

Public Workshop for Potential Amendments to District Rule 4402 (Crude Oil Production Sumps)

September 29, 2023

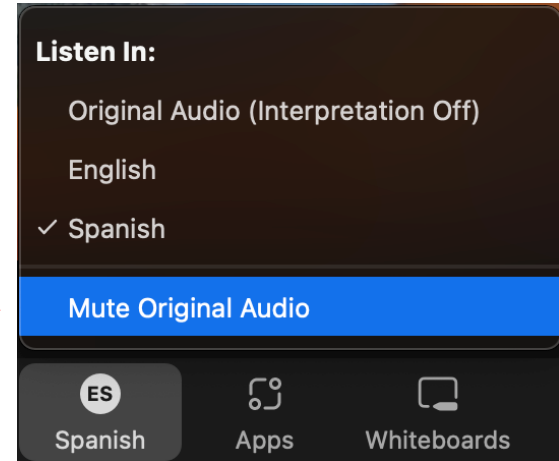
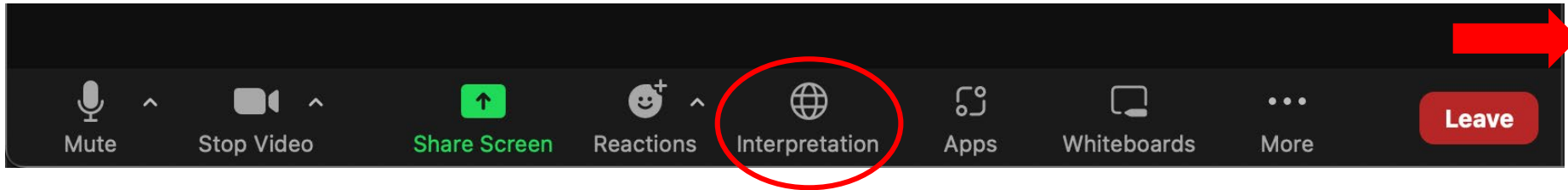
webcast@valleyair.org

How to Listen to the Webinar in Spanish

Cómo Escuchar la Interpretación Español

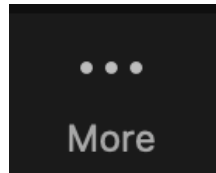
En Una Computadora

1. En los controles de la reunión o el seminario web, seleccione el **icono de interpretación**, que parece a un mundo en la parte debajo de la pantalla.
2. Seleccione español y silencie el audio original.



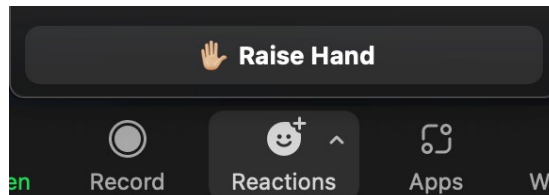
En Un Teléfono o Tableta

1. Seleccione los tres puntos para ver más opciones, seleccione interpretación y siga las mismas instrucciones de arriba.



