

# ESC EMS Management Review

January 26, 2005





# Today's Agenda

## 1. Introduction

- a. Warm up
- b. EMS background history
- c. 2004 Accomplishments

## 2. ISO 14001 Requirements

- a. Internal Audit and Surveillance Audit Results
  - Compliance status
- b. External Communications
- c. Environmental performance
- d. Objectives and Targets status
- e. Corrective and Preventive Action Status
- f. 2003 Management Review Follow-up
- g. Changes/Issues
- h. Recommendations for Improvement



# Expectations

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.



# Current Team

- **Co-coordinators (2 organizations)**
  - 1 OPP
  - 1 R3
- **Facility representation – 8 standing team**
  - 1 MLB-OPP
  - 2 ACB-OPP
  - 2 OPM-R3
  - 3 ASQAB-R3
- **18 month term...sort of...**
- **Biweekly mtgs, documentation, wkgp mtgs**



# Warm up: Quiz

Which of the following are ISO 14001 elements?

- Objectives & Targets
- Environmental Impacts Analysis
- Operational Control
- Environmental Permitting
- Legal and Other Requirements



According to the international standard on EMS,  
what are the 5 steps involved in establishing  
an EMS?

1. Policy
2. Plan
3. Implement
4. Check & Corrective Action
5. **Management Review**

# The remaining questions are?



- All are false with the exception of 4 and 5.

# How is EMS tracked government-wide?



- **Office of the Federal Environmental Executive (OFEE)**
  - monitors progress
  - offers guidance
  - issues annual report to the White House



