

Air Toxics Science Advisory Committee Orientation

Cleaner Air Oregon

OREGON'S HEALTH-BASED AIR QUALITY REGULATIONS

Protecting community health through evaluation and reduction of industrial air toxics emissions

ATSAC Orientation
October 17, 2022

CleanerAirOregon

Cleaner Air Oregon Process



Cleaner Air Oregon Risk Action Levels

Additional actions required as health risk increases 

Low Risk

High Risk



Source permit level



Community engagement level



Best available control technology level

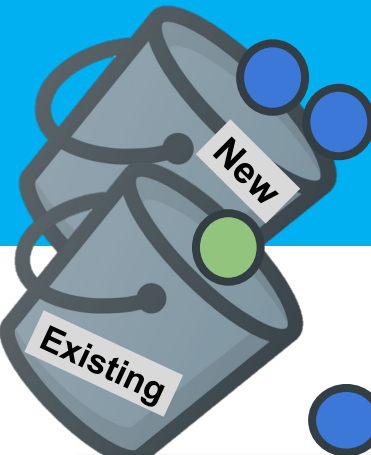


Risk reduction level

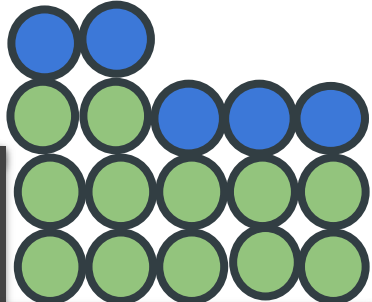


Immediate curtailment level

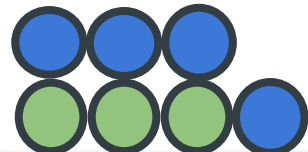
Status of Program



Facility starts CAO Process



Emissions Inventory and Source Testing

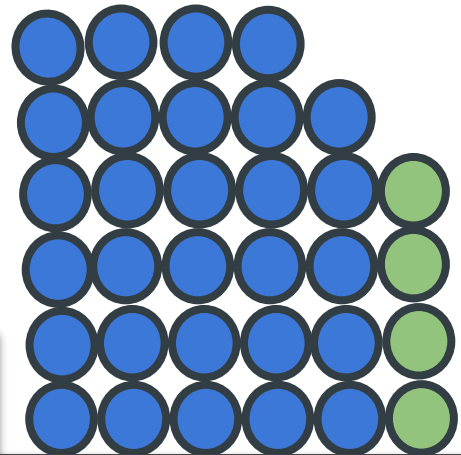


Modeling and Risk Assessment



Risk Assessment Approval

Risk Reduction¹



Permit Issuance

¹Risk reduction is only applicable to existing facilities

Cleaner Air Oregon Process



**Report toxic air
contaminants**

Priority List



Assess risk

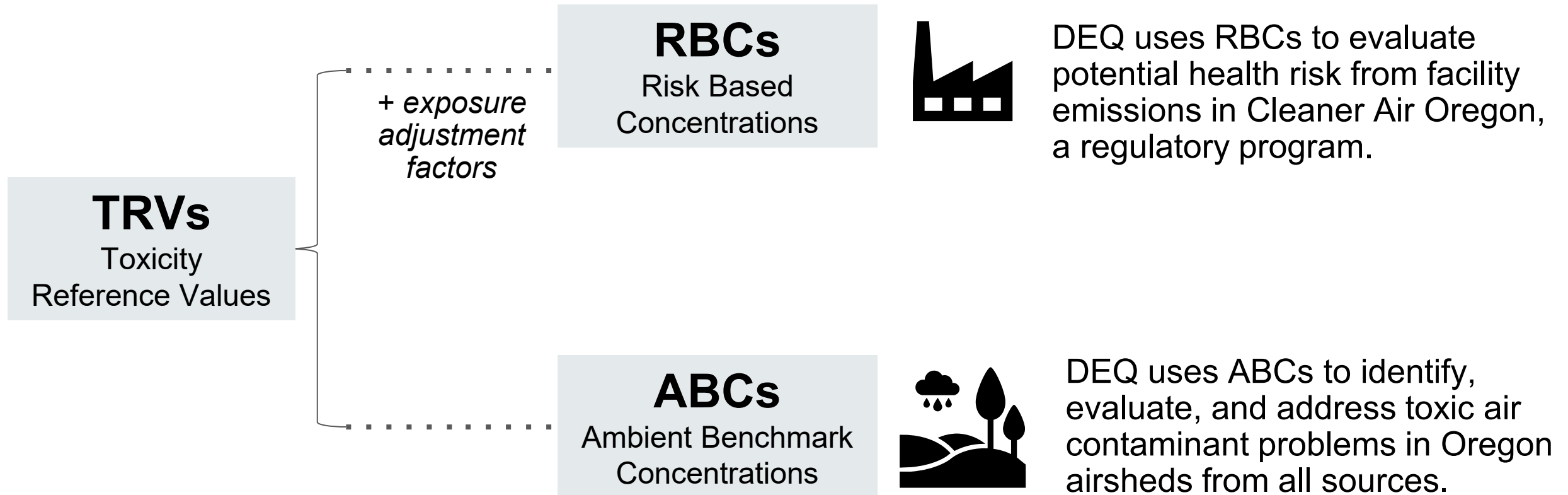
Toxicity Reference
Values (TRVs)

