

CAO Fiscal Advisory Committee Meeting Review of Draft Proposed Rules

Cleaner Air Oregon

REFORMING OREGON'S INDUSTRIAL AIR QUALITY REGULATIONS

Inviting Oregonians to help create new regulations that protect what we all care about: the health of our people, a clean environment, and the economic vitality of our communities.

Sept. 23, 2019

CleanerAirOregon

Statute Requirements for HI rules

- Only applies to non-cancer benchmarks for existing facilities
- Applies to chemicals expected to have developmental or other severe human health effects
- Requires standards and criteria for adjusting benchmarks to individual facilities
- Consider the recommendations of a technical advisory committee (established by EQC)

Parameters for HI Rulemaking

- Must be consistent with statute
- Work within recently adopted CAO rules
- Work within legislatively appropriated program resources
- Timely rulemaking- implementation is underway

Technical Advisory Committee

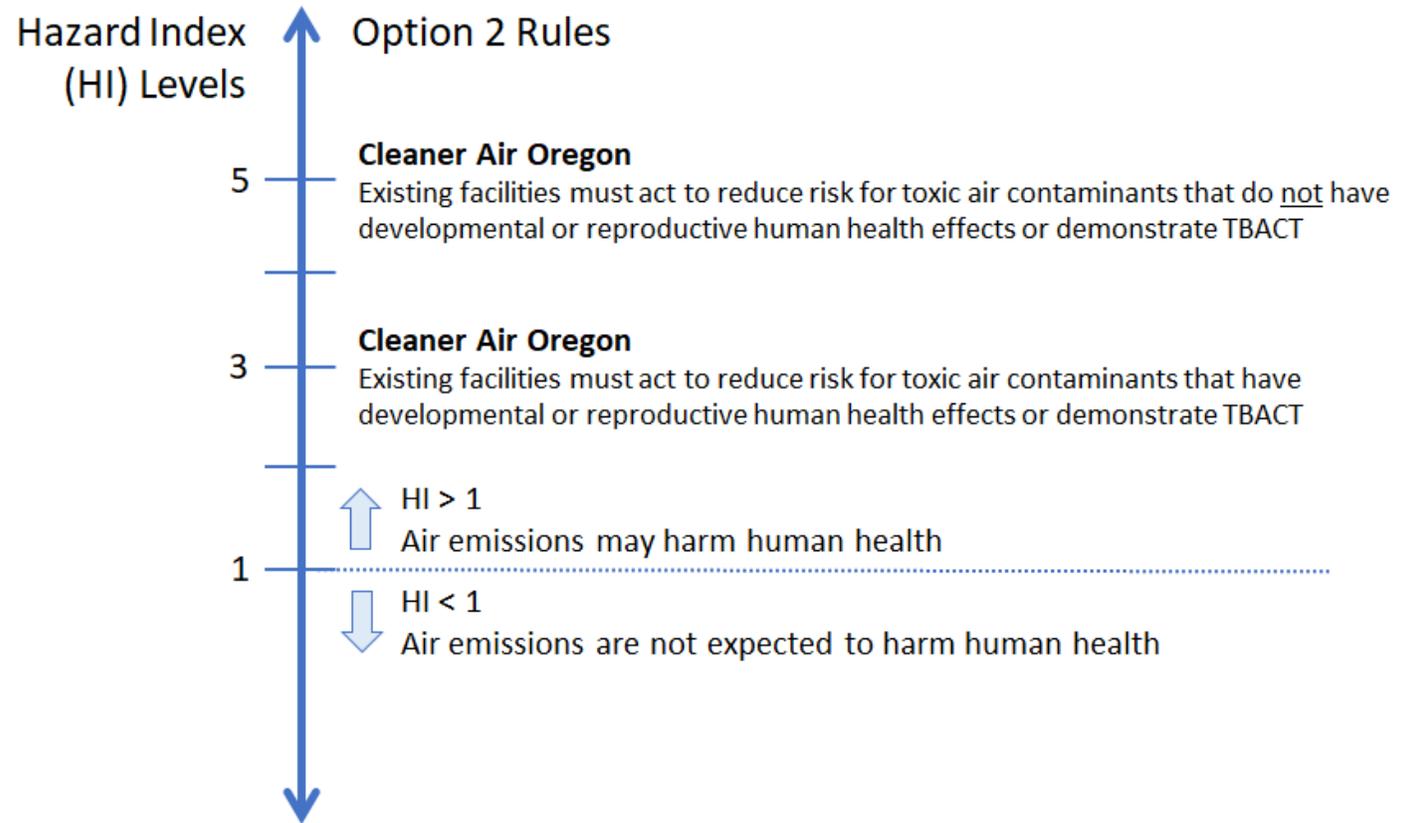
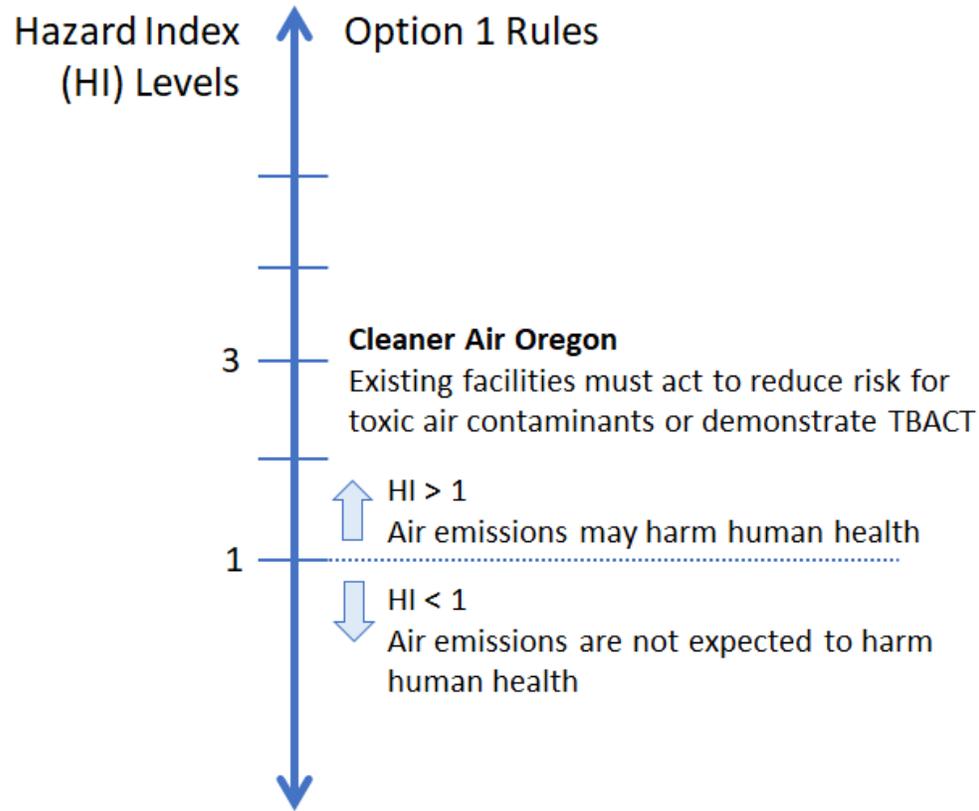
Majority opinions