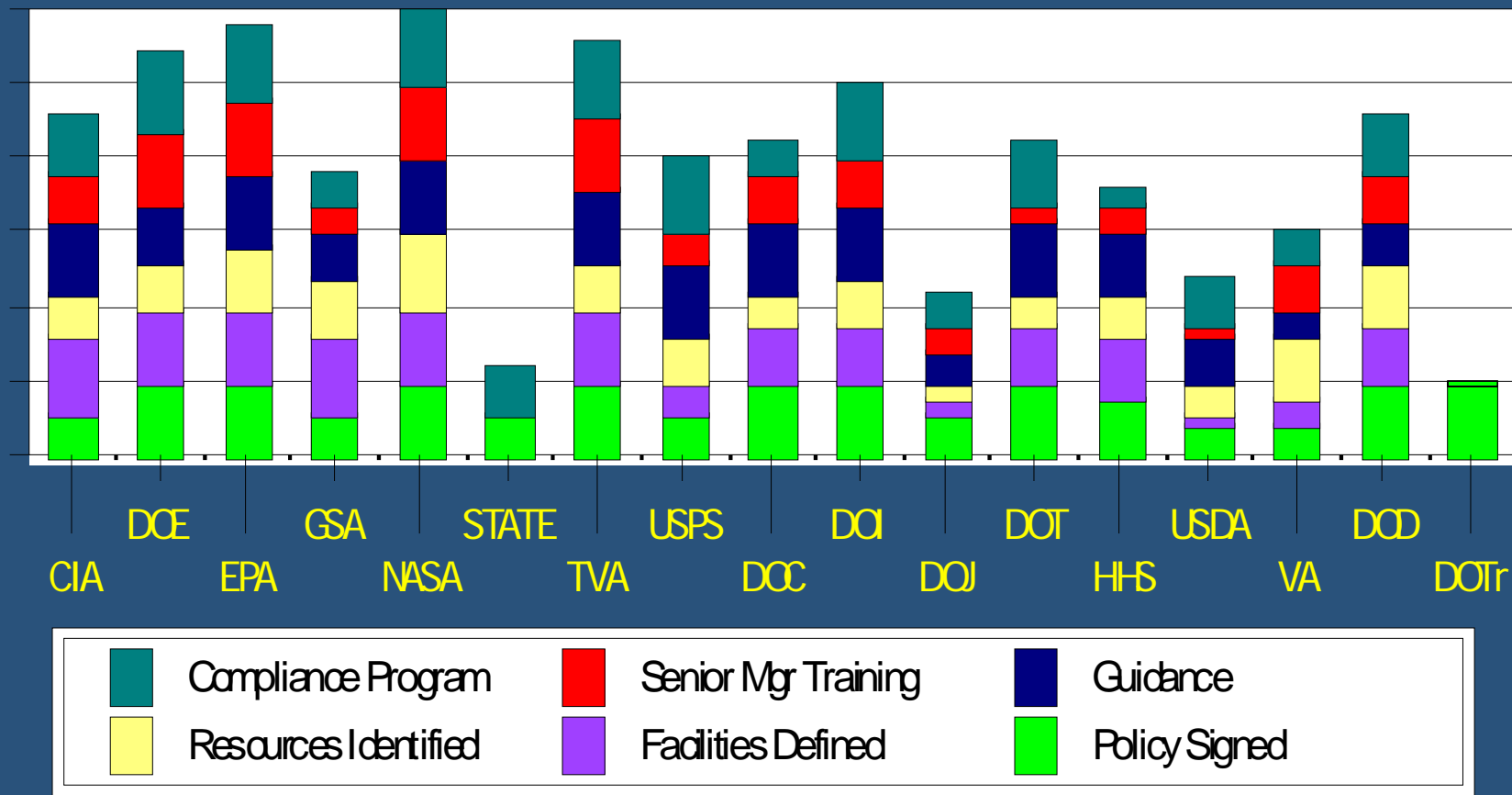
# Federal EMS Status

- **230+** Federal facilities with an EMS
- 21 are certified to ISO 14001– many others use 14001 as their foundation
- Hundreds of others are working on new EMS
- In 2003, >1,000 Federal personnel trained

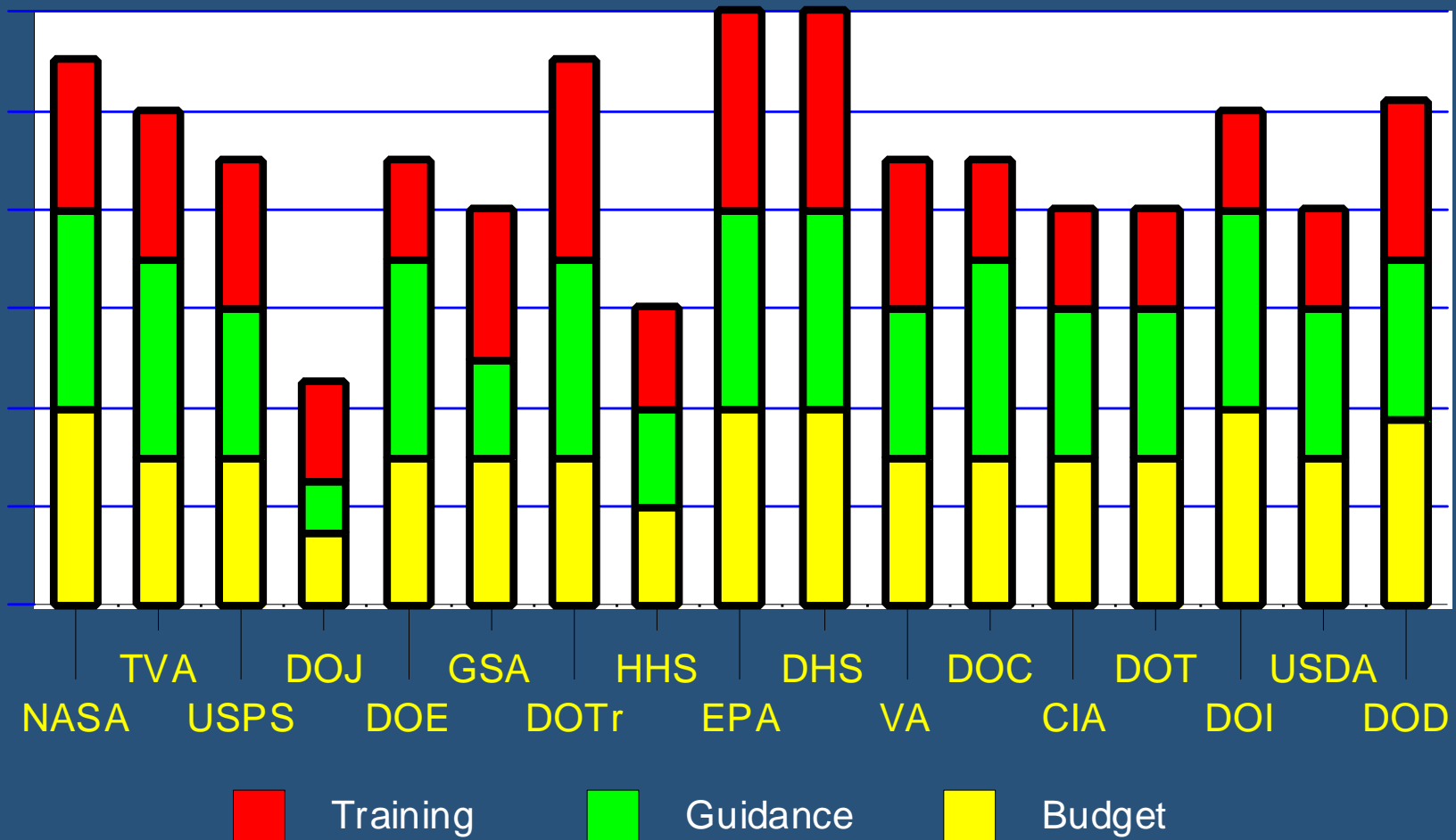
# EMS Scorecard for Federal Agencies – CY2002



