

Air Quality Overview



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Natalie came to ODOT in 2009 with 11 years of experience in Air Quality and Noise Analysis from CH2M Hill.

Natalie is a technical expert in transportation air quality analysis, air emission and dispersion modeling, and noise modeling. She leads air quality conformity for ODOT.



Air Quality Takeaways

1. Why projects need transportation air quality analysis.
2. What types of projects need analysis and in which areas.
3. What types of projects don't need analysis.



Transportation Air Quality Regulations



Federal

- **1990 Clean Air Act Amendments**
 - National Ambient Air Quality Standards
 - Transportation Conformity Rule 40 CFR 93
- **National Environmental Policy Act**
 - FHWA Mobile Source Air Toxics (2023)



State

- **State Ambient Air Quality Standards**
- **State Conformity Rule**

Maintenance Areas

Area Name	Pollutant	Current Designation/ Classification	End Conformity Requirements
Eugene-Springfield	PM ₁₀	Maintenance	6/10/2033
Klamath Falls	PM _{2.5} (2006 NAAQS)	Nonattainment	-
Lakeview	PM ₁₀	Maintenance	7/19/2026
La Grande	PM ₁₀	Maintenance	7/19/2026
Medford-Ashland	PM ₁₀	Maintenance	8/18/2026
Oakridge	PM ₁₀	Maintenance	9/21/2042
Oakridge	PM _{2.5} (2006 NAAQS)	Maintenance	9/21/2042
Salem	CO	Maintenance	3/2/2029

Maintenance Areas with no Conformity Requirements

Area Name	Pollutant	Current Designation/ Classification	Conformity End Date
Portland	CO	Maintenance	10/2/2017
Portland	Ozone	Maintenance	6/15/2005
Eugene-Springfield	CO	Maintenance	2/4/2014
Klamath Falls	CO	Maintenance	11/19/2021
Medford	CO	Maintenance	9/23/2022
Grants Pass	CO	Maintenance	10/30/2020
Grants Pass	PM ₁₀	Maintenance	12/26/2023



Project Level Conformity Analysis Triggers

Required for:

- Projects needing federal funding or federal approval
- Projects located in nonattainment or maintenance areas, or
- Projects that are part of Environmental Assessment or Environmental Impact Statement
- Non-exempt projects (exempt: bicycle/pedestrian, bus shelter)
- Can be qualitative or quantitative

Exempt Projects

Safety

- Shoulder improvements
- Adding medians, fencing

Air quality project

- Bicycle and pedestrian facilities
- Rideshare

Mass Transit

- Purchase of replacement buses
- Bus shelters
- Mass Transit

Others

- CNG fuel station

Traffic signal synchronization projects (40CFR 93.128)

**NO ANALYSIS
REQUIRED!**
40 CFR 93.126

Check out Air Quality Manual Appendix E for full list!



Air Quality Conformity Consultation

40 CFR 93: EPA Transportation Conformity Rule

OAR-340-252: State Transportation Conformity Rule

OAR-340-252-0060: Consultation

- Federal - FHWA, FTA, EPA
- State - DEQ, Lane Regional Air Pollution Agency (LRAPA), ODOT
- Local – MPO, local agencies and project sponsors

OAR-252-0060(1)(d)(E)(iii): ODOT responsible for convening air quality technical review meetings on specific projects when requested by other agencies or, as needed





Questions asked in Conformity Consultation

- Why are no build and build volumes the same with added lanes?
- What model was used or version?
- Include 'Opening year' for conformity analysis
- What is % diesel now and future % diesel?

- How is traffic circulating outside project area?
- When does construction start and end?
- Is funding secured?
- What stage of NEPA?
- What is operational year?
- Project figures need labels
- Included RTP and TIP?

PM10 and PM2.5 Conformity Analysis

- Quantitative analysis only required for projects is a **‘Project of local air quality concern (POAQC)’**
- POAQC is a very detailed and time-consuming process
- Typically, AADT >125,000 and 8% heavy duty diesel or more
- Consultation must concur to confirm status as a POAQC
- Traffic inputs and project details are needed to determine status



PM₁₀ and PM_{2.5} Areas by Region

ODOT Region	Maintenance Areas
Region 2	Eugene- Springfield PM10 Oakridge PM10 and PM2.5
Region 4	Klamath Falls PM2.5

PM10 and PM2.5 Project Checklist

PM₁₀ and PM_{2.5} PROJECT LEVEL CHECKLIST

The purpose of this checklist is to provide the required PROJECT LEVEL documentation to aid the interagency consultation group in the determination of project type, i.e.

