



## **Calendar Year 2014 Report of the Environmentally Preferable Purchasing Toxics Reduction Task Force**

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## ***Executive Summary***

Since the Environmentally Preferable Products (EPP) program was established at OSD, it has created more than four dozen contracts. Growth in purchases from all EPP contracts has increased more than a hundred-fold from the first days of the program: from 1994 to 2013, purchases on the statewide ecopurchasing contracts grew from \$5 million to over \$419 million. Since 2010, purchases of green cleaners, a focus of Task Force efforts since 2009, have tripled in size – from \$1,213,225 to \$3,467,811.

The EPP program began as an optional program, helping agencies to identify greener and safer products. In 2009, Governor Deval Patrick issued Executive Order 515, mandating that executive state agencies make the switch from ordinary products to EPPs whenever they represent the “best value” for the job. E.O. 515 also created the Toxics Reduction Task Force to provide targeted technical assistance and guidance to agencies. This is the sixth annual report on the efforts of the Task Force.

Although the program issued the first state “multi-attribute” designations of environmentally preferable cleaners in the 1990s, by the year 2000 the program had switched to accepting the high-quality third-party certifications of *Green Seal* and *ULE/Ecologo*. In 2014, the program coordinated a highly-detailed review of these certifications and the U.S. Environmental Protection Agency’s Design for the Environment certification, in cooperation with several other states and the Responsible Purchasing Network.

The Task Force also conducted training and assistance for agencies on the evaluation of green cleaners, developed information for safer disinfection and sanitization practices, and helped OSD develop a new multistate contract for environmentally preferable cleaners that the Commonwealth will administer and which will provide a new source of revenue.

## Overview

The EPP Task Force was established to facilitate progress with the 2009 Governor's Executive Order 515, directing all Commonwealth Executive Departments to procure Environmentally Preferable Products (EPPs) and services whenever such products and services are readily available, perform satisfactorily, and represent the best value to the Commonwealth.

The Executive Order was the result of successful EPP contracts that demonstrated that products that are less toxic, conserve natural resources, and produce less waste can also be effective in terms of cost and performance. The first EPP contracts for products using recycled materials were established by the Operational Services Division (OSD) in the mid-1990s as an outgrowth of the "Clean States" project (now the "Leading by Example" program). By the late 1990s, with the help of the state's Toxics Use Reduction (TUR) program, OSD made Massachusetts the first state to designate a "multi-attribute" EPP category: green cleaners.<sup>1</sup> In contrast to creating a preferable status for copy paper that has a certain percentage of recycled paper, ("single-attribute"), green cleaners must be evaluated according to their impact on workers, water quality, waste, and many other aspects of use.

The Executive Order formalized the relationship with the state's TUR program and with agencies concerned with greening operations, creating a Task Force co-led by the Office of Technical Assistance and OSD's EPP program, and directing agency department heads to designate an EPP liaison. The Executive Order requires an increase in EPP purchases, including incorporation of environmental specifications into contracts, construction, leases, and for agencies to educate staff on EPPs.

There has been a significant increase in the use of environmentally preferable products and services. In 2010, a review of purchasing data estimated that 58% of all cleaning chemical purchases were from the EPP "green cleaners" contract (FAC59: Environmentally Preferable Products, Programs, Equipment and Supplies). The review drew attention of many agencies to the question of how to increase the percentage, and also drew attention to problems in tracking EPP purchases, which led to changes in OSD tracking systems to improve understanding of what is being purchased on and off the EPP contract. Purchases reported to the Massachusetts Management Accounting Reporting System (MMARS) since 2010 show a tripling of purchases from the EPP FAC59 from 2010 to 2013 – from \$1,213,225 to \$3,467,811. However, reports from vendors under the green cleaners contract, which includes sales to

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<sup>1</sup> EPA discusses this and other Massachusetts EPP innovations in its 2000 publication, *State and Local Government Pioneers: How State and Local Governments Are Implementing Environmentally Preferable Purchasing Practices*. <http://www.epa.gov/oppt/epp/pubs/case/statenlocal.pdf>.

municipalities and authorities not reporting to MMARS, show purchases twice that amount - \$7,356,000.

Since the EPP program was established at OSD, it has created more than four dozen contracts.<sup>2</sup> Growth in purchases from all EPP contracts has increased more than a hundred-fold from the first days of the program: from 1994 to 2013 purchases on the statewide ecopurchasing contracts grew from \$5 million to over \$419 million.

