Water Quality Standards

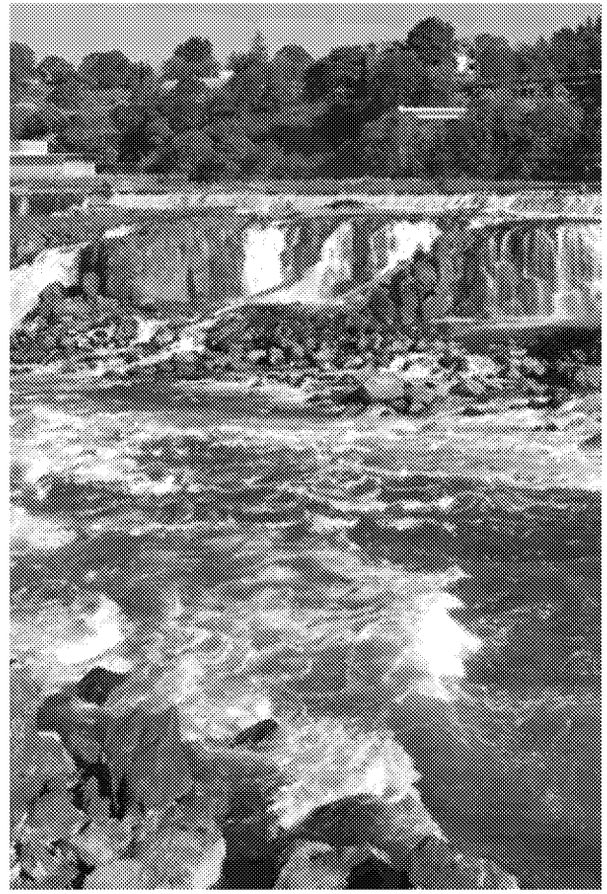


Photo credit Andrea Matzke

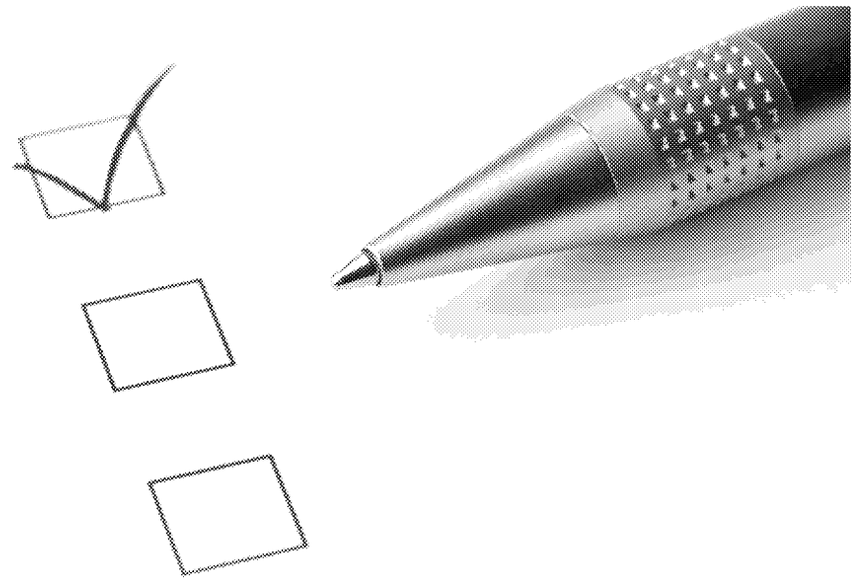
Willamette Basin Mercury Variance Rulemaking – Federal and State Requirements

November 1, 2018
DEQ Headquarters

Debra Sturdevant | Oregon Department of Environmental Quality

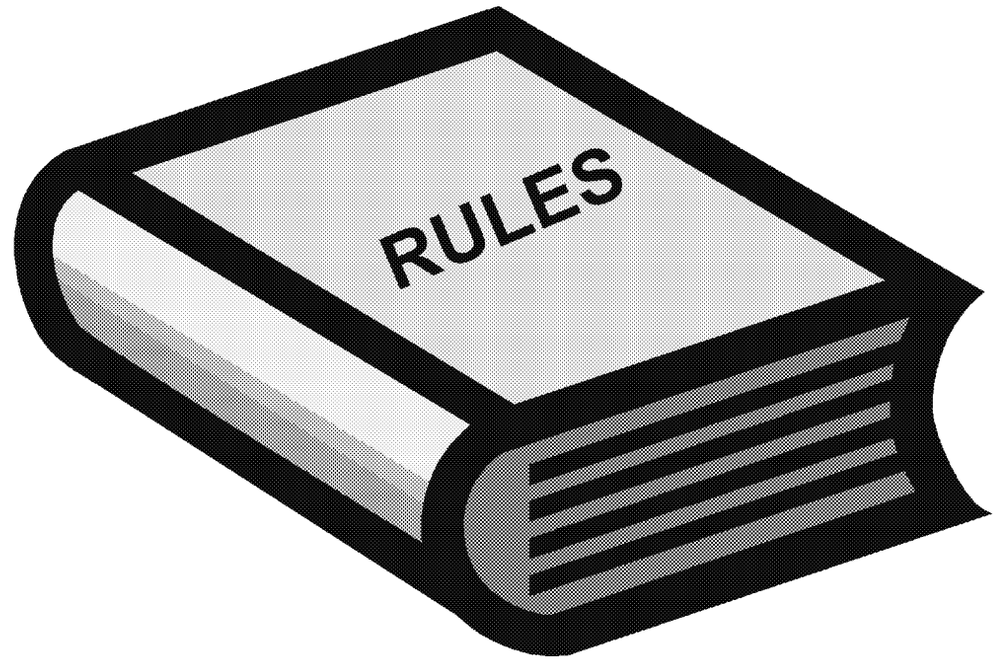
Topics

- What is a variance and what does it do?
- Variance justification
- Variance requirements
- Differences between federal and state rules



Federal regulations (2015)

- First federal regulations about variances
- How to justify the need for a variance
- Duration
- Highest attainable condition



What is a variance?

