

Sandia National Laboratories/New Mexico -- Comprehensive Environmentally Preferable Purchasing (EPP) Program

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Award Category: Green Purchasing

Nominee: Team Nomination:
Sandia Pollution Prevention Staff & Procurement Green Teams

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Nomination Abstract:

Sandia National Laboratories/New Mexico (SNL/NM) has a comprehensive EPP program in place that continues to grow and evolve to incorporate new aspects as they are identified. This program has three primary elements: Procurement Green Teams; a Product Review process; and Product Replacement Recommendations. The EPA's Comprehensive Procurement Guidelines regarding recycled-content products, the USDA's biobased preferences, and the USGBC's LEED guidelines are used as a starting point for all EPP efforts. With the ability to direct purchasing efforts across the site, these program elements have facilitated the implementation of environmentally beneficial and financially wise policies and practices.

Nomination Description:

Overview

Within SNL/NM's comprehensive EPP program, the three primary elements each have specific functions and roles to fill. There are two Procurement Green Teams: one team is focused on environmentally preferable purchasing methods such as through the Just-In-Time (JIT) contracts or with constraints on personal Procurement Cards; the second team is focused on integrating EPP into all new construction project contracts and construction

specifications. The Facilities New Product Review process is a blending of Environmental, Safety and Health (ES&H) disciplines that verify whether a potential new product is safe for the environment as well as for employees. The ongoing Product Replacement Recommendations are an outgrowth of both Pollution Prevention Opportunity Assessments and facility walk-throughs, which regularly identify potentially harmful products that can be replaced with less-toxic or non-toxic products.

Green Teams

The work of the two Green Teams in the past year has had tremendous impact on SNL/NM's capability to purchase recycled-content products and to effectively track those products once they are purchased. The scope is now broadening to include biobased products, those included on the preliminary USDA list and beyond.

The JIT Green Team has continued to effectively add EPA Comprehensive Procurement Guidelines (CPG) language to new or re-bid contracts as they are processed through the department. Most recently, a furniture contract was awarded to an environmentally proactive company with full CPG language included. Additionally, as existing contracts generate purchasing issues, the JIT Green Team is swift to act in an environmentally preferable manner. For example, while SNL/NM has had a contract for remanufactured toner cartridges in place for over five years, this year a loophole formed permitting individuals to purchase virgin toner cartridges through a second technology contract. This was discovered during a quarterly review of purchasing figures. The team moved to block any further purchases through this loophole, redirecting purchasers back to the remanufactured toner provider and minimizing CPG compliance damage to only two percent of SNL/NM's annual total. This team has also pushed for current contract adjustments as needed. One of SNL/NM's major areas of difficulty in CPG compliance is the purchase of virgin binders. To combat this, the Green Team pushed the office supplies contract holder to discontinue the availability of all virgin binders and to launch a new catalog of recycled-content binders. This will increase SNL/NM's compliance by approximately 1.5%, or \$115,000 in FY06 and further drive the market to make recycled-content binders more readily available.

The Construction Green Team is responsible for making possible the tracking of all EPP that occurs for new construction sites. A tracking form, shown in Attachment 1, was created that must be turned in with each monthly or quarterly invoice, and a payment rule was created that states SNL/NM can withhold payment until the form is received. The tracking form is distributed to each new project along with purchasing expectations regarding recycled-content. The form continues to be revised and now includes USDA required biobased products applicable to new construction. This form and rule have amplified SNL/NM's construction tracking capability by 226%, an increase of almost \$2.5 million dollars in the past year. Additionally, the Construction Green Team has consistently worked toward incorporating US Green Building Council's (USGBC) Leadership in Energy & Environmental Design (LEED) guidances into the SNL/NM construction and maintenance specifications.

The SNL/NM approach to reporting Affirmative Procurement (AP) purchasing figures is to only justify what is unavoidable or absolutely necessary. The philosophy is to present as true of a picture of ourselves as possible. While this negatively impacts the site's level of compliance, it makes planning and responding to non-compliance in specific product categories much simpler, as primary targets for purchasing reform fall out directly from the reported totals. Through the work of the Green Teams, SNL/NM has been able to capture more accurate AP tracking information in greater quantities which has raised the tracked purchases to almost \$8 million with a compliance level of 93%.

