



**MONTEREY BAY AIR RESOURCES DISTRICT  
ADVISORY COMMITTEE MEETING**

**THURSDAY, FEBRUARY 6, 2020 – 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 at 1:35 pm.**
2. Roll Call.  
**Present:** Allen Stroh, Janet Brennan, Sandy Coplin, Bob Smith, Scott Storm, David Mack, Sandy Swint.  
**Excused:** Tom Brokaw, Jeff Davis, Jay Tufano, Scott Soares.
3. Changes to the Agenda - **None**
4. ELECTION OF 2020 COMMITTEE CHAIR AND VICE CHAIR  
**Result:** Janet Brennan, Chair; Jeff Davis, Vice Chair
5. Public Comment Period – **None.**
6. **Accepted and Filed** Summary of Actions for the Advisory Committee Meeting of December 5, 2019  
**Accepted by consensus.**
7. **Accepted and Filed** a Report on Daily Eight-Hour Peak Ozone Concentrations, Hourly Peak Ozone Concentrations, and PM2.5 and PM10 Air Monitoring Data for 2019.  
**Motion:** Accept and file the report., **Action:** Approve, **Moved by** Sandy Coplin, **Seconded by** Bob Smith.  
**Motion passed unanimously.**
8. **Received** an Oral Report on Wineries Emissions and Air District Rule Applicability  
**Received report and provided comments; no action required or taken.**
9. **Received** Monthly Oral Report from Air Pollution Control Officer  
**Richard Stedman, APCO, reported on the following:**  
Board of Directors meeting held on December 18, 2029  
Engineering
  - Completed first round of meetings with a consultant to update District records retention schedule.
  - On August 22, Engineering hosted a workshop for wastewater treatment facilities to explain air toxics emissions reporting needed from the facilities and review

excel spreadsheet used to calculate emissions.

- On September 19, our Inspector Bronwyn Nielson will present at the annual Monterey County Environmental Compliance workshop. The theme for the workshop this year is "Compliance HAZ Never Been So Easy."

Planning and Air Monitoring

- Phase II of the Monterey Bay Electric Vehicle Incentive Program is still underway. Over half of the funds for this year have been awarded.
- District signed a grant agreement for 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.

New Employee

Laura Cent - Started as the District's Senior Fiscal Assistant on December 9, 2019.

10. Future Agenda Items - **None**


11. Chairman's Comments - **None**

12. Comments from Committee Members - **None**

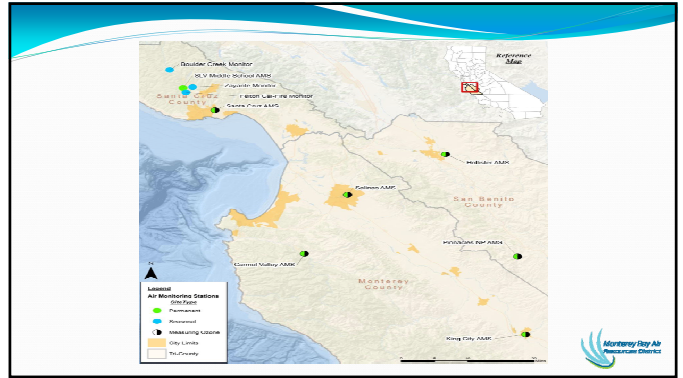
13. Order for Adjournment - **The meeting was adjourned at 2:55 pm.**