## EMS Implementation



# EMS Scorecard for Federal Agencies – CY2003



# SHEMD Evaluation of 34 Appropriate EPA Facilities:



- Agency-wide EPA Facilities have been very successful and have made tremendous progress:
  - **Four completed the 12-step program**
  - Two have had their **final audit**
  - **Every location** has reached > Step 9



# What Does the Future Hold

After December 2005 – **METRICS** will relate to performance of the EMS:

- **Effectiveness of EMPs**
- **Progress towards objectives**
- **Changes made during management review**



**Dr. Jerry Oakley (SHEMD Deputy  
Division Director) quoted when  
asked for EMS resources.....!**

**“So you’re ISO14001 registered, but  
what have you done lately?”**



# 2004 Accomplishments

- Several new Team members
- EMS **J** Drive re-organized
- ~30-40 new employees trained
- Anthony Veltri's model for Green Cleaning Products Presentation (SHEMD conference, Philadelphia)
- ESC Training for EPAsupplies.com BPA Greening the Govt.

# 2004 Accomplishments (cont)



- Updated EPs - 6 for minor updates/corrections. 1 major rewrite for Green Purchasing. 1 to add the shadow procedure (internal audit).
- Reviewed all EMPs (took 4 months for all revisions)
- Attended EMS annual conference with SHEMD and offered ideas
- Website improved
- Preparations made for 1 -1/2 day internal auditor training here in spring by ERG/SHEMD

# Definitions (paraphrased from SHEMD and ISO)



- **Objectives** - goal, arising from the environmental policy, that an organization sets itself to achieve, quantifiable where practicable
- **Targets** - Detailed performance requirement, quantified where practicable that arises from objectives and that needs to be set and met in order to achieve those objectives
- **Operational Control (OP)** - Documents how the organization currently manages operations to minimize impacts (SOPs).
- **Environmental Management Program (EMP)** – Documents the organization’s plans for improving performance

# When do you need an EMP?



Objective



Target



Environmental Management Program

Used to move from current level to a higher level of performance.