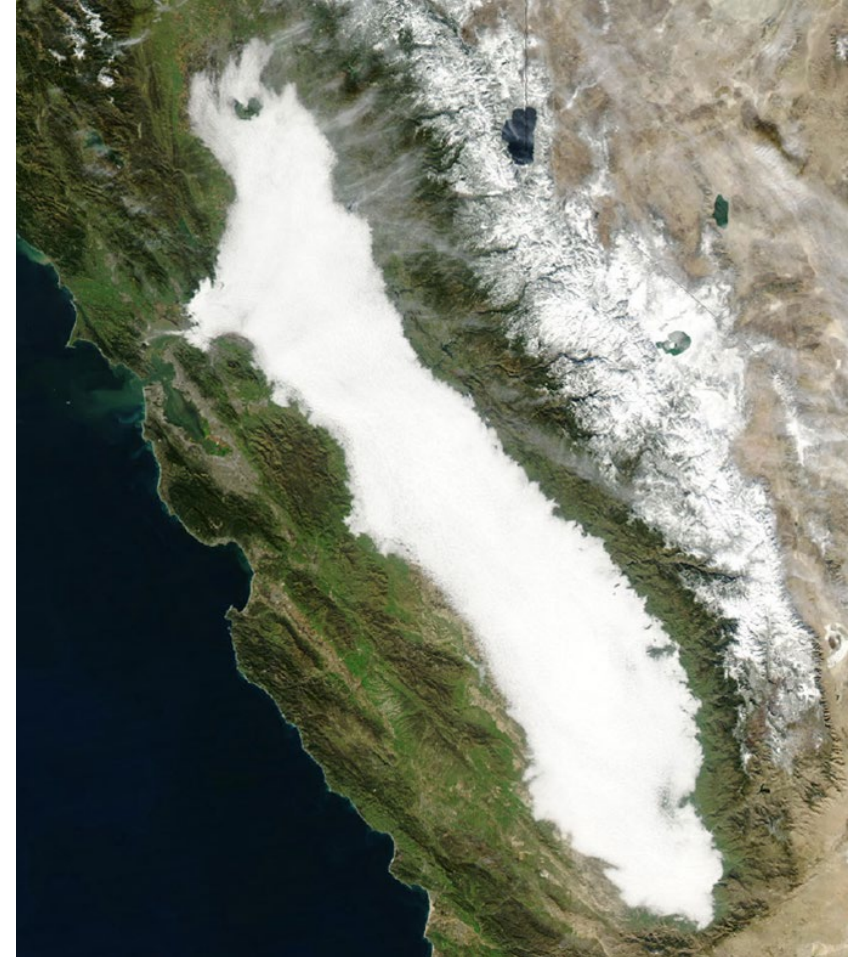
Para Hacer una Pregunta o un Comentario

1. Seleccione el icono de reacciones para levantar su mano



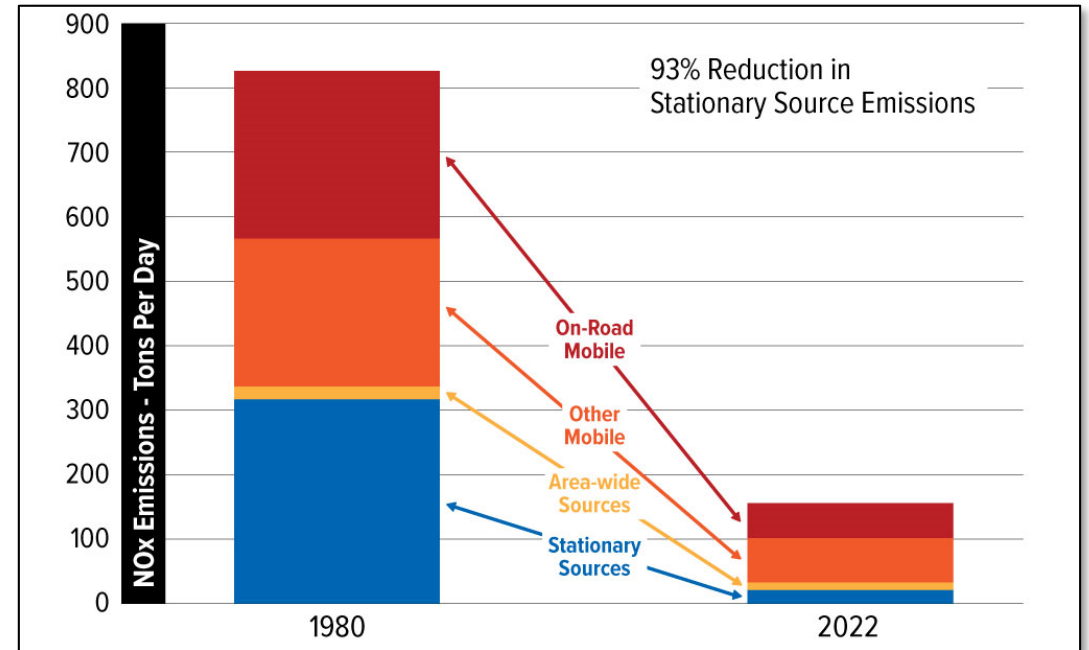
Valley's Air Quality Challenges

- Valley's challenges in meeting federal air quality standards unmatched due to unique geography, meteorology, and topography
- Valley designated as “Extreme” non-attainment of the 8-hour Ozone National Ambient Air Quality Standards; “Serious” non-attainment of federal standards for fine particulate matter (PM_{2.5})
 - Substantial emission reductions needed to achieve federal standards
- Need to go beyond already strict control limits
 - Stringent measures have already been implemented and Valley needs further emission reductions to attain federal standards



