# E-ENTERPRISE FOR THE ENVIRONMENT: A PATH FORWARD

Clean Air Act Advisory Committee

December 1, 2016

Richard A. “Chet” Wayland

# The old way of doing business

EPA

↓

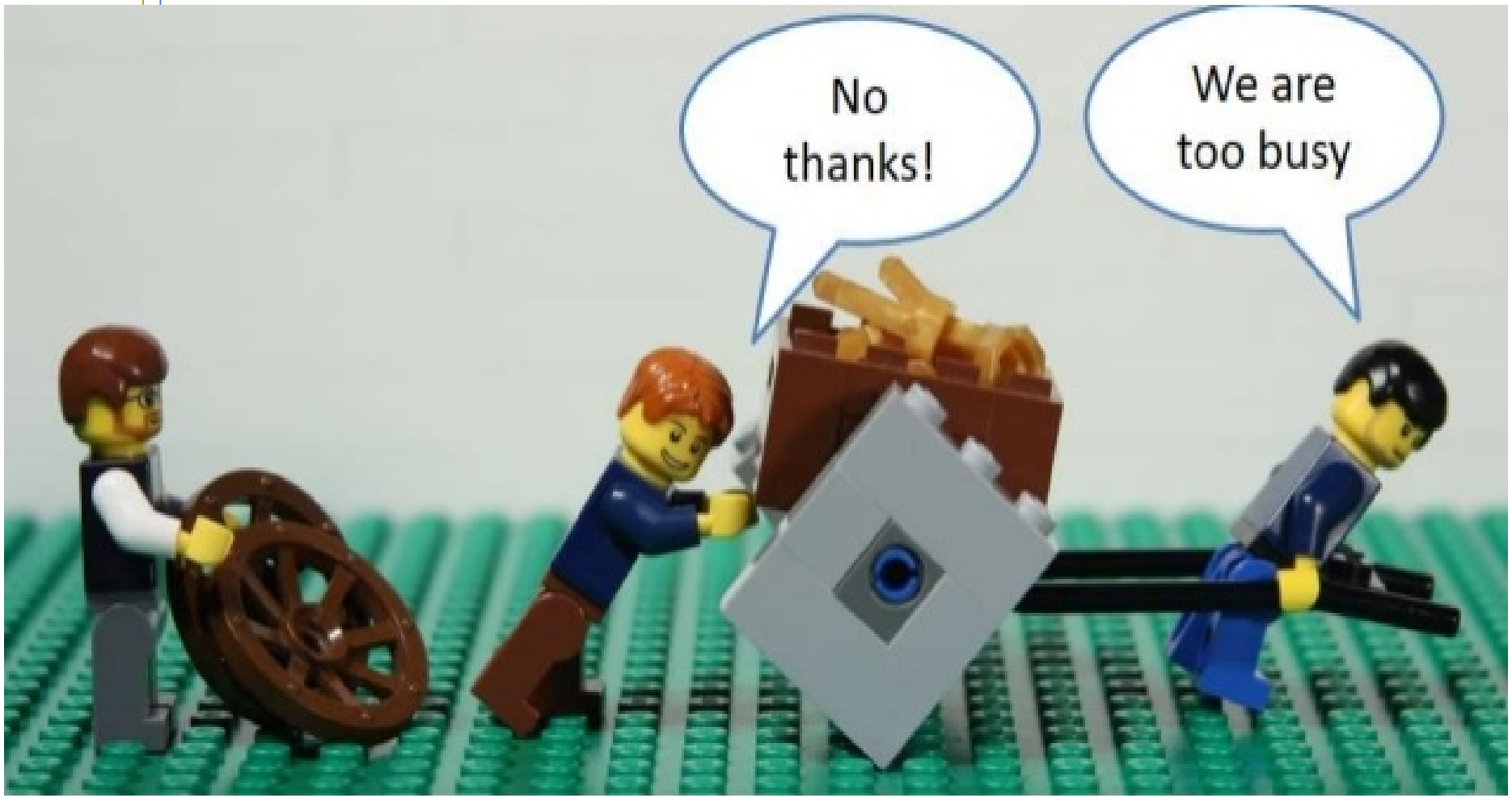
States and Tribes

↓

Regulated Entities and the Public

Old, outdated processes and equipment are no longer effective in helping co-regulators in environmental protection.

