

Oregon Air Quality Permitting Updates 2022: Rulemaking Advisory Committee Meeting 2

Jan. 24, 2022
9 a.m. - 12 p.m.

For Zoom technical issues, email bvaldez@kearnswest.com



Rulemaking Resources

Rulemaking webpage:

<https://www.oregon.gov/deq/rulemaking/Pages/aqpermits2022.aspx>

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Rulemaking notifications: Subscribe to DEQ

https://public.govdelivery.com/accounts/ORDEQ/subscriber/new?topic_id=ORDEQ_244

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RAC #2 Agenda

Time	Topic
9 a.m.	Welcome, agenda overview, and participation guidelines
9:05 a.m.	RAC Meeting #1 Review
9:35 a.m.	Generic Plant Site Emission Limits (PSELS)
10:35 a.m.	Break
10:50 a.m.	Generic PSELS continued
11:15 a.m.	Change permit type
11:40 a.m.	Next steps
11:45 a.m.	Public input
12 p.m.	Adjourn Meeting

Webinar Participation Tips

Thank you for joining us today!

- Please join audio by either phone or computer, not both.
- RAC members: Stay on mute when not speaking, and please join us on video if able.
- RAC members are joined as panelists and members of public as attendees.
- For discussion and comments, use “Raise Hand” button to get in the queue; if joined by phone press *9.
- Say your name and affiliation before speaking.
- Move around and take care of yourself as needed!
- For Zoom technical issues, email bvaldez@kearnswest.com.

Participation Guidelines

- Honor the agenda and strive to stay on topic
- Provide a balance of speaking time
- Bring concerns and ideas up for discussion at the earliest point in the process
- Address issues and questions – focus on substance and avoid personal attacks
- Seek to learn and understand each other's perspective
- Listen and speak with respect



Role of RAC members

This is an advisory committee and discussions will be used by DEQ to inform its draft rules.

- Prepare for and set aside time for the meetings and review materials in advance.
- Stay focused on the specific agenda topics.
- Provide constructive comments.
- Treat everyone and his/her/their opinions with respect.
- Allow one person to speak at a time.

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RAC Meetings

- **RAC #1**
 - Notice of Intent to Construct, technical clarifications, and typos and non-technical clarifications
- **RAC #2**
 - Generic Plant Site Emission Limits and change permit type
- **RAC #3**
 - Short-term activity permit, no expirations, National Ambient Air Quality Standards clarifications, no excess emissions for 48 hours and petition for General permits
- **RAC #4**
 - Outstanding issues and fiscal impact

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Plant Site Emission Limit Definition

A Plant Site Emission Limit or PSEL means the total mass emissions per unit time of an individual regulated pollutant specified in a facility's permit.

Plant Site Emission Limits - Purpose

- The Environmental Quality Commission adopted the PSEL program in 1981 to:
 - Ensure progress toward attaining compliance with ambient air quality standards in nonattainment areas;
 - Maintain compliance with ambient air quality standards and increments;
 - Administer offset and banking programs; and
 - Establish the baseline for tracking increments.
- PSELs are federally enforceable limits on Potential to Emit

Plant Site Emission Limits - Concepts

- Facility-wide “caps” for pollutants regulated under New Source Review and hazardous air pollutants for synthetic minor purposes
- Used to track applicability of New Source Review
- Calculated based on:
 - Production, throughput and usage (not enforceable limits)
 - Emission factors or material balance (not enforceable limits)

Plant Site Emission Limits - Changes

- Can be increased if requested by the source:
 - Increases $<$ SER currently do not require further analysis
 - Increases \geq SER require air quality analysis and possible controls and offsets
- Can be changed by DEQ if:
 - Errors were made or more accurate data is available
 - More stringent controls are required

Generic PSEs - History

- Adopted as part of streamlining in 2001
- Increases in PSEL < Significant Emission Rate allowed without any AQ analysis
- Sources asked for increases less than the Significant Emission Rate at the end of the year when they realized they would exceed their PSEL

Generic PSEL - Definition

(72) "Generic PSEL" means the levels for the regulated pollutants listed below:

(a) Greenhouse Gases (CO₂e) = 74,000 tons per year

(b) CO = 99 tons per year

(c) NO_x = 39 tons per year

(d) SO₂ = 39 tons per year

(e) VOC = 39 tons per year

(f) PM = 24 tons per year

(g) PM₁₀ (except Medford AQMA) = 14 tons per year

(h) PM₁₀ (Medford AQMA) = 4.5 tons per year and 49 pounds per day

(i) PM_{2.5} = 9 tons per year

(j) Lead = 0.5 tons per year

.....