- Reproductive effects should be considered developmental effects
- Developmental effects at any dose should be considered severe, even if other impacts would occur first
- No science-based way to determine what a “severe” impact is- this is a policy decision (also a concern)

Written Concerns (2 members)

- Not considering most recent studies
- Insufficient committee review time

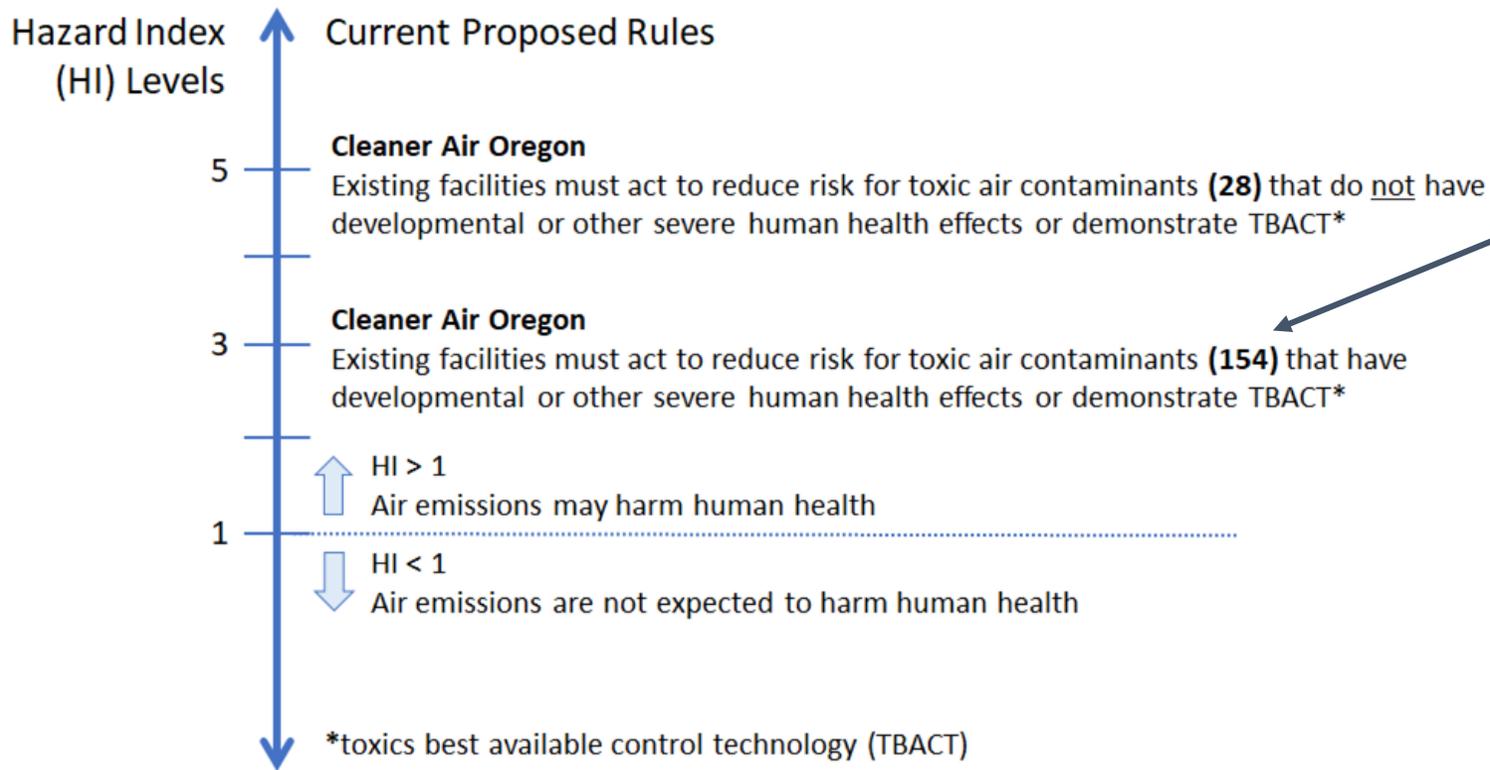
Two rule scenarios presented to Rules Advisory Committee in July 2019



Rules Advisory Committee Input

- Include toxic air contaminants with health standards based on impacts to multiple organ systems
- Include contaminants are known to be extremely hazardous when inhaled
- Intent of statute - applies to a subset of toxic air contaminants, assessed at individual sources
- Additional feedback in meeting minutes and written comments posted online