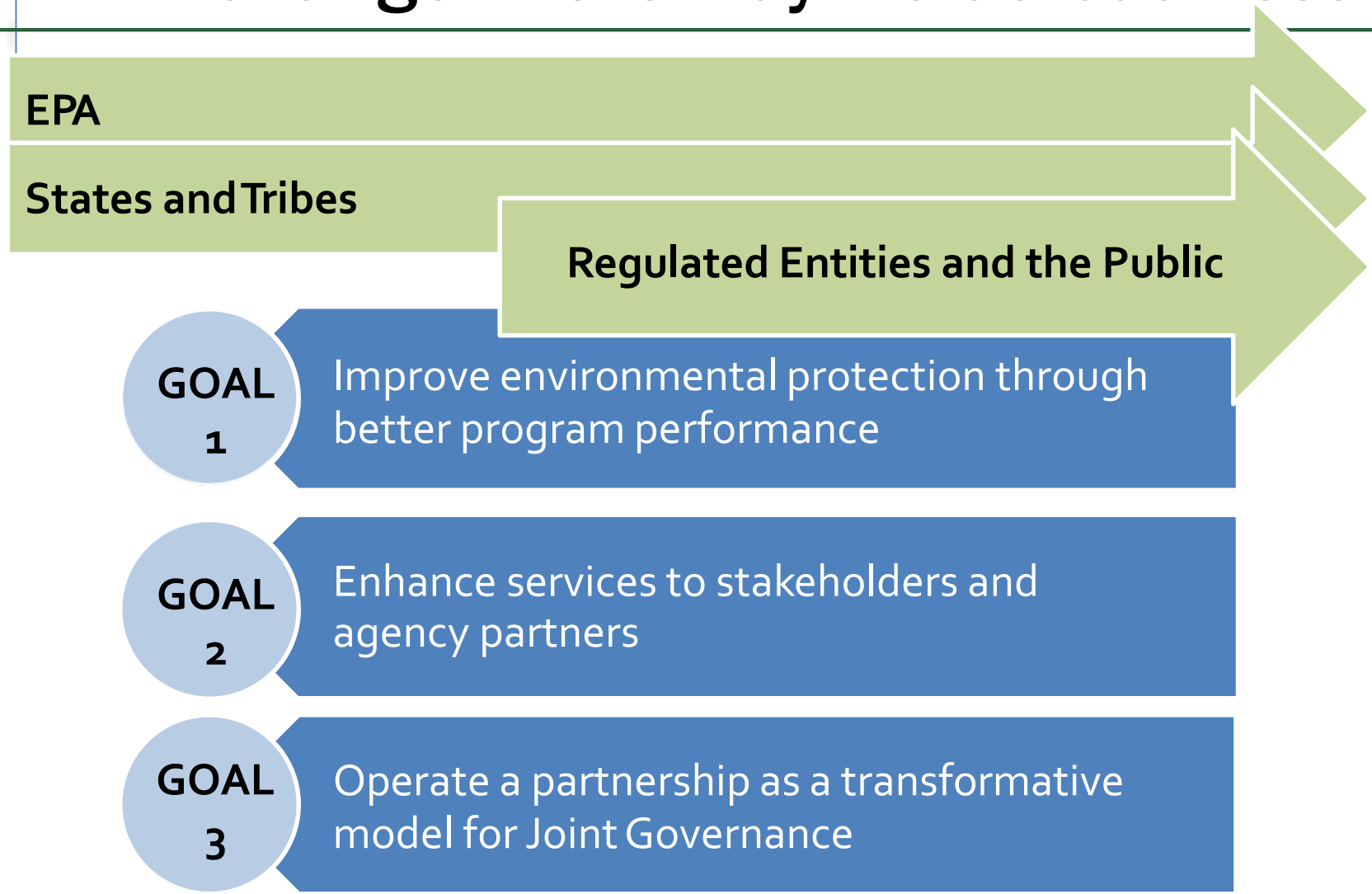
# Often we are too busy to consider a better way



