



Monterey Bay Air Resources District BOARD OF DIRECTORS MEETING

WEDNESDAY, FEBRUARY 21, 2018 – 1:30 P.M.

19 Upper Ragsdale Drive, Suite 100, Monterey, CA 93940

SUMMARY OF ACTIONS

1. CALL TO ORDER – **The meeting was called to order by Chair Friend at 1:35 pm.**
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL

<u>Present</u>		<u>Absent</u>
Ryan Coonerty	John Phillips	Fred Ledesma
Zach Friend	Oscar Rios	Steve McShane
Lowell Hurst	Simon Salinas	Jane Parker
Jerry Muenzer		Steve Dallas
4. ELECTION OF 2018 BOARD OF DIRECTORS CHAIR AND VICE CHAIR
Upon motion of Director Phillips and seconded by Director Salinas the Board unanimously elected Jerry Muenzer as Chair and Ryan Coonerty as Vice Chair.
5. RECOGNITION OF DAVID CRAFT ON HIS RETIREMENT FROM THE DISTRICT
6. PRESENTATION BY ENERGY SOLUTIONS ON ELECTRIC VEHICLE INFRASTRUCTURE AND GREEN BUILDING CODES
7. PUBLIC COMMENT PERIOD – **None.**
8. REPORTS BY COMMITTEE CHAIRS ON COMMITTEE MEETINGS
 - a. Budget, Personnel, and Nominating Committee
 - b. Advisory Committee
9. COMMENTS AND REFERRALS FROM CHAIR AND BOARD MEMBERS
10. REPORT FROM AIR POLLUTION CONTROL OFFICER
Richard Stedman, APCO, reported on the following:
District Business
 - Recognition of Sandy Hartunian for exceptional customer service.
 - Staffing –
 - Newly hired inspector left in January to take a job with the California Air Resources Board.
 - Isael Rubio-Salazar starting as an inspector on February 26.
 - District received 21 applications for the engineering recruitment.

Wednesday, February 21, 2018

- District has been in communication with several cannabis cultivators in Monterey County regarding the use of large, stationary diesel or natural engines to provide power until PG&E completes their upgrade work.
- On February 2, the District issued emission reduction credits to Dynegy due to the shutdown of their two large boilers.
- Planning Division issued permits and attended training at the Elkhorn Slough Foundation for a burn project using the biochar method of open burning for eradication and disposal of Eucalyptus trees near the Slough.
- A prescribed burn was conducted this past weekend in the Gabilan Range between Salinas and San Juan Bautista
- Carl Moyer Program Application Period opened in January. An application workshop was held on January 10.
- District purchased three new Purple Air particulate sensor devices.

San Lorenzo Valley

- San Lorenzo Valley Wood Stove Change-out program is continuing. So far, 65 vouchers have been issued and \$5,500 is remaining of the \$75,000 designated for the program.
- San Lorenzo Valley Free Yard waste drop-off program is set for the week of April 7 – 14 at the Ben Lomond Transfer Station for residents with zip codes in the San Lorenzo Valley.
- Wintertime Spare the Air will be ending for the San Lorenzo Valley since exceedances of the PM2.5 standard are not ordinarily observed after the middle of February.
- Only four days of PM 2.5 exceedances of the federal standard have been measured this season. All of these exceedances were measured at CAL FIRE Headquarters in Felton.

Outreach

- Clean Air Leaders Awards – May 31 from 7:00 – 9:00 pm. Location still TBD. Requests for nominations will go out end of March.
- District open house will be scheduled once the remodeling is completed.
- As part of the District's increased focus on education about air quality, staff is meeting with representatives from environmental education programs to determine which one will work best for the District and area schools.
- With the coming of Spring/Summer, the District will begin participating in outreach events, beginning with the Hartnell Ag Tech the end of March.
- The District video is scheduled to be completed the end of March. We hope to show it at the Board retreat and the Clean Air Leaders Awards.

Building Remodel

- Third floor remodel is progressing and is estimated to be completed the middle of March.
- Downstairs lighting retrofit project has been completed. District is looking into solar panels to provide additional cost savings.

CONSENT AGENDA

Upon motion of Director Salinas and seconded by Director Phillips the Board unanimously moved approval of the Consent Agenda with the exception of Agenda Item No. 23 which was pulled from the Consent Agenda and moved to the Regular Agenda.

