

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

December 13, 2022

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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



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 650 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

BARCT Analysis Process

- BARCT is an air emission limit for existing sources and is maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts
- District undertakes comprehensive analysis to determine whether District rules satisfy BARCT, including:
 - Identifying local, state, and federal requirements
 - Identifying emission reductions that have been achieved
 - Determining cost-effectiveness of requiring additional emission reductions
- If District determines that a rule does not meet BARCT, following steps are taken:
 - Identify requirements to meet BARCT
 - Analyze technological and economic feasibility of potential control options of each rule
 - Review of requirements in other districts and regions
 - Quantify public health, air quality, and potential attainment benefits of each control option

AB 617 BARCT Rule Analysis

- Assembly Bill (AB) 617 requires expedited BARCT review and implementation schedule for facilities in CARB's Cap-and-Trade Program
- District adopted expedited BARCT implementation schedule in Dec. 2018
- Workshops held July 2020, April 2021, and October 2022 provided update on rules evaluated through expedited BARCT analysis in 2019-2021
- Rule 4402 BARCT analysis results:
 - The existing exemption threshold for clean produced water in District Rule 4402 is less stringent than in other air districts' rules. Therefore, District has begun a rule making process to explore opportunities to enhance stringency of this rule and ensure the continued implementation of BARCT
 - Rule 4402 also included as SIP strengthening measure in Proposed 2022 Ozone Plan

Current Rule 4402 Overview

- District Rule 4402 adopted on April 11, 1991 and last amended on December 15, 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 provisions of Rule 4623 (Storage of Organic Liquid) or maintained leak-free and fitted with a pressure/vacuum vent

Key Rule 4402 Definitions

- Sumps: a lined or unlined surface impoundment or excavated depression in the ground which, during normal operation, is in continuous use for separating crude oil, produced water, and solids in oil producing fields.