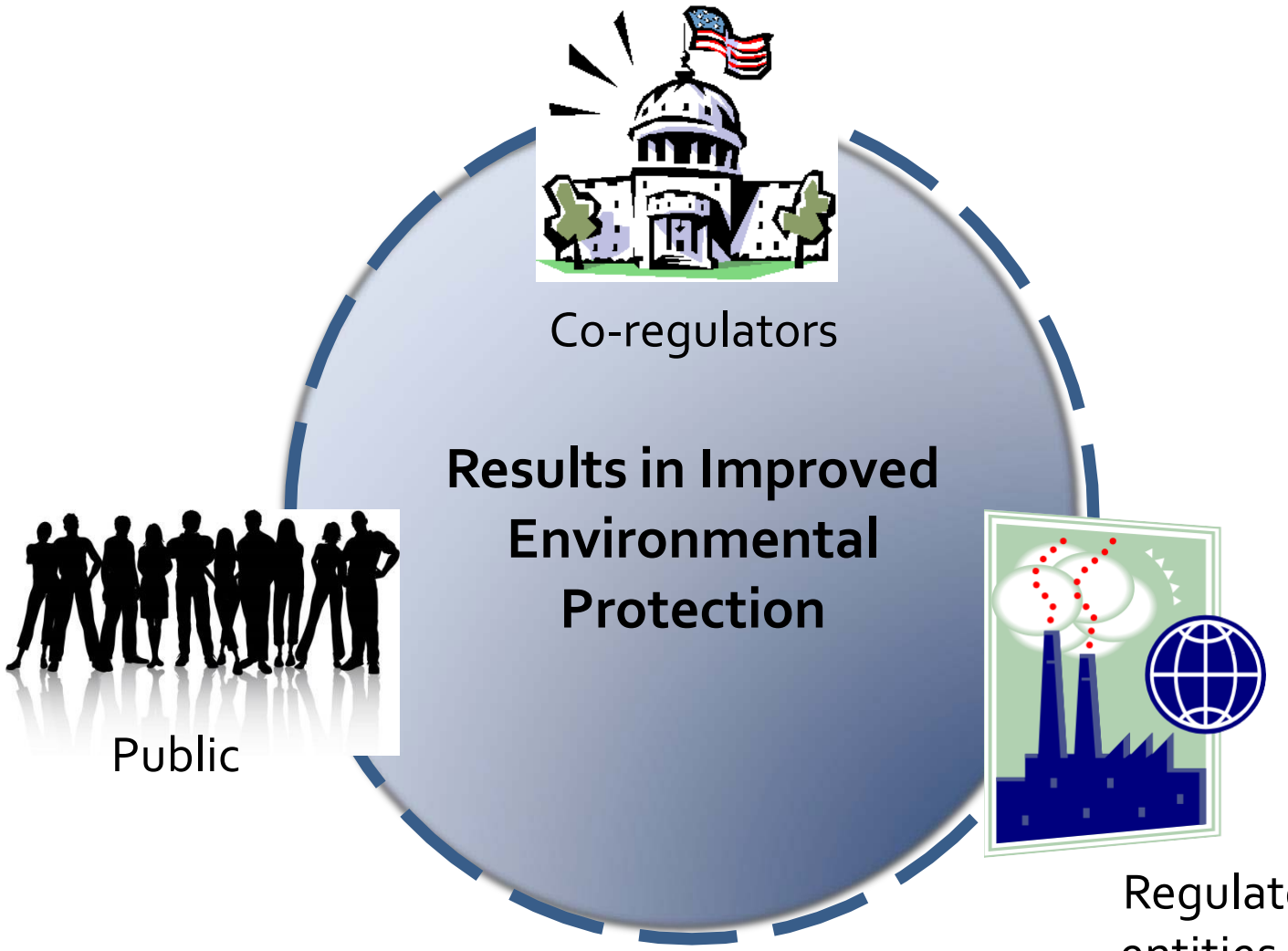
# Working together smarter

- E-Enterprise for the Environment is a new model for collaborative leadership among environmental co-regulators, engaging with all interested and affected parties, to achieve positive environmental, human health, and economic outcomes.

