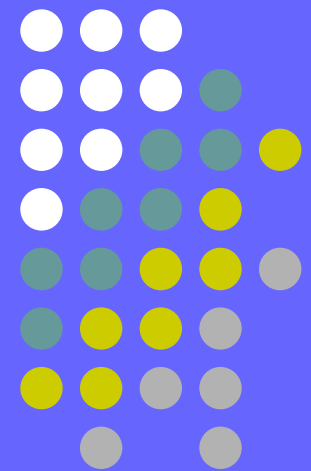


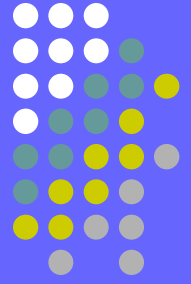
ESC EMS Management Review



December 5, 2007

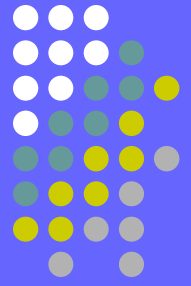


Today's Agenda



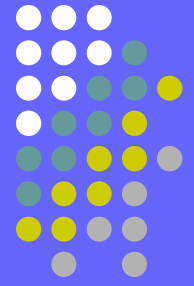
- **Management Review - expectations**
- **Calendar Year's Accomplishments**
- **ISO 14001:2004 Requirements Review**
 - a. Internal Audit, Surveillance Audit, Compliance Results
 - b. External Communications
 - c. Environmental performance
 - d. Objectives and Targets status
 - e. Corrective and Preventive Action Status
 - f. Annual Management Review Follow-up
 - g. Changes/Issues
 - h. Recommendations for Improvement

Expectations – as always...



Determine if the EMS is **suitable,**
adequate, and effective....and...

Determine if there is a need for changes
or if there are opportunities for
improvement.



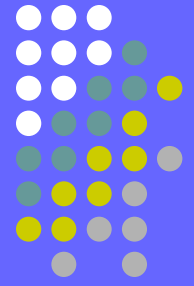
2007 Accomplishments – linked to our Policy

1...To comply fully with the letter and spirit of all Federal, State, and local environmental laws and regulations.

- **EMS Documents reviewed and updated:**
 - Environmental Procedures 3, 5, 6, 8, 9,10,13,14,15,16,18
 - All Operational Control Forms (11)
 - Legal and Other Requirements
 - EMS Manual

2...To consider environmental factors when making planning, purchasing, and operating decisions

- **Continued use of Green Purchasing BPA.**

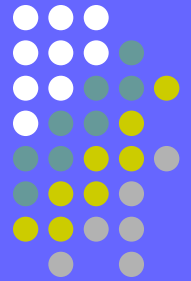


2007 Accomplishments – linked to our Policy

3...To work continuously to improve the effectiveness of our environmental management programs.

- **Used U of Md report to create new EMP.**
- **Completed final report for Chemshare.**
- **Revised chemical adoption program.**
- **Started Fuel EMP.**
- **Added new team member- from a different organization.**
- **Recycle tip sheets updated**

2007 Accomplishments – linked to our Policy



4...To provide appropriate training and educate employees to be environmentally responsible on the job.

- Put safety and EMS icons on desktops.
- Gave 24 new employee presentations.
- Received 2 EMS training puzzles.
- New EMS Team member trained.
- Updated annual awareness training presentation. (but, waiting for SHEMD presentation to be launched)
- Earth Day event in April (Rain Gardens).
- Updated EMS website.
- Gave 2 awards for Internal Audit Members (AT,NT).
- Gave awards for Rain Garden participation (12)

2007 Accomplishments – linked to our Policy

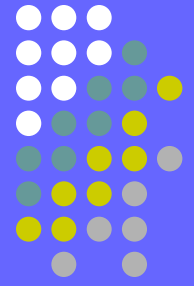


5...To monitor our environmental performance regularly through rigorous evaluations.

