

Maryland Transit Administration Environmental & Sustainability Management System

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MTA Environmental Manager





Maryland Transit Administration

- Established in 1970, the MTA is one of the largest multi-modal transit agencies in the nation.
 - Six (6) modes: Bus, Metro Subway, Light Rail, MARC Train, Commuter Bus, and Mobility
 - Fiscal year 2016 had 110,717,753 boardings
 - Recently launched BaltimoreLink



Environmental Compliance Efforts

- September / October 2005 – EPA Visited the MTA
- EPA Agreement (Consent Agreement and Final Order – CAFO) Effective February 2007.
- Developed 2 supplemental environmental projects as a condition of the CAFO.
- Determined need for a management system to address environmental issues.



Maryland Transit Administration

- MTA attended training through the Virginia Tech/Federal Transit Administration partnership.
 - 2009 - Training for ISO 14001:2004 - EMS
 - 2016 - Training for ISO 14001:2015 – ESMS
- Completed program in June 2017.

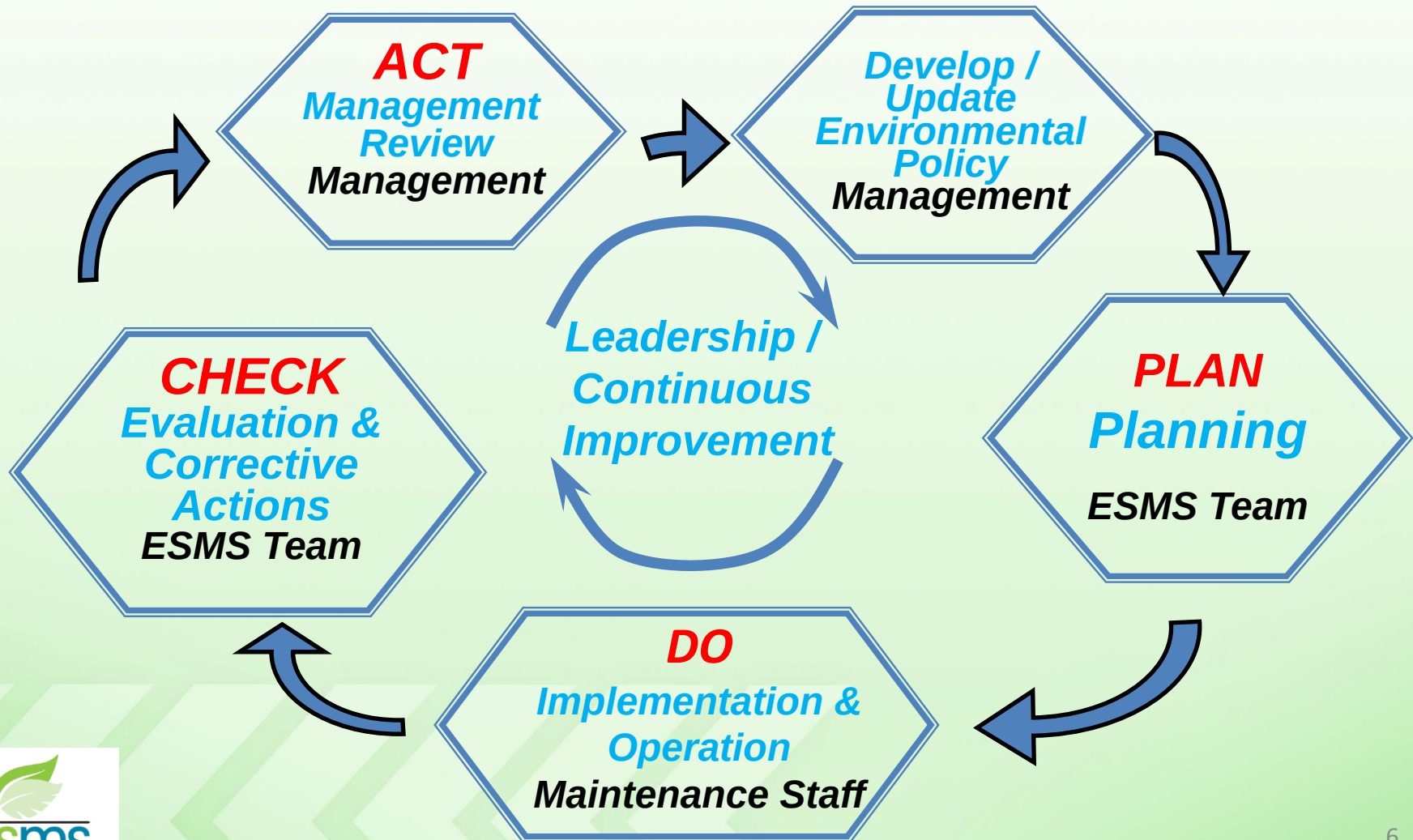


ESMS Core Team

- Robert Frazier, Environmental Manger
- Sean Adgerson, Deputy COO, Core Support
- Kelly Lyles, Environmental Planning
- Toby Johnson, Engineering
- Virginia Dadds, Engineering Stormwater Manager
- Lauren Molesworth, Environmental Planning



Key Elements to Managing the ESMS





Challenges

- Building environmental programs, data management systems, and ESMS simultaneously.
- Changes to fiscal planning and senior leadership.
- Initiating culture change at all levels of the agency.
- Identification and delegation of roles and responsibilities.





Incorporated Programs

- **Sustainability**

- The MTA is developing Sustainability Program for the agency.
- The plan establishes performance measures based on three areas: People, Planet, Prosperity.
- Water Consumption included within ESMS.

- **Energy Management**

- The MTA Energy Plan is a required plan by Maryland Energy Administration and sets goals for the agency to reduce energy consumption by 20%.

- **Transit Asset Management**

- The Transit Asset Management Plan is a federally mandated plan to manage the maintenance and replacement of all assets within the agency.
- Helps to identify life-cycle planning for assets which have an environmental impact.

Current ESMS

- Development and implementation in progress.
 - Chose a Light Rail facility due to nature of operations.
 - Culturally receptive staff and management.
- Done as a **TEAM** effort.
 - Planning
 - Engineering