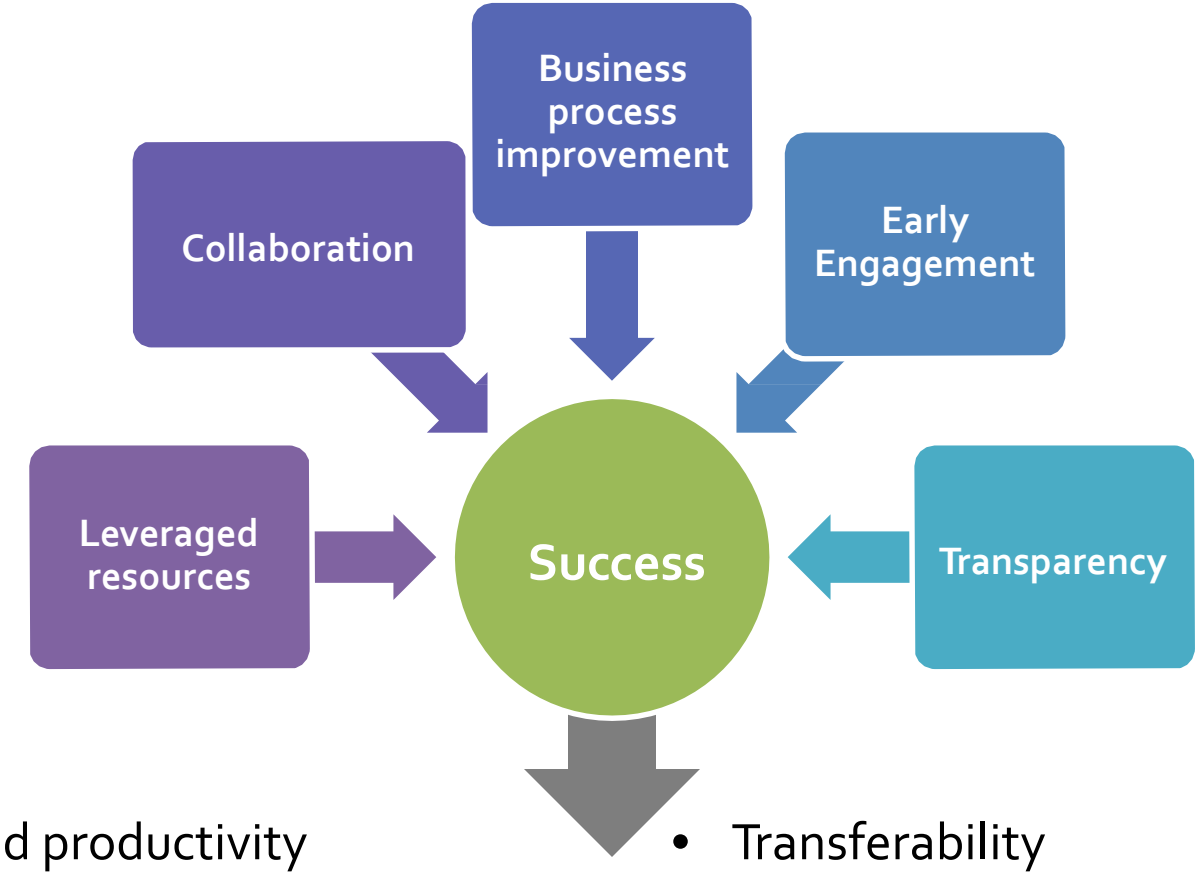
# E-Enterprise is a fundamental change in the way we do business



# E-Enterprise benefits in practice



# E-Enterprise Keys to Success




- Increased productivity
- Accessible information
- Informed and timely decision making
- Transferability
- Increased compliance
- Improved environmental protection

# E-Enterprise Shared Results


E-Enterprise for the Environment is a collaborative effort that will result in shared success and improved environmental protection.

