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Environmental Justice and Air Toxics:

A Blueprint of Best Practices and Resources for A Healthier Oregon

U.S. Environmental Protection Agency, Region 10
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Acknowledgments

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APPENDICES

1. BACKGROUND AND CONTENTS

Background: The intention of this report is to identify best practices and resources for effective community engagement regarding air toxics and environmental justice in Oregon. Most of the information and resources identified in this report were presented at an Environmental Justice and Air Toxics Workshop held on March 15, 2017 (Workshop). The Workshop's goals were to build relationships among community members and federal, state and local agencies, and to develop a shared understanding of regional air quality issues and impacts to communities with environmental justice (EJ) concerns.

Eighty-four people attended the Workshop representing local community groups; state, local, and federal agencies; tribal governments; PSU; and national experts on community engagement and air quality issues.

The Workshop arose out of the broader Portland Making a Visible Difference (MVD) Collaboration which focused on increasing environmental improvements in communities with serious needs who had received little attention in the past. Through the Portland MVD work, EPA established a Steering Committee with representatives from non-governmental organizations and communities; and state, local and federal governments. The Steering Committee helped identify priority environmental/ public health issues and concerns in Portland communities. Four broad themes emerged from the MVD Steering Committee, including reducing air toxics, increasing green infrastructure to improve water and air quality, equitable development; and increasing green jobs in low income communities. The Steering Committee identified actions to address these priorities and an "Air Toxics Workshop" focused on environmental justice impacted communities was identified as an important first step in improving communication between government decision makers and community groups.

The Workshop was a joint work effort of the Environmental Protection Agency (EPA), Neighbors for Clean Air (NCA), Portland State University (PSU), Multnomah County, Oregon Department of Environmental Quality (ODEQ), and the Oregon Health Authority (OHA). Members of the Steering Team, whose focused efforts helped plan the Workshop and prepare this Report include: Sarah Armitage (ODEQ), Fletcher Beaudoin (PSU), Dan Brown (EPA), Kari Christensen (OHA), Cheryl Grabham (ODEQ), Nakisha Nathan (NCA), Mary Peveto (NCA), Julie Sifuentes (OHA) Mary Lou Soscia (EPA), Sheryl Stohs (EPA), Maggie Tallmadge (Coalition of Communities of Color), and John Wasiutynski (Multnomah County Office of Sustainability).

Future workshops are also being planned by community members, EPA and state agencies. These Phase II workshops will take place in Portland, Corvallis and The Dalles. The workshops will be designed to provide training for communities impacted by air pollution so they can understand the regulatory rule- making process and help effectively shape Oregon's new air regulations. The Phase II workshop objectives are to:

- Identify key elements of the rule-making process and how to incorporate actual community experiences and concerns into the regulatory process.
- Provide training on how to use existing tools, data and resources to effectively communicate community needs and concerns regarding improving air quality.
- Provide training about how to make effective public comments that can help shape the final rule, and role play effective public commenting.

- Create a space for concerned residents, community organizations and regulators to come together to learn and understand each other's priorities, roles and limitations in order to better address air quality

Contents: This report provides an overview of the key federal policy and statutory frameworks for environmental justice, an overview of the Oregon regulatory framework, and information about the Cleaner Air Oregon initiative. It also identifies best practices and resources for community capacity building, engagement and education identified during the Workshop and by the Workshop planners. It includes links to Workshop video presentations. The Appendices provide supplemental documents including a summary of the Workshop (Appendix A) and PowerPoint presentations referred to in this Report (Appendix C).

2. KEY STATUTORY AND POLICY FRAMEWORKS AND TOOLS FOR ENVIRONMENTAL JUSTICE

a. **Charles Lee Presentation:** In this presentation, Charles Lee, Senior Policy Advisor for Environmental Justice at the EPA, gives an overview of environmental justice history and identifies the key statutory and policy frameworks for EJ. He outlines the many tools and resources that are available to EJ advocates and the public. A summary of the key frameworks and resources discussed by Mr. Lee is provided below. Mr. Lee's PowerPoint presentation is attached in Appendix C and his recorded presentation is linked here: https://www.youtube.com/watch?v=fUc9H0pIIa0&index=4&list=PLd4xfJU3qzMViN7ehtyBa0wbQQKi 4wvb.

b. **The EPA's Definition of Environmental Justice:***

"Fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

"Fair Treatment" means:

"no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

"Meaningful Involvement" means:

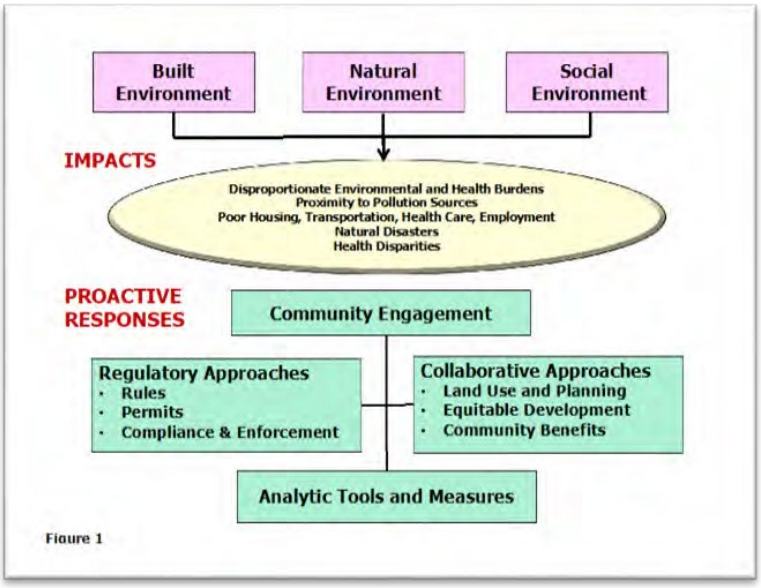
1. "1. People have an opportunity to participate in decisions about activities that may affect their environment and/or health;
2. The public's contribution can influence the regulatory agency's decision;
3. Community concerns will be considered in the decision-making process;
4. Decision makers will seek out and facilitate the involvement of those potentially affected."

*Source: https://www.epa.gov/environmentaljustice/learn-about-environmental-justice

c. **A Systemic View of Environmental Justice:** Figure 1 is an example of what environmental justice looks like on a systemic level [Charles Lee, March 15, 2017 PowerPoint presentation, Slide 4].

Environmental justice involves issues of the built environment, the natural environment and the social environment and these produce a set of impacts that have disproportional impacts on certain populations.

Over time, responses to these impacts include: community engagement, regulatory and collaborative approaches, and analytic tools and measures.



d. **EJ Policy Framework:** Executive Order 12898 and Presidential Memorandum signed by President Clinton in 1994, called on federal agencies to address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The Presidential Memorandum that accompanied the Executive Order is important because it identified how the problem should be addressed: by using existing environmental and civil rights law.

e. **Environmental Statutes:** Plan EJ 2014 - Legal Tools: This EPA resource compiles the key legal authorities, environmental statutes and provisions, such as the Clean Air Act and Clean Water Act, thatcan be used to address issues related to EJ.

f. **The Diesel Emission Reduction Act (DERA) and EPA's Diesel Initiative: Dan Brown Presentation:** In this presentation, Dan Brown, EPA provides an overview of the EPA's regulation ofAir Quality through the Clean Air Act and Motor Vehicle Emission standards. He summarizes the Diesel Emission Reduction Act (DERA) under which the EPA awards grants to reduce diesel emissions in areas that are disproportionately impacted by diesel emissions. The EPA has provided a grant to the Metropolitan Contractors Improvement Partnership to update technology on non-road and construction equipment for minority-owned businesses in Oregon. Mr. Brown also identifies "near-port" resources developed by the EPA. Links to these resources are provided in Section 7 of this report. Mr. Brown's PowerPoint presentation is attached in Appendix C and his recorded presentation is linked here: https://www.youtube.com/watch?v=gO2oyZF3c3Y&index=8&list=PLd4xfJU3qzMViN7ehtyBa0wbQQ Ki4wvbK

g. **The EPA's Environmental Justice Collaborative Problem-Solving Model:** Collaborative Problem- Solving (2008): This is a handbook for all stakeholders that describes the basic tenets of the Collaborative Problem-Solving Model. Collaborative problem-solving means that various stakeholders agree to work together to address a particular issue or concern. In situations involving environmental justice issues, stakeholders often have to reconcile divergent interests in order to address complex and interrelated environmental, public health, economic, and social problems in local communities. When multiple stakeholders work together, they create a collective vision that reflects mutually beneficial goals for all parties. Collaborative problem-solving, in the context of environmental justice, involves proactive, strategic, and visionary community-based processes that

bring together multiple parties from various stakeholder groups (e.g., community groups, all levels of government, industry, and academia) to develop solutions to address local environmental and/or public health issues.

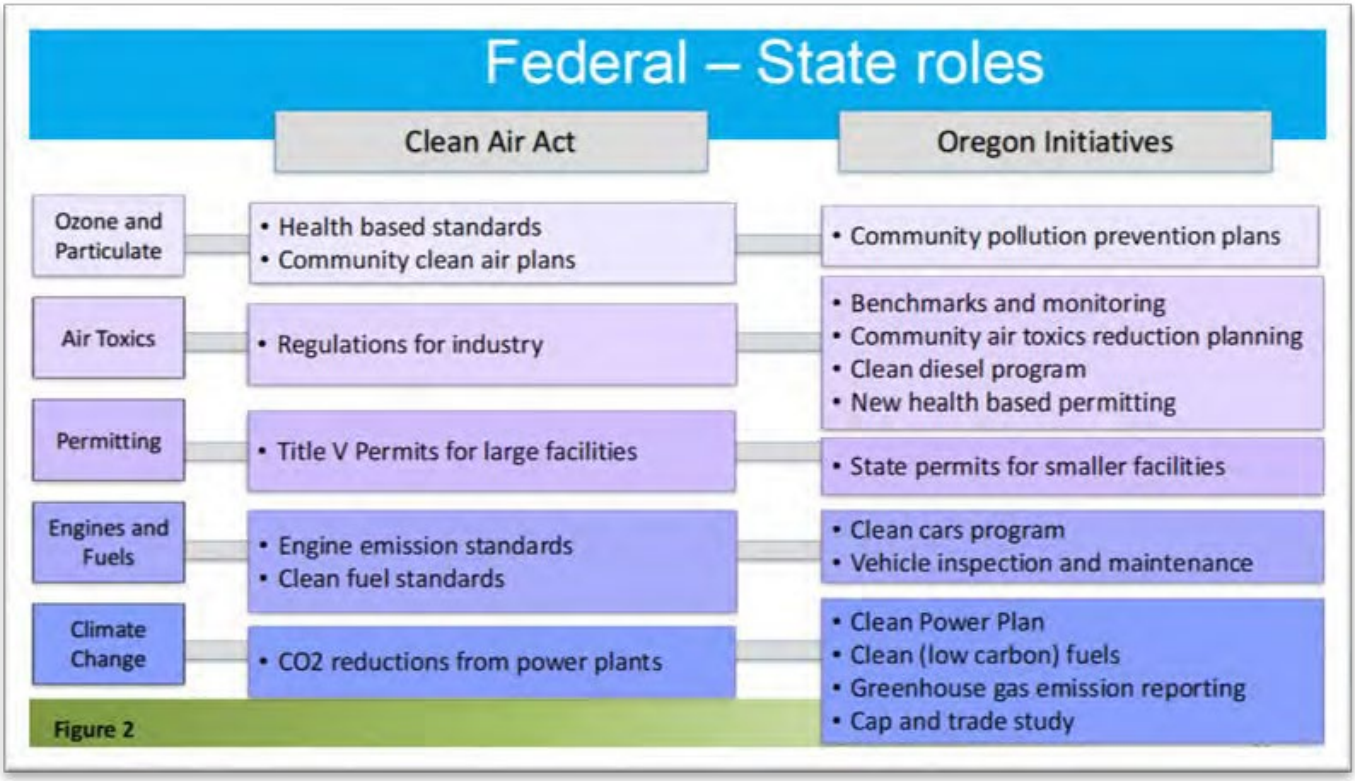
h. **Policy Guidance for Incorporating EJ into Rulemaking:** The EPA also has created guidance for analysts and rule-writers for incorporating EJ into the Rulemaking environment:

- Technical Guidance for Assessing Environmental Justice in Regulatory Analysis
- Guidance on Considering Environmental Justice During the Development of Regulatory Actions.

3. FEDERAL AND STATE AIR QUALITY REGULATORY FRAMEWORK IN OREGON

a. **Overview of Oregon's Regulatory Framework:** Both EPA and the Oregon Department of Environmental Quality (DEQ) set pollution control standards for Oregon. The state carries out federal requirements and, in many cases, goes beyond federal law to further protect public health and tailor programs to meet state needs and policies.

Figure 2 depicts the federal and state roles in regulating air quality in Oregon. More information regarding these roles is provided in the Cleaner Air Oregon "Air Quality Overview" PowerPoint Presentation and speaker's notes provided in Appendix C.



b. **Cleaner Air Oregon:**

The Oregon Health Authority (OHA) and the Department of Environmental Quality (DEQ) are working together under the Cleaner Air Oregon initiative to reform current industrial air toxics

regulations to reflect health-based standards that seek to protect human health, environmental health and economic health. Cleaner Air Oregon Factsheet

Additional information about the history, status and opportunities to participate can be found at the Cleaner Air Oregon website. The recorded Workshop presentations of Richard Whitman, Director, Oregon Department of Environmental Quality (DEQ) and Gabriela Goldfarb, Environmental Public Health Section, Oregon Health Authority (OHA) are linked here: https://www.youtube.com/watch?v=gGmpiTZC_wo&index=5&list=PLd4xfJU3qzMViN7ehtyBa0wbQQ Ki4wvbK and their PowerPoint Presentation is provided in Appendix C.

c. **DEQ's Environmental Justice efforts and EJ Citizen Advocate Position:** A summary of how DEQ's programs and activities integrate the principles and requirements of Environmental Justice is included in Appendix B.

d. **State of Oregon Environmental Justice Task Force Handbook regarding Environmental Justice: Best Practices for Oregon's Natural Resource Agencies:**

This handbook identifies best practices for identifying environmental justice issues and engaging in capacity building for environmental justice communities in Oregon.

4. BEST PRACTICES AND RESOURCES FOR COMMUNITY CAPACITY BUILDING

a. **Holly Wilson Presentation on Best Practices/Resources:** In this presentation, Holly Wilson, EPA, North Carolina, shares best practices and examples of how the EPA helped build communities' capacity to effectively participate. A summary of the best practices and resources identified by Ms. Wilson is provided below. Ms. Wilson's PowerPoint presentation is attached in Appendix C and her recorded presentation is linked here: https://www.youtube.com/watch?v=KWbIvraZWPk&index=7&list=PLd4xfJU3qzMViN7ehtyBa0wb QQKi4wvbK

b. **Best Practices for Agencies to Help Create Meaningful Involvement**

1. Keep the public informed using the Environmental Justice listserve.
2. Provide regular and frequent updates of regulatory actions beyond the Federal Register notices as people tend not to review the Federal Register.
3. Use diverse methods such as webinars, conference calls, and in-person training to deliver information on rules and regulatory actions.
4. Bring in all the stakeholder voices: Tribes, regional, state, local agencies, communities, NGO's and industry.
5. Communication: Provide plenty of notice and use phone calls.
6. Practice Active Listening: Hear the words and try to understand why the person is upset, not just that they are upset.
7. Create a safe environment during meetings and understand that discussion may become animated because participants are passionate about their concerns.
8. Consider paying for a strong facilitator who is aware of all perspectives and is trusted to manage the discussions.

9. Manage expectations: help the community understand which set of rules are applicable at the time and to understand how the rule-making process works.
10. Provide training that is driven by the specific needs of the community and ensure that there is a shared power base within the community.
11. Consider training and paying community members to facilitate and present trainings.
12. Consider providing trainings prior to proposals.
13. Provide training on how to comment and present testimony effectively.
14. Schedule training during times convenient for community members and consider providing food/child care.
15. Provide interpreters to address and reduce concerns regarding language barriers.

Source: Holly Wilson, March 15, 2017 EJ and Air Toxics Workshop Presentation

c. Examples of Best Practices: The EPA compiles best practices examples to support EJ efforts in training, engagement and public input. Best practices examples can be found at the website of the Office of Air Quality Planning and Standards (OAQPS) and within the EPA document: Promising Practices for EJ Methodologies in NEPA Reviews.

d. International Association of Public Participation (IAP2) Spectrum of Public Participation: IAP2's Spectrum of Public Participation was designed to help convening agencies determine the level of participation that defines the public's role in any public participation process. The Spectrum shows that differing levels of participation are legitimate and depend on the goals, time limitations, resources, and levels of concern regarding the decision to be made. The IAP2 Spectrum of Participation is a resource that is used on an international level and can be found in many public participation plans.

IAP2'S PUBLIC PARTICIPATION SPECTRUM

The IAP2 Federation has developed the Spectrum to help groups define the public's role in any public participation process. The IAP2 Spectrum is quickly becoming an international standard.

INCREASING IMPACT ON THE DECISION

	INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

e. Grants for communities:

- The Robert Wood Johnson Foundation supports initiatives that help change local conditions that allow communities and their residents to reach their greatest health potential.
- The National Institute of Environmental Health Services may pay communities to participate in grant review under certain specified circumstances.
- Citizen Air Monitoring: There may be EPA grants available for community members to purchase air quality sensors (cost ranging from $100 to $500) to do local monitoring.

5. BEST PRACTICES AND RESOURCES FOR COMMUNITY ENGAGEMENT

a. Shalini Gupta Presentation on Best Practices/Resources: Ms. Gupta, the Executive Director, Center for Earth, Energy and Democracy (CEED) shared alternative models to the traditional stakeholder process that can create more impactful community engagement. These models are summarized below. Ms. Gupta's PowerPoint presentation is attached in Appendix C and her recorded presentation is linked here: https://www.youtube.com/watch?v=Vg95okeTZvI&index=10&list=PLd4xfJU3qzMViN7ehtyBa0wbQQ Ki4wvbK

b. Community-Centered Analysis Space and Community/Resident Education:

Figure 3 demonstrates an alternative model for community engagement in which Community/Resident Education and Community- Centered Analysis Space are layered into the traditional stakeholder process.

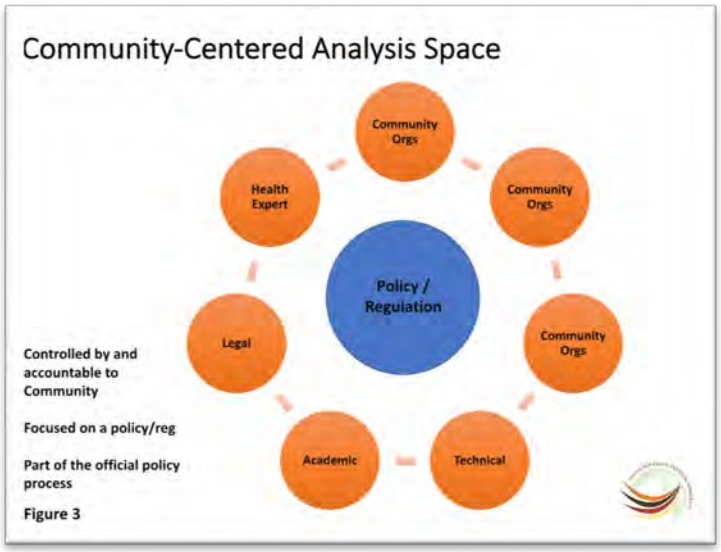


Figure 3

The model provides an opportunity for the impacted community to get their questions answered and contemplates that:

1. Experts are chosen and trusted by the community who work closely with academic allies;
2. The process works with the community's agenda, which may be different than the traditional stakeholders' agenda;
3. The community determines who will best represent the community in the larger process; and
4. The community has a role in determining what is included in final documentation.

c. Community/Resident Education: This part of the Community-Centered Analysis model considers a holistic approach to community education and capacity-building. It anticipates partnership and investment in building up residents' capacity to engage. Best practices include providing training on fundamentals such as organizing, what regulations are and how they get developed, and developing popular education for technical concepts such as "cumulative impacts".

d. **Community Engagement Arc:** The Community Engagement Arc (Figure 4) is another alternative model for community engagement. In this model, Community/ Resident Education ideally occurs from the start of a process with the communities most impacted. A Community-Centered Analysis space is created so that community questions can get answered by technical experts they trust. Then, they link up with the larger stakeholder process. Once the regulation or policy is adopted, community engagement continues to ensure accountability during implementation.

Figure 4

e. **Memorandums of Understanding (MOU):** Communities and government agencies can negotiate Memorandums of Understanding with each other to provide clarity about the relationship, expectations and working protocols between the Community- Centered Analysis Space and the larger stakeholder process. A template created by CEED that outlines the questions and considerations for community members and agencies is attached in Appendix B.

f. **Local community recommendations for community engagement:** At the March 15, 2017 Workshop, local community members identified specific needs and recommendations for community engagement in Oregon:

1. Community members would like to see more resources, funding, and compensation to enable members to effectively participate and reduce the barriers to engagement.
2. Use more accessible ways of conducting outreach with communities, such as: going to communities that have the most burden, seeking out centralized locations such as businesses, churches, and hospitals.
3. Empower communities to hire their own experts to interpret data and formulate their questions.
4. Access to data needs to be made available, relevant and understandable by the community.
5. There are concerns about equity and over-representation of industry in processes. There is a concern that the larger the process, the easier it is for community input to be diminished.
6. Provide transparent timelines, sustainable engagement and accountability that ensures that the process circles back to the community.
7. Relationship-building between agency staff and community members is a key component that needs attention.
8. Provide interpreters to address and reduce concerns regarding language barriers.

Note: A summary of the full discussion is included in the March 15, 2017 Facilitator's Summary

6. COMMUNITY EDUCATIONAL RESOURCES

a. The difference between technology-based and human health-based approach to permitting:

- **Technology-based approach:** Federal law and Oregon's current rules aim to restrict pollution by imposing technology-specific requirements on industry-specific manufacturing facilities (e.g., emissions control devices and work practices for industry-specific equipment/operation). The rules impose requirements based on the size of a facility and its potential for pollution. While air pollution rules are intended to reduce industrial air toxics emissions, they do not necessarily cap the total amount of pollution a facility may release. Nor are they designed to take into account the local impacts of industrial pollution on human health and, therefore, do not necessarily restrict concentrations of pollutants based on the health risks they pose for people nearby.
- **Human health-based regulations for air quality:** this approach sets limits on air emissions for industrial sources based on risks to human health. It can include defining exposure levels that are protective of human health and assesses facility emissions based on human health safety standards.
- Resources:
  - Information on Cleaner Air Oregon's initiative to establish health-based standards.
  - EPA Clean Air Act Overview regarding the setting of emission standards: This website explains EPA air toxics standards including technology and health based approaches. A PowerPoint presentation that provides an overview of the Clean Air Act and regulatory process is also attached in Appendix C.
  - Plain English Guide to the Clean Air Act: This website provides a brief introduction to the Clean Air Act.

b. Cumulative Risk and Impacts: Cumulative Risk refers to the combined health risk from exposure to multiple things. People generally are exposed to more than one toxic air pollutant at a time or to pollutants from more than one source at a time.

Examples of cumulative risk include:

- Combined risk from multiple air toxics emitted from a single facility;
- Combined risk from air toxics from multiple industrial facilities in an area;
- Combined risk from community sources – this means all kinds of sources beyond just industrial facilities. This would include traffic-related air toxics, residential wood burning, wildfires, etc.
- Combined risk from multiple routes of exposure – the most common example of this is mercury, which is emitted into air where it can be inhaled. It also settles on soils and water, with which people can come into contact. Mercury can also be concentrated through the food chain in fish that people eat.
- Cumulative risk over time means that some communities may have already had a disproportionately large exposure to air toxics or other environmental exposures, potentially making them more sensitive to additional air toxics exposures.
- These different examples of cumulative risk are not mutually exclusive of one another, and could be occurring at the same time. A regulatory system could consider and, where appropriate, address more than one type of cumulative risk.

Additional information on cumulative risk can be found in the Cleaner Air Oregon "Cumulative Risk and Background" PowerPoint Presentation and speaker's notes provided in Appendix C.

- For a description of possible elements of a cumulative risk analysis, see Appendix B.
- **Presentation on Cumulative Risk analysis in the State of Minnesota:** In this presentation, Dr. Kristie Ellickson, State of Minnesota's Pollution Control Agency, shared information on Minnesota's process and outcomes relating to including cumulative risk and impacts on EJ communities in state regulation. Ms. Ellickson's PowerPoint presentation is attached in Appendix C and her recorded presentation is linked here: https://www.youtube.com/watch?v=je8a5cg1h3I&index=6&list=PLd4xfJU3qzMViN7ehtyBa 0wbQQKi4wvbK
- **Statutory Example Relating to Cumulative Risk**: This Minnesota statute is an example of a state statute that required consideration of the cumulative effects of pollution in a particular Minneapolis community.

c. Guidance on the rulemaking process:

- These links provide guidance on the federal rule-making process: A Guide to the Rulemaking Process prepared by the Office of the Federal Register and The EPA's Rulemaking Process .
- How to Comment Effectively: **The Art of Commenting: How to Influence Environmental Decision-making with Effective Comments (Environmental Law Institute)** by Elizabeth Mullin: This book provides a logical, step-by-step approach to reviewing environmental documents and preparing comments. An overview on The Art of Commenting is included in Appendix B.

d. Developing popular education for communities: There are organizations that specialize in developing popular education for different types of policy such as The Center for Urban Pedagogy in New York. In addition, CEED has developed popular education around Cap and Trade policies and Clean Power Plan regulation.

7. TECHNICAL TOOLS TO SUPPORT COMMUNITY ENGAGEMENT

a. The EPA website features online screening and assessment tools that communities can access and use:

b. EJSCREEN allows users to access high-resolution environmental and demographic information for locations in the United States, and compare their selected locations to the rest of the state, EPA region, or the nation. The tool may help users identify areas with: minority and/or low-income populations; potential environmental quality issues; and a combination of environmental and demographic indicators that is greater than usual. EJSCREEN may also be used to support educational programs, grant writing and community awareness efforts.

c. Community-Focused Exposure and Risk Screening Tool (C-FERST) provides access to resources that can help communities learn more about their environment, exposures, and demographic characteristics. They may also compare conditions in their community with their county and state averages.

d. Tribal-Focused Environmental Risk and Sustainability Tool (Tribal-FERST) is an online information and GIS mapping tool designed to provide tribes with easy access to the best available human health and ecological science.

e. Near-Port Interactive Tools: Port areas have many diesel pollution sources due to the ships, locomotives, and trucks that operate there. Port areas often have a disproportionate impact on the communities adjacent to them. These communities are often also at an economic disadvantage or are otherwise susceptible to environmental injustices. Specific tools include:

- The Port Primer for Communities: this is interactive tool is designed to help communities participate more effectively in engaging ports in decision-making. It provides examples of tools and resources that have been used successfully in other areas.
- The Community Action Roadmap is a companion to the Ports Primer and is based on proven engagement principles for building community engagement. It is a tool that provides a step-by-step process for communities to build capacity and prepare for engagement.
- The Draft Environmental Justice Primer for Ports is directed at the Port Authorities and provides them with more effective strategies when considering to engage communities near them.
- EPA's EXPOsure toolBOX (EPA ExpoBox) is a toolbox created to assist individuals from within government, industry, academia, and the general public with assessing exposure. It is a compendium of exposure assessment tools that links to guidance documents, databases, models, reference materials, and other related resources.

f. Air Sensor Toolbox for Citizen Scientists: This toolbox provides information for citizen scientists and others on how to select and use low-cost, portable air sensor technology and understand results from monitoring activities.

8. CLOSING

It is hoped that this report and the resources provided will support the community and government agencies in working together to achieve a healthier Oregon environment for all. The workshop on March 15, 2017 was intended to be a catalyst for engaging, informing and creating new, effective relationships between community members and government agencies in order to assist in the development of sound policies and regulations that protect the health and life quality for all Oregonians.

The workshop planners hope that this resource guide can help to continue and support ongoing and effective EJ work in Oregon.

This report was written by the impartial facilitation team at DS Consulting with information and input provided by EPA, DEQ, Multnomah County, Neighbors for Clean Air and OHA.

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Appendix A.

March 15, 2017 Workshop Facilitator's Summary & Appendices

(Click on a title to jump to section)

EPA Making a Visible Difference
Portland Environmental Justice and
Air Toxics Workshop Portland
Community Engagement and
Capacity Building

March 15, 2017

Facilitator's Summary

This report was prepared under EPA Contract EP14 020 Task Order 20 with SRA International

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1. Background and Goals of the Workshop

On March 15, 2017, a one-day Environmental Justice and Air Toxics workshop was held at the Jade/APANO Multicultural Space in South East Portland, Oregon. The workshop's goals were to build relationships among community members and federal, state and local agencies, and to develop a shared understanding of regional air quality issues and impacts to communities with environmental justice (EJ) concerns.

Education around air quality, diesel emissions, health impacts and tools to assess impacts can help build community capacity to work collaboratively and identify strategies to improve air quality for the area. At the workshop, community members heard presentations on the EJ regulatory framework and best practices which may help lead to more constructive engagement on areas for action. Agency attendees heard presentations that identified many tools for meaningfully and effectively engaging with environmental justice communities on issues that matter to them. In post-workshop evaluations, many attendees indicated that the workshop was effective, provided useful information and allowed the attendees to meet new people.

This workshop was a joint work effort of Environmental Protection Agency (EPA), Neighbors for Clean Air (NCA), Portland State University (PSU), Multnomah County, Oregon Department of Environmental Quality (ODEQ), and the Oregon Health Authority (OHA). Eighty-four people attended the workshop representing local community groups; state, local, and federal agencies; tribal governments; PSU; and national experts. NCA and PSU will support additional workshops following this session.

This report provides a brief summary of each presentation. Appendices B & C provide links to the full video and PowerPoint presentations and resources referenced.

2. Welcome and Introductions

Donna Silverberg of DS Consulting served as session facilitator. She welcomed the participants and noted that the intent was to have the many different *communities* come together and, hopefully, find new opportunities to partner with each other. To set the stage for the day's agenda, the group watched a video that commemorated the history of Environmental Justice within the EPA.

Ben Duncan, Chair of the Governor's Environmental Justice Task Force, recognized that there is a long history of environmental and institutional racism in Oregon and noted that communities of color continue to bear over-representation of health impacts. He encouraged community engagement by reminding participants of the maxim: "Communities that speak for themselves best protect themselves." He noted that the Oregon statute that created the Environmental Justice Task Force requires that agencies consider the impact on EJ communities and hold hearings in communities at times that are convenient for them.

Sophia Wilson, Vice-President of the Lincoln High School Sisters of Color student organization said she was inspired to become an EJ advocate after learning that people of color are on the frontlines of environmental justice. She is advocating for EJ as a teenager and youth of color, which she believes are strong factors for being able to change the future. She wants to advocate for clean air so children can breathe.

Tony DeFalco the Deputy Director of Verde, Living Cully, a Latino community in N.E. Portland, encouraged the participants to be engaged and emphasized that communities impacted by EJ need the capacity to fight on multiple fronts. Oregon has strong legislation and the community also needs to be very strong in bringing concerns to officials' attention.

Workshop Presentations

3. **Incorporating Environmental Justice into Everyday Actions and Policies** - Charles Lee, Senior Policy Advisor for Environmental Justice at the EPA, gave an overview of environmental justice history and identified key national and state milestones. He identified the key statutory and policy frameworks for EJ and outlined the many tools and resources that are available to EJ advocates, both nationally at the EPA and from the states, that provide basic guidance, screening, analytic tools and best practices. This report provides a summary of the key frameworks discussed by Mr. Lee. More detail is provided in his video and PowerPoint presentation attached in Appendices B & C.

Key Statutory and Policy Frameworks: Mr. Lee reviewed the EPA's Definition of Environmental Justice with the group. Environmental Justice is defined as:

> *"Fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."*

He presented a picture of what environmental justice looks like on a systemic level: Environmental justice involves issues of the built environment, the natural environment and the social environment and these produce a set of impacts which have disproportional impacts on certain populations. Over time, there has been a series of responses to these impacts: community engagement, regulatory and collaborative approaches and analytic tools (that undergird assessments) and efforts such as the EJ2020 Action Agenda which measures progress and what it means to make a difference in environmental communities in terms of positive outcomes.

Environmental Justice Milestones and the Development of the EJ Policy Framework
Mr. Lee identified key environmental justice milestones that led to the development of the current EJ Policy Framework. He stated that to have a shared understanding of EJ principles, it is important to understand the historical context.

> **Creation of the EPA Office of Environmental Justice:** In 1982, in Warren County, North Carolina, a protest relating to a siting of a PCP landfill resulted in some 500 arrests. Mr. Lee and others' work on this issue ultimately led to the publication of the Toxic Wastes and Race Report (1987) which was the first national study on the demographics associated with the location of toxic waste sites. At the time, he thought the report would make a big difference in 50 years. No more than 5 years later, the EPA established the Office of Environmental Equity (later changed to the Office of Environmental Justice).
>
> **EJ Policy Framework -** Executive Order 12898 **and** Presidential Memorandum **and Environmental Laws:** In 1994, President Clinton signed Executive Order 12898 which called on federal agencies to address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The Presidential Memorandum that accompanied the Executive Order is equally important because it identified how to address the problem: by using existing environmental and civil rights law.

Environmental Statutes: He also noted the many environmental statutes and provisions, like the Clean Air Act and Clean Water Act, that can be used to address issues related to EJ. These statutes can be found in a comprehensive compilation created by the EPA: Plan EJ 2014 - Legal Tools.

Other Tools and Resources: Mr. Lee described the many tools and resources available to support EJ efforts.

- Collaborative Problem-Solving (2008) **and** Plan EJ 2014 (2010)**:** These resources provide guidance for the EJ community to engage in effective problem-solving. He stressed that to make progress, it is important to be able to consider different perspectives and use dispute resolution so that innovative solutions can be developed and duplicated. The EPA has also created the Plan EJ 2014 Legal Tools document which compiles key legal authorities for advancing environmental justice.
- **Best Practices:** The EPA compiles best practices examples to support EJ efforts in training, engagement and public input. Best practices examples can be found at the website of the Office of Air Quality Planning and Standards (OAQPS) and within the EPA document: Promising Practices for EJ Methodologies in NEPA Reviews.

- **EPA Online Screening Tools:** The EPA website features online screening and assessment tools that can be utilized by communities:

    - EJSCREEN is useful for a broad area review;
    - C-Ferst and T-Ferst are useful for specific communities.
    - Near Port Interactive Tools: These tools support communities near ports. (See Dan Brown's presentation).
    - EPA ExpoBox: a toolbox for assessing exposure.

- **Policy Guidance:** The EPA also has created guidance documents for incorporating EJ into the Rulemaking environment:
    - Technical Guidance for Assessing Environmental Justice in Regulatory Analysis
    - Guidance on Considering Environmental Justice During the Development of Regulatory Actions.

States influence in developing environmental justice policy: Mr. Lee stressed that other states' EJ efforts are resources and models for local EJ advocacy efforts. His video presentation gives many examples of states' efforts and tools including California's Enviro Screen Tool and Minnesota's Cumulative Air Permitting Protocol (See also Dr. Kristie Ellickson's presentation, below).

In closing, Mr. Lee acknowledged Oregon's leadership in the national conversation around EJ and expressed the EPA's desire to work together with Oregon on EJ issues.

Oregon's Current Air Quality Policies and Local Regulatory Context

Richard Whitman, Director, Oregon Department of Environmental Quality (DEQ) and Gabriela Goldfarb, Environmental Public Health Section, Oregon Health Authority (OHA) presented information on the Cleaner Air Oregon process. This is a new statewide initiative in which OHA and ODEQ are partnering to reform the regulations that control industrial air emissions.

4. Background of the Cleaner Air Oregon Initiative: In 2013, the U.S. Forest Service contacted DEQ about studying urban moss to assess pollution from vehicle emissions. DEQ asked the researchers to look for metals instead of vehicle emissions. DEQ had been measuring a higher than expected level of cadmium and other metals in the Portland air shed but did not know where these metal emissions were coming from. By 2015, this study revealed hotspots of elevated levels of metals around two art glass manufacturers, Uroboros Glass Studio and Bullseye Glass Company. A subsequent air monitor placed by DEQ near the Bullseye Glass facility revealed high levels of metals in the air.

This discovery also revealed a significant gap in the state's regulation of industrial facilities. While the current regulatory system is based on technology available to reduce industrial air toxics from known sources of emissions, the emission reduction requirements are not specifically developed in consideration of local impacts on human health. There was a tremendous crisis of public concern regarding this gap between technology based standards and protection of public health and Governor Kate Brown directed the two agencies to work together to overhaul state system for regulating industrial sources of air toxics to align with health.

Approach to Regulatory Reform: Cleaner Air Oregon seeks to: 1) set limits on toxic air emissions for industrial facilities based on impacts to human health; 2) require evaluations of emissions and risks relative to health-based standards and potential health impacts; 3) include a comprehensive screening of facilities that emit air toxics to allow a focus on where emissions need to be reduced to protect public health; 4) give clear guidance to business on regulations (and will consider the impact on businesses, jobs and local economies, recognizing that employment is a significant determinant of health); and 5) to improve public health by improving the air quality for people living near industrial facilities. Cleaner Air Oregon focuses on industrial sources of air toxics which is only one part of the problem. There are a variety of air toxics from other sources, such as transportation, marine, rail, paint, solvents, wood stoves, etc., that also need to be addressed. Air toxic pollution from diesel engines is of particular concern to some Portland communities.

Rulemaking Process: DEQ and OHA have begun a formal rulemaking process to engage the public in creating human health risk-based rules for industrial facilities, for consideration by the Environmental Quality Commission. A technical workgroup and an advisory committee have been convened. The technical workgroup (an appointed group made up of science, health and air toxics regulation experts) will discuss and provide an evaluation of human health risk-based air toxics programs for industrial facilities in other states, and discuss and evaluate key technical issues. It is tasked with providing focused and specific input to help DEQ prepare policy issues for discussion at public policy forums and advisory committee meetings.

OHA and DEQ have researched air toxics permitting programs across the country to incorporate best practices in the Oregon rules including: what the scope should be; the methods for screening emissions; the protocols for conducting more in-depth assessment; and cumulative impacts analysis.

They have requested emission inventory data from all air permittees in Oregon. This will give the state a comprehensive picture of potential emissions from a wide range of facilities in the state. The request is for inventory information, or the amount of some 187 hazardous air pollutants emitted by the industrial source. These specific hazardous air pollutants (HAPs) are regulated under federal law and state laws. The inventory reports will come in September 2017 and will ultimately be made available to the public.

Engagement and Outreach: An advisory committee with 23 members has also been established to assist in the rulemaking process by considering policy recommendations that are based on input from, public policy forums, and the groups they represent. The advisory committee's input will be used by DEQ

and OHA in developing draft rules, which will then be proposed for broader public review and comment as part of DEQ's rulemaking process. In 2016, DEQ and OHA also held several webinars about air toxics, a series of technical workgroup meetings, and 4 regional public forums. The committee expects to finish work this summer and a draft rule will be put out for public comment. In the fall and winter, the emissions inventory will be made public and there will be additional community engagement. The Cleaner Air Oregon site provides more information on the timeline for this process and opportunities to participate.

Next Steps and Funding: The Environmental Quality Commission and the Oregon legislature will be the decision-makers with regard to the rules and funding. The community can help legislators understand the underlying importance of this program. State resources for this work are currently very limited and DEQ has a limited number of monitors that are capable of measuring metals and other air toxics.

5. Understanding Cumulative Risk and Impacts

Dr. Kristie Ellickson, State of Minnesota, Pollution Control Agency, shared information on the State of Minnesota's process and outcomes relating to including cumulative risk and impacts on EJ communities in state regulation. She led the participants through exercises in which they identified the elements of a Cumulative Impact Analysis. A summary of those elements follows:

- **Sensitivity:** This relates to standards based on sensitive life stages. It is the degree of a response to a stimulus. For example, humans respond to bee stings in different ways: there may be no impact, an itchy bump, or medication may be required to stay alive. Standards are cumulative if they protect the most sensitive parts of the population. One possibility in permitting is to develop health benchmarks for the most sensitive population for a certain pollutant. This could mean benchmarks for asthmatics, being elderly, having existing diseases; early life exposure (0-2 years old), etc.

- **Additivity:** This analysis considers the effects and risks of multiple pollutants, i.e. whether exposure to each of the pollutants has an additive effect. The analysis could also add pollutants based on a single health effect relative to one pollutant that is well-known and that sets potency equivalents. This analysis is also helpful when assessing mixtures that may contain multiple pollutants.

- **Multiple Pathways:** These are different ways that people are exposed to pollutants (eating, drinking, breathing, contact with skin, showering, swimming, etc.) Health benchmarks can be developed that assume people are exposed to more pathways than one. For example, if one looks at both inhalation and ingestion at the same time, that is a cumulative component of an analysis.

- **Multiple Sources:** This approach adds in the effects of other nearby sources such as cars, other factories, runoff, etc. It could include looking at all the emissions of the facility, not just the project under consideration. It could include what is already there as well as historical depositions.

- **Non-Chemical Stressors:** This approach considers elements/impacts in the environment that are not chemicals such as chronic stress, noise, crime, historic trauma, aesthetics, lack of green space and infectious agents such as cryptosporidium. This is a cutting-edge concept and there is not a lot of data on this yet

- **Community Vulnerability:** This is an analysis that relates to a community's resilience and considers that there may be greater susceptibility to pollution due to other challenges. For example, if a person was stung by a bee, vulnerability relates to the ability to access an Epi pen, healthcare funds to buy an Epi pen or protective equipment, or living in a community infested by bees. Other examples include historic exposures, structural racism, access to emergency preparedness and management funding, land use and stewardship issues, language barriers, lack of health care, lack of engagement of elected officials, unmaintained housing, etc.

The Minnesota Statute and Approach: In 2008, in Minneapolis, there was statewide opposition to a biomass burner proposal. The Minnesota statute was developed to require Minnesota's Pollution Control agency to consider the cumulative effects of pollution in the area where the biomass burner was originally proposed. Minnesota used existing regulatory tools to do the analysis and have lowered permitting limits based on the analysis.

First, they used a computer model to estimate air concentrations around the facility to determine criteria pollutants. They compared each criteria pollutant to screening levels (called a Significant Impact level) to get a list of pollutants. They did the same process with air toxics and used comparison values that were health-based (health benchmarks). They developed a list of criteria pollutants and pulled the health endpoints/benchmarks that were aligned with each pollutant. For example, fine particles have a cardiovascular and a respiratory endpoint (they impact the lungs and heart). They used the health endpoints to determine what environmental health data or which of those vulnerabilities and nonchemical stressors to pull into the analysis. For example, in looking at respiratory impact, they pulled in nearby traffic sources, environmental tobacco smoke, air quality index rates, data on asthma, hospitalization, emergency room visits etc. into a report.

As a final exercise designed to help participants fully integrate the information shared, participants worked with a permitting scenario and discussed how they would create a cumulative impact analysis in Oregon based on that scenario and different definitions on cumulative analysis.

6. Working Lunch "Open Space" Topics

Participants identified topics for discussion related to air quality and diesel emissions and had discussions on those topics while eating lunch. Topics included: *Toxics Reporting & Community Right to Know (HB 2669/SB 995); Green Jobs: How to give priority to people living in the affected areas so they get the jobs; What Should be the Priorities for Volkswagen Funding Decisions?; EJ Screening Tools; Cleaner Air Oregon Advisory Committee: Balancing Representation & Voice; How Uncertainty in the Federal Regulatory Environment Trickles Down; Air Quality Monitoring & Sensors; How will You Prevent the Outcome of Pesticide Reporting with No Teeth?; and Follow-Up/More on Cumulative Risk.* Some groups also prepared written highlights of their discussion. These highlights are included in the Appendix A.

7. Best Practices for Community Engagement on EJ Issues

Shalini Gupta, Executive Director, Center for Earth, Energy and Democracy (CEED) shared alternatives to the traditional stakeholder process that can create more impactful community engagement. She noted that community engagement is an ideal of democracy: those that are most impacted should be part of the solution-building. Community engagement's fundamental role is to make it possible for the community to influence decision-making in order to make their community as healthy as possible.

The dominant model for community engagement, the standard stakeholder process with an advisory committee, is not the preferred way to address EJ issues. In the traditional process, the community gets 1-2 seats (that are usually hard-fought for seats) among various other stakeholders from industry,

academics, government and other interests. The process tends to relegate EJ to a "stakeholder issue" when it is a fundamental value that should be across the board and part of public-policy making. There are issues regarding who decides who represents the community; community representatives often are not chosen by the leadership of EJ groups. There is an uneven playing field in terms of resources/capacities. There are a lot of professional, paid positions, with resources for research while community organizations tend not to have the same professional resourcing to be at the table on equal footing.

