Pollution Prevention Opportunity Assessment (PPOA) Methodology



Setting Your Installation Up For Environmental Success

Strategies and Considerations for Effective P2 Planning and Implementation 9 April 2003

> Page 1 of 14

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#### Pollution Prevention Opportunity Assessment (PPOA) Methodology

- P2 Planning
- Assessing Opportunities
- Data Collection and Reporting
- Communication
- P2 Hierarchy
- Targets and Objectives
- Aspects and Impacts
- Process Flow Diagrams
- Recommending Alternatives
- Feasibility Analysis
- P2 Initiatives
- Proactive Approach to Achieving Compliance Through P2

Page 2 of 14

### **P2** Planning

- Assigned Duties and Responsibilities
- Based on Management and Environmental Goals
- Baseline Assessment of Waste Streams and Compliance Sites
- P2 Opportunity Assessment
- Prioritized Plan for Project Implementation
- Funding Scheme
- Documentation of Performance
- Periodic and Frequent Updates
- Management and Command Support
- Integration Strategy

Page 3 of 14

# **P2 Opportunity Assessment**

# **Basis/Justification for P2 Plan**

- Prioritize and Screen Efforts to Execute the P2 Program
- Means to Address Compliance Burden through preventive measures
- Facilitates Reporting and Updating
- Demonstrates Feasible Alternatives to Pollution Generation

Page 4 of 14

### **Data Collection and Reporting**

- Accurate and Complete Data is Essential to Good Information.
- Good Information is the Key Knowledge and Wisdom.

 Knowledge and Wisdom are essential to making good decisions and planning.

Page 5 of 14

### Communication

- Sharing Success Stories, Lessons Learned, and Good Ideas
- Websites.
- Technology Transfer.
- Working Groups.
- Documenting Performance.
- Reporting.

Page 6 of 14

## P2 Hierarchy



# Source Reduction Recycling and Reuse Treatment Disposal

Page 7 of 14

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## **Targets and Objectives**

- Overall GOALS are based on published and otherwise applicable MoMs, agency directives, Federal/State regulations.
  - Specific OBJECTIVES are based on locally generated compliance waste stream data
  - Detailed background knowledge:
    - Installation
    - Operations
    - Processes

