Sebaran Kapuz

MULTNOMAH COUNTY, OREGON ADMINISTRATIVE PROCEDURE PUR-10

SUBJECT: Clean Air Construction Standards

PURPOSE: To protect the health and safety of the public and workers on

construction projects that the County solicits and contracts for by

minimizing exposure to diesel particulate matter pollution.

ORGANIZATION RESPONSIBLE:

Department of County Management

Central Purchasing; Department of Community Services Transportation; Department of County Assets Facilities and

Property Management; and Office of Sustainability

DATE: Originally Adopted: May 18, 2019

Amendment Effective: For contracts solicited on or after

May 9, 2022

ORGANIZATIONS

AFFECTED: All Departments/Offices

LEGAL CITATION/

REFERENCE: ORS 279A, PCRB Rules, PUR-8, SUS-3

I. Procedure Rationale

A. The purpose of this procedure is to protect the health, safety, and well-being of

- workers at County construction sites and the public by limiting the exposure to diesel particulate matter and other pollutants associated with the combustion of diesel fuel.
- B. The County is implementing this procedure in conjunction with other jurisdictions to maximize the impact of the procedure and create market pressure to move the construction industry toward cleaner equipment. Diesel particulate matter pollution is an acute problem in Multnomah County according to the Oregon Department of Environmental Quality. Exposure to diesel particulate matter through engine exhaust causes cancer, increases the risk of heart attack, stroke, and cardiovascular disease, exacerbates asthma and can lead to low-weight and preterm births. There is also a growing body of evidence linking traffic-related air pollution, including diesel exhaust, to neurodevelopmental disorders like Autism Spectrum Disorder.
- C. Although there are no areas of Multnomah County with safe levels of diesel pollution, the pollution "hot-spots" are in neighborhoods with higher proportions of residents who are people of color. The disproportionate exposure to diesel pollution mirrors health disparities in the community, particularly asthma, cardiovascular disease and low birth-weights. Children are also especially vulnerable because their lungs are still in the developmental phase and they breathe, on average, 50 percent more air per pound of body weight than adults do.
- II. Terms/Definitions. Capitalized terms used, but not otherwise defined in PUR-10, are defined in the County's Public Contract Review Board (PCRB) rules at section 10-0000.
 - A. <u>CARB</u>: California Air Resources Board, a state regulatory agency charged with regulating the air quality in California.
 - B. <u>Construction Services:</u> Refers to services contracted for by the County that involve the use of Non-road Diesel Construction Equipment and/or On-road Diesel Powered Dump Trucks and Concrete Mixers.
 - C. <u>Contractor:</u> The Person with whom the County enters into a Contract for Construction Services.
 - D. <u>Diesel Particulate Matter</u>: The solid or liquid particles found in the air released through the exhaust from diesel vehicles and equipment.
 - E. <u>DOC</u>: Diesel oxidation catalyst. A DOC is a device designed to reduce harmful diesel emissions such as carbon monoxide, hydrocarbons and certain diesel particulate matter.
 - .F. <u>DPF</u>: Diesel particulate filter. A DPF is a device designed to trap all diesel

- particulate matter above a certain size.
- G. <u>Emission Control Device</u>: Technology added to combustion engines to reduce harmful emissions, including DOC and DPF. These may include catalytic converters and particulate filters, among other technologies. For the purpose of PUR-10, all Emission Control Devices must be currently listed on the Verified Technologies List for Clean Diesel on the EPA website or the Currently Verified diesel technology list maintained by CARB.
- H. <u>EPA</u>: US Environmental Protection Agency, a federal regulatory agency charged with protecting human health and the environment.
- I. Non-road Diesel Construction Equipment: Equipment and vehicles that: (1) are powered by non-road engines, as defined in 40 CFR §89.2, (2) use diesel fuel, and (3) are not designed primarily for travel on public highways. Only equipment and vehicles with diesel engines whose power exceeds 25 horsepower are Non-road Diesel Construction Equipment.
- J. On-road Diesel Powered Dump Trucks and Concrete Mixers: Trucks with US Department of Transportation Federal Highway Administration vehicle category classification of 7 or greater with a lifting bed to dump loose material that are used for the transport of aggregate (soil, gravel, waste materials, etc.) and concrete, respectively.
- K. <u>Program Administrator</u>: The party designated by the Multnomah County Chair to carry out the rules herein on behalf of the County, in whole or in part.
- L. <u>Recognized Service Provider:</u> A person or entity authorized by the Emission Control Device manufacturer to install Emission Control Devices.
- M. <u>Tier:</u> Refers to engine emission standards promulgated by the EPA for non-road diesel equipment, as established in 40 CFR §89.112, and Tier 4 exhaust emission standards, as shown in 40 CFR §1039.101 and 40 CF §1039.102. Verification of Tier is established by referring to label affixed by the manufacturer to the engine block or elsewhere on the equipment.