## a. Audit status

- **Internal audit June 22-23, 2004,**
  - **3 observed non-conformances - minor - closed**
    - **Result: developed list of EMS Coordinator duties, hard-bound book for pH calibrations, better tracking of EMS awareness training**
- **Surveillance audit July 12-13, 2004,**
  - **3 observed non-conformances - minor - closed**
    - **Result: better tracking of training records and safety documents**
  - **As of Sept 2 2004, Certificate of Registration still in effect (next audit, July 2005)**



## a. Audit status (cont)

- **No compliance violations**



## b. External Communications

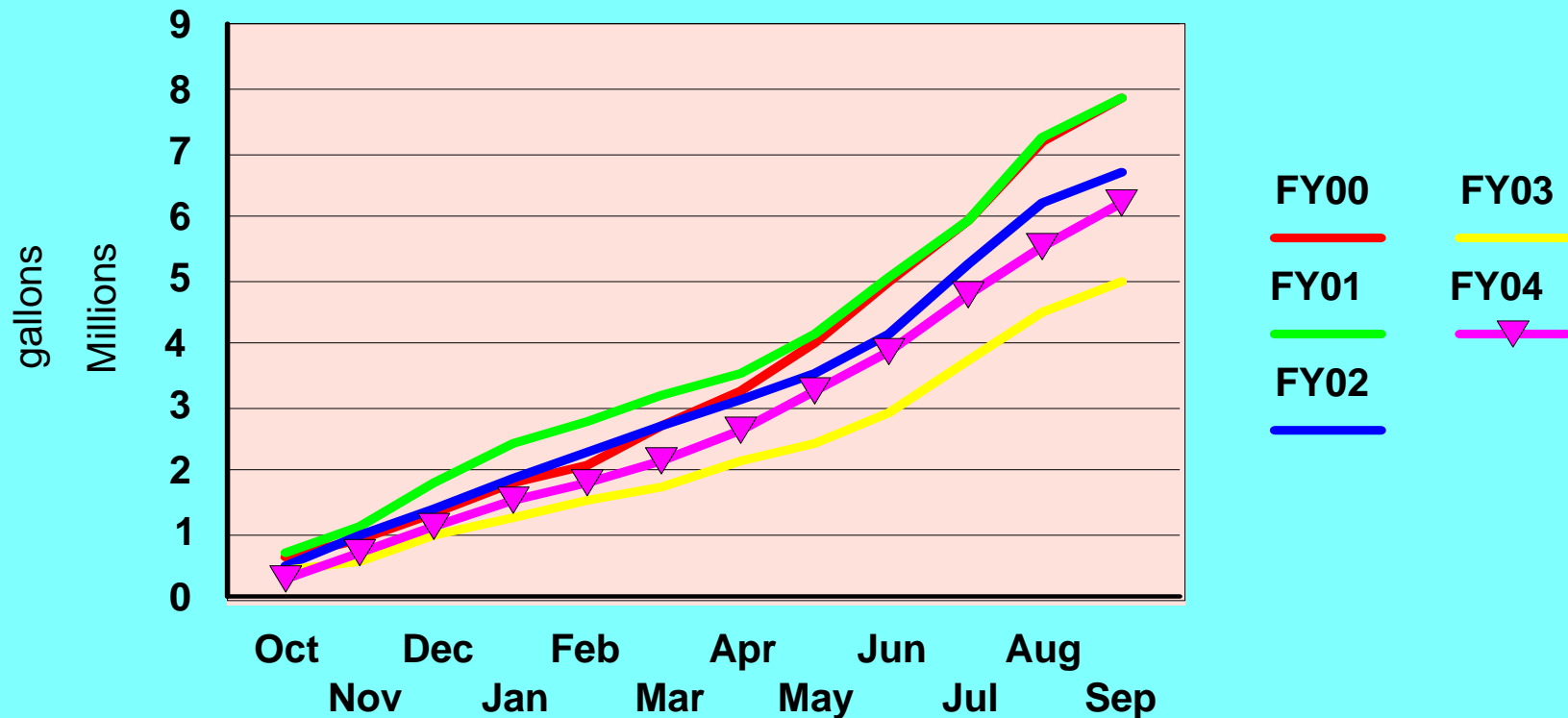
- No communications from external parties or complaints
  - **Contacted by Ft. Meade Cross Functional Team for assistance in developing their EMS**