### *Highlights of 2014 Activities*

Feedback from trainings in 2013 indicated that the Task Force training on green cleaning and disinfectants had been very well received, and had led to changes in practice. However, many more departments needed to be reached. In 2014, the Task Force continued its training on green cleaners and disinfectants, as described on the next page.<sup>3</sup>

The Task Force also assisted OSD with the creation of a new multistate contract for green cleaning chemicals and related equipment (FAC85: Environmentally Preferable Cleaning Products, Programs, Equipment and Supplies), an effort that involved an in-depth evaluation of third-party environmental certifications, including an engagement with the U.S. Environmental Protection Agency's Design for the Environment Program concerning how they could improve their certification to become accepted by the joint state effort.

The Task Force also assisted the state's property owner, the Division of Capital Asset Management and Maintenance (DCAMM), in revising relevant standards that DCAMM has developed for use by state facility managers as part of their Integrated Facility Management program, and presented to DCAMM's management on green cleaners and EPP contracts.

During this time, OSD's EPP program managed a transition of EPP contracts to the new COMMBUYS system. COMMBUYS is the Commonwealth's new on-line procurement system. In addition, the EPP program sent out an EPP newsletter to over 1600 contacts, revised the EPP website and created a [Green Cleaning, Programs, Products and Supplies webpage](#), and assisted in the development of a contract for Environmentally Preferable Janitorial Services (FAC81), (awarded to 25 vendors), which includes requirements to use environmentally preferable

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<sup>2</sup> See <http://www.mass.gov/anf/budget-taxes-and-procurement/procurement-info-and-res/procurement-prog-and-serv/epp-procurement-prog/green-products-and-serv/specific-epp-statewide-contracts/>, or click on the *Recycled and Environmentally Preferable Products and Services Guide* on that page.

<sup>3</sup> In order to provide information in a timely manner after data becomes available, this report implements a transition to calendar year instead of fiscal year.

cleaning products. All vendors were required to submit their product lists, and the EPP program verified their compliance with the green specifications outlined in the bid. The EPP program also served as the central organizer of the multi-state FAC85 contract development. Important aspects of this work are discussed in greater detail below.

### *Green Cleaners and Disinfectants*

In 2014, the Task Force provided its training on transitioning to green cleaning on several occasions to the Department of Conservation and Recreation. In January, more than 25 management and middle-level staff attended a training West Boylston, and in February a similar number received training in Carver. In March, the Task Force presented an overview of EO 515 and the FAC59 Green Cleaning Contract to DCR's Leading by Example Committee and published a new Green Cleaning Case Study on DCR's green cleaning program at Bradley Palmer State Park. In April, the Task Force conducted a Green Cleaning Training at DCR's Supervisors Academy to over 50 DCR upper-level staff.

As a result of these trainings, TURI provided direct assistance to the state's largest campground, Salisbury, where both chemicals and the cleaning process were changed. The work will be ongoing through 2015. The Central region assistance also focused on warehousing and distribution, as part of standardizing the cleaning process. TURI's representative on the Task Force trained and demonstrated products for pool supervisors, resulting in a contract put out to bid for all 29 DCR pools. Each pool is to purchase starter kits for training seasonal staff. Kits include "bucketless" (microfiber) mops; cleaners, sanitizers and disinfectants based on peroxides; an enzyme-based product for the uric acid or urine smell found in some of the bathrooms; and foam and dilution guns for better delivery and dilution of the chemicals to reduce exposure and save money.

A demonstration in the Metro West region attended by about a dozen facility representatives cleaned a badly soiled restroom, and resulted in management stating they would mandate each facility buy starter kits for the 2015 season.

DCR in West Boylston has moved forward with its staff to change over their cleaning system to an onsite generator of chemicals, a new steam cleaner as well as a microfiber mop system to make the cleaning in their building less toxic and more efficient. This team has worked with the TURI lab very closely to plan testing of the new process and equipment and meet with the current staff and users of the building and communicate about the project. Further work is being done on vehicle fleet cleaning.

Planning for training in the Western region, and Boston area campground management, has been initiated.

To support the work at DCR, a new category for cleaning microfiber mops and cloths was added to the process of developing a new green cleaners contract (see below: the New FAC85 Contract). Special conditions pertain to cleaning microfiber mops and cloths in order for their absorbent capacity to be maintained. Two vendors in the state will offer this service in order to help agencies with no infrastructure to clean microfiber themselves.

DCR's expenditures on FAC59 (the contract for green cleaners during 2014) increased 33% in one year - from \$174,000 in FY2013 to \$230,000 in FY 2014.