III. Applicability & Effective Date

- A. Except as otherwise provided in the Phase-In Schedule in PUR-10 at Section VII, the following requirements apply to Contracts that include Construction Services that the County solicits on or after the amended effective date of this rule and with an original Contract Price, including all associated subcontracts, that equals or exceeds \$500,000.
- B. Except as otherwise expressly provided in ORS 279C.800 .870, and notwithstanding ORS chapters 279A, 279B, and ORS 279C.005 -.670, applicable federal statutes and regulations govern when federal funds are involved and the federal statutes or regulations conflict with any provision of

ORS chapters 279A, 279B, and ORS 279C.005 - .670 or this procedure, or require additional conditions not authorized by ORS chapters 279A, 279B, and ORS 279C.005 - .670, or this procedure.

IV. Roles and Responsibilities

- A. The Office of Sustainability is responsible for interpreting and implementing PUR-10, and will:
 - 1. resolve any questions about the intent or application of PUR-10;
 - 2. provide technical support to County departments;
 - periodically report to the Board of County Commissioners on the impacts of this procedure, including, but not limited to, pollution reduction, costs incurred by the County, enforcement actions, and financial assistance provided to Contractors;
 - 4. provide administrative support to help enforce PUR-10; and
 - 5. review the Clean Air Construction Standards as described in PUR-10 at Section V(B).

B. DCA will:

- implement PUR-10 on all applicable solicitations and Contracts that include Construction Services that will be administered by DCA; and
- after the effective date, ensure all Contractors providing applicable Construction Services comply with PUR-10.

C. DCM-Central Purchasing will:

- ensure that appropriate language describing the requirements of PUR-10 is included in all applicable solicitations and contract documents; and
- 2. monitor solicitations and contract specifications for compliance with PUR-10.

D. DCS will:

- 1. implement PUR-10 on all applicable solicitations and contracts that include Construction Services that will be administered by DCS; and
- 2. after the effective date, ensure all Contractors providing applicable Construction Services comply with PUR-10.
- E. The Program Administrator will carry out the duties assigned by the Chair, which may include, but are not limited to:

- 1. issuing decals to Contractors;
- 2. processing requests for exemptions;
- 3. providing technical assistance to Contractors; and
- 4. other duties as assigned.

V. Amendment and Standard Review

- A. PUR-10 may be updated by amendment. Specifically, updates may be triggered by changes in:
 - 1. availability of Emission Control Devices,
 - 2. alternative fuel technologies,
 - 3. the need to expand requirements to address other air pollutants besides diesel particulate matter, and/or
 - 4. changes in regional administration of the Clean Air Construction program.
- B. The Clean Air Construction Standards shall be reviewed for effectiveness and updates no later than January 1, 2024. Results of that review shall be published on the Office of Sustainability's website and any proposed updates to the Standards stemming from that review will be vetted through a public stakeholder process.

VI. Idle Reduction Requirements

- A. For contracts that include Construction Services solicited after the amended effective date of this rule, Contractors working on such contracts shall take the following steps to reduce unnecessary Non-road Diesel Construction Equipment idling:
 - All Non-road Diesel Construction Equipment must shut down after five (5) minutes of inactivity, and
 - All Non-road Diesel Construction Equipment shall have prompts, issued by the County or the Program Administrator, visible to the operator, to remind them to shut down the equipment after five (5) minutes of inactivity, and
 - 3. Contractors must post "Five Minute Limit" signs in high foot traffic areas of the job site, visible to workers, and
 - 4. Contractors must ensure all Non-road Diesel Construction Equipment operators are aware of the idling reduction requirement.

