Scoping Meeting on District Implementation Options for CARB Oil/Gas Facilities GHG Emission Standards Rule

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Webcast participants: submit comments to webcast@valleyair.org
Agenda

• Overview of existing regulations for oil/gas fugitive VOC and methane emissions
• Overview of new CARB rule for oil/gas fugitive methane emissions
• District implementation options for CARB rule
• Next steps
• Questions/comments
Existing District regulations

- Target VOC (not methane) emissions
- In-place for over 25 years
- Rules 4623 – Storage of Organic Liquids
- Rule 4401 – Steam Enhanced Crude Oil Production Wells
- Rule 4409 – Components at Light Crude Oil Production (> 30° API), Gas Production, and Gas plants
- Others - Rule 4402 (sumps), 4407 (In-Situ Combustion Wells), 4408 (Glycol Dehydration Systems)
Existing Federal Regulations

• NSPS Subpart OOOO – Oil/gas production, transmission, distribution
  – New/modified equipment 8/23/11 – 9/18/15
  – VOC emissions only

• NSPS Subpart OOOOa – Oil/gas production, transmission, distribution
  – New/modified equipment after 9/18/15
  – VOC and methane emissions
  – Certain provisions stayed 6/5/17 - 8/31/17
    • fugitive emission requirements stayed
CARB oil/gas fugitive methane rule

- AB-32 Global Warming Solutions Act of 2006
- AB-32 Implemented by CARB
- Multi-faceted approach by CARB to reduce GHG emissions
  - Cap and Trade regulation
  - Source specific regulations, including oil/gas industry
CARB oil/gas fugitive methane rule

• Industry/California Districts consulted by CARB
• CARB public workshops
• 80% of oil/gas production in CA is in the Valley
• Adopted by CARB March 23, 2017
CARB oil/gas fugitive methane rule

- Applies to equipment/components used in:
  - Crude oil/gas production
  - Crude, condensate, and produced water separation/storage
  - Natural gas underground storage
  - Natural gas gathering/boosting stations
  - Natural gas processing plants
  - Natural gas transmission compressor stations
CARB oil/gas fugitive methane rule

Emission/control standards:

- Separator/tank systems – flash testing, possible vapor control, **exemption for small producers**
- Well stimulation circulation tanks – best management practices, emission testing/technology assessment (grouped okay)
- Reciprocating/centrifugal compressors – leak requirements
- Natural gas pneumatic devices/pumps – bleed rate requirements
CARB oil/gas fugitive methane rule

Emission/control standards:
- Open well vents - measure gas flow
- Natural gas underground storage - monitoring plan

LDAR for components at regulated facilities
- Exemptions for - components subject to District LDAR, heavy oil (< 20° API), others
- Quarterly LDAR using EPA method 21
CARB oil/gas fugitive methane rule

Critical components

– Longer leak repair time allowed
– Must be approved by CARB

Standards for required vapor collection/control systems

– If available, use sales gas line, fuel gas line, existing gas disposal well
– Alternatively, use vapor control device w/ 95% control and NOx ≤ 15 ppmv @ 3% O2. Applies to new and existing devices used to comply
CARB oil/gas fugitive methane rule

Detailed record keeping (5 years retention) and reporting (annually beginning 7/1/18) requirements

CARB Final staff report expected in late June will provide guidance on various rule interpretation/applicability questions
Implementation

• Implementation by CARB or the District
• District implementation benefits
  – District staff familiar with facilities
  – Efficient use of government funds
  – Supported by industry
  – Supported by CARB
  – Need MOA between CARB and District in order to proceed with implementation
Implementation

• Minimum information to be provided by owners specified in the rule
  – Owner/operator name/contact info
  – Address of each facility (contiguous/adjacent) with equipment subject to rule
  – For each facility - inventory of equipment subject to rule; annual crude oil, produced water, natural gas throughput
Implementation

- Minimum requirements for District program specified in the rule
  - Permit #s and conditions that ensure compliance with rule – or reason why not included
  - Declaration from operator that information is true and correct
  - Annual updates by Jan 1 every year
District Implementation

• Need to include currently un-permitted facilities
  – natural gas compressor stations, others

• District must recover costs for implementation
  – All efficiency streamlining efforts to be utilized
  – Initial costs – permitting, registration, etc.
  – Ongoing costs - inspections, annual report review, others

• CARB funds available to offset District’s implementation costs
  – Amount available TBD
Option #1

Incorporate requirements into each affected PTO, require PEERs to enforce requirements for exempt equipment

• Revise Rule 2250 PEER to allow PEERs for exempt equipment to enforce CARB oil/gas rule

• Possibly revise Rules 3020 (PTO fees) and 3155 (PEER fees) to recover costs for implementing CARB oil/gas rule – only if CARB funds insufficient
District Implementation

Option #2

Incorporate requirement into each affected PTO, enforce requirements for exempt equipment through compliance plan

• Possibly revise Rule 3020 to add PTO surcharge fee recover ongoing inspection costs
District Implementation

Option #3

Incorporate requirements into facility-wide requirements for permitted equipment, require a facility-wide PEER for all exempt equipment

- Revise Rule 2250 PEER to allow PEERs for exempt equipment to enforce CARB oil/gas rule
- Possibly revise Rules 3020 (PTO fees) and 3155 (PEER fees) to recover costs for implementing CARB oil/gas rule – only if CARB funds insufficient
District implementation

Other Options

• Incorporate requirements into facility-wide requirements for all equipment – permitted and exempt equipment
  – Not feasible as it would require exempt equipment be permitted

• Enforce via submittal/approval of a compliance plan
  – May not be approvable by CARB, as requirements would not be incorporated into District PTO/PEERs
Next steps

• Evaluate comments received
• Select best option
• Public workshop for Rule amendments
  – Reg II – Permitting/PEERs
  – Reg III – fees to recover costs – only if CARB funds insufficient

• Ongoing – Work with stakeholders/CARB to develop a FAQ document
Comments/Questions

• If you have comments, questions, suggestions:
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• Comments due by June 22, 2017