



**MONTEREY BAY AIR RESOURCES DISTRICT
ADVISORY COMMITTEE MEETING
THURSDAY, DECEMBER 5, 2019 – 1:30 P.M.**

24580 Silver Cloud Court, Boardroom, Third Floor, Monterey, California

Summary of Actions

1. Call to Order – **The meeting was called to order by Vice Chair Brennan at 1:30 pm.**
2. Roll Call
Present: Allen Stroh, Janet Brennan, Sandy Coplin, Jeff Davis, Matt Farrell, Bob Smith, Scott Soares, Scott Storm.
Absent: Jay Tufano, Sandy Swint.
Excused: Tom Brokaw, David Mack.
3. Changes to the Agenda – **None.**
4. Public Comment Period – **None.**
5. **Accepted and Filed** Summary of Actions for the Advisory Committee Meeting of September 5, 2019
6. **Reviewed** Draft Rule 441 Boilers, Steam Generators, and Process Heaters, **Provided Input and Recommended** Board Adoption
Motion: *Recommend adoption to the Board of Directors.,* **Action:** *Approve,* **Moved by** *Allen Stroh,* **Seconded by** *Bob Smith.*
Vote: *Motion passed (summary: Yes = 7, No = 1, Abstain = 0).*
Yes: *Allen Stroh, Janet Brennan, Sandy Coplin, Matt Farrell, Bob Smith, Scott Soares, Scott Storm.*
No: *Jeff Davis.*
Absent: *Tom Brokaw, David Mack, Sandy Swint, Jay Tufano.*

Public Comment:

- Lance Erickson, Chevron – (no objections; comments and a couple of requests)

7. **Received** a Presentation on AQ Treks, an Environmental Education Program for Middle and High School Classrooms
8. **Received** Monthly Oral Report from Air Pollution Control Officer **Richard Stedman APCO, reported on the following:**
Engineering
 - First round of meetings with records retention consultant has been completed.
 - Engineering hosted a workshop for wastewater treatment facilities on August 22 to explain air toxics emissions reporting needed.
 - September 19 District Inspector Bronwyn Nielson presented at the annual Monterey County Environmental Compliance workshop.
 - October CAPCOA meetings:

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- i. Compliance Symposium held October 3-4 in Sacramento.
 - ii. Engineering Symposium held October 8-9 in Folsom.
 - iii. Vapor Recovery meeting held October 8-9 in District office.
- Hearing Board approved a variance for UC Santa Cruz to operate natural gas fired emergency generators for a short period of time while the power is shut-off to install and test solar panels at the substation.
 - PG&E Power Safety Power Shutoff (PSPS) has resulted in an increased demand for emergency generators. Based on communication with some of our sources, there are not many portable generators available for rent in the state and they are having to look outside of California for engines. We anticipate there may be an increase in sources purchasing and permitting emergency generators.

Planning and Air Monitoring

- Phase II of Monterey Bay Electric Vehicle Incentive Program launched on August 1.
- National Drive Electric Day was held in Santa Cruz on September 14 and the Community Power Festival in Monterey on September 21. District staff set up outreach booths at each of the events.
- District signed a grant agreement for the Funding Agricultural Replacement Measures for Emissions Reductions (FARMER) Program which will provide \$1.25 million for the replacement of tractors and irrigation pumps with cleaner burning engines.
- Envision Solar with cooperation from Caltrans, installed two of the first DC fast charge stations equipped with solar panels and battery storage at the Camp Roberts rest areas.
The project was funded by the District's Plug-In Monterey Bay, AB 923, grant program.

San Lorenzo Valley

- San Lorenzo Valley PM2.5 seasonal monitors have been installed at the Felton, Zayante, and Boulder Creek fire departments, and the CAL FIRE Headquarters in Felton.
- Wintertime Spare the Air program launched on November 1. During a Spare the Air Alert, residents are asked to voluntarily choose devices that use fuels other than wood to heat their homes.
- Annual San Lorenzo Valley Student Art Contest was launched in September. The contest teaches students about how the use of wood burning stoves and fireplaces affects air quality. This year's theme is "Wood Smoke Affects Us All."

9. Future Agenda Items

- a. Repeat Amy's presentation to the Board on power shut offs.