# The breadth of E-Enterprise Team membership

**Combined Air Emissions Reporting (CAER) Team**
- State Co-chair: Bryan Shaw (TX)
- EPA Co-chair: Marc Houyoux

**E-Enterprise Facility Team**
- State Co-char: Joshua Kalfas (OK) & Regina Crolley (SC)
- EPA Co-chair: Ron Evans & Susan Joan Smiley

**Advanced Monitoring Team (AMT)**
- State Co-chair: Ben Grumbles (MD)
- EPA Co-chair: David Hindin

**Leak Detection and Repair (LDAR) Team**
- State Co-chairs: Keith Sheedy (TX) & Lisa Dorman (PA)
- EPA Co-chair: Esteban Herrera

**SPeCS for eSIPs**
- State Co-chair: Rob Sliwinski (NY)
- EPA Co-chair: Ron Evans

**States Currently Involved**: AK, AR, AZ, CA, CO, CT, GA, IA, KY, MA, MD, MI, MN, MO, MS, MT, NC, NE, NH, NJ, OH, OK, OR, PA, RI, SC, TN, TX, VA, VT, WI, WV, WY

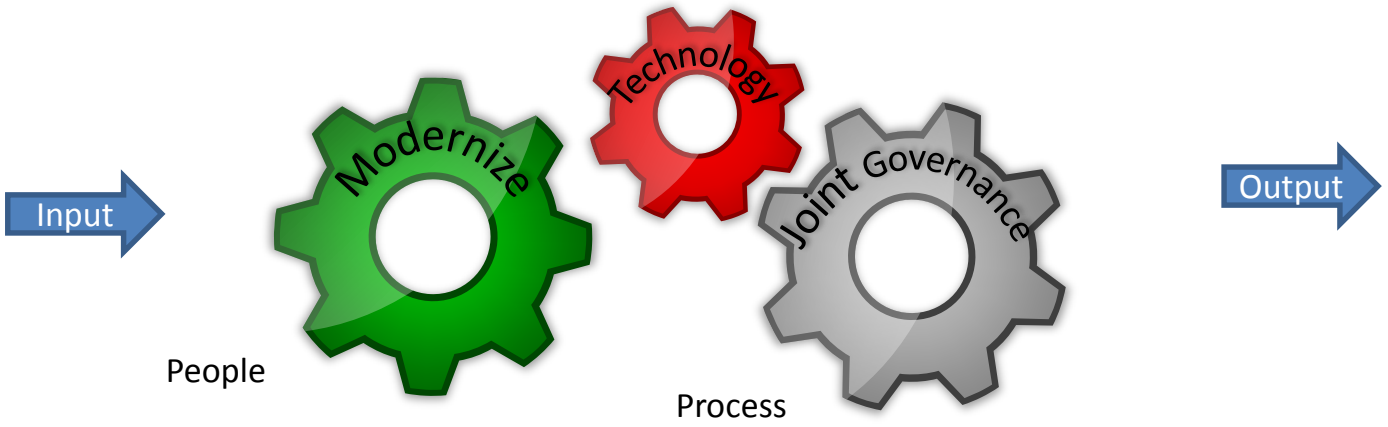
**Local Air Agencies Currently Involved**: SWCAA, SCAQMD, NWCAA

# Numerous other joint projects underway

- The E-Enterprise program has worked closely with EPA Regional offices and states to identify numerous other projects which are consistent with the principles of E-Enterprise
- There are currently 21 projects which are under development with an eye towards designing ways of doing activities more effectively and efficiently. The goal of these projects is to develop them in a way that provides useful examples or tools which can be adopted by others
- Examples:
  - Iowa Air Quality E-Permitting Project: developing a new air quality e-permitting system and documentation to help others adopt the system for their use
  - Georgia Compliance Stormwater Permitting process: converting a paper based system to a electronic based one

# Characteristics of an E-Enterprise Project

- Streamline and modernize business processes including input from all stakeholders
- Introduce technology where appropriate to maximize efficiency
- Ensure buy-in and adoption of the streamlined process through joint governance



# Many E-Enterprise projects are underway, a sampling

- Combined Air Emissions Reporting scoping project (discussed in June)
- Interpreting short term air quality data from sensors (discussed in June)
- Improving understanding of the results of private water well testing
- Leak Detection and Repair

- State Plan Electronic Collection System (SPeCS) for SIPs
- Modernizing Fuels Reporting
- Pesticide Label Matching
- Facility Identification
- Advanced monitoring

# Build once, use many


- State of New Hampshire invested in simple online guide for residents to understand the results of their well test
- Through E-Enterprise, there is now a version which is freely available via the E-Enterprise Portal to any State, locality or Tribe to easily adapt for the needs of their citizens
- Some States are now actively considering adding it as a service for their citizens, adapting it is estimated to require only 1 hour of programming time