Adopted Controls Are Improving Air Quality

- Governing Board has adopted numerous attainment plans and air quality control strategies to address federal standards
 - Stationary source ozone and PM-forming NOx emissions reduced by over 90% through hundreds of regulatory actions
- California Air Resources Board (CARB) has adopted numerous mobile source emissions controls
- District/CARB combined efforts represent nation's toughest emissions control program
- Strong incentive programs (\$5.7 billion in public/private investment)
- Through significant clean air investments, Valley continues to make major improvements with respect to air quality

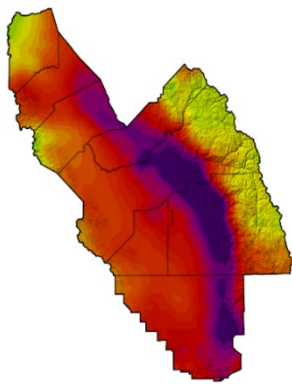


Decades of Stringent Air Quality Regulations

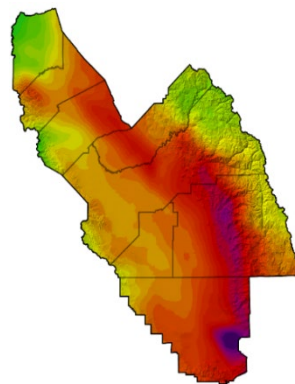
- District has evaluated and implemented stringent control measures across all sources under its jurisdiction in efforts to attain federal standards
 - Adopted over 670 rules and rule amendments in order to control emissions from stationary sources and other local sources
 - District's New Source Review permitting regulation requires the use of the Best Available Control Technology (BACT)
- District stationary sources subject to Best Available Retrofit Control Technology (BARCT) since 1980s
- Robust and ongoing analysis necessary to demonstrate that District's rules continue to meet state and federal requirements, including BARCT
 - Increasingly stringent air quality standards
 - Control technologies continually evolving

Ongoing Efforts to Reduce Ozone Levels

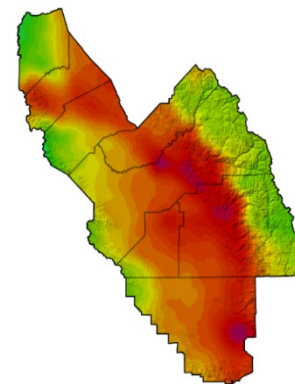
- Ongoing implementation of strategies within Valley ozone attainment plans have led to significant improvements in regional air quality
 - Valley now in attainment of 1-hour standard of 124 ppb
 - Over 92% reduction in days over 8-hr standard of 84 ppb
 - Over 73% reduction in days over 8-hr standard of 75 ppb
 - Over 61% reduction in days over 8-hr standard of 70 ppb
- 82% of days during May-October ozone season now meet latest ozone standard, with vast majority of days meeting 1997 and 2008 standards