10. Chairman's Comments – **None.**


11. Comments from Committee Members

12. Order for Adjournment – **The meeting was adjourned at 3:11 pm.**


Ann O'Rourke
Executive Assistant

Proposed Rule 441 Boilers, Steam Generators, and Process Heaters

SEONG KIM, AIR QUALITY ENGINEER II
ADVISORY COMMITTEE
DECEMBER 2019




Outline




Background




Proposed Rule Requirements



Rule Impacts




Timeline




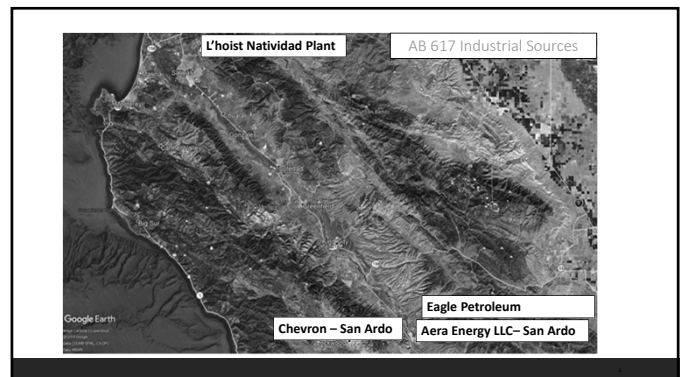
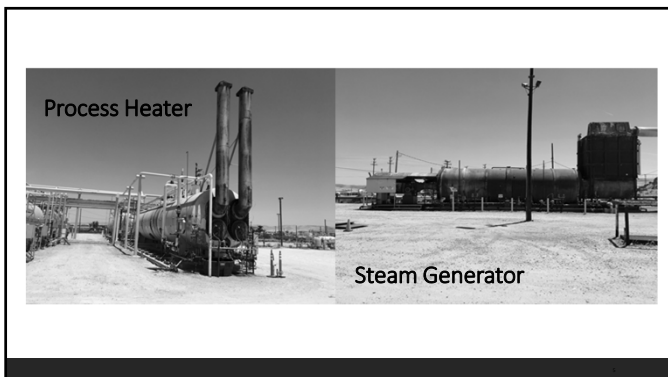
Background

- January 1, 2019: A district that is nonattainment for one or more criteria pollutants must adopt an expedited rule development schedule that implements Best Available Retrofit Control Technology (BARCT) by the earliest feasible date.
- BARCT requirements only apply to industrial sources subject to the State Cap & Trade program as of January 1, 2017.
 - There are four industrial sources located in Monterey County.
- Applies to units rated at 2+ MMBTU/hr



Background

- Approximately 40 units in the District
 - Located at four facilities: L'hoist North America of Arizona, Chevron USA Inc., Aera Energy LLC, and Eagle Petroleum, LLC
- Rule 441 will address controlling oxides of nitrogen (NOx) and carbon monoxide (CO) emissions from boilers, steam generators, and process heaters.

AGENDA ITEM NO. 6

Proposed Rule Requirements

Proposed BARCT Emission Limits				
Source Category	Total Unit Rated Heat Input/Description (MMBTU/hr)	Fuel	NO _x Limit (ppmv @ 3% O ₂)	CO Limit (ppmv @ 3% O ₂)
Boilers & Process Heaters	≥ 2 to < 5	Gaseous	30	400
	≥ 5 to < 20		15	400
	≥ 20		9	400
Oilfield Steam Generators	≥ 2	Gaseous	15	400



Retrofit Control Technology

- Ultra Low NOx Burner
 - Cost-effective
- Ultra Low NOx Burner + Selective Catalytic Reduction
 - Not cost-effective



Compliance Schedule

- Submit a written plan detailing the method of achieving compliance of emission limits by December 31, 2020.
- Application required by December 31, 2021
- Demonstrate final compliance of emission limits by December 31, 2023



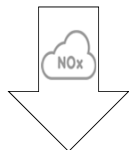
Exemptions to BARCT Limits

- Low-use units, < 90,000 therms per year.
- Units that were non-operational throughout 2019.
- Operation of units during curtailment conditions, up to 200 hours per year.

Low-use and non-operational units become subject to BARCT limits if status changes, and must meet Compliance Schedule outlined in rule.



Rule Impacts



Reduces NOx by approximately 352 to 1,392 tons per year



- Cost ranges from \$555 to \$26,080, depending on the size of the unit
- Cost-effectiveness
 - Includes capital cost, operating cost, and maintenance cost



Rule Timeline

Activity	Date/Time	Where
Public Workshop	January 15, 2020, 10 AM	MBARD Board Room 24580 Silver Cloud Ct., Monterey
Board Adoption	February 19, 2020, 1:30 PM	MBARD Board Room 24580 Silver Cloud Ct., Monterey

PUBLIC COMMENTS DUE BY FEBRUARY 7, 2020



Questions?

Seong Kim
Air Quality Engineer II
skim@mbard.org



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AQ Treks, an Environmental Education Program for Middle and High School Classrooms



David Frisbey
 Planning and Air Monitoring Manager
 December 5, 2019

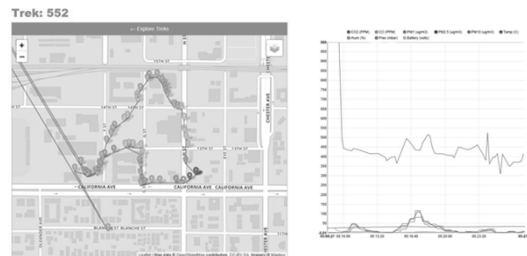
AQ Treks Personal Air Monitor

Regulatory Data	PAM Data
PM, 2.5µm	PM, 2.5µm
3.0 UG/M3	N/A
74 km	PM, 10µm
7.0 UG/M3	N/A
30.9 km	

AQ Treks Personal Air Monitor



Output



AQ Treks Personal Air Monitor

- 3 week rental - \$360
- Curriculum: Jr. High – College
- District Provides Outreach, Equipment Rental, and Training

Discussion and Questions... Get Ready to Trek!