 - Environmental
 - Senior Leadership



MTA ESMS Core Team and VT



ESMS Project Focus: ASTs

- Identified Aboveground Storage Tank (ASTs) as a significant risk.
 - Potential for environmental impact = **High**
 - Potential for community impact = **High**
- Developed an Action Plan to assess and reduce risk.
 - Inspections to identify tanks needing repairs.
 - Prioritize and track repairs and replacements.
 - Fiscal planning for routine maintenance.





Early Benefits

- Best foot forward approach.
- ESMS helps to drive MDOT policies; above and beyond regulations; helps to capture new incentives and incorporate changes.
- Improved relationship with public and community groups.
 - Air pollution and water pollution concerns.
- Foundation of these early benefits is increased communication:
 - With the public
 - Internally between departments





Early Benefits: Improved Efficiency

- Planning, engineering, and environmental departments all involved in tanks via regulatory obligations, asset management, energy conservation, and sustainability.
- Improved fiscal management and manpower management through inter-departmental cooperation.
 - Defining financial resources and planning execution of projects across all departments.
 - Leads to cost savings and more efficiency – not doubling efforts.



Early Benefits: Cost Savings

- Tank repairs and preventative maintenance before issues become larger – initial realization for MTA.
- Management of repairs and fiscal planning through asset management.
- Total cost of needed tank repairs and replacements at the selected facility: **\$128,000**
 - Cost of replacing structurally deficient 6,000 gallon AST: **\$85,000**
 - Other repairs to facility ASTs: **\$43,000**
- Fines previously incurred due to leaking tanks:
 - EPA consent decree total cost: **\$2.7 Million**
 - On going costs for monitoring and remediation: **~\$500,000**





Conclusion: Continual Improvement!

- Realizing improvement to inter-departmental project cooperation.
 - Increased communication
 - Better fiscal planning and management
- Risk reduction:
 - Increased requirement for inspection and maintenance.
 - Data management of inspections .
 - Open/close cycle for deficiencies.
- Cost of previous fines, etc.





Turning the Wheels

- The MTA is forging ahead with the full implementation of their ESMS structure to all modal maintenance facilities.
- Exploring the potential for ISO certification for initial facility.
- Continuing culture change within the organization





Thank You.
Questions/Comments?