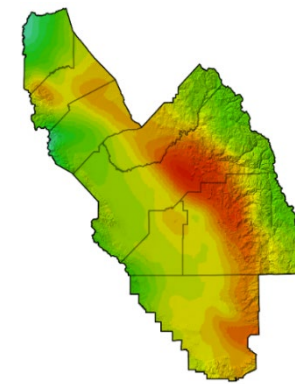
2000



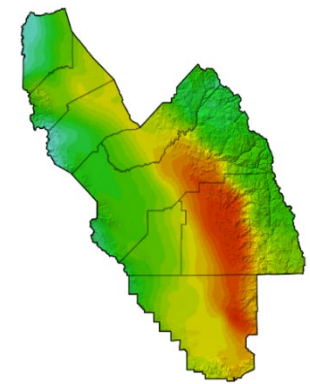
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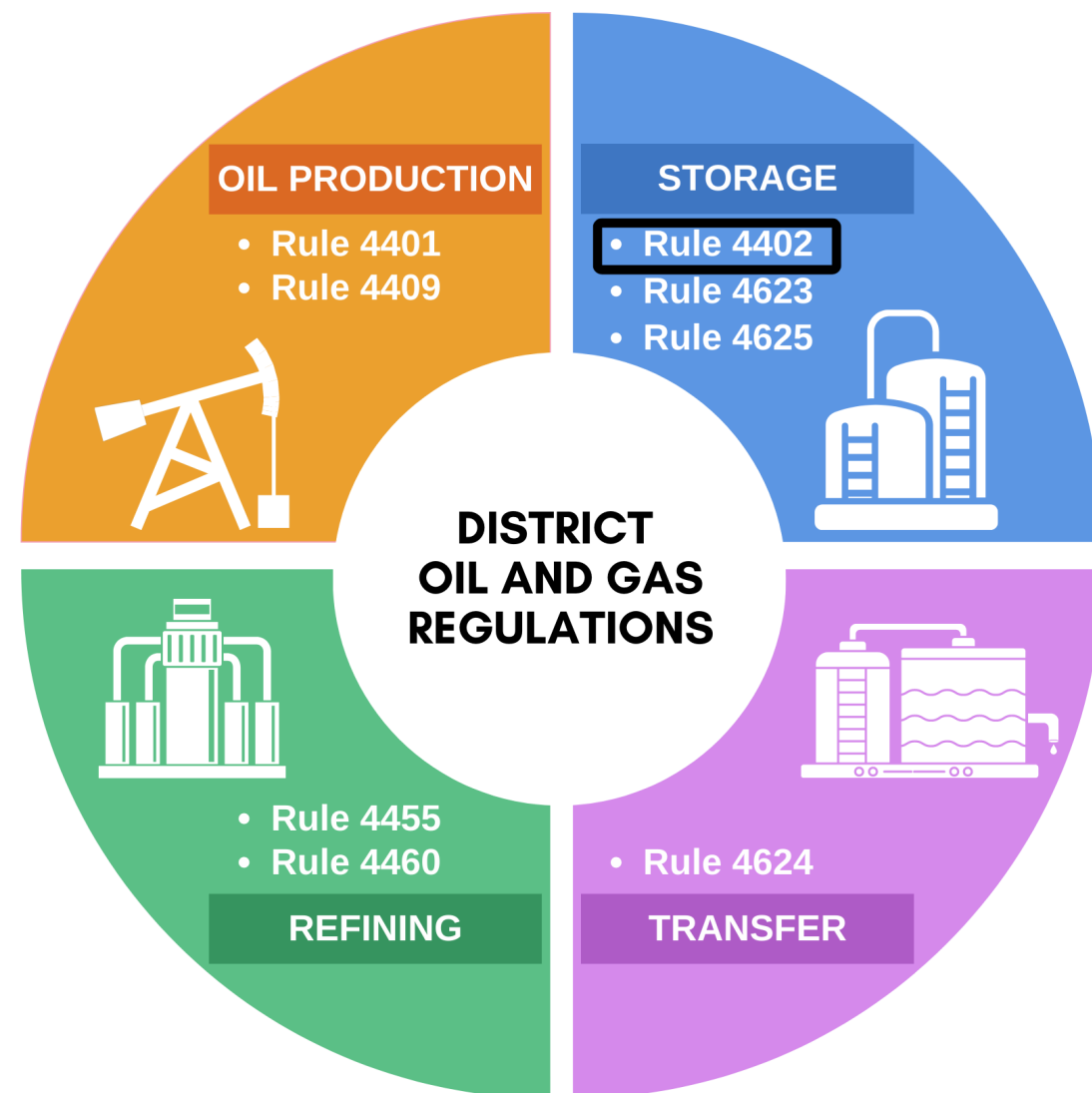
2022

Reasons for Rule Development

- Assembly Bill (AB) 617 requires expedited BARCT review and implementation schedule for facilities in CARB's Cap-and-Trade Program
 - *2021 District BARCT Rule Analysis* found opportunities for aligning existing Rule 4402 VOC exemption threshold for produced water in ponds and sumps with limits in other air districts' rules
- Rule 4402 included as SIP strengthening measure in 2022 *Ozone Plan* (VOC emissions are a precursor to ozone)
- District conducted an extensive rule making process to explore opportunities to enhance stringency of this rule and ensure continued implementation of BARCT

District VOC Oil and Gas Rules

- In addition to Rule 4402, District currently has complimentary, stringent VOC rules regulating other facets of the oil and gas industry
- Coordinated implementation with CARB, EPA, and other agency oil and gas regulations (e.g. California Oil and Gas Regulation)



