



Clean Air Construction Standard for public projects

Taking local action for cleaner air

Metro Council Work Session

January 21, 2020

Overview of presentation

- Background
- Program adoption scenarios
- Potential next steps
- Council direction requested
 - Dollar threshold for Metro projects
 - COBID support level



Previous Council guidance

Proceed with development of a comprehensive Standard at a lower dollar threshold:

- Provide support for COBID firms to comply
- Address potential barriers to COBID and small firms in competing for bids
- Have a contingency plan for no bids on lower value projects

Council direction requested

1. Which threshold does Council prefer for Metro adoption of the Clean Air Construction Standard?
2. What level of support would Council like to provide to COBID and small firms to help with compliance?

Why construction diesel pollution?



Clean Air Construction Standard

Engine requirements applicability:

- Non-road diesel equipment >25 horsepower
- On-road diesel cement mixers and dump trucks

Requirements phased in:

- Idle reduction begins 2020
- Engine requirements phase-in period: 2021-2026

Includes exemptions and COBID extended timeline

Updates on the regional collaborative



Program adoption scenarios

Program Element	Scenario A	Scenario B
Threshold	Formal procurement thresholds \$100,000 for public improvement; \$150,000 for other construction services	\$500,000 (consistent with Multnomah and Washington Counties)
Estimated # of Projects (past 3 FYs)	29/year average Average value: \$600,000	8/year average Average value: \$1.5 million
COBID technical assistance	\$50,000 per year	\$30,000 per year
Levels of support for equipment upgrades	Medium to High (range of \$105,000 to \$525,000)	Basic to Medium (range of \$35,000 to \$175,000)

Existing funding for diesel upgrades

- Oregon DEQ Clean Diesel Grants – \$50 M
- EPA DERA
 - National: \$44 M available; grant awards up to \$1 M
 - State allocation funds: \$800,000
- City of Portland Tier 0 gap grants – \$200,000

Metro COBID support options

- Direct support – allocate funds in FY21 budget for technical support and funding for upgrades
- Procurement rule changes – minimize negative impacts on COBID firms

-OR-

- No immediate changes – and monitor the effectiveness of the Standard

Direct support – technical assistance

Contract with a diesel expert

- Develop compliance plans
- Identify equipment/vehicle retrofit, repower or replacement needs
- Identify the costs of upgrade options
- Help with preparation of grant applications



Direct support – funding for upgrades

- During the procurement process for Metro project
- Outside of procurement process - could be limited to COBID firms

Levels of support for upgrades

		Level of support		
Threshold	Projects/year	Basic	Medium	High
Formal	30	\$105,000	\$315,000	\$525,000
	<i>Estimated # of upgrades</i>	15	45	75
\$500K	10	\$35,000	\$105,000	\$175,000
	<i>Estimated # of upgrades</i>	5	15	25

Procurement rule changes

Reduce negative impact on COBID firms:

- Additive alternate
- Special class exemption from low bid
- Exemptions from Standard
- Contingency plan for no bids

Additive Alternate

- Provide a mechanism to pass compliance costs through to Metro during the low bid process by identifying these costs separate from the base bid

Special class exemption

- Create a special class of public improvement projects that are exempt from low bid requirements
- Would provide an avenue for procuring these projects through the RFP process
- Would allow more flexibility in how projects are awarded

Exemptions from Standard

- Blanket: exempt all COBID firms
- Hardship: include process for COBID firms to apply for a hardship exemption

Contingency plan for no bid

- Evaluate cause of no bid
- Address other causes first
- Option to exempt project from the Standard if deemed principal barrier to competition

No immediate changes

- Adopt Standard without providing direct support or changing procurement rules
- Monitor effectiveness for first year

Potential next steps

- Adopt resolution to add Clean Air Construction Standard to Sustainable Procurement Admin Rules
- Sign Regional CAC intergovernmental agreement
- Add no idling requirements to contract documents
- Engage with contractors and COBID firms
- Continue to develop implementation plan and train internal stakeholders

Council direction requested

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2. What level of support would Council like to provide to COBID and small firms to help with compliance?

