

PROPOSED RULE 1118.1 Control of Emissions From Non- Refinery Flares Public Consultation Meeting

South Coast Air Quality Management District
Diamond Bar, California
October 30, 2018



Agenda

- Rule Update
- Key Concerns
- Proposed Changes Based on Stakeholder Feedback
- Other Proposed Changes
- Schedule

Rule Update

- Public Workshop – October 17th
- Stationary Source Committee – October 19th
- Key issues
 - ✓ NOx limits for “Other Flaring”
 - ✓ Ammonia generation from thermophilic digestion and digestion of food waste
 - ✓ Further limits for oil and gas production
 - ✓ Bifurcating the rule – Essential Public Services from Oil and Gas Production

Key Issues - NOx Limits for Organic Liquid Handling and Other Flaring

- Organic liquid handling stakeholders requested staff to rely on BACT standards for new flare installation
- PR 1118.1 has been revised

- Original proposal

Flare Gas	NOx	CO	Destruction Efficiency
Other flare gas (Parts per million @3% oxygen)	30	10	99%

- Revised proposal

Flare Gas	NOx	CO	VOC
Other flare gas (Pounds/MMBtu)	0.060		
Organic Liquid Handling (Pounds/1000 gallons loaded)	0.034	0.050	0.020

Key Issue – Food Waste and Thermophilic Digestion

- Stakeholders requested higher NOx limits and/or an exemption for food waste digestion or thermophilic digestion
- Food Digestion
 - ✓ SB 1383 sets requirements to divert organic food waste from landfills to digesters with the intent for “beneficial uses of biomethane”
 - ❑ 50% diversion by 2020
 - ❑ 75% diversion by 2025
 - ❑ 75% anticipated to go to existing digesters at wastewater treatment plants
- Thermophilic Digestion
 - ✓ Newer, faster process that uses higher temperatures
 - ✓ Results in increased biogas generation and increased ammonia concentrations in waste stream

Key Issue –(Continued)

Food Waste and Thermophilic Digestion

- Stakeholders provided information that indicates ammonia concentrations may increase from digesting food waste and from thermophilic digestion¹
 - ✓ Ammonia in waste stream is converted to NO_x during combustion
 - ✓ Flares may not be able to meet BACT standards, permit limits, or PR 1118.1 limits
- Stakeholders requested a technology assessment and either an exemption of a different NO_x limit
- More information on the impacts of food waste digestion needed

1. Black and Veatch presentation “Ammonia in Biogas/Digester Gas: Fuel-born NO_x Emissions at Flares – presented October 10, 2018

Key Issue – *(Continued)*

Food Waste and Thermophilic Digestion

- Rule to include emission limits that reflect BACT for Major Polluting Facility and Minor Facility
 - ✓ Numerical limits or statement to comply with BACT
- Adding the following to the resolution where staff will:
 - ✓ Work with CAPCOA and the waste management industry to conduct a BACT technical and cost assessment; and
 - ✓ Report back to the Stationary Source Committee within 12 months of rule adoption to present findings and recommendations regarding emissions from food waste digestion and thermophilic digestion on current BACT NOx limits
- BACT Guidelines would be amended, if necessary, to reflect the findings of BACT technical and cost assessment

Key Issue – Further limits on Flaring at Oil and Gas Sites

- Stakeholder commented that routine flaring should not be allowed at oil and gas sites
 - ✓ PR 1118.1 requires establishes a 5% capacity threshold for existing flares
 - ✓ New flares have low emission limit (0.018 lb/MMBtu) – but no limitations on the amount flaring
 - ✓ Existing flares meeting the 0.018 lb/MMBtu limit also have no limitations on the amount of flaring