# Leak Detection and Repair (LDAR) Modernization

- Looking for more cost-effective ways to implement LDAR program while increasing environmental benefits using modern tools
- Through E-Enterprise, a combined team of EPA, State and local air staff are looking into 3 areas in detail for changes in the LDAR rule:
  - incorporating optical gas imaging
  - incorporating low emissions technology
  - modernizing data recordkeeping and reporting

# Modernizing SIP submission and review

- Many groups have looked at improving the SIP submission and review process over the years
- EPA finalized the E-SIP in March to allow for electronic submission of SIPs
- Through E-Enterprise, an EPA/State team developed a plan for adapting the Section 111D State Plan  Electronic Collection System (SPeCS) for Section 110D SIPs, reprograming will be done in Summer 2017

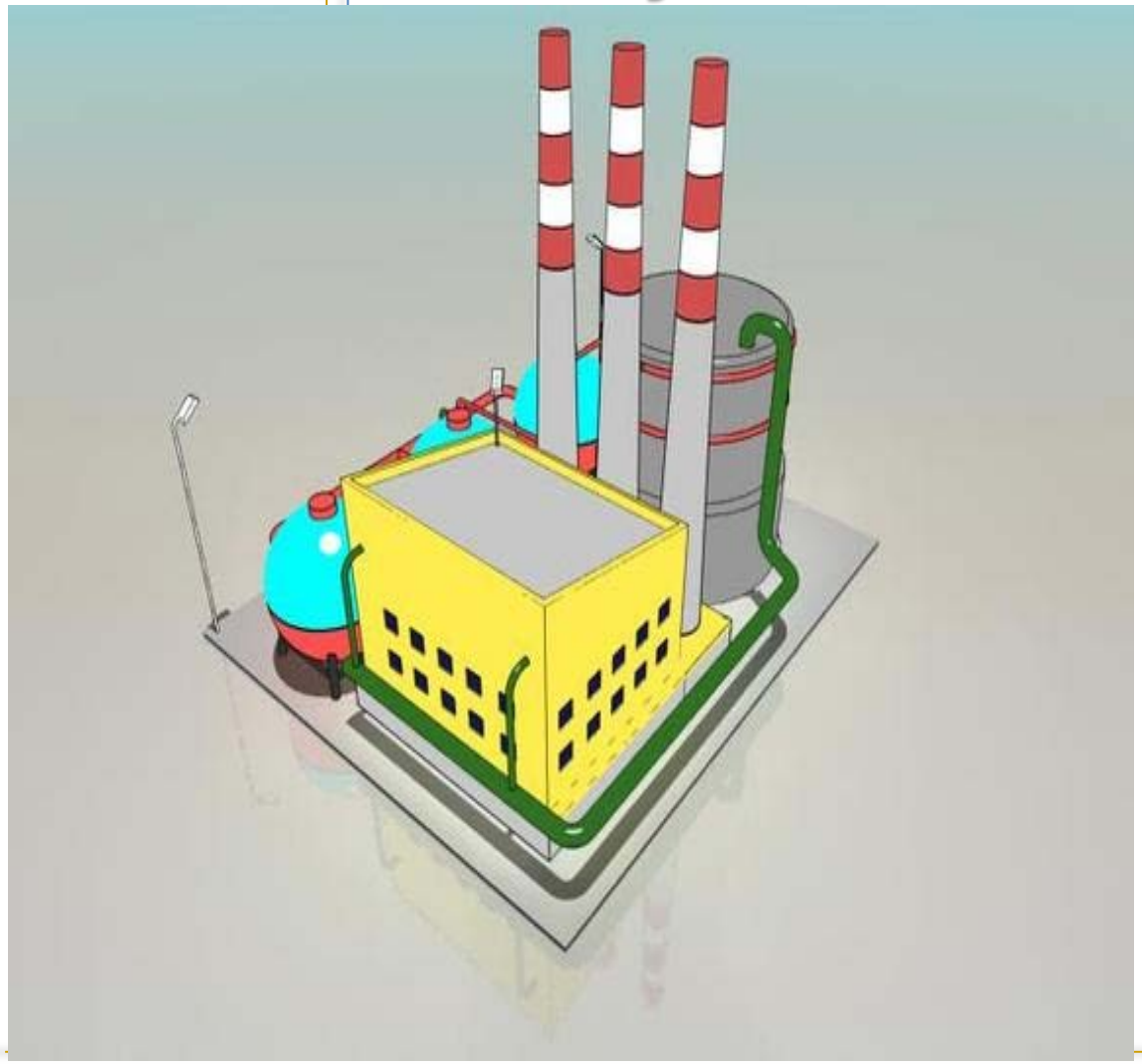
# Modernizing Fuels Reporting


- With the support of E-Enterprise, OTAQ has an effort underway to consolidate 90 individual compliance forms into a single “smart” form
- Reduces regulatory burden for reporters
- Improves EPA processing of forms by building in upfront data validation and data entry guidance

# Pesticide Label Matching

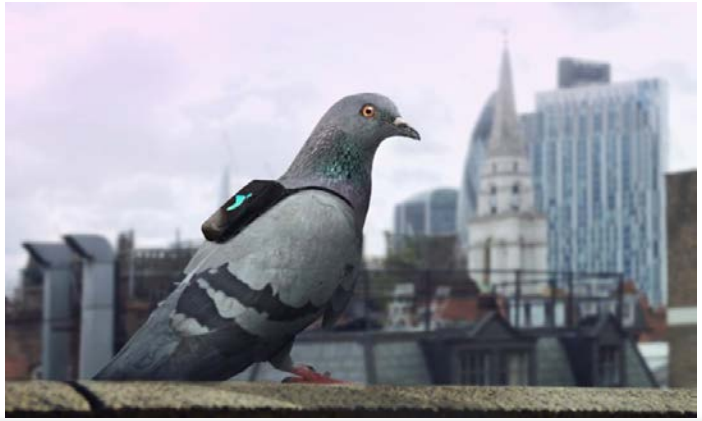
- Pesticide label inspection is a paper-based, labor-intensive process that requires field inspectors to visually compare the contents of a label
- Through E-Enterprise, EPA and State staff aim to consolidate information from six separate interfaces into a single mobile application.
- The project also seeks to enable comparisons of field photograph label images to those stored in an electronic database, leveraging OCR technology.
- Benefits:
  - Reduce pesticide label inspection program complexity and cost, while improving efficiency and impact.
  - Promote increased and more proactive regulatory compliance.
  - Ensure protection of human health (e.g., of farm workers and children) and the environment.