Program adoption scenarios

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1. Threshold	Formal procurement thresholds \$100,000 for public improvement; \$150,000 - other construction services	\$500,000 (consistent with Multnomah and Washington Counties)
2. COBID support	Medium to High	Basic to Medium

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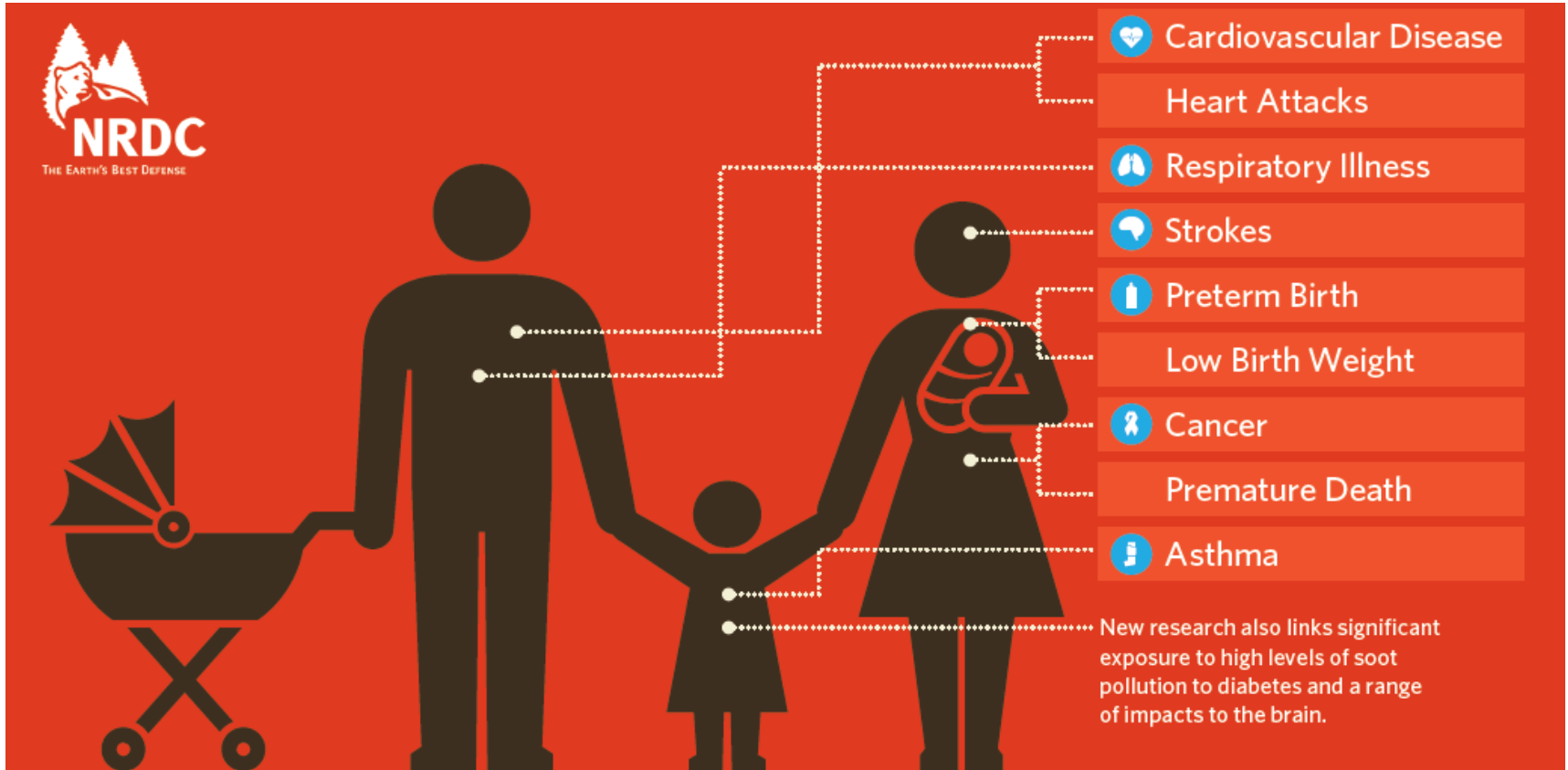
Funding for upgrades – costs

