Federal Energy Management Program

<http://www.eere.energy.gov/femp/procurement/>

**Recycled Products and Suppliers**

U.S. Environmental Protection Agency Comprehensive Procurement Guidelines

<http://www.epa.gov/wastes/conserve/tools/cpg/products/index.htm>

**Substitutes for Ozone-Depleting Products**

U.S. Environmental Protection Agency

<http://www.epa.gov/ozone/snap/lists/index.html>

**SPECIFIC PRODUCT CATEGORIES**

**Carpet**

**Contract Language and Standards/Guidelines**

U.S. Environmental Protection Agency

Select “carpet” at <http://yosemite.epa.gov/oppt/eppstand2.nsf/Pages/Search.html?Open>

California Carpet Standard

http://www.documents.dgs.ca.gov/green/epp/standards.pdf

**Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

http://www.epa.gov/epaoswer/non-hw/procure/products/carpet.htm

**Suppliers Meeting California Carpet Standard**

http://www.green.ca.gov/EPP/carpets.htm

**Cement/Concrete**

**Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

http://www.epa.gov/epaoswer/non-hw/procure/products/cement.htm

**Cleaning Products**

**Contract Language and Standards/Guidelines**

U.S. Environmental Protection Agency

Select “cleaning supplies” at http://yosemite.epa.gov/oppt/eppstand2.nsf/Pages/Search.html?Open

**Suppliers**

EcoLogo CCD 104 Hand Cleaners – Industrial

http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\_id=329

EcoLogo CCD 110 Cleaning and Degreasing Compounds

http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\_id=335

EcoLogo CCD 115 Odor Control Additives

<http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=340>

EcoLogo CCD-146 Hard Surface Cleaners

<http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=371>

EcoLogo CCD-147 Floor Care Products

<http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=372>

EcoLogo CCD 148 Carpet and Upholstery Cleaners

http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\_id=373

EcoLogo CCD 166 Disinfectants and Disinfectant Cleaners

http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\_id=391

Green Seal GS-37 Industrial and Institutional Cleaners

<http://www.greenseal.org/findaproduct/index.cfm#cleaners>

**Construction Materials and Products**

**Contract Language**

U.S. Department of Energy

http://www.hss.doe.gov/pp/epp/epspecs.html , see “Construction Services”

**Green Format Index to Construction Products**

Construction Specifications Institute

http://www.greenformat.com/home

**Materials Evaluation Tool - BEES**

National Institute of Standards and Technology

<http://www.nist.gov/el/economics/BEESSoftware.cfm/bees.html>

**Sustainable Renovation of Small Projects**

General Services Administration

<http://www.sftool.org>

**Paint**

**Recycled Content Specifications and Suppliers**

U.S. Environmental Protection Agency

http://www.epa.gov/epaoswer/non-hw/procure/products/paint.htm

**Suppliers**

EcoLogo CCD-47 Surface Coatings (Paints, Stains, and Varnishes)

<http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=272>

EcoLogo CCD-48 Surface Coatings (Recycled)

http://www.ecologo.org/en/seeourcriteria/details.asp?ccd\_id=273

Green Seal GS-43 Recycled Content Latex Paint

http://www.greenseal.org/newsroom/GS-43\_Recycled\_Content\_Latex\_Paint.pdf

**Toner Cartridges**

**Recycled Content Specifications and Suppliers**

International Imaging Technology Council

<http://www.i-itc.org/companies.php>

EcoLogo CCD-039 Printing Cartridges Remanufactured

<http://www.ecologo.org/en/seeourcriteria/details.asp?ccd_id=461>

U.S. Environmental Protection Agency

<http://www.epa.gov/wastes/conserve/tools/cpg/products/toner.htm>