Risk Based
Concentrations
(RBCs)



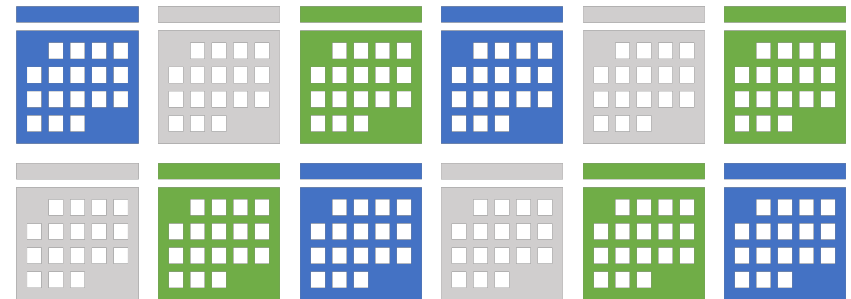
**Regulate to
reduce risk**

TRV Applications



TRV Definitions

- **Acute:** Exposure evaluated over a 24-hour period or day
- **Chronic:** Exposure evaluated over one year period or longer



TRV Definitions

- **Noncancer:** Air concentration below which noncancer health effects are not expected from inhalation
- **Cancer:** Air concentration corresponding to a one in one million excess cancer risk, calculated by dividing one in one million (0.000001) by the inhalation unit risk

Sources of TRVs



Agency Name	Examples of TRV Names
US Agency for Toxic Substances and Disease Registry (ATSDR)	<ul style="list-style-type: none"> • Chronic Minimal Risk Levels (MRL) • Intermediate MRLs (2 weeks-1 yr)
US Environmental Protection Agency (EPA)	<ul style="list-style-type: none"> • Inhalation Unit Risk (IUR) • Reference Concentration (RfC)
California Environmental Protection Agency (CalEPA)	<ul style="list-style-type: none"> • IUR • Chronic Reference Exposure Level (REL) • Acute Reference Exposure Level (1 hour)
Oregon DEQ in consultation with ATSAC	<ul style="list-style-type: none"> • Chronic TRV, Acute TRV (24 hours)

ATSAC Background

- **Original ATSAC's Role (2006-2017)**
 - Reviewed Proposed Toxicity Information
 - Voted on recommendations to ABCs
- **2021 Air Toxics Alignment Rulemaking**
 - ATSAC rescoped to provide input on TRVs

Purpose of ATSAC

- Recognizing scientific uncertainties and continuing development of new information in the field
- Advise DEQ and OHA on development of TRVs
- Review and provide feedback on TRVs proposed by DEQ
- Not deliberating on policy or fiscal impacts
- Science advisory committee- no decision-making authority

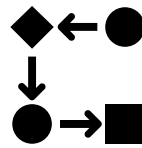
ATSAC Work Plan



ATSAC
charter
review and
introduction
to TRV
update tool



DEQ and OHA
develop TRV
proposals and
questions for the
ATSAC



ATSAC reviews the
general process that
agencies followed to
generate proposals



ATSAC takes a close
look at agency
questions on specific
chemicals



Final
ATSAC
meeting

TRV Rulemaking Process

