



# An Update on Diesel Emergency Generator Air Permitting and Compliance in Washington State

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# MULTIDISCIPLINARY SERVICES

Environmental Remediation  
and Engineering



Geotechnical  
Engineering



Permitting  
and Compliance



Air Quality



Water Resources



Stormwater



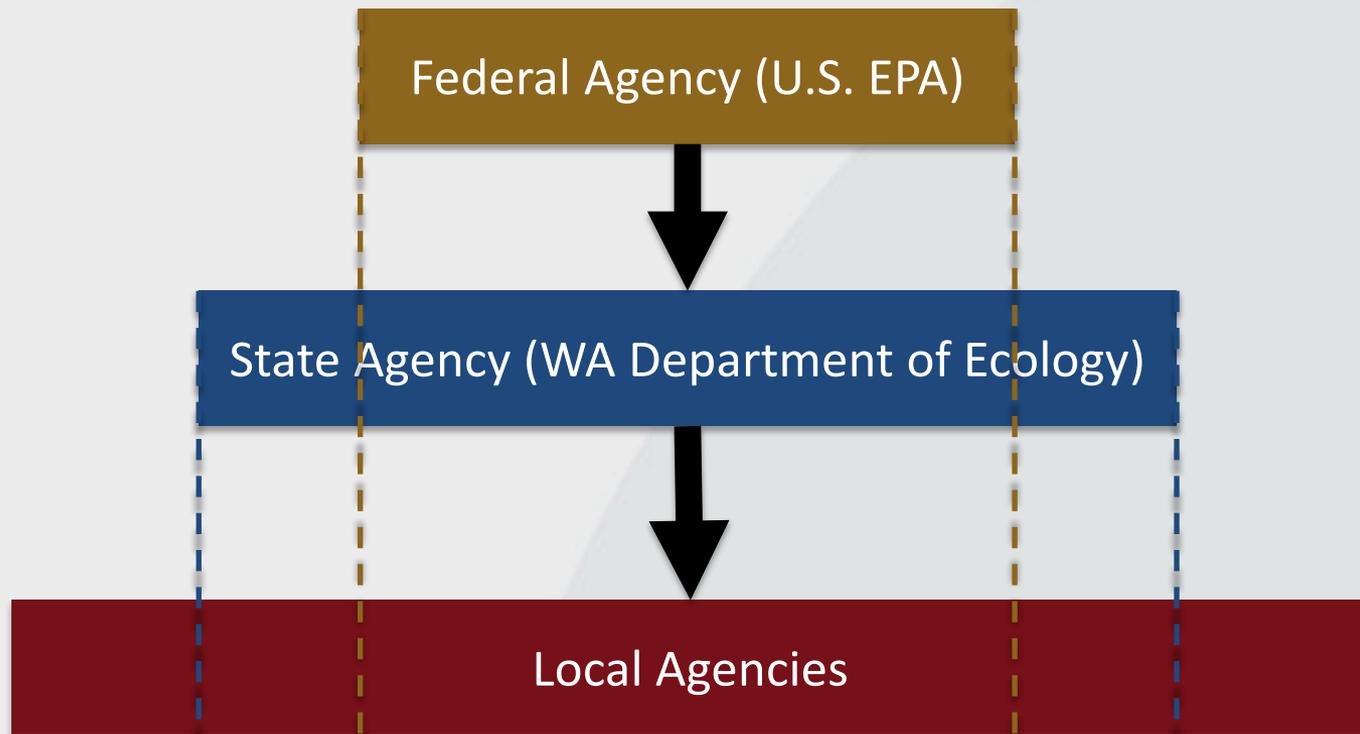
## OUTLINE

- General overview of air quality regulatory framework in WA
- Recent changes to regulatory practice for emergency gens
- Common compliance challenges