- 1. The above idle reduction requirements do not apply where:
 - a) the safety of Contractors, subcontractors, and their employees may be compromised if Non-road Diesel Construction Equipment is turned off, for example, where employees are working in a trench; or
 - the equipment is Tier 4 or has been retrofit with a DPF (frequent shutdowns may be detrimental to the emissions control system, reducing the effectiveness of that system by lowering the exhaust temperature); or
 - c) the equipment is in the process of being tested, serviced, inspected or repaired.
- If a Contractor believes an exception applies, the Contractor is responsible for bringing the relevant facts to the attention of the County project manager, their on-site designee, or the Program Administrator, who will then determine, at their sole discretion and based on on-site review, if an exception in Section VI(B)(1) applies.

VII. Diesel Engine Requirements and Phase-In Schedule

A. For contracts that include Construction Services solicited after the amended effective date, and meeting the threshold set in Section III(A), and in accordance with the phase-in schedule outlined below, all Non-road Diesel Construction Equipment and all On-road Diesel Powered Dump Trucks and Concrete Mixers used pursuant to such contracts must meet the following requirements:

Effective Date of Diesel Engine Require ment	Nonroad Diesel Construction Equipment (over 25hp)				On-Road Diesel Powered Dump Trucks and Concrete Mixers				
	Engine Requirem ents	Retrofit Options DPF DOC				DPF	_		
			(only if DPF or equivalent can't be installed)		Engine	(only if DPF or equivalent can't be installed)			
		All Firms	Non-DMW ESB/SDV B Firms	DMWE SB/SD VB Firms	Requirem ents	All Firms	Non-DMW ESB/SDV B Firms	DMWESB /SDVB Firms	
Effective Date	No Idling	Y			Υ	Y			
January 1, 2022	No Tier 0 engines allowed unless retrofit	Υ			N/A	N/A			
January 1, 2023	No Tier 0 or 1	Y	Y (only if DPF or	Y (only if DPF or	N/A	N/A	N/A	N/A	

	engines allowed unless retrofit		equivalent can't be installed	equivalent can't be installed)				
January 1, 2024	No Tier 0, 1, 2, or 3 engines allowed unless retrofit	Y	N (pre-2024 installs allowed)	N (pre-202 4 installs allowed)	N/A	N/A	N/A	N/A
January 1, 2025	No Tier 0, 1, 2, or 3 engines allowed unless retrofit	Y	N	N (pre-202 4 installs allowed)	No pre-2007 engines allowed unless retrofit	Y	N	N (pre-2024 installs allowed)

B. EMISSION CONTROL DEVICE RETROFITS

- Non-road Diesel Construction Equipment and On-road Diesel Powered Dump Trucks and Concrete Mixers that do not meet the diesel engine standards in the table in Section VII(A) may alternatively be retrofitted with an Emission Control Device as provided in the table in Section VII(A) utilizing the process described below.
 - a) DPFs shall be used wherever the use of such a device is feasible from a technical and safety perspective in the opinion of a Recognized Service Provider. Both active and passive filter regeneration mechanisms shall be considered for DPFs.
 - b) A DOC may be used on a limited basis as described in the table in Section VII(A), in cases where a DPF is determined by a Recognized Service Provider to be infeasible for technical or safety reasons. The Contractor shall provide a statement from a Recognized Service Provider to the Program Administrator that a DPF is infeasible for the vehicle or equipment.
- Beginning January 1, 2024, new DOC retrofits will no longer be allowed on Non-road Diesel Construction Equipment or On-road Diesel Powered Dump Trucks and Concrete Mixers. Contractors may continue to use Non-road Diesel Construction Equipment that was retrofitted with a DOC prior to 2024.
- 3. Beginning on January 1, 2025, existing DOCs will no longer be allowed on Non-road Diesel Construction Equipment or On-road Diesel Powered Dump Trucks and Concrete Mixers, except that DMWESB/SDVB firms may continue to use Non-road Diesel Construction Equipment retrofitted with a DOC prior to 2024.
- 4. Allowable DPFs are those that are currently listed on the Verified Technologies List for Clean Diesel on the EPA website verified by the EPA or the Currently Verified diesel technology list maintained by CARB.
- Allowable DOCs for On-road Diesel Powered Dump Trucks and Concrete Mixers are those that are currently listed on the Verified Technologies List

- for Clean Diesel on the EPA website verified by the EPA or the Currently Verified diesel technology list maintained by CARB.
- 6. All Emission Control Devices shall be maintained in good working order for the duration of the Contract.