- **Mgmt review 12/06.**
- **Wrote SOW and procured a Lead internal auditor.**
- **Completed internal audit and surveillance audit.**
- **Tracking of waste, purchasing and recycle streams.**
- **Completed annual SHEMD survey (with mgmt input).**

6...To seek to prevent pollution before it is produced, reduce the amount of waste at our facility, re-use and recycle whenever possible, and support pollution prevention by our customers and suppliers.

- **Created rain garden.**
- **Implemented chemical adoption program (two donations so far).**
- **America Recycles Day-collect shoes, coats, phones.**



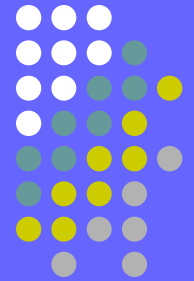
2007 Accomplishments – linked to Policy

7...To maintain and improve the grounds of the ESC in an environmentally sensitive manner including land, water, wildlife and natural resources.

- **Installation of rain garden**

8...To use energy efficiently throughout our operations, and support the efficient use of gas and electricity in our facility.

- **Laboratory Optimization Control Project (LCOP)**

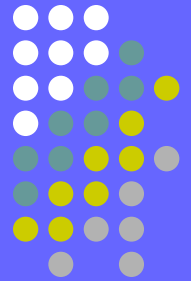


2007 Accomplishments – linked to Policy

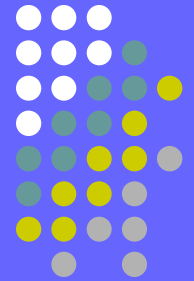
9...To work cooperatively with the local community and other stakeholders to further common environmental objectives.

- Participated in SHEMD conference calls.
 - Responded to the SHEMD National Goals survey.
 - Completed annual SHEMD survey (with mgt input)
 - Updated MOA for computer use.
- *10...To communicate and reinforce this policy throughout our organizations.*
- Wrote articles for the Region 3 employee newsletter (The Protector) and submitted salients.

Audit status ISO14001:2004



- **Internal audit Sept 17-18, 2007 (led by EHS contractor).**
 - 1 observed non-conformance - minor - (Current EMP did not includes means and time frame by which objectives and target were to be achieved.)
 - Non-conformance CORRECTED.
- NOTE: next audit to be scheduled for April/May 2008. (will exercise option year)



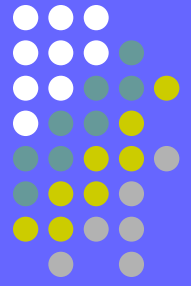
Audit status ISO14001:2004

- External Surveillance audit July 24-27, 2007 (QSR)
 - no observed non-conformances- yea!
 - 5 opportunities for improvement - not responded to yet.

ESC is recommended for continued registration by QSR!

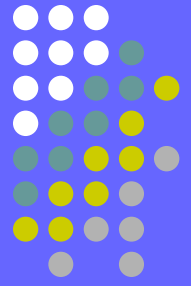
NOTE: will need to re-submit PR for a new 3-yr contract by early 2008

External Communications

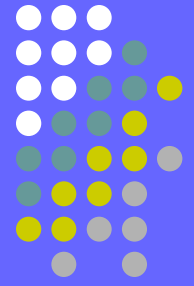


- **Communications from external parties...no complaints!**
 - Maintaining contact with Ft. Meade Cross Functional Team as they develop their EMS, ie. communications with EMS Coordinator Heather Carolan (recently replaced by Andrea Tun).
 - Maintaining contact with José Jiménez of the EPA Federal Facilities Program, Region III, Philadelphia
 - Website new and improved...seeing use by the public.
 - Participated in National EMS Coordinators SHEMD monthly calls.

