

Landfill Gas Emissions 2021 Rulemaking Advisory Committee (RAC) Meeting 2 – Draft Rule Review

Air Quality Planning

Feb. 25, 2021
Remotely Held Meeting

Introductions

- Hello and welcome
- Purpose of meeting

Webinar Participation Tips

- **Thank you for joining us today!**
- Please join audio by either phone or computer, not both. We encourage RAC members to turn on your video.
- Please keep your audio on mute when not speaking.

Public Input Instructions

- The public input will be allowed at the end of the meeting as time permits
- To submit input after the meeting:
 - Kuoppamaki.heather@deq.state.or.us

Rulemaking Resources

<https://www.oregon.gov/deq/Regulations/rulemaking/Pages/lfg2021.aspx>

Primary Rulemaking Contact:

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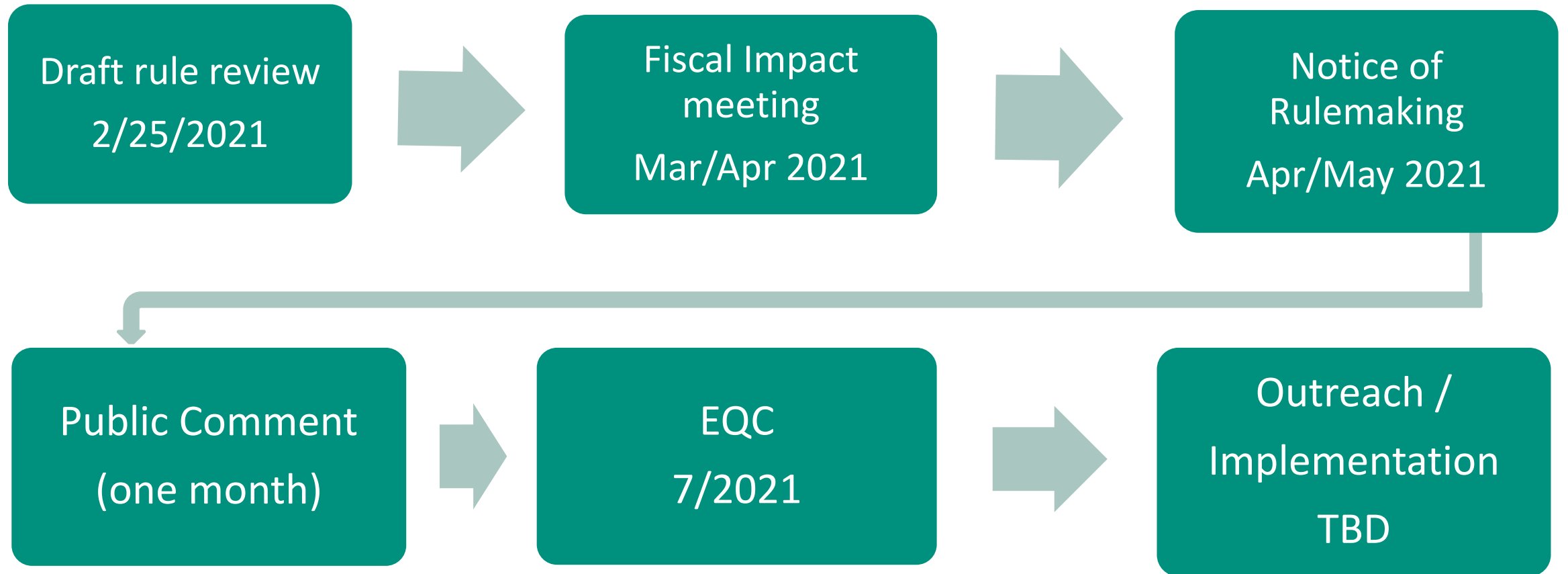
Agenda

Time	Topic
9 AM	Meeting commencement
9:15 AM	Review and discuss previous meeting materials
9:45 AM	Rule review and discussion
	Break
	Continued discussion
12:30 PM	Public Input
12:45 PM	Review next steps
1 PM	Adjourn meeting

Previous Meeting Materials

- Policy Primer
- Landfill Gas Primer
- Rule Comparison
- Meeting Summary

Anticipated Timeline



Current Meeting Materials

- Table and Figure
- Draft Rules
- Rule Compilation Summary
- Discussion Prompts

Draft Rules

- OAR 340-239 - NEW landfill gas emissions
- OAR 340-216 - Air Contaminant Discharge Permits
- OAR 340-012 - Enforcement Procedure and Civil Penalties

Draft Rules

- OAR 340-239 - NEW landfill gas emissions
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Draft Rules

OAR 340-239 - NEW landfill gas emissions

- California Landfill Methane Rule
- 40 CFR Part 63, Subpart AAAAA
- 40 CFR Part 60, Subpart XXX
- 40 CFR Part 60, Subpart Cf
- Oregon specific additions