## c. Environmental Performance:



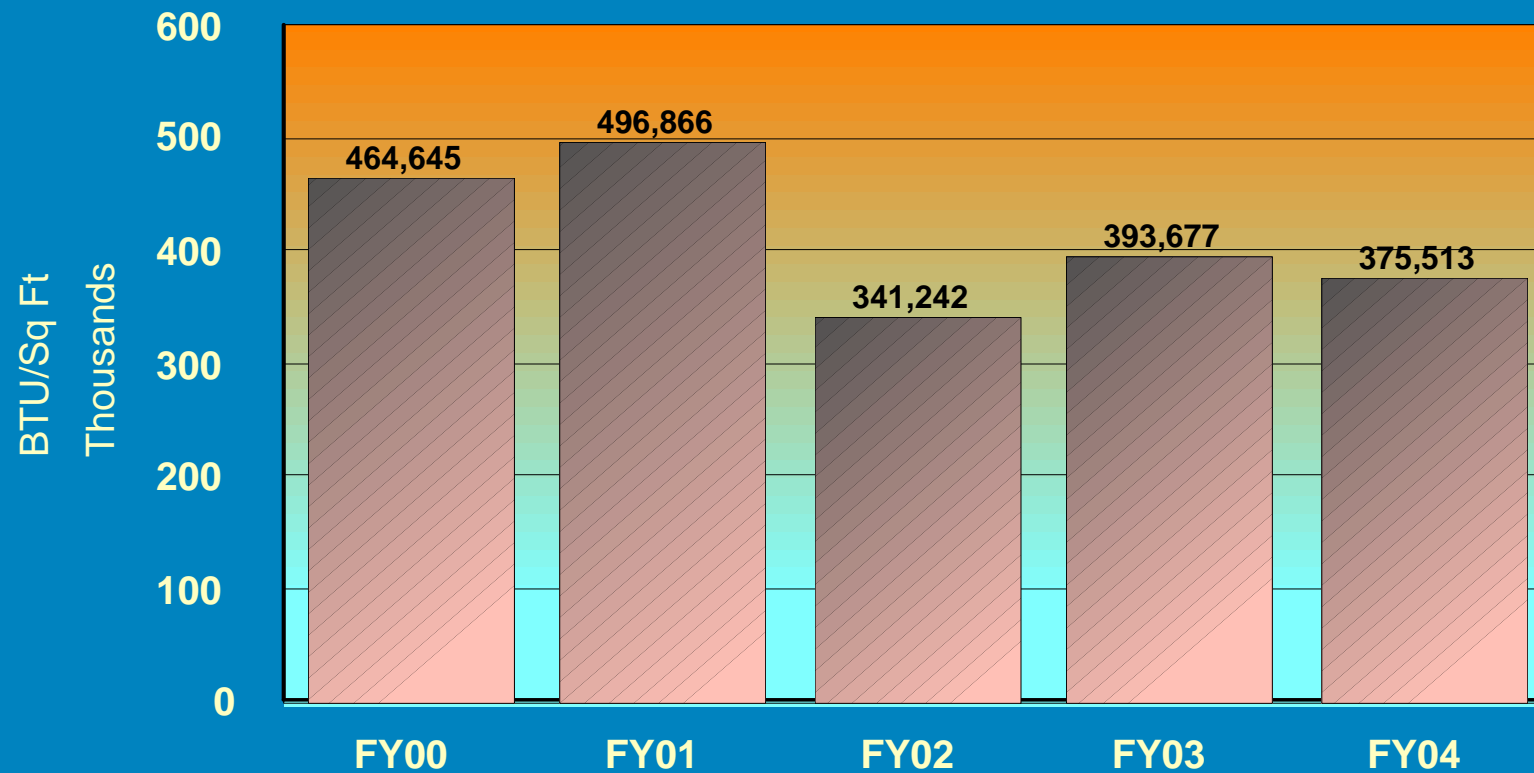
- **Recycling (see handout)**
- **Water (see OPM ESC year end report FY04)**
- **Energy (see OPM ESC year end report FY04)**

# Cumulative Water Consumption Total Water Intake



The Environmental Science Center's overall water consumption halted its downward water use. Domestic water consumption is up significantly (45%) while cooling tower use was up slightly 5.5%. In FY05, we'll be examining why domestic water consumption has increased

## ESC Energy Total Consumption Average per Year



Weather changes over the year created  
a net effect of essentially no change from the previous period.