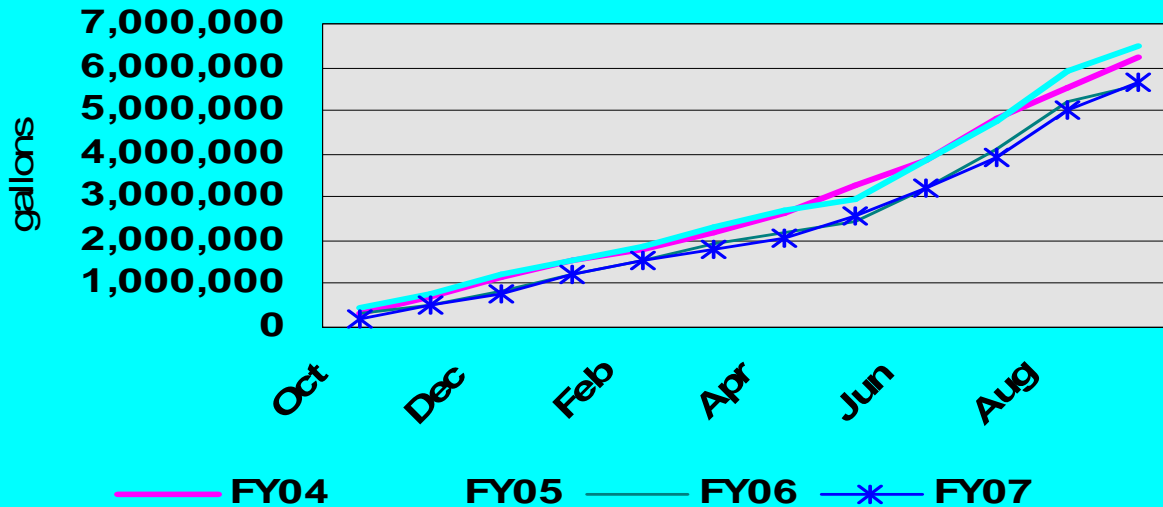
Environmental Performance:



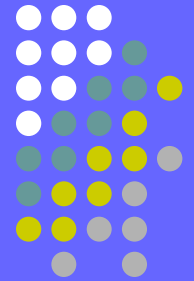
- Water (from OPM ESC EOY report FY07)
- Energy (from OPM ESC EOY report FY07)
- Hazardous Waste Generation (from OPM ESC EOY report FY07)
- Recycling (see handout)



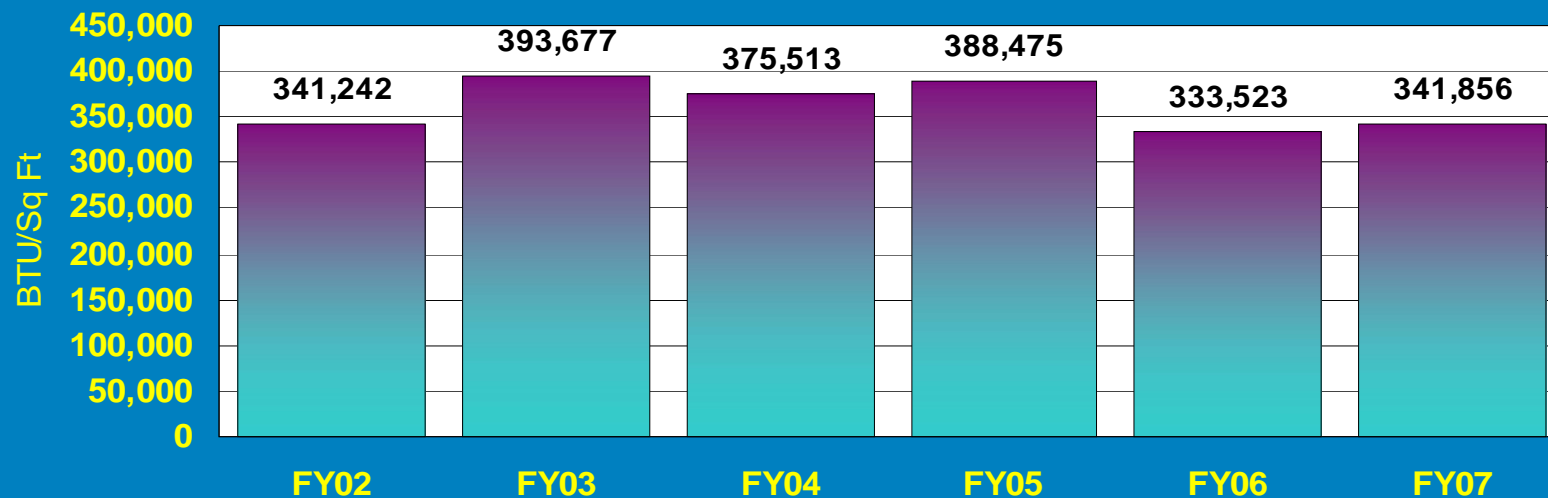
Cumulative Water Consumption Total Water Intake