C. Exemptions

- 1. Exemptions to the above diesel engine requirements may be granted on a per Contract basis in circumstances where:
 - a) the Non-road Diesel Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete Mixers is required for an emergency (including for underground equipment operators); or
 - b) the equipment cannot be retrofitted with an Emission Control
 Device in accordance with Section VII(A) and (B); <u>and</u> no
 compliant rental equipment is available within 100 miles of the
 job site; or
 - c) the Contractor can demonstrate to the Program Administrator or other County designee that due to the uniqueness of the Non-road Diesel Construction Equipment or special circumstances, it is not reasonable to comply with the diesel engine requirements.
- 2. Contractors must request exemptions listed in Section VII(C)(1)(b) or (c) in writing to the contact for the bid process at least 10 business days before the bid process closes. If additional work is added to the Contract following the close of the bid process, additional exemptions for the additional work may be requested from the County project manager, their on-site designee, or the Program Administrator at least 10 business days prior to the acceptance of the change order or additional work.
- 3. If Non-road Diesel Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete Mixers that do not comply with PUR-10 are needed for an emergency as provided in Section VII(C)(1)(a), the Contractor must request an exemption in writing from the County project manager, their on-site designee, not later than 7 business days after the emergency begins.
- 4. The County or the Program Administrator shall have sole discretion whether to grant or deny an exemption, but exemptions shall not be unreasonably denied.

- A. All Contractors must obtain and display on the Non-road Diesel Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete Mixers subject to this procedure a decal issued by the Program Administrator, Multnomah County or its designee, showing compliance with PUR-10.
- B. The decal will be unique to the Non-road Diesel Construction Equipment or On-road Diesel Powered Dump Trucks and Concrete Mixer and is non-transferable between equipment/vehicles.
- C. The decal will be issued only if all requested information needed to verify compliance has been provided, including confirmation that Emission Control Device(s) are maintained on the equipment/vehicle in proper operating condition, and upon confirmation that the equipment/vehicle complies with PUR-10.
- D. The decal, when issued, will be valid as long as the equipment remains in compliance with this standard, or for 12 months when issued for an exemption under Section VII(C). If the equipment becomes non-compliant, the Program Administrator may notify the Contractor via email. The Non-road Diesel Construction Equipment or On-Road Diesel Powered Dump Trucks and Concrete Mixer with valid decal can be used for Construction Services under any Contract.
- E. If the decal expires due to a new phase-in period, the Contractor will need to renew the decal, if operating the equipment/vehicle on a Contract subject to PUR-10.

- F. If an exemption under Section VII(C)(1)(a) or (b) is granted, then the requirement to display a decal will also be waived for that specific Non-road Diesel Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete Mixer for the duration of the emergency under section VII(C)(1)(a) or for the duration the Contract under VII(C)(1)(b).
- G. Random on-site inspections by Multnomah County staff (or an approved designee) will be conducted.

IX. Enforcement/Penalties

- A. Failure of the Contractor to comply with PUR-10 may result in harm to the public and those present on or near the job site.
- B. However, it would be difficult to assess the actual damage and the actual cost incurred by (1) the County, (2) individuals employed by the County, (3) the public, including the population for which the County is the Local Public Health Authority, and (4) those present on or near the job site, as a result of the Contractor's, or its subcontractors', failure to comply with this procedure.
- C. Therefore, if a Contractor or its subcontractors fail to comply with any of the requirements of this procedure, including but not limited to the submission of required documentation, the County may take any or all of the following actions:
 - 1. Impose penalties for failure to comply with this procedure:
 - a) If the Contractor or subcontractor(s) fails to comply with Sections VII and VIII of this procedure, the Contractor or subcontractor shall pay the sum of \$2,500 per day per piece of Non-road Diesel Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete Mixers that is not compliant with this procedure.
 - b) Misrepresenting the presence or type of Emission Control Device for a piece of Non-road Diesel Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete Mixers will result in an additional \$2,500 fine for each piece of equipment for which a misrepresentation was made.
 - c) Failure to comply with Section VI of this procedure will result in a fine of \$500 per violation.
 - d) The County project manager or their onsite designee, in their sole discretion, may give a Contractor or subcontractor 10 business days to bring noncompliant Non-road Diesel

Construction Equipment and/or On-Road Diesel Powered Dump Trucks and Concrete mixers into compliance, or to otherwise comply with this procedure, before relying on the enforcement mechanisms described in Section IX(C)(1)(a),(b), and (c).

2. Other Enforcement: The enforcement mechanisms that are noted above do not limit any other enforcement mechanisms or remedies available to the County in the event that the Contractor or its subcontractors fail to meet the requirements of this procedure.