SOUTH CENTRAL COAST BASINWIDE AIR POLLUTION CONTROL COUNCIL

Technical Advisory Committee

Larry R. Allen, APCO

San Luis Obispo County APCD

David Van Mullem, APCO

Santa Barbara County APCD

Michael Villegas, APCO

Ventura County APCD

Council Members

Karen Bright, Chair

Council Member, City of Grover Beach

San Luis Obispo County

Roger Aceves, Vice Chair

Council Member, City of Goleta

Santa Barbara County

Mike Morgan

Council Member, City of Camarillo

Ventura County

MEETING MINUTES June 20, 2012

Present

Council Members:

Roger Aceves, Santa Barbara County APCB

Karen Bright, San Luis Obispo County APCB

Mike Morgan, Ventura County APCB

Staff:

Mike Villegas, Ventura County APCD

David Van Mullem, Santa Barbara County APCD

Larry Allen, San Luis Obispo County APCD

Kate Miller, Ventura County APCD

1. Approval of Minutes of February 22, 2012

Bright/Aceves Minutes approved.

2. Public Comment Period

None

3. Future ARB Motor Vehicle Programs – Mike Villegas

Mike Villegas distributed a handout from Tom Cackette's presentation on the Mobile Source program to CAPCOA's Spring Conference. Mobile source emission reductions will be important for continued air quality progress, as air districts have already implemented the majority of feasible stationary source control measures.

- Overview of additional reductions for NOX and ROC in 2015-22 time frame
 - More stringent standards for 2017-25
 - o Hydrogen Refueling station requirement up to 500
 - o Federal GHG and fuel economy standards
- Vehicles and Technologies Next 5 Model Years
 - o Smog emissions won't change much but older cars will cycle out
 - o In this timeframe: GHG 17% lower, Fuel Economy 20% better
 - \circ New car will cost more but will have a fuel-savings payback in \sim 40 months
 - Technology Penetration 2011-16 (manufacturing projections for light-duty vehicles)

 o About 60% of the fleet will be more aerodynamic leading to a 10%
 - improvement in fuel economy, and will have low rolling resistant (LRR) tires

 Approx. 40% will have advanced transmissions and direct injection
 - o 10% lower weight; 10% electric drive and advanced internal combustion engines

- Vehicles for Model Years 2017-25:
 - Smog emissions are projected to decrease by 75%, Greenhouse Gas emissions (GHG) by 34%
 Fuel economy is expected to be 50% better

Economics

- New car price increase: \$1,800 (vs. 2016), countered by potential fuel savings of \$7,000 for a breakeven point of three years.
- Technology Penetration for 2017 25: all headed to more aerodynamic vehicles with LRR tires. Ventura County APCD just received a Clean Air Fund grant to offer vouchers for LRR tires in order to get message out to the public and help commercialize the technology.
- Advanced transmissions weight reductions, electric drives become more prevalent
- Zero Emission Vehicle (ZEV) mandate could result in ZEVs being 15.4% of annual sales in 2025. Along with BEVs and FCEVs, will be a larger portion of the market.
- A variety of ZEVs will be available to consumers in coming years including SUVs.
- Fueling Infrastructure for electric vehicles: Ventura is working with SB and SLO on a plug-in EV readiness project, location selection, working with cities on building codes to make sure people can install a charger in their garage without much difficulty.
- Looking to install 18,000 level 2 chargers and 200 fast chargers (30-minute charge) statewide.
- Council member Morgan proposed a partnership between the state and proprietors to operate chargers at highway rest stops.
- 68 Hydrogen stations statewide are planned by the end of 2015 to support 20,000 fuel cell vehicles mostly government funded. Bright asked about the cost of installing a station. Mike Villegas will research and report back in September.
- Carbon-intensity (GHG associated with producing and utilizing the fuel during the entire cycle from well to pump): Gasoline 10% reduction by 2020. Electricity should be 33% renewable by 2020. Hydrogen offers 33% less carbon intensity than gasoline. Goal for alternative fuels is 60-70% lower carbon intensity.
- Mix of passenger vehicles will evolve through 2050: ARB projects gasoline powered vehicles will decline as a percentage of vehicles sold. Hybrids will increase and then decline by 2050. Plug-in hybrids will stay steady along with dramatic growth in Fuel Cell Vehicles.
- Next steps: ensure GHG standards are implemented (review in 2022). There are continuing incentive programs to establish the hydrogen infrastructure over next four years.

4. Central Coast Clean Cities Coalition (C5) Update – Larry Allen

This non-profit group, known as C5, is made up of Air Districts, schools and universities, fuel and vehicle providers, government agencies, and members of the public. They promote the use of alternative fuels and vehicles and the infrastructure to support and maintain progress on the central coast. The stringent process to attain a "Clean City" designation took three years and was achieved in 2006. This enables C5 to be eligible to secure Federal grant funding to use for interns, annual operations and training. The group will be re-certifying shortly and will look to members for ongoing support.