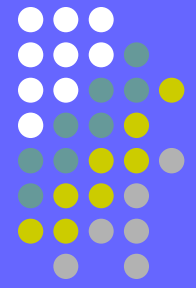
Overall water consumption is **about average for the previous couple of years**. Domestic water consumption was up appreciably. Boiler water consumption down appreciably. Total water consumption continues to be dependent on the amount of water used for cooling in the summer months. The cooling tower water dwarfs other water use.



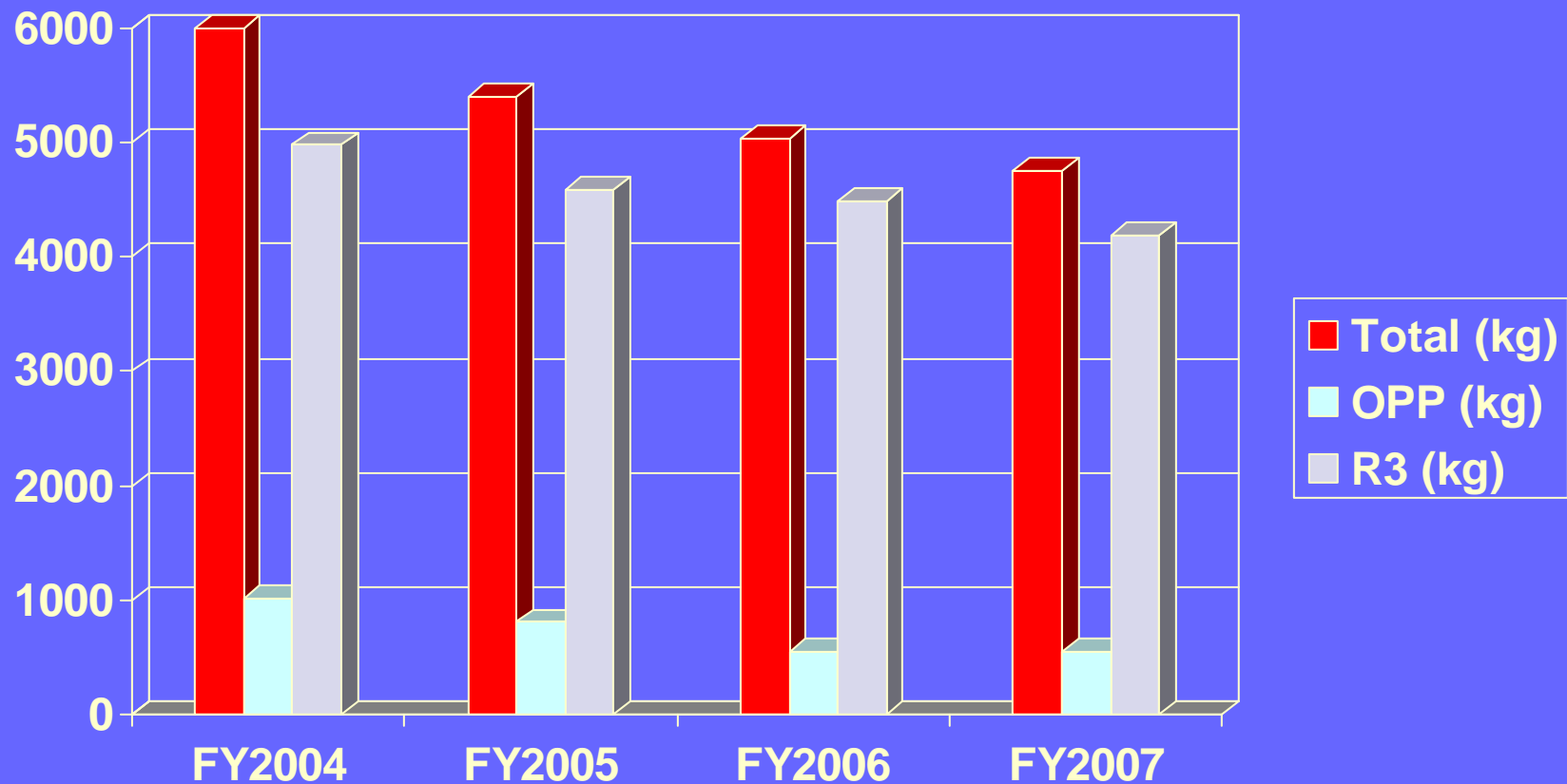
ESC Energy Total Consumption Average per Year