Draft Rule Review Summary

Rule Text:

- Language or summary of draft rules to inform committee discussion

Key Issues:

- Policies important to reduce landfill gas emissions and ease implementation

Topics for Committee:

- Requests for feedback and committee expertise to inform DEQ's proposed approach

OAR 340-239-0010 Applicability

Rule Text:

- Rules only apply to solid waste landfills that have received waste since 1977
- Exclusions:
 - Landfills on tribal or federal lands.
 - Hazardous waste, CERCLA landfills
 - Landfills that only receive nondecomposable waste
 - **Closed** landfills with less than 450,000 tons of waste-in-place

Key Issues: Many more landfills will be regulated by these rules.

Topics for Committee:

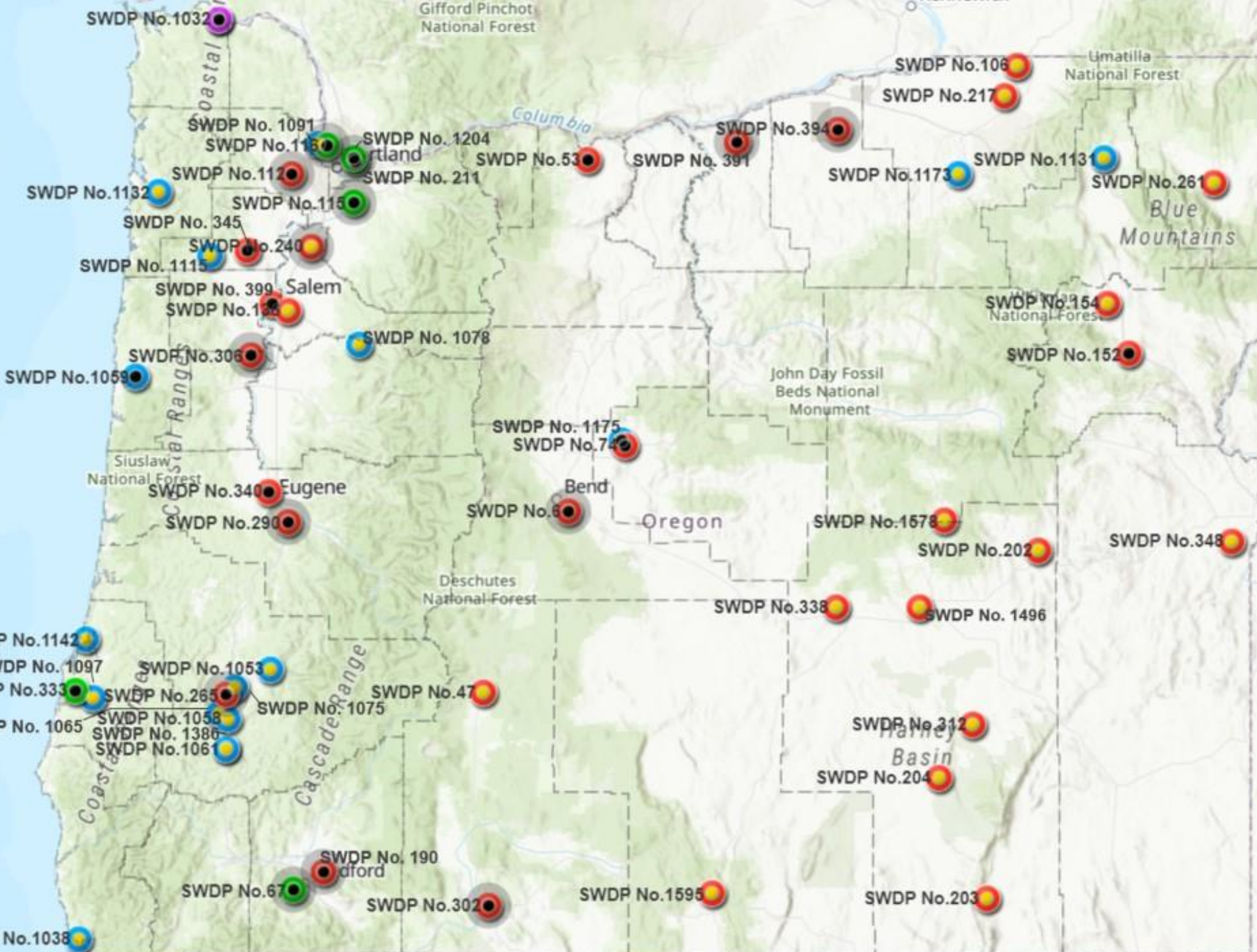
- Feedback on age of landfill?
- Other exclusions?

OAR 340-239-0010 Applicability

- Feedback on age of landfill?
- Other exclusions?



