Challenges and Benefits of an Environmental Management System for a Midwestern Public Utility

Dominic J. Hanket
Columbus Department of Public Utilities

Robert W. McGormley
Gresham, Smith and Partners

August 27, 2014
Presentation Outline

- Overview of EMS
- EMS Challenges
  - DPU Environmental Audit
- EMS Benefits
Environmental Management System

- Environmental policy
- 16 elements aligned with ISO 14001
  - Legal and other requirements
  - “Significant aspects” and “impacts”
  - Roles and responsibilities
  - “Operational controls”
  - Training and awareness
  - Document control and recordkeeping
  - Internal audits
- DPU implementation began in late 2008
EMS Challenges

- #1—Understanding that environmental improvement is needed
- DPU in 2006
  - No formalized environmental program
  - Compliance status beyond core services largely unknown
  - Significant interest in operations by environmental advocacy groups
  - Regulatory Compliance Section established
  - Initiated comprehensive environmental compliance audit
Purpose
- Establish a compliance baseline
- Identify areas needing immediate attention
- Recommend long-term solutions

Scope
- >100 facilities
- Primary environmental laws and regulations
- Records back to 2004

Schedule
- August 2006 – August 2007
Environmental program gaps:
- Department-wide compliance for non-core functions
- Tracking regulatory changes
- Defined roles and responsibilities
- Training
- Outdated documents
- Recordkeeping
- Identifying environmental priorities
EMS Challenges

- Legal and other requirements
  - Tracking ever-changing regulations and applicability to new processes and operations

- Significant aspects and impacts
  - Identifying all activities and associated environmental impacts
  - Conscientiousness in identifying operational and equipment changes that present an environmental impact
EMS Challenges

- Roles and responsibilities
  - All staff are required to play some role in the EMS
  - Need to look beyond what staff believes to be their core function
    - Serve on Steering, Core, or Implementation teams (no extra pay)
    - Burden of additional responsibilities on staff already being stretched
  - Staff willingness to conduct required monthly and annual inspections
EMS Challenges

- Operational controls
  - Staff cooperation in developing and following procedures
  - Integrating EMS-driven capital improvements into existing CIPs

- Training and awareness
  - Reaching all employees
  - Environmental policy and relevant significant aspects
  - Staff taking assigned training courses
  - Engaging contractors and subcontractors
EMS Challenges

- Document control and recordkeeping
  - Preventing “rogue” copies
  - Tracking employee training
  - EMS data management

- Internal audits
  - Changing mindset to one where finding and fixing problems is a good thing
  - Reporting non-conformances
  - Conducting root cause analysis
EMS Challenges

- Willingness to change
  - EMS development requires positive cooperation and patience

- Recognizing successes
  - Focus is often on problems rather than successes
EMS Benefits

- Environmental compliance more readily achievable and sustainable
- Regulatory program more consistent across divisions
- Program weaknesses are called out and strengthened
  - Training
  - Emergency preparedness
  - SPCC and stormwater inspections
- Existing environmental improvement initiatives are supported
EMS Benefits

- “Significant aspects” addressed (e.g., chemical handling)
  - Environmental management programs
  - Implementation team members
  - Operational controls

- EMS team participation increases inter-departmental information sharing and cooperation
EMS Benefits

- Better environmental awareness and understanding of roles and responsibilities
- Major environmental compliance issues identified and addressed prior to less favorable outcomes
- Contractor/subcontractor performance improvement
- EMS audit program provides sustainable compliance and high performance level

Challenges and Benefits of an Environmental Management System
EMS Benefits

- Incorporation of non-regulatory driven improvements reduces environmental impacts on community
- Ratepayers assured that utility is “doing the right thing”
- Successful well-recognized management program such as the EMS may contribute to favorable bond rating and EPA grants
Challenges and Benefits of an Environmental Management System

EMS Benefits

- Positive example for other government and private entities
  - DPU Environmental Policy adapted to apply city-wide
  - Fleet Management Division implementing EMS
  - City Departments have access to DPU EMS documents via intranet
Questions
Contact Information

- Dominic “Dan” J. Hanket
  Columbus Department of Public Utilities
  910 Dublin Rd.
  Columbus, OH 43215
  (614) 645-3753
  DJHanket@columbus.gov

- Robert W. McGormley
  Gresham, Smith and Partners
  155 E. Broad St., Ste. 900
  Columbus, OH 43215
  (614) 221-0678
  rob_mcgormley@gspnet.com