Community-Centered Analysis Space and Community/Resident Education:
Ms. Gupta introduced an alternative model where Community/Resident Education and Community-Centered Analysis Space are layered onto this traditional stakeholder process. Within the traditional process, there is a layer for a Community-Centered Analysis Space, a space for the community to get their questions answered. This model contemplates using experts chosen and trusted by the community that work closely with academic allies, and that the process is working with the community's agenda, not necessarily the stakeholders' agenda. The community has a process to pick who will best represent the community in the larger process and can negotiate what might be included in final documentation.

The Minneapolis Climate Action Plan process is an example of using the Community-Centered Analysis Space. The EJ community negotiated ahead of time that an EJ lens would be included in the appendix of the Climate Action Plan. City staff also had EJ training by trainers picked by the EJ community. The process was co-facilitated by a community policy expert and city staff. It included a community-centered analysis space with community control of the agenda, experts, representation and documentation. In the final recommendations, the original (unedited) recommendations were included so people could see the EJ lens on this policy, regardless of what ultimately was decided.

Memorandums of Understanding (MOU): Communities can negotiate Memorandums of Understanding with government agencies to provide clarity on the relationship, expectations and working protocols between the Community-Centered Analysis Space and the larger stakeholder process. Negotiation can include:

- Governance: who serves in the process and how they will be selected, how EJ recommendations get discussed, voting etc.;
- Communication protocols including notice, documentation and resources provided (stipends, staffing, printing, translation, etc.);
- Facilitation and Agenda setting (who will facilitate, and how the agenda will be set);
- Training; and
- Fundraising: Funding/resourcing could take different approaches: funding from government agencies, having some resources staffed by government agencies, agencies raising funds to do community engagement, foundations providing funding for engagement and capacity-building to the community. This is an important area for negotiation as there may be some tension between agencies and organizations due to competition for the same capacity-building funds from funders.

Community/Resident Education: This layer of process considers community education holistically and consider how to build resident capacity. In traditional processes, there are often set standards on how this happens. Education and outreach by government staff tends to be held in the area of concern, but the residents from that neighborhood are not necessarily showing up. There needs to be partnership and investment in building up residents' capacity to engage. This might mean providing training on organizing, what regulations are and how they get developed, and education on cumulative impact. Building capacity means building basic fundamentals, developing popular education, and breaking concepts down to allow communities to engage. There are organizations that specialize in developing

popular education for different types of policy such as The Center for Urban Pedagogy in New York. CEED has developed popular education around Cap and Trade policies and Clean Power Plan regulation.

Community Engagement Arc:
Another approach to consider is an iterative Community Engagement Arc. In the Arc Model, Community/Resident Education ideally occurs from the start of a process with the communities most impacted. A Community-Centered Analysis space is created so that community questions can get answered by technical experts they trust. Then, they link up with the larger stakeholder process. Once the regulation or policy is passed, it is important to ensure that there is community engagement and accountability during implementation.

In closing, Ms. Gupta noted that the traditional process is the only one that currently is institutionalized. These other processes are happening on an ad hoc basis and there are opportunities and models to make them part of the community engagement process. She posed the question that if justice in environmental policy regulations means addressing the distribution of power, then how can these approaches be institutionalized in order to re-negotiate the power dynamic?

Essential Components for Community Engagement in Oregon: In an interactive exercise, Ms. Gupta asked participants to identify: 1) an essential component of community engagement that they felt was critical for the Oregon process moving forward and 2) why it is critical. A summary of the responses is included in the Appendix of this report. Some highlights and themes are discussed below.

Participants felt that communities are under-resourced regarding capacity-building. Community members would like to see more resources, funding, and compensation to enable members to effectively participate and reduce the barriers to engagement. They encouraged more accessible ways of conducting outreach with communities including going to communities that have the most burden, seeking out centralized locations, places of business, churches, and hospitals. They suggested that communities be empowered to hire their own experts to interpret data and formulate their questions. Community education is also important and access to data needed to be available, relevant and understandable by the community.

There are concerns about equity and over-representation of industry in processes. There is a concern that the larger the process, the easier it is for community input to be diminished. They stressed the need for transparent timelines, sustainable engagement and accountability that ensures that the process circles back to the community. Ultimately, relationship-building between agency staff and community members is a key component that is needed.

8. Developing Policies Using an EJ Lens: Best Practices and Applications of EJ Principles
Dan Brown, EPA, presented on EPA's Diesel Initiative: A Case Study of Incorporating EJ.

The EPA's Regulation of Air Quality: Dan explained that the EPA regulates air quality through the Clean Air Act (CAA). There are two main categories of air pollutants: criteria pollutants and air toxics. Criteria pollutants are commonly occurring air pollutants like particulate matter, nitrogen oxides, and ozone that pose public health threats. The EPA sets National Ambient Air Quality Standards which are levels of ambient concentrations of pollutants protective of human health. It is the states' role to monitor the pollution in their state to make sure the ambient levels of air that people are breathing meet the standards, and if not, develop programs to insure they meet the standards. The other main category of air pollutants are air toxics. They are referred to as Hazardous Air Pollutants. Congress included 187 hazardous air pollutants in the CAA and mandated that EPA developed standards that limit emissions at the major known sources. These standards are not health based; they are technology-based, meaning they generally require the best available technology to reduce pollutants at major industrial sources.

Motor Vehicle Emission Standards: The EPA generally regulates engines and fuels together at the federal level as the CAA prohibits states from setting tailpipe standards for motor vehicles. The EPA regulated gasoline to take the lead out and then required cars to have catalytic converters to reduce tailpipe emissions. Similarly, diesel has been regulated to take the sulfur out. The EPA has a very comprehensive regulatory program with standards for trucks, construction and railroad equipment, and marine vessels. Collectively, this suite of regulations reduces diesel pollutants by 90 percent. However, those standards are for new vehicles. Because it takes a long time for a fleet of vehicles to transition over to the new standards, the EPA does not expect the full benefit of these standards to be realized until 2030.

Diesel Particulate Matter and Health: Mr. Brown explained that regulating diesel engines is important because they are the source of both criteria air pollutants and air toxics. Exposure to diesel exhaust can exacerbate asthma and respiratory illnesses, worsen existing heart and lung disease, and result in increased emergency room visits. Diesel particulate matter is most problematic. The particles are very small (less than 2.5 microns in diameter as compared to a human hair, which is 50-70 microns in diameter). It poses the greatest health problems since the tiny particles can get deep into lungs and even pass into the blood stream.

Diesel pollution through an EJ lens: While national standards that regulate diesel pollution help produce significant reductions, they do not address disproportionately impacted communities and do not help prioritize where investments in technology should be made. They are not designed to address urban areas which tend to have higher levels of diesel pollution concentrations.

Consequently, the EPA has developed EJ-focused tools. In 2005, the Diesel Emission Reduction Act (DERA) was established. Under DERA, the EPA now has the authority to award grants to reduce diesel emissions in areas that are disproportionately impacted by diesel emissions. The EPA invites projects with a priority toward these areas, giving extra credit to projects that indicate a community process was used or the community was engaged in the proposed project.

The Metropolitan Improvement Project is an example of a project funded in Oregon. The project updated the technology on non-road and construction equipment for minority-owned businesses. This provides multiple benefits for the community. The project addresses a population that may not be able to afford to buy and update their equipment with the clean technology. Also, these companies tend to stay in the local areas, so the EPA is investing in cleaner equipment that will stay on multiple projects in the same community. Additionally, when public agencies and universities are funding construction projects, they can require that the equipment used meet the clean diesel standards. This project helps advance that policy while reducing barriers for minority businesses to compete.

Ports Initiative: A lot of diesel pollution sources are in port areas due to ships, locomotives, trucks, etc. Those areas often have a disproportionate impact on the communities adjacent to them. Many times, those communities are also at an economic disadvantage or are otherwise susceptible to environmental injustices. Through a stakeholder process, the EPA has put together tools to support these communities. The EPA has three demonstration projects with the port communities and the Ports of Savannah, New Orleans and Seattle to demonstrate and improve the tools.

Near-port Community Capacity Building Tools: The Port Primer for Communities is an interactive tool that is designed to help communities participate more effectively in engaging ports in decision-making. This occurs by increasing the understanding of the role ports play both locally and in the larger economic scenarios, and how ports can impact the local land use. The Ports Primer provides examples of tools and resources that have been used successfully in other areas.

The Community Action Roadmap is a companion to the Ports Primer and is based on proven engagement principles for building community engagement. It is a tool that provides a step-by-step process for communities to build capacity and prepare for engagement.

Finally, because agencies also struggle to effectively engage with communities, the Draft Environmental Justice Primer for Ports is directed at the port authorities and provides them with more effective strategies to consider when engaging communities near them.

These tools and more information on the Ports Initiative can be found at **www.epa.gov/ports-initiative**

9. Incorporating EJ at the National Level

Holly Wilson, EPA North Carolina, shared specific examples of how the EPA helped build communities' capacity to effectively participate. She reviewed the EPA definition of EJ and the concepts of fair and meaningful involvement and fair treatment. She presented a continuum of public participation that ranges from informing to empowering. She noted that the public engagement that is needed is scaled for the type of regulation/issue. Ultimately, for there to be empowerment, capacity must be built so that people can effectively participate.

Meaningful Involvement Process – Rulemaking Activities: Ms. Wilson gave examples of activities that she uses to help create meaningful involvement. Within her group, she does a monthly email of regulatory actions (as people tend not to review the Federal register). They also use the EJ listserve, which has over 5000 people on it. They conduct webinars and hold bi-monthly conference calls on specific topics. They also do in-person training to help deliver information on high profile rules.

Concerning training, it is important that it be community-driven and has a shared power base within the community. It also is important to have state and industry participation when possible. EPA has started doing training prior to proposals. They have many capacity building presentations already prepared and available for use by other communities including: presentations on the Clean Air Act, how to comment, the public participation process, permitting, woodstoves, presenting testimony in a public hearing, etc.

Training Example – Petroleum Refinery RTR Proposal:
In New Orleans, the community was dealing with a petroleum refinery Risk and Technology Review (RTR) . They trained the community on how to present testimony at the public hearing. This included how to handle the impersonal context of the hearing officer ("don't take it personally"), how to talk about concerns in five minutes, and how to stagger presentations so that the conversations could be continued in five-minute increments so that the community was able to get the full breadth of concerns. The testimony was comprehensive, impressive and well-received by the EPA and others.

Training Example - Newport News: there was a facility that had a permit renewal, which had been grandfathered in multiple times. The training goal was to make sure the community knew how and where to be involved in the process (e.g. record-keeping, reporting, compliance.) Trainings took place in the evenings over the phone. The community worked with a local professor and provided comments on the permit. The permit was paused.

Lessons Learned About Trainings:

- Create a safe environment. People are going to get animated because they are passionate. Have a good strong facilitator that is aware of all perspectives. The EPA may be able to pay for facilitators.

- Manage expectations: the community needs to understand which set of rules are applicable at that time. Help people get perspective on what they can live with and help them understand that the process is not final, but a progression. Agency staff, when new, have a tendency to promise more than they can deliver. This happens with community too.
- Building relationships means being responsive.
- Try to bring in all the important voices: Tribes, regional, state, local agencies, communities, NGO's and industry.
- Communication: Do lots of advance notice and phone calls, including operator-assistance calls. Hear the words: try to understand why the person is upset, not just that they are upset.
- Create trainings that are community-driven and ensure that there is a shared power base with the community.

Other Tips and Resources:

- Funding: Foundations like the Robert Wood Johnson Foundation give grants to community leaders to solve Wicked Problems with a stipend. The National Institute of Environmental Health Services will pay for communities to participate in grant review. Her group has also paid community facilitators and presenters to do training.
- The Art of Commenting by Elizabeth D. Mullin is a great tool for breaking down a regulatory action. Start with the impact statement or preamble: it is hard to review the entire content of a rule in a sixty-day period; the impact statement provides a summary.

- Citizen Air Monitoring: Inexpensive air quality sensors that range from $100 to $500 are becoming available. They are a great tool to do local monitoring. There may be EPA grants available for purchasing these sensors. There are resources for how to do a study design when working with these sensors.

10. Closing: Reflecting on Key Messages, Commitments and Next Steps

Multnomah County Commissioner Jessica Vega Pederson acknowledged the participants and the importance of Environmental Justice from a personal and county government level. She stressed that Oregon and Multnomah County need to be examples for the rest of the country on prioritizing people and health first. She said she and her colleagues are doing all they can to support these efforts locally and is pleased to collaborate with all who attended the workshop.

Charles Lee reiterated that the EPA is here as a resource and it is the EPA's mission to protect the health and environment of all people. Their goal is to do it in partnership with the community.

Participants discussed what they learned in small groups and were asked to make a commitment on what each will do differently after this workshop. Participants shared their commitments with the large group. Themes included continuing to outreach, dialogue and build partnerships within the community, continuing to advocate for environmental issues and EJ, sharing information and resources from this workshop, and incorporating the EJ lens further into their work. A list of commitments is included in the Appendix of this report.

In closing, Sheryl Stohs, EPA, shared these words from Mary McLeod Bethune, an American educator, stateswoman, philanthropist, humanitarian and civil rights activist:

> *"I leave you love. I leave you hope. I leave you the challenge of developing confidence in one another. I leave you a thirst for education. I leave you a respect for the use of power. I leave you*

faith. I leave you racial dignity. I also leave you a desire to live harmoniously with your fellow man. I leave you finally a responsibility to our young people."

This report was written by the impartial facilitation team at DS Consulting. Questions regarding this report can be sent to Donna Silverberg (donna@dsconsult.co) or Nancy Pionk (nancy@dsconsult.co).

Respectfully submitted on April 15, 2017
Donna Silverberg
Owner, DS Consulting

EPA Making a Visible Difference Portland

Environmental Justice and Air Toxics Workshop
Portland Community Engagement and Capacity Building

LOCATION: Jade/APANO Multicultural Space
8114 SE Division Portland, OR 97206

March 15, 2017

The purpose of this one-day workshop is to build relationships among community members and federal, state and local agencies, and to develop a shared understanding of regional air quality issues and impacts to communities with environmental justice concerns.

Education around air quality, diesel emissions, health impacts and tools to assess impacts can help build capacity to work collaboratively with community and industry members to identify strategies to improve air quality for the area. People attending the workshop will leave with an enhanced knowledge of state rulemaking processes, which can help lead to more constructive engagement on areas for action. Agency attendees will learn tools for meaningfully and effectively engaging with environmental justice communities on issues that matter to them.

This workshop is a joint work effort of Environmental Protection Agency (EPA), Neighbors for Clean Air (NCA), Portland State University (PSU), Multnomah County, Oregon Department of Environmental Quality (ODEQ), and the Oregon Health Authority (OHA). The proposed attendees are local community groups; state, local, and federal agencies; tribal governments; PSU; and national experts. NCA and PSU will support additional workshops following this session.

Agenda

8:30 Registration Open

9:00 Welcome and Introduction to the Day – Session facilitators Vernice Miller-Travis & Donna Silverberg

9:15 Introductions to Local Environmental Justice Leaders and Community Members

- Ben Duncan, Chair, Governor's Environmental Justice Task Force
- Sophia Wilson, Vice-President Lincoln High School Sisters of Color student organization
- Tony DeFalco, Deputy Director, Verde, Living Cully

9:45 Incorporating Environmental Justice into Everyday Actions and Policies—Charles Lee, Senior Policy Advisor for Environmental Justice at the U.S. Environmental Protection Agency. Charles Lee has been working actively to bring environmental justice issues to the forefront of thinking and planning at a national level. He will share principles, practices and examples from of how he and others have successfully integrated EJ into policy making and thinking.

10:15 Oregon's Current Air Quality Policies and Local Regulatory Context—Richard Whitman, Director, ODEQ & Gabriela Goldfarb, Environmental Public Health Section, OHA
Where are we in the Clean Air Oregon process? How can today's discussion and information fit into that context?

10:45 Break

11:00 **Understanding Cumulative Risk and Impacts – Dr. Kristie Ellickson, State of Minnesota**
Dr. Ellickson will share information on the State of Minnesota's process and outcomes related to including cumulative risk and impacts on EJ communities in state regulation. This presentation will be followed by small group discussions on the topic/lessons that could be applied in Oregon.

12:00 **Working Lunch (will be available) "Open Space":** All participants will be invited to name a Topic (related to air quality and diesel emissions) and at which table they will be sitting so that others may join to discuss the topic

1:15 **Best Practices for Community Engagement on EJ Issues – Ms. Shalini Gupta, Executive Director, Center for Earth, Energy and Democracy**
Ms. Gupta will provide information and examples of how her organization has successfully engaged communities to enhance effective engagement on air polices nationwide. An interactive format will allow people to engage with her and others at the sessions

2:30 **Break**

2:45 **Message from Multnomah County Chair, Deborah Kafoury**

2:55 **Developing Policies Using an EJ Lens: Best Practices and Applications of EJ Principles**
A panel will address:

- Examples of Incorporating EJ at the National level, Holly Wilson, EPA North Carolina
- EPA's Diesel Initiative: Case Study of Incorporating EJ, Dan Brown, EPA Region 10, Oregon Operations Office
- Historical Experience at EPA, Charles Lee, EPA Washington DC

4:00 **Reflecting on Key Messages, Commitments and Next Steps**
Small and large group discussion on the lessons learned and next steps needed in Oregon

4:30 **Adjourn**

Thank you for your commitment to these issues.
We hope your experience today will support effective engagement now…and in the future!

Thank you to the following for supporting today's workshop:

NEIGHBORS FOR CLEAN AIR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Oregon Health Authority

Multnomah County Office of Sustainability

DEQ State of Oregon Department of Environmental Quality

March 2017 Air Quality, Diesel Emissions, and Environmental Justice Workshop
Presenters' Biographical Information

Dan Brown, US Environmental Protection Agency, Portland, OR

Dan Brown has spent the past 23 years working for the US Environmental Protection Agency, in both national and regional offices, implementing voluntary and regulatory programs to reduce air pollution from energy, industrial and transportation sector sources. He works for EPA's Region 10 Office leading work on the West Coast Collaborative, Clean Power Plan and the Georgia-Basin/Puget Sound International Air Shed. He has an MS in Environmental Science and Engineering, a BS in Civil Engineering and is an AEE Certified Energy Manager.

Ben Duncan, Chief Diversity & Equity Officer, Multnomah County and Chair, Governor's Environmental Justice Task Force

Ben Duncan is the Chief Diversity and Equity Officer for Multnomah County. He has been with the county since 2004 when he began his career in Environmental Health as a community health worker. He has since worked as a health educator, policy analyst and manager of the Health Equity Initiative. In each of these roles, his work has always focused on the relationships between our social, economic, and environmental conditions and racial and ethnic disparities.

Ben is the founding board member of OPAL Environmental Justice Oregon, an organization that organizes low income and people of color to build power for environmental justice and civil rights in the community. He also serves as Chair of the Oregon Governor's Environmental Justice Taskforce, and recently became Chair of Oregon Public Health Institute's Board.

Kristie Ellickson, State of Minnesota's Pollution Control Agency

Kristie Ellickson joined the Minnesota Pollution Control Agency (MPCA) in 2007 after completing her Ph.D. at Rutgers University and postdoctoral work at both Rutgers and the University of Wisconsin-Madison. Prior to her academic pursuits, she was a U.S. Peace Corps volunteer in the country of Panama. As a graduate student and post doc she conducted research on trace metal speciation and bioavailability in a variety of environmental matrices.

Dr. Ellickson's work at the MPCA includes: the incorporation of cumulative risk and impact assessment principles into regulatory risk; the review of human health risk assessments for large permitted facilities; and she has been the lead investigator on an EPA community-scale air toxics grant targeting passive and active air sampling for Polycyclic Aromatic Hydrocarbons in an urban and rural environment.

Tony DeFalco, Verde, Portland, OR

Tony DeFalco is the Living Cully Ecodistrict Coordinator at Verde, coordinating the nation's first equity driven ecodistrict designed to re-interpret sustainability as an anti-poverty strategy. His expertise in community economic development, environmental protection and sustainability spans 15 years of working locally and nationally in environmental advocacy, coalition building and policy advocacy. His current focus includes redevelopment of a landfill into a park in a low-income neighborhood in Portland and strengthening communities of color and low-income communities in deriving economic benefit

from environmental investments.

He is a founding board member of the Center for Diversity and the Environment and serves as a trustee of Earthjustice. He also serves on the Port of Portland's Citizen Advisory Committee and the Portland Development Commission's Neighborhood Economic Development Council. Tony holds a master's degree in Natural Resources Planning and Interpretation from Humboldt State University and a bachelor's degree in Ethnic Studies from the University of California at Berkeley.

Gabriela Goldfarb, Oregon Health Authority's Environmental Public Health Section

Gabriela Goldfarb joined the Oregon Health Authority, Public Health Division in September 2016 as manager of OHA's Environmental Public Health Section. She oversees the agency's programs to advance science-based actions that protect people from environmental threats where they live, work, and play, including lead and other hazardous exposures, climate change impacts, pesticide incidents, food safety, and more. Before joining OHA, Ms. Goldfarb served from 2012 – 2016 as a natural resources policy advisor in the Oregon Office of the Governor. Her portfolio included ocean and coastal matters, toxics, air and land quality, environmental justice, and natural resource impacts of marijuana legalization. Gabriela's prior experience includes a decade as an ocean and coastal policy consultant, Deputy Director of For the Sake of the Salmon, Federal Programs Manager for the California Coastal Commission, and Senior Consultant for a toxics regulatory consulting firm. Gabriela has a Master's in Public Policy from the Harvard Kennedy School and is a graduate of the University of California, Berkeley.

Shalini Gupta, Center for Earth, Energy and Democracy, Minneapolis, MN

Shalini Gupta is the co-founder and Executive Director of the Center for Earth, Energy and Democracy (CEED). Her work is focused on forging solutions to our environmental crises that are grounded in economic and social history. Shalini has worked with a range of organizations from local grassroots groups to international organizations engaging in the promotion of sound environmental policy and environmental justice. She was a governor appointee to the Minnesota's Next Generation Energy Board, with prior positions at the Department of Energy's Argonne National Laboratory and as the senior energy associate at the IWLA Midwest office.

Ms. Gupta currently is on the leadership bodies of the national Climate Justice Alliance and the Midwest Environmental Justice Network, working to promote equitable and sustainable policies at the community level and across the country. Shalini is a former Bush Leadership Fellow, holds a B.S. in the geophysical sciences from the University of Chicago and a Master's degree in environmental management from Yale University.

Charles Lee, Senior Policy Advisor for Environmental Justice, US Environmental Protection Agency, Washington D.C.

Mr. Lee is widely recognized as a true pioneer in the arena of environmental justice. He was the principal author of the landmark report, Toxic Wastes and Race in the United States. He helped to spearhead the emergence of a national environmental justice movement and federal action including the First National People of Color Environmental Leadership Summit, Executive Order 12898, EPA's Office of Environmental Justice, National Environmental Justice Advisory Council (NEJAC), and the Federal Interagency Working Group on Environmental Justice.

Charles Lee is currently the Senior Policy Advisor for Environmental Justice at the U.S. Environmental Protection Agency (EPA). In this capacity, he leads the development and implementation of EPA's agency-wide environmental justice strategic plans, i.e., Plan EJ 2014 and now EJ 2020. He has served in multiple capacities, ranging from creating the United Church of Christ's environmental justice program to directing EPA's environmental justice office. He was a charter member of the NEJAC, where he chaired its Waste and Facility Siting committee, as well as serving on Institute of Medicine Committee on Environmental Justice and numerous other panels. In these capacities, he led efforts to incorporate environmental justice into EPA's rulemaking process, develop models for collaborative problem-solving, transform brownfields redevelopment into a community revitalization paradigm, advance approaches to address cumulative risks and impacts, and lay a strong science foundation for integrating environmental justice into decision-making.

Mr. Lee has authored numerous papers, reports, journals and articles on environmental justice over the past three decades. He is the recipient of many awards for his work, including the EJ Pioneer Award from the EPA Administrator on the occasion of the 20th anniversary of the signing of Executive Order 12898. In February 2017, the 122nd Session of the South Carolina House of Representatives passed Resolution H*3732 to honor his work.

Vernice Miller-Travis, Skeo Solutions, Charlottesville, VA

Vernice is a Senior Associate in the Community Planning and Design Group of Skeo Solutions. She provides technical expertise for collaborative planning and design services in area-wide brownfields revitalization, community sustainability and environmental justice. Vernice has expertise in brownfields redevelopment and community revitalization, collaborative problem solving, multi-stakeholder design and planning, and environmental justice. Her interests have focused on environmental restoration and the inclusion of low-income, people of color, and indigenous communities in environmental decision making at the federal, state, local and tribal levels.

Prior to joining Skeo Solutions, Ms. Miller-Travis served as the Director of the Environmental Justice Initiative of the Natural Resources Defense Council, a Program Officer at the Ford Foundation, Executive Director of Groundwork USA, and co-founder of We ACT for Environmental Justice. She also serves on the National Environmental Justice Advisory Council to EPA, and as Vice-Chair of the Maryland Commission on Environmental Justice and Sustainable Communities, where she leads an effort to encourage state and local governments to consider the environmental and public health dimensions of local land-use and zoning decisions.

Donna Silverberg, DS Consulting, Portland, OR

Donna is the owner and principal of DS Consulting who has been a practicing mediator/facilitator for over 25 years. Since 1998, she has been facilitating large, technically complex natural resource and public health issues in the northwest, with a focus on the interface between state, federal and municipal agencies and tribal governments, and the communities they serve.

Prior to starting her own firm, she served as the manager of Oregon's Public Policy Dispute Resolution Program from 1994-1998, with part of that time also serving as Governor John Kitzhaber's Special Assistant on Dispute Resolution for natural resource issues. From 1990-1994 she was the Assistant Director of the Center for Municipal Dispute Resolution in San Diego, CA where she mediated a wide variety of issues involving the City's diverse communities. She received her B.A. in Sociology from Lewis and Clark College and her J.D. from the University of San Diego's School of Law.

Holly Wilson, US Environmental Protection Agency, Office of Air Quality Standards and Planning

Holly focuses her work with the EPA Regional Coordinators to educate local communities across the nation on air quality concerns. She provides resources and tools to help communities understand and reduce their risk to air toxics. Prior to this assignment, she produced numerous satellite broadcasts and videos on new and emerging air pollution control issues. She has worked as a compliance inspector with the Hillsborough County Environmental Protection Commission, a training manager with the Florida Department of Environmental Protection, and as a sales executive with Kraft Foods Inc. Holly received her B.A. in Psychology from the University of South Florida and now resides in North Carolina.

Sophia Wilson, Vice-President, Lincoln High School's Sisters of Color student organization

Sophia Wilson is a junior at Lincoln High School. She is Vice President of the Sisters of Color, a student organization established to support a safe place for women students of color at Lincoln. The group meets regularly to discuss issues about social justice and often take field trips, one of which was a trip to visit Governor Brown on Valentine's Day to raise awareness about air quality issues in Portland. She also is Vice President of the Pacific Island Student Union, as well as an active member of Black Student Union. She is very active in her community and is always looking for things to get involved in.

Richard Whitman, Director, Oregon Department of Environmental Quality

Richard Whitman grew up in the Boston area and emigrated with his wife Emily to the west coast in 1984 where he worked on community economic development programs in low-income areas around the State of California. After being inspired to become involved in environmental issues in law school at U.C. Berkeley, he moved to Portland, where he joined the law firm of Ball, Janik. In 1996, he took the opportunity to go back into public service, joining Attorney General Hardy Meyers as the head of the Natural Resources Section in Oregon DOJ. Mr. Whitman became the Director of the Oregon Department of Land Conservation and Development in 2008, where he led efforts to organize state work on climate adaptation, to protect the Metolius River, and to improve Oregon's urban growth management program. In 2011, he was named as the Policy Director of the Governor's Natural Resources Office, where he coordinated the work of the 14 Oregon agencies involved in environmental protection and resources management. The Environmental Quality Commission appointed Mr. Whitman as the Interim Director of the Oregon Department of Environmental Quality in the fall of 2016, and as the Director in February 2017.

Toxics Reporting & Community Right to Know (HB 2669/SB 995) – Kathryn Saltzman

- Community impacts – access to data results in meaningful participation
- We learned that there will be a public hearing on HB 2669 on Monday (3/20) at 3pm!

Green Jobs: How to give priority to people living in the affected areas get the jobs – Patricia Toledo (MLK Worker Center)

- How to give priority to people living in the affected areas get the jobs
- Contractors working for the city of Portland should be required to look for local workers
- Training local workers in new technology practices
- Regulate/Require city environmental programs to hire local workers where the program takes place
- In public participation practices and building community knowledge, consider popular education methodology to explain concepts and collect ideas for solutions
- Do not decide for us, without us
- Enforcement – how you are making sure green jobs requirements will be met

What Should be the Priorities for Volkswagen Funding Decisions? – Kevin Downing (ODQ)

- Supporting work in larger context
- How to engage and reinforce advocacy in political realm
- How to involve the following during outreach:
    - Minority, other impacted communities
    - Community advisory committee
    - Translation services
- Outreach based on EJ factors
    - Identify high pollution areas
    - Identify EJ & other disproportionate impacts
    - Rural vs.Urban populations
    - Cost effectiveness

EJ Screening Tools – Sheryl Stohs (EPA)

- Why is the topic important?
    - EJ screen provides a way for community members to visualize the problems in their communities
    - EJ screen provides an invaluable tool for planners to understand the underlying concerns & realities in marginalized communities
    - EJ screen provides a visualization on how pollutants & demographics can be understood together
- What did you learn?
    - How to use EJ screen in order to garner data on a community's cumulative risk within the definition of environmental justice
    - How to use EJ screen to create a working assessment of communities that are at risk (create patterns, etc.)

    - Over 70% in the EJ percentile raises concerns
- What will happen next to move this forward?
    - Spread a working knowledge of EJ screen to community members (workshops, etc.)
    - Make sure to include community output on the tool and the workshop process
    - Marry the concepts of environmental justice and cumulative risk to EJ screen as a tool
    - Include EJ screen tool within groups & organizations to increase an understanding & awareness of environmental justice

Cleaner Air Oregon Advisory Committee: Balancing Representation & Voice

- Importance: Fair representation & balance of voices
- Learned:
    - Government needs to be more empathetic when addressing community concerns
    - Voices are more equal than thought / perceived
        - 8-Comm, 6-Gov't, 8-Industry
    - Engage community for open comment period

How Uncertainty in the Federal Regulatory Environment Trickles Down

- Taking local enforcement less seriously
- Intensifying already tense budget discussions
- Limiting investment in advancing technologies
- Opportunities for grassroots ownership

(No handwritten notes available for the following topics)
Air Quality Monitoring & Sensors – Holly Wilson (EPA)
How will You Prevent the Outcome of Pesticide Reporting with No Teeth? – Lila Wickham
Follow-Up / More on Cumulative Risk - Kristie

EPA Making a Visible Difference Portland
Environmental Justice and Air Toxics Workshop
March 15, 2017

Shalini Gupta Discussion: Essential Components of Community Engagment

Participants were asked to identify:
1) an essential component of community engagement that they felt was critical for the Oregon process moving forward and 2) why it is critical.

Effective Outreach and Engagement

- Reach out through community liaisons
    - Targeted focus groups
    - Technology
- Every community is different
- Localized outreach/issue near facilities
- Targeting places in addition to people
- Many community & neighborhood associations in Portland
- Outreach programs from state to groups
- School health nurse as gateway to community
- National Environmental Justice Advisory Committee (NEJAC)
- Open line of communication between state and community
- Widespread dissemination of information
- Find access points
- Be at the forefront of the mind
- "Nothing about [investing in community spaces] us without us."
- Need clarity and agreement on definition of indigenous communities to cover tribes and urban native populations
- Knowing community – get in the weeds
- Communicate to the communities that are affected that they are being affected
- Go where your stakeholders are at - engage their leaders

Reduce Barriers For Engagement

- The affected community needs to be part of conversation and reducing barriers.
    - Traditional methods are not conducive to this as community members are not paid to attend workshops.
    - Having meetings in the evening and child care is not sufficient
    - All-day forums are not practical
- Have meetings in centralized / convenient locations, accessible by the community: churches, hospitals, radio, community centers.
    - Go where the people are, places of business and talking to workers there

- Adjust communication standards to make sure there is understanding and engagement

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Essential elements needed for Cleaner Air Oregon Process

Timely Question: Can Oregon develop a cumulative health benchmark?
Minnesota Pollution Control Authority identifies not having a cumulative health benchmark as a barrier within their state.

Oregon's Gaps – Need for:

- Syncing up OHA & DEQ data
  - Mapping health data or data collected by health agencies with DEQ data including: demographics, cancer, asthma, radon, water toxics
- Community-level engagement
  - Actual positions within DEQ & OHA that focus on community-level communications & relationship building

- Industry has had a greater voice in OR DEQ processes
- Clean Air Oregon
  - Stakeholder process
  - Tally today showed more even
- Inequity among representatives at the table – AOI vs Community group

---

Building Capacity to Engage

- Community is under-resourced to engage
- Avoiding tokenization and exploitation (providing compensation for community members to participate). Food and babysitting is not enough.
- Resource the community; when writing a grant, hire community members instead of asking for volunteers
- Deal with under-resourcing by providing child care and food
- Make knowledge not just data accessible to the public and share so people don't have to re-invent the wheel. The community already know what they need/impacts
- Empower communities to have/hire their own experts to interpret data and formulate their questions
- Empower communities to understand how to influence action, at what level of government – hard for average resident to know what to do or who to approach
- Access to data and information are empowering tool for communities
  - Needs to be available and legible.
  - Use Technology that is relevant/understandable by the community
  - Use language that is accessible
- Allow time and capacity for average citizen to engage
- Create avenues for engagement

- Foundations and other community institutions need to step up to resource community groups/leaders
- Foster leadership and paths to decision-making positions for people of color and low income populations
- Pushing for education/professional institutions to graduate/hire people from target communities
- There must be pre-work; Funding could come from penalties that are currently being allocated to the general fund
- Get money to groups that don't have means to go to events to be able to attend workshops/meetings

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Stakeholder Process

- Need transparent timeline for EJ community; need all communities to be engaged
- Need meaningful input from community members; they don't need to feel engaged but to be engaged. "Nothing about us without us."
- How to keep full community engagement through the entire process
- Keeping the process as a sustained process – follow through with committments to the very finish
- Need a clear path from the community analysis space to the final decision.
- Accountability: there needs to be a commitment from leadership regarding accountability. The process needs to circle back to the community.
- The larger the process, the easier it is for the community input to get diminished.
- How to listen to community representatives
- Concern about equity
- Industry has significant voice – is over-represented and paid to be there.
    - Community needs to be over-represented.
    - Building relationships – greater accountability – relationships exist and there is accountability to those relationships.
- Community-centered analysis space
- Sustained process, commitment
- Creating Memorandums of Understanding
- Interactive – Key Piece
    - Community input
    - Have to include community
- Community input is needed on enforcement mechanism. Community enforcement needs to be viable. Need a critical focus on long-term management – more than just sending letters

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Relationship Building

- Pre-existing relationships
- Trust
- Provide education opportunities around issues and allow individuals from impacted communities to tell their own stories.

- Listen to community stories with intention. Agencies need to listen – communities need to tell. That is also empowering.
- Hear from the community with the valued expertise
- Acknowledging community difference
- Challenge to agency representatives:
    - As managers – should be judged on ability to sustain community engagement
    - Have specific staff assigned to maintain these relationships
    - Hire people from communities based on experience not education.
    - "Never ask a question you don't really want an answer to."

EJ Air Toxics Workshop - Commitment Notes

Workshop attendees provided commitments in response to…

"In order to advance the ideas and actions put forward today, I commit to doing the following":

Work on long-term plans for building partnerships with community partners to address environmental justice.

JS
OHA

Continue enviro outreach via non-profit Fernhill Wetlands Council – both directions up to elected's and out to the voice of the people. Civic engagement through supporting clean air, water, soil – protected and more enviro. Sensitivity in our forests. Community organize – help connect local groups from the kitchen table to action in our democracy. Humans over party politics.

Victoria Lowe
Fernhill Wetlands Council

Advocating for environmental justice for clean air and other natural resources. I will try methods mentioned to conjure community involvement from a diverse group of perspectives. I will make sure that other members on the commission I serve on, know just how much disproportional effects affect people of diverse backgrounds, hopefully resulting in due action & consideration.

Melanie Estrada
Forest Grove Sustainability Commission

- Report to my neighborhood association & my coalition (SE Uplift) on this meeting
- Share meeting report/videos, etc. with the above groups and anyone else I can interest
- Continue to track/attend Clean Air Oregon process & meetings
- Continue to track legislation & write those letters via Neighbors for Clean Air updates/alerts

Linda Nettekoven
HAND

Serve the marginalized, under-served, and low-income communities to provide equal access to sustainable practice, green spaces, and environmental education as well as to empower future environmental leaders and stewards.

Samantha Springs
Confluence Environmental Center/Americorps
Portland Public Schools

I commit to incorporating the environmental justice lens in my forthcoming preparation of testimony for my agency in regard to HB2669: Toxics Community Right to Know.

Perry Cabot
Multnomah County Health Department

I will bring the lessons learned today to my work team and incorporate them into our workplan, development and community engagement processes.

Jennifer Karps
Portland Environmental Services

Ensure that Oregon's EJ laws, policies, priorities are a part of decision making processes that I am involved in at the Oregon Health Authority.

Kari Christensen
Oregon Health Authority

Follow up with some of the resources Holly presented. Question my assumptions about how to engage with community, and improve. Make clear commitments and follow through. Investigate MOU as tool of effective and authentic community partnerships between government and community.

Tim Lynch
Multnomah County Office of Sustainability

- Develop more relationships
- Learn about sensors & citizen science
- Help with PSU study monitoring
- Testify
- Outreach to electeds

Shana Canote
South Portland Air Quality

Keeping Oregon's EJ statute at the forefront of my thoughts/plans and work.

Matt Davis
Soon to be Oregon DEQ

To remain in dialogue with environmental justice communities seeking to protect and restore their health, to have their voice heard in decisions that affect them when state government takes action.

Gabriela Goldfarb
Oregon Health Authority

To continue meaningful outreach to EJ communities… to recognize their experiences and honor their truth… and to advocate for brownfield redevelopment that results in the creation of assets that will benefit the existing and historical community.

Claudia Christensen Garcia
City of Portland - Brownfield Program

Continue to reach out to community members earlier in the process before a regulatory action happens, to build relationships and learn from the community what matters to them.

Nina DeConcini

Oregon DEQ

- Look for the opportunities to engage communities in advance of need.
- Learn cross-cultural communication techniques.

Kevin Downing
Oregon DEQ

Learn about the best practices agencies can use to engage with communities and put them into practice.

EPA

Work in partnership for collaborative solutions for all Oregonians.

Sophia Aguilera
OEC

Explore county analysis in decision making, inform myself on EJ lens (to better recognize tenets) and support resourcing communities to facilitate & lead efforts to serve their own needs/values.

Julia Babcoch
Oregon Solutions

Be available and listen for the voices of the EJ community.

Jo Niehaus
Lane Regional Air Protection Agency

Engage more with my community.

Keep the conversation going.
Work to find ways to involve community groups in many DEQ processes.
Bring lessons learned to my counterparts at the regional solutions team.

Cheryl Grabham
Oregon DEQ

Building bridges between underserved PDX communities and government agencies and non-profits. And planting more trees, of course!

Appendix B.

Resources & Video Links

(Click on a title to jump to section)

Environmental Justice Citizen Advocate Position

Background

Oregon DEQ is committed to the principles of Environmental Justice and strives to ensure that the agency's actions address the interests of Oregon communities, including minority, low-income and other traditionally underrepresented communities, including rural communities. DEQ's environmental justice efforts are guided by state and federal laws.

Federal laws include Title VI of the 1964 Civil Rights Act and Federal Executive Order 12898.

With implementation of Oregon's Environmental Justice law (Oregon Revised Statutes 182.535-182.550) in January 2008, Oregon DEQ and other state agencies became subject to new environmental justice requirements. The law requires agencies to consider environmental justice when determining whether and how to act, providing greater public participation to all people affected by decisions, and creating a citizen advocate position to support this work. The state definition of this work follows:

> **182.545 Duties of natural resource agencies.** In order to provide greater public participation and to ensure that all persons affected by decisions of the natural resource agencies have a voice in those decisions, each natural resource agency shall:
>
> (1) In making a determination whether and how to act, consider the effects of the action on environmental justice issues.
>
> (2) Hold hearings at times and in locations that are convenient for people in the communities that will be affected by the decisions stemming from the hearings.
>
> (3) Engage in public outreach activities in the communities that will be affected by decisions of the agency.
>
> **(4) Create a citizen advocate position that is responsible for:**
>
> **(a) Encouraging public participation;**
>
> **(b) Ensuring that the agency considers environmental justice issues; and**
>
> **(c) Informing the agency of the effect of its decisions on communities traditionally underrepresented in public processes**. [2007 c.909 §4][1]

DEQ's near-term EJ work

DEQ's programs and activities integrate the principles and requirements of Environmental Justice into their operations. The efforts noted below represent DEQ's commitments through internal practices and cooperative work with local, state and federal partners for the 2016-2018. DEQ's EJ citizen advocate participates in some of this work.

In 2016-18, Oregon DEQ will continue efforts to further the progress of EJ in Oregon. This will include:

[1] **Note:** 182.535 to 182.550 were enacted into law by the Legislative Assembly but were not added to or made a part of ORS chapter 182 or any series therein by legislative action. See Preface to Oregon Revised Statutes for further explanation.

Partnerships

- Collaborate with EPA and other states to share information about current EJ issues, activities and events applicable to Oregon
- Coordinate with other state natural resource and health agencies, and local environmental public health agencies to develop and share tools for EJ activities in Oregon, such as a tool to take into account demographic indicators for prioritizing work and sharing environmental public health with communities with environmental justice concerns
- Consult with the Oregon Environmental Justice Task Force for guidance about tools to more deeply integrate EJ principles and requirements into DEQ operations
- Participate in, and work with EPA on, any national or regional EJ efforts or initiatives, such as EPA Region 10's Making a Visible Difference steering committee
- Coordinate with EPA to develop EJ trainings for specific Oregon DEQ programs
- Consult with state and local environmental public health agencies to incorporate EJ considerations into programs, such as priorities for air toxics site investigation
- Collaborate with EPA to identify LEP individuals who need language assistance using data such as EJ Screen, the latest census data, or information from DEQ

Outreach

- Diversify Oregon DEQ's advisory committees and workgroups, including, but not limited to, participants representing environmental justice issues
- Establish DEQ protocols for culturally appropriate community engagement, taking into account demographic indicators and Limited English Proficiency

Tools

- Develop a tool to take into account demographic indicators for prioritizing DEQ's work
- Explore opportunities to focus Supplemental Environmental Project funds resulting from civil penalties for environmental law violations in communities with environmental justice concerns
- Develop a Limited English Proficiency implementation plan with measureable outcomes to address the identified needs of LEP populations and provide guidance for Oregon DEQ
- Continue to develop an agency implementation and staff training plan, with outcome-based measurements, for using EPA's EJ Screen when DEQ decisions may affect communities with identified or potential EJ concerns

Accountability

- Consult with the Oregon Environmental Justice Task Force to measure success while developing the Environmental Justice section of the next PPA; review work completed during the previous grant cycle and seek task force input about how to improve moving forward
- Reduce localized impacts of air toxics in communities with environmental justice concerns statewide through the Cleaner Air Oregon regulatory reform program
- Incorporate EJ and cultural competency expectations and understanding implicit cultural bias in Oregon DEQ manager position descriptions and performance management materials

- Ensure compliance with Title VI of the Civil Rights Act of 1964. This includes participating in EPA sponsored training and/or guidance to help achieve compliance with Title VI
- Take reasonable steps to ensure meaningful access to programs and activities that impact LEP persons, by following the four factors according to 69 Fed. Reg. 3502 (June 25, 2004), at: http://www.gpo.gov/fdsys/pkg/FR-2004-06-25/pdf/04-14464.pdf
    (1) the number or proportion of LEP persons eligible to be served or likely to be encountered
    (2) the frequency with which LEP individuals come in contact with or impacted by program/activities
    (3) the nature and importance of the program, activity, or service provided by the ODEQ to people's lives; and
    (4) the resources available including costs considerations
- Provide notice to LEP persons that language services are available and that they are free of charge

Training

- Maintain an online training for environmental justice that is available to all employees
- Strongly encourage all managers and staff whose primary work responsibilities include permitting or field work to complete the online EJ training
- Provide all DEQ employees opportunities to access training in cultural competency and understanding implicit cultural bias
- Provide all DEQ employees opportunities to access training about DEQ's tool to evaluate demographic indicators for prioritizing work and engaging communities
- Coordinate Technical Assistance/Training needs for Title VI and LEP with EPA
- Provide training to managers and staff regarding LEP policies and procedures
- Provide training in the use of EJ Screen, in collaboration with EPA, with a strong focus on managers and staff whose primary work responsibilities include permitting, enforcement, or field work

If additional funding for EJ work in Oregon is available and awarded, Oregon DEQ will use it for the activities below:

- Reduce barriers to participation by communities with environmental justice concerns in public meetings and hearings convened by Oregon DEQ, by providing childcare, food and opportunities for interpreters
- Improve outreach for public meetings and hearings convened by Oregon DEQ to include targeted materials based on demographic information for communities. For example, work with county environmental public health agencies to understand languages spoken in communities, and translate outreach and communication tools as appropriate
- Implement recommendations in Oregon DEQ's statewide Toxics Reduction Strategy to reduce toxic pollution to Oregon's air, water and land, which may have disproportionate effects on environmental justice communities
- Implement recommendations from the Portland Air Toxics Solutions Recommendations that address Environmental Justice communities as determined by the Environmental Justice Analysis conducted for the project

[CEED Template]

Points of Agreement between _____ (Government Agency)
and _____ (Community Group(s))

Purpose: To be clear on expectations among the two parties, so as to not have miscommunication, establish working protocols, and build a solid basis for long term engagement on policy development and implementation.