Current Rule 4402 Overview

- Rule 4402 adopted April 1991, last amended in December 2011
- Applicability: All first, second, and third stage sumps at facilities producing, gathering, separating, processing, and/or storing crude oil in an oil field
- Purpose: Limit VOC emissions from sumps
- Requirements:
 - First stage sumps are prohibited
 - Second or third stage sumps equipped with an intact flexible floating cover, rigid floating cover, or fixed roof cover that is impermeable to VOCs and covers entire perimeter of sump
 - Sumps replaced with above-ground fixed roof tanks must comply with Rule 4623 (Storage of Organic Liquid) or maintained leak-free and fitted with a pressure/vacuum vent

Produced Water VOC Exemption Limit Comparison

District - Rule	Produced Water VOC Exemption Limit
South Coast AQMD - Rule 1176	5 mg/L
Ventura County APCD - Rule 71.4	5 mg/L
San Luis Obispo APCD - Rule 419	5 mg/L
SJVAPCD - Rule 4402	35 mg/L




Oil/Water Separation

- Oil/Water Separation Control Technology
 - American Petroleum Institute oil/water separators
 - Dissolved air flotation systems
 - Parallel plate oil/water separators
 - Hydrocyclone oil/water separators
 - Walnut shell filters
 - Other media filters
- District staff analyzed cost and effectiveness of control technologies to determine potential VOC limits for exempt ponds




Outreach and Analysis

- District created updated inventory of facilities subject to the rule:
 - Contacted facilities and requested updated VOC data for sumps and produced water ponds
 - Comprehensive review of Central Valley Regional Water Quality Control Board records of ponds storing produced water in Valley
- Based on District's analysis, sources that have ponds have already invested in cleaner technologies to reduce emissions
 - Source test data indicates all ponds are below 5 mg/L



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



HEALTHY AIR LIVING™

May 4, 2023

RE: Request for Records for Rule 4402 Crude Oil Production Sumps
XXXXXXX Company
S-XXXX

The San Joaquin Valley Air Pollution Control District (District) is requesting information from the following:

Operator	Lease	Oil Field	Status	Latitude	Longitude

District Rule 4402 (Crude Oil Production Sumps) has exemptions in Section 4.1.2 for second and third stage sumps containing clean produced water and Section 4.1.7 for Ponds. Pursuant to the recordkeeping requirements in Section 6.1.2 and 6.1.6 of Rule 4402, operators claiming this exemption shall maintain records to justify the exemption, including results of an independent laboratory analysis, and the records shall be made available to the District upon request.

The District is requesting copies of the most recent sample results from an independent laboratory analysis. Please provide these records **within 10 days from the date of this letter**. Please submit the requested records with attention to the District's **Compliance Department** via one of the following methods:

Mail: San Joaquin Valley Air Pollution Control District
1990 East Gettysburg Avenue, Fresno, CA 93726-0244
ATTN: Compliance Department, Rule 4402 Records
E-MAIL: compliance@valleyair.org
FAX: (559) 230-6112

If you have any questions, please contact District staff at (559) 230-6000 and they will be happy to assist you. **Please be sure to reference your Facility ID as appropriate.**

Northern Region
4800 Enterprise Way
Modesto, CA 95368-8718
Tel: (209) 557-8400 FAX: (209) 557-8476

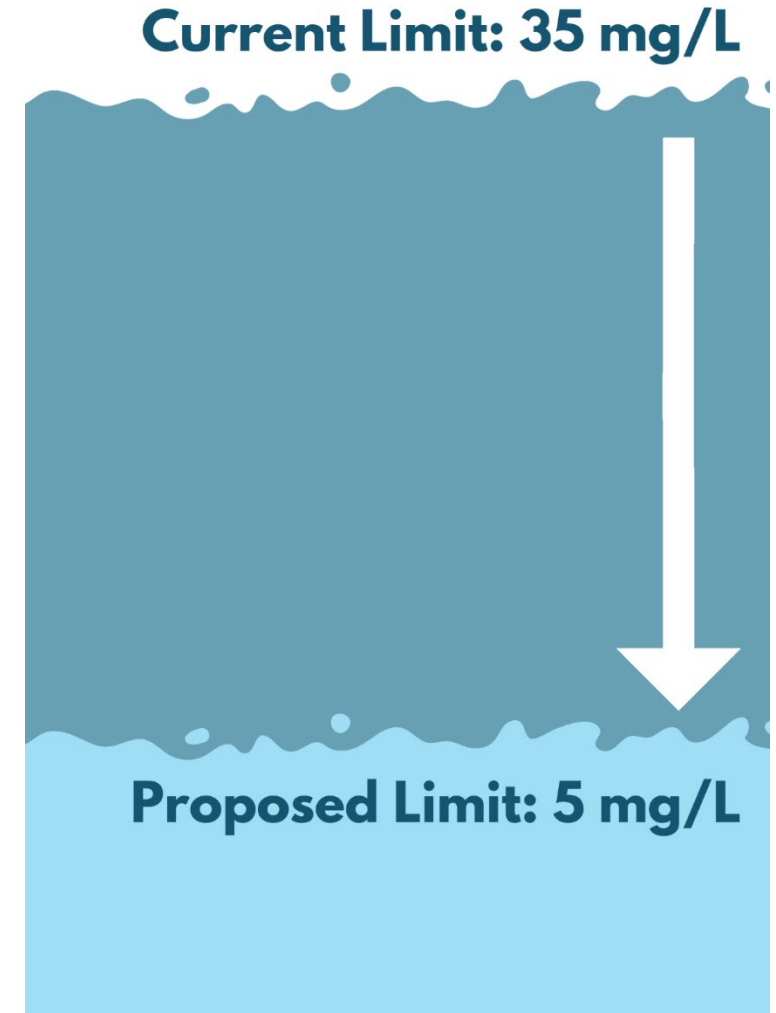
Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6081

