

Eaton Corporation Roxboro ISO 14001 Program

Engine Air Management
Operations

Brian Phillips



What is Eaton Roxboro's Environmental Policy

- **The Eaton Corporation in Roxboro, NC, a manufacturer of automotive and pneumatic components, shall conduct its environmental operations in compliance with applicable environmental laws and regulations in keeping with corporate guidelines and good community citizenship. We maintain a commitment to the prevention of pollution and the protection of the environment. The goal of continual improvement in the above forms the framework for setting and reviewing environmental Objectives and Targets**



What are the Benefits of ISO 14001?

- It allows the company to pursue market opportunities or meet market requirements
- It focuses on meeting environmental objectives
- It promotes employee awareness
- It assists in:
 - maximizing efficient use of resources
 - meeting and maintaining regulatory requirements

EMS at Roxboro

- Air emission control system
- POTW treatment system
- NPDES storm water control system
- NPDES industrial waste water discharge system
- RCRA LQG hazardous waste collection system

Aspects and Impacts

- Metals in waste water
- Oil mist concentrations in air
- Storm water contamination
- Oil and grease to POTW/storm sewer
- Hazardous waste generation

Objectives & Targets

- Assess the most significant impacts
- Select ones that can be affected most by plant's activities
- Establish annual objectives that abate or mitigate the significant impacts effect
- Set a target which can be MEASURED to track the progress on meeting that objective

Objectives and Targets con't.

- Monthly at Environmental Steering Committee meetings review progress of meeting the objective
- Adjust plan accordingly

Examples of Objectives/Targets

- To reduce oil and grease in waste water
- To reduce hazardous waste generation
- To reduce oil mist in air
- To reduce O&G going to city to 75% of permit limit
- To reduce amount generated in 2001 by 25% of 2000 amount
- To reduce oil mist level in air to 0.5 TLV

Monitoring and Sampling

- Monitoring is generally based on permit requirements
- More frequent monitoring is done as necessary
- Monitoring is done on all areas of environmental contact

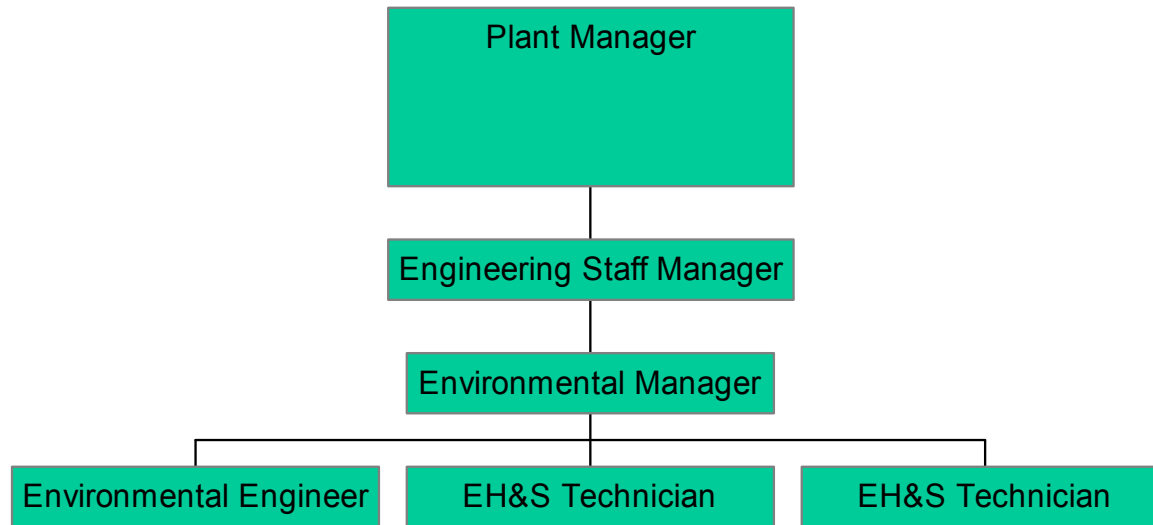
Auditing and Reviews

- Internal audits (performed quarterly)
- Qualification audits (performed by DNV)
- Quarterly management reviews
- Monthly steering group meetings

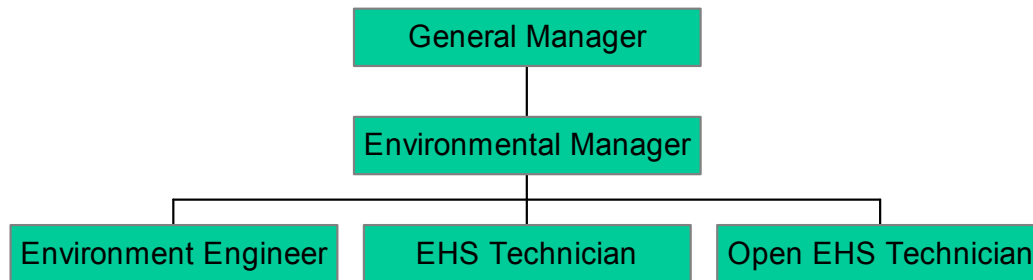
Training

- Documented training of all plant employees on environmental awareness occurs annually
- All visitors to the plant receive nominal awareness training
- Contractors and persons performing work at plant receive documented environmental and safety training