Tool under CWA regulations

Water quality standard not attainable; WQBELs not achievable

Time limited alternative for specified dischargers or waterbody

Requires progress toward the standard

Variance Justification Factors

Naturally occurring pollutant concentrations

Natural, ephemeral, intermittent or low flow conditions

Human-caused conditions or pollutant sources

Dams, diversions, or other hydrologic modifications

Physical conditions (e.g. substrate, habitat features)

Substantial and widespread economic and social impact

Highest Attainable Condition

Highest attainable interim criterion

or

Effluent condition with greatest pollutant reduction achievable

or

Effluent condition that optimizes current technology + pollutant reduction program

Colorado Analysis

Options (from most removal to least)	Technologically Feasible	Economically Feasible	Environmentally Feasible
Option #1	No	No	No
Option #2	Yes	No	No
Option #3	Yes	Yes	No
Option #4	Yes	No	Yes
Option #5	Yes	Yes	Yes

Permit Conditions
(OAR 340-041-0059(5))

Interim Effluent Limit

Pollutant Minimization Program

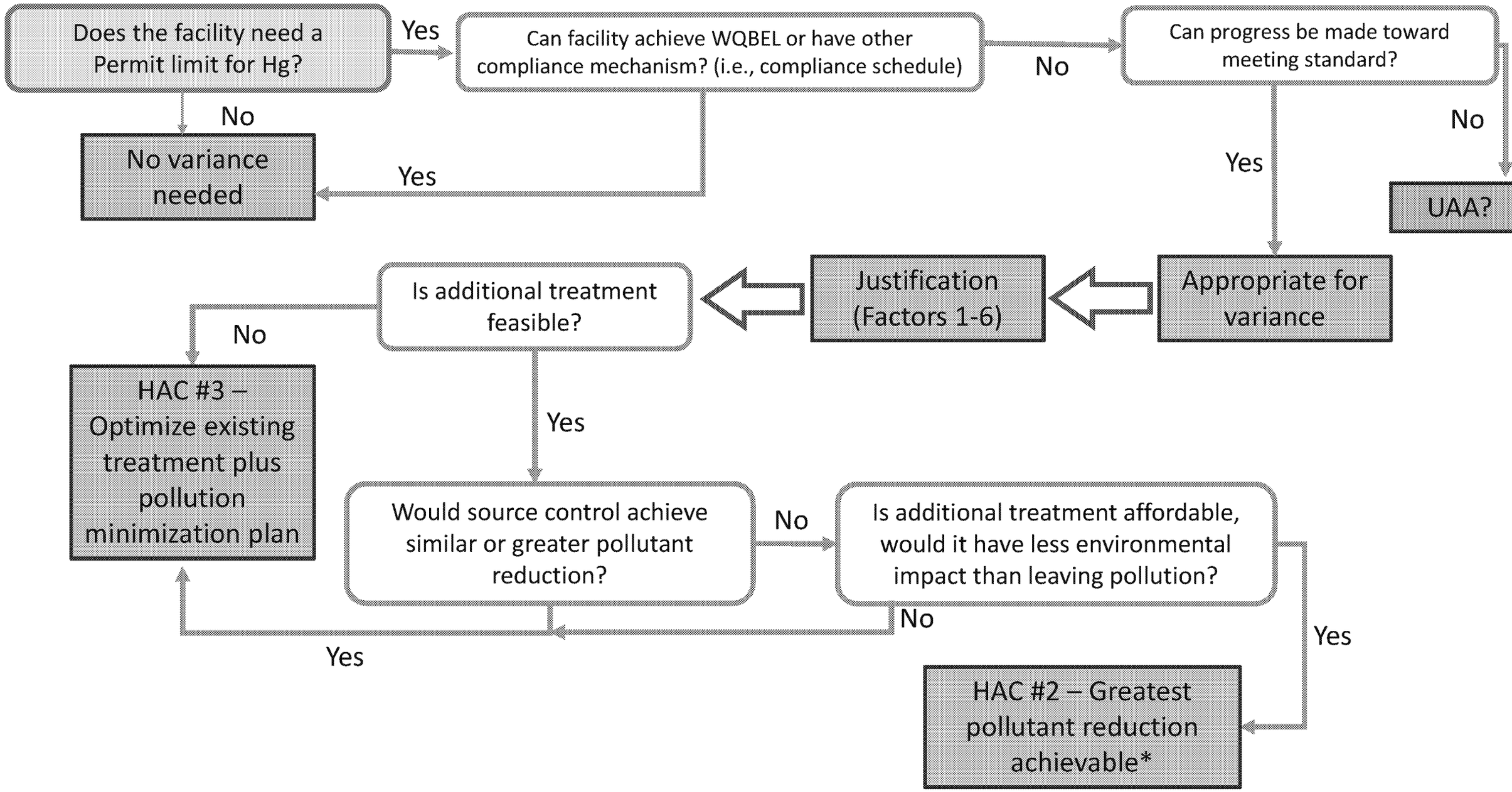
Monitoring

Progress Reports

Variance Duration

- ✓ State: term of the NPDES Permit with renewals allowed
- ✓ Federal: As long as necessary to achieve HAC with re-evaluation if >5 years

State of Oregon Department of Environmental Quality



* - may need compliance schedule

Questions?