### *Why Green Cleaning?*

Cleaners are often overlooked as a source of chemical exposure and environmental damage. Many contain quite hazardous ingredients – corrosives, flammables, asthmagens, carcinogens, neurotoxins, chemicals toxic to aquatic organisms that are routinely disposed down the drain, air pollutants, hazardous wastes, and chemicals that when disposed can combine with organic matter to form persistent and hazardous substances. In addition, some ingredients are hormone disruptors, which can alter physiologic endocrine function and cause reproductive harm. Some can burn or irritate the skin or eyes. Some can damage the immune system. These impacts can be avoided or reduced through the use of more benign chemicals or cleaning methods. The question is whether the more benign cleaners or methods can work as well, and the answer is that many can, but the transition may not be a simple transition.

### *What the Training Communicated*

The training developed by the Task Force is meant to facilitate the transition to using green cleaners. It encourages organizations to strive for wide acceptance of the new green cleaners by all staff, rather than implementing a top-down mandated transition, through the establishment of a process for green cleaner evaluation. The Task Force developed this focus because its research – which included conducting surveys and one on one interviews with staff, working with staff in the field, and requesting feedback at presentations – showed that many staff had negative perceptions of green cleaners that resulted from such one-time, mandated changes, in which they played no part. In addition, there is also the history of early green cleaners, which did not work as well as current ones do.

The trainings encouraged establishing a process to enable the organization to keep up with new products and technological developments: to continuously improve. Ensuring that employees who will use the cleaner participate in the evaluation of its effectiveness is a key to success. The new green cleaner may work just as well but with some important differences, such as concentration, action on surfaces, solubility, use with cold or hot water, or shelf-life. Perhaps it takes a little more time or effort to take out certain soils, but the investment is worthwhile. Those who use the new cleaner need to see the big picture; and only they can provide the needed information for performance goals to be met.

The training recommended that organizations create standard methods for producing and verifying effective results. What is the process for cleaning an area, and how do you know it has been cleaned? Once a method has been established, it can be used to train new workers and to evaluate their work, to ensure that cleaning standards are met. This is an ancillary benefit of the program, which is first used for comparing different cleaners and choosing the best one.

The training showed attendees OSD's Approved Products List,<sup>4</sup> which has 16 vendors of green cleaners, and explained that even though the active ingredients of some of the cleaners are more benign, they have been tested and shown to be as effective as harsher cleaners. It was strongly recommended that the organization select some of the cleaners on the list for trial, and that relevant employees participate in setting standards and evaluating performance. Once the evaluation teams and standards have been created, they can call the nearest vendors, and invite them to perform free onsite demonstration trials.

The training helped managers to see the value of a green cleaning transition that garners widespread support and which continuously improves. It educated staff and management on how many green cleaning contracts have automatic dispensing systems which reduce over-use of products, as well as accidents and exposure in transferring chemicals from storage to containers for daily use. It educated them on the value of reducing threats to their own health, the health of occupants and visitors of their facilities, and to the surrounding environment. This was especially well-received by DCR, as it is consistent with their environmental mission, and was seen as important to communicate to the public, a chance to educate visitors to DCR facilities on how they could use greener chemicals themselves.

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<sup>4</sup> On this page: <http://www.mass.gov/anf/budget-taxes-and-procurement/procurement-info-and-res/procurement-prog-and-serv/epp-procurement-prog/green-products-and-serv/specific-epp-statewide-contracts/green-cleaning-products.html>

In addition, the training included coverage of the Governor's Executive Order 511, which establishes employee safety committees in each Secretariat. The Task Force noted that these committees now exist and are established to provide occupational health and safety protection for state workers, including protection from hazardous cleaning chemicals. After discussing this, the Task Force received some relevant responses from attendees. One employee stated that he could no longer work in a certain location when it was being cleaned, as the smell of the chemical caused a reaction, and that it was good to know that he could report this sensitivity to the safety committee. He had said nothing but had simply arranged his schedule to avoid exposure. The Massachusetts Right to Know Law (MGL Chapter 111F) was also discussed. This law requires that employees in state agencies be trained on the chemicals to which they are exposed.<sup>5</sup>