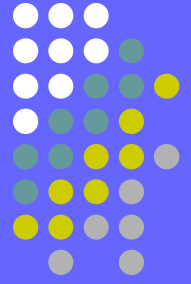
In FY07, ESC increased our BTU/ft² level by 2.5%. While ESC used more natural gas (but no fuel oil) to heat the facility in FY07, fewer electric KWHs were used during the same period. The net effect was a slightly increased energy demand over the previous fiscal year. The **energy consumption is still below the historical highs** for the facility.








Hazardous Waste Generation




Performance Measures- FY06 vs FY07

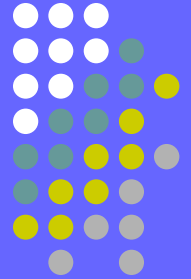


- Can recycling 
- Bottle recycling 
- Paper recycling 

- Lab Bottle recycling 
- Lab Plastics recycling 

- Energy used 

Performance Measures- FY06 vs FY07

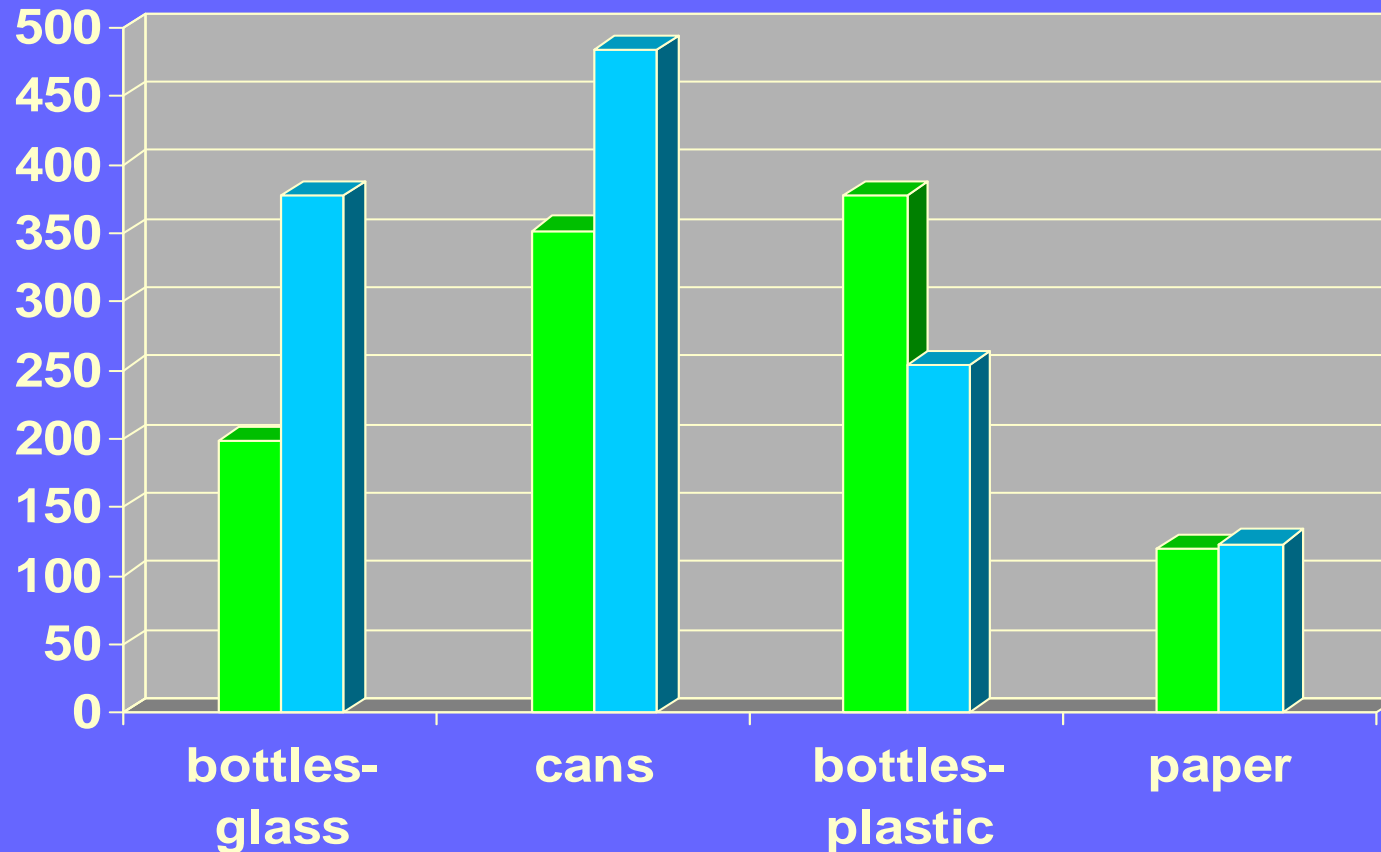
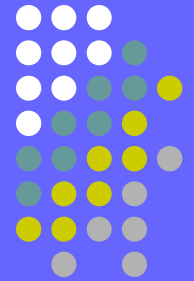


- Total Water used 
- Paper purchased (total) 
 - 1.43 cartons/person to 1.24 cartons/person
- Copies made (total) 
 - 4192/person to 5401/person 
- FYIStaff went from 168 to 161



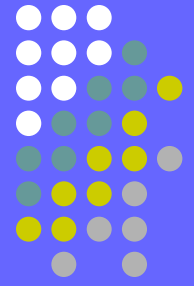
Recycling trends

note: units in lbs started in FY06, FY07 incomplete data, bottles (non-lab)



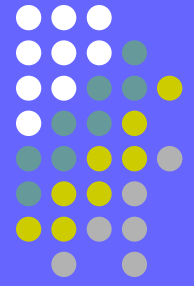
Another way to look at trends

note: generic units, FY07 incomplete data



Current Objectives and Targets

Fuel Use - Mobile sources



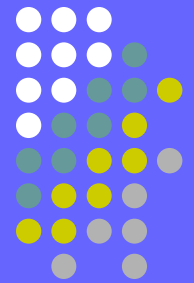
Objective 1: Increase use of the hybrid vehicle.
Target time period: 1 year from effective date

Target 1.1 Promote awareness of the hybrid vehicle among ESC employees by sending out emails to staff, making posters for display in building, conduct driving demo/s.

Target 1.2 Enhance and formalize ESC's vehicle reservation and tracking procedures by creating and implementing an efficient tool with input from all appropriate parties.

Target 1.3 Create a tool to monitor the use of the hybrid to determine if there is an increase in times of use or numbers of miles driven.

Current Objectives and Targets, cont



Objective 2: Promote use of public transportation, ridesharing and flexiplace and develop a system to help ESC employees participate in a rideshare program.