## d. Current Objective and Target status

- Chemical Resources wkgps: Target b1 launched 6/03. Completed 4/04 (received baseline report)
  - Target b.2: Launched 7/04
- Water Consumption wkgp (SOP proposal accepted by ESC Board 5/04)
- Waste Generation wkgp: Target d1 (list of wastes): launched 11/03. Completed 5/04 (received baseline report)

## d. Targets and Objectives status



- Mobile Source wkgrp: Target b on hold
- Paper Consumption: complete
  - Paper Conservation e-mail to staff
  - Implemented Paper Workgroup suggestions: blue recycle containers, Tip Sheets, MOU

## e. Corrective Actions and Preventive Actions (suggestions)



- CA – none issued
- Suggestions
  - **Brown glass** jugs now recycled for all ESC
  - **Green Meetings** Memo for Conference Rooms
  - **Peanuts** being reused by repository
  - Researched need for **rechargeable batteries** and determined it was not significant

## f. 2003 Management Review Follow up



- Golden Groundhog Day (EMS Awareness) Feb 2004
- PowerPoint Presentation for new employees



# Current Minimum EMS needs

- Respond to internal audit report
- Activity/Aspect analysis
- Update EMS web site
- Conduct new employee briefings on EMS
- Conduct EMS awareness activities
- Review EMP regulatory requirements
- Update EMS manual
- Update EMS procedures (18)
- Update EMP forms (13)
- EPP Implementation

# Current Minimum EMS needs (cont)



- ISO 14001 Surveillance Audit
- Internal Audit
- Management Review
- Review OPM and SHEM reports
- Meet EMP objectives & targets (over 33!)
- Launch and coordinate with workgroups
- Complete new EMP for materials consumption
- DOCUMENTATION



## g. Changing Circumstances

- Moved from implementation to performance
  - **New Metrics**
  - **New ISO 14001 standards**
  - **Better understanding of ISO standard**
  - **Re-evaluation of initial goals**
  
- Need to refocus / restructure to emphasize **quality** vs. quantity

## **h. Proposal: Streamline Documentation**



### **1. Remove redundancies in documentation:**

- Restructure EMS Manual into appropriate Environmental Procedures (EP). Make this an EMS Training/Introduction Manual for new employees**
- Restructure EMP format to consolidate legal requirements, training, competencies.**



## h. Proposal: Reduce Targets

### 2. Reduce number of active EMP Objectives and Targets

- **Only required to focus on one at a time**

# h. Proposal: EMPs – Set to Inactive Status



Ten out of eleven EMPs:  
no active Objectives  
&Targets

- Air Emissions
- Radiation
- Storm Water Discharge
- Wastewater Discharge
- Water Consumption
- Energy Consumption
- Fuel Consumption (heating oil, natural gas)
- Fuel Consumption (Mobile)
- Paper Consumption
- Waste Generation



## **h. Proposal: Strategy for 2005**

- **Refocus team to work on one target only (Chemical Resources EMP)**
  - Standing EMS Team, plus Volunteers invited to the EMS meetings to provide ideas and expertise. EMS team will provide structure and guidance to accomplish target.
  - Meet twice a month
- **Non-target issues (mgmt review, audit prep, suggestions, etc.)**
  - Sub-set of Standing EMS Team
  - Meet monthly ...more often as needed.

# Then....we need a 3-5 year strategic plan for EMS at the ESC



- **Resources?**
  - Representation of Members
  - Rotation/Transition of coordinator
  - Rotation/Transition of members
  - Training
  - Funding (ISO audits)
- **Expectations/Outcomes?**
  - Focus work (one target a year)
  - Stay ISO certified?
  - Internal audits – staffing?



# So what do you think....?

- Is the EMS suitable, adequate, and effective?
  - **The EMS team does not think it is in its current state.....changes are needed.....**
- 2005 year plan?
- 3-5 strategic plan?
- Feedback time.....

Remember, EMS is not a  
program....



...it is a  
**management** tool...It  
belongs to **YOU!**

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