# Developing a common understanding of facility information



- A “facility” may be defined in several different ways
- Through E-Enterprise, EPA and the states are working together to core set of facility information needed to manage their programs
- Benefits:
  - Reduce industry reporting burden of redundant facility information
  - Help programs and agencies manage their responsibilities more efficiently.
  - Assemble more quickly the multi-media environmental data needed for consolidated reports, permits, and inspections.
  - Provide the public a more complete understanding of regulatory obligations and environmental impacts of each facility.
  - Increase facility data accuracy.

# Advanced monitoring: assisting the market

- The technology for measuring elements of the world around us is developing rapidly
- Users generally have little information to understand the quality and usability of the new sensors
- Through E-Enterprise, EPA and State partners are:
  - investigating options for a voluntary 3rd party certification system
  - Providing information on how to interpret data from sensors
  - Working with outside companies and groups to develop data standards

# Future of E-Enterprise

- Collaboration makes common sense
  - Can reduce inconsistencies and duplication of effort
  - Working together can help streamline processes, provide a sense of joint ownership and lead to wider adoption
  - Advances in technology, including IT, advanced monitoring, and data storage/analysis are leading to greater understanding and savings
- Benefits accrue to everyone
  - Reduced cost to industry of reporting and complying
  - EPA and SLTs gain efficiencies in programs
  - Public gets better information with greater transparency
- All leading to more effective and commonsense environmental protection at lower cost

# Contact Information

- Richard A. “Chet” Wayland, Director, Air Quality Assessment Division, Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency
  Wayland.Richard@epa.gov

- Please visit the new E-Enterprise Website:
  http://e-enterprisefortheenvironment.net/