One of the JIT Green Team members administrates the Procurement Card program. This enables the creation of a quarterly Green Purchasing newsletter, shown in Attachment 1, that encourages cardholders to consider recycled and biobased content more preferable than virgin or petroleum based products. This tool also reminds cardholders of their environmental purchasing responsibilities as they use Federal monies. This newsletter has since been incorporated into the Sandia National Laboratories corporate Environmental Management System.

In tandem, the Green Teams participated in hosting a 2-day Green Purchasing Event at SNL/NM. Scot Case, an internationally recognized guest speaker from the Center for the New American Dream, was brought in to lead three themed seminars for: Office Administrative Assistants; Program Managers and System Engineers; and finally ES&H personnel, Procurement Cardholders, and Procurement personnel. These seminars advocated awareness in purchasing, change to personal habits, available resources in the Federal realm, and basic compliance training regarding recycled-content and biobased-content products. Personnel from Los Alamos National Laboratory were invited to attend, and the seminars were video-teleconferenced to Sandia National Laboratories' Livermore, California site. Approximately 100 people participated in the seminars.

Facilities Product Review

This process to review new chemical products requested by the Facilities department is a cooperative effort between Facilities, Industrial Hygiene, Waste Management, Pollution Prevention and Fire Protection. Each organization has the opportunity to review each new chemical product requested, to provide input on the product, and to recommend alternative products should the requested product not be satisfactory in some regard. One such review has resulted in the pilot testing of a biobased soy product for paint stripping. Three gallons of the soy solvent, shown in Attachment 1, have been purchased for approximately \$200 to be tested for efficacy. This product has been well received and will potentially replace a paint solvent with hazardous properties no longer permitted.

Additionally within the Facilities department, environmentally preferable products and materials have been incorporated into the construction process for new buildings, remodeling, and renovation work conducted at Sandia. The Facilities Management and Operations Center (FMOC) Standards Program maintains construction specifications that define the desired level of quality and performance required for FMOC engineering design, construction, and operations. These specification standards have been revised to

require use of environmentally preferable materials and products. The Standard Specifications involving CPG products and materials were revised to ensure compliance with CPG recycled content requirements. Other Standard Specifications were revised to require recycled content beyond the CPG program, including ceiling tiles (Section 09511) and aggregate base coarse (Section 02232). Those Standard Specifications for paints (Section 09900), carpet (Sections 09680 and 09682), adhesive (numerous Sections) and sealants (Section 07900) have been revised to require low-volatile organic compound (-VOC) content products and materials. The roofing Standard Specifications were revised to require products and materials in compliance with Energy Star reflectance requirements as well as low emissivity. Attachment 1 has a sample of language from a Standard Specification.

Product Replacement Recommendations

In the course of conducting Pollution Prevention Opportunity Assessments (PPOAs) on facilities or processes, and participating in ES&H facility walk-throughs, products are identified that could be replaced with less-toxic or non-toxic environmentally preferable substitutions. An example of this is a PPOA conducted on the SNL/NM cafeteria system in the summer of 2005, two hazardous cleaning chemicals and the plastic to-go service ware were identified as targets to replace with biobased cleaners and recently improved biobased plastic utensils and cartons. Likewise, in the course of working with environmentally forward-thinking SNL/NM scientists, a year-long pilot test of biobased vacuum pump oil has begun and chemical usage is being reviewed. Piloting biobased vacuum pump oil has the potential to make a noticeable impact on our laboratory petroleum consumption and respective hazardous waste generation. Reviewing chemical process usage will also bring about reductions in hazardous waste, such as in the case of a cluster of labs that replaced two hazardous solvents, hexane and toluene, with a non-hazardous detergent.

Conclusions

The comprehensive EPP program in place at SNL/NM combines awareness, education, virtually transparent policies, and proactive proliferation of EPP products and ideas. This creates an atmosphere of positive environmental stewardship that continues to grow and reach further into site operations each year.