*Ann O'Rourke*  
*Executive Assistant*

# Air Monitoring Summary for 2019

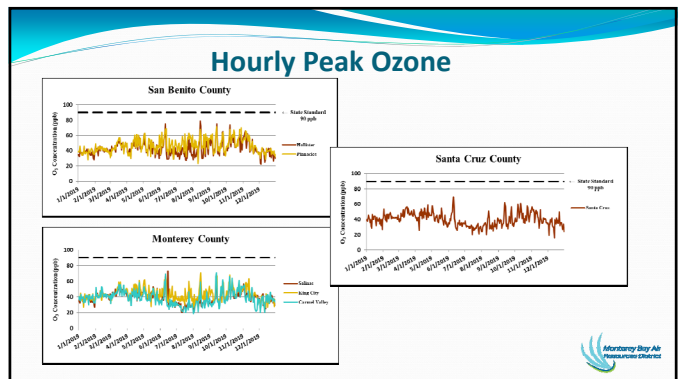


Board Report  
February 6, 2020

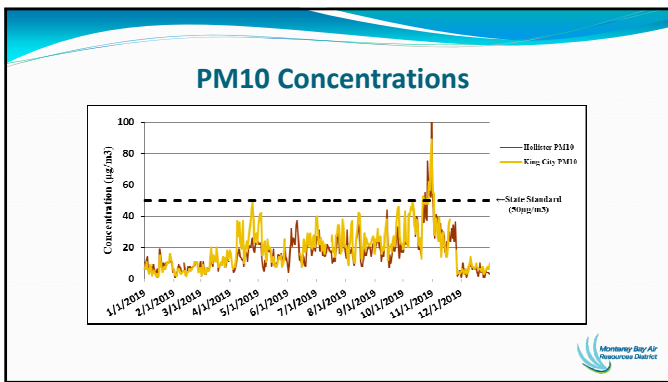
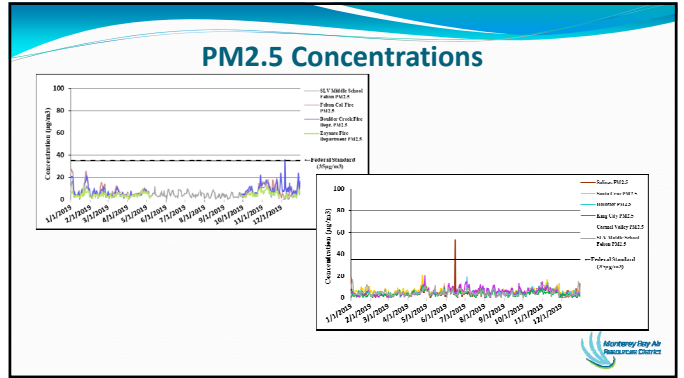
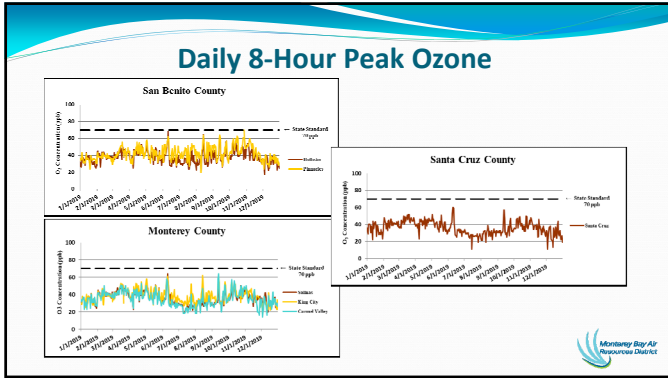


### Ambient Air Quality (Daily) Standards

Pollutant	Averaging Time	California Standards			National Standards	
		Concentration	Primary Concentration <sup>3</sup>	Secondary Concentration <sup>4</sup>	Primary Concentration <sup>3</sup>	Secondary Concentration <sup>4</sup>
Ozone	1 hour	0.09 ppm	--	--		
	8 hour	0.070 ppm	0.070 ppm	0.070 ppm		
PM2.5	24 hour	---	35 µg/m <sup>3</sup>	Same		
PM10	24 hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same		



AGENDA ITEM NO. 5




### Attainment Status


Pollutant	State Designation	Federal Designation
Ozone (O <sub>3</sub> )	Nonattainment-Transitional	Attainment
Inhalable Particulates (PM <sub>10</sub> )	Nonattainment	Attainment
Fine Particulates (PM <sub>2.5</sub> )	Attainment	Attainment
Carbon Monoxide (CO)	Monterey Co.-Attainment	Attainment
	San Benito Co.-Unclassified	Attainment
	Santa Cruz Co.-Unclassified	Attainment
Nitrogen Dioxide (NO <sub>2</sub> )	Attainment	Attainment
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	Attainment
Lead	Attainment	Attainment

### Discussion and Questions....

# WINERY EMISSIONS AND AIR DISTRICT RULE APPLICABILITY




MARY GIRAUDO, ENGINEERING SUPERVISOR  
ADVISORY COMMITTEE  
FEBRUARY 6, 2020




# Presentation Overview

- Wineries in District
- Winery Emissions and Emission Controls
- Rule 201 Permit Exemptions and Rule 207 New Source Review
- SB288 - Rule Revision Process
- Impact of Proposed Revisions to Rule 207




# Wineries in Monterey, Santa Cruz, & San Benito Counties

- 192 Wine Producers and Blenders in MBARD Jurisdiction
  - 110 in Monterey County
  - 68 in Santa Cruz County
  - 15 in San Benito County
- 180 facilities qualify for permit exemption (94% of facilities)
- 13 wineries require local District permits
  - 11 permitted wineries
  - 2 wineries in permit application phase
- 1 winery requires a Federal Title V permit – Federal Major Source Threshold 100 tons per year




# Attainment Status of Ambient Air Quality Standards (AAQS)

- MBARD is in attainment with all national AAQS
- MBARD does not meet State ozone and PM<sub>10</sub> AAQS
- Volatile Organic Compound (VOC) emissions are precursors to ozone and PM<sub>10</sub>