(t) Single HAP = 9 tons per year

(u) Combined HAPs (aggregate) = 24 tons per year

Example Generic PSEL: Simple/Standard permit

Pollutant	Limit	Units
PM	24	tons per year
PM ₁₀	14	
PM _{2.5}	9	
SO ₂	39	
NO _x	39	
CO	99	
VOC	39	
GHGs (CO ₂ e)	74,000	

Simple permit

Standard permit

Pollutant	Limit	Units
PM	98	tons per year
PM ₁₀	42	tons per year
PM _{2.5}	21	tons per year
SO ₂	39	tons per year
NO _x	39	tons per year
CO	99	tons per year
VOC	39	tons per year
GHG	74,000	tons per year



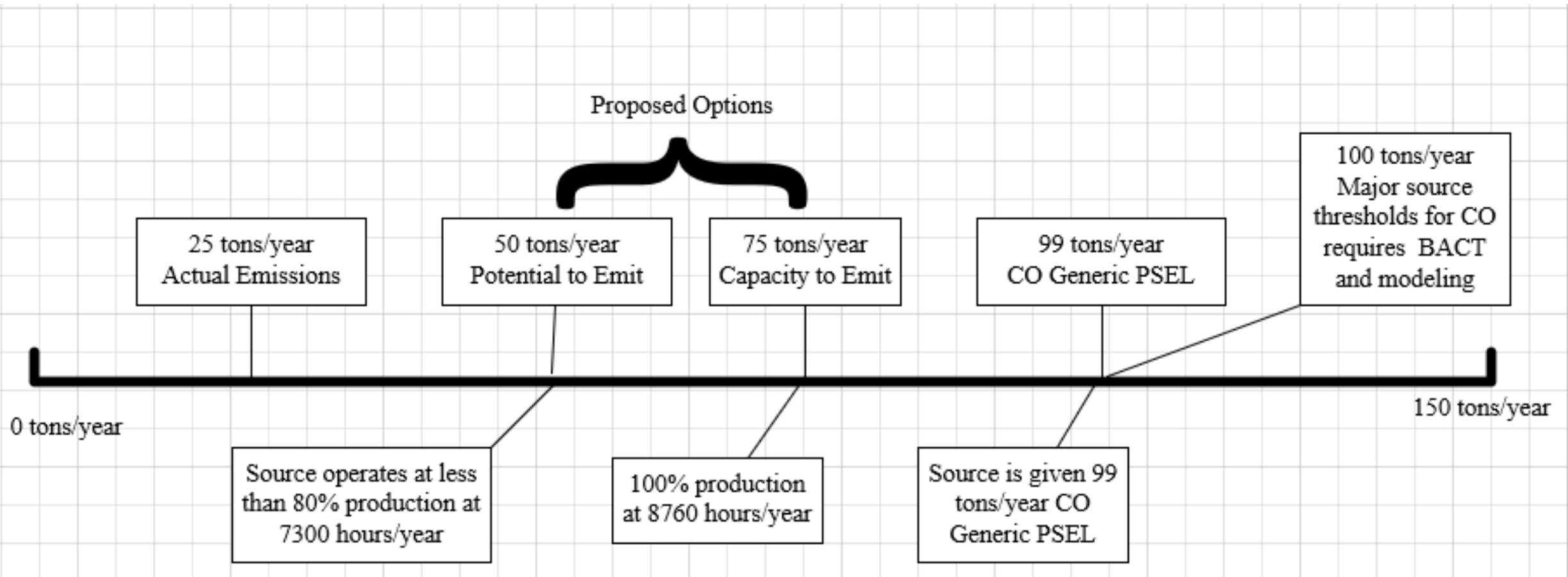
Challenges with Generic PSEs

- May not be protective of the short-term NAAQS, especially in EJ communities
- Are more than some sources could ever emit and prevents DEQ review of increases less than SER
- Do not encourage sources to reduce emissions
- Obscure hourly emission rates used to determine if Notice of Construction and Approval of Plans is triggered

