



Department of Environmental Quality

Proposed Adoption of Federal Air Quality Regulations



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Presentation Outline

- **Background**
- **Proposed adoption of new federal regulations**
- **Proposed rules to implement new federal emission guidelines**
- **Proposed adoption of new federal plan**
- **Proposed re-adoption of amended federal regulations**
- **Recommendation**



Background Information – Federal AQ Regulations

National Emission Standards for Hazardous Air Pollutants (NESHAP)

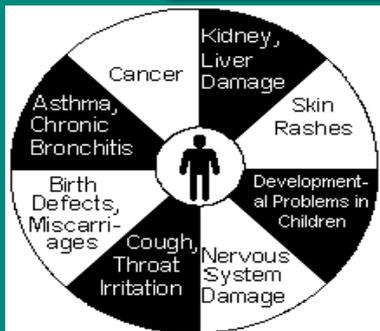
**New
Sources**



**Existing
Sources**



Pollutants



Hazardous Air Pollutants (HAP)

Sources



**Major Sources
(\geq 10/25 tons)**

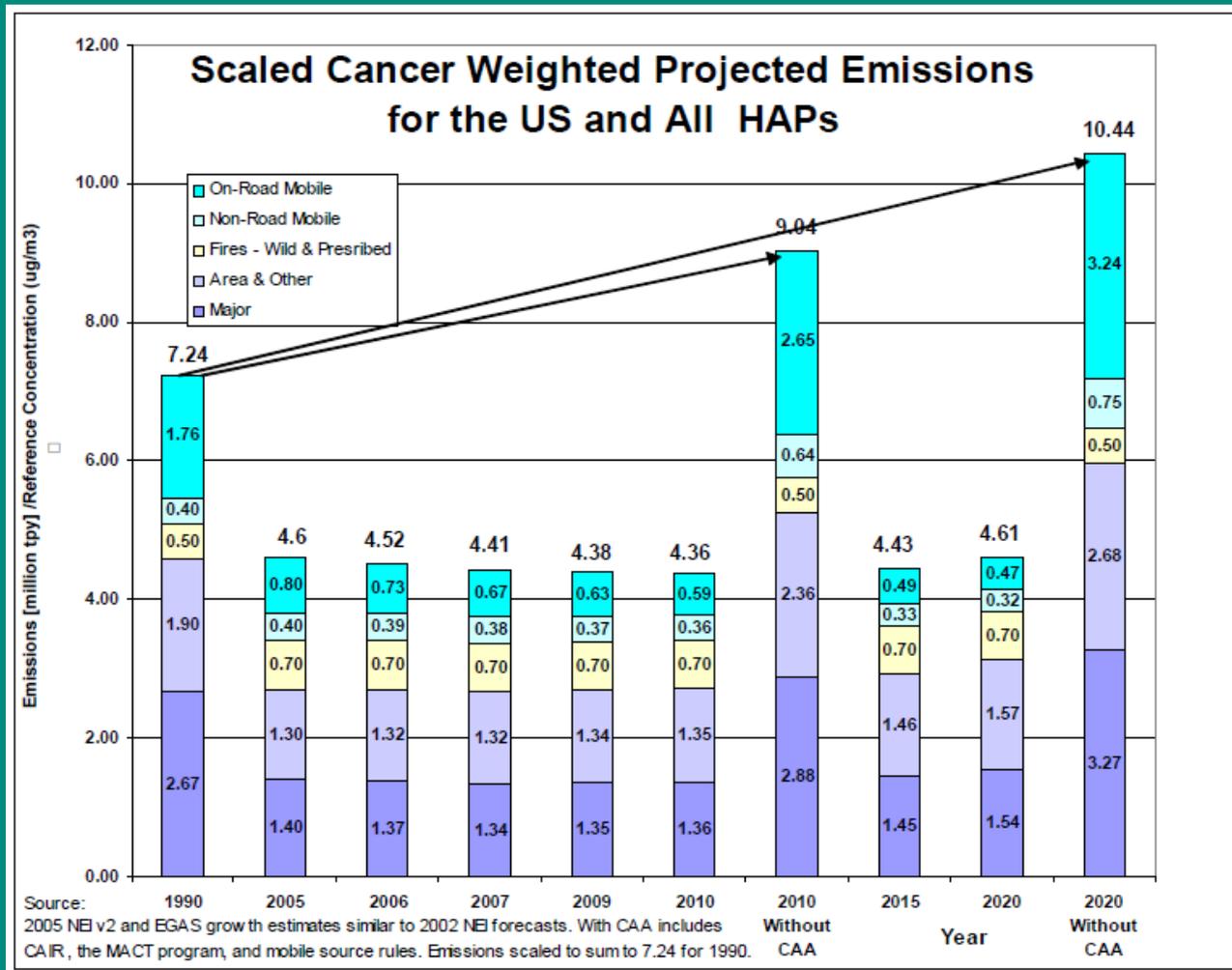


**Area Sources
($<$ 10/25 tons)**





Background Information – NESHAP Program Benefits





Background Information – Federal AQ Regulations

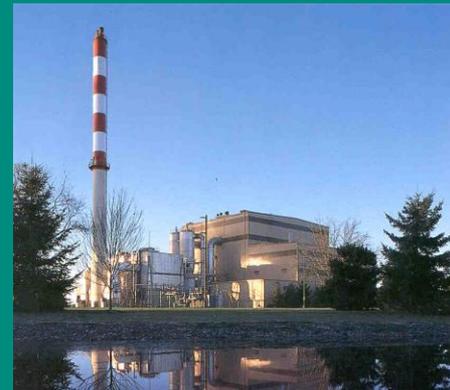
New Source Performance Standards (NSPS)

New
Sources

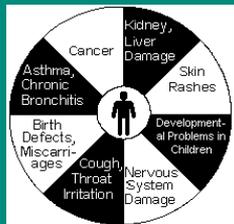


Emission Guidelines

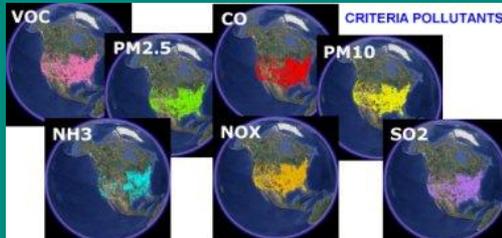
Existing
Sources



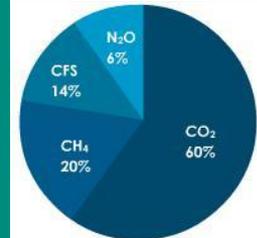
Pollutants



HAPs



Criteria Pollutants



GHGs

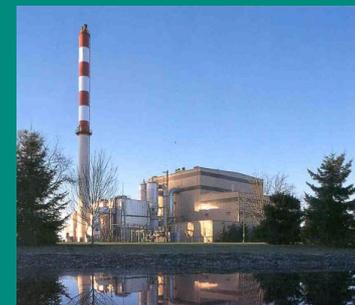
Sources



Significant Sources



Background Information – Federal AQ Regulations



**New Source
Performance
Standards (NSPS)**

**National Emission
Standards for Hazardous
Air Pollutants (NESHAP)**

**Emission Guidelines
(minimum performance
standards)**

EPA Adoption

**Apply upon EPA adoption
(not much flexibility for states)**