### Disinfection and Sanitization

The training also covered what the Task Force had learned about the use of disinfectants and sanitizers. Sanitization is the level of disinfection used for careful cleaning, such as when preparing food surfaces.<sup>6</sup> Disinfection is intended to address the presence of harmful microbes, such as when cleaning up bodily fluids<sup>7</sup>. Many popular disinfectant products pose health and safety issues. Chlorine bleach (sodium hypochlorite) is linked to asthma, is corrosive to eyes and skin, can release chlorine gas and other toxic chemicals when mixed with household ammonia, and can form toxic and long-lasting compounds in the environment when combining with organic matter. Quaternary ammonium chlorides ("quats"), are also asthmagens and corrosive, and have been found to concentrate in sewage sludge. Ortho-phenyl phenol is a carcinogen, and pine oil is a potential respiratory/skin sensitizer. In general, the Task Force's research found that disinfectants are often overused. For example, bleach was found to be used as a cleaner by employees who judged that when there is the smell of bleach, the area is clean. However, a clean surface should not have any smell, and the smell of bleach only means a significant amount is in the air to be breathed. The Task Force training has focused on the proper use of disinfectants and sanitizers, so that they when they are needed they are not underused, and so that they are not overused or used improperly.

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<sup>5</sup> Contact information was provided: inquiries either from employees or employers should be addressed to [safepublicworkplace@state.ma.us](mailto:safepublicworkplace@state.ma.us) or 508-616-0461.

<sup>6</sup> The Centers for Disease Control defines a sanitizer as an "agent that reduces the number of bacterial contaminants to safe levels as judged by public health requirements. Commonly used with substances applied to inanimate objects. According to the protocol for the official sanitizer test, a sanitizer is a chemical that kills 99.999% of the specific test bacteria in 30 seconds under the conditions of the test."  
[http://www.cdc.gov/hicpac/Disinfection\\_Sterilization/19\\_00glossary.html](http://www.cdc.gov/hicpac/Disinfection_Sterilization/19_00glossary.html)

<sup>7</sup> The CDC defines a disinfectant as "usually a chemical agent (but sometimes a physical agent) that destroys disease-causing pathogens or other harmful microorganisms but might not kill bacterial spores. It refers to substances applied to inanimate objects. EPA groups disinfectants by product label claims of "limited," "general," or "hospital" disinfection."



Firstly, an area must be cleaned, by a product designed to remove soils, before a sanitizer or disinfectant is used. If the area is not cleaned before disinfecting, soils may remain and prevent the disinfectant from reaching the intended surface. Disinfectants, to work, must remain on a surface for a certain amount of time (known as “dwell-time”). If the chemical is used without observation of the dwell-time, it will not be effective as a disinfectant. Disinfectants should be used as part of an overall program that sets standards for practice and results. This program should identify where contamination is likely to occur that can be transferred – such as “touch points.” For example, little but the dispersion of toxics is accomplished when floors or windows are disinfected, but disinfecting areas that have been soiled with blood, vomit, or feces is critical.<sup>8</sup> The Task Force recommended against the use of combined disinfectants and cleaners, urging attendees to first clean, and then disinfect where necessary.

The Task Force shared with training attendees, and has posted on its website, the criteria it established for safer disinfectants and sanitizers; information on new devices that use steam to effectively sanitize and clean surfaces; and information about health impacts from improper or excessive use of disinfectants from the MA Department of Public Health (DPH).<sup>9</sup>

The Task Force member from TURI’s Cleaning Lab, while providing training to health agents in Franklin County, identified a key issue relevant to making the transition to safer sanitization and disinfection: that the current food code requires verification of sanitization processes, and the available methods are designed for the use of bleach and quats. When the required test for safe food preparation surfaces is to check the strength of the chlorine preparation that is used, then only chlorine preparations will be used. The member of the Task Force from the Department of Health discussed the matter with her colleagues and was told that food code regulations posed a barrier to making a change in this requirement. Consultations with EPA resulted in a finding that EPA regulations need not pose such a barrier, and the Task Force is continuing to look at how Department of Health verification requirements may be adjusted to meet their protective purposes and reduce environmental and health impacts through allowing safer alternatives, such as hydrogen peroxide, citric or lactic acid, or steam.

### DCAMM

Task Force members provided significant assistance to DCAMM in updating and developing standards for property management as part of the Integrated Facility Management program that DCAMM uses in working with managers of state facilities. Updates included emergency response procedures, safety training, waste management activities, and pesticide use. The Task

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<sup>8</sup> See, for example, <http://www.mass.gov/anf/docs/osd/epp/fact-sheets/cleaningthebathroomflyer.pdf>

<sup>9</sup> <http://www.mass.gov/eohhs/docs/dph/occupational-health/sensor-lung-disease-bulletins/summer2013.pdf>

Force worked with DCAMM to set parameters that influence agency decisions to use or not use greener products and services. The Task Force educated DCAMM about its new contract for janitorial service providers, which requires the use of green cleaners; about the practice of Integrated Pest Management, which can drastically reduce the unnecessary use of toxic materials; green cleaning and disinfection alternatives; toxics use reduction efforts that facilities can pursue, and about the many EPP contracts that facilities can use. DCAMM has established an ongoing relationship with the Task Force to help them transition more facilities to greener practices.