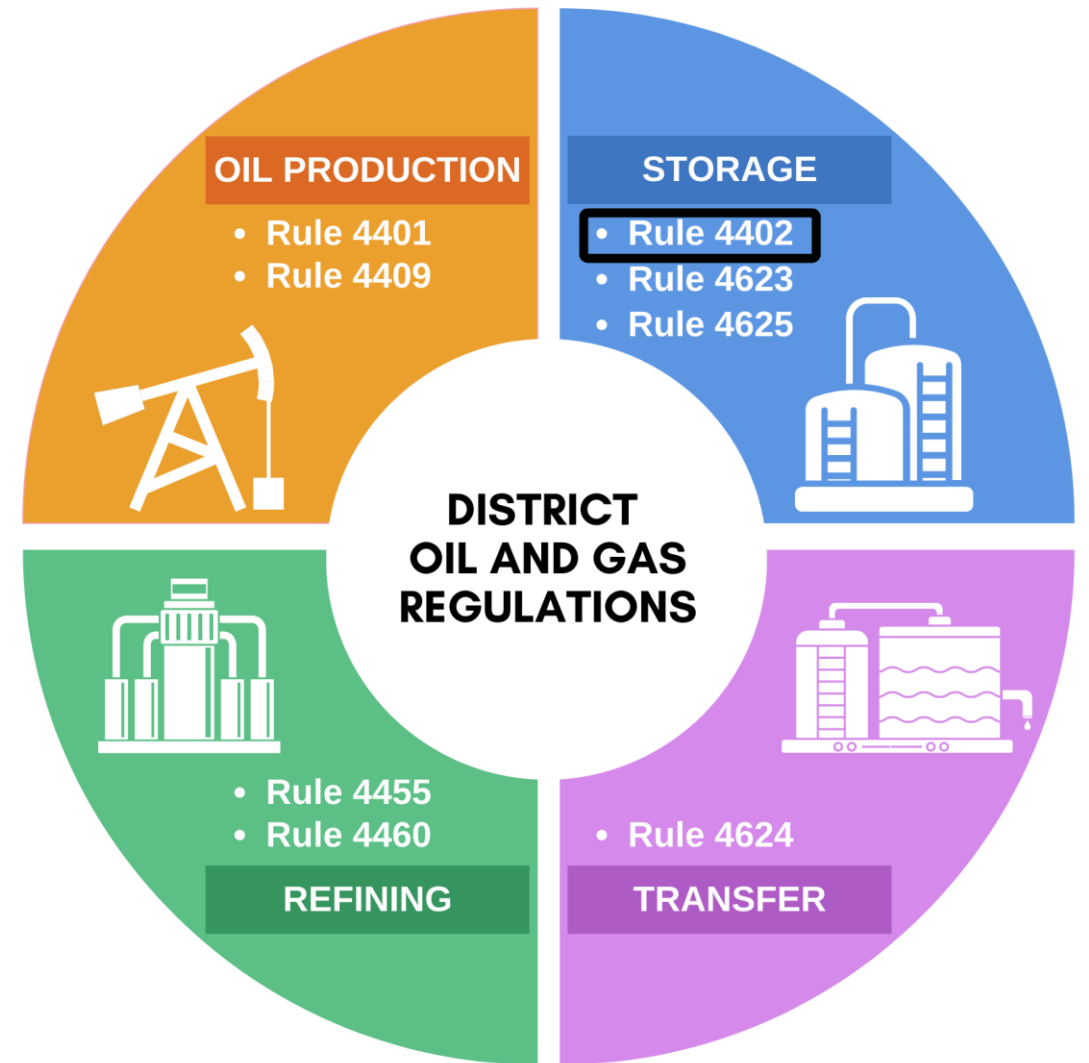


Key Rule 4402 Definitions

- Ponds: any very large excavation that is used for the storage and or disposal of clean produced water, is not used for the separation of oil and water, and has no more than five percent visible oil-covered surface area.
- Pits: any excavation for which the intended use under normal conditions is the intermittent or emergency collection of crude oil and water and is not used for the separation of oil and water.
- Clean produced water: produced water containing less than 35 milligrams per liter of volatile organic compounds (VOCs)

District VOC Oil and Gas Rules

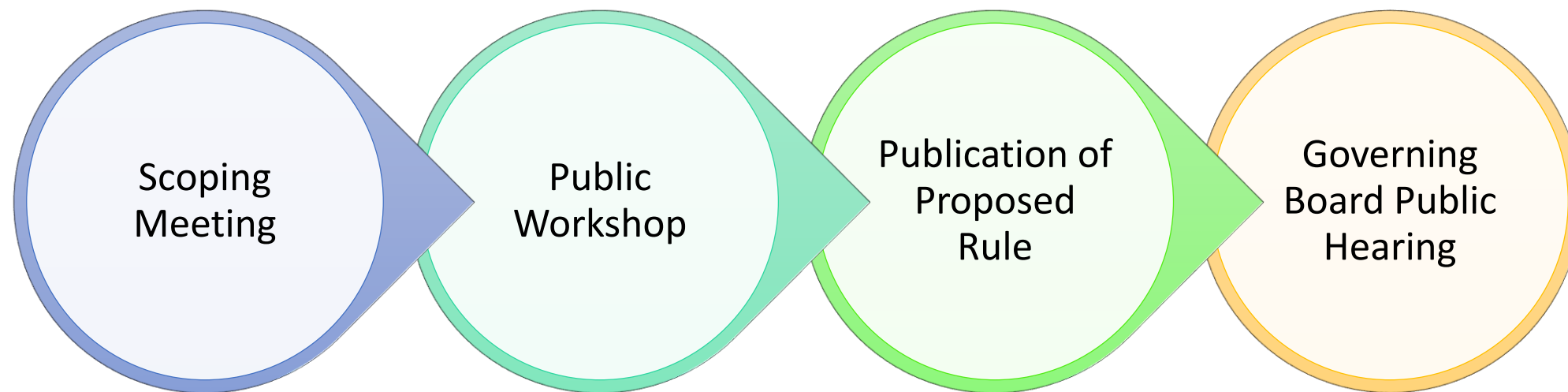
- In addition to Rule 4402, District currently has complimentary, stringent VOC rules regulating other facets of the oil and gas industry



Next Steps

- District is beginning a rule making process to ensure continued implementation of BARCT in Rule 4402
- District rules developed through robust public process, with emphasis placed on providing opportunities for public engagement and feedback through workshops and comment periods
- District will evaluate economically and technologically feasible rule amendments through a robust public process to implement BARCT
- District will also consider ways to provide clarity to existing rule, update test methods, etc.
- Additional workshop will provide further information and provide more opportunities for public engagement

Public Engagement Process for Rule 4402 Amendments



Public Participation and Comment Invited throughout Process

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Comments/Questions

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