EPA Adoption

**Do not apply upon EPA adoption
(more flexibility for states)**

State Adoption/Implementation

**Apply upon state adoption or
adoption of federal plan**



Proposed Rules

Adopt new federal standards

Boilers



- New major source NESHAP (full adoption)
- New area source NESHAP (partial adoption)
 - Permitted sources (Title V and ACDP)
 - DEQ implementation through permitting programs
 - Larger boilers (> 10 million Btu per hour)
 - Requirement - emission controls, tune-ups, energy assessment
 - Unpermitted sources
 - EPA implementation
 - Smaller boilers (< 10 million Btu per hour)
 - Requirement - tune-ups
 - Mostly schools
 - DEQ Small Business Program Assistance
- HAPs reductions (nationwide)
 - HAPs addressed – acid HAPs, metal HAPs, organic HAPs
 - HAPs reduced – 32,000+ tons per year
 - PM and VOC reduced – 54,000+ tons per year



Proposed Rules Adopt new federal standards

- New NESHAP and two new NSPSs (partial adoption)
- Permitted sources (Title V and ACDP)
 - DEQ implementation through permitting programs
 - Large uncertified engines - significant requirements (see next slide)
 - Requirements - emission controls and ongoing testing
- Unpermitted sources
 - EPA implementation
 - Certified engines; or
 - Small uncertified engines - less significant requirements
 - Emission controls and one-time testing; or
 - Tune-ups
 - Mostly schools
 - DEQ Small Business Program Assistance
- HAPs reductions (nationwide)
 - HAPs addressed – acid HAPs, metal HAPs, organic HAPs
 - HAPs reduced – 2,700+ tons per year
 - PM, CO, NOx and VOC reduced – 85,000+ tons per year