11. **Accepted and Filed** Summary of Actions for the December 20, 2017 Board of Directors Meeting

12. **Received and Filed** Budget to Actual Report for the Seven Months Ended January 31, 2018

13. **Received and Filed** Report of Fiscal Year 2017-18 Budget Adjustments Approved by the Air Pollution Control Officer in January and February 2018
14. **Accepted and Filed** Engineering Division Activity Report for the Months of December 2017 and January 2018
15. **Accepted and Filed** Report of Summary of Mutual Settlement Program Actions for the Months of December 2017 and January 2018
16. **Accepted and Filed** Compliance Division Activity Report for the Months of December 2017 and January 2018
17. **Accepted and Filed** Report on Daily Eight-Hour Peak Ozone Concentrations, Hourly Peak Ozone Concentrations, PM2.5 and PM10 Air Monitoring Data for the month of December 2017
18. **Approved** Out-of-State Travel Request for an Air Quality Planner to Attend the Residential Wood Smoke Workshop in Nashville, TN in March 2018
19. **Approved** an Extension Request by the City of Capitola for the AB2766 Grant 16-02 41st Avenue Adaptive Traffic Control System to February 1, 2019
20. **Approved** Out-of-State Travel Request for Air Quality Engineer to Attend Air Dispersion Modeling Training in Las Vegas, Nevada, April 30 – May 1, 2018
21. **RESOLUTION NO. 18-001: Adopted** a Resolution Approving and Adopting a District Pay Schedule That Includes Monthly Salary Ranges for All Positions and New Salary Ranges for Management and Confidential Employees Effective February 21, 2018
22. **RESOLUTION NO. 18-002: Adopted** a Resolution Approving Fiscal Year 2017-18 Budget Revisions per Attached Schedule A

REGULAR AGENDA

23. **Received** a Report from Staff on the status of the MBARD Grant Programs
Received presentation only; no action required.
24. **Received** Presentation on District's Jurisdiction for Odors
Received presentation only; no action required.
Public Comment
David Ramirez, MRWMD, assured the Board that his district takes odor issues very seriously and that they are working with MBARD.

The item below was removed from the agenda and not considered by the Board:

- ~~25. Discuss and Provide Direction to the APCO on Advisory Committee Meeting Schedule~~

CLOSED SESSION

26. The Board will meet in Closed Session pursuant to Government Code section 54950, relating to the following item:

- a. Pursuant to Government Code section 54957, the Board will provide a performance evaluation for the Air Pollution Control Officer. **No reportable action.**


27. Adjournment – **The meeting was adjourned at 3:00 p.m.**

Ann O'Rourke


Executive Assistant

2/20/2018

CALGreen Non-Residential




	Non-Residential		
	Mandatory	Voluntary	
		Tier 1	Tier 2
Minimum threshold (number of parking spaces) for standards to be effective	≥10	≥10	≥1
Percent of new parking spaces with EV Capacity	6%	8%	10%


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Design for Accessibility


- California code accessibility requirements apply to EVSE and associated parking for specific buildings
 - Details are listed in Title 24 Chapters 11A and 11B
- Parking space standards include slope, vertical clearance, path of travel, dimensions
- Local building codes can ensure that EV-ready parking spaces are designed to meet accessibility requirements


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CALGreen Multifamily


	Multifamily	
	Mandatory	Voluntary
Minimum threshold for standards to be effective	17 units	17 units
Percent of new parking spaces with EV Capacity	3%	5%
Overall effect for all multifamily housing	1-2%	2-3%

Amendments to multi-family building code are required by the 2016 California ZEV Action Plan.




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CALGreen Residential



	Mandatory	Voluntary
Minimum threshold for standards to be effective	One per unit per household	
What is required?	Electrical panel capacity; Conduit	Wiring



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2/20/2018

Details

EV-Ready
(Full Circuit)

Rationale: Minimize total costs and additional barriers to installing EVSE. Several local building codes require full circuits.

Full Circuit: Full circuits are ready for the addition of electric vehicle charging station. Full circuit installations include 208/240V, 40-amp panel capacity, raceway, wiring, receptacle, and overprotection devices similar to a dryer circuit.



