

# Cleaner Air Oregon

## Oregon Air Toxics: Tales from the EI

NW – Airquest Annual Meeting  
June 13<sup>th</sup>, 2017

# Outline

- **Cleaner Air Oregon background** (Brandy)
- **Information request for EI** (Brandy)
- **EI QA/QC Process** (J.R.)
- **Next Steps** (J.R.)

Background

# CLEANER AIR OREGON

# USFS Moss Study Reveals mHAPS

## Portland Moss Study



Using an epiphytic moss to identify previously unknown sources of atmospheric cadmium pollution<sup>☆</sup>

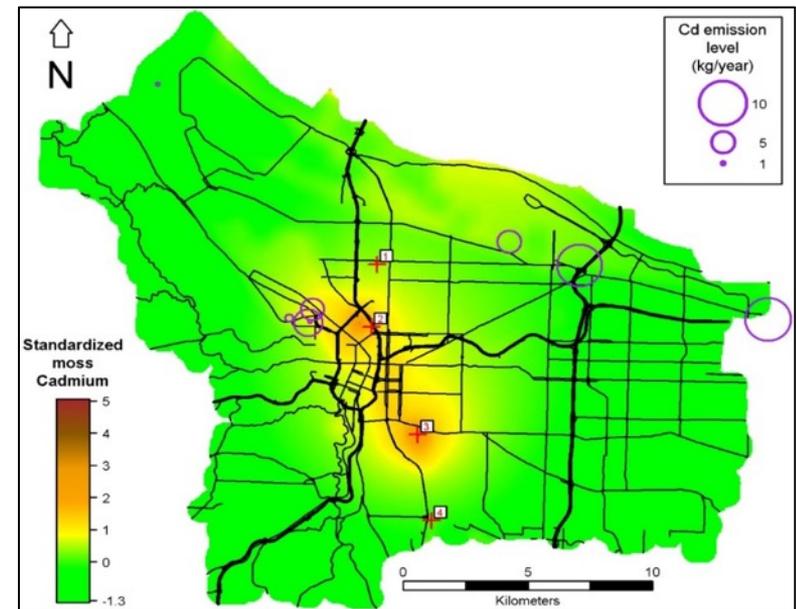
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## Cadmium Concentrations in Moss



Source: USFS

<http://www.sciencedirect.com/science/article/pii/S0048969716306052>

<http://www.fs.fed.us/pnw/research/2016/mar/index.shtml>

# Political Will Emerges – Gov. Brown’s Mission

**4/6/2017**

***“Clean air is fundamental to good health. I am deeply concerned that federal and state air quality programs do not directly consider public health in regulating certain classes of industrial air emissions. This must change.”***

- Protective of health
- Grounded in science
- Predictable



# Cleaner Air Oregon - Rulemaking



# Cleaner Air Oregon - Overview



## **Report air toxics**

Companies to report use of 630+ pollutants to state regulators via EI



## **Assess risk**

Facilities calculate potential health risks to people who live, work, and go to school nearby



## **Regulate to reduce risk**

Companies would have to act if the levels of air toxics they emit exceed health risk action levels (RALs)

Who, What, Where, and When Details

# **EI - REQUEST FOR INFORMATION**

# Background: Request for Information

First step was information gathering:

Letters sent November 2016 to all permitted sources:

- Why is this information needed?
  - State and federal emissions data and reporting gaps
- How will it be used?
  - Identify what is being emitted, how much, and by whom
  - Inform air toxics policy and permitting program development
- Will it be released to the public?

# Who Submitted Information

Facilities with the following air permits or registration:

- Area Source Registrants
- Basic and General ACDPs
- Simple and Standard ACDPs
- Title V

Exceptions:

- Gasoline Dispensing Facilities
- Drycleaners

# Classifying Reporting Sources and Requirements

- ~ 1,300 Permitted point sources in OR
- Classified into two reporting groups:
  - Group 1 - Generals and Basics (~915):
    - Required to report:
      - Only activities for emissions units
      - Material Balance usages
  - Group 2 – TV, ACDP Standard/Simples (~385):
    - Required to report:
      - All relevant emissions units
      - Activities for each unit
      - Control devices and efficiencies
      - Calculated emissions

In the trenches with the data

# **EI QA/QC PROCESS – GROUP 2 SOURCES**

# QA/QC Process Flow

## 1. Gather relevant documents

- Permit, Review Report, Annual Report

## 2. Asses quality of submittal

- Formatting errors, completeness, “insufficient information”, etc.

## 3. Investigate reference material for EF values

- Source test data, permitted values, industry research group materials, peer-reviewed journal articles, AP-42, engineering estimates

## 4. Contact sources and permit writers

- Request clarifications on EU/EF values/methods, and/or propose alternate EF values

# Example Air Toxics EI

Switch to example Excel spreadsheet!!

# Challenges

- **Emissions Units & Activities:**
  - Coordination with sources to obtain reference materials
  - Consistency across industry/emissions units
  - Variability of reporting competency
  - Process changes – either material, emission unit, or controls
  - Insufficient information
- **Material Balance:**
  - Reporting of SDS and material composition
  - Chemicals not reported as they fell under aggregate CAS registry numbers – e.g. Petroleum distillate mixture (CAS 68477-31-6)
  - Insufficient information and/or materials tracking by source

# Example Air Toxics EIs

Switch to amazingly captivating Excel spreadsheets!!

# Successes

- Collaborative spirit with sources, consultants, and permit writers
- Highlighted gaps in current permits and/or Annual Reporting
- Provided deeper technical insight into industrial sources and processes
- Working with industry groups to obtain researched and statistically vetted EFs
- ODEQ's first detailed, QA/QC'd AT EI from

# Successes

Oregon DEQ's first detailed, QA/QC'd Air Toxics EI

- Reported emissions from sources with:
  - Air Toxics ranging from 20-60 species
  - Up to 40 Emissions Units
  - Material Balances of up to 200 materials

How can we leverage all this data moving forward?  
...and make it better?

# Moving beyond the initial EI

## **NEXT STEPS**

# Moving Forward

- Continue to work with sources, consultants, and industry experts to develop AT emissions basis
- Compile ODEQ AT source test data as resource for permit writers, potentially collaborating regionally (CA & WA)
- Move to electronic reporting and user-friendly interface for public disclosure
- Finalize emissions basis for Generals and Basics sources and finish Group 1 QA/QC

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Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).