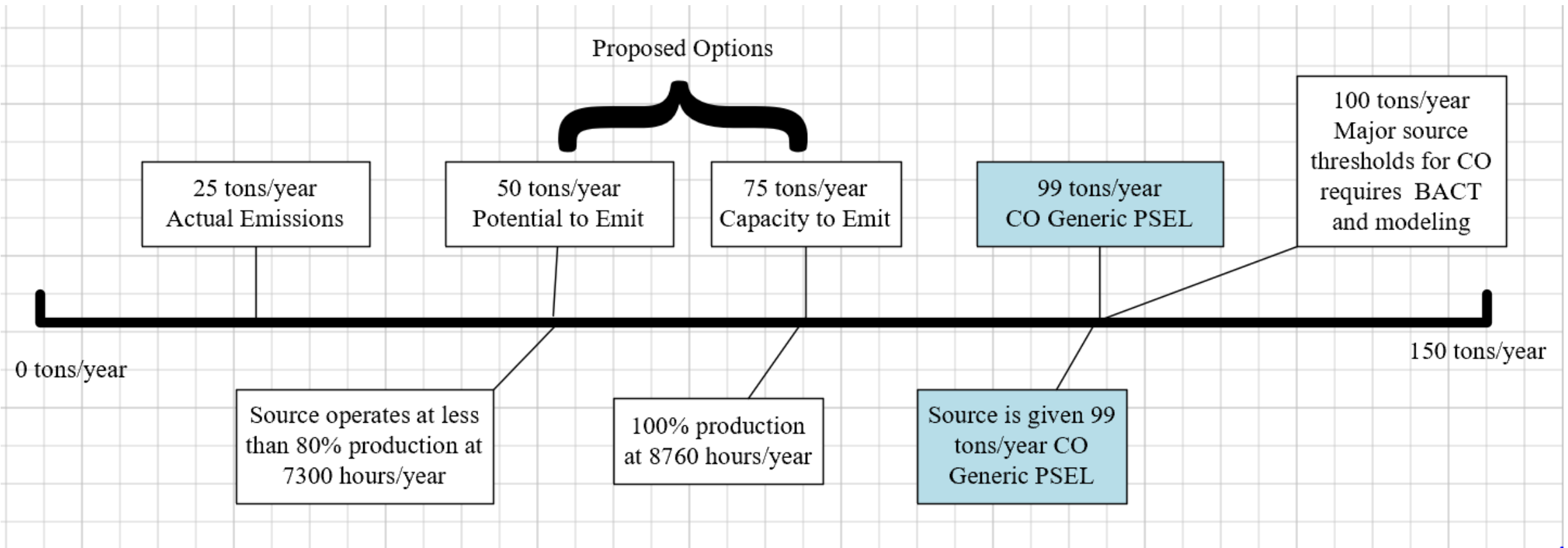
Proposal Under Consideration

- Keep Generic PSELS for General permits
- Keep Generic PSELS for sources that do not want to be major sources – synthetic minor sources
- Permit other sources at their capacity or potential to emit with source specific PSELS.