# Air Emissions from Wineries

- Fermentation produces (carbon dioxide and ethanol)
- Oak barrel aging and storage (ethanol) “The Angel’s Share”
- Fermentation emissions occur during peak ozone season, late summer/early fall
- Ethanol = VOC = ozone and PM<sub>10</sub> precursor



Winery	City	Fermentation VOC Emissions (lbs per day)	Permitted Fermentation Throughputs (gallons/year)	2018 Fermentation Throughputs (gallons/year)
Constellation Brands	Gonzales	1,808	30,437,595	29,283,867
The Wine Group	Soledad	268	9,500,000	5,030,805
Franciscan Vineyards	Soledad	250	4,515,957	3,974,523
Delicato	Paicines	499	9,734,176	2,954,090
Kendall-Jackson	Soledad	236	5,906,952	3,916,425
Delicato	King City	234	4,000,000	2,456,522
Scheid Vineyards, Inc.	Greenfield	156	5,439,896	4,973,332
Monterey Wine Co.	King City	176	3,500,000	2,636,390
J. Lohr Winery	Greenfield	95	3,479,600	1,591,723
Conundrum Winery	Salinas	< 25	1,010,000	706,460
KVL Holdings Inc.	Soledad	< 25	563,000	562,366



AGENDA ITEM NO. 5

**2018 EMISSIONS INVENTORY REPORTING**  
(stationary sources >10 tons per year)

FACILITY NAME	VOC (tons/year)
<b>CONSTELLATION WINES (Gonzales Winery)</b>	<b>85.38</b>
CHEVRON U.S.A.	45.83
DYNEGY MOSS LANDING	38.94
AERA ENERGY, LLC - SAN ARDO FIELD	37.48
THE WINE GROUP - GSV SOLEDAD WINERY	26.33
ESTANCIA WINERY	20.88
JACKSON FAMILY WINES - MONTEREY	15.50
THRESHOLD ENTERPRISES	13.16
SCHIED VINEYARDS - WINERY	9.87
CITY OF SANTA CRUZ WWTP	4.77
MRWMD	4.61
MONTEREY ONE WATER (formerly MRWPCA)	3.16
SANTA CRUZ ENERGY, LLC (landfill)	3.01
CITY OF WATSONVILLE WWTP	1.97
LHOIST (formerly CHEMICAL LIME)	1.50
GRANITE ROCK - AROMAS	1.25
CALPINE KING CITY COGEN	0.84
AMERESCO SANTA CRUZ ENERGY LLC (Buena Vista)	0.49
AMERESCO SANTA CRUZ ENERGY LLC (Johnson Canyon)	0.12
WASTE SOLUTIONS GROUP OF SAN BENITO, LLC	0.11
TOTAL =	315.09
TOTAL VOCs from Wineries =	157.85
VOC Percent from Wineries =	50%


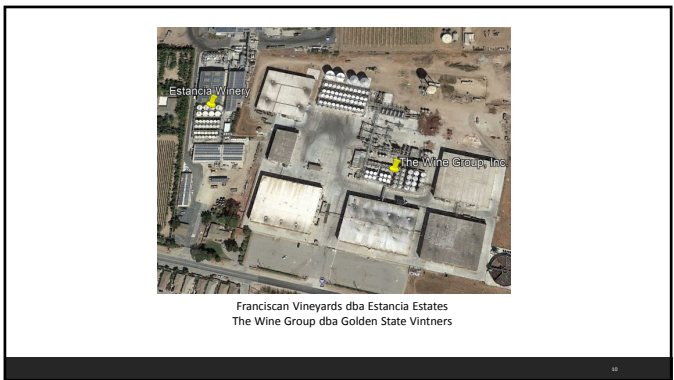
Stationary Source Emissions Inventory (> 10 tons per year)

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20 sources >10 tpy, includes 5 wineries

VOC emissions from 5 wineries = 158 tons per year


50% of VOC from wineries

Local Rules (201 and 207)

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- Rule 201 establishes permit exemptions
- Rule 207 establishes permit emission thresholds for emission control and offsets



Rule 201 Permit Exemptions

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- Wineries in operation as of May 14, 1997 with an annual production rate less than 1.25 million gallons.
- New or reconstructed, as defined in Rule 207, wineries with annual production rate less than 150,000 gallons.