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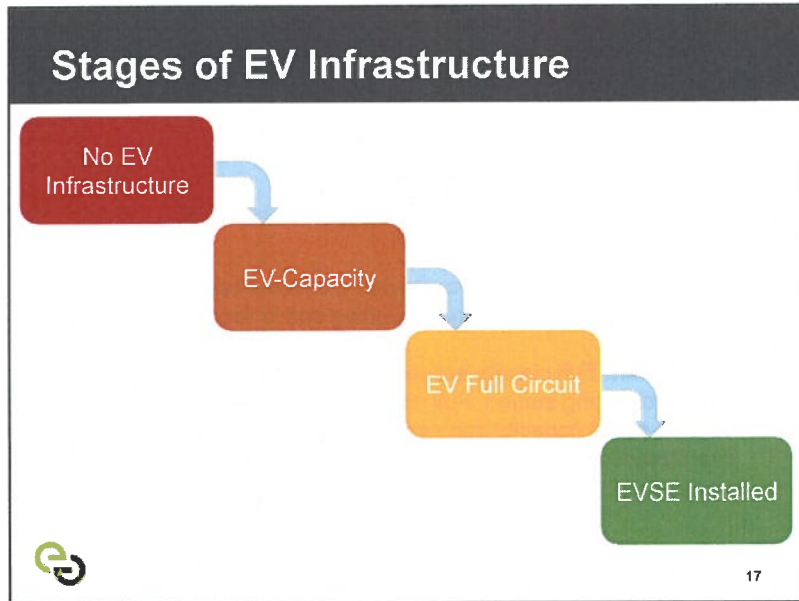
Details

EVSE Installed

Rationale: Maximize access to EV charging in buildings/locations experiencing high demand. A few local codes require EVSE installation, though in general this is left to builder's discretion.



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Details

EV-Capacity

Rationale: Provide certain hard-to-retrofit elements while minimizing up-front cost.

Electric Panel Capacity: Under CALGreen, electrical panels must have space and electrical capacity to accommodate 208/240 V, 40-amp circuits and electrical supply system must have similar capacity.

Raceway (conduit): Conduit that will be difficult to access or alter after construction (e.g. enclosed within walls or pavement, etc.) must be installed during construction. In some cases, building codes require that all conduit must be installed during construction.

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2/20/2018

Energy Solutions background

Energy Solutions' mission is to create large-scale environmental benefits for our clients by implementing market-based solutions and developing policies that contribute to these goals.

- Energy Solutions has provided research and/or program implementation for over 100 consumer product and building energy and water efficiency standards
- Employee-owned
- Clients and customers served:
 - Energy and water utilities
 - California and other State agencies
 - Local and regional government agencies
 - Federal and international government agencies
 - NGOs
 - Private sector: retail and commercial



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EV INFRASTRUCTURE DETAILS



ADDITIONAL SLIDES



ES COMPANY OVERVIEW



2/20/2018

San Francisco Bay Area Local Code Examples

Summary of Oakland standards adopted February 2017:

	Full Circuit	Inaccessible Raceway Installed	Electric Panel Capacity
1 parking space	1 parking space	-	Sufficient to supply 1 parking space
2-10 parking spaces	2 parking spaces	-	Sufficient to supply 2 parking spaces
11-15 parking spaces	2 parking spaces	1 parking spaces	Sufficient to supply 3 parking spaces
16-20 or more parking spaces	2 parking spaces	2 parking spaces	Sufficient to supply 4 parking spaces
Greater than 20 parking spaces	10% of parking spaces (rounded up)	Multi-Family Buildings: Remaining 90% of parking spaces Non-Res Buildings: Additional 10%	Sufficient to supply 20 percent of spaces*

*Note: Full circuits are counted towards panel capacity requirement

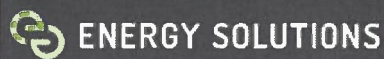


- San Francisco proposed standards are similar
- Fremont adopted standards November 2016 that require full circuit + EV charger at 10% of spaces ¹¹

THANK YOU

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Cassidee Kido
Associate
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City of Santa Cruz Multifamily


	Multifamily
	Mandatory
Minimum threshold for standards to be effective	5 units
Percent of parking spaces required to have EVSE installed *	12%

* Projects requiring an EV van accessible parking space shall receive a credit of one parking space




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City of Santa Cruz Non-Residential




Total Number of Actual Parking Spaces	Total Number of Actual or Required EVSE Spaces, whichever is greater
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201+	6% of total



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2/20/2018


California Green Building Code



2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES

CALGreen NEW 2016 CODE
EFFECTIVE JANUARY 1, 2017


- Located in Title 24, Part 11
- Sets state mandatory baseline for PEV charging infrastructure and includes “voluntary” section.
 - Voluntary section provides a model code that becomes mandatory if adopted at the local level
- Local cities can adopt local amendments based on “voluntary” CALGreen or their own tailored amendments



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CALGreen Codes Lag Local Governments