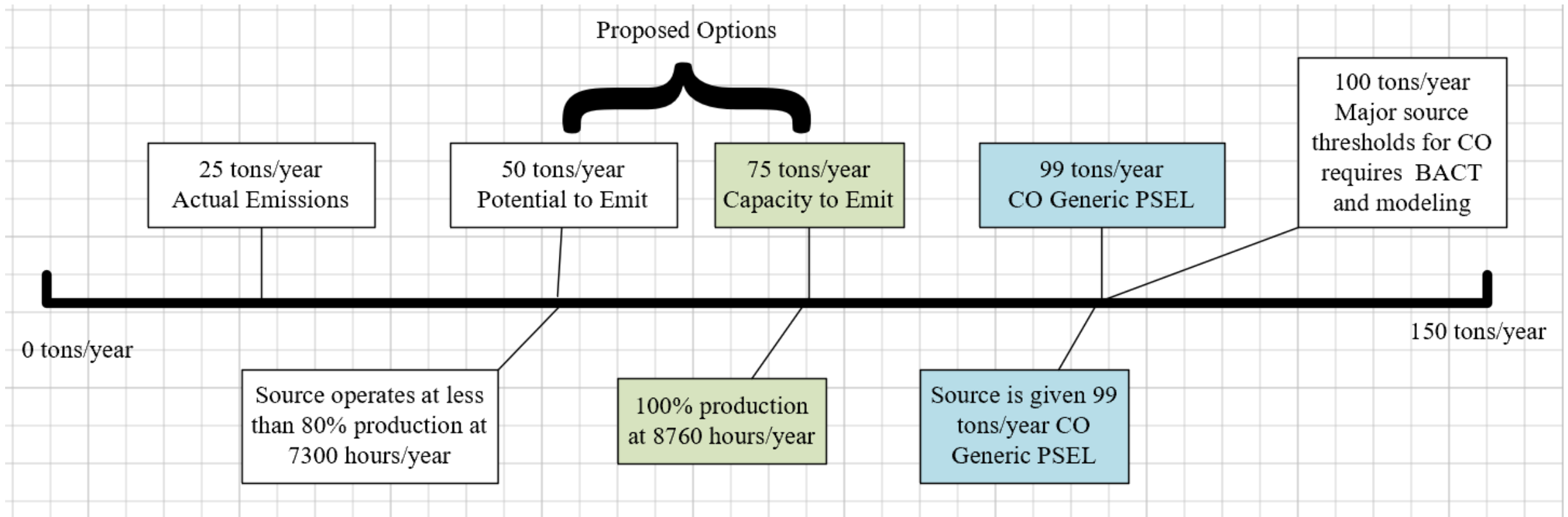
Example for Carbon Monoxide Generic PSEL