This relates specifically to the _____policy planning process that is underway by the State/City of _____. Articulation of this relationship will enhance the long term environmental and social sustainability of the policy, as frontline community (those that are most impacted by the policy) meaningful engagement is central to good policy-making and democratic decision-making.

The following are key areas of discussion – the points listed are starting points to determine what is important for your community's specific policy and engagement goals with the government agency for a specific policy. They were developed through CEED's experience with policy stakeholder processes and workshop training around Effective Community Engagement Models for EJ Policy-Making. You can have different agreements depending on the policy, regulatory process or agency. CEED recommends the following steps:

1. *A community group or coalition have a facilitated discussion among their members on these key points to first determine their own priorities and needs.*
2. *Enter into a facilitated discussion with an official with decision-making/signing capacity at the government entity you are focusing on, to negotiate final points of agreement.*
3. *You can hire a facilitator or ask the government entity to provide the resources for a neutral party.*
4. *You may want a legal review of the final document that results, but not required if resources are limited.*
5. *Make sure all parties sign the final agreement, so you have it and can reference it for future accountability and work.*

I. Communication

- Amount of notice time government agency should give community groups on key decision points?
- Who is the official point of contact at the government agency for the community groups?
- What is the community's expectation of a communication plan (during policy development and during implementation) by the government agency to inform frontline community residents, the broader public, that may not part of any official policy stakeholder planning process?
- Will there be coordination of community engagement done by the official government agency process with the community groups (co-planning)?
- Multilingual needs of documents, at meetings?

[CEED Template]

II. Policy Body Governance

- Process by which who from the community side will serve on the stakeholder process will be made (i.e. community group/coalition elects their representative or government body decides)?
- Decision making process, voting, etc. (of individuals versus those representing coalitions – weight of vote)?
- Make-up of the stakeholder panel – how many seats, what is fair representation?
- What does meaningful representation mean? Do you need a separate space for an environmental justice working group on the policy?
- How will EJ/community recommendations be documented and retained (i.e. as an appendix) before they enter any larger stakeholder negotiated language?

III. Resources

- What resources will be provided for community group representatives, if any, to participate on panel? (parking, stipends, food, etc…)
- What resources will be provided to community organizations for outreach on the policy?
- What resources will be provided to community organizations for research they control (i.e. decide the researcher, the questions that get researched) so they have the technical support they need?
- How will community groups will be communicated with if government agencies seek foundation dollars for civic engagement activities, to not compete with community organizations for funding, and so that proposals can be submitted in a partnership manner that builds the capacity of both parties?
- What staff at the state/city will be providing technical support to the community representatives? What is the level of experience of that staff member (not entry-level)?
- What will be the community engagement process for determining mitigation resources/efforts investments in the community (i.e. from regulatory fees, legal settlements, etc)?

IV. Facilitation and Agenda-Setting

- Will there be joint-facilitation of policy/stakeholder agenda setting process? What is the process of identifying a neutral facilitator, a facilitator with EJ experience?
- Will the facilitators be equally compensated?
- How will community groups and government agencies reach joint understanding of key decision points and timeline of when key decisions are made, ahead of time, so community has time to reflect, research and deliberate?
- What will be the prioritization process of policy recommendations when moving to implementation phase?

V. Training

- Will the government agency be needing any further trainings around environmental justice?
- On what topic, who decides who the trainers are? Is it a policy training, community engagement training?

Summary of The Elements of A Cumulative Impact Analysis

Source: Dr. Kristie Ellickson, State of Minnesota, Pollution Control Agency,

- **Sensitivity:** This relates to standards based on sensitive life stages. It is the degree of a response to a stimulus. For example, humans respond to bee stings in different ways: there may be no impact, an itchy bump, or medication may be required to stay alive. Standards are cumulative if they protect the most sensitive parts of the population. One possibility in permitting is to develop health benchmarks for the most sensitive population for a certain pollutant. This could mean benchmarks for asthmatics, being elderly, having existing diseases; early life exposure (0-2 years old), etc.

- **Additivity:** This analysis considers the effects and risks of multiple pollutants, i.e. whether exposure to each of the pollutants has an additive effect. The analysis could also add pollutants based on a single health effect relative to one pollutant that is well-known and that sets potency equivalents. This analysis is also helpful when assessing mixtures that may contain multiple pollutants.

- **Multiple Pathways:** These are different ways that people are exposed to pollutants (eating, drinking, breathing, contact with skin, showering, swimming, etc.) Health benchmarks can be developed that assume people are exposed to more pathways than one. For example, if one looks at both inhalation and ingestion at the same time, that is a cumulative component of an analysis.

- **Multiple Sources:** This approach adds in the effects of other nearby sources such as cars, other factories, runoff, etc. It could include looking at all the emissions of the facility, not just the project under consideration. It could include what is already there as well as historical depositions.

- **Non-Chemical Stressors:** This approach considers elements/impacts in the environment that are not chemicals such as chronic stress, noise, crime, historic trauma, aesthetics, lack of green space and infectious agents such as cryptosporidium. This is a cutting-edge concept and there is not a lot of data on this yet

- **Community Vulnerability:** This is an analysis that relates to a community's resilience and considers that there may be greater susceptibility to pollution due to other challenges. Forexample, if a person was stung by a bee, vulnerability relates to the ability to access an Epi pen, healthcare funds to buy an Epi pen or protective equipment, or living in a community infested by bees. Other examples include historic exposures, structural racism, access to emergency preparedness and management funding, land use and stewardship issues, language barriers, lack of health care, lack of engagement of elected officials, unmaintained housing, etc.

Overview -- The Art of Commenting
2nd Edition
Elizabeth D. Mullin
Environmental Law Institute
http://store.westacademic.com/s.nl/it.A/id.9157/.f
$30 online new ($2.99+ used)
Free 4 page booklet adapted from book @ http://eli-ocean.org/wp-content/blogs.dir/2/files/Making-Your-Voice-Heard.pdf
Tips for Submitting Effective Public Comments by NOAA Fisheries Service @ https://alaskafisheries.noaa.gov/sites/default/files/effectivecomments.pdf

☐ **Track agency actions to know when things come up**

- Federal Register
- Agency websites
- Various publications that report on current environmental events (BNA)
- RSS feeds
- Get on mailing, email lists and listservers
- Find an Agency staff "buddy"

☐ **Know the deadlines for receipt of comments**

- How to comment information generally up front in notices
    - General comment period is 30 days
- Ask for an extension if you think you'll need one

☐ **Coordinate your comments with others to strengthen your position**

- Like-minded groups, organizations or businesses (environmental groups, community organizers)
- Coordinate with others who you expect will comment (environmental law clinics)
- Groups who may have slightly different positions (trade associations)

☐ **Identify supplemental background information**

- Statues and law governing regulation
    - Statues are legally binding. If document is not consistent with statute or pertinent regulations, there may be grounds for a lawsuit. Statues can have broad goals such as NEPA Section 101 https://www.fsa.usda.gov/Internet/FSA_File/nepa_statute.pdf
    - Free legal resources at www.law.cornell.edu (links to federal and state environmental laws)
- Case law interpreting statues
- Other pertinent regulations
- Environmental Assessments (EA) and Environmental Impact Statements (EIS)
- Permits
- Agency materials, guidelines, guidance and toolkits
- Studies, reports, data, analyses
- Newspaper clippings

- Comments from sister agencies
- Consent decrees, orders

☐ **Collect background information**

- Agency Websites
- Agency Libraries
- Government Printing Office (www.gpo.gov)
- National Technical Information Service (www.ntis.org)
- Government Depository Libraries
- Dockets
- Hotlines
- Library of Congress (www.thomas.loc.gov) – goes back to 1973
- Freedom of Information Act Requests (FOIA)
    - www.foia.gov
    - www.nfoic.org – National Freedom of Information Coalition links to FOIA information for each state
    - Cost associated with request, some provisions exist for waiving fees (Agency-by-Agency)
    - Try free online resources first
- Nongovernment sources (environmental law clinics)
- Your Agency "buddy"

☐ **Find sample documents and review comments**

- www.regulations.gov - regulatory port, view comments on other regulations

☐ **Make a checklist**

- Identify all items to address in comments
- Note key statues or language

☐ **Review the document**

- Check for improbably assumptions
- Improper methodologies
- Failure to follow required or accepted practices (laboratory, engineering)
- Misleading or unclear statements
- Unsupported conclusions
- Legal errors or emissions
- Inconsistencies within the document (table/text don't match, data inconsistent with tables/text)
- Inconsistent cited references
- Look for major problems or themes that may have emerged

☐ **Define your objectives**

- Determine what you want to see happen, what are your priorities?
- Craft comments and set priorities based on your objectives
- Focus on what you care about most, set lesser ones apart

- Don't overwhelm the recipient
- Don't get nitpicky, focus on substance

☐ **Writing your comments**

- Think about your recipient, what comments would you want to receive?
- Identify the document being reviewed
- Establish who you are – include your name, position, describe your organization and/or what knowledge, expertise, or concern you have about the action
- If you provided comments previously, cross-reference or provide a copy of earlier comments
- Identify any attachments included in the comment submittal
- Separate comments into three parts, keep as concise as possible
    - General Comments – list big issues/changes that may be needed
    - Major Comments
    - Page-By-Page Comments – for lengthy documents or multiple concerns
        - Cross reference specific place within document (Example: §9 page 4-5)
        - Provide a brief summary of your concern (Example: Given the likely length and complexity of the draft plan, the bill should allow at least 30 days for public comment. Currently the bill provides for only 14 days).
- Use headings to separate out individual issues and subheading for lengthy comments.
    - Once comments are received, EPA organizes and responds to comments by issue
        - EPA received 2.7 million comments on Greenhouse Gas New Source Performance Standards for Electric Generating units
    - Example: **Risk Assessment Understates Risk.** The risk assessment grossly underestimates the chemical's possible effects on human health.
- Begin each new comment and each paragraph with a topic sentence
    - Put topic sentence first, it expresses a central thought
    - Topic sentence is underlined
    - Topic sentence should state exactly what is wrong or what change is needed
    - Other sentences add to or clarify thought but are not the central idea
        - Example: <u>The cost of the reclamation plan far exceed any conceivable benefit.</u> The draft plan would require expenditure of $10M to revegetate 5 acres of land. Located in a heavily industrialized area, the land has virtually no potential for wildlife, recreation, or any other nonindustrial use. The area needs vegetative cover to control erosion, not landscaping.
- Use good sentence structure
    - Use sentences with less than 50 words
    - Use active (not passive) voice
    - Don't ask questions
        - Commenting is not a conversation
        - Example: what about the impact on wetlands? (Versus) The EIS should address the impact of the proposed project on wetlands.
- Be respectful
    - Be firm, dignified, and respective
    - Don't call anyone's integrity or motives into question

- Don't suggest employees are not doing their job or living up to the agency mission

☐ **Types of issues to raise**

- Don't engage in personal attacks, allege lack of integrity, conflict of interest or bad faith.
- Raising legal issues.
  - Separate out legal relevant facts from other facts.
  - Specifically describe or quote any pertinent language, citation and specific issue/violation of concern
  - For Example: The old farm house down the street has rich and interesting history (versus) EPA should require a historical survey. Under 40 C.F.R. §6.301, EPA must take steps to preserve historic resources. The old farm down the street has a rich and interesting history and possibly many artifacts. At a minimum, there should be a historic survey to assess the property and mitigate measures to preserve anything of historical or cultural value.
- Raising factual issues.
  - Information is presented, but it is wrong or misleading
  - Information is incomplete
  - Facts are presented but not relied on or given sufficient weight in the decision
- Raising process issues.
  - Inadequate notice of opportunity for involvement
  - Not enough time for review
  - Right people not involved
  - Format of involvement was inadequate
  - Not enough background materials were available for meaningful participation
  - Docket excluded important documents

☐ **Provide specific language**

- Type specific language changes in the Page-By-Page section
- Use software "track changes" "redline/strikeout"
- Instead of indicating what words to remove or add, rework sentence for recipient
- Indicate what you support as well as what you disagree with
- Give specific examples to illustrate your concerns
  - Example: Construction of the proposed parking lot would exacerbate the existing flooding problem. In February, it rained two inches of a 24-hour period. As the enclosed photograph indicates, the resulting flood nearly reached the high school. The new lot would increase the amount and speed of surface runoff into the stream, leading to more frequent and larger foods.

☐ **Provide supplemental information**

- Respect copyright laws when submitting supplemental information
- Supply solid, well-documented information
  - Include only information with supporting details
  - Provide citations of source when referencing books, articles, or other publications
  - Provide the date, photographer and location when submitting photographs

☐ **Offer helpful solutions**

- Best comments offer solutions to the problems raised
- Options could include changes in timing of an action, mitigating measures, offsets, conditions, emergency exemptions, or other solutions

☐ **Other options**

- Speak at a public meeting or hearing
    - Request one if not scheduled
    - Oral comments should be a summary of your major concerns
    - Write down and submit text of oral presentation to the Agency
    - Send follow-up letter to express additional information and request its inclusion in the record
- Rally support for your position
    - Rally support from federal, state, or local agencies, businesses, organizations, or citizens groups
- Meet with decision makers
    - Within the agency conducing the action
    - Involve a legislator
- Get Publicity
    - Combination of media resources
    - Internet, social media, television, radio, newspapers, magazines, flyers

LINKS TO ENVIRONMENTAL JUSTICE RESOURCES

Videos of March 15, 2017 Workshop Presentations

Key Statutory and Policy Frameworks - Federal

1. Executive Order 12898
2. Presidential Memorandum to Executive Order 12898
3. Toxic Wastes and Race Report (1987)
4. Plan EJ 2014
5. Plan EJ 2014 - Legal Tools
6. Promising Practices for EJ Methodologies in NEPA Reviews
7. EPA's Environmental Justice Collaborative Problem Solving Model

Community/Stakeholder Involvement – Federal

1. EPA Office of Air Quality Planning and Standards (OAQPS)

Community/Stakeholder Involvement –State

1. ECOS Green Report on Community Engagment and Equity Considerations in Permitting

Guidance – Federal

1. Technical Guidance for Assessing Environmental Justice in Regulatory Analysis
2. Guidance on Considering Environmental Justice During the Development of Regulatory Actions
3. EPA ExpoBox

   EPA's Exposure Toolbox provides guidance on EJ questions such as:

   i. Characteristics related to proximity to source or stressor
   ii. Differential exposures to a stressor
   iii. Population characteristics

Screening and Assessment Tools – Federal

1. Website: EJSCREEN; EJSCREEN Fact Sheet (2016) English; EJSCREEN - Hoja Informativa (2016)
2. Website: C-FERST; C-FERST Fact Sheet
3. Website: Tribal-FERST ; T-FERST Fact Sheet

Screening and Assessment Tools – State

1. Website: CalEnviroScreen

Kristie Ellickson: Minnesota Cumulative Analysis Air Permitting

https://www.pca.state.mn.us/air/air-permitting-south-minneapolis

Richard Whitman / Gabriela Goldfarb: Cleaner Air Oregon

Cleaner Air Oregon

Dan Brown: Near Ports Initiative

www.epa.gov/ports-initiative

Holly Wilson: EPA Office of Air Quality Planning and Standards

Air Sensor Toolbox for Citizen Scientists

Appendix C.

PowerPoint Presentations

(Click on a title to jump to presentation)

Clean Air Act Overview

Cleaner Air Oregon: Air Quality Overview, Sarah Armitage, ODEQ

Cleaner Air Oregon: Cumulative Risk & Background and Setting & Administering Acceptable Risk Levels

Cumulative Analyses in a Regulatory Environment, Kristie Ellickson, PhD

Environmental Justice in the Policy Process & Community Engagement Interface, Shalini Gupta, Executive Director of Center for Earth, Energy and Democracy (CEED)

EPA's Diesel Initiative as a Case Study of Incorporating Environmental Justice into Air Quality Programs, Dan Brown, EPA

Incorporating Environmental Justice into Everyday Actions & Policies, Charles Lee, Senior Policy Advisor for Environmental Justice, EPA

Incorporating Meaningful Involvement at the National Level, Holly Wilson, EPA North Carolina

Update on Cleaner Air Oregon, Gabriela Goldfarb, OHA; Richard Whitman, ODEQ

EPA
United States
Environmental Protection
Agency

Clean Air Act Overview

June 2014

Objectives

- Provide context for Clean Air Act (CAA).
- Describe major provisions of CAA.
- Explain overall regulatory process and opportunities for public involvement.

Air Pollution in the Real World

- Mobile Sources
- Stationary Sources
- Natural Sources

- Impacts:
  - Health, environmental, economic

History of the Clean Air Act (CAA)

- 1963: Funding to study and clean up air pollution.
- 1970: CAA enacted.
- 1977: Prevention of significant deterioration.
- 1990: Acid rain, ozone depletion and toxics.

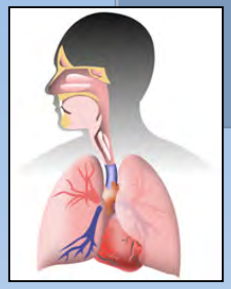
The Clean Air Act Calls For…

- Meeting health-based air quality standards
- Controlling stationary and mobile source emissions
- Reducing toxic emissions
- Reducing acid rain
- Reducing regional haze
- Protecting the ozone layer
- Reducing greenhouse gas emissions
- Involving states, tribes and stakeholders

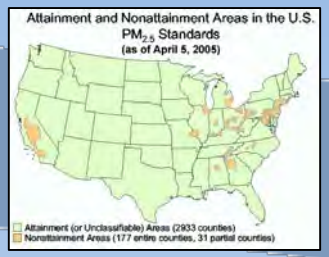
Titles of the Clean Air Act

- Title I—National Ambient Air Quality Standards, Hazardous Air Pollutants
  - SIP, NSR and Technology Standards
- Title II—Mobile Sources
- Title III— Emergency Powers and Tribal Authority, Public Involvement
- Title IV—Acid Deposition
- Title V—Operating Permits
- Title VI—Stratospheric Ozone

Air Quality Management Cycle



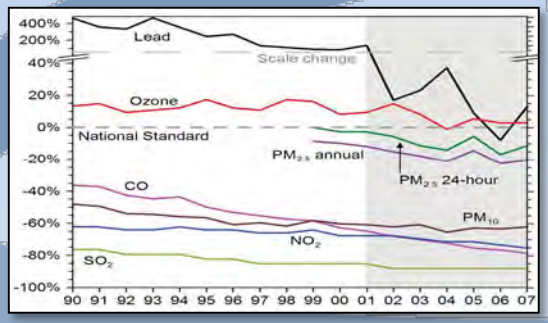
EPA revises National Ambient Air Quality Standards, Monitoring Reqts.



EPA Designates Nonattainment Areas

Air Agency Assesses Expected Improvement From Federal Measures, and Develops Additional Control Strategies to Attain Standards

Scientific Research



Ongoing Evaluation by EPA and Air Agency: Air Quality Monitoring, Tracking Emissions and Implementation of Control Programs

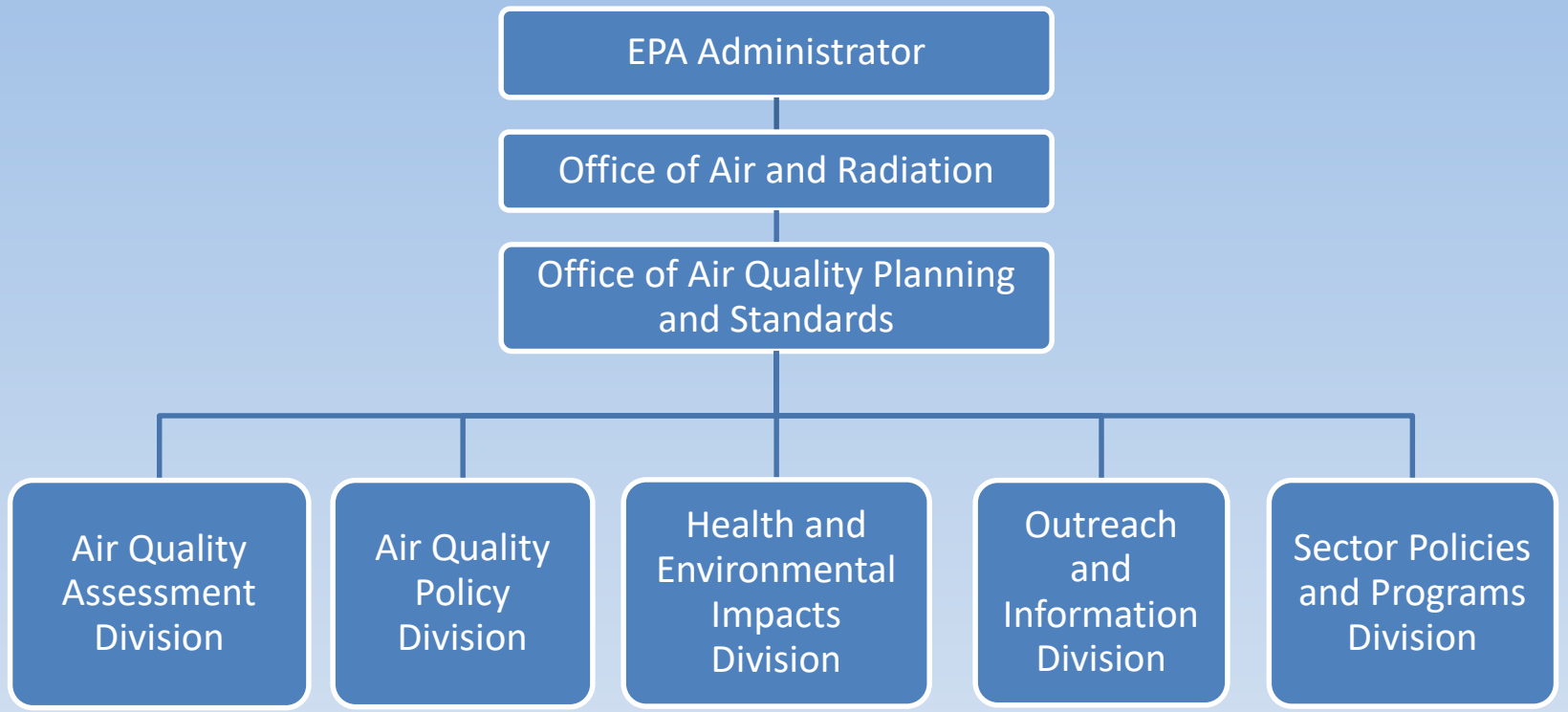
Air Agency Submits Plan to EPA and Implements Control Strategies Through Regulatory and Non-regulatory Approaches

Air Quality Management Responsibilities

- Federal government
  - Sets standards
  - Provides oversight

- State governments
  - Develop implementation plans
  - Issue permits
  - Enforce standards

Office of Air Quality Planning and Standards (OAQPS)



National Ambient Air Quality Standards (NAAQS)

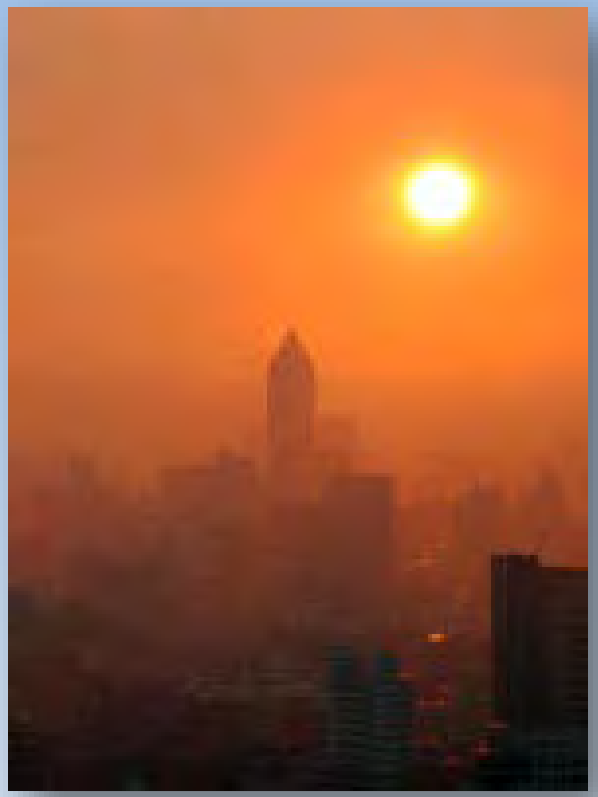
- Set for “criteria pollutants”
  - “reasonably be anticipated to endanger public health and welfare.”
  - presence in the ambient air come from numerous and diverse mobile or stationary sources.

Statutory Requirements

- Primary standards protect public health.
- Secondary standards protect welfare.
- EPA may not consider cost in setting NAAQS, only health risks.

NAAQS Criteria Pollutants

- Particulate Matter (PM)
  - PM_{10} and $PM_{2.5}$
- Carbon Monoxide (CO)
- Nitrogen Dioxide (NO_2)
- Sulfur Dioxide (SO_2)
- Ground-level ozone or smog (O_3)
- Lead (Pb)



Attainment Areas

- EPA designates all areas in the country as:
  - "Attainment" (meeting the standards)
  - "Nonattainment" (exceeding standards)
  - "Unclassifiable" (not enough data to know)

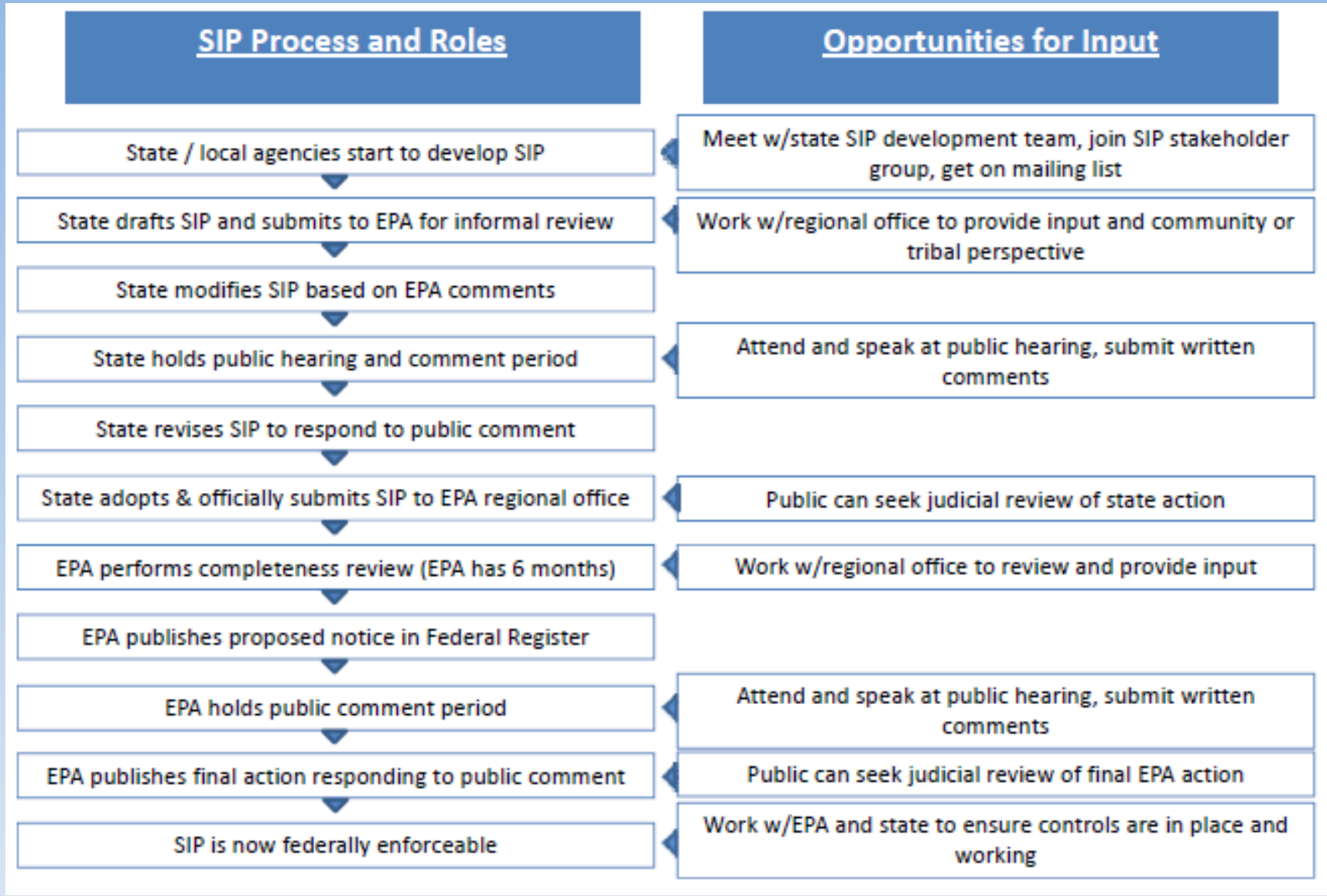
NAAQS Implementation

- State Implementation Plans are the core policy tool
- Preconstruction permitting.
- Regional haze.
- State, tribal and local program measures.

State Implementation Plans (SIPs)

- A collection of regulations, programs and policies.
- Used to attain or maintain air quality standards.
- Includes public involvement requirements.
- Mandatory for states and voluntary for tribes.

The State Implementation Plan Process



Compliance with SIPs

- States subject to
  -- sanctions
  -- mandatory planning

New Source Review (NSR)

- Requires stationary sources of air pollution to get permits before starting construction.
- Also known as “preconstruction permitting” or “construction permitting.”

What are the Components of the NSR Program?

PSD Permit Requirements

- Main requirements:
  - Install Best Available Control Technology (BACT)
  - Perform air quality analysis
  - Assess impacts
  - Allow public involvement

NA NSR Permit Requirements

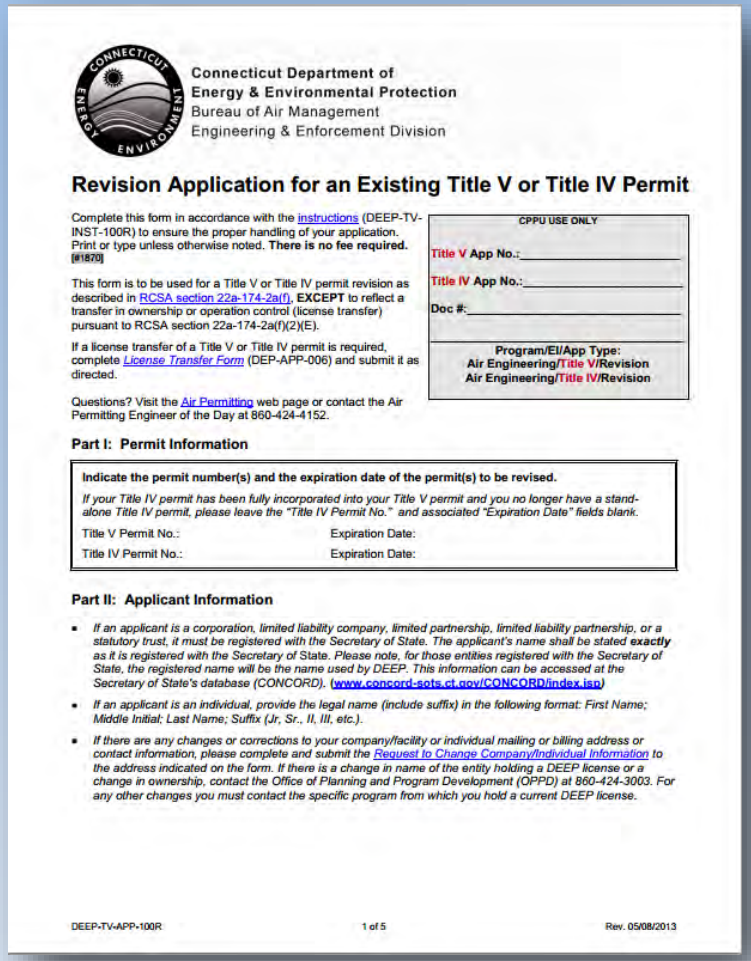
- Main requirements:
  - Install Lowest Achievable Emission Rate (LAER) technologies
  - Obtain emission offsets.
  - Perform alternative sites analysis
  - Show statewide facility compliance
  - Allow public involvement

Minor NSR Permit Requirements

- CAA does not have specific requirements.
- New sources and modifications cannot interfere with attainment of the NAAQS.
- State program requirements vary greatly.

Title V Permits

- Established in 1990
- Gives a facility one combined permit
- Issued by states and tribes
- Self-funded through a fee program



Connecticut Department of
Energy & Environmental Protection
Bureau of Air Management
Engineering & Enforcement Division

Revision Application for an Existing Title V or Title IV Permit

Complete this form in accordance with the instructions (DEEP-TV-INST-100R) to ensure the proper handling of your application. Print or type unless otherwise noted. **There is no fee required.** [#1870]

This form is to be used for a Title V or Title IV permit revision as described in RCSA section 22a-174-2a(f), **EXCEPT** to reflect a transfer in ownership or operation control (license transfer) pursuant to RCSA section 22a-174-2a(f)(2)(E).

If a license transfer of a Title V or Title IV permit is required, complete *License Transfer Form* (DEP-APP-006) and submit it as directed.

Questions? Visit the Air Permitting web page or contact the Air Permitting Engineer of the Day at 860-424-4152.

CPPU USE ONLY

Title V App No.:_____

Title IV App No.:_____

Doc #:_____

Program/EI/App Type:
Air Engineering/Title V/Revision
Air Engineering/Title IV/Revision

Part I: Permit Information

Indicate the permit number(s) and the expiration date of the permit(s) to be revised.

If your Title IV permit has been fully incorporated into your Title V permit and you no longer have a stand-alone Title IV permit, please leave the "Title IV Permit No." and associated "Expiration Date" fields blank.

Title V Permit No.: Expiration Date:

Title IV Permit No.: Expiration Date:

Part II: Applicant Information

- *If an applicant is a corporation, limited liability company, limited partnership, limited liability partnership, or a statutory trust, it must be registered with the Secretary of State. The applicant's name shall be stated **exactly** as it is registered with the Secretary of State. Please note, for those entities registered with the Secretary of State, the registered name will be the name used by DEEP. This information can be accessed at the Secretary of State's database (CONCORD). (www.concord-sots.ct.gov/CONCORD/index.jsp)*
- *If an applicant is an individual, provide the legal name (include suffix) in the following format: First Name; Middle Initial; Last Name; Suffix (Jr, Sr., II, III, etc.).*
- *If there are any changes or corrections to your company/facility or individual mailing or billing address or contact information, please complete and submit the Request to Change Company/Individual Information to the address indicated on the form. If there is a change in name of the entity holding a DEEP license or a change in ownership, contact the Office of Planning and Program Development (OPPD) at 860-424-3003. For any other changes you must contact the specific program from which you hold a current DEEP license.*

DEEP-TV-APP-100R 1 of 5 Rev. 05/08/2013

Title V Permit Implementation

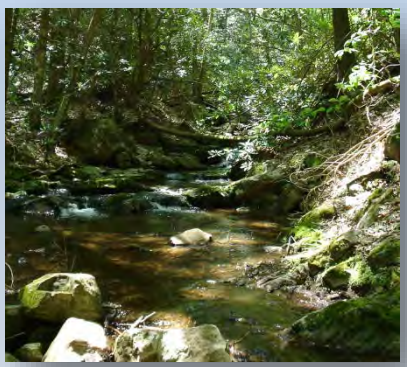
- All major sources and some minor sources must obtain permits.
- Source must apply for permit.
- States have lead on issuing permits.

What are “Air Toxics”?

- Also known as Hazardous Air Pollutants (HAPs).
- 187 substances specified by Congress
  - Can cause health effects.
  - Can’t link to ambient concentrations, thus no NAAQS.

Air Toxics May…

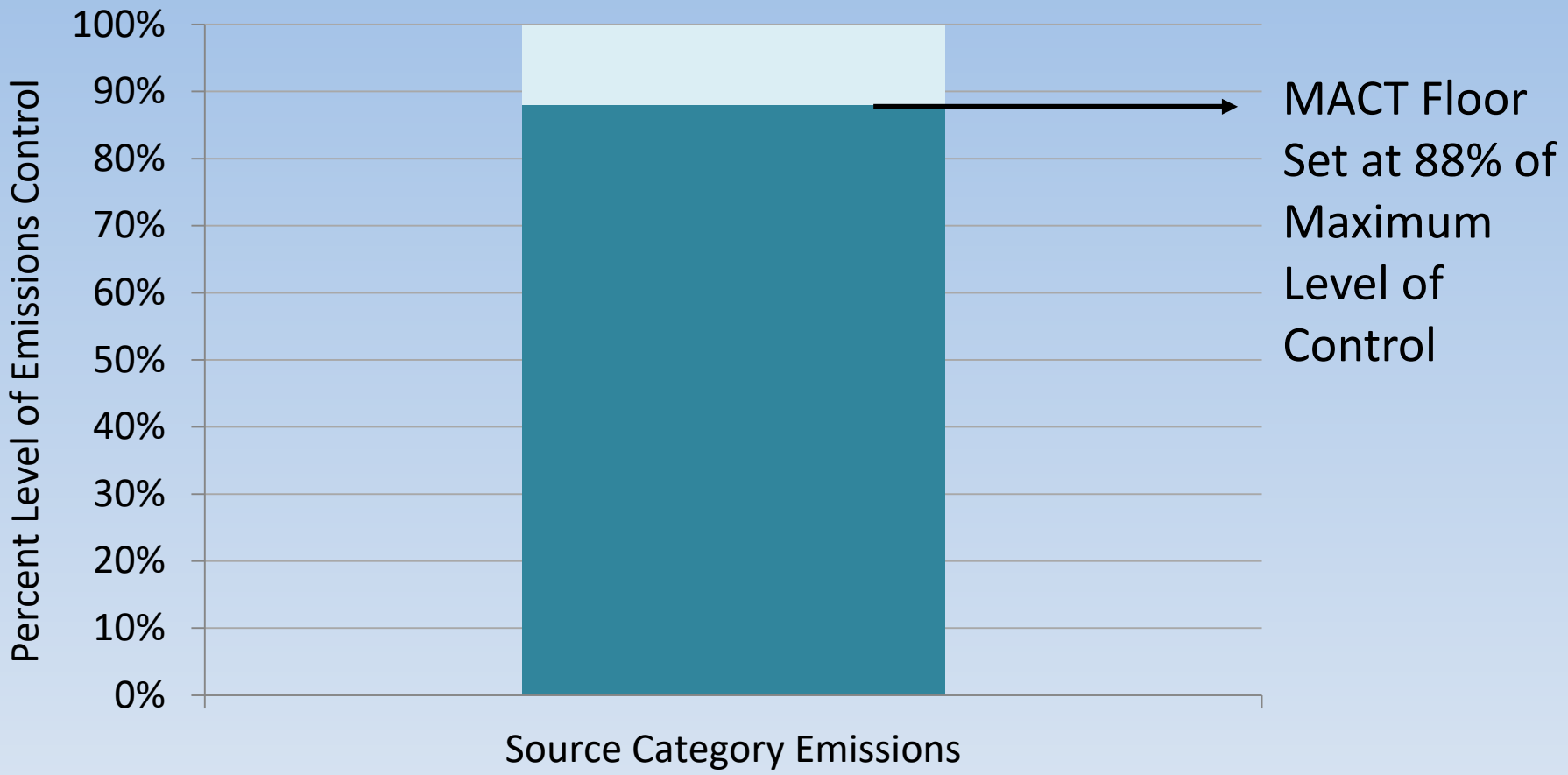
- Cause cancer or other serious health effects.
- Have potential adverse environmental effects.
- Have diverse physical and chemical characteristics.
- Cause exposure in multiple ways.
- Be transported locally, regionally, nationally or globally.
- Persist in the environment and/or bioaccumulate.



CAA Requirements for Air Toxics

- Set technology-based Maximum Achievable Control Technology (MACT) standards.
- Residual risk assessment
- Technology reviews

MACT Floor


100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percent Level of Emissions Control
Source Category Emissions
MACT Floor Set at 88% of Maximum Level of Control

The General Air Toxics Risk Assessment Process

Planning/Scoping/Problem Formulation

Exposure Assessment

Who is exposed?

What chemicals are they exposed to?

How does the exposure occur?

Toxicity Assessment

Is a chemical toxic?

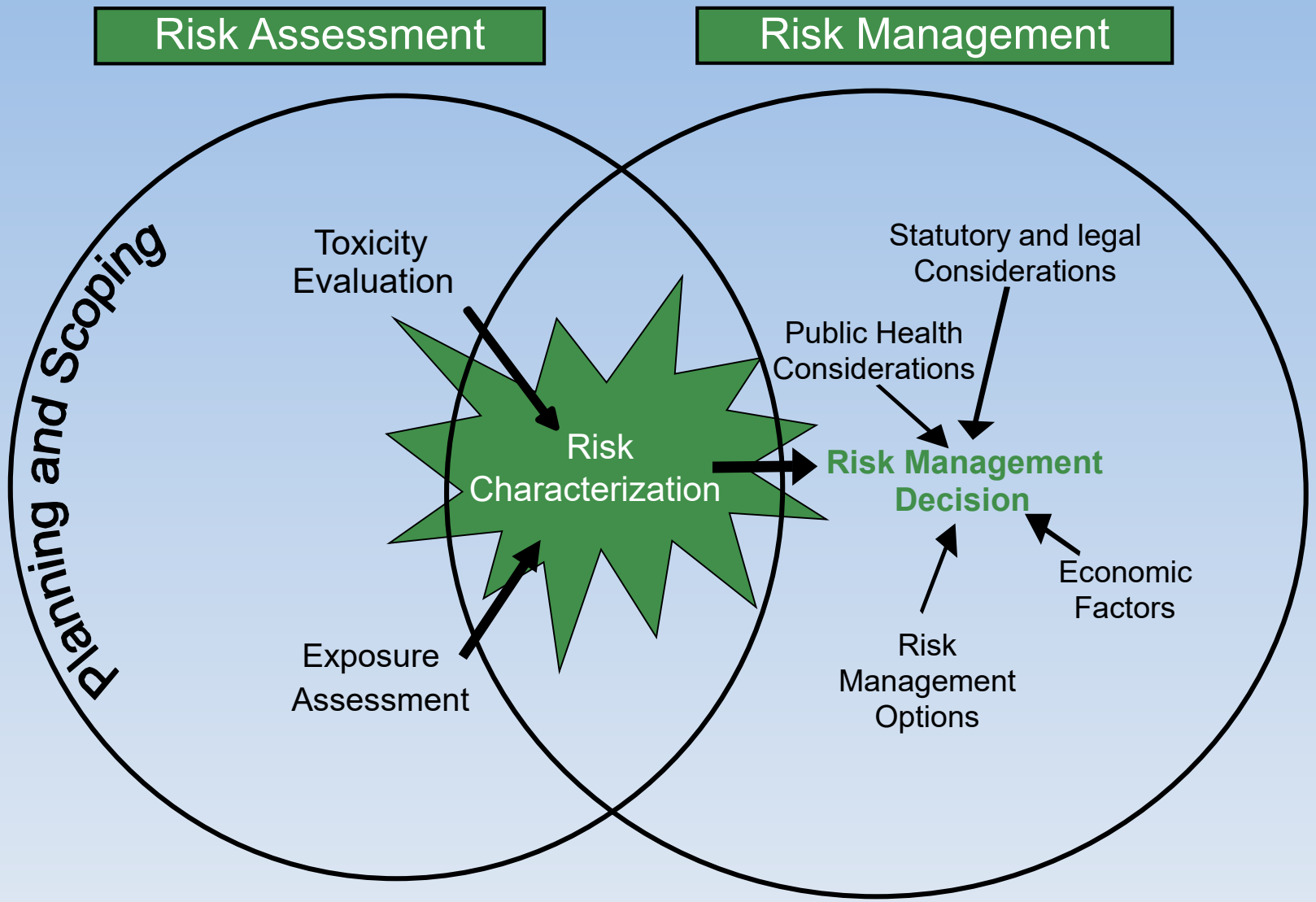
What is the relationship between the dose of a chemical and the response that results?