Target time period: 1 year from effective date

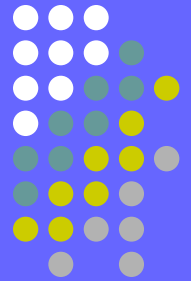
Target 2.1 Promote awareness of the carpooling/ridesharing among ESC employees by sending out emails to staff and making posters for display in building.

Target 2.2 Establish a formal rideshare matching program.

Target 2.3 Promote use of 'Episodic Flexiplace' by educating staff on process.

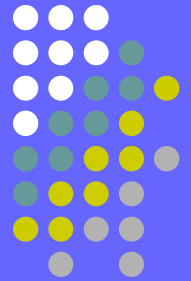
Target 2.4 Coordinate with Fort Meade's EMS coordinator, Andrea Tun, to evaluate joint rideshare matching opportunities between ESC and Fort Meade employees.

Current Objective and Target accomplishments so far



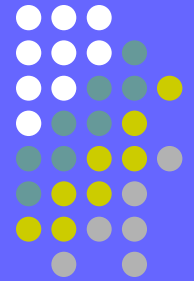
- Began the carpool sign up sheet.
- Held preliminary meeting to determine how vehicle reservations are currently made.
- Sent out awareness emails on carpooling.
- Created a “straw” spreadsheet to use for car reservations.

Corrective Actions and Preventive Actions (suggestions)



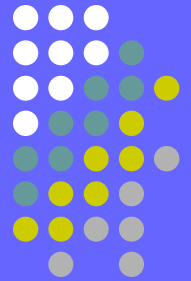
- Corrective Actions – none issued
- Suggestions – a total of 36 received since 2003
 - ✧ 25 have been addressed and closed, 11 remain open

2006 Mgmt Review Follow up *Recommendations*



- A new significant aspect was selected for focus of next year's work. The EMS Team requests concurrence to tackle new aspect.
 - The " Fuel Consumption of Mobile Sources and Exhaust Emissions Associated with Their Use" EMP was launched July 25, 2007.
- Need direction on how to conduct next internal audit.
 - A contractor was hired as Lead Auditor and audit was held in Sept 2007.

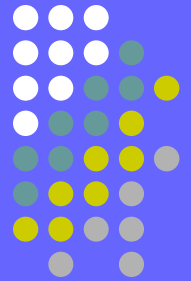
2006 Mgmt Review Follow up *Recommendations*



- Consider impact of ISO commitments.
 - Discussion was held during this meeting. All agreed it is a high maintenance program but that it was important enough for ESC to retain accreditation.
- Need to revise our succession plan, because of inability to find a new Co-coordinator – request management help.
 - Discussion was held on idea to hire a SEE.

2006 Mgmt Review Follow up

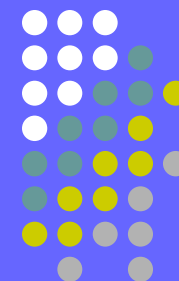
Action Items



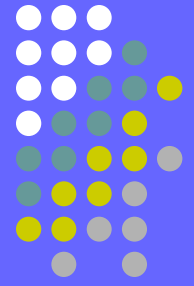
- For the next internal audit: Mgmt agreed to fund hiring an outside lead auditor again.
 - Robin(s) and Skip put together a bid package and got quotes for an audit. Contractor was hired and audit was held in Sept
- Given the fact that the succession plan for putting new EMS Co-coordinators in place has not worked...
 - CCM proposed that the managers discuss how to keep EMS going and keep the commitment to ISO. We are in the process of hiring a SEE...but, no decision on fate of Co-coordinator positions.