- Multifamily (MF) housing:
 - Currently under CALGreen, 1-2% of parking spaces are required to be “EV ready” (electrical panel capacity, empty raceway)
 - Potential revision would be effective Jan 1, 2020
- Non-residential codes require that 6% of spaces are “EV ready”
- Santa Cruz, Fremont, Oakland, San Francisco, others:
 - 10%-12% of (MF) parking spaces served by a complete electrical circuit
 - Many require capacity for future expansion
 - Some require full EVSE installation
 - Many require similar levels of infrastructure for nonresidential buildings



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Policy Goals



- Many cities have their own Climate Action Plans with GHG reduction goals and, in many cases, specific EV charging infrastructure goals
 - EV building code standards development helps support these goals



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LOCAL BUILDING CODES OPPORTUNITIES



2/20/2018

Cost Savings

- EV Infrastructure in new construction significantly reduces cost & hassle:
 - Avoid potentially **costly retrofits** to electrical panels and service
 - Avoid potential **cost of breaking and repair of hardscape**
 - Reduce **soft costs** (permitting, inspection, project management, landlord or HOA approval if required, etc.)



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Estimated Cost-Effectiveness (per EV parking space)

	New Construction Cost	Retrofit Cost	Potential Cost Savings
City of Oakland, Surface Parking, Two EV Charging Full Circuits	\$1,300	\$6,300	\$5,000
San Francisco Large Enclosed Garage, 12 EV Charging Full Circuits	\$900	\$2,400	\$1,500

Source: Energy Solutions cost-effectiveness studies funded by California Energy Commission, City of Oakland and Pacific Gas & Electric

• Note: any required upgrades to main electrical service for commercial buildings or required step down transformer (480 V to 240 V) are not included in either new construction costs or retrofit costs



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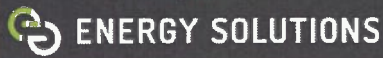
Local Government EV Readiness Infrastructure



Source: gwald/Flickr

Ed Pike, P.E.,
Senior Engineer

February 21, 2018




RATIONALE FOR EV INFRASTRUCTURE IN NEW CONSTRUCTION




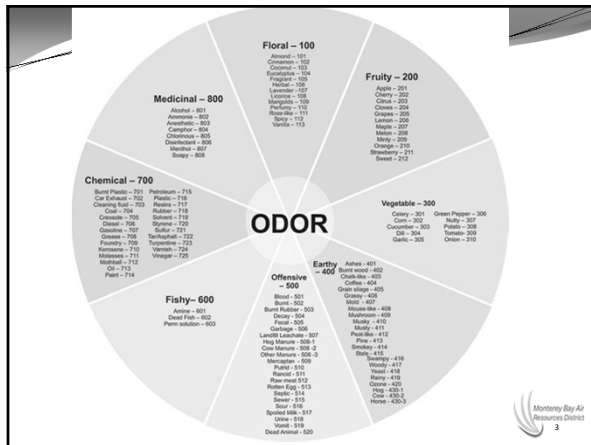
Air District Jurisdiction for Odors

Amy Clymo, Engineering and Compliance Manager
February 2018




Background

- Address public comments from December meeting
- Regulatory context
 - odor=nuisance
- Odor Sources
- Jurisdiction

Regulatory Context

- Health and Safety Code Section 41700 -District Rule 402
...a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.




Regulatory Context - Exemptions

- Health and Safety Code Section 41705


Section 41700 does not apply to odors emanating from any of the following:

- (1) **Agricultural operations** necessary for the growing of crops or the raising of fowl or animals.
- (2) Operations that produce, manufacture, or handle **compost**, as defined in Section 40116 of the Public Resources Code , if the odors emanate directly from the compost facility or operations.
- (3) Operations that **compost green material or animal waste products** derived from agricultural operations, and that return similar amounts of the compost produced to that same agricultural operations source, or to an agricultural operations source owned or leased by the owner, parent company, or subsidiary conducting the composting operation.




Potential Odor Sources

- Agricultural fields
- Landfill operations
- Composting
- Anaerobic digester
- Wastewater treatment plant
- Construction activities
- Wastewater lift stations
- Domestic animals
- Ocean
- Salinas River
- Standing water
- Smoke from burning




Nuisance Jurisdiction

Agricultural	<ul style="list-style-type: none"> • Exempt from H&SC 41700 • Utilize best farming practices
Landfill Operations	<ul style="list-style-type: none"> • Air District Rule 402 and equipment permits • Monterey County - local enforcement agency (LEA)/CalRecycle
Wastewater Treatment Plant	<ul style="list-style-type: none"> • Air District Rule 402 and equipment permits • Regional Water Quality Control Board
Composting	<ul style="list-style-type: none"> • Monterey County – LEA - Odor Impact Minimization Plan • CalRecycle
Anaerobic Digester	<ul style="list-style-type: none"> • Monterey County – LEA • CalRecycle
Construction, domestic animals, ocean, river, standing water, burning	<ul style="list-style-type: none"> • Air District Rule 402 • City/County