Stationary Internal Combustion Engines





Proposed Rules Adopt new federal standards

Stationary Internal Combustion Engines

Standard	Engine Type	Engine Size	Compliance Option	Testing Requirements	Who Would Implement
NESHAP	Non-emergency	> 500 HP	Emission standards	Initial/Ongoing	DEQ
		300 < HP < 500	Emission standards	Initial	EPA
		< 300 HP	Tune-ups	None	EPA
	Emergency	Any	Tune-ups	None	EPA
NSPS Spark Ignition	Non-emergency	> 500 HP	Certified engine	None	EPA
			Emission standards	Initial/Ongoing	DEQ
		< 500 HP	Certified engine	None	EPA
			Emission standards	Initial	EPA
	Emergency	Any	Certified engine	None	EPA
			Emission standards	Initial	EPA
NSPS Compression Ignition	Non-emergency	> 30 liters per cylinder	Emission standards	Initial/Ongoing	DEQ
			Certified engine	None	EPA
		> 500 HP	Emission standards	Initial/Ongoing	DEQ
			Certified engine	Initial	EPA
	< 30 liters/cylinder & < 500 HP	Emission standards	Initial	EPA	
		Certified engine	Initial	EPA	
Emergency	Any	Certified engine	Initial	EPA	
		Emission standards	Initial	EPA	



Proposed Rules Adopt new federal standards



Adopt by reference two additional new NSPSs:

- **Crude oil and natural gas production, transmission and distribution**
 - **Constructed after Aug. 23, 2011**
- **Nitric acid plants**
 - **Constructed after Oct. 14, 2011**



Proposed Rules – Adopt rules to implement federal emission guidelines

Emission Guidelines

- Minimum performance standards
- State required to:
 - Submit negative declaration (no sources);
 - Adopt rules and submit state plan; or
 - Request delegation of federal plan

Commercial/Industrial Solid Waste Incinerators

- Two Oregon sources subject to standards
- Adopt emission guidelines mostly by reference
- Submit state plan

Hospital/Medical/Infectious Waste Incinerator

- One Oregon source subject to recordkeeping, not standards
- Adopt federal plan by reference
- Submit delegation of federal plan request





Proposed Rules Adopt by reference – amended federal standards



- **NESHAPs:**

- Address residual risk and technology advances
 - Chromium electroplating
 - Natural gas transmission and storage
 - Oil and natural gas production
 - Pulp and paper
- Provide flexibility, technical corrections, clarification
 - Chemical manufacturing
 - Electric utility steam generating units
 - Petroleum refineries
 - Portland cement

- **NSPSs:**

- Provide flexibility, technical corrections, clarification
 - Commercial/industrial solid waste incinerators
 - Electric steam generating units
 - Hospital/medical/infectious waste incinerators
 - Petroleum refineries
 - Portland cement plants



Summary

- **This rulemaking proposes:**
 - Adoption of new federal standards
 - Re-adoption of amended standards
 - Rules to implement new federal emission guidelines for commercial and industrial solid waste incineration units
 - Adoption of the federal plan for hospital, medical and infectious waste incinerators



Public Process

- **Public comment period – Nov. 18, 2013 – Dec. 23, 2013**
- **Public hearing – Dec. 18, 2013**
- **Attendees – 2**
- **Comments**
 - Northwest Pulp and Paper Association
 - Requested public comment period extension
 - DEQ extended public comment period
 - Associated Oregon Industries
 - Asked to be informed of any additional rule changes
 - EPA
 - Comments related to rules, CISWI Plan and HMIWI Delegation Request
 - DEQ made all requested changes



DEQ Recommendation

- **Adopt the proposed permanent rules in Attachment A as part of chapter 340 of the Oregon Administrative Rules.**
- **Approve the state plan to implement new federal emission guidelines for commercial and industrial solid waste incineration units seen in Attachment B;**
- **Approve the request for delegation of the federal plan for hospital, medical, and infectious waste incinerators seen in Attachment C; and**
- **Direct DEQ to submit the state plan and delegation requests to the EPA for approval.**