### Air District Exemption Comparison

District	Reference	Exemption Threshold Limits
Santa Barbara County APCD	Rule 202	Emissions from fermentation, aging and bottling with actual emissions less than 1 ton per year (if no aging, equivalent to 322,581 gallons red wine)
San Joaquin Valley APCD	Certification Statement	Annual production rate less than 47,600 gallons
San Luis Obispo APCD	No Specific Rule Exemption	By policy wineries are not permitted but they are "registered" and pay renewal fees
Bay Area AQMD	Regulation 2, Rule 1	Fermentation tanks for wine
	2017 Clean Air Plan, Further Study Measure	Review emissions generated by fermentation at wineries and breweries to determine if reductions can be achieved

### Rule 207 New Source Review

Federal and state emission thresholds for permit review:

- Best Available Control Technology (BACT)
- Offsets



### Rule 207 BACT and Offset Thresholds

	Best Available Control Technology (BACT)	Offsets	Offset Exemptions
FEDERAL	≥ 150 lbs/day facility-wide aggregated emissions	≥ 150 lbs/day facility-wide aggregated emissions	APCO discretion upon demonstration of findings < 10 tons per year (Rule revision in 2006)
STATE	≥ 25 lbs/day individual permit unit	25 tons/year (Health and Safety Code)	NA
		137 lbs/day facility-wide aggregated emissions (Rule 207)	< 10 tons per year (Rule revision in 2006)

### District Board Required Findings

- ✓ If District is in attainment with all national ambient air quality standards, revisions will not impair or impede continued maintenance of national standards or progress toward achieving attainment of State ambient air quality standards.
- ✓ The revised rule will not exempt, relax or reduce the obligation of any major stationary source, as those rules existed on December 30, 2002, to obtain a permit or meet best available control technology requirements.
- ✓ Consistent with Division 26 Air Resources procedural requirements.
- ✓ Consistent with environmental justice guidance.



### Rule 207 BACT and Offset Thresholds

	Best Available Control Technology (BACT)	Offsets	Offset Exemptions
FEDERAL	≥ 150 lbs/day facility-wide aggregated emissions	≥ 150 lbs/day facility-wide aggregated emissions	APCO discretion upon demonstration of findings < 10 tons per year (Rule revision in 2006)
STATE	≥ 25 lbs/day individual permit unit	25 tons/year (Health and Safety Code)	NA
		137 lbs/day facility-wide aggregated emissions (Rule 207)	< 10 tons per year (Rule revision in 2006)

### Next Steps to Increase Offset Threshold to 25 Tons/Year

- Propose Revisions to Rule 207
- District Board adopt required findings
- CARB Executive Officer appoints hearing officer to conduct public hearing to review rule revisions and Board findings



AGENDA ITEM NO. 5

### Rule Impacts on Best Available Control Technology (BACT) Requirements

- RULE CHANGE WOULD NOT ALLEVIATE THE NEED TO INSTALL BACT IF THRESHOLDS EXCEEDED**
- Two systems have been achieved in practice and cost effective in Santa Barbara County. Units are published in the BACT clearinghouse for closed-top tanks ≤ 30,000 gallons capacity.
- For tanks > 30,000 gallons capacity, cost analysis will be required.
- Emission controls allow wine industry to grow in CA while still achieving air quality goals.



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Winery	Facility-Wide VOC Emissions (tons/year)	Exceeds Offset Thresholds*	Fermentation VOC Emissions (lbs/day)	Exceeds BACT Thresholds	Allowable Fermentation Throughputs (gallons/year)	2018 Fermentation Throughputs (gallons/year)
Constellation Brands	144.0	YES	1,808	YES	30,437,595	29,283,867
The Wine Group	44.8	YES	268	YES	9,500,000	5,030,805
Franciscan Vineyards	43.2	YES	250	YES	4,515,957	3,974,523
Delicato (SB)	23.0	YES/NO	499	YES	9,734,176	2,954,090
Kendall-Jackson	22.4	YES/NO	236	YES	5,906,952	3,916,425
Delicato (Mty)	18.8	YES/NO	234	YES	4,000,000	2,456,522
Scheid Vineyards, Inc.	15.8	YES/NO	156	YES	5,439,896	4,973,332
Monterey Wine Co.	14.2	YES/NO	176	YES	3,500,000	2,636,390
J. Lohr Winery	12.2	YES/NO	95	YES	3,479,600	1,591,723
Conundrum Winery	9.2	NO	< 25	NO	1,010,000	706,460
KVL Holdings Inc.	6.5	NO	< 25	NO	563,000	562,366

\*Difference if offset threshold 137 lb/day vs. 25 tons/year

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### Rule Impacts of Increased Offset Threshold to 25 Tons/Year

- Rule change would allow 6 wineries to increase the overall VOC emissions by 43.6 tons/year (87,000 lbs/year) before triggering offset requirements.
- Emissions equivalent to a production rate of either 14 million gals/year red wine, or 35 million gals/year white wine.
- Represents a 31% increase in production rates from our permitted wineries (based on an assumed average of 24.5 million gallons).
- Foresee rule change providing additional growth for the emerging cannabis and composting industries.



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Questions?



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