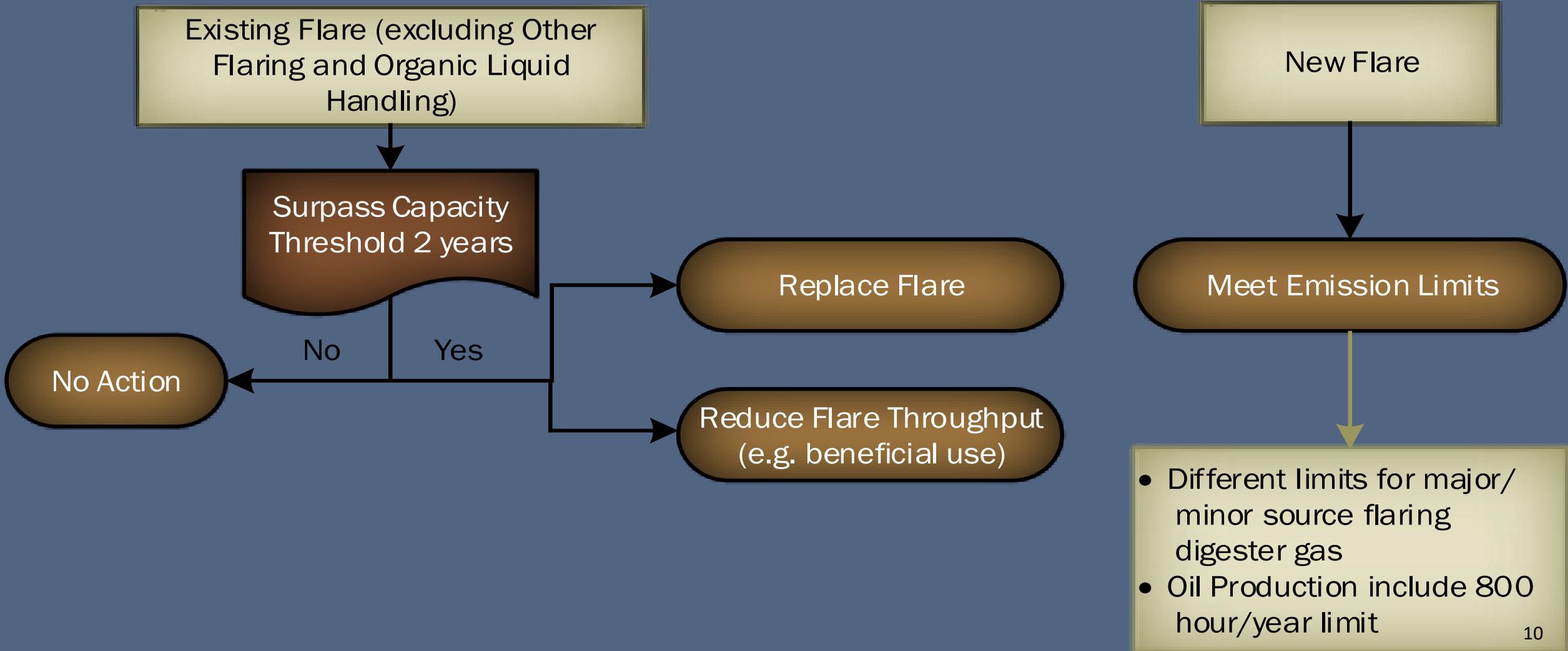
Key Issue – *(Continued)*

Further limits on Flaring at Oil and Gas Sites

■ Staff recommendation

- ✓ For new flares, limit hours of operation to 800 hours per year (incorporate in permit)
- ✓ For existing flares meeting the 0.018 lb/MMBtu limit - no change recommended:
 - ❑ Only 8 currently permitted
 - ❑ Based on current throughput (2015 – 2017) ~0.01 tpd NO_x
 - ❑ Potential to emit (if they were to flare 24/7) ~0.04 tpd NO_x
 - ❑ Staff proposes no changes for existing flares until they need to be replaced

Overview of Proposed Rule Requirements



Key Issue – Bifurcating the Rule

- Several stakeholders requested that essential public services and oil and gas extraction be addressed in two separate rules
- Staff response:
 - ✓ PR 1118.1 is a source-specific rule that regulates the flares across different industries
 - ✓ PR 1118.1 addresses the unique characteristics of each industry through:
 - Different Limits
 - Different Capacity Thresholds
 - Different Requirements
 - ✓ 2016 AQMP commits to adopting a rule for non-refinery flares in 2018
 - ✓ EPA RACM/BACM requirements

Other Proposed Changes Since Public Workshop

- Remove Assist Gas definition – not referenced in rule
- Add definitions for Major Polluting Facility and Minor Facilities
- Require nominal fee for administrative processing of notifications
 - ✓ Notification of Flare Surpassing Threshold (30 day Notice)
 - ✓ Notification of Statement of Intent
 - ✓ Notification of Flare Reduction
- Notify SCAQMD one week prior to conducting source test
- Amend exemption referencing 1118 and 1109.1 to exempting flares at “asphalt plants, biodiesel plants, hydrogen production plants fueled in part with refinery gas, petroleum refineries, and sulfur recovery plants”

Proposed Rule 1118.1 Schedule



- Stakeholder Meetings
 - ✓ Ongoing
- Comments Due on Preliminary Draft Staff report and Rule
 - ✓ October 31st
- Set Hearing
 - ✓ November 2nd
- Stationary Source Committee Update
 - ✓ November 16th
- Public Hearing
 - ✓ December 7th