Risk Characterization

What is the likelihood that the exposure will result in an adverse health effect?

How sure are we our answers are correct?

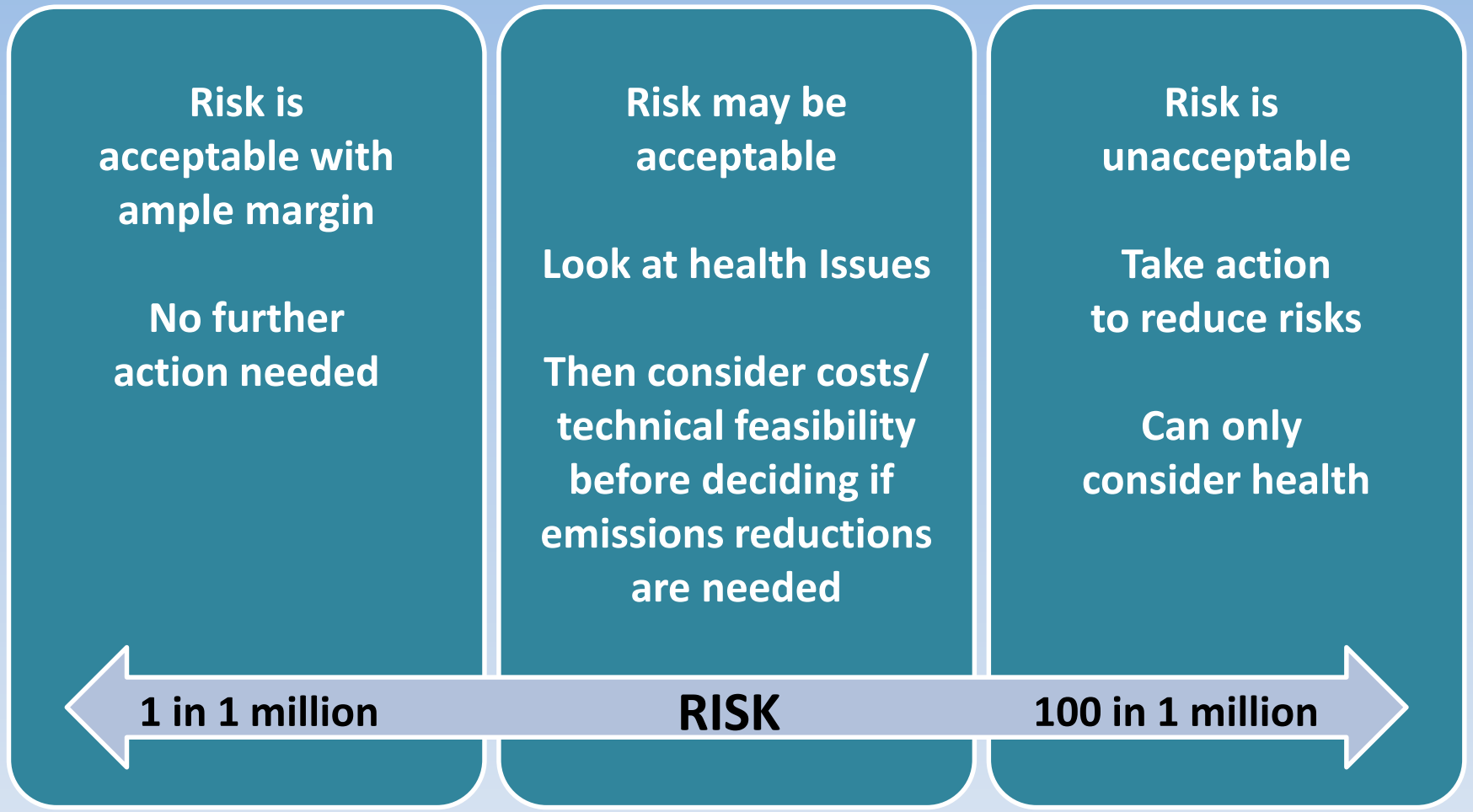
So, just what is the risk?



What is the Residual Risk Program?

- Assess risks remaining after MACT standard
- Set additional standards if MACT does not protect public health or the environment

Residual Risk Decision Framework



Summary of Requirements

NAAQS Criteria Pollutants	
RACT (Reasonably Available Control Technology)	Existing sources in non-attainment areas.
LAER (Lowest Achievable Emission Rate)	New major sources in non-attainment areas.
BACT (Best Available Control Technology)	New major sources in attainment areas.
NSPS (New Source Performance Standards)	New sources or modifications to existing sources.
Air Toxics	
MACT (Maximum Achievable Control Technology)	All sources in a source category, existing or new.
Residual Risk Standards	One-time requirement to address remaining risk.
Technology Reviews	Done every eight years.

Opportunities for Public Participation

- Join air agency email groups or listservs
- Participate in air agency technical work groups
- Participate in public advisory committee / stakeholder groups
- Arrange ad hoc meetings with key decision makers
- Participate in public hearings and webinars on proposed state, tribal, or federal agency actions
- Submit public comments on proposed state actions
- Submit public comments on proposed EPA actions

ADDITIONAL REFERENCE SLIDES

Regulations Affecting Stationary Sources: EPA and States

- Standards for Criteria Pollutants
  - New Source Performance Standards (NSPS)
  - 129 Standards for municipal waste and landfills
- Standards for Toxics
  - Area source standards
  - Maximum Available Control Technology (MACT)

CURRENT NAAQS

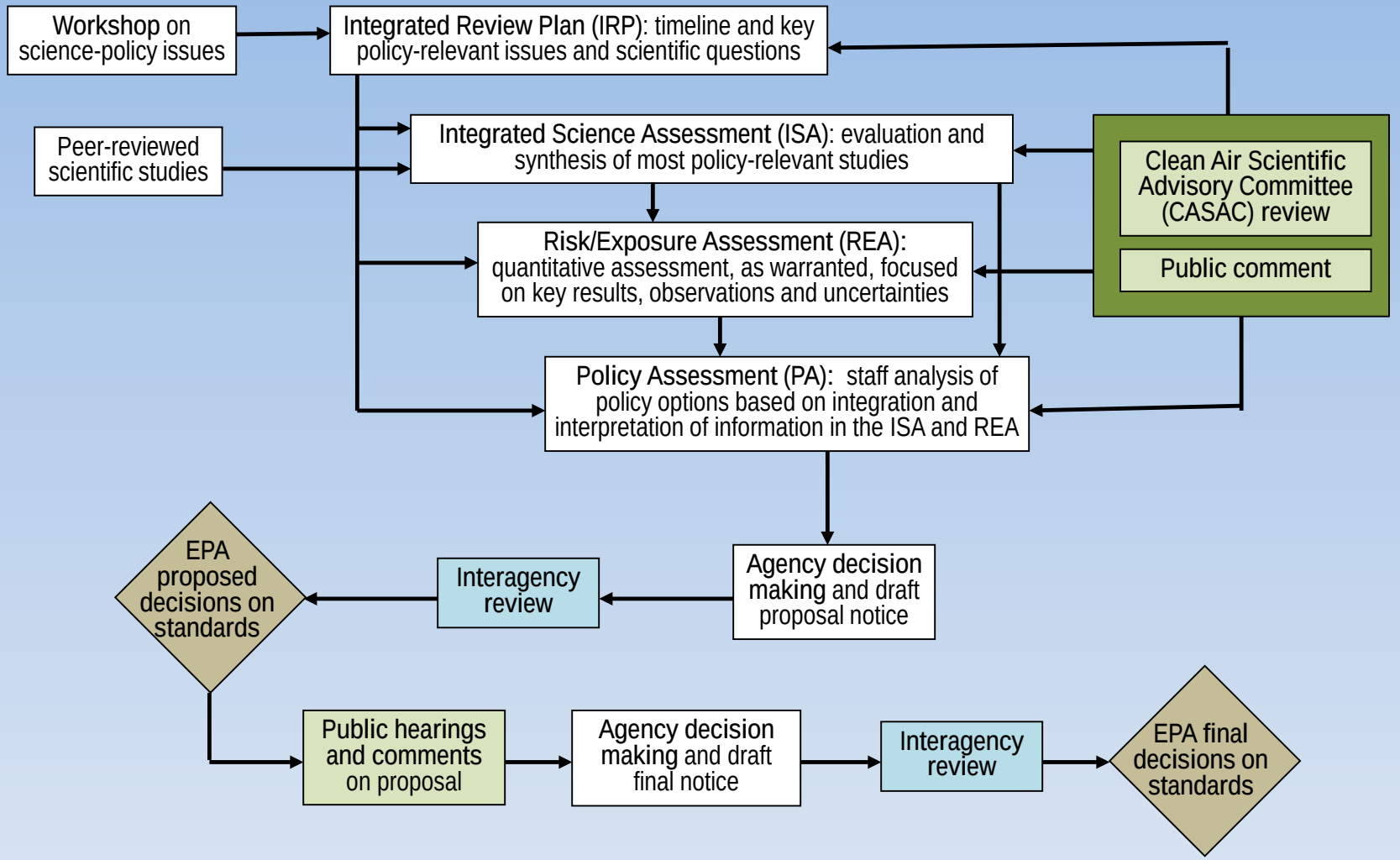
	Primary Standards		Secondary Standards	
Pollutant	**Level**	**Averaging Time**	**Level**	**Averaging Time**
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour	None	
	35 ppm (40 mg/m^3)	1-hour		
Lead	0.15 µg/m^3	Rolling 3-Month Average	Same as Primary	
Nitrogen Dioxide	100 ppb	1-hour	Same as Annual Primary	
	0.053 ppm (100 µg/m^3)	Annual (Arithmetic Mean)		
Particulate Matter (PM_{10})	150 µg/m^3	24-hour	Same as Primary	
Particulate Matter ($PM_{2.5}$)	15.0 µg/m^3	Annual (Arithmetic Mean)	Same as Primary	
	35 µg/m^3	24-hour	Same as Primary	
Ozone	0.075 ppm (2008 std)	8-hour	Same as Primary	
	0.08 ppm (1997 std)	8-hour	Same as Primary	
	0.12 ppm	1-hour	Same as Primary	
Sulfur Dioxide	75 ppb	1-hour	0.5 ppm (1300 µg/m^3)	3-hour

Anticipated NAAQS Implementation Milestones

(updated March 2013)

Pollutant	Final NAAQS Date (or Projection)	Infrastructure SIP Due	Designations Effective	Attainment Demonstration Due	Attainment Date
$PM_{2.5}$ (2006)	Oct 2006	Oct 2009	Dec 2009	Dec 2012	Dec 2014/2019
Pb (2008)	Oct 2008	Oct 2011	Dec 2010/2011	June 2012/2013	Dec 2015/2016
NO_2 (2010) (primary)	Jan 2010	Jan 2013	Feb 2012	none	none
SO_2 (2010) (primary)	June 2010	June 2013	August 2013 (+2 rounds)	Feb. 2015	Aug 2018
Ozone (2008)	Mar 2008	Mar 2011	July 2012	Mid 2015	2015/2032
$PM_{2.5}$ (2012)	Dec 2012	Dec 2015	Early 2015	Mid 2016	2021 (Mod) 2025 (Ser)
Ozone (2014)	2014	2017	2016	2020	2020/2037

NAAQS Review Process



Integrated Review Plan

- Kickoff" workshop to inform IRP
  - Public participation: Workshop open to any interested participants
- Prepare IRP to guide entire review

➢ Public review process: CASAC and public review of draft IRP

Integrated Science Assessment

- Evaluates and synthesize policy-relevant science
- Characterizes available scientific evidence
- Serves as scientific foundation to inform Risk/Exposure Assessment

➢ Public review process: CASAC/public review of multiple ISA drafts

Risk/Exposure Assessment

- Conduct needed quantitative assessments
- Estimate risks to public health & welfare
- Identify uncertainties

➢ Public review process:

  – CASAC consultation/public review of REA planning document

  – CASAC/public review of one or more drafts

Policy Assessment

- Develops policy options for consideration by EPA Administrator
  - Organizes what is known
  - Integrates ISA and REA
  - Assesses possible regulatory options
  - Provides foundation for interagency review

➢ Public review process:
  - CASAC and public review of one or more drafts

Rulemaking

- Notice of Proposed Rulemaking
  - Public review process: Public comment period, including public hearing(s), follows publication of proposed rule
- Final Rulemaking Notice

APPENDIX

Available Resources

- Overview of section 112 (this includes the list of HAPs): http://www.epa.gov/ttn/atw/overview.html
- For further explanation of major and area sources and a list of source categories please visit: http://www.epa.gov/ttn/atw/pollsour.html
- For a listing of all of the NESHAP/MACT final rules please visit: http://www.epa.gov/ttn/atw/mactfnlalph.html
- For an overview of the risk and technology review program please visit: http://www.epa.gov/ttn/atw/rrisk/rtrpg.html
- Plain English guide to Clean Air Act: http://www.epa.gov/air/caa/peg/
- State, local, tribal and federal partnerships: http://www.epa.gov/ttn/atw/stprogs.html

Image Sources

(Slide number references shown in parentheses)

- Smokestacks (3): [unknown]
- Mountain (3): [unknown]
- Woods (5): [unknown]
- Skyline (5) : [unknown]
- Air quality management cycle (7) : [unknown]
- Uncle Sam (8): Library of Congress
- United States (8): U.S. Department of Veterans Affairs
- Doctor and patient (10): Centers for Disease Control
- Congestion (10): U.S. Department of Transportation
- Smoggy skyline (12): U.S. EPA
- Huntington Power Plant (13): Utah Geological Survey
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- Website screenshot (17): California Environmental Protection Agency Air Resources Board
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- Facility worker (20): [unknown]
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- Title V Permit (23) : Connecticut Department of Energy & Environmental Protection
- Soccer field (25): [unknown]
- Basketball players (25): [unknown]
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- Hospital (26): [unknown]
- Facility (35): [unknown]

Air Quality Overview

October 18, 2016

Air Quality Program Vision

The Air Quality Program is dedicated to ensuring healthy air quality for all of our state's communities.

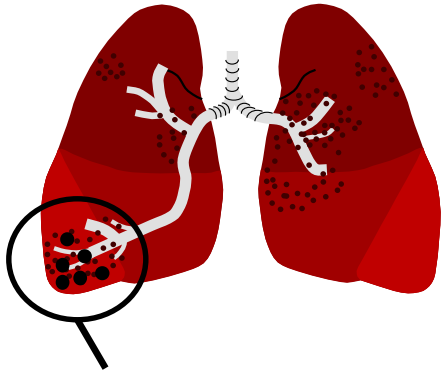
We do so by using good science, collaboration, and Oregon law.

Our work reflects our values of:

- *Leadership, partnership, integrity and commitment;*
- *Open and clear communication;*
- *Consistent implementation of federal and state regulations; and*
- *Empowering skilled staff to solve problems.*

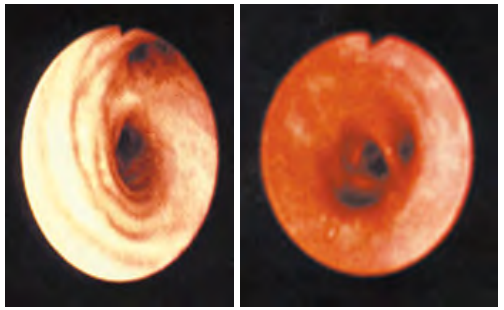
Air pollutants of concern in Oregon

Particulate Matter



Fine particles enter deeply into the lungs

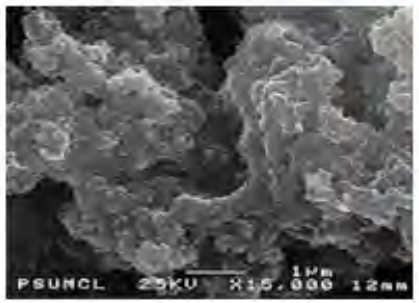
Ground Level Ozone



Healthy Airway Inflamed Airway

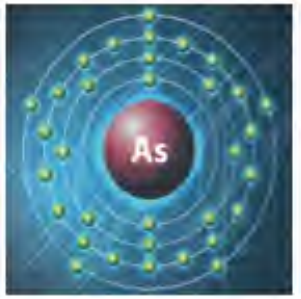
Pollution Affecting Climate Change and Ecosystems

Toxic Pollutants



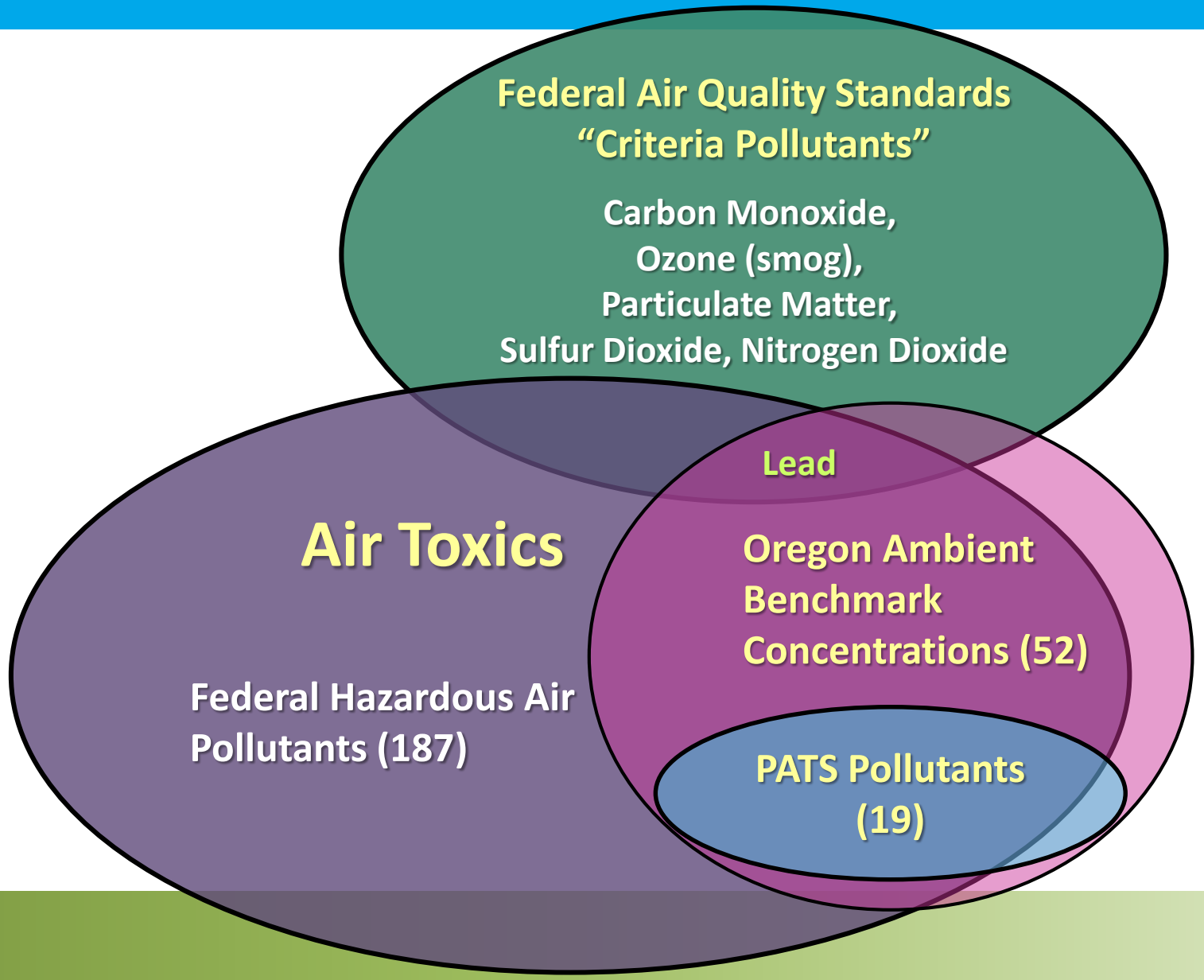
Diesel Particulate

Benzene



Arsenic

Criteria Pollutants and Air Toxics



Actions to reduce air pollution

Air Quality Program

Federal – State roles

	Clean Air Act	Oregon Initiatives
Ozone and Particulate	• Health based standards • Community clean air plans	• Community pollution prevention plans
Air Toxics	• Regulations for industry	• Benchmarks and monitoring • Community air toxics reduction planning • Clean diesel program • New health based permitting
Permitting	• Title V Permits for large facilities	• State permits for smaller facilities
Engines and Fuels	• Engine emission standards • Clean fuel standards	• Clean cars program • Vehicle inspection and maintenance
Climate Change	• CO2 reductions from power plants	• Clean Power Plan • Clean (low carbon) fuels • Greenhouse gas emission reporting • Cap and trade study

Air Quality Permits

Basic Air Contaminant Discharge Permits (104)

Simplest permits, smallest emitters

Rock Crushers, Asphalt Paving, Auto body Shops, Crematories

General Air Contaminant Discharge Permits (2083)

Simpler permits, small emitters

Gasoline stations, Dry Cleaners, Coffee Roasters, Grain Elevators

Simple Air Contaminant Discharge Permits (147)

Simple permits, small emitters

Data Centers, Metal Foundries, Wastewater Treatment Plants, Printers, Publishers

Standard Air Contaminant Discharge Permits (133)

Complex permits, medium emitters

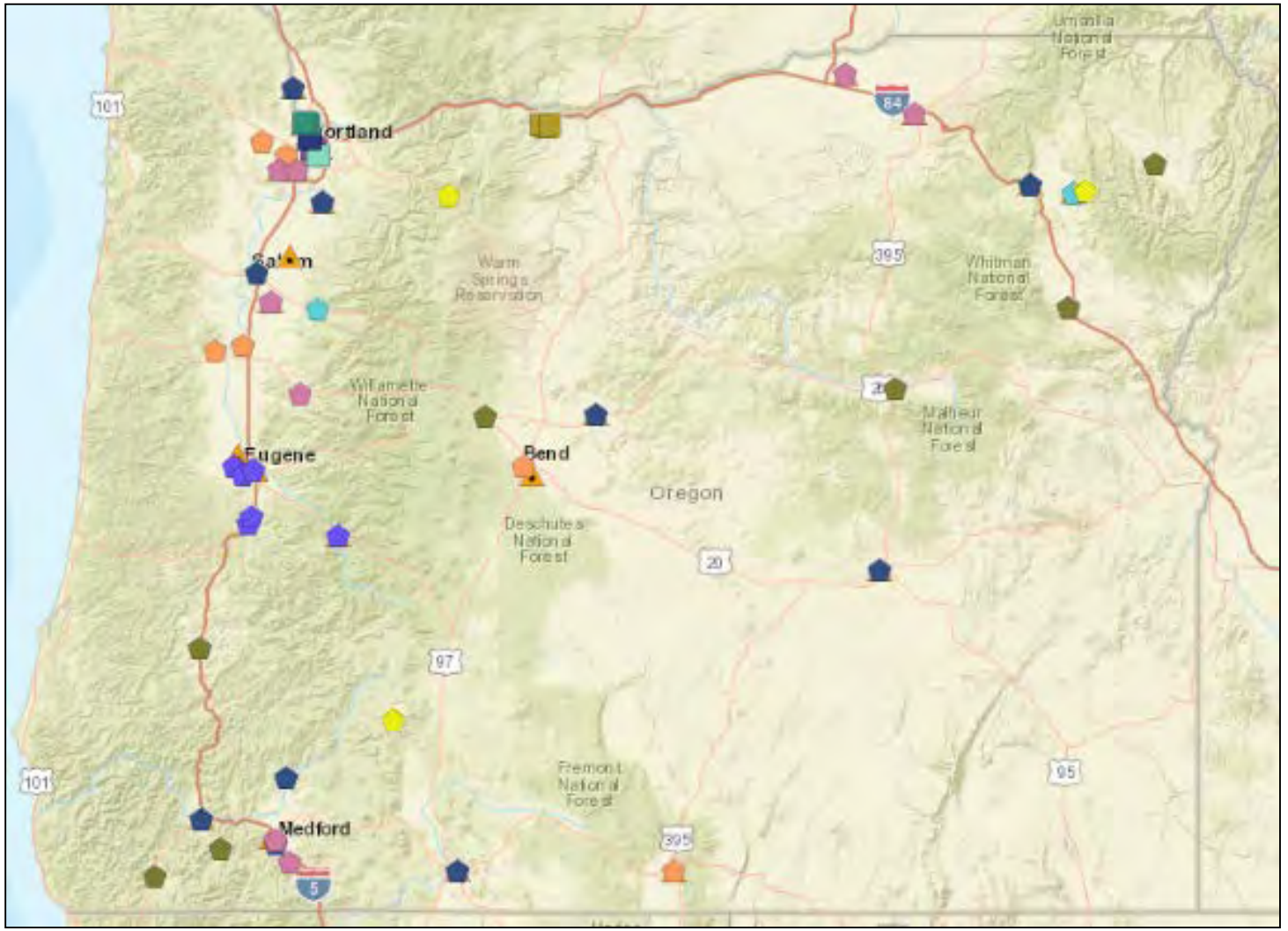
Particleboard, Plywood, Fuel Terminals, Semiconductor, Bakeries

Title V Permits (109)

Most complex permits, largest emitters

Electricity Generation, Landfills, Fiberglass, Pulp and Paper, Steel Mills

Assessing air quality – monitoring locations



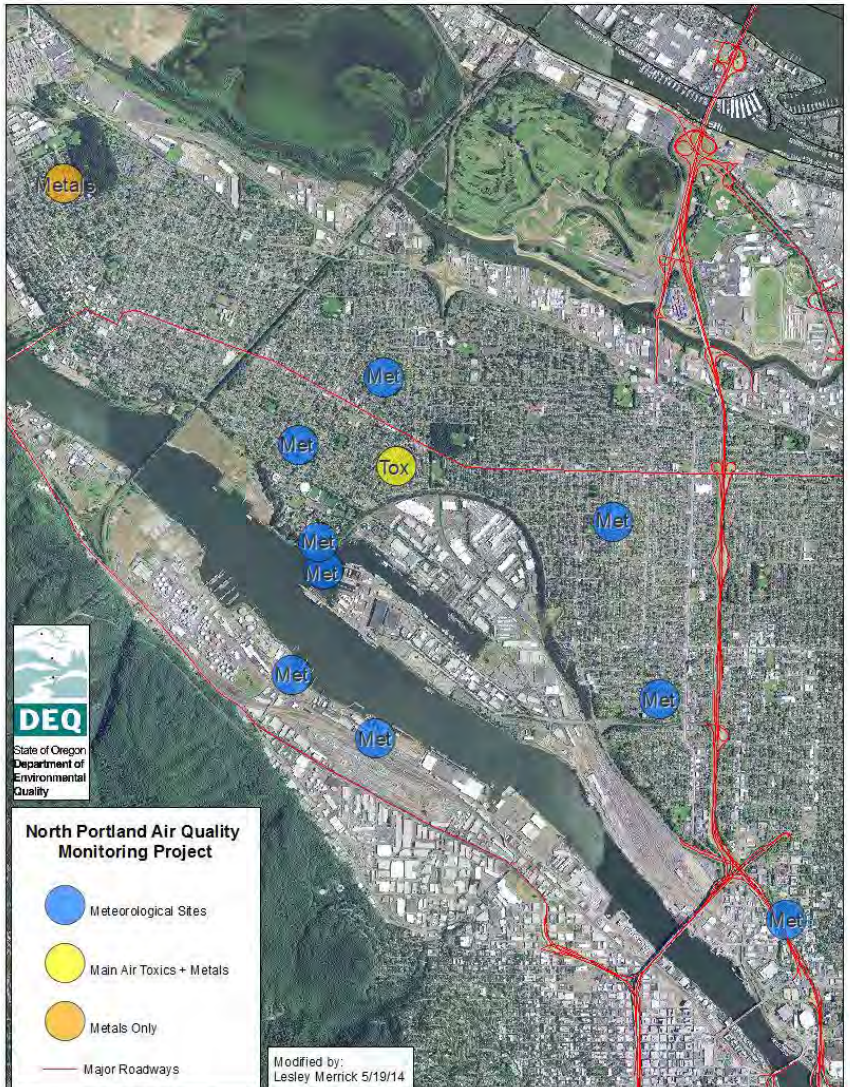
Air toxics monitoring

Air toxics monitoring equipment

Long-Term Trend Monitors
- Portland
- La Grande

Year-Long Assessments
- Medford
- Klamath Falls
- Hillsboro
- North Portland

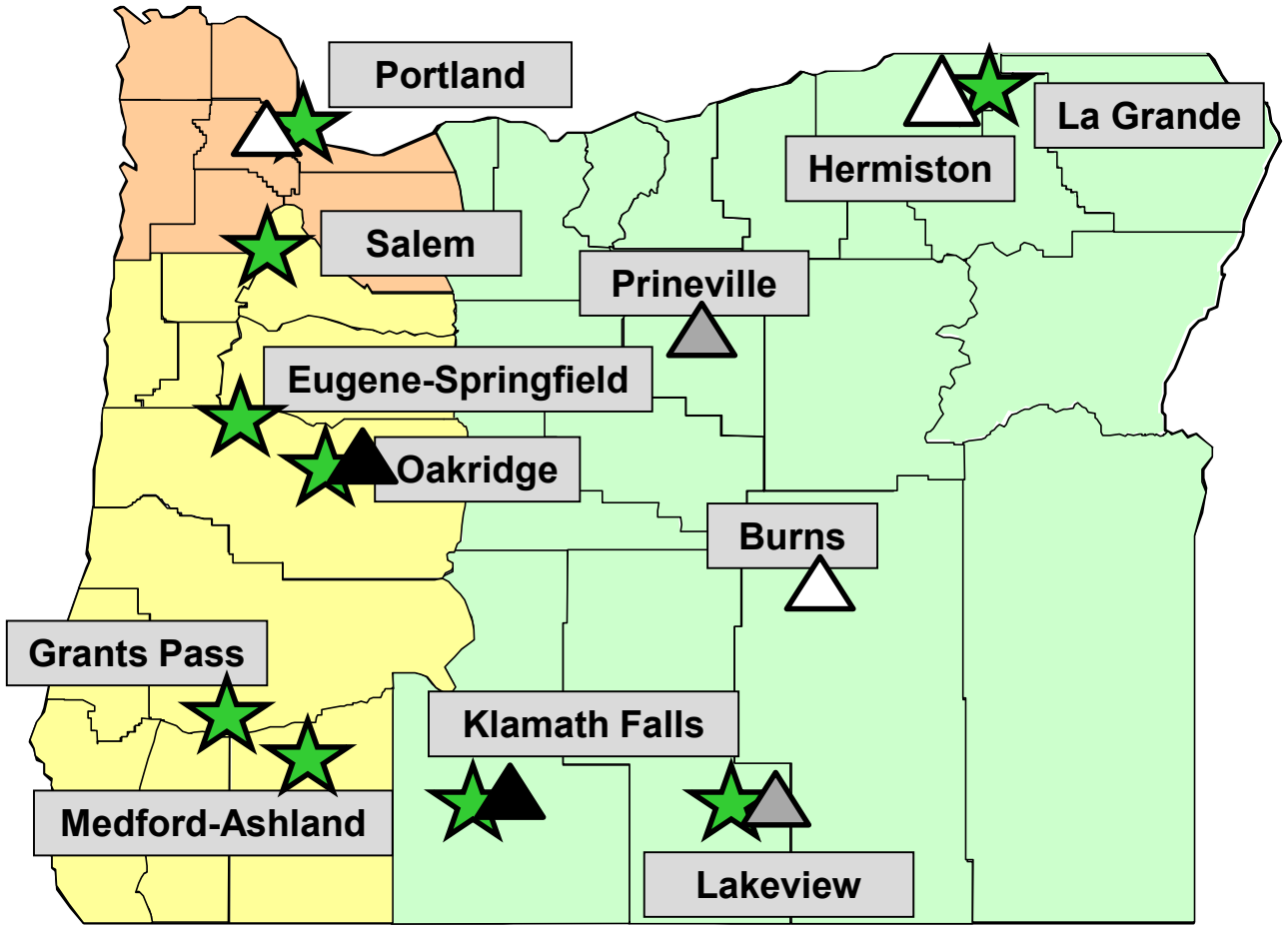
Special Studies
- North Portland
- SE Portland
- The Dalles

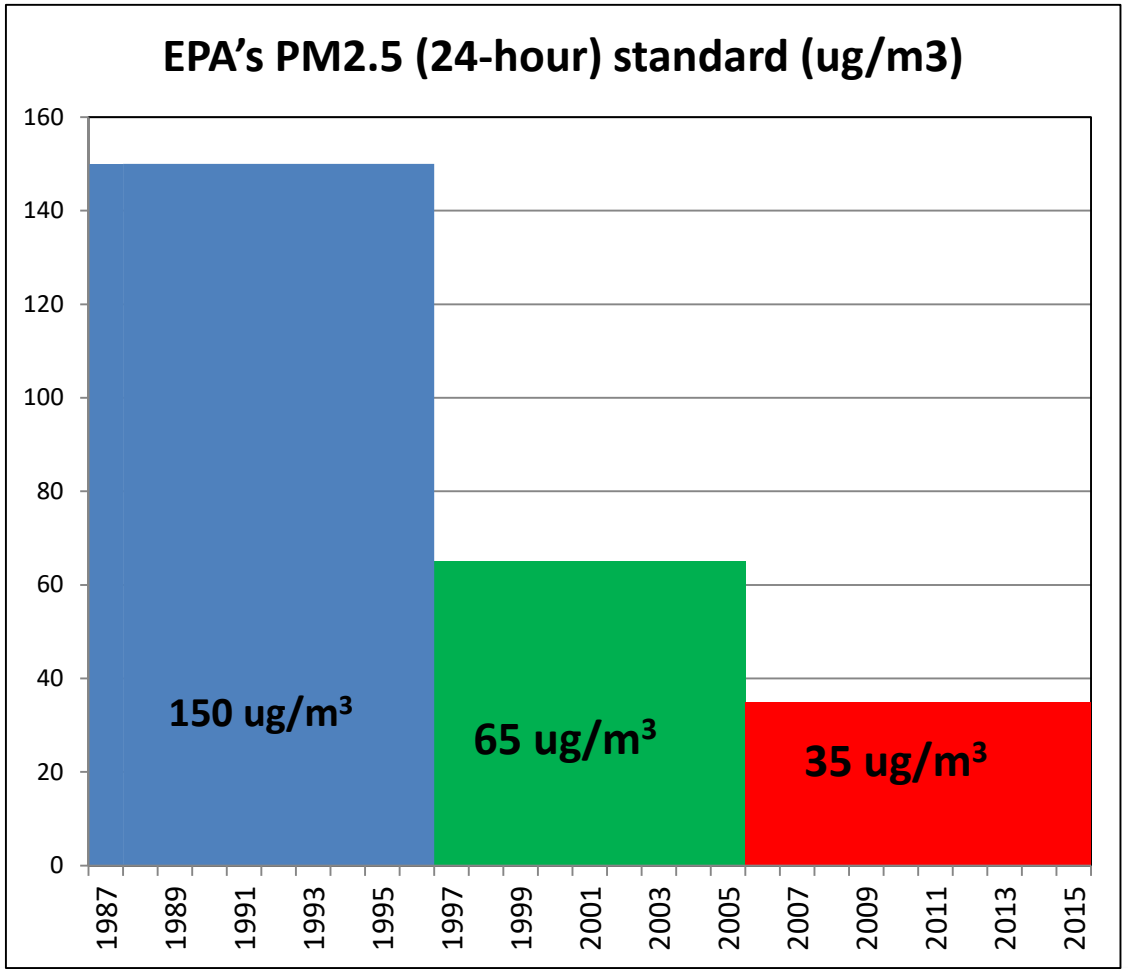


Community air toxics assessment in North Portland

http://www.deq.state.or.us/aq/forms/annrpt.htm

Progress meeting federal air standards





Ozone and particulate standards reached

Exceeding particulate standard but no official violation

Particulate violation areas

Particulate and ozone areas of concern

Sources of toxic air pollutants

Oregon's Air Toxics Program

Federal Air Toxics Standards for Industry

Permits

Large Facilities
- Wood Products
- Foundries
- Vehicle Painting

Smaller Facilities
- Dry Cleaners
- Auto Body Shops
- Metal Plating

Oregon Benchmarks

Assessment and Solutions

Statewide:
- Clean Diesel Engines
- Heat Smart
- Gasoline Fueling

Portland Air Toxics Solutions:
- Wood Burning
- Diesel Engines
- Cars and Trucks
- Metals Facilities

Federal Engine and Fuel Standards

Cleaner Diesel Vehicles and Equipment

Opt in to Low Emission Gasoline Vehicles

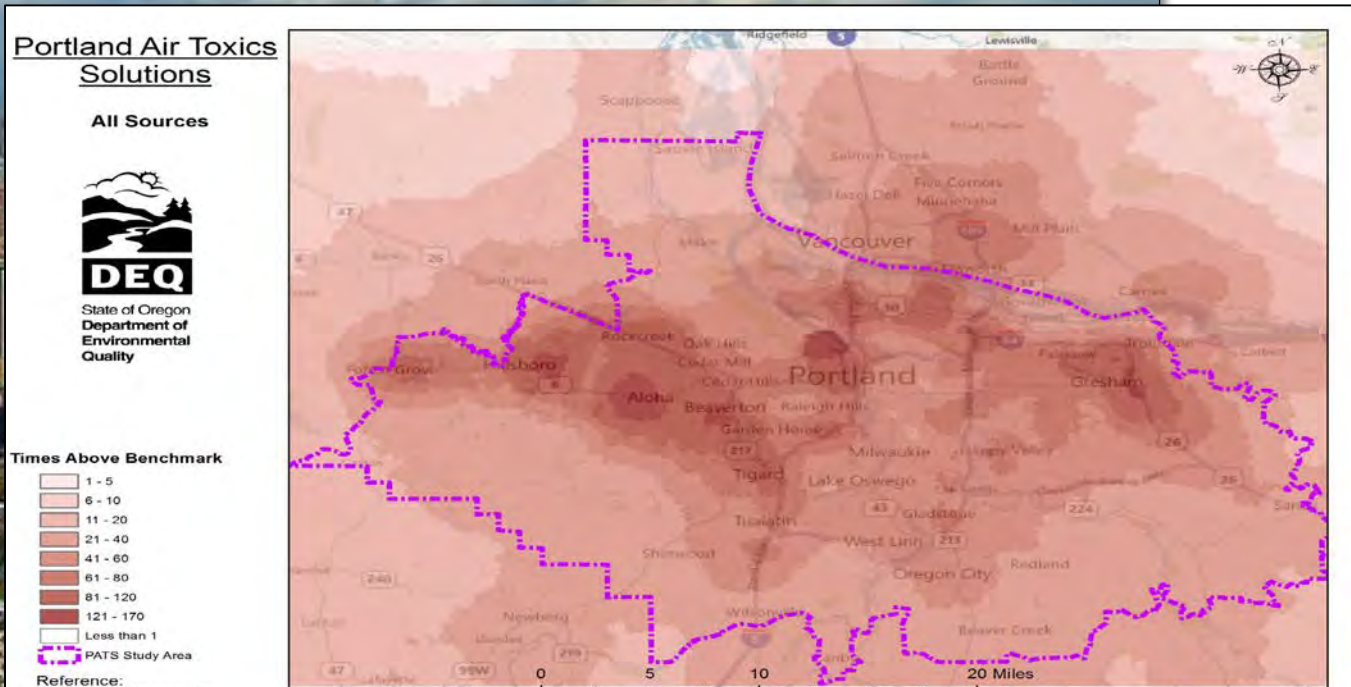
Oregon Low Emission Vehicles

Portland Air Toxics Solutions

A geographic approach to understanding and reducing air toxics

Five priority categories for reduction:

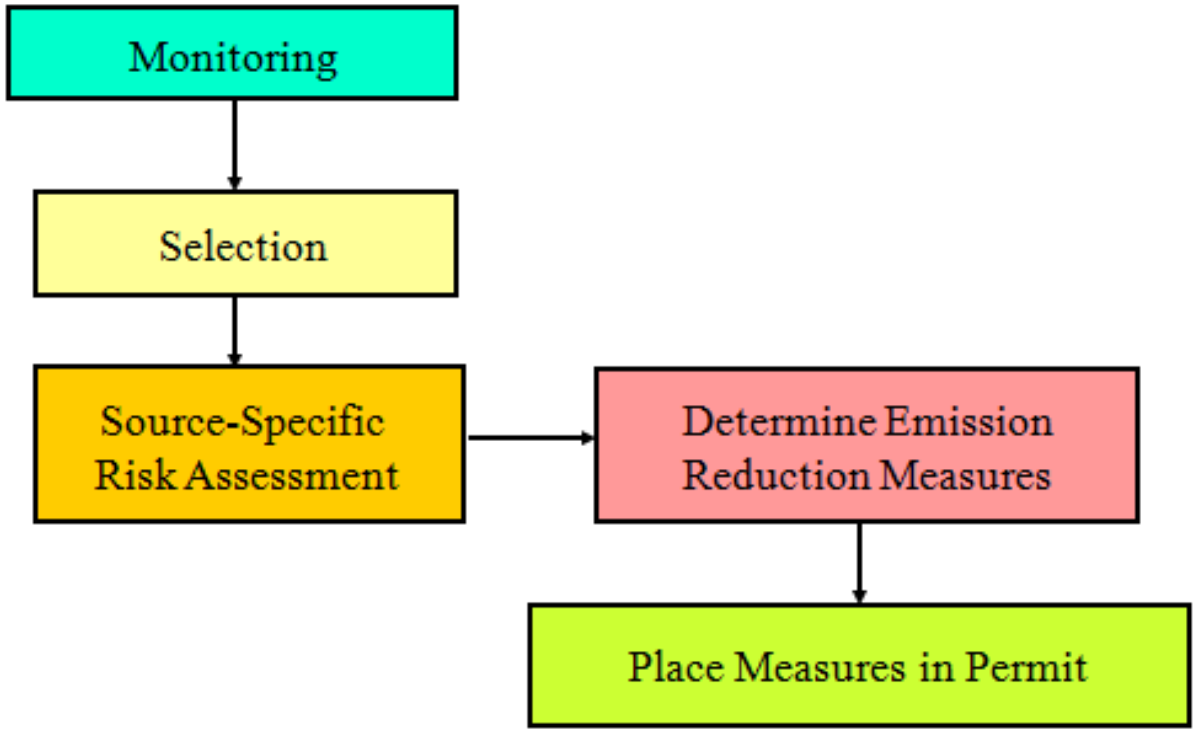
- Residential wood burning
- Cars and trucks
- Heavy duty vehicles
- Construction equipment
- Industrial metals facilities



Safety Net Program

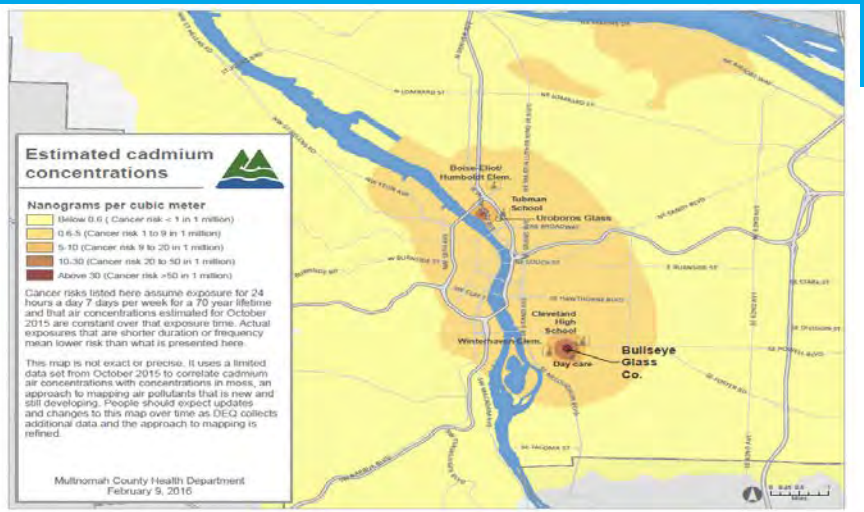
- Address potentially high risk emissions at stationary sources that are not covered by federal standards, geographic planning or state rules