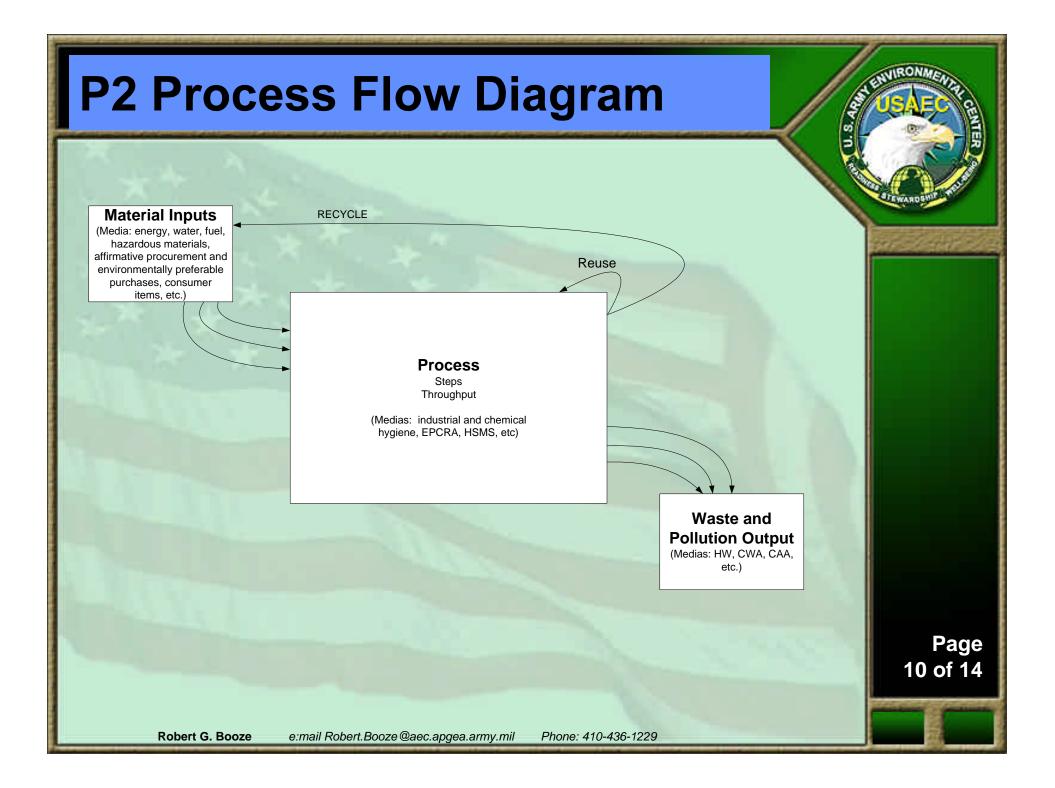
Page 8 of 14

### **Aspects and Impacts**

- Compliance Medias
  - Input
  - Process & Throughput
  - Output
- Compliance Site Inventory
  - Location Geographically
  - Process Pollution Generation
  - Ownership Responsible Unit/Activity
- Process/Program Specific Data
  - Material Inputs Cost, Quantity
  - Production Labor, Time, Cost
  - Waste Cost, Quantity

Page

9 of 14



# **Recommending Alternatives**

Based on experience, domain knowledge, command interest, and professional "hunches." Requires varied and specific expertise:

- Organization Personalities
- Mission Operations PM/CM Requirements
  - weapon systems
  - ranges and training
- Installation Management Activities
  - supply and logistics
  - facilities, equipment, vehicle, weapons maintenance
  - medical activities
  - contracting and administration
  - energy production and distribution
  - waste management
- Environmental Media
- Financial Analysis
- Chemistry and Toxicity
- Regulatory Implications
- etc...

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Page 11 of 14

### **Feasibility Analysis**

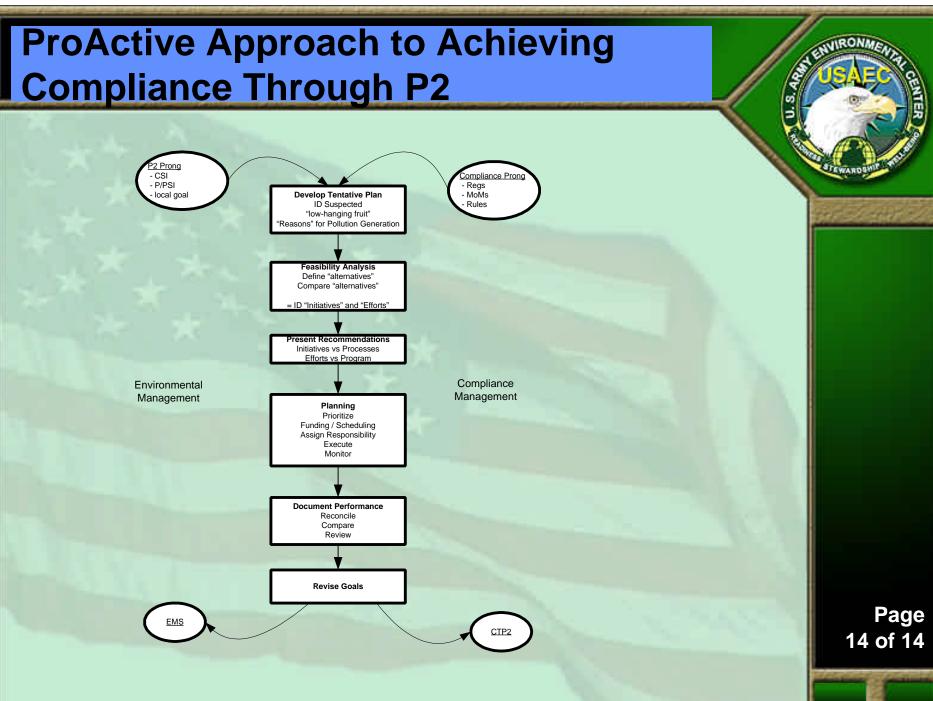
- Description Targeted Process and Detailed Flow Diagram
  - Current Waste Generation
  - Current Operational Parameters
  - Current Material Consumption Rates
- Narrative Qualification of Alternative(s)
- Quantitative Feasibility Analysis
  - Technical Feasibility
  - Environmental Feasibility
  - Economic Feasibility

Page 12 of 14

## P2 Initiatives

- "Finalized" P2 Opportunities.
- Technically the "result" of PPOA.
- Initiatives = Real Projects :
  - Planned
  - Funded and Resourced
  - Responsible POC
  - Data to Document Performance
  - Evidence of Effectiveness
  - Future Success Story

Page 13 of 14



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