Southern Region
34946 Pioneer Court
Bakersfield, CA 93308-8725
Tel: (801) 392-5500 FAX: 801-392-5585

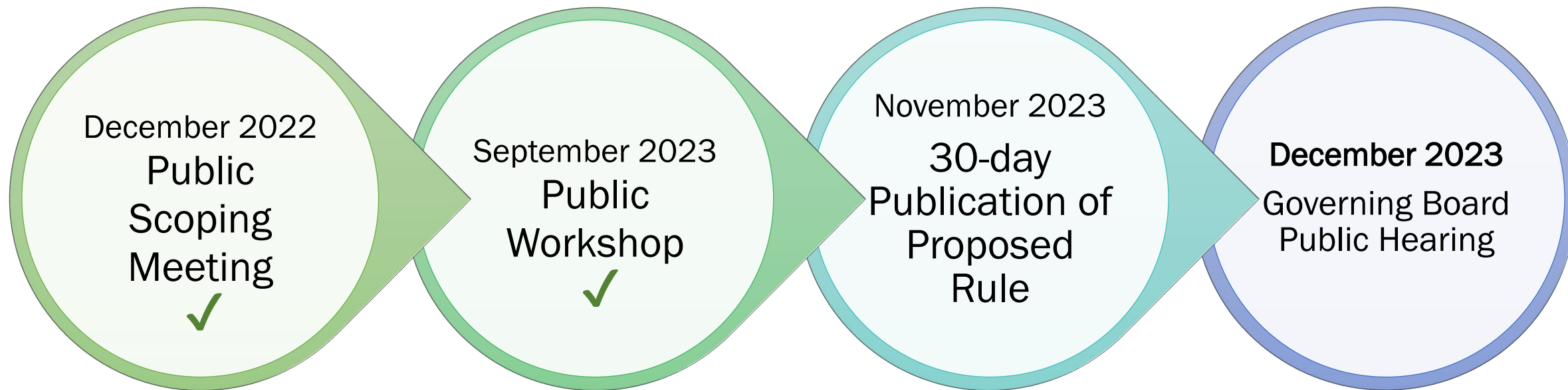
www.valleyair.org www.healthyliving.com Printed on recycled paper.

Proposed Amendments to Rule 4402

- Lower VOC exemption limit for ponds and sumps from 35 mg/L to 5 mg/L
 - Addresses BARCT requirements
 - Aligns Rule 4402 VOC limit with other California air districts' rules
- Other minor changes to improve clarity
- Since emissions have already been reduced by industry
 - No emission reductions expected from proposed rule amendments
 - No costs expected



Public Engagement Process for Rule 4402 Amendments



Public Participation and Comment Invited throughout Process

Contact Information

Contact: Ross Badertscher
Mail: San Joaquin Valley APCD
1990 E. Gettysburg Ave
Fresno, CA 93726
Phone: (559) 230-5800
Fax: (559) 230-6064
Email: ross.badertscher@valleyair.org

Visit <https://ww2.valleyair.org/about/sign-up/>
to sign up for District's Oil and Gas Listserv

Comments/Questions

webcast@valleyair.org