- Rare cases

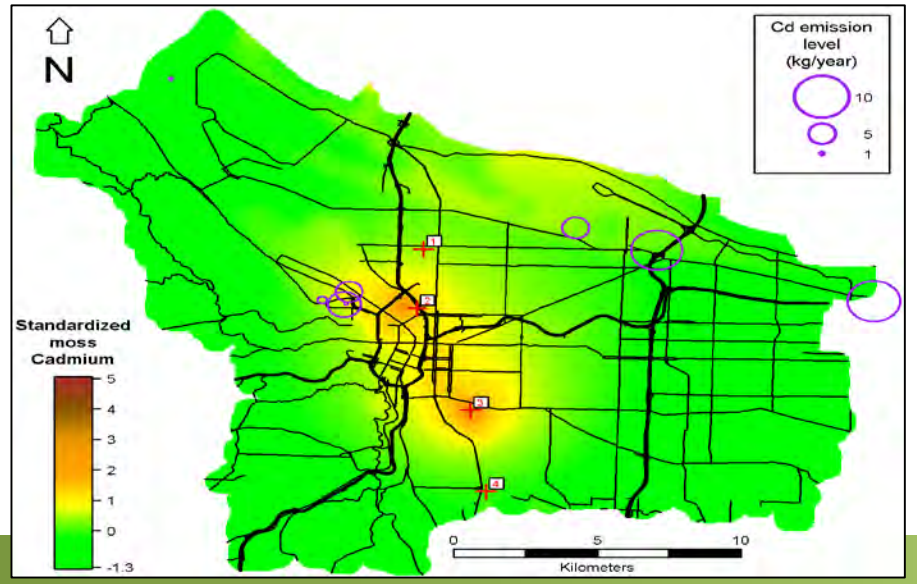


Portland Metals and Moss Study

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



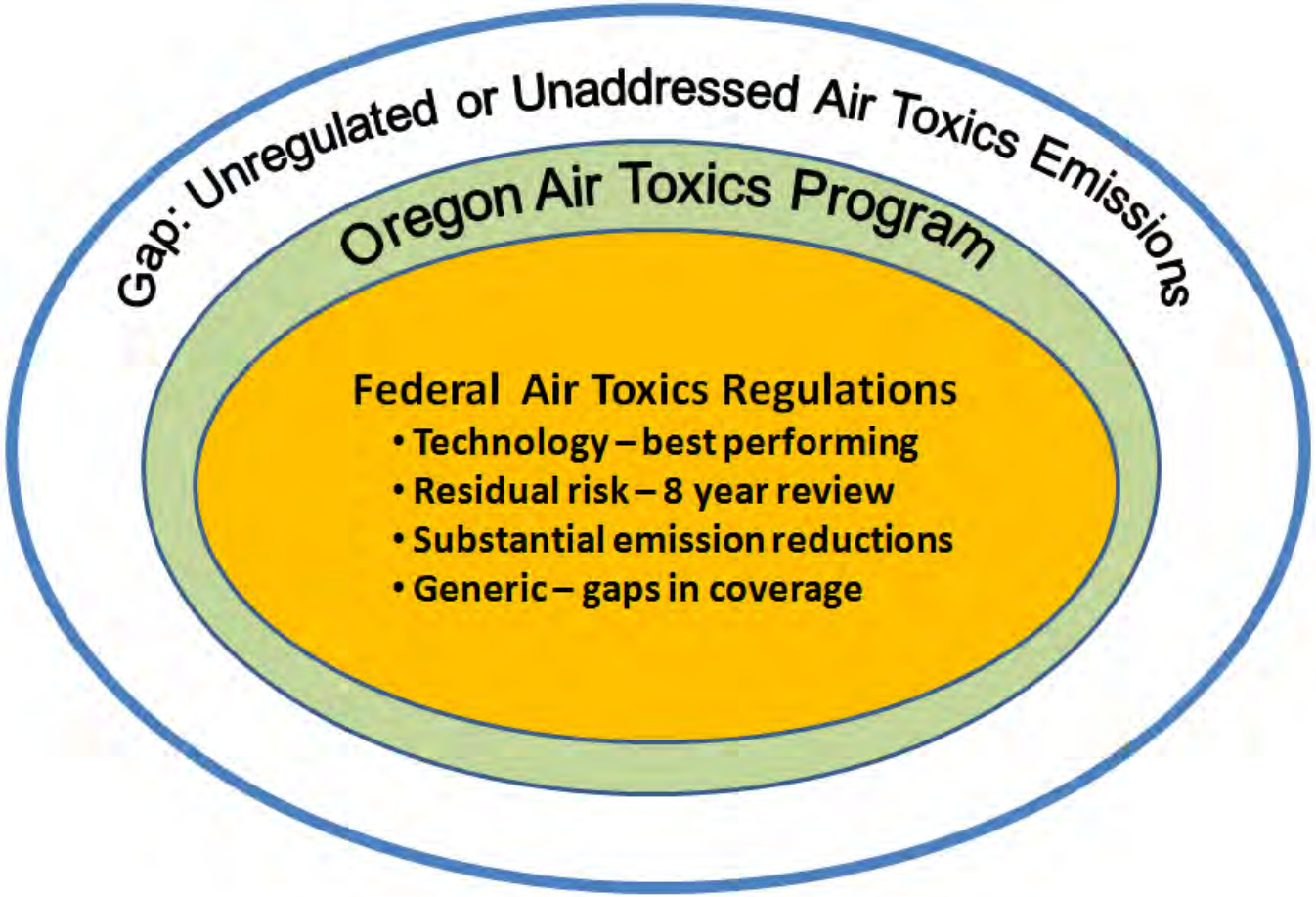
Estimated Cadmium Air Concentrations



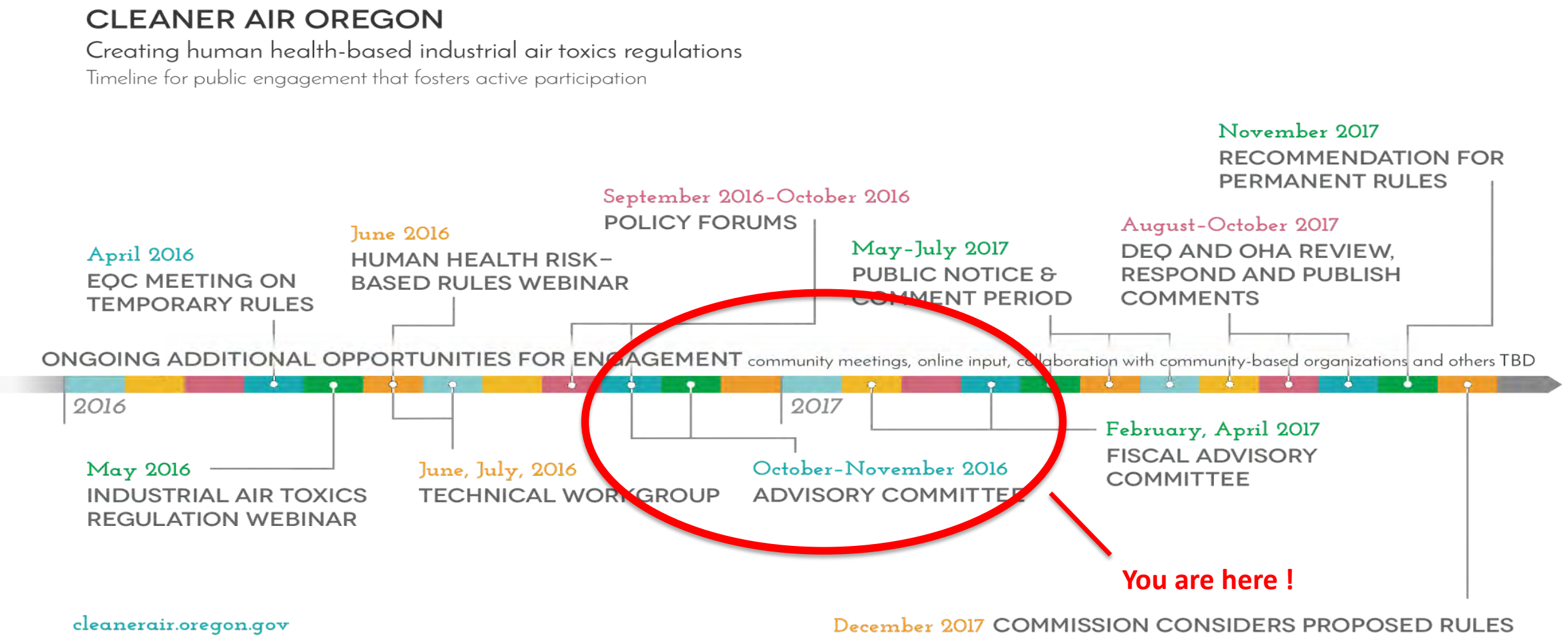
Cadmium Concentrations in Moss

DEQ Metals Monitor

What is the Industrial Facility Risk Gap?

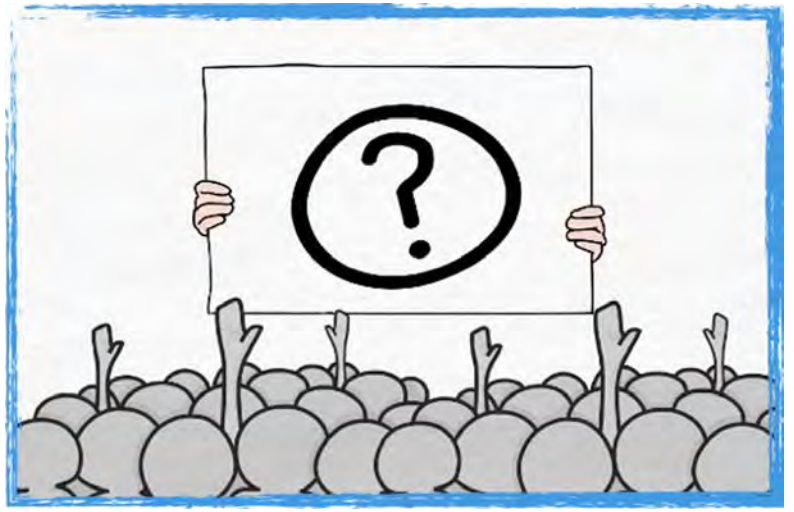


Public engagement: formal process



Air Quality Overview

Any Questions?



Cumulative Risk and Background
and
Setting and Administering Allowable Risk Levels

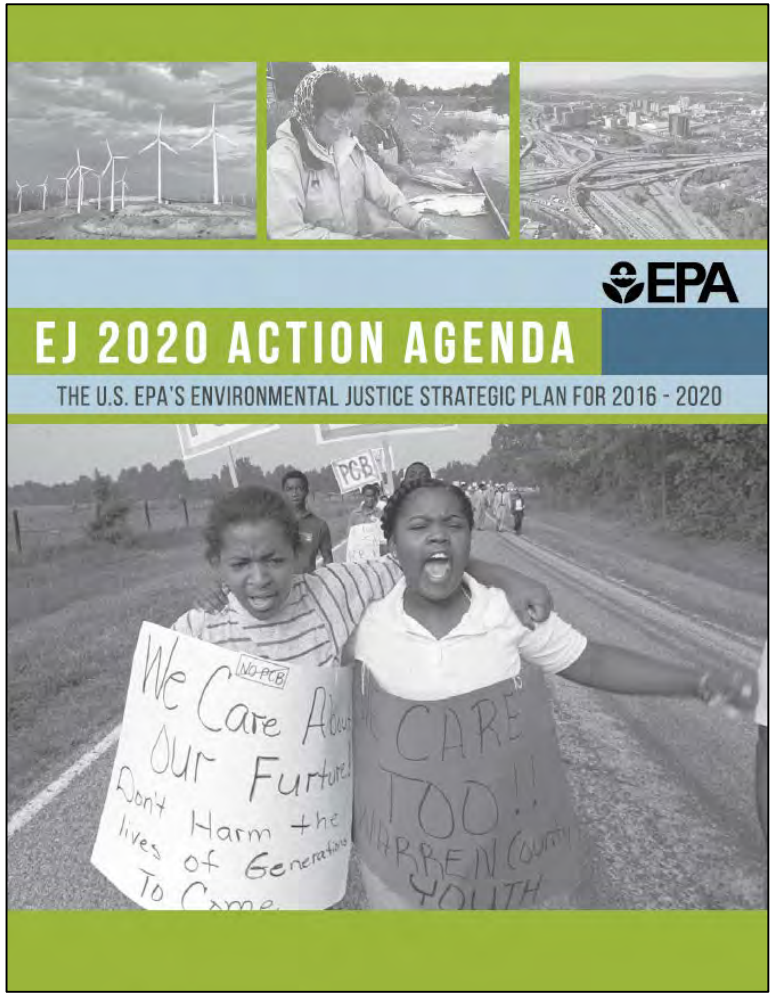
November 17, 2016

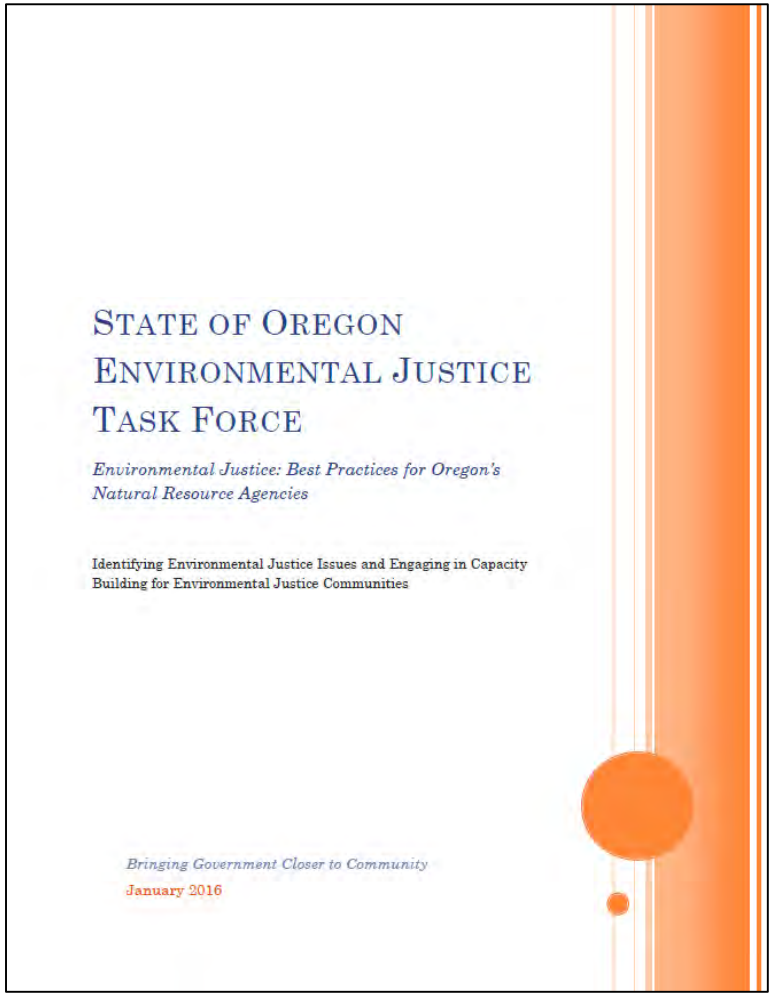
Cumulative Health Risk

What do we mean by cumulative health risk? Risk from:

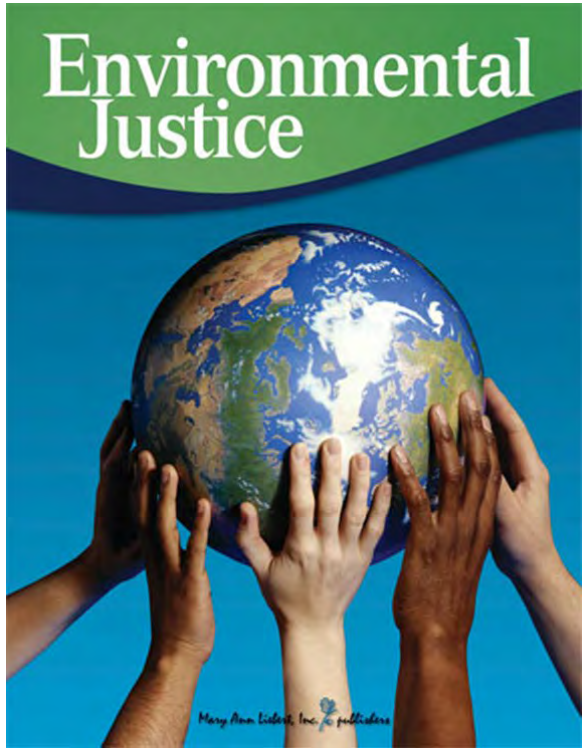
- Multiple air toxics emitted from a facility
- Multiple facilities in an area
- Community sources of air toxics levels in ambient air (background air quality)
- Multiple routes of exposure such as soil, water and air
- Cumulative risk over time

Cumulative Risk and Environmental Justice





Cumulative Health Risk



Environmental Justice Task Force said:

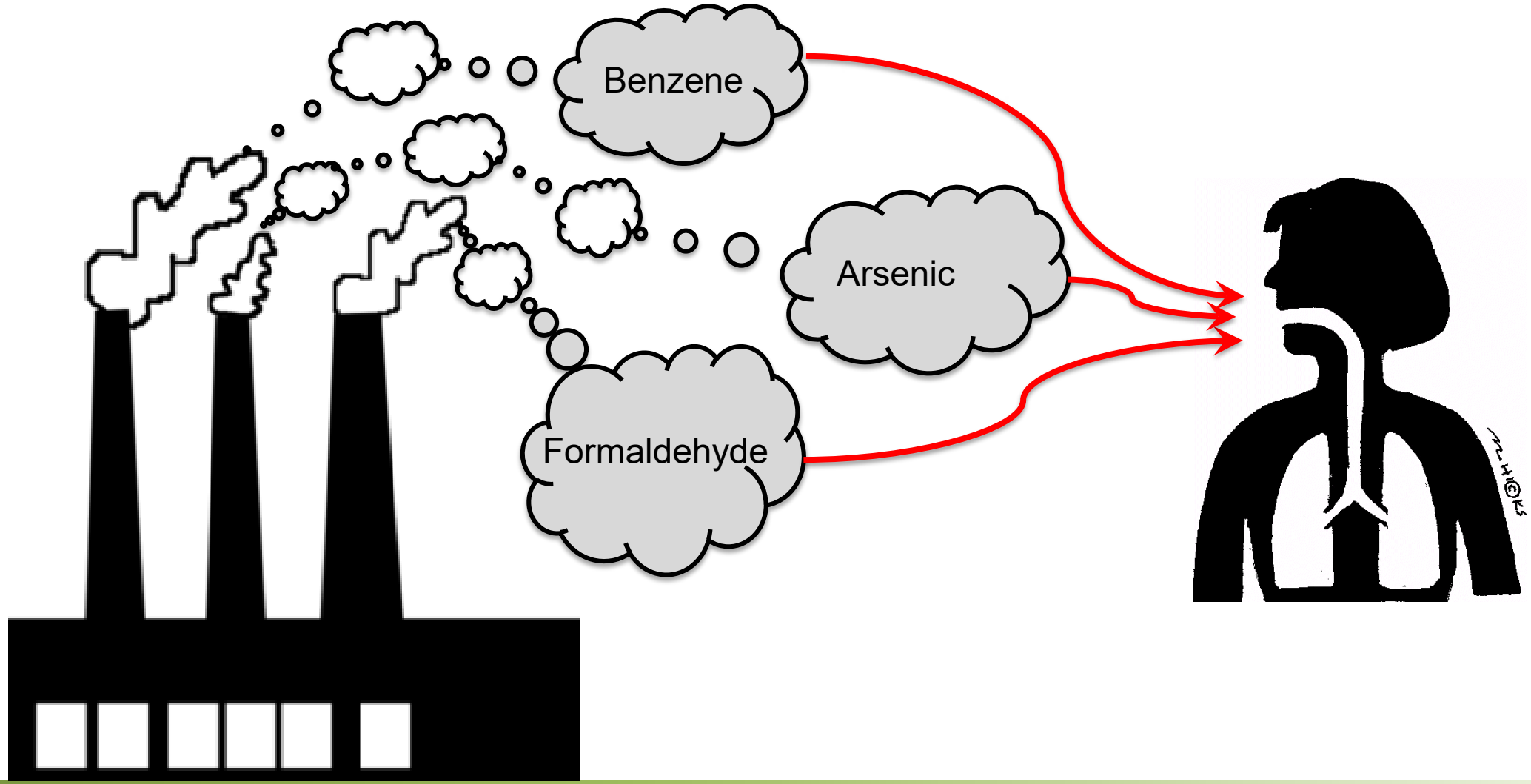
- Begin the permitting process with clearer communication to EJ stakeholders about likely cumulative risks from multiple emission sources, as well as disproportionate sensitivity to health impacts from air toxics and other social determinants of health.
- Require cumulative impact assessment and enhanced community engagement for communities with EJ concerns if disparate impact predicted.
- Provide EJ stakeholders with targeted technical assistance to weigh in on the commensurate exposure from different emission sources.

Cumulative Health Risk

Policy Forum ranked, in the following order, cumulative risk from:

- Multiple air toxics together
- Air toxics released by multiple industrial facilities in the same area
- a facility plus community sources in the area
- Multiple routes of exposure

Program Element 8: Cumulative Risk from Multiple Air Toxics from a Single Facility



Toxicity of Mixtures

- **Antagonism: 1+1 = 1**
- **Additivity: 1+1 = 2**
- **Synergy: 1+1 = 4**

Program Element 8: Cumulative Risk from Multiple Air Toxics from a Single Facility

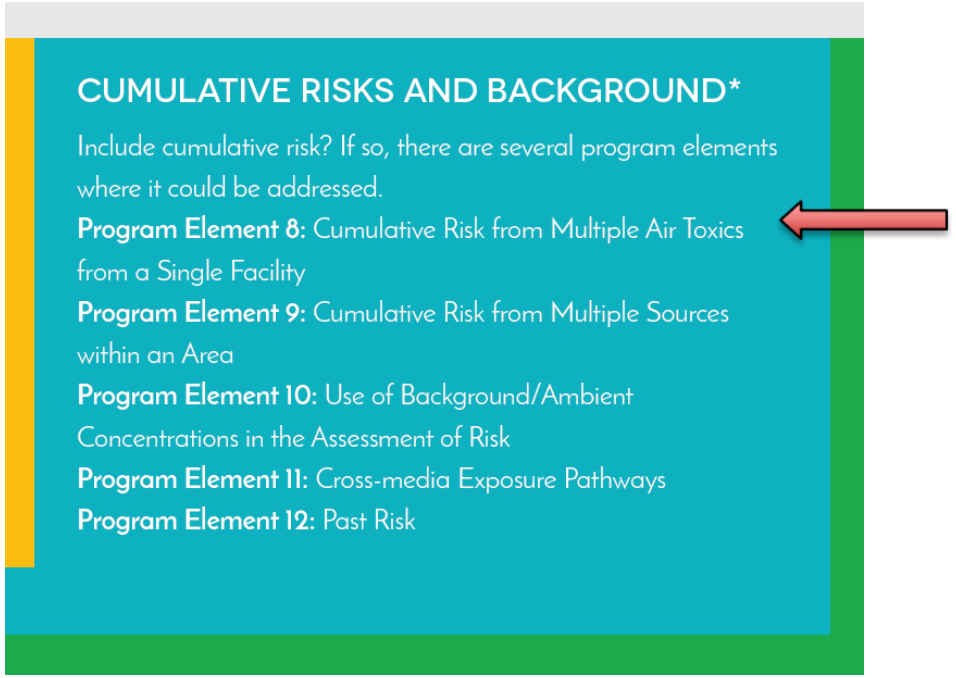
Technical Workgroup said:

- Look at all air toxics from a single facility
- Consider screening approach with conservative levels that take into account multiple air toxics
- Assume additivity

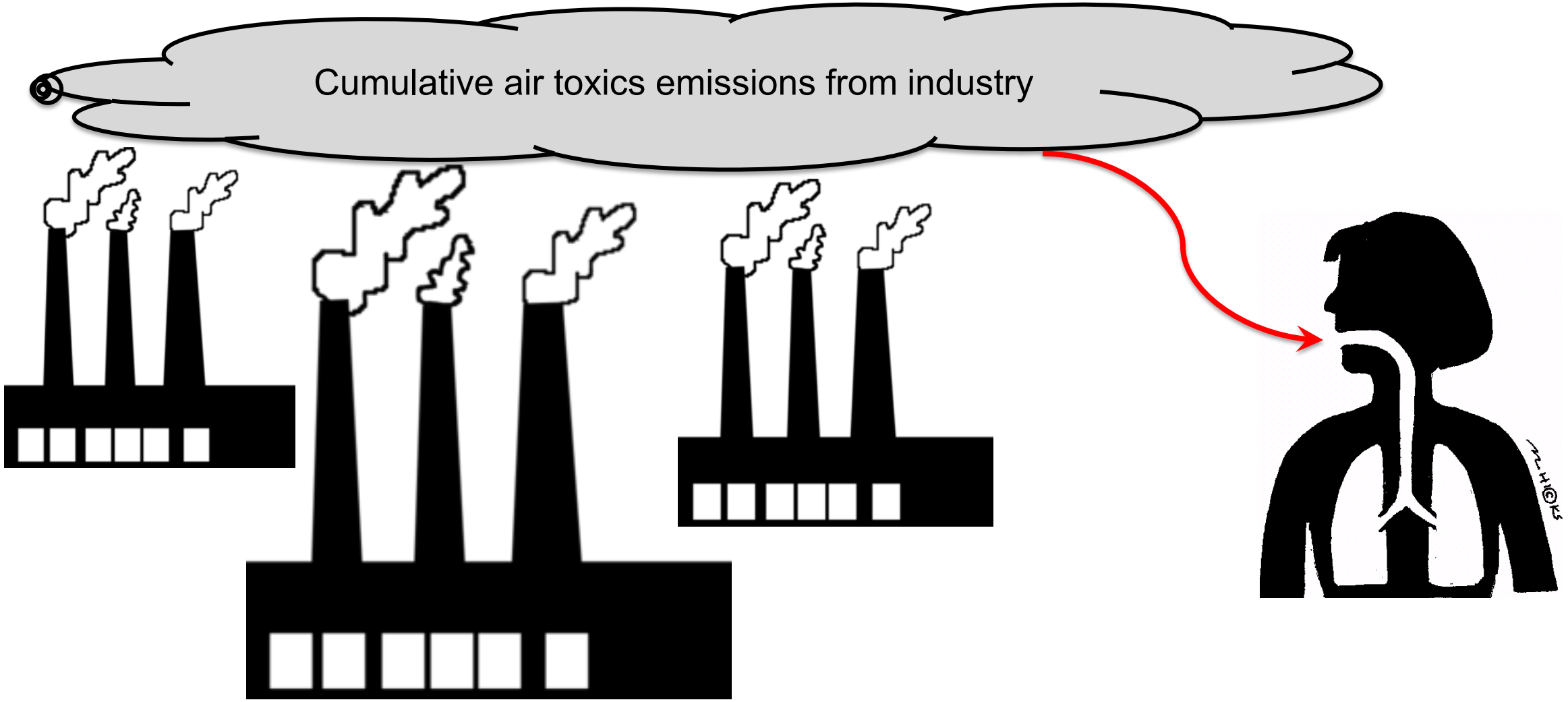
Program Element 8: Cumulative Risk from Multiple Air Toxics from a Single Facility

Potential Elements	
A.	Sum the individual cancer risks for multiple air toxics from a single source to estimate cumulative cancer risk
B.	Sum the organ-specific risks for multiple non-carcinogen air toxics from a single source
C.	Do not include assessment of cumulative risks from multiple air toxics
D.	Placeholder for elements developed by Advisory Committee members

Page 9 of Cumulative Risk and Background Discussion Paper



Program Element 9: Cumulative Risk from Multiple Industrial Sources in an Area



Program Element 9: Cumulative Risk from Multiple Industrial Sources in an Area

- Not included - Rhode Island
- Included:
  - WA: Models nearby sources within a 1.5-km radius
  - NY: Integrated into calculation of maximum off-site air concentrations, which are then compared to risk-based levels

Program Element 9: Cumulative Risk from Multiple Industrial Sources in an Area

Technical Workgroup said:

- Address multiple industrial sources that may be under screening thresholds.
- Modeling multiple sources for cumulative risk requires a good emissions inventory.
- Fugitive emissions are very hard to quantify for cumulative risk.

Program Element 9: Cumulative Risk from Multiple Industrial Sources in an Area

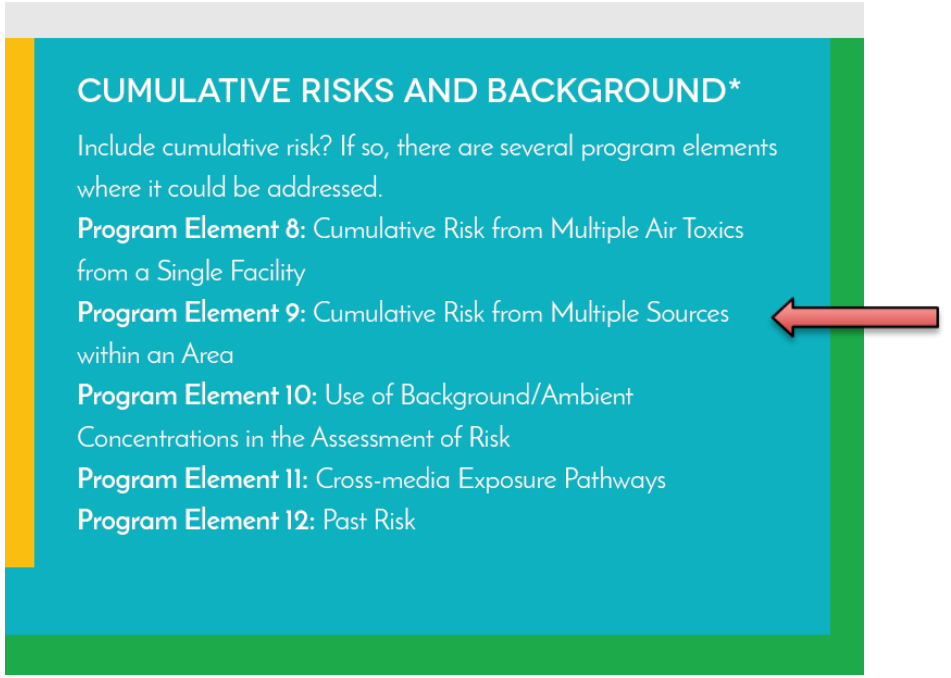
Potential elements for cumulative risk from multiple sources within an area

The following are elements that DEQ and OHA are seeking additional discussion and input from the Advisory Committee on. If there are additional elements not included below, please raise them.

Please note that if cumulative risk from multiple sources is included, the permitting program could address this in many different ways. It could be included in an early screening step or at a later step in risk assessment. These elements are discussed in the "Screening and Risk Assessment" discussion paper.

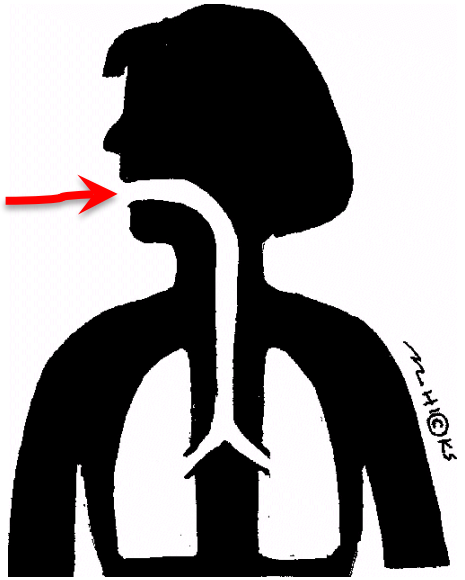
Potential Elements
A. Include industrial facilities within a set distance (for example, WA uses 1.5 km)
B. Include facilities nearby – determined on a case-by-case basis
C. Use monitoring to try to determine contributions from other industrial facilities in an area
D. Do not include nearby industrial facilities
E. Placeholder for elements developed by Advisory Committee members

Page 12 of Cumulative Risk and Background Discussion Paper



Program Element 10: Accounting for Community Sources

Cumulative air toxics emissions from community



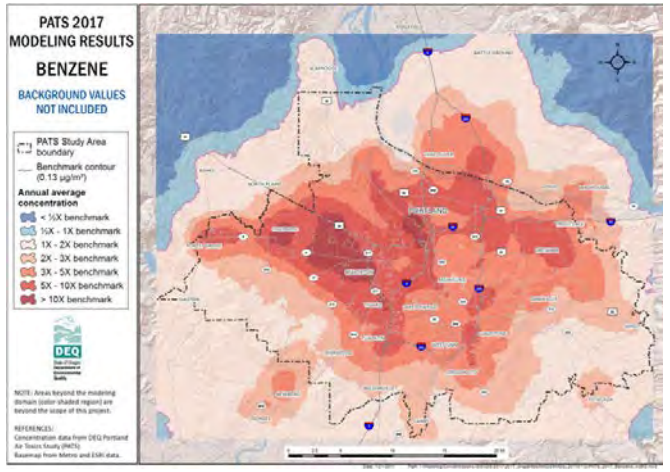
Program Element 10: Accounting for Community Sources

Technical Workgroup said:

- Build community source contributions into the estimated ambient concentrations when developing permits.
- Monitoring data is excellent to calculate background concentrations but is very costly and time consuming. Care should be taken to avoid double counting monitored and modeled pollutants.

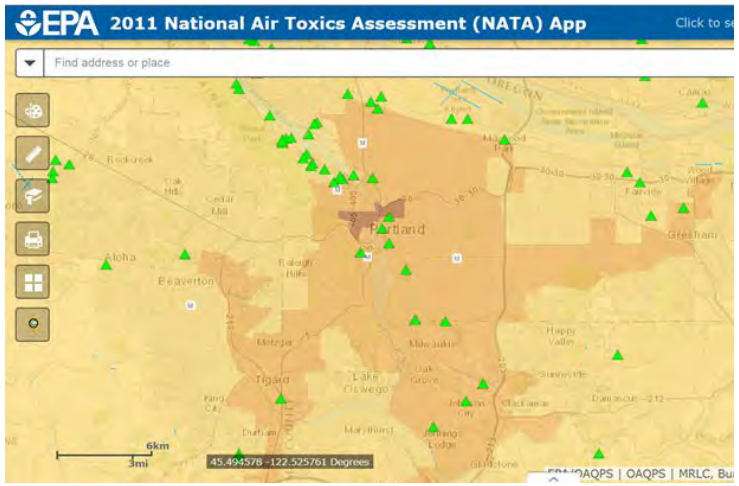
Tools for Understanding Community Air Toxics Emissions

How could the ambient concentrations from community sources be calculated?



Portland Air Toxics Solutions local model for benzene

Air monitoring results



Concentration from NATA at relevant census-tract level

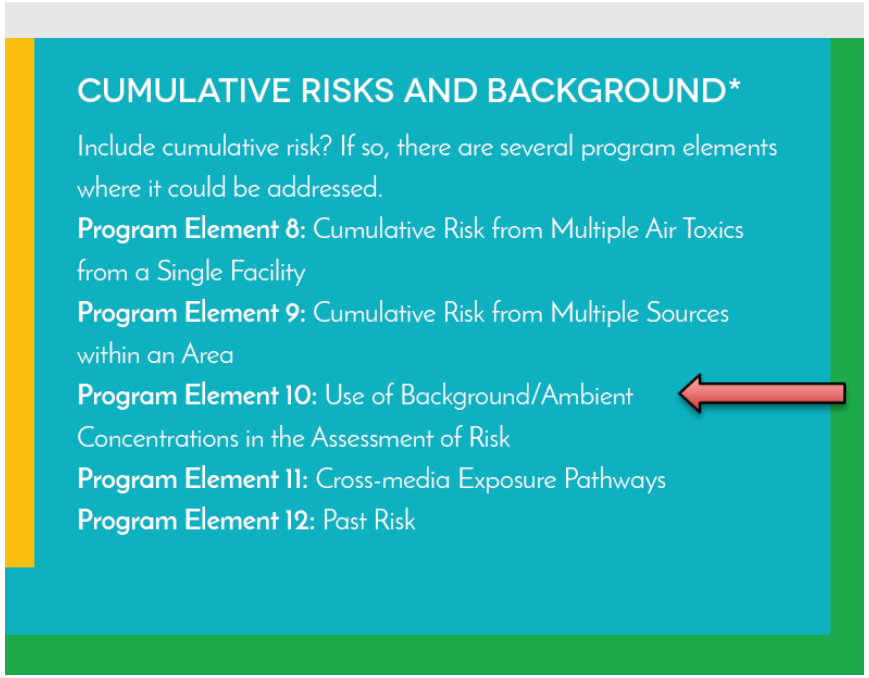
Program Element 10: Accounting for Community Sources

Potential elements for use of community/ambient concentrations in the assessment of risk

The following are potential elements that DEQ and OHA want the Advisory Committee to discuss. If there are additional elements not included below, please raise them.

Please note that if consideration of community air toxics concentrations is included, the permitting program could address this in many different ways. It could be included in an early screening step or at a later step in risk assessment. These elements are discussed in the "Screening and Risk Assessment" discussion paper.

Potential Elements
A. Calculate background levels using National Air Toxics Assessment data
B. Calculate background levels using monitoring data if available
C. Calculate background levels using local model if available (e.g., Portland Air Toxics Assessment)
D. Calculate background levels by modeling sources within 1.5 km
E. Do not include consideration of background levels
F. Placeholder for elements developed by Advisory Committee members

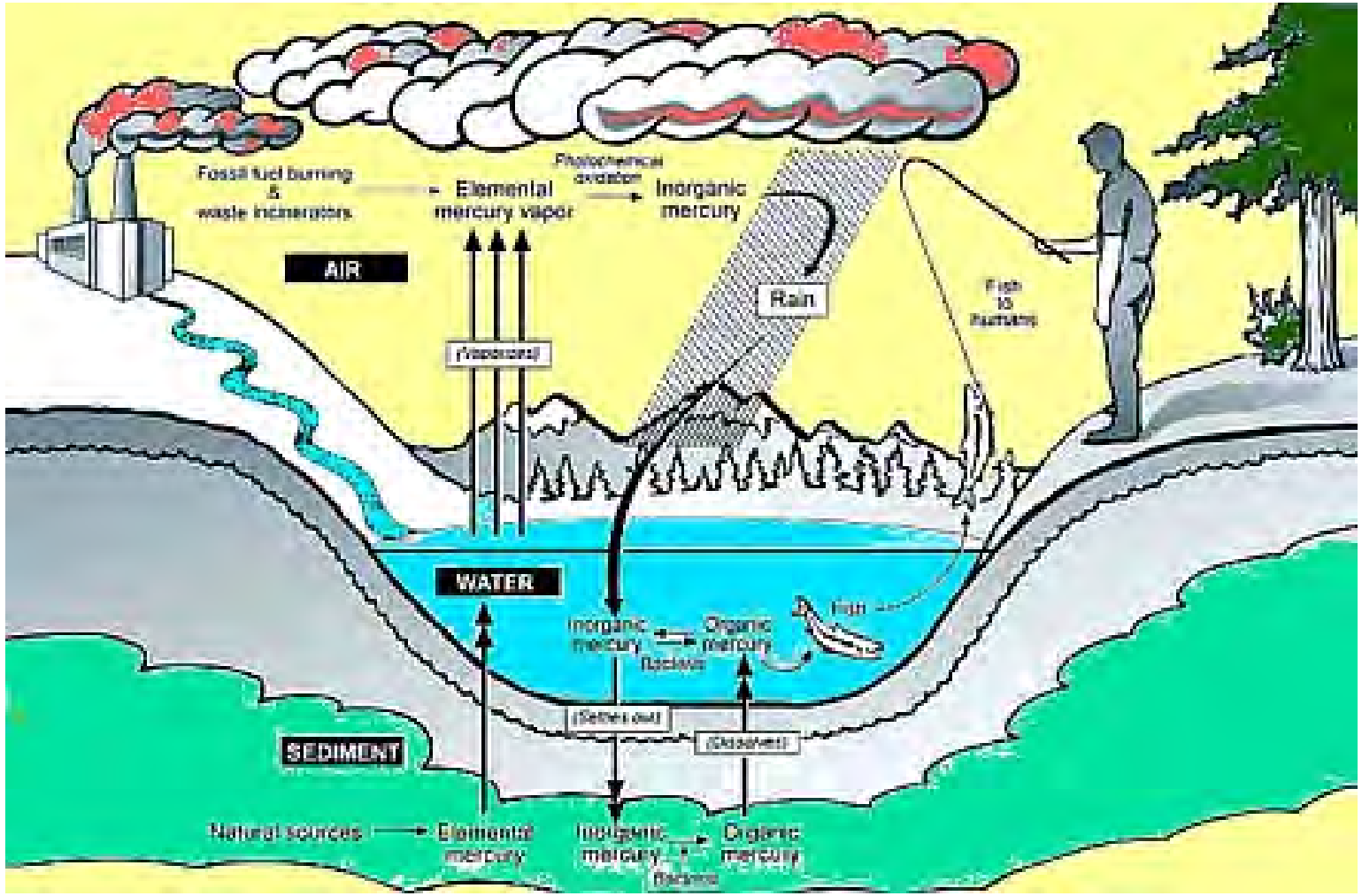


Page 14 of Cumulative Risk and Background Discussion Paper

Program Elements 8, 9, and 10: Regulatory Advantages and Challenges in Considering Cumulative Risk

Cumulative risk	Advantages	Challenges
8. Multiple air toxics at single facility	• Control multiple pollutants • Identification of risk drivers	• Cost related to complexity • Understanding what is emitted and when • Emission estimation uncertainty • No community sources
9. Multiple industrial sources of air toxics in an area	• More accurate estimate of potential exposures • Better understanding of potential hotspots and local risk drivers	• More cost related to complexity • More complex task of understanding what is emitted and when • More uncertainty in estimation • No community sources
10. Community emissions of air toxics	• More accurate estimate of potential exposures • Better understanding of potential hotspots and local risk drivers • Continued focus on community sources	• Monitoring data limitations • Beyond Portland, limited data on community emission sources • Model uncertainty and data quality limitations • Potential competitive disadvantages

Program Element 11: Cross-media Exposure Pathways



Program Element 11: Cross-media Exposure Pathways

Technical Workgroup said:

- Consider multi-pathway exposures, ecological effects and risks especially for sensitive populations.
- Chemicals often have different health effects and different target organs depending on whether they are swallowed or inhaled, making it difficult to add up the risk across exposure pathways.
- Look at inhalation during the initial screening step but considers other pathways of exposure during subsequent tiers of analysis.

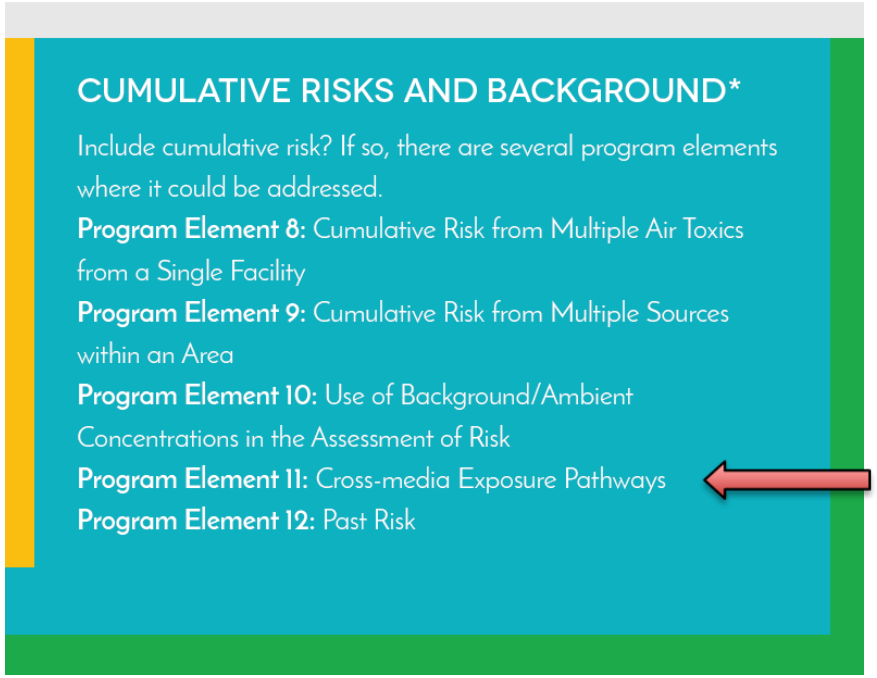
Program Element 11: Cross-media Exposure Pathways

Potential elements for cross-media exposure pathways

The following are elements that DEQ and OHA are seeking additional discussion and input from the Advisory Committee on. If there are additional elements not included below, please raise them.

