

Michigan Integrated Assessment (IA) Program

Nathan Hude DEQ, Waste Management and Radiological Protection Division huden@michigan.gov

IA Intent / Purpose

- Provide cost saving recommendations for small to medium sized businesses in a non-regulatory manner
- Build relationships with industry, develop trust
- Waste Analysis
- Energy Consumption Analysis
- Water Use Analysis
- Multi-media Compliance Assistance

IA Key Points

- Service is Free
- Service is Confidential
 - Report of findings and suggestions is provided and made available only to the company
 - o FOIA
- Service is Non-Regulatory
 - o What if you're facility is dumping methylethylgonnakillya down the drain?
- Report suggestions not mandatory to implement

IA Target Audience

- Small to medium sized business, <500 employees
- May not have funds to hire consulting firm
- Businesses that have or do not have environmental staff assigned

What is in an IA?

Two Parts

- Pollution Prevention
- Compliance Assistance

The P2 Mindset

- P2 ≠ Recycling, but may start from there
- P2 may have direct impacts upon the company in the aspect of monetary savings, or it might just end up
 giving the company bragging rights
 - Some costs may not have a return
- Working to reduce, replace, or eliminate
 - Eliminate or Replacement Example- Solvent change
 - o Reduction Example- Excess packaging or Trash bags
- Working to reduce, replace, or eliminate
 - o Eliminate or Replacement Example- Solvent change
 - Reduction Example- Excess packaging or Trash bags
- Avoiding or reduce purchases that have a large or costly life cycle

- o Pounds of CO2e per serving of beef? 6.5 lbs
- o Life Cycle of 1 egg = 55 gallons of water
- o What about the life cycle of "Special Island" water, shipped 7300 miles?

What is in an IA

- Part 1 of 2: Pollution Prevention- What/Intent?
 - o Multi-media based (air, waste, water)
 - o Reduction of regulatory oversight
 - o Increase efficiencies and possible cost savings
 - o Find preventative measures to eliminate or reduce waste streams with possible cost savings
 - o Conservation of energy and water resources
- Part 1 of 2: Pollution Prevention- How?
 - Waste / trash service analysis
 - o Material substitution / replacement
 - o Lighting survey
 - o Environmental Management System assistance
 - o Special Use Tools
 - Thermal Imaging Camera
 - Ultrasonic Detection
 - Electrical Use Meter. 110v

Part 2 of 2: Compliance Assistance

- Multi-media based (air, waste, water)
- Assist in addressing any company / facility identified concerns
- Mitigate risk potential for non-compliance
- Research company / facility identified concerns
- · Review of past inspections, permits, etc. in effort of identifying possible concerns, multi-media
 - Waste Data System (WDS, public access)
 - o Michigan Air Compliance & Enforcement System (MACES, internal access)
 - o MiWaters (public access)
- Address compliance concerns identified on site

IA Planned Timeline

- Survey / Request for IA
- Information Exchange
- Schedule a site visit
- Day 1: 2 4 hours on site walk through
- Follow-up documentation if needed
- Day 60: Draft Report
- Day 90: Final Report