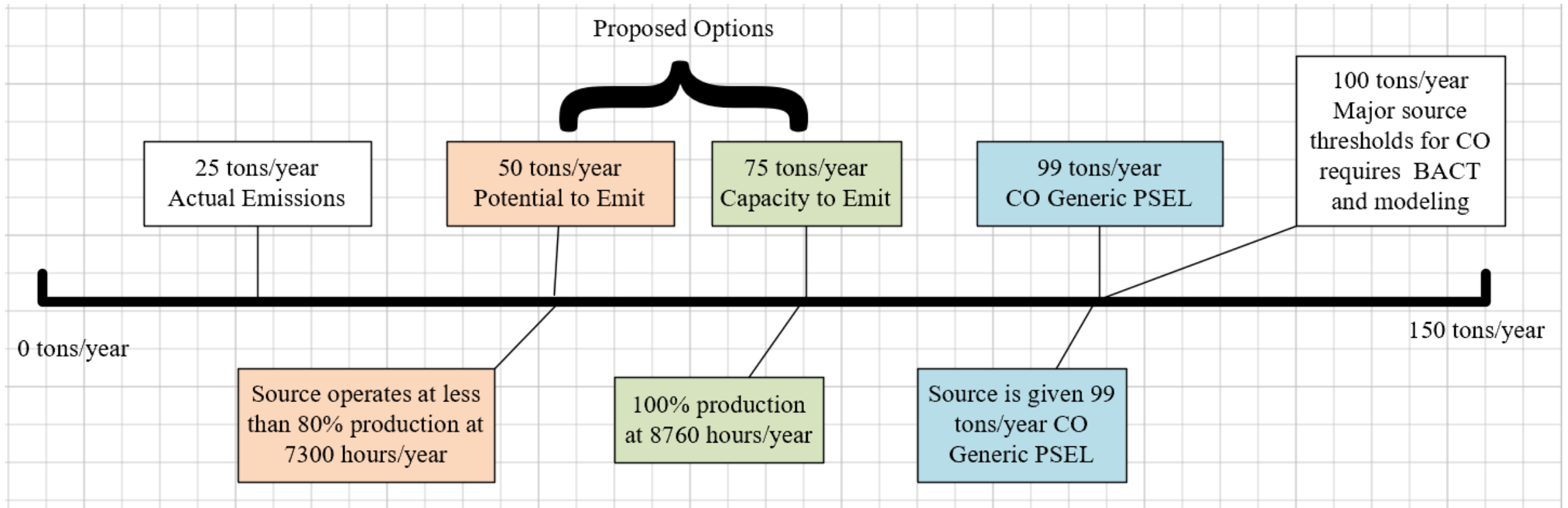
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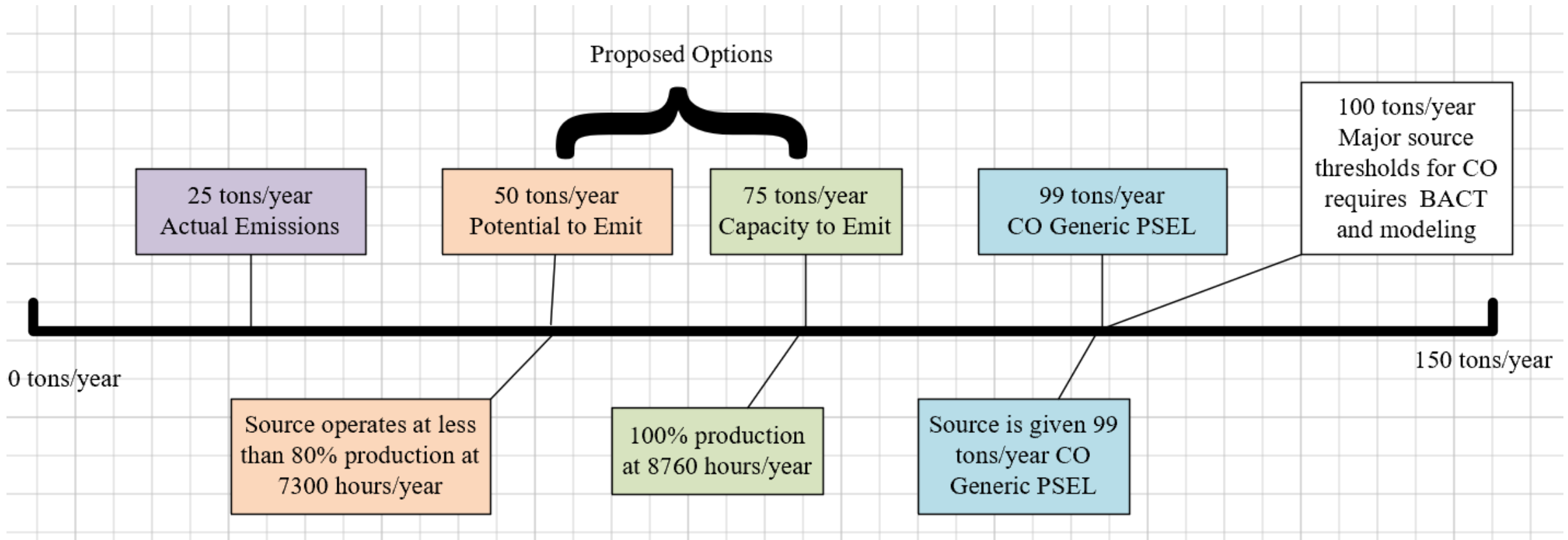
Example for Carbon Monoxide Generic PSEL



Example for Carbon Monoxide Generic PSEL



Example for Carbon Monoxide Generic PSEL



How to Calculate Potential to Emit/Capacity

CO							
Local Process Name	Rated Capacity (MMBtu/Hr)	Potential Throughput	Units	Emission Factor	Units	Tons Emitted	
External Combustion >10 MMBTU/hr	46.203	60,000,000	SCF	84.0	lb/MMSCF	2.5	Potential to Emit
External Combustion >10 MMBTU/hr	46.203	392,949,786	SCF	84.0	lb/MMSCF	16.5	Capacity
						99.0	Generic PSEL