Please note that if cumulative risk from cross-media exposure pathways is included, the permitting program could address this in many different ways. It could be included in an early screening step or at a later step in risk assessment. These elements are discussed in the "Screening and Risk Assessment" discussion paper.

Potential Elements
A. Include bioaccumulative, persistent chemicals
B. Include cross-media considerations for all chemicals
C. Analyze potential for cross-media impacts chemical by chemical
D. Do not include cross-media impacts
E. Placeholder for elements developed by Advisory Committee members



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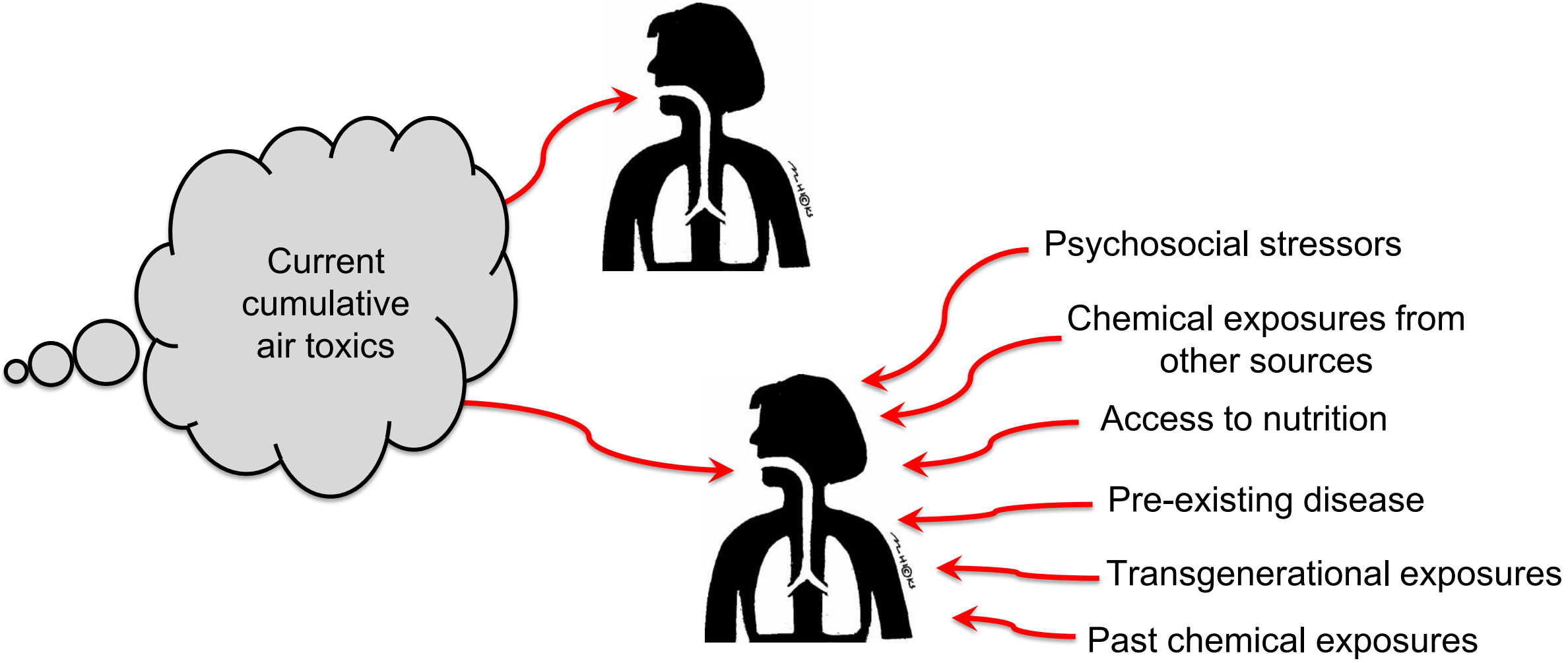
Program Element 12: Past exposures and sensitive populations

Program Element 12: Past exposures and sensitive populations



Program Element 12: Past exposures and sensitive populations

Technical Workgroup said:

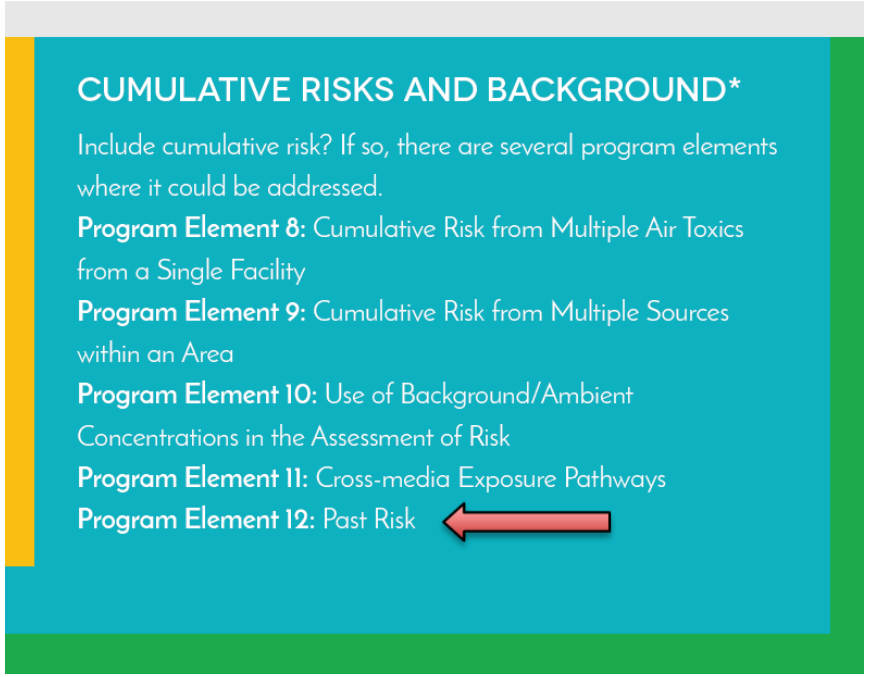
- Consider past exposure by doing multiple risk assessments over time.
- Acknowledge previous exposures that we don't know how to quantify and discuss qualitatively in the uncertainty section of risk assessment.
- Litigation and looking at responsible parties is not best way but has developed some sophisticated analyses.
- Academic longitudinal epidemiological studies require a lot of research and resources.

Program Element 12: Past exposures and sensitive populations

Potential elements for past exposure

The following are elements that DEQ and OHA are seeking additional discussion and input from the Advisory Committee on. If there are additional elements not included below, please raise them.

Potential Elements
A. Acknowledge there are previous exposures that we may not technically be able to quantify
B. Discuss past exposure to air toxics qualitatively in the uncertainty section of a risk assessment
C. Do not address past exposures to air toxics
D. Placeholder for elements developed by Advisory Committee members



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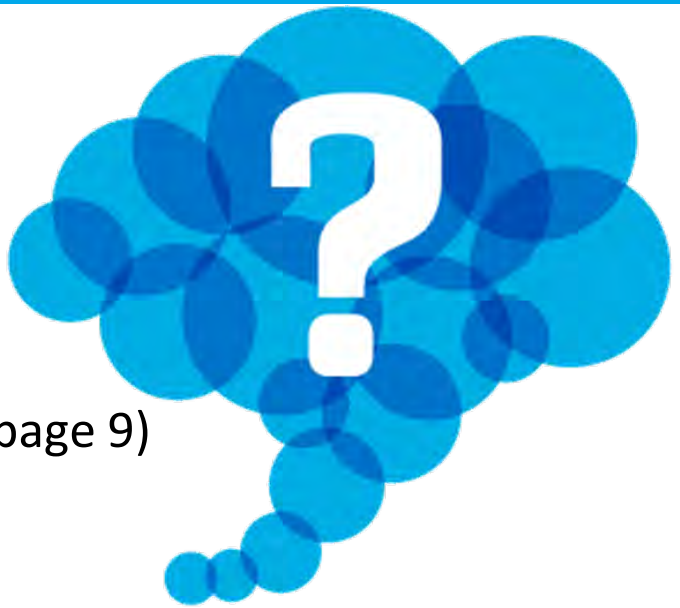
Cumulative Risk

Discussion



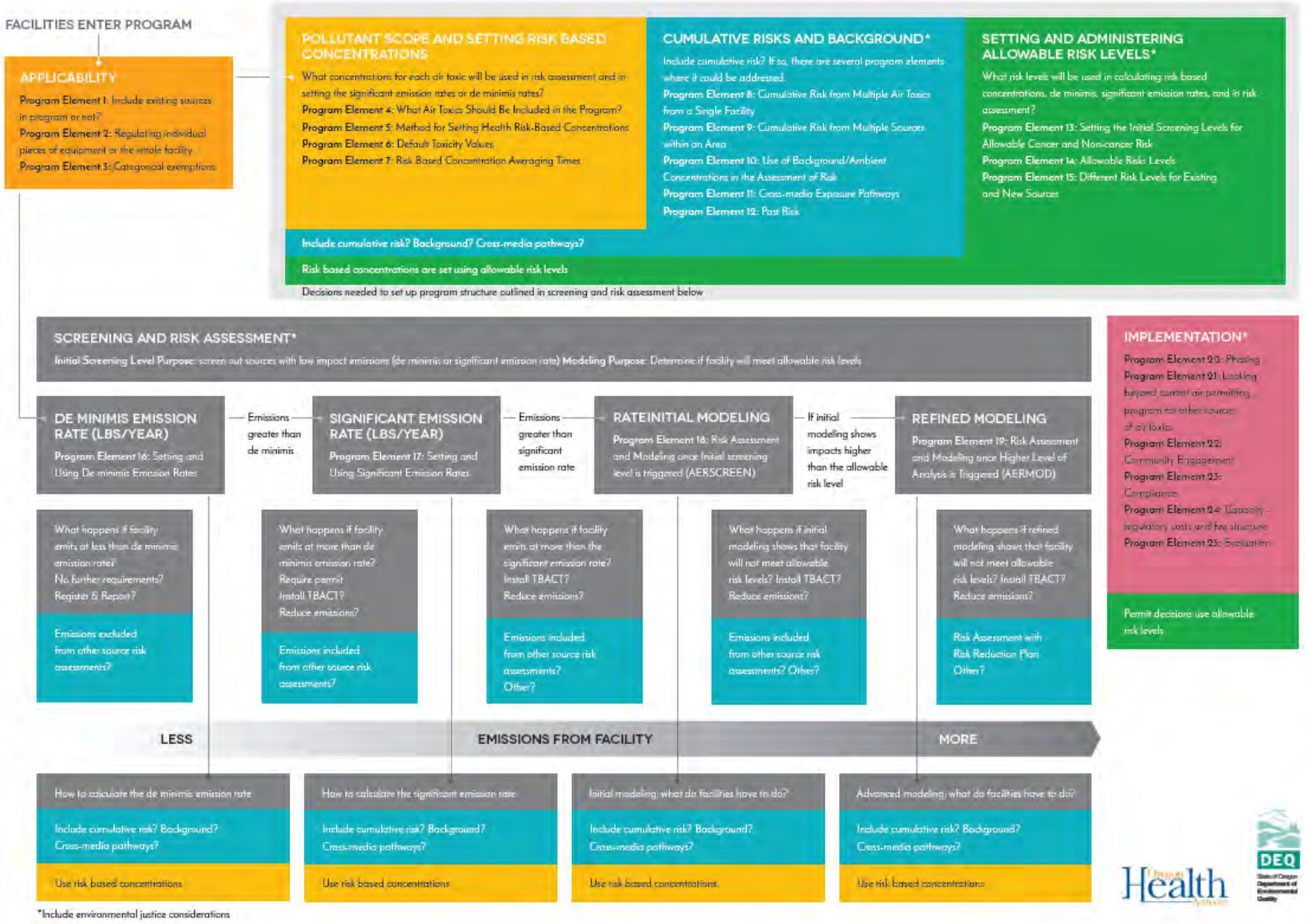
Include:

- Multiple Air Toxics from a Single Facility? (page 9)
- Multiple Sources within an Area? (page 12)
- Community Sources in the Assessment of Risk? (page 14)
- Cross-media Exposure Pathways? (page 17)
- Past Risk and Sensitive Populations? (page 18)

Setting and Administering Allowable Risk Levels

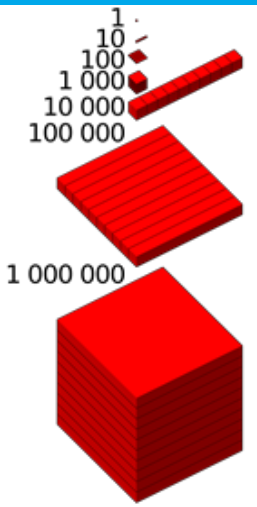
CleanerAirOregon

Health Risk-Based Industrial Air Toxics Permitting Program General Framework

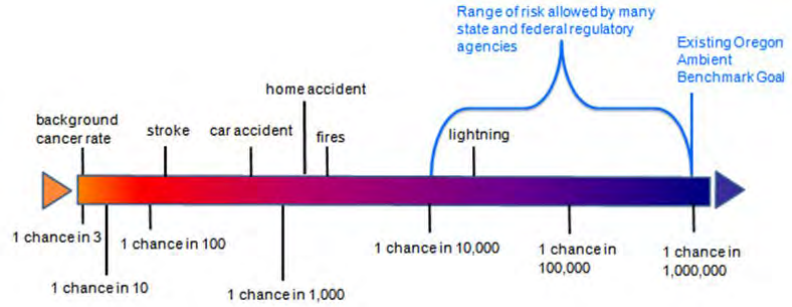


Questions on Setting and Administering Allowable Risk Levels

Where should the initial screening levels for allowable cancer and non-cancer risk be set?

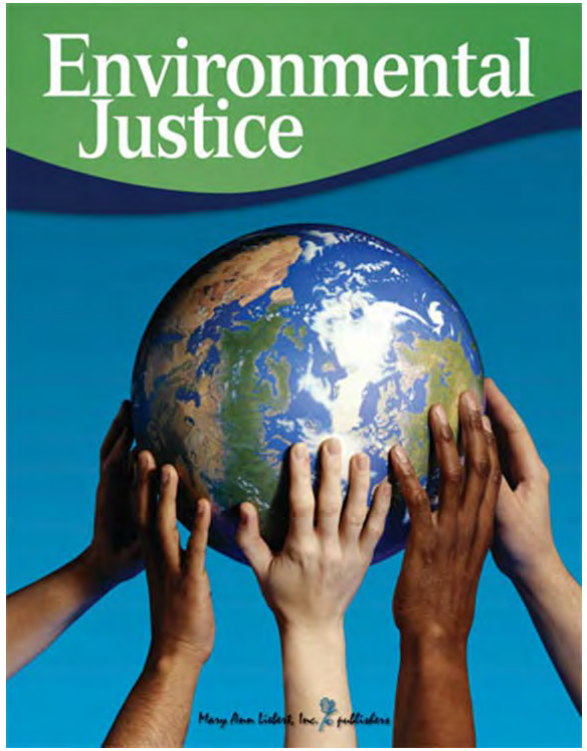


What should the allowable risks levels be?



Should Oregon allow different risk levels under certain (any) conditions?

Allowable Risk



Environmental Justice Task Force said:

- Promulgate health-based standards for industrial source air toxics and base permit decisions on compliance with such standards.
- Apply enhanced permitting requirements to new and renewal permits, with shorter renewals to account for changing demographics, health science, and technology.

Cancer vs. Non-Cancer Risk Levels

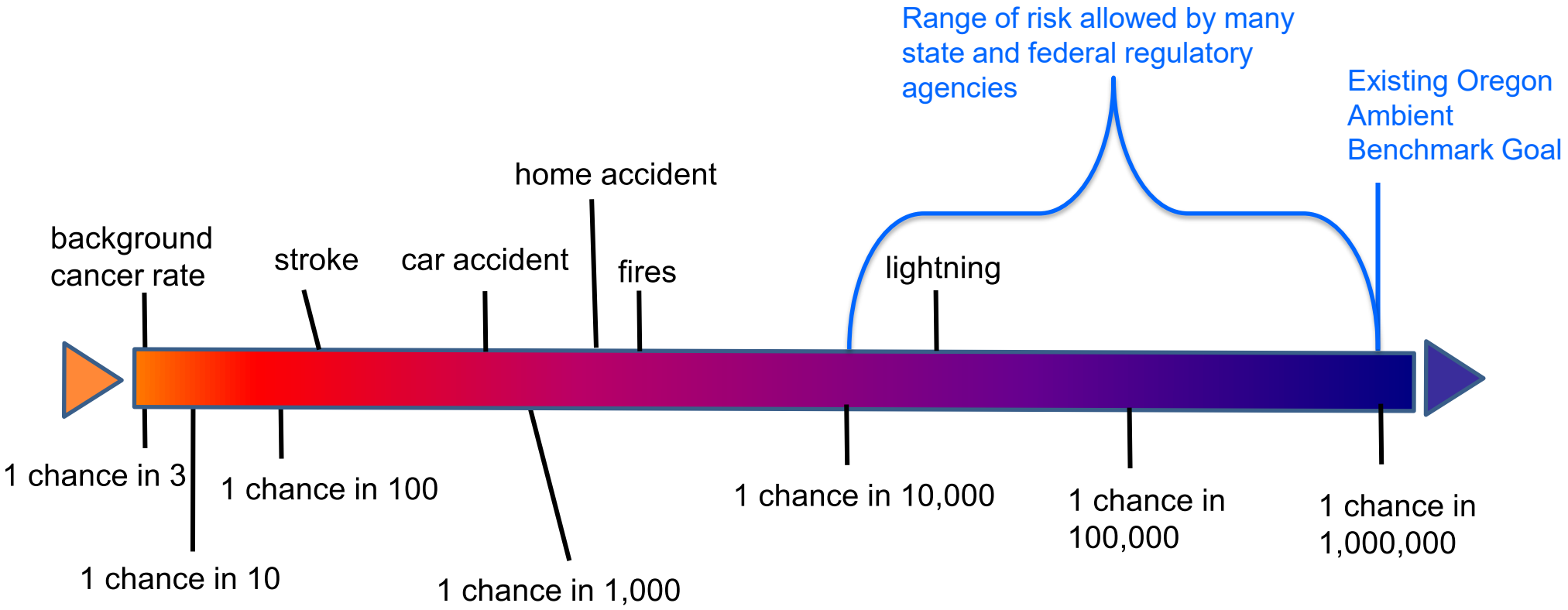
Cancer risk = Air Toxics Concentration x Unit Risk Estimate

$$\text{Non-Cancer risk Hazard Quotient (HQ)} = \frac{\text{Air Toxics Concentration}}{\text{Threshold}}$$

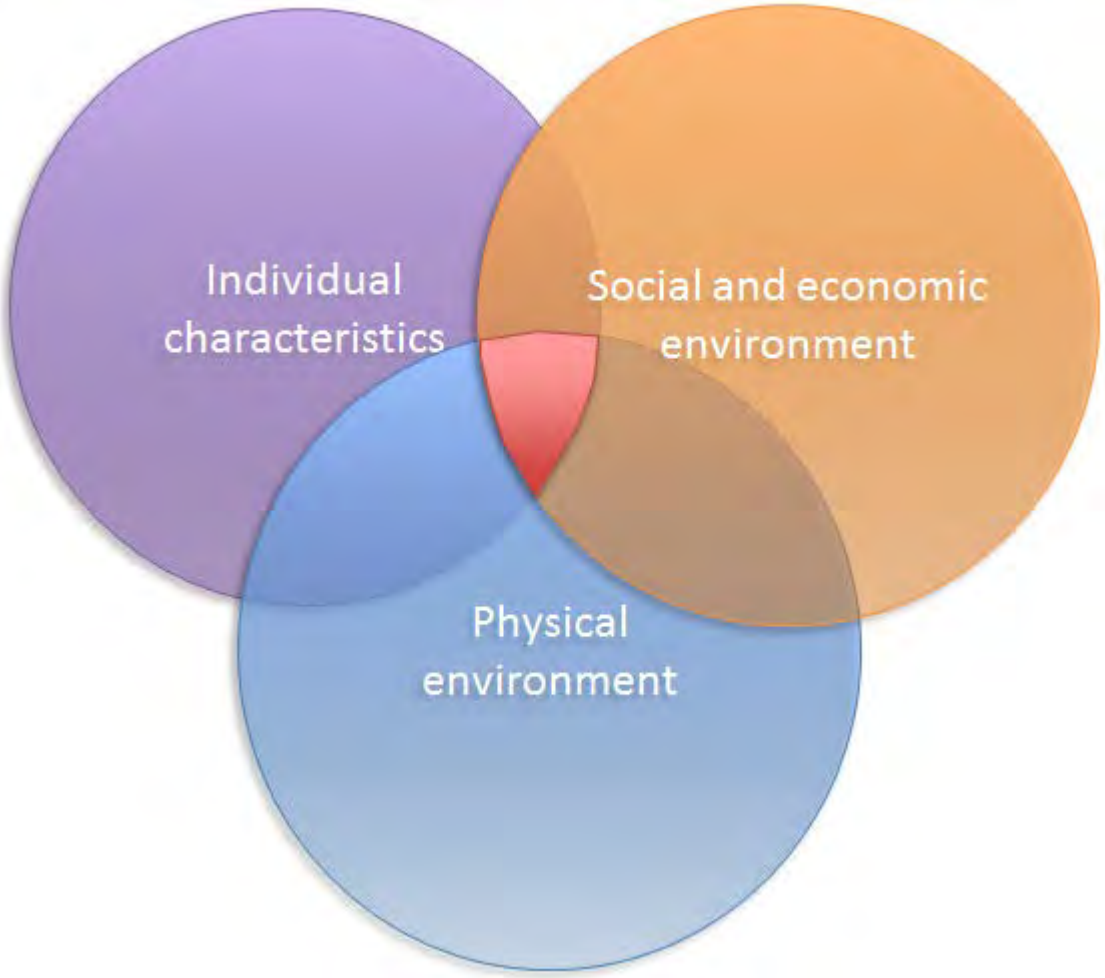
$$\text{Cancer Risk Based Concentration} = \frac{\text{Allowable Cancer Risk}}{\text{Unit Risk Estimate}}$$

Non-Cancer Risk Based Concentration = Threshold x allowable non-cancer risk ratio (HQ)

Everyday Risks/Allowable Risks



The Balance of Allowable Risk



Program Element 13: Setting Initial Screening Levels (1 air toxic at a time; 1 piece of equipment)

Technical Workgroup said:

- A cancer risk that is 1 in 1 million or less is an allowable initial screening health risk level.
- A Hazard Quotient that is 1 or less is typically used as the allowable level of non-cancer risk.

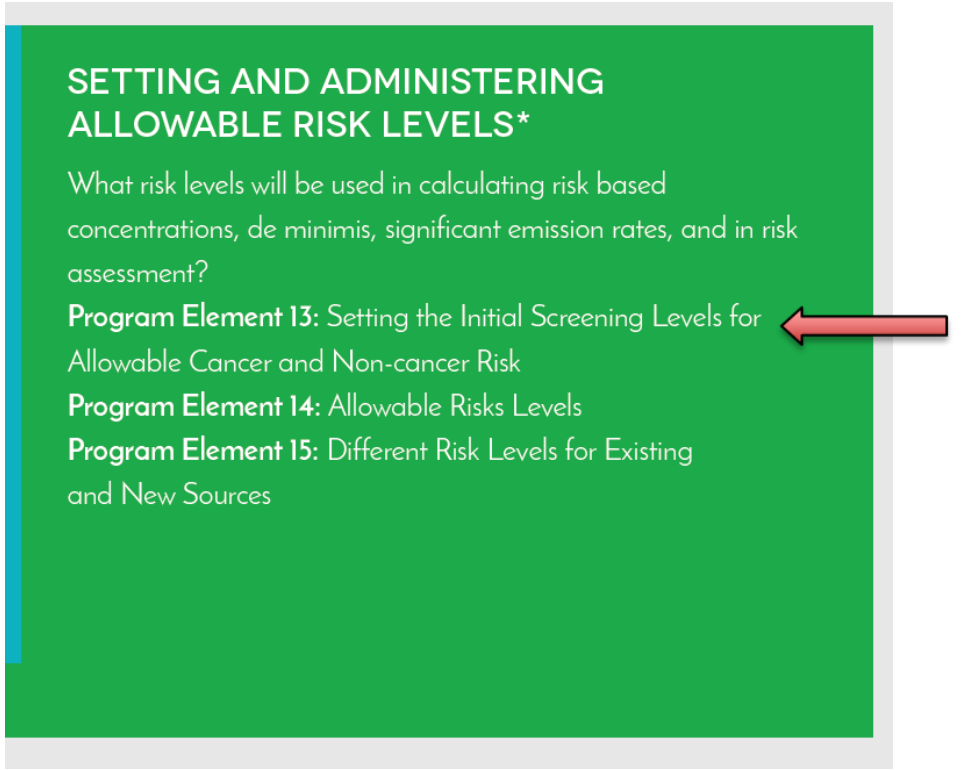
Program Element 13: Setting Initial Screening Levels (1 air toxic at a time; 1 piece of equipment)

Potential elements for setting the initial screening levels for allowable cancer and non-cancer risk

The following are potential elements for which DEQ and OHA are seeking additional discussion and input from the Advisory Committee. If there are additional elements not included below, please raise them.

Potential Elements
A. 1 in 1 million cancer risk and hazard quotient of one for non-cancer risk
B. Placeholder for elements developed by advisory committee members

Page 5 of Setting and Administering Allowable Risk Discussion Paper



Program Element 14: Allowable Risk Levels (All emissions; whole facility)

Technical Workgroup said for whole regulated facilities:

- Most-typical range of cancer risk levels: 1 in 1 million up to 100 in 1 million
- Non-cancer risk levels with hazard quotients: target organ-specific hazard indices from 1 to 5

Program Element 14: Allowable Risk Levels (All emissions; whole facility)

Should Oregon allow higher risk levels for sources that have:

- Installed Best Available Control Technology?
- Installed Lowest Achievable Emission Rate?
- Employed pollution prevention?

Thermal Oxidizer (afterburner)

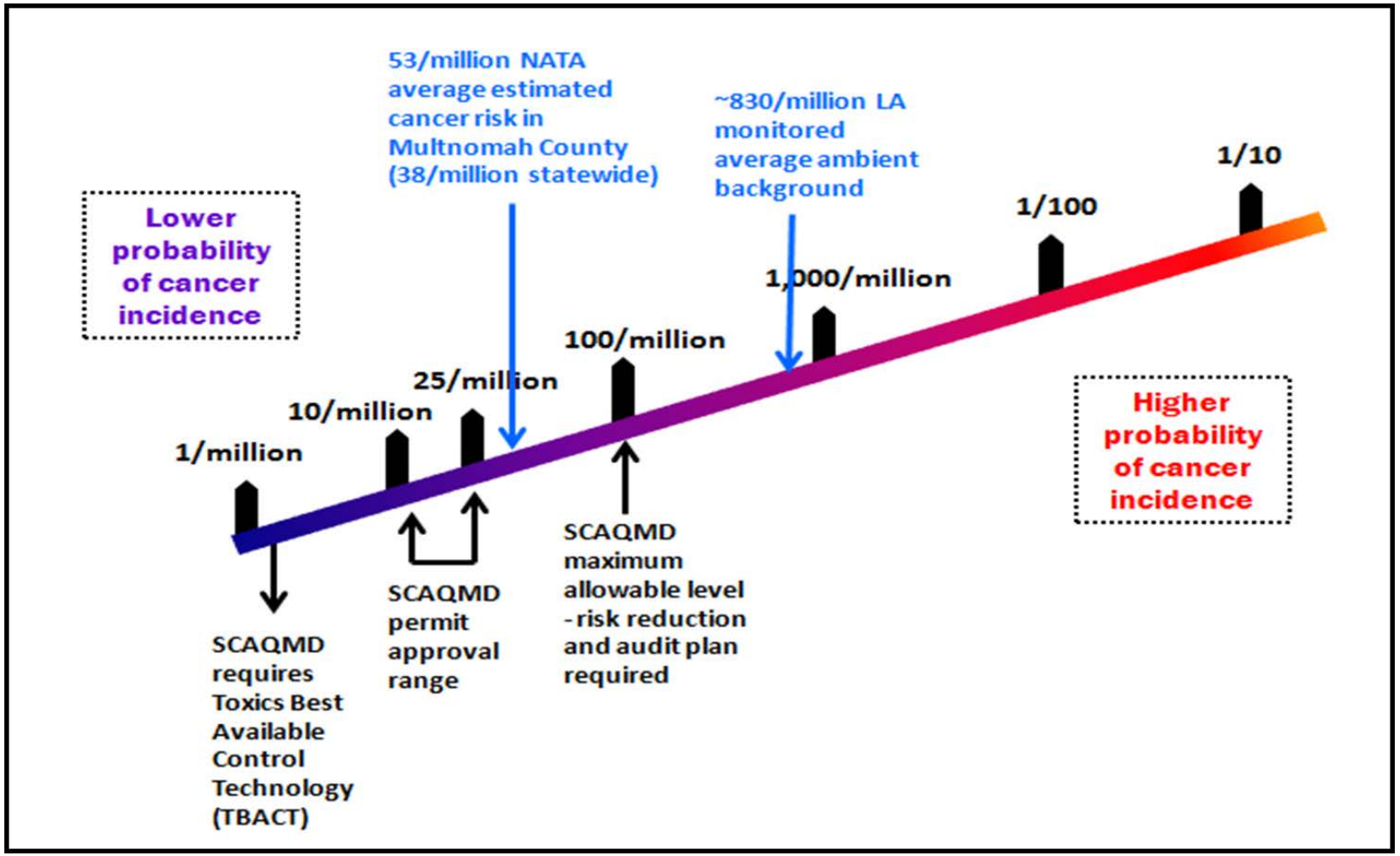
pollution prevention

Program Element 14: Allowable Risk Levels (All emissions; whole facility)

Technical Workgroup said:

- South Coast Air Quality Management District allows 1 in 1 million without T-BACT and 10 in 1 million with T-BACT for new individual pieces of equipment.
- In Washington, T-BACT is usually required before permits will be approved.
- Many people believe T-BACT is not enough for air toxics. Additional protection could include pollution prevention.

Example of Use of Range of Cancer Risk Targets in Air Permitting – SCAQMD, California



Program Element 14: Allowable Risk Levels (All emissions: whole facility)

Policy Forum input:

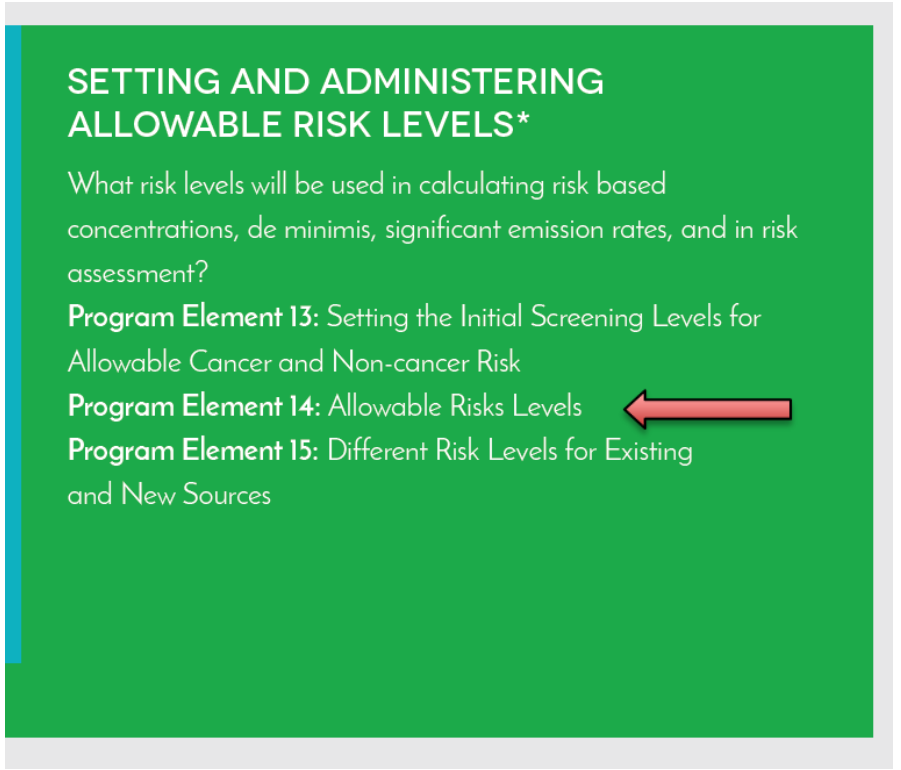
- Do not allow facilities to emit air toxics at levels that pose a higher risk to health if pollution controls are installed and used properly

Program Element 14: Allowable Risk Levels (All emissions; whole facility)

Potential elements for allowable risk levels

The following are potential elements for which DEQ and OHA are seeking additional discussion and input from the Advisory Committee. If there are additional elements not included below, please raise them.

Potential Elements
A. Allow higher cancer risk levels for entire facility if control technology such as TBACT is installed. Other programs have allowed risk in the range of 3.8 in 1 million to 100 in 1 million. Some program do not have a limit on allowable risk levels.
B. Require control technology, without considering cost or energy in the decision (Lowest Achievable Emission Rate - LAER) if entire facility risk of cancer or non-cancer effects is above a specified level.
C. Allow higher hazard index for non-cancer effects if control technology such as TBACT is installed. Other programs have allowed from a 1 to 5 hazard index. Some program do not have a limit on allowable non-cancer effects levels.
D. Require LAER if entire facility hazard index is: a. Above 1 b. Above 5 c. Above some other level



Page 8 of Setting and Administering Allowable Risk Discussion Paper

Program Element 15: Different Risk Levels for Existing and New Sources?

Some programs require a more protective risk level for new facilities than existing facilities, because new facilities can be designed to meet lower risk levels.

Program Element 15: Different Risk Levels for Existing and New Sources?

Technical Workgroup said:

- South Coast Air Quality Management District allows 10 in 1 million with T-BACT for new individual pieces of equipment and 25-100 in 1 million for the existing whole facility for all air toxics.
- Give existing units more time to comply, whereas new units must comply immediately.

Policy Forum input:

- Do not allow existing facilities to emit air toxics at levels that pose a higher risk to health than new facilities.

Program Element 15: Different Risk Levels for Existing and New Sources?

Potential elements for allowing different risk levels for existing and new sources

The following are potential elements for which DEQ and OHA are seeking additional discussion and input from the Advisory Committee. If there are additional elements not included below, please raise them.

Potential Elements
A. Allow existing facilities higher cancer risk levels, up to 10 in 1 million risk. Other programs have allowed between 7.5 in 1 million and 100 in 1 million risk levels. Some programs do not have a limit on the allowable risk.
B. Do not allow existing facilities higher risk than new or modified sources
C. Placeholder for elements developed by advisory committee members

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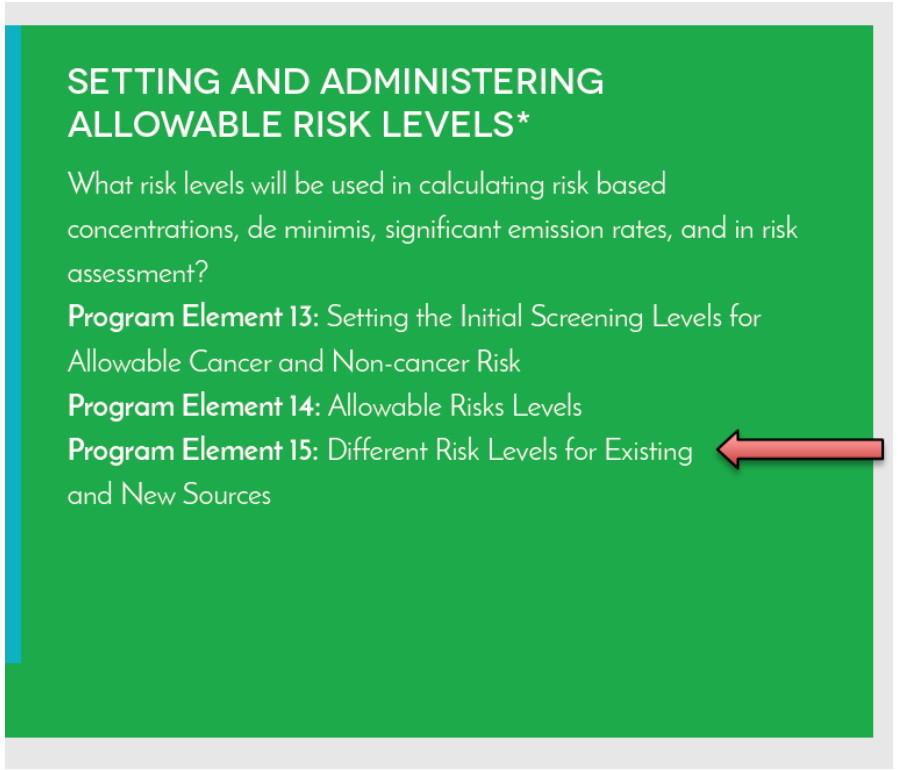

Setting and Administering Allowable Risk Levels

Discussion

Where should the initial screening levels for allowable cancer and non-cancer risk be set? (page 5)

What should the allowable risks levels be? (page 8)

Should Oregon have different risk levels for existing and new sources? (page 10)

Cumulative Analyses in a Regulatory Environment:

Moving from Is It Cumulative? to How Cumulative is it?

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651-757-2336

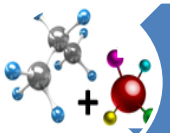
Minnesota Pollution Control Agency


PuzzleRoom
Wilderness
ItDepends
Baker
NationalParks
DataAnalyst
AnxiousFlyer
SchoolVolunteer
DinnerAsAFamily
Introvert
MysteryBooks
PeaceCorpsVolunteer
Hiker
SlowMarathonRunner
CoffeeDrinker
RoadTrips
Collaborater
Scientist
BitterBeer
Mom
Camper

Elements of Cumulative Impact Analysis

Sensitivity

- Standards based on sensitive life stages



Additivity

- Multiple contaminants with similar effects

Multiple Pathways

- Total exposure via drinking, eating, swimming...

Multiple Sources

- Added effects of cars, factories, runoff...

Non-Chemical Stressors

- Impacts from noise, traffic, aesthetics ...

Community Vulnerabilty

- Greater susceptibility to pollution due to health care, housing, other challenges

Quantitative	Analysis Methods, Data **More Available**	**MPCA Can Compel** Action to Address

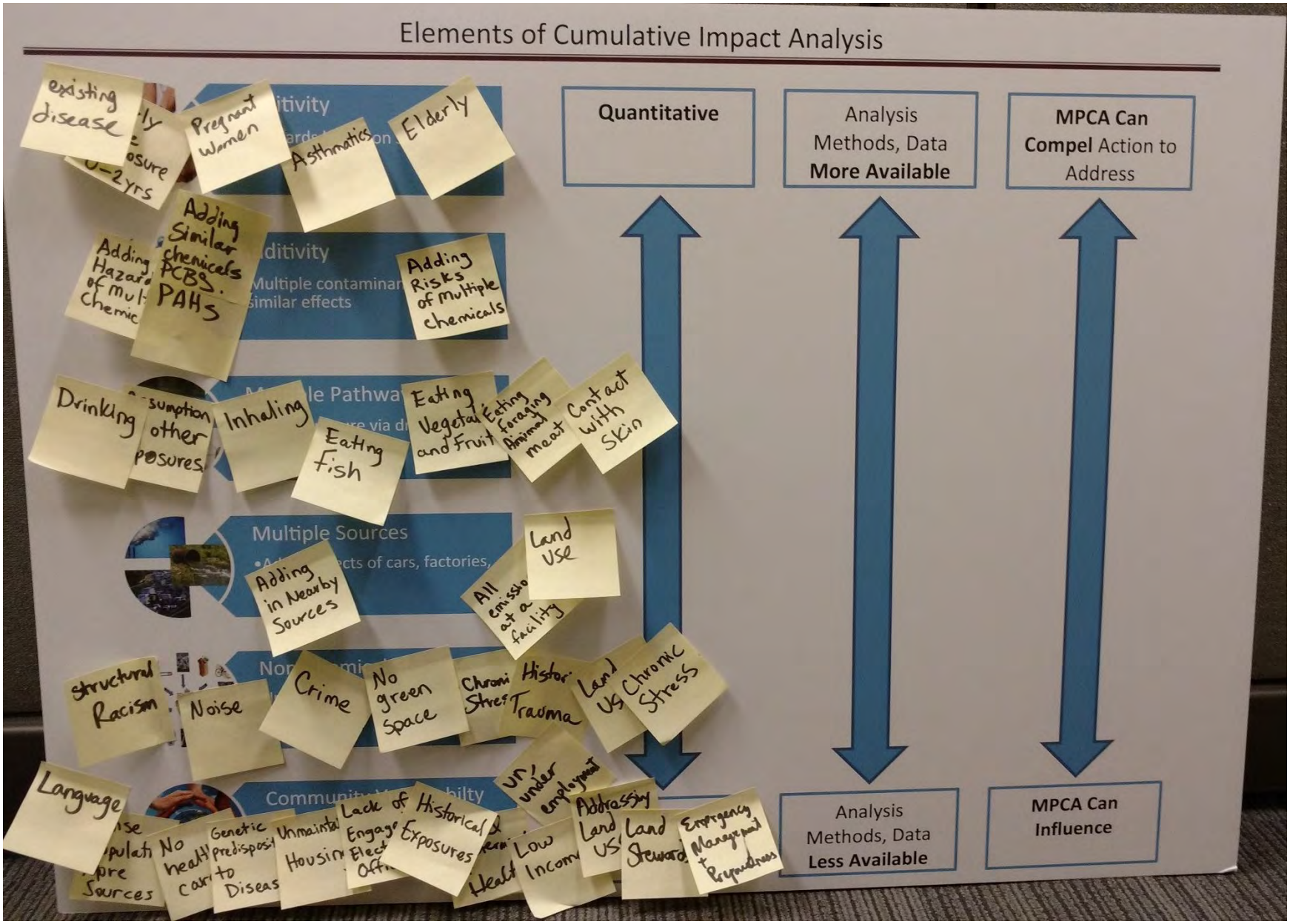
Qualitative	Analysis Methods, Data **Less Available**	**MPCA Can Influence**

Table Activity 1

- Every table has sticky notes and a copy of the image “Elements of a Cumulative Impacts Analysis”.

- After each slide, I will pause for 1 minute to allow tables to write indices or tasks in addition to the ones that I list and post them on your cumulative impacts analysis figure.

This is where we are going…



Existing disease

Adjust health benchmarks for early life exposure

Sensitivity

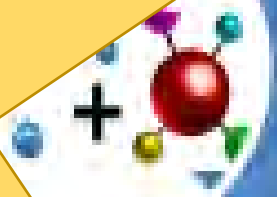
- Standards based on sensitive life stages

Health benchmarks developed for most sensitive population

asthmatics

elderly

Assessing mixtures



Additivity

- Multiple contaminants with similar effects

Adding hazards of multiple chemicals

Adding risks of multiple chemicals

Adding pollutants based on potency equivalents

Eating foraging animals

Inhaling

Eating fruits and vegetables

Multiple Pathways

- Total exposure via drinking, eating, swimming…

Assumption of other exposures

Drinking

Eating fish

Contact with skin- swimming, showering

Multiple Sources

- Added effects of cars, factories, runoff…

Adding in nearby sources

All emissions at a facility

Including what's already there.