### *The New FAC85 Contract and Review of Third-Party Certifiers*

In 2014, the Task Force assisted the OSD EPP program with the development of a new multi-state contract, FAC85, replacing FAC 59 for green cleaners, equipment, and supplies. The states of Connecticut, Rhode Island, New York, and Vermont are participating. The contract encompasses 12 product categories and has a potential contact value of \$54,000,000 over seven years.

Extensive work was involved in defining the many attributes that would apply to each category. Of great help was the Responsible Purchasing Network, which has assisted other states in creating similar contracts. Task Force members assisted in every phase of the project, including a comprehensive evaluation of third-party certifiers.

After Massachusetts established the first state multi-attribute EPP designation for green cleaners, as noted above, it was recognized that the process was very work-intensive. A committee composed of members of several relevant programs (from the same agencies now composing the Task Force) met frequently for more than a year to determine the relevant criteria, the key information, a process for submission and review, and then to share in the review tasks. It was not realistic to expect that the programs would be able to contribute the same level of expertise and work hours to continue identifying new environmentally preferable products, or to renew contracts in existing categories. Instead, OSD recognized that two third-party certifications, *Green Seal* and *ULE/Ecologo*, were qualified to meet the highest standards set forth in ISO 14020 and 14024 environmental label guidelines. The International Organization for Standards develops international standards through a consensus process, whose members include 164 national standard-setting bodies. The 14020 standard consists of general principles that apply to environmental labeling and claims, to promote accurate,

verifiable and relevant information. The 14024 standard applies to programs that provide a seal of approval.<sup>10</sup>

Both certification systems ensure that products meet criteria developed through open, stakeholder-based processes. Both *GreenSeal* and *ULE/Ecologo* are multi-attribute certification programs and conduct on-site audits, update their standards regularly, and base their certifications on scientific criteria and evaluations of product effectiveness. In order to expand and renew EPP designations, OSD decided to accept these certifications as reliable. On some occasions the program has turned to the Task Force to assist in developing and implementing standards where these programs have not issued certifications, as for example, with disinfectants and laundry detergents.

Over the years, some providers have commented on the cost of obtaining these certifications, and the program has considered the issue of including the EPA Design for the Environment Program (DfE) designation, which in the past has been less expensive to obtain, as a way of eliminating a barrier for small businesses that could make environmentally preferable products available. However, the DfE designation has not provided the same assurances of reliability as the other certifications. It has conducted onsite inspections years after granting certifications, its evaluations are not open and transparent, and it has not recognized some of the criteria others recognize as critical, such as the absence of chemicals classed as asthmagens. However, the evaluators at DfE examine every chemical that is used, and have access to confidential business information. Evaluators are chemical experts involved in EPA's green chemistry and Toxic Substances programs. Further, many of the deficiencies that critics perceived in the program's operation previously, concerning lax enforcement of standards, appeared to have been addressed by a more rigorous approach recently.

The FAC85 team formed a subcommittee to evaluate whether DfE certification was acceptable. They conducted a review of all three certifiers using the format included in the U.S. Environmental Protection Agency's *Draft Guidelines for Product Environmental Performance Standards & Ecolabels for Voluntary Use in Federal Procurement*, issued in November 2013, with additions from other EPA publications, the International Organization for Standardization, the American National Standards Institute, Consumer's Union, and existing green cleaning certification and ecolabel programs. Task Force members assisted in contacting the three certification programs and reviewing with them important aspects of their process. This included how the program verified submitted claims, when and how the certification program performed onsite inspections, what criteria providers had to meet, how deficiencies were addressed, how violations are addressed, and what claims may be made.

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<sup>10</sup> See: <http://www.iso.org/iso/environmental-labelling.pdf>.