Throughput x Emission Factor x Conversion Factors = Plant Site Emission Limit

Definition of Potential to Emit

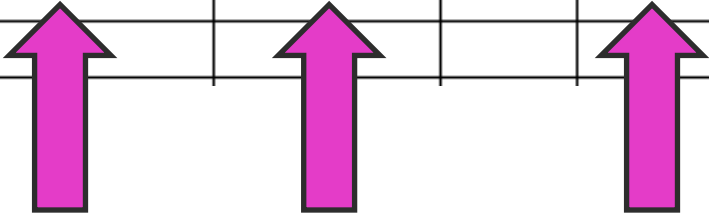
(124) "Potential to emit" or "PTE" means the lesser of:

(a) The regulated pollutant emissions capacity of a stationary source; or

(b) The maximum allowable regulated pollutant emissions taking into consideration any physical or operational limitation, including use of control devices and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, if the limitation is enforceable by the Administrator.

Proposed Additional Enforceable Limits

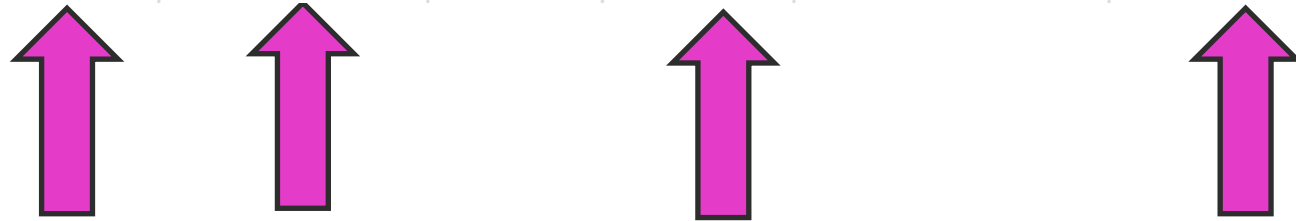
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Local Process Name	Rated Capacity (MMBtu/Hr)	Potential Throughput	Units	Emission Factor	Units	Tons Emitted	
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						99.0	Generic PSEL



Throughput x Emission Factor x Conversion Factors = Component of PSEL

Particulate Matter Emissions w/Baghouse

Local Process Name	Hourly Throughput	Annual Throughput	Units	Emission Factor	Units	Control Efficiency	Lbs/Hour Emitted	Tons/Year Emitted
Flash Calciner	2500	10,000,000	pounds	560	lb/1000 pounds	99%	14,000	28
Flash Calciner	2500	10,000,000	pounds	560	lb/1000 pounds	99.9%	1,400	2.8



Proposed additional enforceable limits

$$\text{Throughput} \times \text{Emission Factor} \times (1 - \text{control efficiency}) = \text{Component of PSEL}$$



Impacts of Changing Generic PSEs

- Creates permits that more accurately reflect actual emissions
- Provides for regulatory certainty
- Avoids over-allocation of air resources
- Provides transparency for communities
- Allows more opportunities to review AQ modeling of emission increases to ensure compliance with short-term National Ambient Air Quality Standards

Impacts of Changing Generic PSELS

- Allows for continued use recommended by SPPIT 1 for General permits and synthetic minor sources
- Emissions must be calculated regardless of Generic or source specific PSEL
- Capacity PSELS should reduce permit mods to increase PSEL
- Less work for DEQ refund overpayment of Title V emission fees based on audit

Impacts of Changing Generic PSEL Use

- Training for DEQ and sources
- Permit mods to approve PSEL increases < SER
- Fees for potential permit mods
- Potential delays in permitting approvals

Implementation

- New Sources - immediately
- Existing sources - at first permit renewal application due date after the rule adoption date
- Permit modifications – upon submittal
- Permit writers will work closely with their sources to clearly explain whether to set their PSELs based on capacity or potential to emit
- Later requested increases in PSELs will require a permit modification and fees

Discussion Questions

- What are additional impacts of the proposal?
- Do you have other suggestions to ensure compliance with short-term NAAQS while maximizing permitting efficiencies?
- What effects do you think this change will have on regulated sources?
- What effects do you think this change will have on impacted communities?