EMS Organization



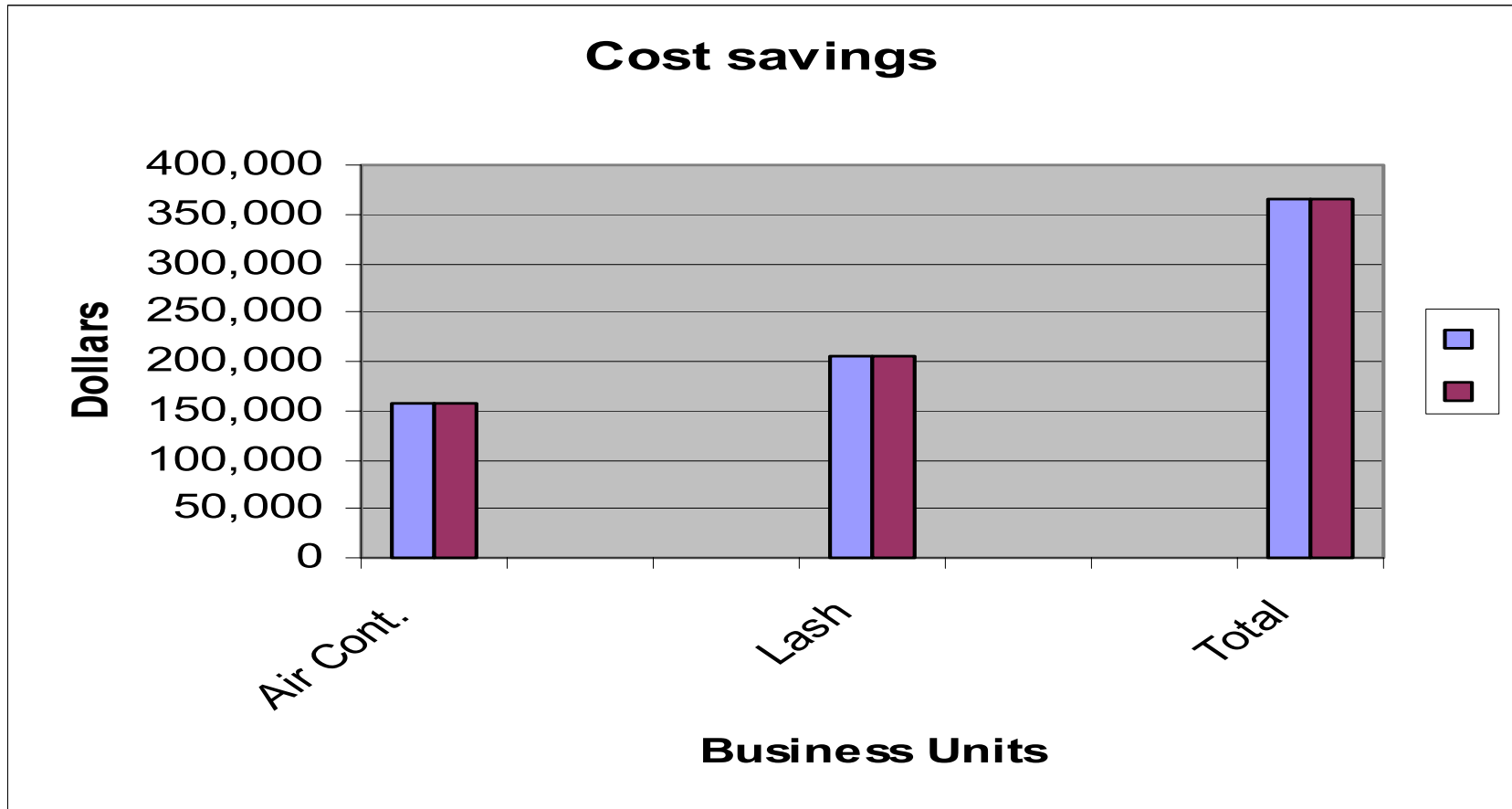
Organization Chart



Continual Improvement

- Increase recycling activities to include more scrap production materials
- Maximizing current oil/water separation system
- Implement process improvements to reduce generation of hazardous waste
- Install high efficiency oil mist capture system

Cost Savings from ISO Program



Key Expense Saving Projects

- Oil blending operation
- New zero discharge parts washer
- Eliminate “bad actors” in waste water stream
- Improvement to UF cleaning method
- Improved handling of scrap parts
- Implementing a general recycling program
- Develop process to regenerate “dead” UF’s
- Improve plating process

Lessons Learned

- Although paperwork burden is increased, overall benefits are substantial
- First, it keeps environmental issues in the “spotlight”
- Second, it gives more credibility to the organizations environmental program
- Third, it tracks resources and allows for cost saving opportunities