



Operations and Maintenance

Golden Seal Program

In August 2000 DGS RESD Building and Property Management (BPM) established the Golden Seal Program. The Golden Seal Program is a operations and maintenance program based upon a thorough review of our cleaning chemical procurement process for custodial/maintenance products statewide.

This research activity allowed the DGS RESD BPM to better evaluate the overall impacts to worker health and environmental issues associated with chemical cleaning products statewide.

The Golden Seal Program has three main elements:

- Promote And Incorporate Purchase Of Environmentally Friendly "Green" Building Products.
- Enhance Employee Awareness To Reduce, Reuse, And Recycle.
- Convert Existing Buildings Into Sustainable Buildings.

Sustainability in BPM

- Prevent harm to the natural environment and human health, and
- Benefit the community and local economy for current and future generations.
- Sustainability = 3 Rs: Reduce, Reuse, Recycle.

BPM Environmental Safety Health And Operations Program (Eshop)

Bpm's eshop is designed to: Provide Industrial Hygiene services, that incorporate a comprehensive, environmentally sensitive purchasing, operations and maintenance program within the DGS RESD BPM that involves all areas of BPM operations such as

cleaning, groundskeeping, HVAC, trades and engineering for consistency with applicable laws, regulations, and tenant requirements.

ESHOP IH Assessment: Environmentally Preferable Cleaning Products

- Inventory all existing chemical products.
- Review quantity and purpose of use.
- Review active ingredients.
- Assess history of injuries to BPM Workers.
- Select test products, train BPM staff in use, monitor effectiveness, and obtain BPM staff and tenant feedback.

Examples of Environmentally Unsafe/Harmful Product Ingredients

- Benzyl Alcohol: Carcinogenic
- Diethanolamine: Carcinogenic
- Methyl Chloroform: Kidney/heart damage
- Methyl Ethyl Ketone: Damage to liver, reproduction
- Naphthalene: Carcinogenic
- Nitrotriacetic Acid: Carcinogenic
- Trichloroethylene: Liver, carcinogenic

DGS RESD BPM

Common Cleaning Products

All Purpose Cleaner

- Glass and Window Cleaner
- Bathroom Cleaner/Deodorizer
- Liquid Hand Soap
- Lime and Scale Remover
- Carpet Shampoo (rotary brush)
- Furniture Polish
- Chrome and Brass Polish/Cleaner
- Graffiti Remover
- Floor Finish Disinfectant
- Floor Stripper
- Wood Floor Wax/Cleaner
- Solvent Spotter/Gum Remover



Notes:

Testing BPM’s Golden Seal Program for EPP

Initially, BPM staff tested four specific products as EPP items: Handsoap, General Purpose Cleaner, Glass Cleaner, Restroom Tile Cleaner. BPM janitorial crews tested these environmental cleaning products in a variety of State Office Buildings.

Implementation of Janitorial Testing for Golden Seal / EPP

Testing of new products was implemented at the beginning portion of regular janitorial meetings. Janitor supervisors received training on EPP purchasing and advised on cleaning effectiveness of products. Dwell time was the main concern, yet buy-in was successful. Products were used as a comparison to existing products.

RESULTS of BPM Testing for New Cleaning Products

Environmental Preferable Product (EPP)

Manufacturers: Naturally Yours (NY), Clean Environment (CE), ZEP

Handsoap	1	NY, CE, ZEP
General Purpose Cleaner	2	NY, CE, ZEP
Glass Cleaner	3	NY, CE, ZEP
Restroom Tile Cleaner	2	NY, CE, ZEP

Scale:

Excellent (1) Good (2) , OK (3) , Fair (4) , Poor (5)



Operations and Maintenance



INTEGRATED
WASTE
MANAGEMENT
BOARD

Examples of additional BPM's EPP Cleaning Products

Old Products

AJAX
Bleach
Forward
Steamette

New Products

CSP
SK32
Neutral Quat
Potpourri

Newer ingredients are safer for use, produce better indoor air quality and are lower impact on the waste stream.

Lessons Learned

1. Education of janitorial staff through training is essential to promote conversion from older products to EPP.
2. Dwell time of EPP merchandise requires longer action time for results.
3. MSDS training needed.

Golden Seal EPP List

Naturally Yours

[://www.naturallyyoursstore.com](http://www.naturallyyoursstore.com)

All Purpose Cleaner; Product Number :NY2
Clepaner Degreaser: NY3
Basin, Tub and Tile Cleaner: NY4
Glass and Window Cleaner: NY6
Clinging Toilet Bowl Cleaner: NY7

GOLDEN SEAL EPP LIST

Rochester-Midland

www.rochestermidland.com

Enviro-Care All Purpose Cleaner
Enviro-Care Neutral Disinfectant
Enviro-Care Washroom and Fixture Cleaner

The Clean Environment

www.greencities.net

All Purpose Cleaner Product Number : N-1
Basin, Tub and Tile Cleaner : N-7
Clinging Toilet Bowl Cleaner : N-8
Furniture Polish and Protector : N-11
Glass and Hard Surface Cleaner : N-13
Heavy Duty Degreaser/Cleaner : N-14
Cycle-Graffiti Remover : C-54

Benefits of Environmental Preferred Products

- Saves money
- Consume less energy
- Lowers annual utility bills
- Reduces air pollution
- Provide same or better performance
- Better IAQ for tenants
- Save taxpayer dollars through lower energy bills
- Reduced air pollution levels
- Same or better quality
- Name-brand products
- Publicly demonstrate commitment to environment and citizens

Savings Opportunities Through EPP Purchasing

- State and Local Govt spend \$12 billion on energy bills
- Individual potential for 30-50% energy savings
- Potential for annual 4.1 MMTC reduction
- Potential for annual \$107.2 million in energy savings

Barriers to EPP Purchasing

1. What is environmental preferable purchasing?
2. Where can I find information about EPP products and energy efficiency?



Notes:

3. Will this limit competition?
4. How will I know which product will save the most amount of money over time?
5. Is EPP of equal quality to what I'm buying now?

Overcoming Barriers and Answering Questions

ENERGY STAR® Purchasing Tool Kit

One-stop shopping guide to answer these questions and more

Includes:

- savings calculator to demonstrate benefits
- purchasing guidelines
- product listings to show widely-available, name-brand products

Savings Calculator

- Compares energy-efficient vs. conventional equipment
- Demonstrates benefits of reduced energy and maintenance costs
- User inputs for accurate results

Products Availability

Office Equipment

- computers/monitors
- printers, fax machines
- copiers, scanners
- multifunction devices

Exit Signs

Residential Heating and Cooling Equipment

- furnaces, boilers, heat pumps

Residential Light Fixtures

Transformers

Residential Appliances



Operations and Maintenance



- refrigerators
- dishwashers
- clothes washers
- room air conditioners

TVs, VCRs, and TV/VCRs

Roof Products

Insulation

Windows

Energy Efficiency Product Availability

Recommendation levels from FEMP
(Federal Energy Management Program)

Non-residential Lighting Products

- Ballasts
- Fluorescent Tube Lamps

Non-residential Heating and Cooling

Residential Appliances

Commercial Ice Cube Machines

Electric Motors

Steps to Successful EPP Implementation

6. Review DGS purchasing policies at www.dgs.ca.gov
7. Identify product categories where savings opportunities exist
8. Use Savings Calculation Tool to determine savings opportunities
9. Check web site at www.energystar.gov for product listings
10. Call 1-888-STAR-YES
11. Coordinate with appropriate offices within your agency
12. Encourage energy-efficient purchasing and identified EPP products