Clean Diesel Public Contracting: Regional action for health and cleaner air

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Presentation Overview

• Need
  – Why focus on construction equipment emissions? Video
• Options to address emissions from construction equipment:
  – Regulatory
  – Voluntary
• Evaluating the feasibility of clean diesel public contracting
  – Process
  – Recommendations
• Discussion
Multi-Agency Team
Regional Air Quality

PATS 2017 MODELING RESULTS

DIESEL PARTICULATE MATTER
ALL SOURCES

PATS Study Area boundary
Benchmark contour (0.1 μg/m³)
Annual average concentration
< ½X benchmark
½X - 1X benchmark
1X - 2X benchmark
2X - 3X benchmark
3X - 5X benchmark
5X - 10X benchmark
> 10X benchmark

NOTE: Areas beyond the modeling domain (color-shaded region) are beyond the scope of this project.

REFERENCES:
Concentration data from DEQ Portland Air Toxics Study (PARTS)
Base map from Metro and ESRI data.
Why Focus on Construction Equipment?

Diesel emissions sources in Portland Metro area

- Construction equipment: 51%
- Trucks: 39%
- Rail: 6%
- Airports: 3%
- Other: 1%
Diesel Particulate Matter & the Oregon Benchmark

- Emission Inventory
- Benchmark Goal
- Modeled

Reduction Targets To Meet Diesel PM Benchmark
89-92%
Depending upon the source category

Tons per year

Potential Solutions

• Regulation
  – Port prefers regulation at the highest level
  – Opportunity for greatest diesel emissions reduction and health benefits at the broadest level

• **Clean diesel public contracting requirements**
  – Opportunity for significant diesel emissions reduction on public projects
  – Benefits health of Port employees, contractors, nearby communities
  – Provides a significant opportunity in the absence of broader regulation
  – Leadership opportunity on a significant public health issue.
Policy Development Process

1. Survey existing contracting policies
2. Identify key evaluation criteria
3. Evaluate policy alternatives against criteria
4. Report findings to internal and external stakeholders
5. Finalize recommendations
6. Seek agency adoption
Clean Diesel Programs in U.S.
Evaluation Criteria for Policy Options

- Level of emissions reduction
- Technical limitations/safety concerns
- Administrative burden and cost
- Ease for contractors to understand and comply
Policy Recommendation

- All public construction projects over $2 million
- No dirty non-road diesel equipment & pre-2007 trucks onsite for more than 3 days unless retrofitted with exhaust controls
- Allow limited waivers from policy:
  - When rental equipment or a EPA/CARB verified control device is not available
  - Safety concern or technical limitation (e.g. special equipment)
  - Lower horsepower equipment (under 100 hp)
  - Emergency
- Minimum contractor reporting requirements
- Routine compliance inspections
- Accommodations for MWESB and small firms
Enforcement

- Participating jurisdictions would fund a shared position for enforcement and technical assistance

- Job site compliance verified by local govt project managers through clean diesel sticker
Policy Options for Accommodations
(Such as Small Businesses, or Minority & Women-Owned Firms)

✓ Fund retrofits for some firms
  1. Establish regional pooled fund*
  2. Pay for retrofits separately but consistently as projects occur
✓ Longer timeframe to comply with the policy

*VW Settlement funds could also potentially be used
Cost Estimates

Contractor Costs:
- Retrofit costs (0.06% to 0.57% of contract value)
- Administrative costs

Public Agency Costs:
- Technical assistance
- Policy compliance verification

Cost Minimization Opportunities:
- Shared costs for technical assistance and enforcement
- Minimize reporting requirements for contractors