Odor Complaints from Marina

- ~70 complaints received since February 2017
- Confirmed odor present
- Unconfirmed odor source
- Weather dependent
- District in communication with:
 - Monterey County Environmental Health
 - City of Marina Public Works
 - Operators within the fence line of 14201 Del Monte Blvd




Recent Activities

- Meeting January 30 with:
 - Monterey County Environmental Health
 - Monterey Regional Waste Management District
 - Monterey One Water
 - Keith Day – Composting
 - Michael Hardy – Anaerobic digester



Questions/Comments?



2/26/2018

MBARD Grant Activities

Highlights:
Moyer Overview
R/V Rachel Carson
Santa Rita Unified School District EV Bus
Plug-In Monterey Bay EV Infrastructure Program
F.A.R.M.E.R.

Presented by: MBARD Planning Division
 February 21, 2018

MBARD Grant Programs


- **Carl Moyer Memorial Grant Program**
 - Repower or replace old dirty diesel powered equipment
- **Woodstove Change-out**
 - Specific to San Lorenzo Valley
- **CEC Grants**
 - Development of EV and Alternative Fuels Readiness Plans
 - EV Fleet and Infrastructure Accelerator Project
- **AB923**
 - School Bus Repower/Replacements and EV Infrastructure
 - Plug-In Monterey Bay EV Infrastructure Program
- **AB2766**
 - Transportation Projects and EV Rebates

Moyer Overview

- 18 years of running the program (since 2000)
- 150 Projects
- Total emissions saved throughout each project:
 - **1781.0 Tons**
- Grant Dollars Awarded since inception:
 - **\$11,069,512.19**


R/V Rachel Carson

- Grant Awarded: **\$ 280,384**
- Repowered: 2 Old Tier 1, 1995 Caterpillar 750 hp
- Replacement: 2 NEW Tier 3, 2016 Caterpillar 756 hp
- Annual emission reduced: **8.69 tons**
- Total emission reduced over project life: **26.34 tons**



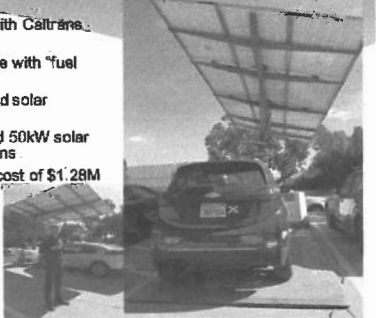
Santa Rita Unified School District EV Bus

- 2016 E-Lion Model B1 from Canada
- 71 passenger, Type C
- 135kWh capacity, 100+ miles driving range
- \$10,000 annual fuel savings
- Co-funded with ARB HVIP (MBARD \$296,649 + HVIP \$130,000)



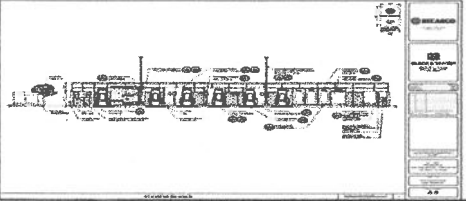
Camp Roberts SRA Solar Powered DCFC stations

- 3 year collaboration with Caltrans District 5 staff
- Huge regulatory hurdle with "fuel dispensing" at SRAs
- Only solution is off-grid solar powered EV charging
- Envision Solar to build 50kW solar powered DCFC stations
- ETC is Q3 2018 at a cost of \$1.28M



Plug-In Monterey Bay EV Infrastructure Program - Hwy156/101 Multi DCFC Station

- Tesla Power Packs were the long lead items
- BTC design fast charge system will be 160kW
- Engineering design and final drawings are complete
- Construction Documents are with Monterey County Planning for permit issue
- ETC is June 2018



Grant Programs - Coming Soon

- * **AB134 ~ \$700,000**
 - * Add-on to the Carl Moyer Program
 - * Disadvantaged Communities
- * **Wood Smoke Reduction Program - \$250K**
 - * Woodstove Replacements
 - * Available Districtwide
- * **FARMER ~ \$1.3 million**

Grant Program - Coming Soon
FARMER

- **Funding Agricultural Replacement Measures for Emission Reductions Program**
- **Funding from AB 134 and AB 109 ~ \$1.3 Million Allocated**
- **Follows Carl Moyer Program Guidelines**
- **Only for Agriculture**
 - Harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, etc.

Discussion and Questions....