Chronic stress

No green space

Historic trauma

Non-Chemical Stressors

- Impacts from noise, traffic, aesthetics …

Noise

Crime

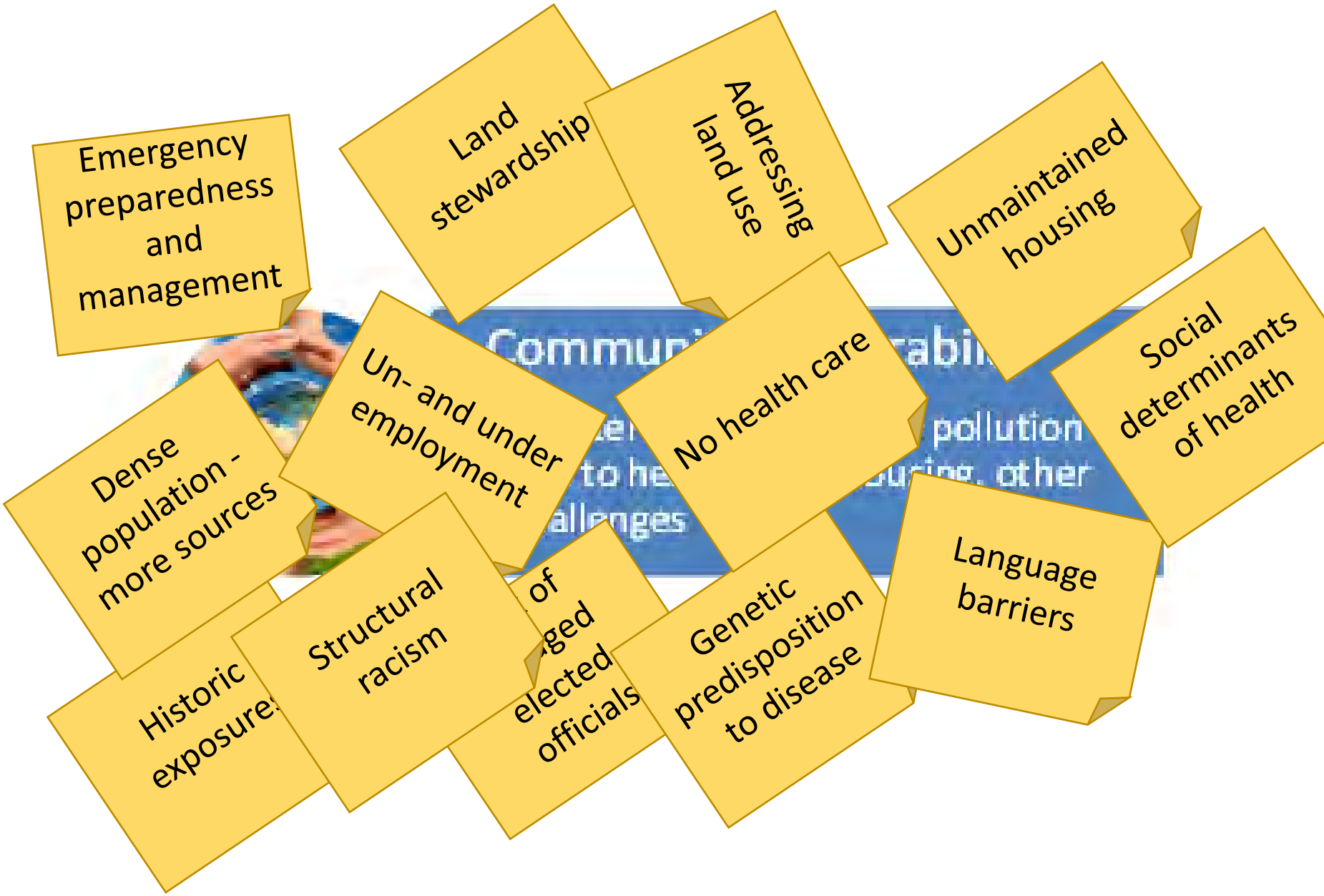
Infectious agents

Aesthetics, like seeing a big tall stack everyday

Table Activity 2

- I will pause with the “Vulnerability” slide up and have tables write examples of what makes a community vulnerable or less resilient.

- Once the tables have had time to add some vulnerability indicators, I will go through what the MN Environmental Justice Advisory Group came up with.


Emergency preparedness and management
Land stewardship
Addressing land use
Unmaintained housing
Social determinants of health
Un- and under employment
No health care
Dense population - more sources
Structural racism
Genetic predisposition to disease
Language barriers
Historic exposures
elected officials

Minnesota Statute, Section 116.07, Subdivision 4a:

Subd. 4a. **Permits.** (a) The Pollution Control Agency may issue, continue in effect or deny permits, under such conditions as it may prescribe for the prevention of pollution, for the emission of air contaminants, or for the installation or operation of any emission facility, air contaminant treatment facility, treatment facility, potential air contaminant storage facility, or storage facility, or any part thereof, or for the sources or emissions of noise pollution.

The Pollution Control Agency may also issue, continue in effect or deny permits, under such conditions as it may prescribe for the prevention of pollution, for the storage, collection, transportation, processing, or disposal of waste, or for the installation or operation of any system or facility, or any part thereof, related to the storage, collection, transportation, processing, or disposal of waste.

The agency may not issue a permit to a facility without analyzing and considering the cumulative levels and effects of past and current environmental pollution from all sources on the environment and residents of the geographic area within which the facility's emissions are likely to be deposited, provided that the facility is located in a community in a city of the first class in Hennepin County that meets all of the following conditions:

(1) is within a half mile of a site designated by the federal government as an EPA superfund site due to residential arsenic contamination;

(2) a majority of the population are low-income persons of color and American Indians;

(3) a disproportionate percent of the children have childhood lead poisoning, asthma, or other environmentally related health problems;

(4) is located in a city that has experienced numerous air quality alert days of dangerous air quality for sensitive populations between February 2007 and February 2008; and

(5) is located near the junctions of several heavily trafficked state and county highways and two one-way streets which carry both truck and auto traffic.

Minnesota Statute, Section 116.07, Subdivision 4a:

Subd. 4a. **Permits.** (a) The Pollution Control Agency may issue, continue in effect or deny permits, under such conditions as it may prescribe for the prevention of pollution, for the emission of air contaminants, or for the installation or operation of any emission facility, air contaminant treatment facility, treatment facility, potential air contaminant storage facility, or storage facility, or any part thereof, or for the sources or emissions of noise pollution.

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The agency may not issue a permit to a facility without analyzing and considering the cumulative levels and effects of past and current environmental pollution from all sources on the environment and residents of the geographic area within which the facility's emissions are likely to be deposited, provided that the facility is located in a community in a city of the first class in Hennepin County that meets all of the following conditions:

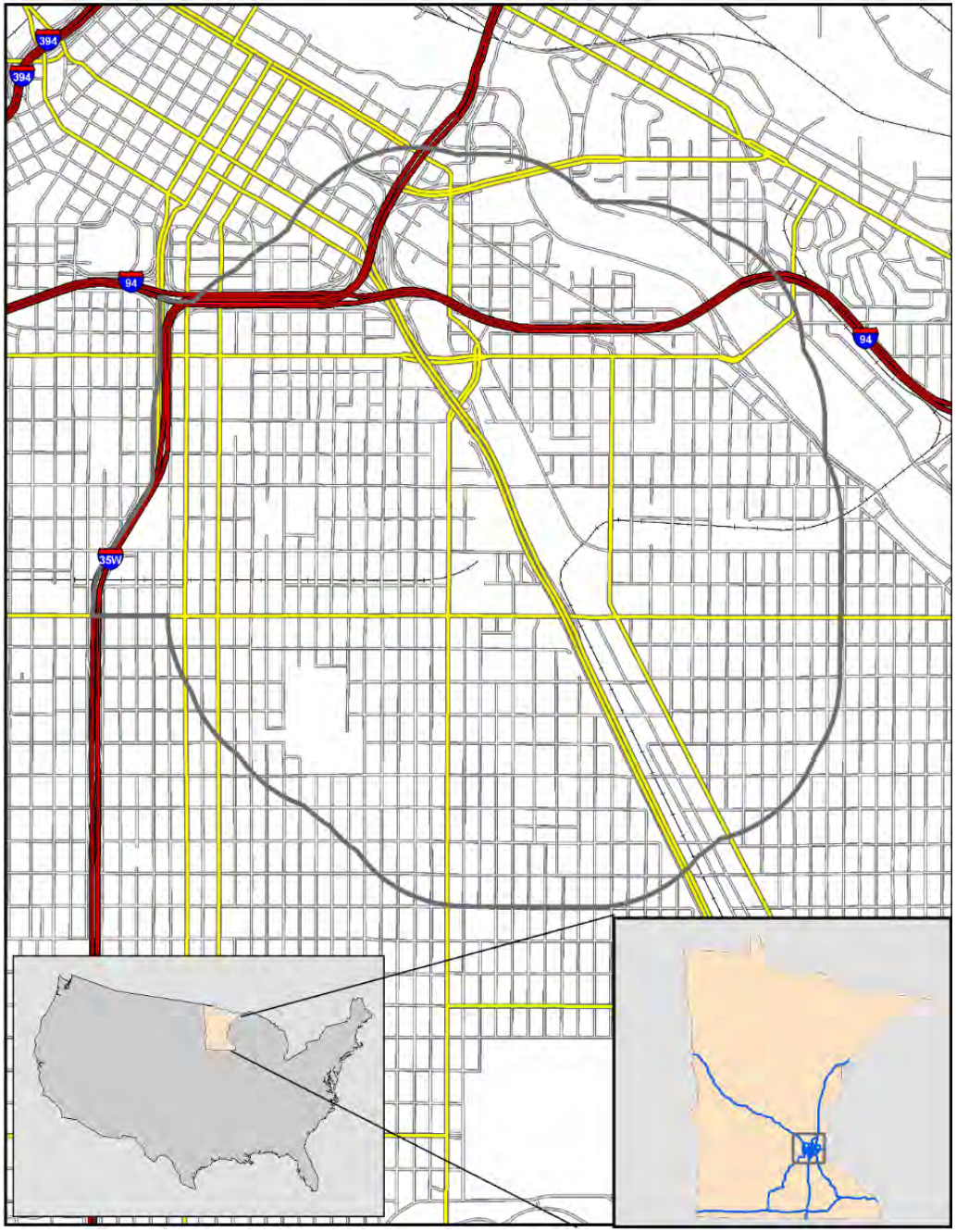
(1) is within a half mile of a site designated by the federal government as an EPA superfund site due to residential arsenic contamination;

(2) a majority of the population are low-income persons of color and American Indians;

(3) a disproportionate percent of the children have childhood lead poisoning, asthma, or other environmentally related health problems;

(4) is located in a city that has experienced numerous air quality alert days of dangerous air quality for sensitive populations between February 2007 and February 2008; and

(5) is located near the junctions of several heavily trafficked state and county highways and two one-way streets which carry both truck and auto traffic.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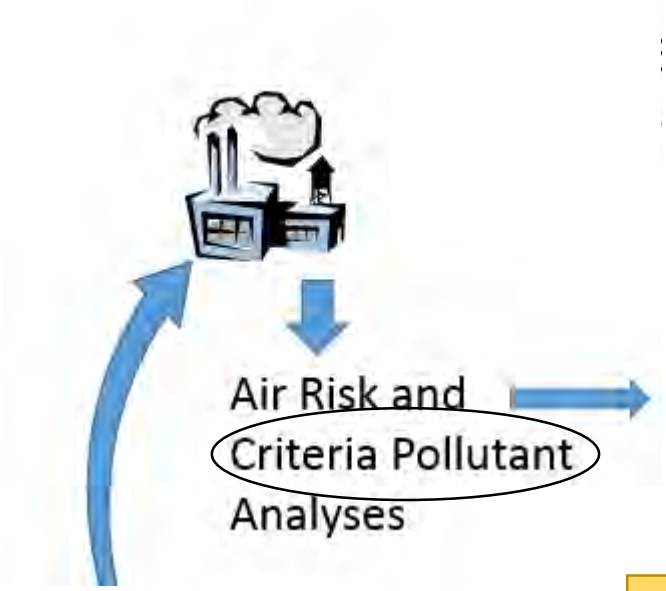
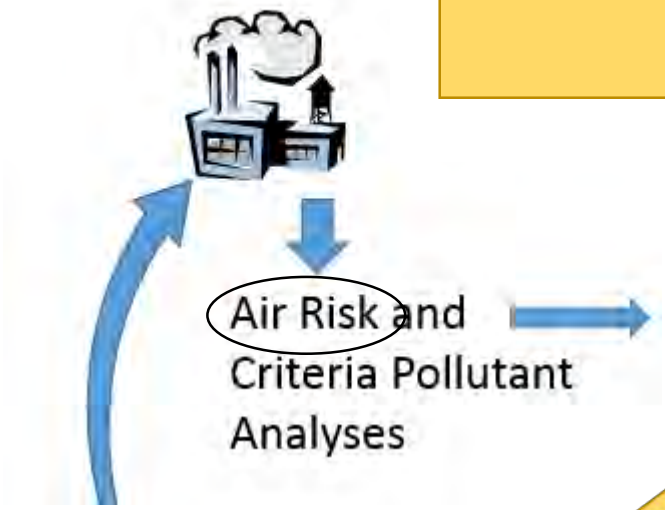


All emissions at a facility

Including what's already there.

Adding in nearby sources

Assessing mixtures



Inhaling

Health benchmarks developed for most sensitive population

All emissions at a facility

Eating fruits and vegetables

Adding pollutan
based on poten
equivalents

Adjust health benchmarks for early life exposure

Eating fish

Eating foraging animals

Adding hazards of multiple chemicals

Adding risks of multiple chemicals

Air Risk Analysis
and Criteria
Pollutant Analysis

Endpoints
(e.g. respiratory, etc.)

Environmental Health Data
(traffic, asthma, AQI, air concentrations, etc.)

Cumulative Levels and Effects Report

MPCA Leadership

Recommendations To Permitting

Endpoint	Short Term	Long Term
All Health Endpoints	Facility data, national and state air pollutant modeling, criteria pollutant and air toxics measurements, nearby sources, SES	Facility data, national and state air pollutant modeling, criteria pollutant and air toxics measurements, nearby sources, SES
Respiratory	Traffic, Environmental Tobacco Smoke (ETS), AQI, asthma data	Traffic, ETS, AQI, asthma data
Developmental	Superfund site	Drinking water, superfund site, blood lead
Cancer	Not Applicable	ETS, traffic, AQI, drinking water, superfund site, blood lead, cancer rates

Communicating somewhere between…

“Don’t worry, it’s fine.”

Metro Transit - HLRV Air Dispersion Modeling and Air Permit Application
Stack/Vent Parameters

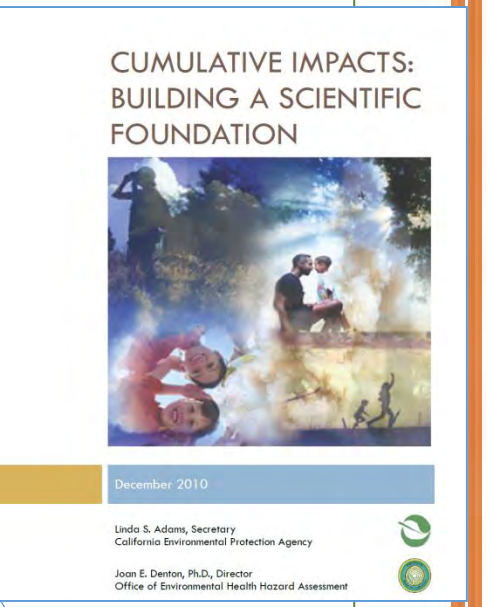
Source	Source Description	Rated Heat Input (MMBtu/hr)	Insignificant Activity?	Exhaust Height from Ground		Exit Temperature		Exhaust Flowrate	Exit Velocity	Diameter	
				(ft)	(m)	(K)	(deg F)	(acfm)	(m/s)	(ft)	(m)
SV001	HLRV Paint Booth Vent 1 (EF-11)	NA	N	36.0	11.0	298.0	77	7,700	7.97	2.5	0.76
SV002	HLRV Paint Booth Vent 2 (EF-26)	NA	N	36.0	11.0	298.0	77	8,500	8.80	2.5	0.76
SV003	HLRV Paint Booth Vent 3 (EF-27)	NA	N	36.0	11.0	298.0	600	8,500	8.80	2.5	0.76
SV005	HLRV Welding	NA	Y	42.0	12.8	298.0	77	600	3.04	1.13	0.34
SV006	HLRV Water Heater	0.600	Y	49.0	14.9	394.3	250	143	1.34	0.83	0.25
SV007	HLRV Bryan B-1 Boiler	2.000	Y	49.0	14.9	394.3	250	477	4.48	0.83	0.25
SV008	HLRV RTU-5	0.810	Y	32.0	9.8	394.3	250	426	25.6	0.33	0.10
SV009	HLRV Pressure Washer	0.657	Y	36.0	11.0	394.3	250	157	1.47	0.83	0.25
SV010	HLRV South Air Curtain Furnace	0.700	Y	31.8	9.7	298.0	77	123	0.82	1.0	0.30
SV011	HLRV North Air Curtain Furnace	0.700	Y	31.8	9.7	298.0	77	123	0.82	1.0	0.30
SV012	HLRV Gun Cleaning	NA	Y	12.0	3.7	298.0	77	185	0.53	1.5	0.46
SV013	HLRV MAU1 Vent 1 (EF-1)	3.888 (total)	N	32.0	9.8	298.0	77	4,000	6.96	1.93	0.59
SV014	HLRV MAU1 Vent 2 (EF-2)	See above	N	32.0	9.8	298.0	77	4,000	6.96	1.93	0.59
SV015	HLRV MAU1 Vent 3 (EF-3)	See above	N	32.0	9.8	298.0	77	2,100	4.49	1.74	0.53
SV016	HLRV MAU1 Vent 4 (EF-4)	See above	N	32.0	9.8	298.0	77	650	3.04	1.18	0.36
SV017	HLRV MAU1 Vent 5 (EF-5)	See above	N	32.0	9.8	298.0	77	12,625	6.23	3.62	1.10
SV018	HLRV MAU1 Vent 6 (EF-6)	See above	N	32.0	9.8	298.0	77	12,625	6.23	3.62	1.10
SV019	HLRV MAU2 (EF-9)	0.573	Y	32.0	9.8	298.0	77	5,300	5.52	2.5	0.76
SV020	HLRV MAU3 (EF-11)	0.832	Y	36.0	11.0	298.0	77	7,700	7.97	2.5	0.76
SV021	HLRV MAU4 Vent 1 (EF-13)	0.788	Y	26.3	8.0	298.0	77	3,160	9.62	1.5	0.45
SV022	HLRV MAU4 Vent 2 (EF-14)	See above	Y	26.3	8.0	298.0	77	3,160	9.62	1.5	0.45
SV023	HLRV MAU4 Vent 3 (EF-15)	See above	Y	31.0	9.5	298.0	77	985	3.43	1.4	0.42
SV024	HLRV MAU5	0.810	Y	32.0	9.8	394.3	250	321	19.29	0.3	0.10
SV025	HLRV MAU6	0.810	Y	32.0	9.8	394.3	250	321	19.29	0.3	0.10
SV026	HLRV MAU7	0.810	Y	32.0	9.8	394.3	250	321	19.29	0.3	0.10
SV027	HLRV MAU8	0.810	Y	32.0	9.8	394.3	250	321	19.29	0.3	0.10
SV028	HLRV VP-1	0.480	Y	32.0	9.8	394.3	250	116	3.1	0.5	0.15
SV029	HLRV VP-2	0.480	Y	32.0	9.8	394.3	250	116	3.1	0.5	0.15
SV030	LRS HVAC RTU-1	0.293	Y	34.0	10.4	394.3	250	115	6.91	0.3	0.10
SV031	LRS MAU1	0.800	Y	34.0	10.4	394.3	250	198	11.88	0.3	0.10
SV032	LRS Boiler B-1	0.399	Y	24.0	7.3	394.3	250	106	6.24	0.3	0.10
SV033	LRS Boiler B-2	0.399	Y	24.0	7.3	394.3	250	106	6.24	0.3	0.10

* SV001 and SV020 are the same exhaust point. They are modeled as individual stacks for clarification.
** The HLRV MAU1, MAU2, MAU3, and MAU4 all exhaust internally. The units are interlocked with exhaust fans when in operation.
The emissions are assumed to exhaust from the interlocked exhaust fan locations.

Cumulative Risk Assessment

EPA Framework for Cumulative Risk Assessment, 2003

"…the combination of risks posed by aggregate exposure to multiple agents or stressors (biological, chemical, physical, and psychosocial) in which *aggregate exposure* is exposure by all routes and pathways and from all sources of each given agent or stressor… "cumulative risk assessment" is defined as an analysis, characterization, and possible quantification of the combined risks to human health or the environment from multiple agents or stressors."



Cumulative impacts means exposures, public health or environmental effects from the combined emissions and discharges, in a geographic area, including environmental pollution from all sources, whether single or multimedia, routinely, accidentally, or otherwise released. Impacts will take into account sensitive populations and socio-economic factors, where applicable and to the extent data are available.

Cumulative Impacts: Building a Scientific Foundation. Cal EPA, OEHHA .2010

Cumulative Effects Definition

"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions."

-National Environmental Policy Act language

Table Activity 3

- Every table has one definition and the individual rungs of the ladder.

- Determine which “rungs” this definition would suggest that you include.

Table Activity 4 (Final)

- Each table will have a permitting scenario, the 3 cumulative analysis definitions, the Elements of a Cumulative Analysis figure.
- Discuss how to develop a cumulative analysis for the particular scenario that is at your table AND USE the definition in your hand out with a star on it.
- You can pull in the rungs of the ladder that align with the definition, and the sticky note tasks that would assist in informing the outcome.
- You have 10 minutes.

My Contact Information

Kristie.Ellickson@state.mn.us
651-757-2336

Cumulative Impacts in South Minneapolis Permitting Website:

https://www.pca.state.mn.us/air/air-permitting-south-minneapolis

Additional Slides….

Table 2

General example for presentation of results for Cumulative Levels and Effects Reports.

	Specific Descriptors	General Discussion
Existing Stressors	• Ambient air toxics measurements	• Similar to other urban areas in St. Paul/Minneapolis
	• Ambient $PM_{2.5}$ measurements	• Lower than National Standard, similar to other urban areas in St. Paul/Minneapolis
	• Traffic densities	• Similar to 10× statewide averages
	• Exposure to tobacco smoke	• Tied for highest smoking rates in metropolitan area
	• Potential exposures from nearby facilities (point sources)	• ~8 nearby facilities with potential exposures
Descriptions of Vulnerabilities	• Asthma hospitalizations and emergency room visits	• ~1.5–2 times higher than Minneapolis city-wide average
	• Cardiovascular hospitalizations	• High variability, uncertain
	• Socioeconomic status and minority populations	• Potential environmental equity area
	• Percent of Population without health insurance	• One of the higher in Hennepin County
	• Ranking in AAFA 100 Cities Asthma ranking	• Ranked best place in nation to live with asthma
	• Comparisons with Healthy People 2020 Objectives	• Asthma hospitalizations and ED visits in Study Area do not meet 2020 Healthy People objectives
Pathways/media	• Outdoor air, indoor air (ETS surrogate), ingestion of homegrown produce, incidental ingestion of soil	
Routes	• Inhalation, ingestion	
Subpopulations	• General population in the Study Area	• Consideration for children included (early lifestage exposure)
Endpoints	• Short-term respiratory and cardiovascular effects	
Proposer Risk Reduction Activities	• Geothermal heating	• Reduced NO_2 emissions
	• Permit limits on daily and annual paint use	• Reduced particulate and VOC emissions
	• Permit limits on annual natural gas use	• Reduced NO_2 emissions
	• Biofiltration gardens	• Reduced run-off from the site
	• Double panel filters on paint spray booth exhaust	• Reduced particulate emissions
	• Permit limits on specific metals in paints	• Reduced metallic emissions: chromium, lead, manganese, nickel or cadmium
	• Public transit is a lower impact activity than individual vehicles	• Reduced vehicle emissions (NO_2, particulate)

- **Is the analysis adequate?**
  - All available data, reasonable “hard look” at potential facility contributions to existing cardiovascular and respiratory events
- **Considering all of the information presented, would you recommend to move forward with a draft permit?**
  - Is the draft permit adequate to limit potential facility impacts to the community?
  - Are there any further voluntary efforts that the agency would suggest?

Environmental Justice in the Policy Process & Community Engagement Interface

EPA Making a Visible Difference Portland
Environmental Justice and Air Toxics Workshop
Portland Community Engagement and Capacity Building Session

March 15th, 2017

Shalini Gupta, Executive Director
Center for earth, Energy and Democracy
www.ceed.org

Why do we have Community Engagement?

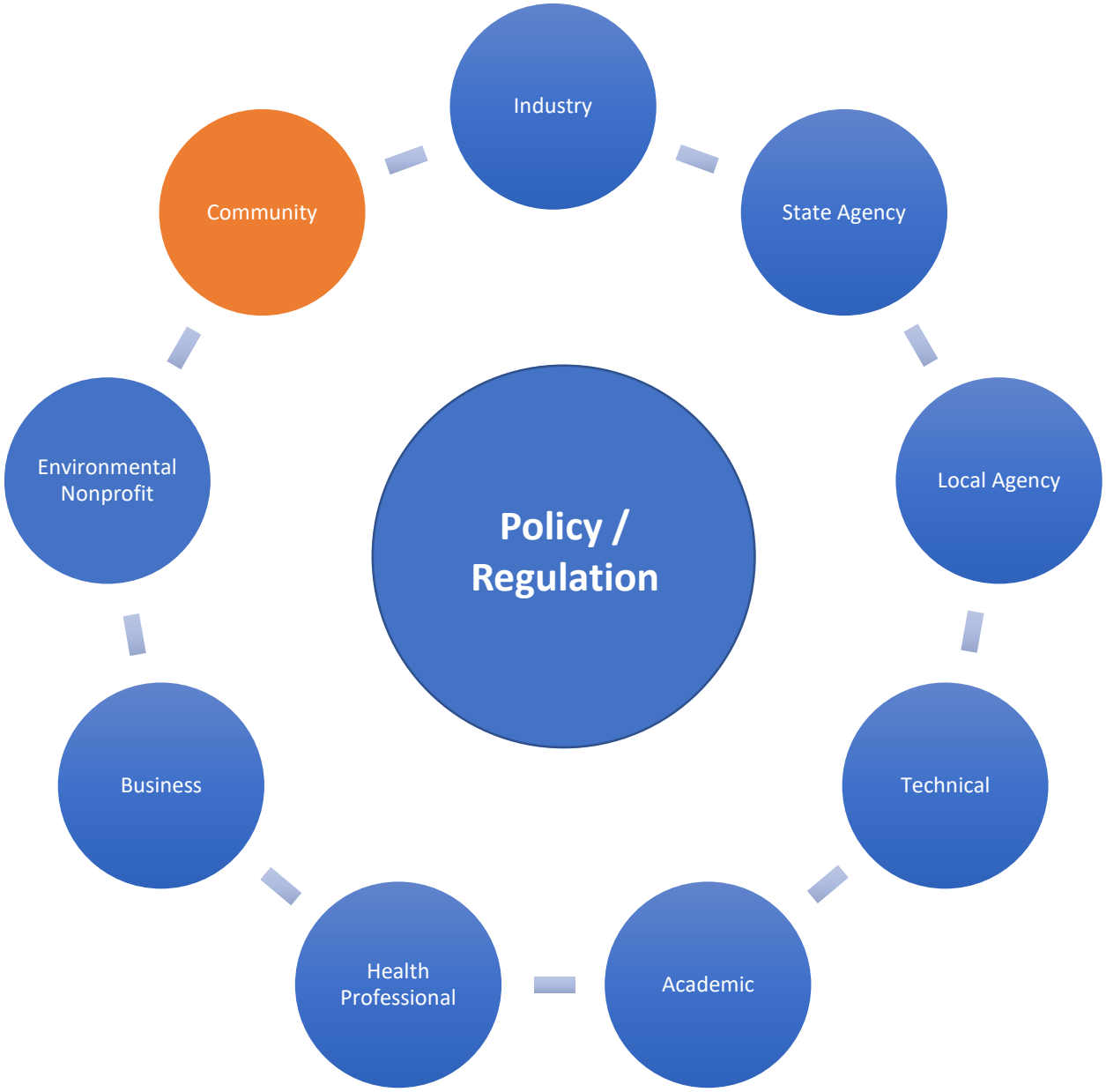
- Ideals of democracy:

  Those most impacted should be part of the solution building

- Fundamental Role (What CE is supposed to do):

  So a community can influence decision-making in order to make their community as healthy as possible

Standard Stakeholder Process



Intersecting Layers Needed for Policy Impact

Minneapolis Climate Action Plan

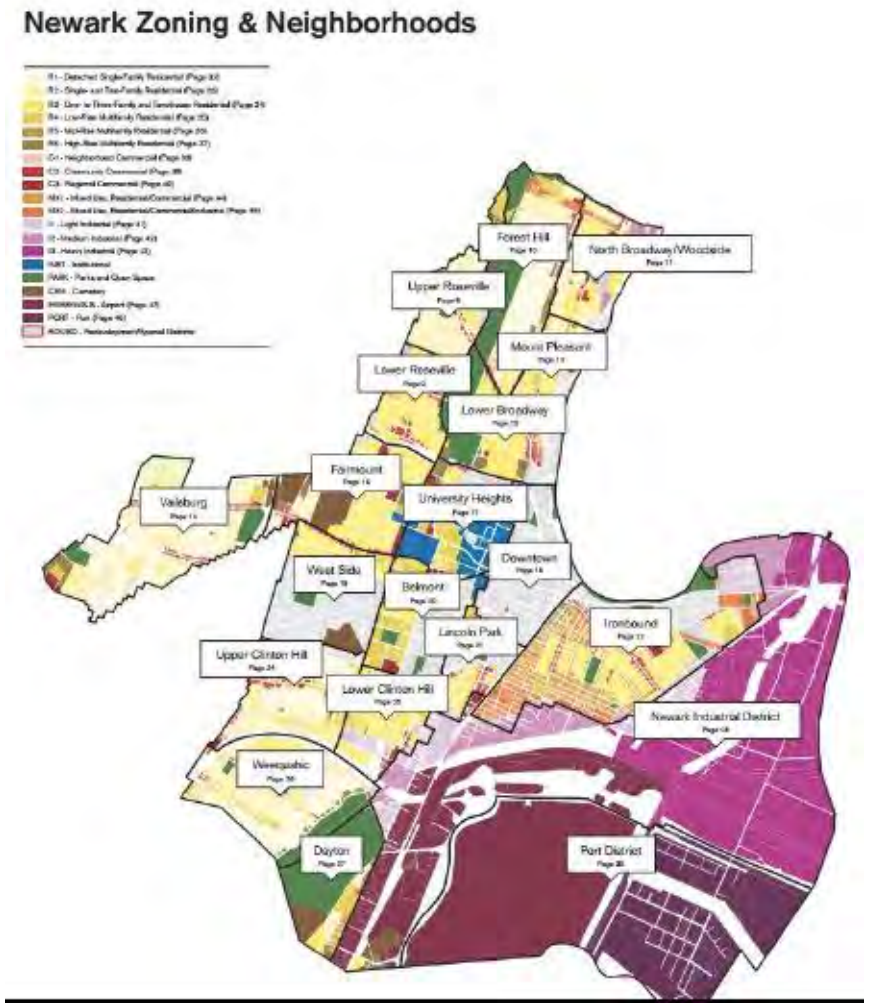
- 2011. City Stakeholder process begins. No Indigenous, community of color organizations. City 46% COC.
- 2012. EJ community petitions for inclusion; points of agreement established; official City Environmental Justice Working Group established (9 months).
- EJWG has co-facilitated (with city staff support) community-centered analysis space with community control on agenda, experts; representation in stakeholder process and documentation.
- Final Plan Passed City Council in June 2013 – unanimously with council members citing economic and racial equity components inserted by EJWG.

WORKSHOP: Building Environmental Justice & Cumulative Impacts into Local Decision Making

National Environmental Justice Training Conference

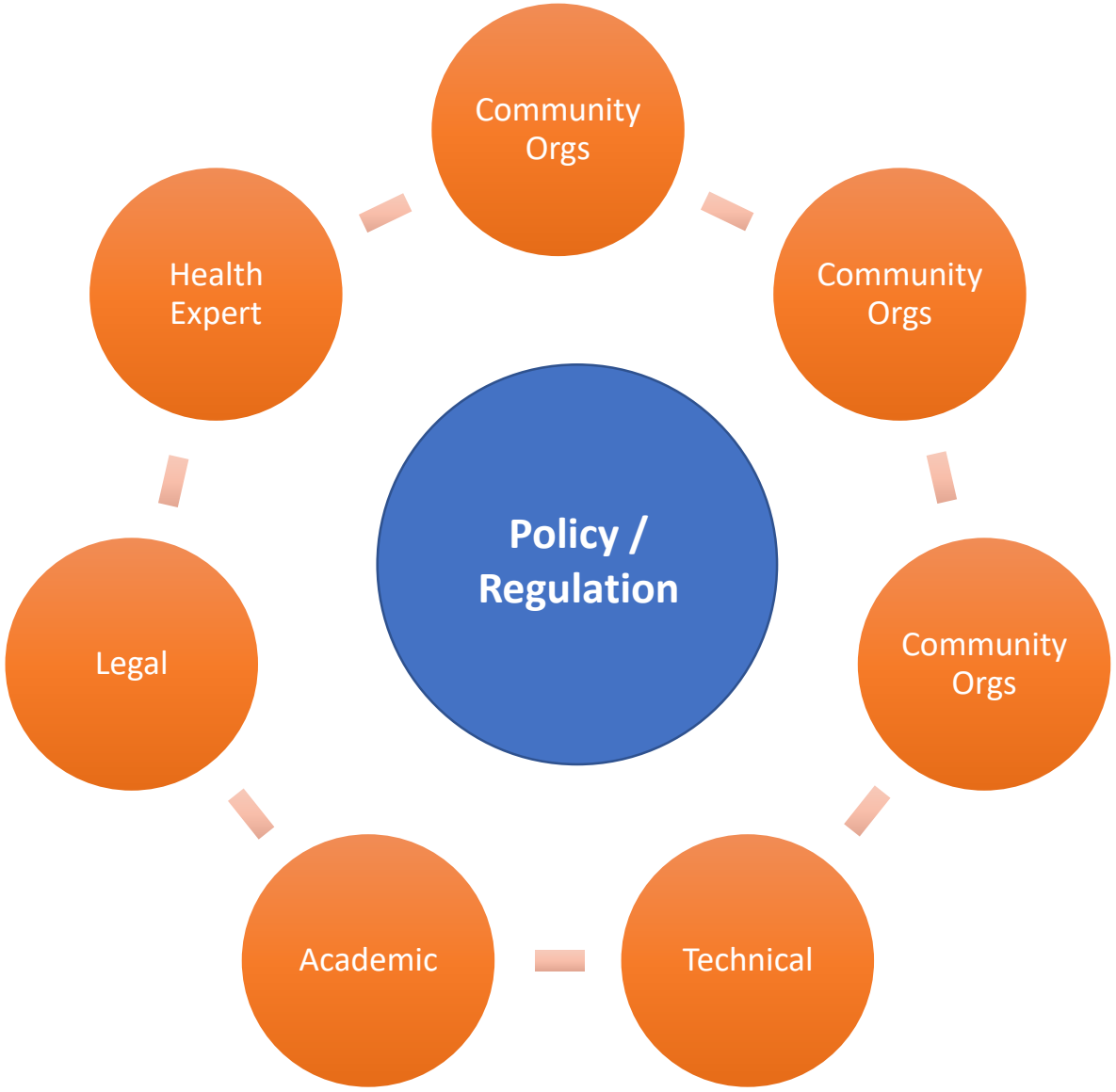
March 9, 2017, Washington, DC

Ana Isabel Baptista, PhD, Assistant Professor of Professional Practice, The New School
Molly Greenberg, MSW, Environmental Justice Policy Manager, Ironbound Community Corporation
Cynthia Mellon, MA, Co Chair, City of Newark, New Jersey Environmental Commission
Nicky Sheats, Esq. PhD, Director, Center for the Urban Environment, Thomas Edison Sate College



1. Role of Municipal laws in EJ & Cumulative Impacts
2. History of Cumulative Impacts Advocacy & Policy in New Jersey
3. Advocacy for EJCI Ordinance in Newark, NJ
4. Implementation process for EJCI Ordinance Newark, NJ

Community-Centered Analysis Space



Controlled by and accountable to Community

Focused on a policy/reg

Part of the official policy process

Intersecting Layers Needed for Policy Impact

Memorandum of Understandings as a Tool

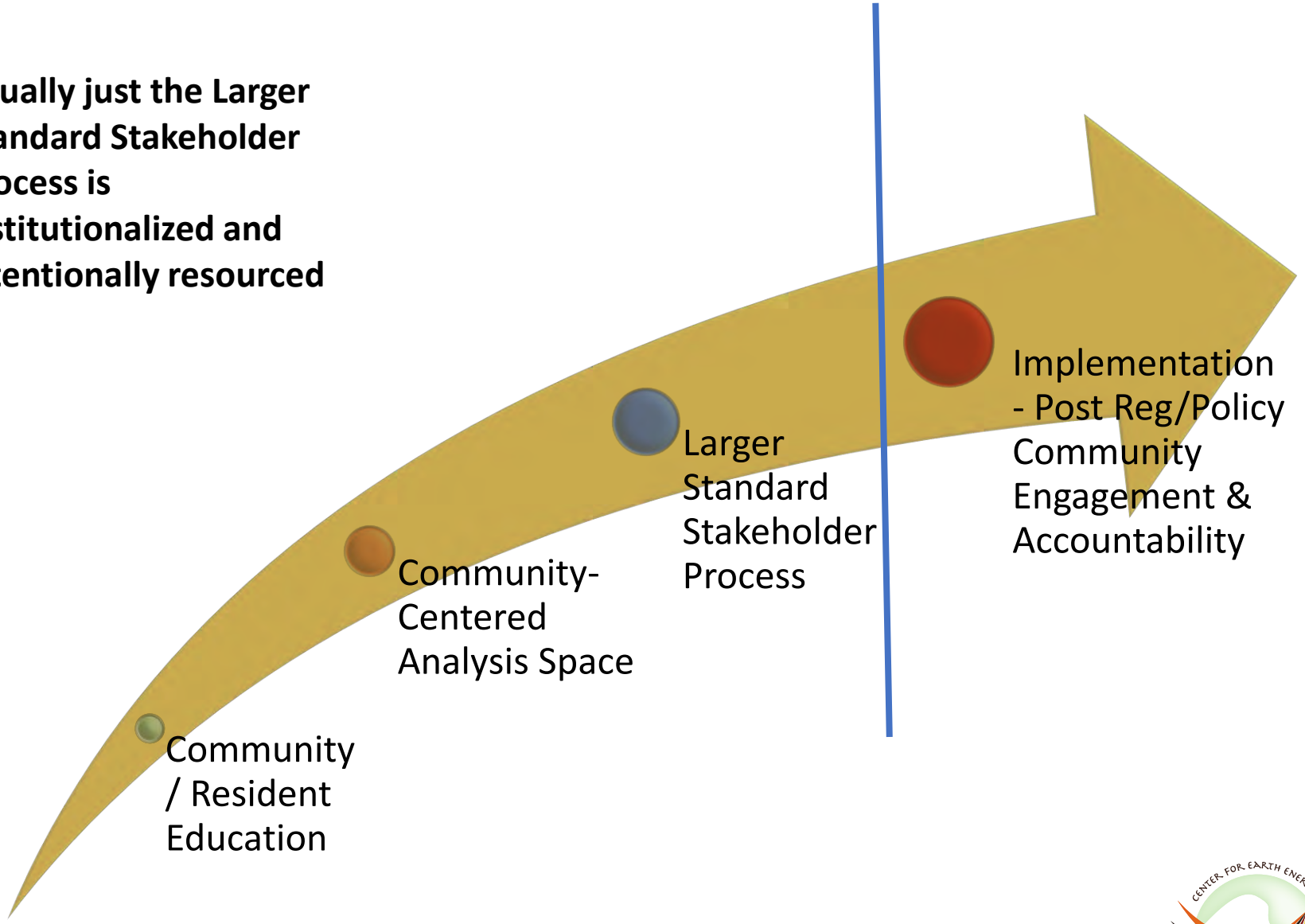
- Between Community-Centered Analysis Space and any larger Stakeholder Process
- To be clear on expectations among the two parties - establish working protocols, for the policy/reg in question.
- Negotiated points can include:
  - Governance Protocols (who serves on SP, how EJ recs get discussed, voting, etc)
  - Communication Protocols (amount of notice on decision making, documentation in final reports, etc)
  - Resources provided (stipends, staffing, printing, etc)
  - Facilitation and Agenda Setting (who, how)
  - Trainings (for residents, for state/city staff, who trains, etc)
  - Fundraising

Community / Resident Education

Build Basics/Fundamentals:
What are regulations?
How do they get developed?
What is cumulative pollution?
What are the key issues identified by the community for the policy/reg?

Iterative Community Engagement Arc

Usually just the Larger Standard Stakeholder Process is institutionalized and intentionally resourced



Justice in environmental policy and regulations means addressing the distribution of power…

. . . the unequal distribution of power, in all its forms, is the major source of inequity, and that community empowerment can have a sustained impact on this distribution of power.

'Empowerment' refers to the process by which communities re-negotiate power in order to gain control over the factors that shape their lives, including ***access to information and opportunity, decision-makers, and policy making****."*

(Jandu, Bourcier, Choi, & Yen, p. 2)

Interactive

- Goal: Indigenous, low income and communities of color disproportionately impacted by industrial air pollution in Oregon can influence decision-making and make their community as healthy as possible.

- Activity: Each table come up with an essential component of community engagement they feel is critical to the Oregon process moving forward. Speak to why it would be critical.