Draft Proposed Rules

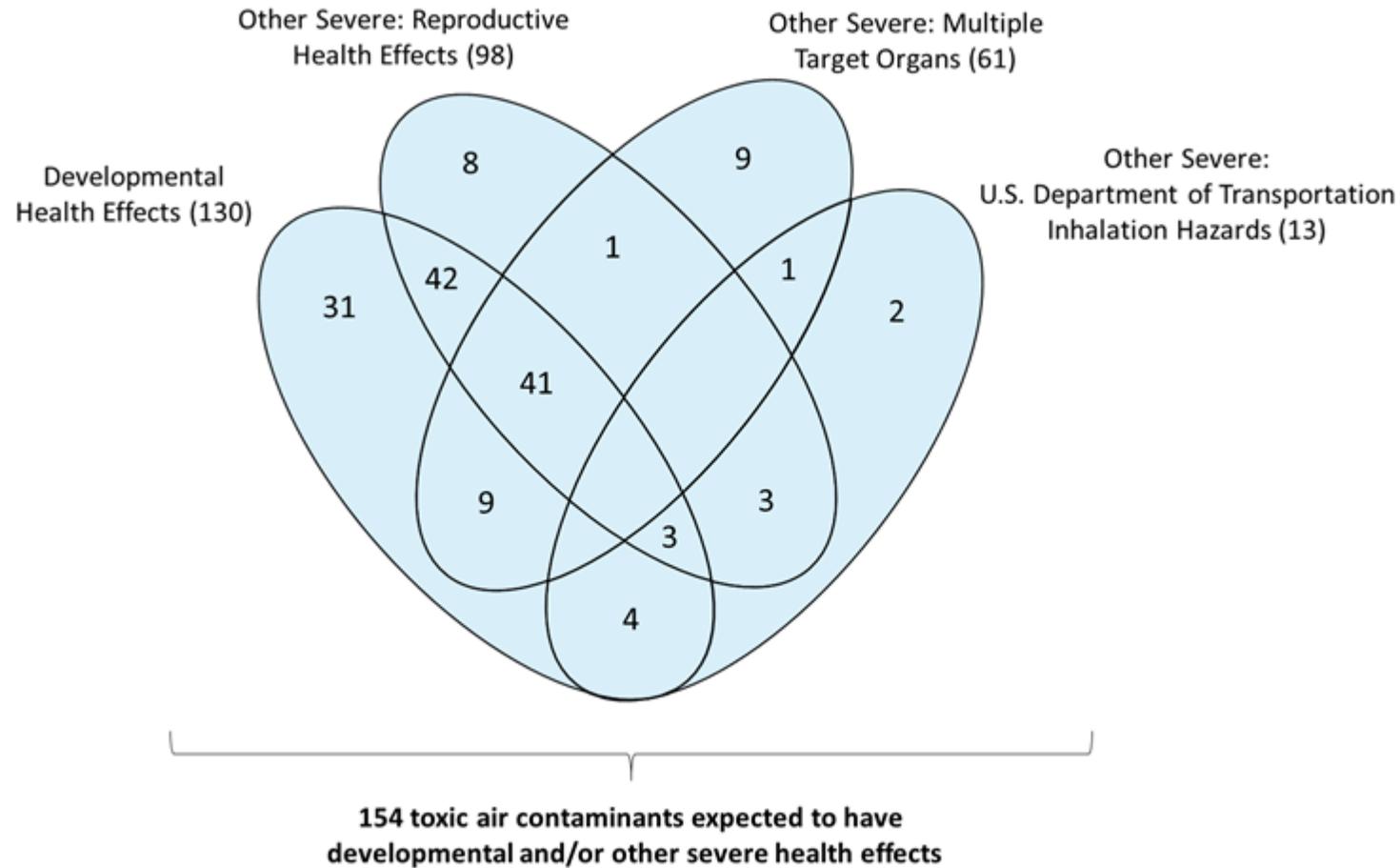


	Number of Toxic Air Contaminants
Developmental Health Effects	130
Reproductive Health Effects	98
Multiple Target Organs	61
U.S. Department of Transportation Inhalation Hazards	13
Expected to have Developmental and/or Other Severe Health Effects	154

Developmental and Other Severe Health Effects

- **Developmental effects- 130 chemicals**
 - Includes chemicals shown to have developmental effects at any dose
- **Other severe health effects**
 - Reproductive health effects - 98 chemicals
 - Multiple target organ systems as basis of TRV - 61 chemicals
 - Designated by U.S. DOT as Inhalation Hazards (classes 2.3 and 6.1) - 13 chemicals
- **Significant overlap in chemicals - total number 154**

Considering Multiple Lines of Evidence



Standards and Criteria- Exceedance Ratio

- For emissions containing mix of contaminants regulated at HI3 & HI5

$$Risk_{HI3} = \sum_{HI3 \text{ chemicals}} \frac{\text{Concentration}}{\text{Risk Based Concentration}}$$

$$Risk_{HI5} = \sum_{HI5 \text{ chemicals}} \frac{\text{Concentration}}{\text{Risk Based Concentration}}$$

$$\text{Exceedance Ratio} = \frac{Risk_{HI3}}{3} + \frac{Risk_{HI5}}{5}$$