	DOC diesel oxidation catalyst	DPF diesel particulate filter
Average cost	\$5,000	\$18,000
Application	Older equipment Tier 0-1	Newer equipment Tier 2-3

Levels of support for upgrades

		Level of support		
Threshold	Projects/year	Basic	Medium	High
Formal	30	\$105,000	\$314,000	\$523,000
	DOC	5	15	26
	DPF	10	31	51
\$500k	10	\$35,000	\$105,000	\$175,000
	DOC	2	5	9
	DPF	3	10	17

Why diesel pollution?



Stakeholder engagement

- Ongoing since 2010 (regionally)
- August 22, 2018 workshop
- Targeted engagement with neighborhood associations, environmental organizations, construction firms, equipment operators, industry associations
- Public comment period in November 2018

Phased-in approach

Effective Date	Nonroad Diesel (over 25hp)	On-Road Diesel (cement mixers and dump trucks)	Retrofits allowed <i>diesel oxidation catalyst, diesel particulate filter</i>
2020	No Idling		
2021	No tier 0		Yes
2022	No tier 1		Yes
2023	No tier 2		Yes
2024	No tier 3	2007+	Some
2025	Tier 4 only	2007+	Some
2026	Tier 4 only	2007+	Some, more for COBID

Regional framework

Lead agency model

- City of Portland as lead agency

Core elements of the regional framework

- Administration
- Communications
- Registration and compliance
- COBID certified firms – specific support

House Bill 2007

- **Directs remaining Volkswagen settlement funds to clean up diesel engines, with preference for COBID firms**
- Phases out old diesel on-road engines in Multnomah, Clackamas and Washington Counties
- Requires clean equipment for state-funded construction projects (\$20M or more)
- Creates task force to consider additional funding strategies

Clean Air Construction Standard

Idle Reduction Requirements

- Nonroad equipment: shut down after five (5) minutes of inactivity.
- Nonroad equipment: anti-idling decals/prompts visible to operator
- Job site: post “Five Minute Limit” signs
- Job site: operator education/awareness

Clean Air Construction Standard

Engine requirements

- Allows for multiple compliance options
- Maximizes emissions reductions
- Starts with the most stringent emissions reduction technology option (Best Available Technology Approach)

Exemptions from the Standard

- Equipment/vehicle is required for an emergency
- A required emission control device would obscure operator lines of sight or otherwise impact worker safety
- Equipment is not able to be retrofit
- Special circumstances whereby compliance for a specific vehicle/equipment is not reasonable

Goal

1. Cleanest available equipment

- Non-road - EPA Tier 4 standards (including Tier 4i)
- On-road - 2007 model or newer dump trucks and cement mixers

OR

2. EPA or CARB certified Best Available Control Technology (BACT) if available:

- Diesel Particulate Filter (DPF), or
- Diesel Oxidation Catalyst (DOC) when adequately demonstrated a DPF is not suitable.

OR

3. Alternative fuel vehicles or equipment

At full implementation

- Idling reduction
- Cleanest available (new) diesel non-road equipment and cement mixers/dump trucks
- Older diesel equipment/vehicles retrofitted with diesel particulate filter (DPF)*
- Alternative fuel vehicles or equipment

*certified COBID firms may have equipment with grandfathered diesel oxidation catalyst (DOC) retrofit technology