2006 Mgmt Review Follow up

Action Items



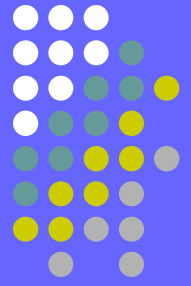
- Joe Smith offered to ask GSA about ChemsShare requirements for getting approval to give away un-needed chemicals from the lab to high schools.
 - **Permission was received to give away chemicals.**
- Skip explained the lack of response when asking SHEMD to help fund a consolidation of our Chemical Inventory (VIM).
 - **R3 and OPP jointly funded the chemical inventory when HQ wouldn't. The inventory was performed Aug/Sept.**
- CCM suggested a brown bag lunch to show "an Inconvenient Truth" as part of the fuel consumption aspect.
 - **Showing of environmental movies is still being discussed.**



Annual EMS activities

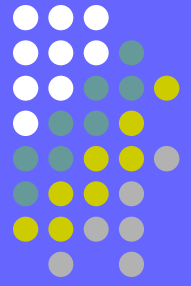
- Respond to audit reports
- Activity/Aspect analysis
- Update EMS web site
- Conduct new-employee briefings on EMS
- Conduct EMS awareness activities
- Review EMS documentation
- ISO 14001 Surveillance Audit
- Internal Audit
- Management Review
- Meet EMP objectives & targets

Changes/Issues



- Limiting the number of active targets is a big improvement!
- **But, there still is not enough time to handle some items, ex. Suggestions, audits.**
- Unclear how SHERMD National Objectives and Targets will effect us, ie. EO 13423.

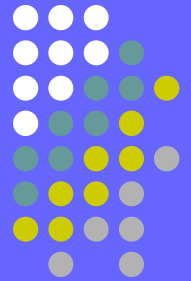
Overview of EO 13423



What is it?

- Policy document developed to minimize the impact of federal activities on the environment.
- Consolidates and strengthens numerous, disparate Executive Orders into a cohesive set of goals to promote sustainable practices across the public sector.
- Also removed some contentious items, like listing mandatory percent levels reductions in chemical usage for departments and agencies.

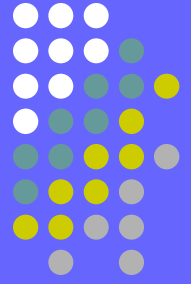
Overview of EO 13423



Requires federal agencies to establish goals for the following:

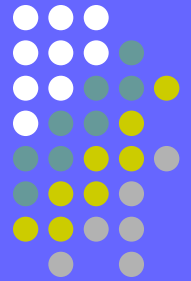
- Increase energy efficiency and reduce greenhouse gases
- Use of renewable energy
- Vehicle fleet management
- Stewardship of electronic equipment used
- Purchase of green products and services
- Reduced toxic and hazardous materials use
- Employment of sustainable building design
- Reduced water consumption

EPAs Goals



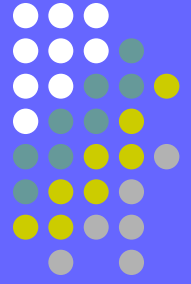
- They are developed for the Agency as a whole....see the **Agencywide EMS Objectives and Targets for 2007 through 2009** document.
- We are waiting for direction.

Recommendations for Improvements



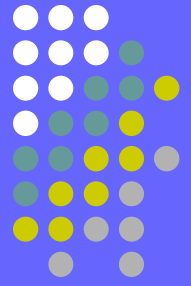
- 1) We would like to create an EMP that covers all of the support activities we've been doing that keep environmental stewardship and EMS alive, ie. environmental fact/tips contest, America recycles day, distribution of environmental information (ex. rain gardens), research on recycle and disposal options, etc.

Recommendations for Improvements (cont)



2) Employ a See!

Recommendations for Improvements (cont)

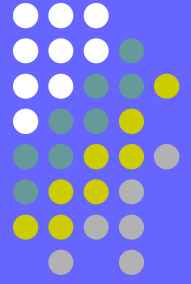


- 3) Need to revise our succession plan, especially because of inability to find a new Co-coordinator – request management help.

Original plan is not working

- FYI: Lynda and Robin became co-coordinators starting in November 2003

So what do you think....?



- Is the EMS suitable, adequate, and effective?
- Feedback time.....