# Overview of Air Quality Regulatory Framework in Washington State

# REGULATORY FRAMEWORK

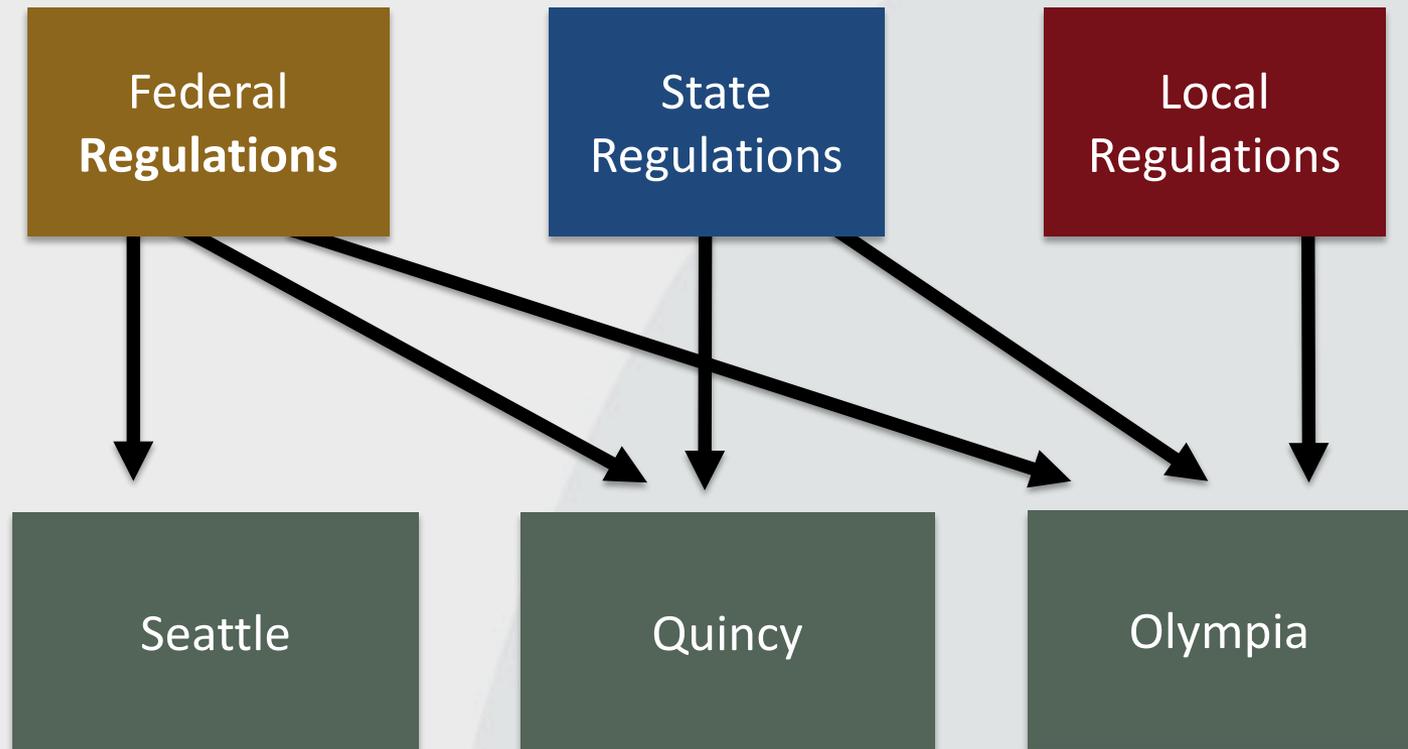


# AIR REGULATORY JURISDICTIONS IN WASHINGTON



# EMERGENCY GENERATOR REGULATIONS

## Washington Emergency Generator Regulatory Web





# Washington State Department of Ecology

## Regulations for Emergency Generators

## Emergency Generators

(~ *greater* than 4 MW total capacity)

### Notice of Construction Application:

- Pollutant potential-to-emit emissions estimates
- Best Available Control Technology (BACT) evaluation
- Air quality dispersion modeling
- Human health impact assessment
- Public comment and hearing
- Schedule

## Emergency Generators

(~ *greater* than 4 MW total capacity)

### Compliance:

- Initial performance test (5-mode, weighted average)
- Performance tests at most every 5 years
- Annual reporting, recordkeeping



# Washington State Department of Ecology

## Regulatory Updates



## WASHINGTON STATE DEPARTMENT OF ECOLOGY

### **Air Permitting – Updates:**

- Segmentation of a project – must look at cumulative impacts of development that occur within a 3-year period.
- 10% opacity limit for emergency generators.
- No limits on generator operation in an unplanned utility outage (sort of).



## WASHINGTON STATE DEPARTMENT OF ECOLOGY

### **Compliance Challenges (specific to CRO – Wenatchee):**

- In CRO jurisdiction (Wenatchee area) – no “burnoff” within 6 months of a source test.
- Limits on the angle of the rain flapper at different operating loads

## Source Testing Compliance Challenges (Specific to Ecology):

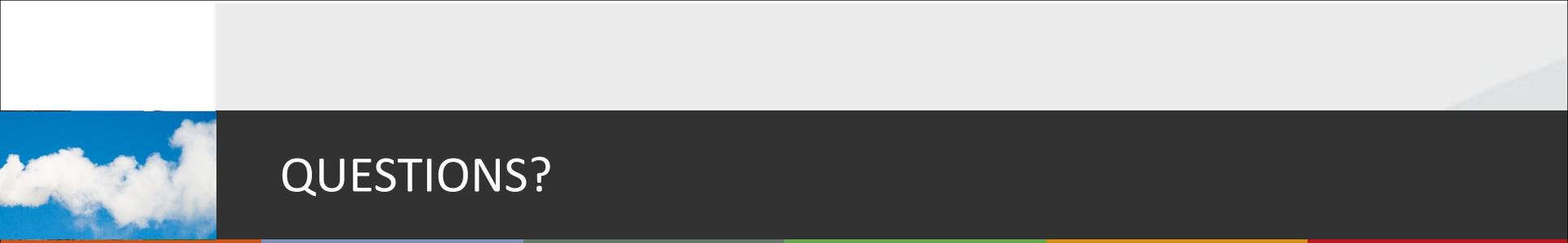
- Compliance with EPA Tier 2 or Tier 4 emission standards – BACT for WA engines.
- EPA's 1.25x multiplier for field-based demonstration of compliance with Tier 2 emission standards on emergency generators

NTE requirement for each pollutant =  $(1.25) \times (\text{STD})$  (Eq. 1)

Where:

STD = The standard specified for that pollutant in [40 CFR part 1039](#) or [1042](#), as applicable.

- WA Ecology rejects use of multiplier on the basis that some have passed.
- The problem: tests are failing.
- Solution: re-testing until it passes.



QUESTIONS?

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