- Municipal:Active
- Industrial:Active
- Municipal:Closure
- Industrial:Closure
- <450,000 US Tons
- >450,000 US Tons
- GCCS



-0015 Definitions

Rule Text:

- Definitions used throughout the Division

Topics for Committee:

- Any missing definitions?
- Any definitions appear incorrect or incomplete?
- Any unnecessary definitions?

OAR 340-239-0015 Definitions

- Any missing definitions?
- Any definitions appear incorrect or incomplete?
- Any unnecessary definitions?

-0100 Landfills with Less than 450,000 Tons of Waste-in-Place

Rule Text:

- General requirements for active landfills with less than 450,000 tons of waste-in-place.

Key Issues: Smaller landfills will be tracked.

Topics for Committee:

- Feedback on annual requirements.

OAR 340-239-0100 Landfills with Less than 450,000 Tons of Waste-in-Place

- Feedback on annual requirements.

-0105 Landfills with Greater than or Equal to 450,000 Tons of Waste-in-Place

Rule Text:

- General requirements for landfills with greater than or equal to 450,000 tons of waste-in-place

Key Issues: Tiered requirements for larger landfills. From calculating methane emissions, to performing surface emission monitoring to installing a gas collection and control system (GCCS)

Topics for Committee:

- Feedback on annual requirements
- Feedback on threshold for methane generation - 664 metric tons per year

OAR 340-239-0105 Landfills with Greater than or Equal to 450,000 Tons of Waste-in-Place

- Feedback on annual requirements
- Feedback on threshold for methane generation - 664 metric tons per year

-0110 Gas Collection and Control System Requirements

Rule Text:

- General requirements for landfill gas collection and control systems

Key Issues: GCCS must be designed, installed, operated, and monitored effectively.

Topics for Committee:

- Open Flares - reducing the situations where these are allowed
- Temporary shutdown of GCCS and notification

OAR 340-239-0110 Gas Collection and Control System Requirements

- Open Flares - reducing the situations where these are allowed
- Temporary shutdown of GCCS and notification

-0200 Compliance Standards

Rule Text:

- General compliance standards

Key Issues: How do we ensure the landfills are staying below the methane emission limits?

Topics for Committee:

- Any missing standards?

OAR 340-239-0200 Compliance Standards

- Any missing standards?

-0300 Construction Activities

Rule Text:

- Areas of a landfill where Division OAR 340-239 do not apply

Key Issues: Sometimes waste will need to be exposed which can increase emissions.

Topics for Committee:

- Any other situations?
- Are there ways to limit these situations without impacting operations?

OAR 340-239-0300 Construction Activities

- Any other situations?
- Are there ways to limit these situations without impacting operations?

-0400 Permanent Shutdown

Rule Text:

- Eventual shutdown / removal of the GCCS

Key Issues: Eventually landfills will not generate enough landfill gas to require a GCCS. How to effectively monitor prior to and after shutdown and / or removal of the GCCS.

Topics for Committee:

- Is 15 years long enough?
- Comments on post-shutdown surface emission monitoring.

OAR 340-239-0400 Permanent Shutdown

- Is 15 years long enough?
- Comments on post-shutdown surface emission monitoring

-0500 Alternative Compliance Options

Rule Text:

- Permittees may request using alternatives to 0110, 0600, or 0800
- Permittee must show alternatives provide the same methane control
- Off-site methane migration is still being controlled

Key Issues: This gives some flexibility.

Topics for Committee:

- Methods to show compliance using alternative methods

OAR 340-239-0500 Alternative Compliance Options

- Methods to show compliance using alternative methods

-0600 Monitoring Requirements

Rule Text:

- Monitoring of the surface and GCCS to show compliance
- Surface emission monitoring based on CA standards

Key Issues: How do we ensure the landfills are staying below the methane emission limits?

Topics for Committee:

- Recommendations for additional monitoring?

OAR 340-239-0600 Monitoring Requirements

- Recommendations for additional monitoring?

-0700 Recordkeeping Requirements

Rule Text:

- Applicable landfills still have to submit electronically to EPA
- Recordkeeping
- Semiannual Reporting
- Other Reporting

Topics for Committee:

- Any missing recordkeeping/reporting requirements?
- Comments on implementation?

OAR 340-239-0700 Recordkeeping Requirements

- Any missing recordkeeping/reporting requirements?
- Comments on implementation?

-0800 Test Methods and Procedures

Rule Text:

- Test methods and procedures used to determine compliance with the rules
- Methane generation rate from EPA Greenhouse Gas Reporting regulations

Topics for Committee:

- Any missing test methods / procedures
- Feedback on other test methods / procedures available?

OAR 340-239-0800 Test Methods and Procedures

- Any missing test methods / procedures
- Feedback on other test methods / procedures available?