One of C5's Projects is for San Luis Obispo, Santa Barbara and Ventura air districts, working with C5 and Santa Barbara's local Community Environmental Council, to develop an EV community readiness plan for the central coast. The group received grant funding from the U.S. Department of Energy, with \$50,000 earmarked for C5. California Energy Commission provided an additional \$200,000 and Ventura is the lead on that portion. The primary goal is to develop an EV charging infrastructure along Highway 101 through the Central Coast that would connect Southern

California to the Bay Area. The hope is that EVs will proliferate in areas where the main vehicle use is commuting. To accommodate this new technology the plan would include:

- Best practices that have been adopted in other areas.
- EV-friendly policies to grow the EV economy and workforce.
 - Developing a GIS-based map/smartphone app (EVs have GIS navigation systems)
- Efforts to work with fleets to expand EV use and to work with local governments to address EV infrastructure
- Efforts to increase educational outreach to influence decision-makers

The Central Coast region has been forecast as an early adopter market for PEVs, and is a top market for hybrids (currently 300 – 500 EVs on Central Coast). There are 35 public charging stations and 30 pending. C5 is also working with the Bay Area AQMD on a statewide grant proposal will be submitted to the DOE requesting \$45,000 for technician and respondent training and fleet outreach (along). C5 conducted a workshop in May at SB MTA, and will have a webinar on July 12.

Because C5 is an integral part of this plan, the SLO County APCD encourages Santa Barbara and Ventura APCDs to become members to help grow the organization. Council member Aceves asked how information will be disseminated about charging station locations. He also inquired if there are recommendations coming out to include charging stations and TDF programs. Larry Allen responded that SLO APCD includes constructing charging stations as a potential mitigation measure as part of their CEQA project review process.

5. SBC Offsets – Mitigation Bankruptcy – Dave Van Mullem

Dave Van Mullem stated the availability of emission reduction credits is an issue statewide, so we want to develop possible solutions for consideration. Under the Health and Safety code, stationary sources emitting over 25 tons of pollutants per year need to set up an emission reduction program. Santa Barbara District opted for an alternative approach, with lower thresholds but also allowing some growth for major sources. The Santa Barbara program is applicable to all sources with a Net Emission Increase (NEI) of 10 tons/year or greater, and the NEI calculation is based on the federal Clean Air Act Amendments date (1990), not potential to emit. NEI is the sum of actual increases and decreases since 1990.

SBCAPCD set up North County/South County trading zones with no community bank or Essential Public Service provisions, which penalizes the "little guys" and those entities providing necessary public amenities. This was all done before SB-288 was adopted by the CA Legislature. SB288 prohibits our New Source Review rules from being less stringent than they were in 2004, and restricts our ability to make rule changes (i.e., no back-sliding).

An emission reduction credit (ERC) is a credit earned by a company when it reduces air emissions beyond what is required, such as electrification of agricultural engines, facility shutdowns, enhanced fugitive hydrocarbon I&M programs, and add-on emission controls. It is an asset that has true value in that it gives a business the flexibility to expand their operations.

ERC history: ERCs registered since 1997: 333 tpy NOx, 202 tpy ROC

ERCs available today: 213 tpy NOx, 109 tpy ROC

APCD estimate of marketable ERCs: 3 tpy NOx, 14 tpy ROC (because of hoarding)

Cost per ton: 1999 Low: \$5,000; 2012 High: \$100,000+

Historically, ERC banking was a very successful and beneficial program for clean air because their use required the surrender of more banked emissions than re needed to offset emissions from a new or modified project. However, today, ERC is a bank destined to go bankrupt; because as we move forward to clean our air there are ever-decreasing opportunities to create ERCs.

Furthermore, the market is too small to work effectively, and there is, understandably, hoarding by some companies. Another aspect of the overall issue is that Department of Defense (DOD) pre-1990 ERCs are non-transferable for off base use and DoD will not share with contractors on base. All these factors have driven market-based pricing to over \$100,000/ton. Especially severe is the lack of credits in the southern zone.

Many businesses are near the threshold; and some existing businesses are over. New businesses must restrict emissions, take business elsewhere, or stop their project. Santa Maria Energy, the University of California at Santa Barbara, and numerous others may not be able to expand their operations in the county.

Larry Allen asked if provisions of SB-288 include a clause related to Federal/State attainment. Mike Villegas said they do not. The consensus is that, at some future time, SB-288 needs to be modified so that this statewide issue can be resolved. Possible solutions include: eliminate daily threshold; increase the annual threshold; eliminate the NEI-based approach for PTE basis; add a backstop option to the rule that allows for mitigation fees for clean air projects; and/or build in a CAP growth allowance.

