Alternative Planning: A MassDEP Perspective

John Fischer, MassDEP November 2009



Alternative Planning Eligibility

If completed one TUR plan and two plan updates may choose to:

- 1. do a toxics use reduction plan update;
- 2. establish a resource conservation plan;
- 3. implement a TUR EMS

EMS Requirements

- EMS conforms with accepted framework (14 required elements) AND
- incorporates specific TURA EMS requirements
- Must be in place for one full EMS cycle (plan-do-check-act) and have undergone independent audit
- Submit EMS Progress Report to MassDEP

RC Requirements

- Complete Resource Conservation plan
- Submit RC Plan summary to MassDEP
- Submit RC Progress report in next planning cycle (return to TUR planning)

RC/TUR Planning Options Timeline



Resource Conservation Asset Areas

- Energy use
- Water use
- Materials and products that contribute to solid waste
- Toxic substances used below threshold amounts
- Chemical substances exempt from TURA reporting

Energy - overview

- 14 plans
- Total estimated use: 260 million kwh/year
- Potential reductions: 42 million kwh/year
- Top Operations:
 - Air Compressors (8)
 - Lighting (8)
 - Boilers (7)
 - Other Common operations: Process heating & cooling, motors, building HVAC, pumps, chillers

Energy – options implemented

- Compressed air eliminate leaks, more efficient compressors, reduce pressure
- Lighting retrofits, motion sensors
- Boilers identify & repair leaks in steam system, oil to natural gas, insulate boiler pipes
- Other replace pond pump, new co-gen plant

Water - overview

- 8 plans
- Total estimated use: 370 million gallons/year
- Potential reductions: 38 million gallons/year
- Top Operations:
 - Process water (6)
 - Domestic plumbing (3)
 - Landscape irrigation (2)
 - Boilers (2)

Water – options implemented

- Process water reuse non-contact cooling water, more efficient pumps, reduce flow rates, additional meters
- Domestic plumbing reduce flush volume
- Landscape irrigation reduce frequency and time
- Boilers reduce wash water use to clean boiler

Materials in Solid Waste - overview

- 3 plans
- Total estimated use: 2.3 million pounds/year
- Potential reductions: 300,000 pounds/year
- Top Operations:
 - Production line (3)
 - Shipping/receiving (2)
 - Building cleaning (2)
 - Offices (2)

Exempt Chemicals & Toxics Below Threshold - overview

- Toxics below threshold 4 plans
- Exempt chemicals 3 plans
- Total estimated use: 45,000 pounds/year
- Potential reductions: 11,000 pounds/year
- Top Operations all production line
 - Inks and solvents

MassDEP Contacts

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EMS Questions
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