Thank You

Shalini Gupta, Executive Director
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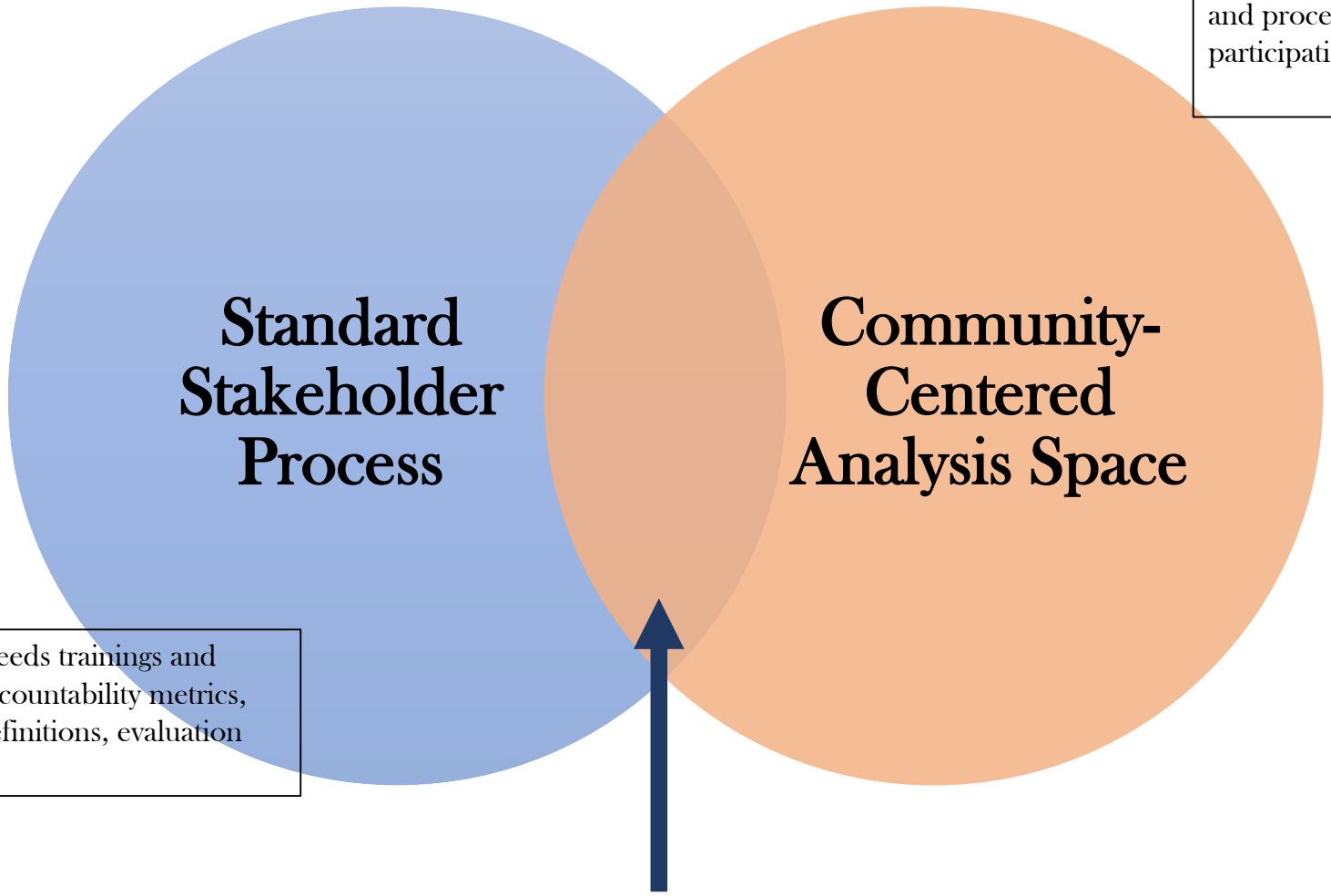


MOU governs this interaction

Work needs to be done in all areas

EPA's Diesel Initiative as a Case Study of Incorporating EJ into Air Quality Programs

Dan Brown
EPA Region 10, Office of Air and Waste

March 15, 2017
Portland EJ and Air Toxics Workshop

How Do Public Agencies Work together to Protect Air Quality

- The Clean Air Act (1990)
  - Describes federal and state roles and responsibilities
  - Prescribes how EPA is to set standards for sources of air pollution
  - Establishes funding to help supports State Agencies
- Two main categories of Air Pollutants:
  - Criteria Pollutants (National Ambient Air Quality Standards)
  - Air Toxics

Regulation of Diesel Emissions

- CAA prohibits states from setting standards for motor vehicles *(with limited exception for CA)*
  - States do maintain the right to regulate the use and operation of vehicles.
- EPA sets standards for vehicles and fuels
  - Gasoline (taking lead out)➡ enabled emission controls on cars
  - Diesel (taking sulfur out) ➡ enabled emission controls on cars

Diesel Engine Standards

- Clean diesel regulations do a lot for new engines:
  - 90% reduction in diesel emissions with annual health benefit of $290 Billion & cost of $15 Billion
- But do nothing to reduce emissions from existing* engines (even though the technology exists)

Heavy-Duty Highway
sales 800,000 / yr
40B gallons / yr
final rule 2000
fully phased in 2010

Nonroad Diesel
sales over 650,000 / yr
12B gallons / yr
final rule 2004
fully phased in 2015

(*except) Locomotive /Marine
sales 40,000 marine engines,
1,000 locomotives / yr
6B gallons / yr
final rule 2008
fully phased in 2017

Diesel Particle Matter (DPM) and Your Health

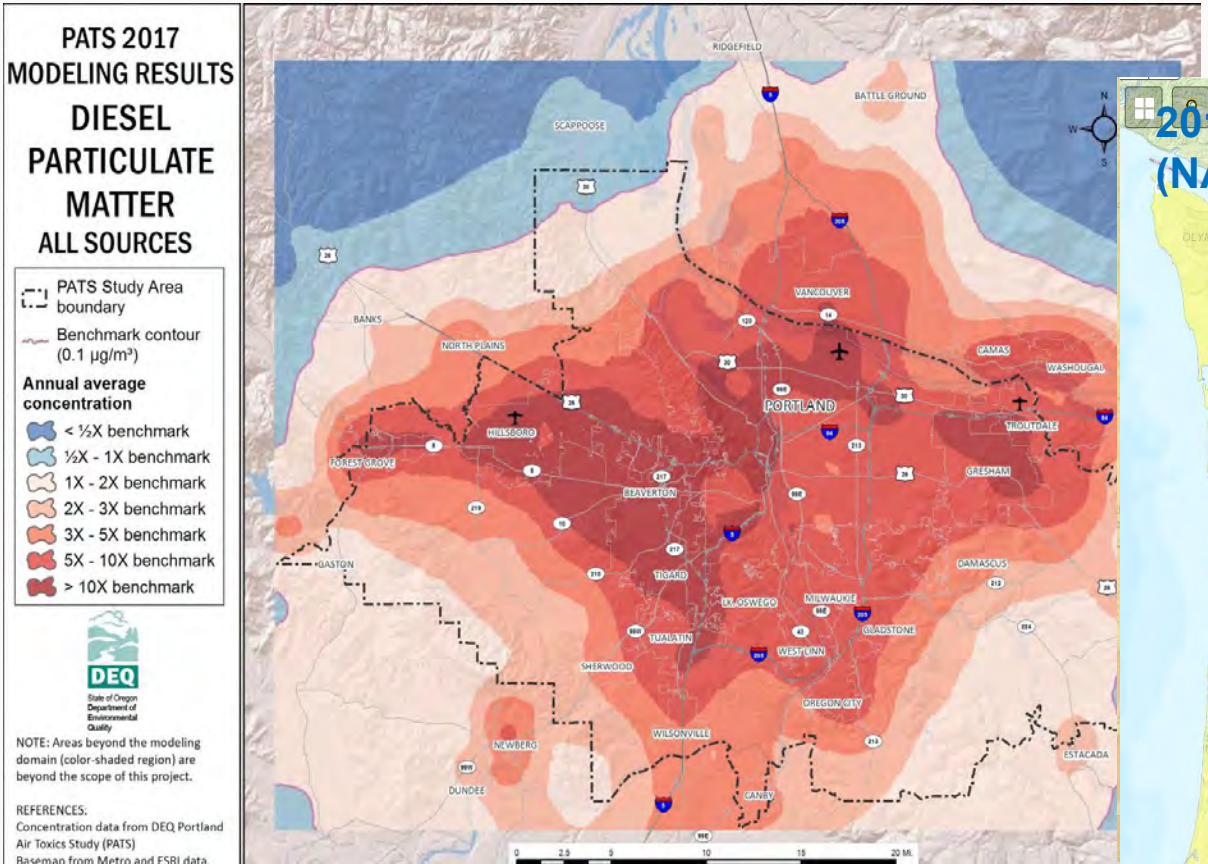
- Exposure to diesel exhaust can
  - lead to asthma and respiratory illnesses
  - worsen existing heart and lung disease
  - result in increased numbers of emergency room visits.

Particle Size and Potential Health Problems

$PM_{2.5}$ (such as from diesel exhaust) poses the greatest problems since it can get deep into lungs and even pass into the blood stream

Environmental Justice Lens

- National regulations produce significant reductions over time, but do not address disproportionately impacted communities.



A Better EJ Tool

Diesel Emission Reduction Act (DERA)

- Established by Energy Policy Act of 2005, gives EPA authority to award grants to reduce diesel emissions in areas **disproportionately impacted** by diesel emissions.
- EPA requests proposals for projects that use a **community-based multi-stakeholder collaborative process** to reduce emissions
- Implemented by EPA Regional Offices through public-private collaboration.

WEST COAST COLLABORATIVE
A public-private partnership to reduce diesel emissions

RMCDC
ROCKY MOUNTAIN CLEAN DIESEL COLLABORATIVE

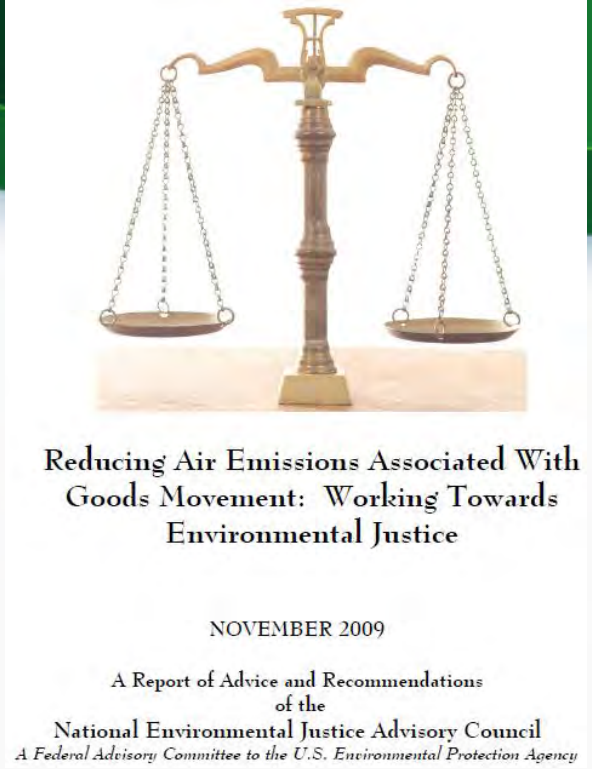
Blue Skyways COLLABORATIVE

MIDWEST CLEAN DIESEL INITIATIVE

Mid-Atlantic Diesel Collaborative
on the route to cleaner air

Northeast Diesel Collaborative

Southeast Diesel Collaborative



- **2007 EPA asked the National Environmental Justice Advisory Council for advice** on addressing disproportionate impacts to communities from goods movement
  - Ports, rail yards, trucking centers, marine vessels – lots of older diesel equipment.
  - Approximately 39 million people live near ports
- **2009 NEJAC gave recommendations**

- **2013 EPA Launched National Conversation With Port Stakeholders**
  - Convened stakeholder-focused webinar listening sessions
    - Community-webinar theme: Community Impacts and Collaborative Solutions
  - Conducted National Port Stakeholder Summit
  - Convened Technical Workshop w/ stakeholders prioritizing Environmental Justice

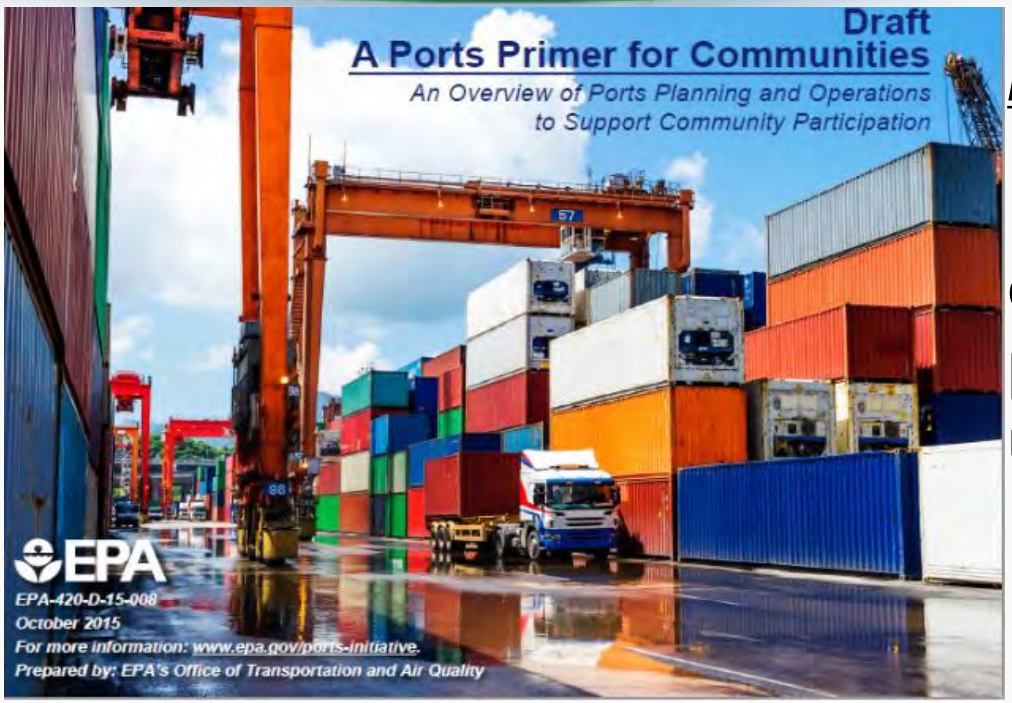
Collaboratively-developed Near-port Community Capacity Building Tools

Near-Port Communities

- Draft Port Primer for Communities
- Draft Community Action Roadmap
- Draft Environmental Justice Primer for Ports

www.epa.gov/ports-initiative

TalkAboutPorts@epa.gov



An interactive tool and reference document that characterizes the port industry sector including environmental and community health impacts associated with port activities

Draft

Ports Primer for Communities:

Help community's participate effectively in decision-making process by increasing local understanding of:

- The role of ports;
- How ports can impact local land use, economy and environment; and
- Tools and resources that have been successful in other communities.

7.2. Air Emissions

Near-port communities are often disproportionately impacted by air emissions due to port operations, goods movement operations and other industries that may be co-located with ports. Air emissions at ports also impact regional air quality.

EPA sets national air quality standards that are implemented by states and tribal agencies. There is also growing momentum within the port sector to reduce emissions and improve air quality.

- Pollutants from Diesel Engines
- Emission Reduction Approaches
- Clean Air Programs at Ports
- Metropolitan Planning Organizations and Regional Air Quality
- EPA SmartWay Program
- North American Emission Control Area

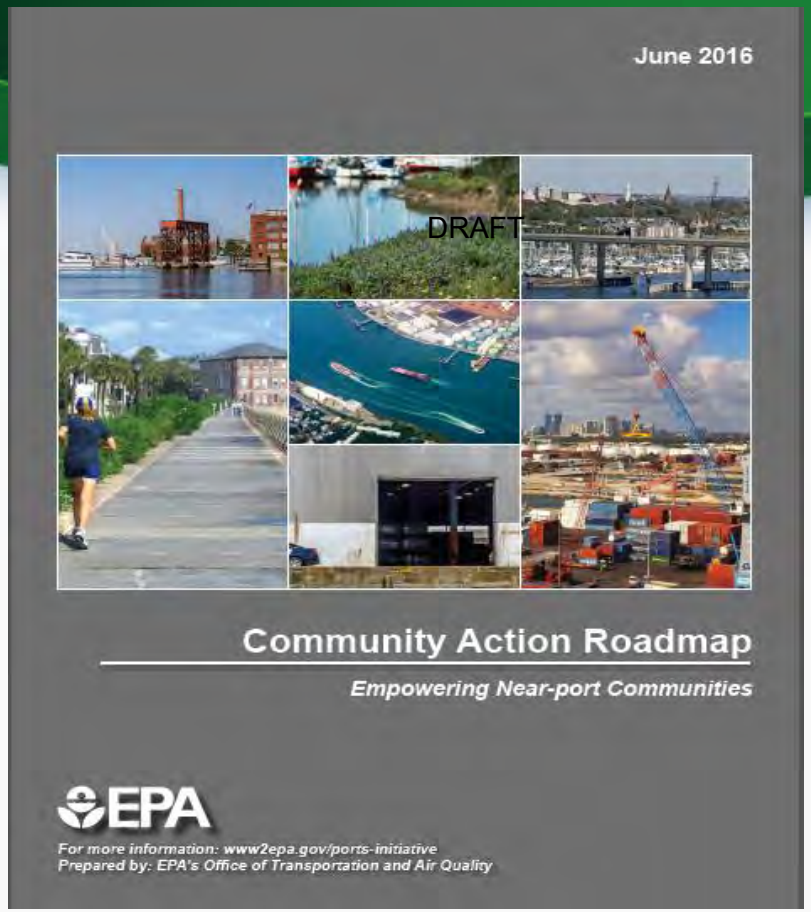
Pollutants from Diesel Engines[1]

Reducing pollutants from diesel engines is a significant concern for ports and near-port communities. Equipment, vehicles and marine vessels that burn diesel fuel are the primary source of combustion-related emissions at port facilities.

Pollutants released by diesel engines include particulate matter (PM), nitrogen oxides, (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), and air toxics. The level of sulfur in the fuel being used is directly proportional to the level of SO_X emissions generated. Levels of other pollutant emissions are related to the physics and chemistry of the diesel combustion process. Additionally, some of the pollutants are inversely linked in the combustion process. This means that engines designed to reduce one pollutant will naturally raise the levels of another pollutant. Therefore, engine modifications must be combined with other emission control technologies in order to effectively reduce the levels of all four of the primary diesel emission pollutants. It is good news for improving community health that EPA has developed regulations requiring production of cleaner diesel engines. However, diesel equipment lasts a long time so the turn over to newer equipment can take quite a while.

Because of the environmental and health impacts of diesel emissions, many ports that have developed air quality programs include a central focus on reducing NO_x, SO_x and PM.[2]

Diesel engines are also a source of greenhouse gas (GHG) emissions and affect climate change. A number of strategies can help reduce impacts of diesel emissions on air quality, as well as on global climate concerns such as impacts on ecosystems, sea level, weather patterns and agriculture.

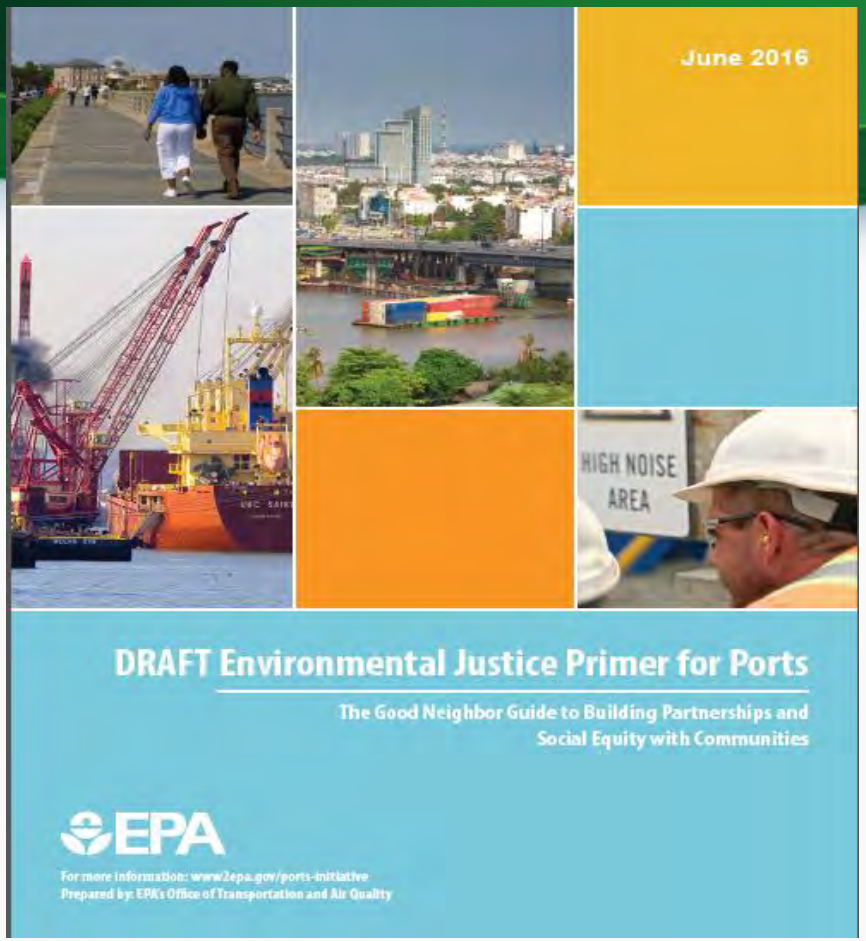


A companion to the Ports Primer providing step-by-step process for building capacity and preparing community stakeholders to engage nearby port facilities and influence decision-making on issues of community interest

Community Action Roadmap

- **Step 1**: Prioritize Goals and Concerns
- **Step 2**: Identify Levers for Change
- **Step 3**: Build Relationships
- **Step 4**: Develop an Action Plan
- **Step 5**: Make Your Case
- **Step 6**: Build Momentum for Change

Community Action Resources



Designed to inform the port industry sector of the perspectives, priorities, and challenges often unique to communities with EJ concerns.

This resource provides step-by-step guidance to improve the effectiveness of port-community engagement.

Steps in the Good Neighbor Roadmap Process

Step 1: Assess Your Community Engagement Approach

Develop a strong policy foundation reflecting your port's commitment to meaningfully engage the near-port community in decisions and strive for solutions that improve their quality of life.

Step 2:

Assess the nature of your port's relationships with the broad spectrum of stakeholders and begin building trust and connections with near-port community organizations and leadership.

Step 3: Gather Community Concerns and Goals

Engage the near-port community to gather current community goals and concerns, even those that may seem beyond current port jurisdiction.

Step 4: Identify Levers for Change

Identify upcoming plans and projects at the port as well as related public, private and non-profit agencies to identify opportunities to involve the near-port community and address community goals.

Step 5: Develop a Good Neighbor Strategic Plan

Work in partnership with the community to document how and when the port and related agencies plan to engage the near-port community and address priority concerns over the next 3-5 years.

Step 6: Act, Measure and Sustain Progress

Collaborate on an early-win project, maintain momentum with consistent action and communication, formalize community partnerships and share progress regularly.

Summary

- The Clean Air Act dictates how EPA sets standards.
- National standards advance clean technology, but do not target highly impacted communities.
- Outside the Clean Air Act, we have limited resources to develop voluntary/collaborative approaches to address highly impacted communities
- We have had support from Congress to pursue such projects under the Diesel Emission Reduction Act
  - DERA Grants – New 2017 RFP to be announced soon
  - Capacity Building Tools – Community Action Roadmap
    - Pilot Projects in Seattle, Savanah and New Orleans
    - Feedback welcome at **TalkAboutPorts@EPA.GOV**

Incorporating Environmental Justice into Everyday Actions and Policies

EPA Making a Visible Difference Portland
Environmental Justice and Air Toxics Workshop
Portland Community Engagement and Capacity Building
Portland, Oregon
March 15, 2017

Charles Lee
U.S. Environmental Protection Agency

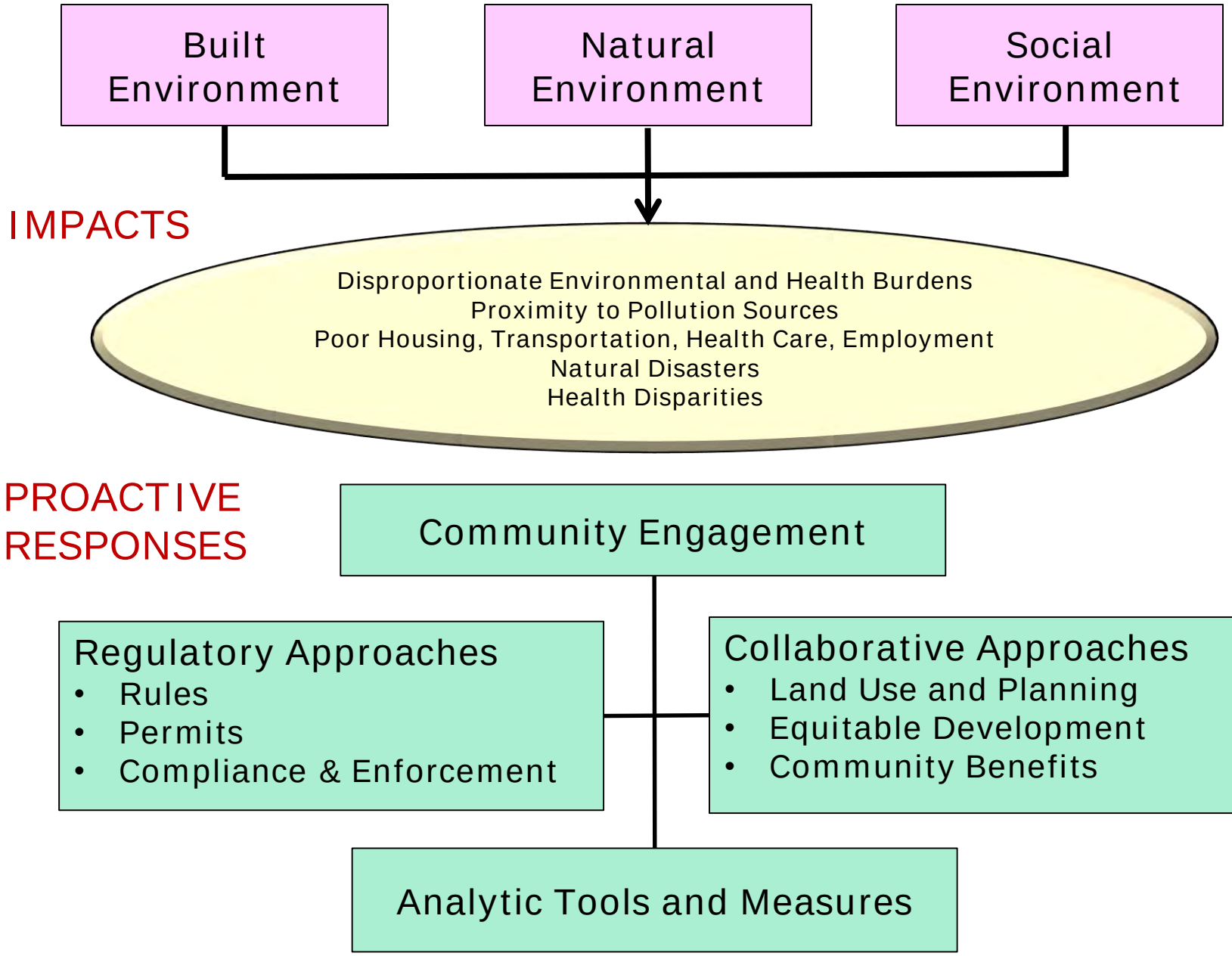
Workshop Goals

- Develop shared understanding of EJ principles for air toxics issues in Oregon
- Build relationships across sectors and achieve meaningful interactive communications

Definition of Environmental Justice

- "Fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

  U.S. Environmental Protection Agency


Built Environment
Natural Environment
Social Environment
IMPACTS
Disproportionate Environmental and Health Burdens
Proximity to Pollution Sources
Poor Housing, Transportation, Health Care, Employment
Natural Disasters
Health Disparities
PROACTIVE RESPONSES
Community Engagement
Regulatory Approaches
• Rules
• Permits
• Compliance & Enforcement
Collaborative Approaches
• Land Use and Planning
• Equitable Development
• Community Benefits
Analytic Tools and Measures

Key Milestones in Environmental Justice

- Warren County, NC (1982)
- Toxic Wastes and Race Report (1987)
- EPA Office of EJ (1992)
- New Hampshire EJ Policy (1993)
- Executive Order 12898 (1994)
- California EJ Law (1998)
- EJ Collaborative Problem Solving (2004)
- Oregon EJ Task Force (2009)
- Plan EJ 2014 (2010)

Key Statutory and Policy Frameworks

- Executive Order 12898 (and Presidential Memorandum)
- EJ Legal Tools Document
- EJSCREEN (CalEnviroScreen)
- Rulemaking Guidance
- Promising Practices – NEPA
- EJ Collaborative Problem Solving

Key Statutory and Policy Frameworks - State

- California
- Connecticut
- South Carolina
- Minnesota
- New York
- Massachusetts
- Maryland

Community/Stakeholder Involvement - Federal

- OAQPS Efforts in training, engagement and public input
- EJSCREEN public release process
- Community collaboration tools and near port pilots

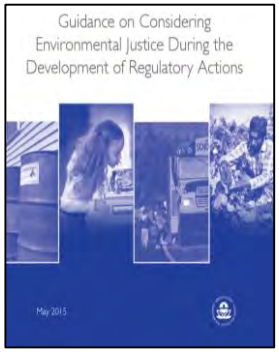
Community Involvement - State

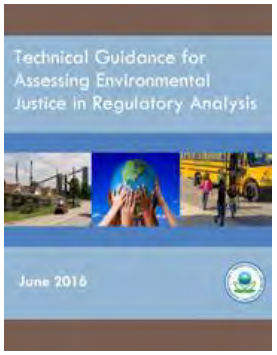
- South Carolina Department of Health and Environmental Control Community Involvement Efforts

- ECOS Green Report on "Community Participation and Equity Considerations in State Permitting Programs"

Guidance - Federal

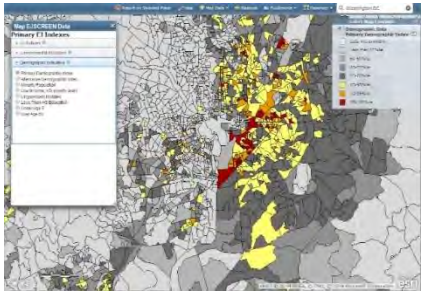
- EPA EJ and Rulemaking Guidance
  - Guidance on Considering Environmental Justice During the Development of Regulatory Actions
  - Technical Guidance for Assessing Environmental Justice in Regulatory Analysis
- EJ Related Questions for Analysis
  - Characteristics related to proximity to source or stressor
  - Differential exposures to a stressor
  - Population characteristics, particularly those contributing to greater vulnerability





Screening and Assessment Tools - Federal

- EJSCREEN
  - Nationally consistent EJ screening and mapping tool
  - Combines environmental & demographic indicators



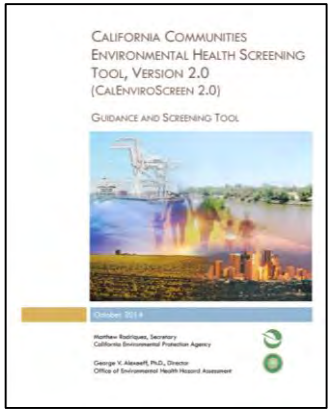
- C-FERST/T-FERST
  - Learn about environmental issues & risks in their communities
  - Compare conditions
  - Explore exposure & risk reduction options

RESEARCH AND PRACTICE

The Environmental Protection Agency's Community-Focused Exposure and Risk Screening Tool (C-FERST) and Its Potential Use for Environmental Justice Efforts

Screening and Assessment Tools - State

- CalEnviroScreen
  - Identifies California communities disproportionately burdened by multiple pollution sources
  - Resulted from development of scientific foundation for cumulative impacts



- Minnesota Cumulative Air Permitting Protocol
  - Resulted from unique statute requiring assessment of cumulative levels and effects
  - Applies to area in South Minneapolis

Take-Aways

- Understand statutory and policy frameworks
- Basic guidance, screening and analytic tools now exist
- Make use of best practices in stakeholder communications and engagement

Incorporating Meaningful Involvement at the national Level

Portland Community Engagement and Capacity Building Workshop

Portland, OR
March 15, 2017

Holly Wilson

Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Research Triangle Park, NC

Background

- What is EJ and Meaningful Involvement and engagement?

EPA Environmental Justice

- E.O. 12898 calls for federal agencies "to the greatest extent practicable and permitted by law, to identify . . . and address . . . as appropriate, disproportionately high and adverse human health or environmental effects of agency programs, policies and actions on minority populations and low income populations"

- EPA defines Environmental Justice (EJ) as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies"

Fair Treatment and Meaningful Involvement

- "Fair Treatment" means that no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental and commercial operations or programs and policies.
- "Meaningful Involvement" means that:
  1. potentially affected community members have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health;
  2. the public's contribution can influence the regulatory agency's decision;
  3. the concerns of all participants involved will be considered in the decision-making process; and
  4. the rule writers and decision-makers seek out and facilitate the involvement of those potentially affected.

How Does Meaningful Involvement and Engagement Apply to OAR Actions?

- Rulemaking and Guidance Development
- EJ and Permitting
- Capacity Building

IAP2 Spectrum of Public Participation

Increasing Level of Public Impact

Inform	Consult	Involve	Collaborate	Empower
Provide Information • Fact Sheets • Websites • Open Houses	Obtain Feedback • Public Comment • Public Meetings • Focus Groups	Two-Way Conversations • Advisory Groups • Workshops • Deliberative Polling	Partner with Public to Develop Preferred Solution • Consensus Building • Participatory Decision-making	Public Makes Decisions • Voting • Citizen Juries • Delegated Decision-making

Policy and Tools That Support Meaningful Involvement

- Plan EJ 2014 and Plan EJ 2020 is a roadmap helping EPA integrate environmental justice into the agency's programs, policies, and activities.
- Programs, Policies and Tools to help support meaningful engagement
  - OGC EJ Legal Tools (complete)
    - A living document using terms **"could" and "can**" far more than "cannot" with respect to CAA programs and authorities.
  - EJ in Rulemaking Process Guidance (Complete)
    - EJ should be a consideration early, often and throughout EPA actions.
  - EJSCREEN
  - OAQPS instrumental in the development.
  - Technical Guidance for Assessing EJ in Regulatory Analysis (2016)
    - Many principles within the draft document are predicated on activities already taking place within OAQPS.
  - EJ in Permitting –
  - https://www.federalregister.gov/documents/2012/06/26/2012-15605/epa-activities-to-promote-environmental-justice-in-the-permit-application-process
  - OAR is the lead on this workgroup.

Examples of EJ analysis/outreach impacting rulemaking

- **Mercury Air Toxics Rule -** necessary and appropriate finding, identified several populations impacted by mercury from power plants through subsistence fishing or high fish diets, including low SES blacks in the southern US, Tribal communities with subsistence fishing, some Asian populations
- **PM NAAQS -** identified low SES populations as "sensitive" and thus needing protection under the NAAQS.
- **Petroleum Refinery Residual Risk and Technology Review -** identified fence line monitoring as a compliance tool for the proposed rule based partially on input from communities.
- **Clean Power Plan** – public involvement requirement, encouragement of EJ analysis by states and CEIP

Meaningful Involvement Process - Rulemaking Activities

- Priority given based on EJ analysis or community concern
- Activities may include:
  - EJ monthly email of recent and upcoming activities
  - Webinars
  - Bi-monthly conference call
  - In person trainings for high priority rules

Meaningful Involvement Process - Rulemaking

- Training Planning
  - Community driven
  - Include upfront discussion of authority used in the rule
  - State and industry participation, when possible
- Timing Possibilities
  - Prior to proposal
  - Post proposal to help support comments
  - Post promulgation to help with implementation

Meaningful Engagement – Capacity Building

- Clean Air Act (CAA) 101
  - Helps communities understand the authorities in the CAA
  - Helps build relationships and strengthens community engagement
  - Identifies how to work with EPA and States
- Permitting Training
  - Helps communities to understand the different types of CAA permits
  - Helps communities work with states and industry on appropriate permits

Meaningful Involvement Activities

- In Person Training Activities
  - EPA Clean Air Act (CAA) Rulemaking and Permit Training, Community Air Permitting Workshop, Birmingham AL
  - CAA and Permitting Training, Detroit MI
  - EPA CAA Rulemaking and Permitting Train the Trainers for EJ/Communities Organizations, RTP NC
  - Community Involvement Air Permitting Training, Worcester, MA
  - Many Tribal Trainings with and independent of ITEP

Recent Rule specific In-person Training

- Petroleum Refinery RTR proposal
  - New Orleans, LA and Oakland, CA
- Clean Power Plan
  - Preproposal – Washington DC
  - Post proposal
    - Tribal governments training at TAMS Center
    - Community trainings
      - Port Arthur TX, Farmington NM, Tuba City AZ and Washington DC

Trainings in FY16 – Making a Visible Difference Communities

- Detroit MI – Monitoring and analysis using publically available information (requested by Region 5 and communities)
- New Jersey - CAA Permitting (requested by community)
- CAA and Permitting – New Port News VA (requested by community)
- Rule specific Training for Mossville on PVC

Lessons Learned About Trainings – In Person Training

- Create a safe environment
  - Good facilitator
  - Good ground rules
- Manage Expectations –
  - Community - help people understand what you can and can't do
  - Your own – you're not going to make everyone happy
  - Other participants (Industry and States)
- Try to bring all important voices
  - Regional Office
  - state, local agency
  - Industry

Lessons Learned About Trainings – In Person Training

- Community Driven Design
  - Trainings may not look the same but will have buy in from the community and you will give them not only EPA's information but also what they see as a need.
  - Be flexible to adjust the agenda
  - Do your homework – explore culture, history and sensitivities for the community
- Hands on activities are important!

Lessons Learned – Best Practices for Webinars and Phone Calls

- Provide Plenty of Advanced Notice
- Operator-assisted calls can help with large meetings
- Start with housekeeping
- Webinars
  - Dry runs
  - Make sure internal roles are clear

Lessons Learned and Helpful Hints

- Don't take public anger as a personal attack – it's really not about you.
- Listen – We have two eyes, two ears and one mouth we need to use them proportionately
- Don't promise more than you can deliver and deliver what you promise.
- Follow up! Building relationships means being responsive.
  - Return phone calls, emails, including on-going discussions.

Appendix – CORE VALUES AND GUIDING PRINCIPLES FOR THE PRACTICE OF PUBLIC PARTICIPATION – NEJAC Model for Plan for Public Participation

- People should have a say in decisions about actions which affect their lives.
- Public participation includes the promise that the public's contribution will influence the decision.
- The public participation process communicates the interests and meets the process needs of all participants.
- The public participation process seeks out and facilitates the involvement of those potentially affected.
- The public participation process involves participants in defining how they participate.
- The public participation process communicates to participants how their input was, or was not, utilized.

CORE VALUES AND GUIDING PRINCIPLES FOR THE PRACTICE OF PUBLIC PARTICIPATION

- The public participation process provides participants with the information they need to participate in a meaningful way.
- Involve the public in decisions about actions which affect their lives.
- Maintain honesty and integrity throughout the process.
- Encourage early and active community participation.
- Recognize community knowledge.
- Use cross-cultural methods of communication.
- Institutionalize meaningful public participation by acknowledging and formalizing the process.
- Create mechanisms and measurements to ensure the effectiveness of public participation.
- **Interact is published by the International Association of Public Participation Practitioners, a non-profit corporation established in 1990 to serve practitioners throughout the world seeking practical experience designing and conducting public involvement programs.*

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Update on Cleaner Air Oregon

Gabriela Goldfarb
Oregon Health Authority

Richard Whitman
Oregon Department of Environmental Quality

CleanerAirOregon

Cleaner Air Oregon – DEQ Context

CleanerAirOregon

Cleaner Air Oregon Background Information

- Existing regulations reduce toxics for many facilities

- Gaps
  - Federal regulations aren't Oregon-specific
  - Don't cover all industry types and toxics
  - Don't account for impact to health of people living near facilities

- New opportunity for regulations that address health

- Washington, California and other states have programs to learn from

CleanerAirOregon

Cleaner Air Oregon & Environmental Justice

Exploring:

- Cumulative Impacts from Multiple Pollutants from a Single Facility
- Cumulative Impacts from Multiple Facilities in Close Proximity
- EJ Screen, Other Tools to Inform Implementation

CleanerAirOregon

What Cleaner Air Oregon will do

- Set health-based limits on industrial emissions
- Assess emissions based on human health safety standards
- Cover a comprehensive range of air toxics and industrial facilities statewide
- Give clear guidance to business
- Improve public health by reducing air toxics

CleanerAirOregon

Understanding Air Toxics Emissions

- Emission Inventory
  - Estimate air toxics emissions
  - Identify pollutants causing the most risk
  - Identify facilities and plan CAO implementation
- Reports due from March to September 2017
  - DEQ will review, analyze and, compile using best practices and scientific methods

CleanerAirOregon

Cleaner Air Oregon Engagement and Outreach

- Visit www.cleanerair.oregon.gov
- Follow us on social media
  - –Cleanerairoregon
  - –@cleanerairOR
- Email: info@cleanerairoregon.org

- 2 webinars: air quality 101, air toxics permitting
- 4 technical workgroup meetings
- 4 regional forums: Pendleton, Bend, Medford, Portland
- 6 policy advisory committee meetings: 3 complete

Cleaner Air Oregon Policy Advisory Committee

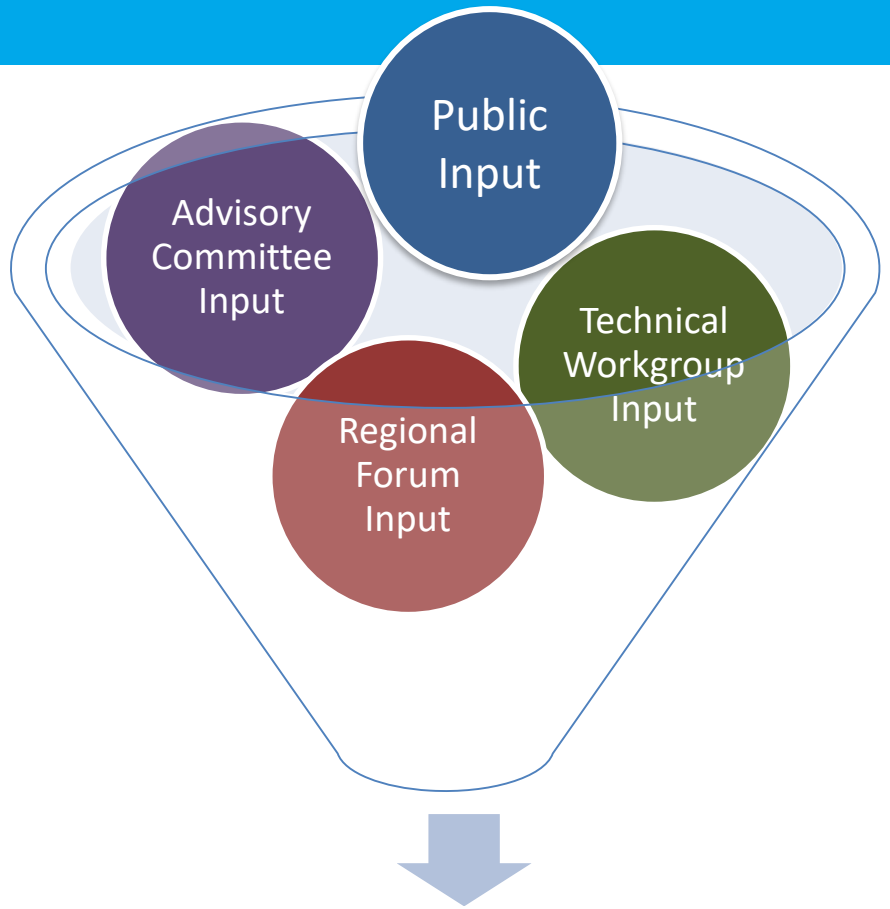
- Policy Advisory committee process underway

  - Using input from technical workgroup, regional forums and agency analysis, the policy advisory is discussing and considering:

- Program scope
- Pollutant scope and setting risk based concentrations
- Setting and achieving acceptable risk levels
- Cumulative risks
- Screening and risk assessment
- Implementation

CleanerAirOregon

Next steps for Cleaner Air Oregon

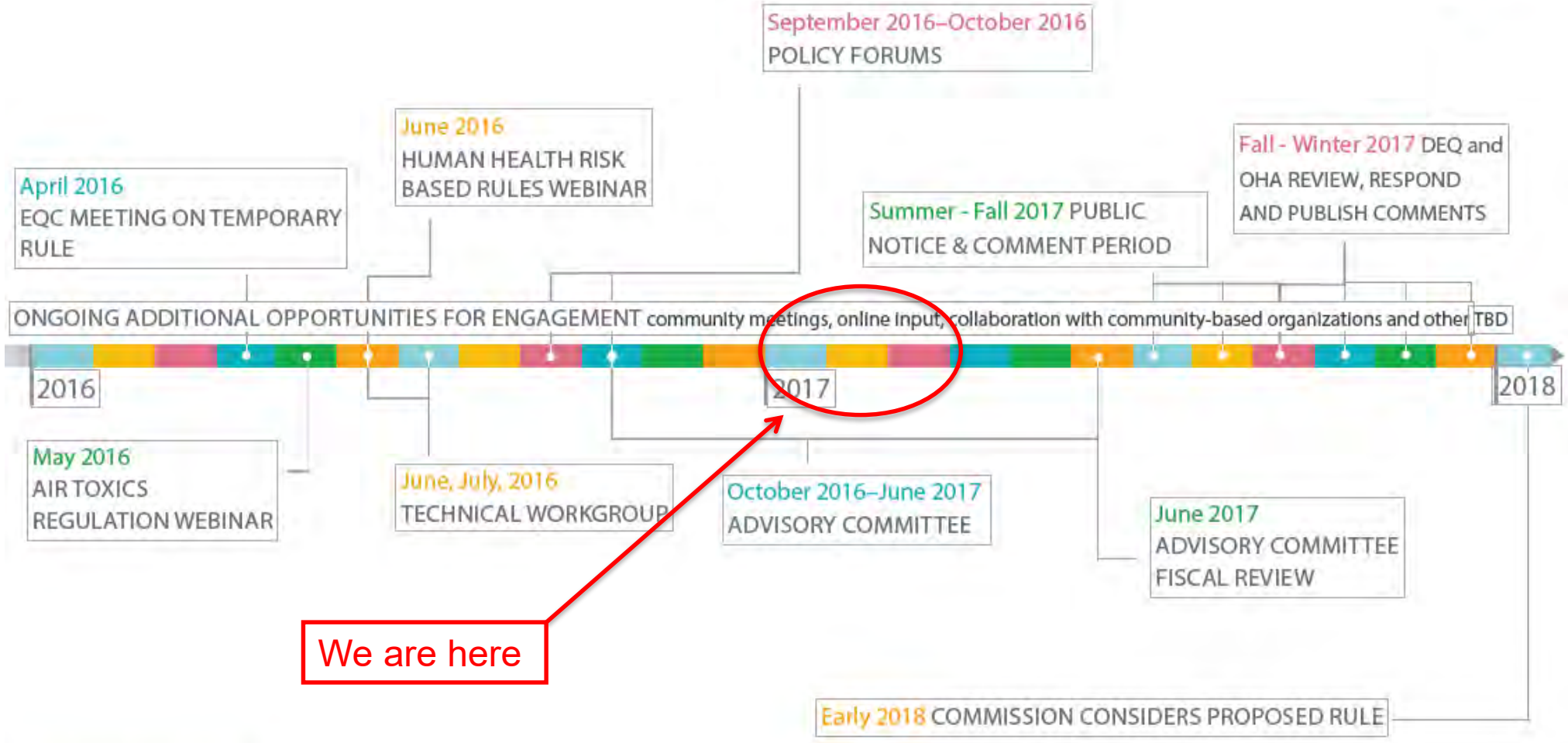


- Rulemaking schedule
  - Summer – Fall 2017, proposed regulations scheduled for public notice and comment
  - Fall - Winter, 2017, DEQ and OHA will summarize, consider and respond to public comment, and prepare the necessary documents for the Environmental Quality Commission
  - Early 2018, Environmental Quality Commission to consider rule adoption

Cleaner Air Oregon

CREATING HUMAN HEALTH-BASED INDUSTRIAL AIR TOXICS REGULATIONS

Timeline for public engagement that fosters active participation



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