- 1) **Exempt** - Exempt from PM10 or PM2.5 project-level conformity determination,
- 2) **Not Exempt, Not of Concern**- Not Exempt, but not of local air quality concern (does not require further analysis), or
- 3) **Of Concern** - Of local air quality concern and, therefore, requiring a hot-spot analysis.

This checklist is only intended as a tool to assist with the PM_{2.5} project-level conformity determination and does not replace regulatory requirements in the Transportation Conformity Rule (40 CFR Part 93), nor associated guidance. Any decisions regarding a particular conformity determination or hot-spot analysis will be made based on the statute and regulations, after appropriate public input. A statement regarding the PM_{2.5} hot-spot consideration should be included as an element in NEPA documentation. This completed and signed checklist, along with a copy of the PM_{2.5} project-level conformity determination, if required, should also be included. Additionally, proof of interagency consultation and public involvement, if required, as well as any other supporting documentation, should be included.

Use the “Tab” or “Page Down” key to maneuver within this document.

STEP 1: PROJECT IDENTIFICATION

A. STIP Number: 20209

Project Name/Short Description: OR-126B: 54th St Improvement: This is a safety project.

PM₁₀ and PM_{2.5} Conformity Analysis Cont.

- Project of local air quality concern (POAQC) analysis is complicated
- Traffic data is needed before consultation can be held
- Traffic data needed for opening year and design year, build and no build
- Both highway and intersection data is needed
- Be patient – consultation takes time



TRAFFIC DATA MATTERS





Project Conformity, MTIP and STIP

- Project must have same design concept and scope as in the MTIP and STIP.
- Design concept- type of facility, e.g. freeway, arterial, etc.
- Design scope- design aspects that relate to facilities impact on regional emissions, e.g., number of lanes, length, number and location of interchanges.



MTIP and STIP Amendments

- Amendments can be administrative or full
- Projects adding capacity will be examined in more detail
- Consultation group is responsible for determining if a project is regionally significant (adding capacity and air quality impacts).
 - Serves as access to and from outside of region (e.g. major activity centers, new malls, and sports complexes), and would normally be included in the modeling of a metropolitan area's transportation network.

Air Quality Mitigation



ODOT Standard specifications Section 290.30(c)

- Truck staging areas, vehicle and equipment idling, dust control and permits



DEQ construction rule for contractors OAR 340-208

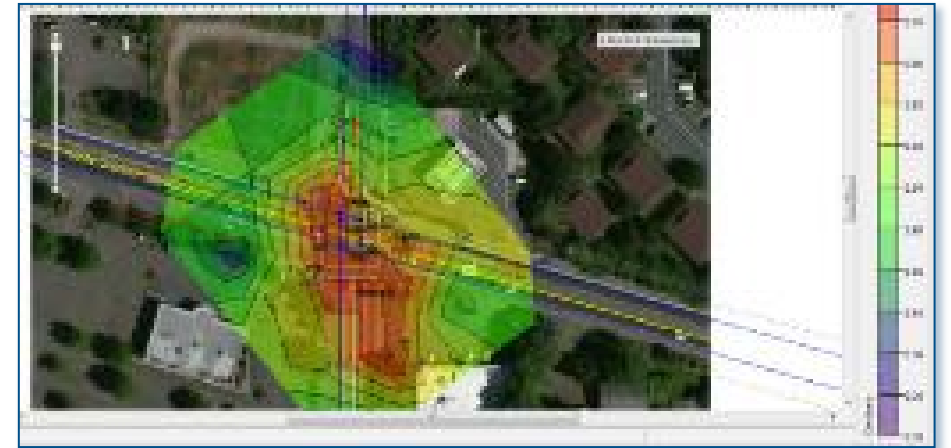


Clean Diesel Construction Standard OAR 731-149-0020

- ODOT Clean Diesel rule OAR 731-005-0800
(5 specified projects and heavy highway projects).
- Outlined in Special Provision Boilerplate documents.
<https://www.oregon.gov/odot/business/pages/special-provisions.aspx>

Air Quality Analysis Overview

1. Contracting - Statement of Work(SOW) (ODOT webpage)
2. Traffic Data – obtain early(ODOT or consultants)
3. Methodology--Interagency consultation
4. Air Analysis (qualitative or quantitative)
5. Construction (mitigation in Standards Specs)
6. Documentation (see Manual and SOW)
7. Review (ODOT Air Quality Specialist) 1-3 weeks



Questions?

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