Compliance Timelines

- Initial compliance date July 1, 2022 (or 1-year after effective date of rules)
- Notification of unplanned temporary shutdown – 10 days after event
- Timeline to shutdown open flares – by January 1, 2024
- Other timelines

Compliance timelines

Permitting

Site types	General requirements	Permit type
Active landfills less than 450,000 tons WIP	Annual waste-in-place reports	Basic ACDP
Active landfills above 450,000 tons WIP but (a) below methane generation rate or (b) below SEM threshold	(a) Annual report on methane generation rate or (b) Annual report with methane generation rate and SEM results	(a) Basic ACDP (b) Simple ACDP
Above 450,000 tons WIP, above methane generation rate or SEM threshold	Install/operate GCCS	Title V (if otherwise required) or Standard ACDP

Permitting

Implementation

- How do we ensure effective, efficient, and equitable implementation of the rules?

- Quantify methane reductions from the rules
- Impacts to small business
- Equity / Environmental Justice
- Timelines, outreach, permitting

Public Input Instructions

To submit a verbal public input:

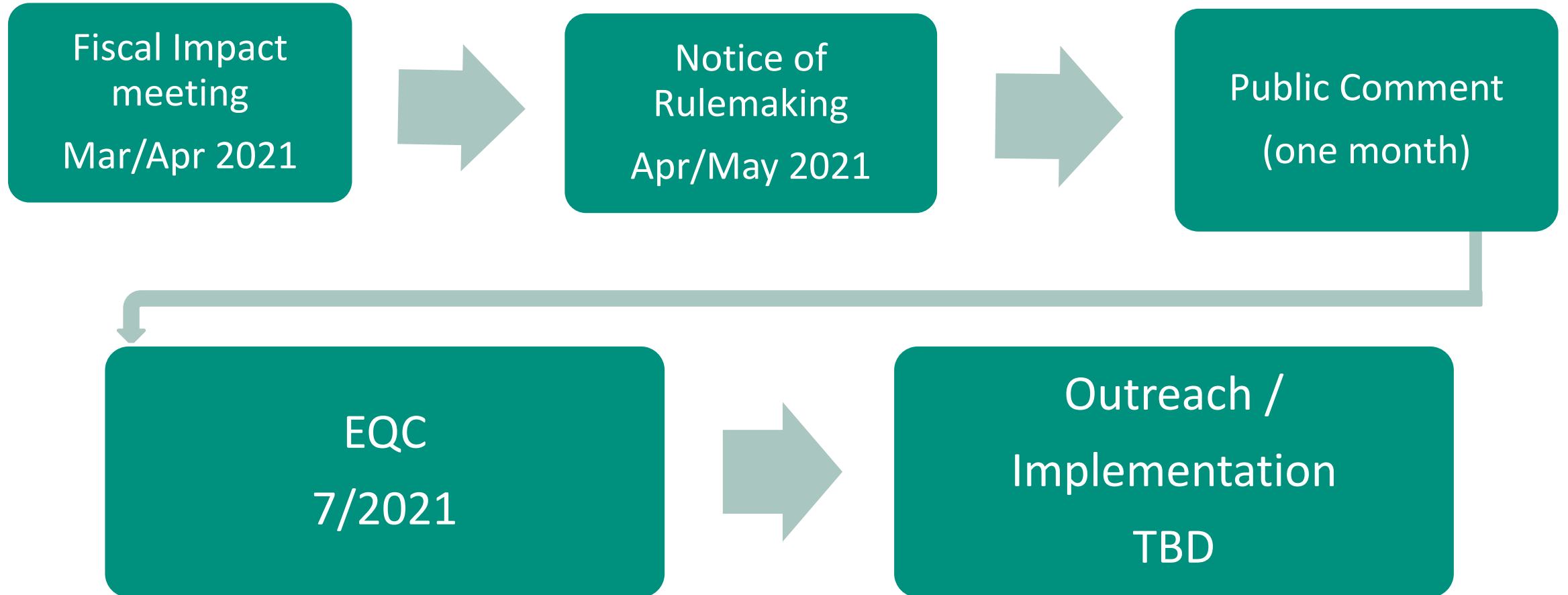
- Click “Raise Hand.”
- If you have joined by phone, press *9 to raise your hand.
- The facilitator will call on participants. You will receive an “unmute” request. Please accept it.
- Please provide your name and affiliation.

If we run out of time and you have not had a chance to speak, you can still provide comments after the meeting.



Questions

Next Steps



Thank you,

Rulemaking website:

<https://www.oregon.gov/deq/Regulations/rulemaking/Pages/lfg2021.aspx>

Sign up for govdelivery:

<https://public.govdelivery.com/accounts/ORDEQ/subscriber/new>

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