The ERC program has done an important job up to this point but has outlived its usefulness. Larry Allen added it is time to meet with Industry to fix this – ERC issues can only be fixed at the state level so we need to go together to the legislature. He encouraged members to meet with their businesses and find out where the problems are.

6. Portable Equipment Registration Program Legislation - Mike Villegas

This voluntary statewide registration program allows equipment such as drilling rigs to move throughout the state without the need to obtain District permits. The portable engine air toxic control measure includes modest emissions limitations for this portable equipment.

- Stationary equipment is subject to District permit requirements and new source review (more stringent emissions standards, protecting regional air quality (nitrogen oxides) and public health (diesel particulate matter). These requirements are necessary as stationary equipment produces higher emissions due to additional operating time at a single location.
- To determine if equipment is part of a stationary source three criteria are evaluated: geographic relationship, control relationship, industrial grouping
- AB1910 was introduced by Ma (D) and Hagman (R) and opposed by CAPCOA. It would have prohibited Air Districts from requiring a Permit to Operate for portable equipment whether or not the equipment replaces or supplements an ongoing primary activity at a facility.
- This bill, sponsored by California Construction and Industrial Materials Association (Cal CIMA), was defeated. Now the CAPCOA Engineering Managers and Enforcement Managers are working with Cal CIMA to find common ground.

7. Update on SLOAPCD South County Community Monitoring – Larry Allen

Goals: Map the plume (sand sheet) from Oceano Dunes to determine size of area it is affecting in the Nipomo Mesa and provide accurate information to affected residents. Staff divided the Mesa into a grid and set up monitoring sites throughout. No one would allow a Could not get permission to set up monitoring site in Guadalupe Flats, so they set up a sampling unit in a truck bed and parked it nearby on episode days.

Monitoring has now been completed and the data is being analyzed. Preliminary results look interesting. Slight changes in wind direction resulted in large shifts in the path of the plume and

in concentrations at the monitoring sites. The plume also appears to impact the agricultural fields toward Santa Maria. Didn't see evidence of emissions from the ag fields themselves, just blowing dust and sand from the Dunes.

This was a cooperative process; SLO borrowed monitoring equipment from eight agencies, and in turn the district repaired a number of these units. The district gained significant expertise in operating the portable samplers. Allen will report back at the September meeting.

8. Agricultural/Residential Interface – Dave Van Mullem

A housing development near Orcutt was built in the late 1970s near agricultural lands not in use at the time. The farmland was put into agricultural use some time later. Every three years when crops are rotated the potential for fugitive dust increases. In March, high winds created a fugitive dust problem, with another episode in April. District staff used cameras to determine the source of the dust. District staff also put out health risk advisory for dust on these days of high wind.

The farmer has a right to farm; the District would have had to find proof of negligence on the farmer's part in order to issue a violation; none was found on that date in April. The dust blows into crevices of nearby roofs; when it gets wet it causes the asphalt beneath the shingles to deteriorate and the roof to eventually leak. Video taken west of the airport clearly shows dust migration and demonstrates why there are health issues associated with the fugitive dust. The Ag Commissioner works closely with the APCD on this issue; however, there is not much control available. This is a big valley and wind whips through, stirring up sandy soil. The District found that the dust was not coming from that farmer's field that day; it was coming from fields further west and north.

A Santa Barbara County supervisor conducted a public meeting with some residents who were upset. The APCO, County Counsel and the Ag Commissioner also attended. Larry Allen suggested that a row of tall trees be planted as a wind break between the field and the residential area to cut down a great deal of the fugitive dust. Dave Van Mullem acknowledged that there is no good solution and no immediate fix. Allen stated that when he gets done with SLO's Mesa presentation he'll share results with Santa Barbara. He speculates that a lot of the fugitive dust SB is experiencing is from the Dunes.

Council member Morgan asked if wind creates plume in itself. Studies showed that the disturbance of the sand by the vehicles facilitates movement of the sand. Concentration is much lower in non-riding areas. Council member Bright agreed vehicles exacerbate the problem.

9. Other Business/Next Meeting Date

Mr. Allen had a matter to bring up to the APCOs pertaining to Greenhouse Gas verification.

State and Federal regulations require facilities to report their GHG emissions, and through the Cap and Trade program mandates that a Verification Specialist perform a certification process. SB and Ventura APCDs each have one GHG Verification Specialist to certify emissions; SLO APCD has two.

The state Conflict of Interest protocol prohibits verification of GHG's at a facility where an agency, such as an APCD, performs other emission related work. As a potential solution, the three air districts could become a verification body in order to trade services, avoiding conflict of interest issues.

Both the Ventura and Santa Barbara Air Pollution Control Officers are interested.

Next meeting date: September 19, 2012