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Changing Permit Type*

Issue:

Some sources may be on the wrong type of permit

Solution:

- Require Simple/Standard ACDP instead of Basic/General when needed
- Allow Simple instead of Standard

*Permit type based on existing criteria in rules

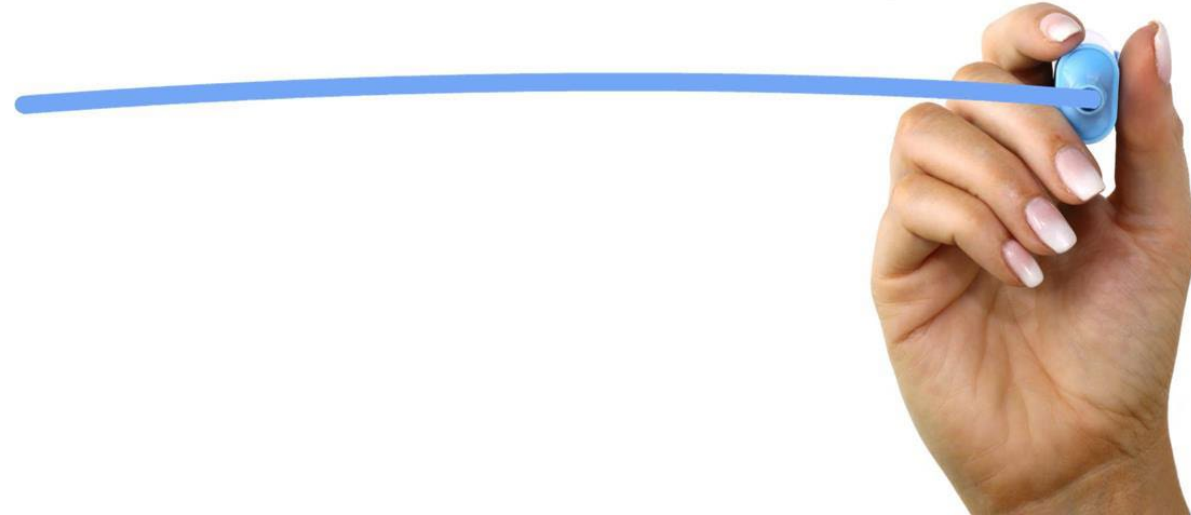
Changing Permit Type - Criteria

- The nature, extent and toxicity of the source's emissions;
- The complexity of the source and the rules applicable to that source;
- The complexity of the emission controls and potential threat to human health and the environment if the emission controls fail;
- The location of the source; and
- The compliance history of the source.

Changing Permit Type – Fee Implications

Permit Type	Initial Application Fees	Annual Fees	
Short Term Activity ACDP	\$ 4,500		\$ -
Basic ACDP	\$ 180	\$562 to \$1,469	
General ACDP	\$ 1,800	Fee Class One	\$ 1,296
		Fee Class Two	\$ 2,333
		Fee Class Three	\$ 3,369
		Fee Class Four	\$ 648
		Fee Class Five	\$ 216
		Fee Class Six	\$ 432
Simple ACDP	\$ 9,000	Low Fee	\$ 3,917
		High Fee	\$ 7,834
Construction ACDP	\$ 14,400		
Standard ACDP	\$ 18,000	\$ 15,759	

QUESTIONS



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Next steps

- DEQ intends to post a meeting summary
- Please fill out the post-RAC#2 meeting survey
 - We will be following up shortly on the rulemaking advisory committee meetings schedule timeline
- Deadline to submit written comments post-RAC#2 is February 7, 2022
- Sign up for meeting notifications
- Next RAC meeting is scheduled for February 24th from 12:30pm – 3:30pm PT

Rulemaking contact: Jill Inahara

jill.inahara@deq.state.or.us

Rulemaking notifications: Subscribe to DEQ

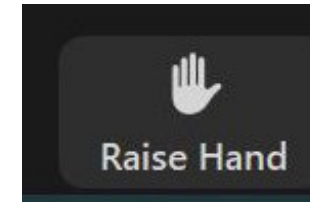
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Public Input Period

- Public input period: 11:45 a.m. – 12 p.m.
- Raise your hand if you'd like to make a comment
- When making public input, please:
 - Respect time limits as assigned
 - Use respectful language
 - Address issues and questions—focus on substance
 - When possible, relate comments to topics on the RAC agenda
- Public input will be considered by DEQ but is not part of the formal comment period



Thank you!