### Green Claims

Included in this evaluation was whether the certifications themselves were compliant with FTC guidelines pertaining to green claims. When public interest in green products grew in recent decades, so too did the use of vague and exaggerated claims, a practice that became known as “greenwashing.” What do the terms “Earth-friendly,” “Eco-safe,” “Environmentally safer,” or “green” mean? Some manufacturers were making such broad claims on the basis of one attribute, or without any verification by an independent, expert source. Is it meaningful to say that a product is “One-hundred percent natural,” when the natural ingredient is toxic? Is it helpful to say that a product is “nontoxic” when it simply lacks a common ingredient known to be toxic, but contains other ingredients that, though less toxic, yet pose some concerns? These issues have been common. Studies of environmental claims have found low levels of reliability, and the Task Force in its work has had to educate agency staff on the difference between buying something that claims to be green, and buying something that OSD verifies bears a reliable green certification, or has verified itself.

In 1992, the Federal Trade Commission issued a *Guide for the Use of Environmental Marketing Claims*, outlining acceptable and unacceptable environmental marketing practices, which has been periodically revised and updated. The FTC guidelines are not regulations, but can be used in litigation to hold manufacturers to standards. They arguably require manufacturers to provide specific details explaining any environmental claim without overstating an environmental attribute or benefit. Vague claims such as “environmentally friendly” or “Earth smart” do not provide purchasers with the specific information that can be used to compare products, and are unacceptable unless they have accompanying information justifying the claims. Task Force members asked each certification body how it enforces standards concerning claims. How do they evaluate compliance, what actions do they take to ensure compliance, and do they take action to withdraw permission to use their certifications from noncompliant companies?

### Result of Review

After several months of reviewing dozens of program and product aspects the team decided to allow DfE products in a “Specialty Products” category, thus expanding the number of products allowed in the FAC85 contract. These were products that were not readily available through *GreenSeal* or *ULE/Ecologo*. The DfE program was provided with information about the team’s decision, which included unresolved questions about onsite inspections, evaluation and ensuring of compliance, and consistency with FTC guidelines, and has responded positively, asserting that it will make some changes. In the next relevant contract review, the question of

acceptance of the DfE certification will be taken up again. The multi-state contracting process and its review of certifications have produced a clearer picture of the credibility and reliability of these important services and have likely helped motivate the EPA to improve the DfE label.

### *Flame Retardants*

In 2014, the Task Force also met to discuss the issue of flame retardants. The standard for fire safety relevant to plastic furnishings or furnishings incorporating plastic foams has been a California standard, which has recently changed. Except for Boston, which has its own standard, manufacturers selling to agencies in Massachusetts are no longer required to use prescribed flame retardants now known to be toxic. Brominated flame retardants have become an international concern and are banned for many uses in Europe because of their persistence as well, but a great variety of flame retardant chemicals has been associated with neurotoxic or endocrine disrupting effects. The Task Force was informed by the OSD EPP office that it had provided relevant information to the furniture purchasing team, which is reviewing the contract OFF38: Office, School and Library Furniture. The Task Force will continue to monitor this issue and assist OSD.

### *Integrated Pest Management*

As part of the DCAMM standards review, Task Force members caused the insertion of reference to OSD contracts relevant to pest management, and of the essential characteristics of integrated pest management (IPM). This will help ensure that all state facility managers are aware of state contracts concerning integrated pest management and of the principles of IPM. IPM concerns using professionals who do not apply toxic pesticides without performing an examination of a site to determine the extent and nature of pest incursions, the means of entry, the attractants and method of subsistence (where the pest obtains food and water). An IPM specialist understands the pest and reports to the facility manager on its presence first. An IPM specialist then uses the least hazardous means of addressing the problem. Entry must be addressed – it does little good to kill mice without stopping mice from getting into the building. If there is water intrusion that is facilitating habitat for insects, or mold, the IPM specialist will identify this need and may even fix it, but it will only be a temporary solution to kill the present pests, they will continue to thrive if the water intrusion is not addressed, and the building will suffer structural damage. Finally, the IPM specialists prefer traps and bait, or the placement of poisons where they will not harm any living things besides the target. No “calendar” application of pesticides is allowed, where poisons are deposited without specific knowledge of the presence of pests. In the future, the Task Force will conduct an evaluation of existing contracts to determine if they meet the standards now described by DCAMM.

## *Future Work*

In Calendar Year 2015, the Task Force will finalize the FAC85 contract and assist OSD in implementation. Task Force members will continue providing training in the transition to green cleaners, to DCR, DCAMM, and other agencies that request it. The Task Force will continue evaluating actions regarding flame retardants and Integrated Pest Management, and will also investigate potential actions concerning safer road paint, insulation, and auto maintenance.

## Members of the Task Force

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