

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT  
ADVISORY COMMITTEE MEETING  
August 26, 2014  
MINUTES

Chair Sara Head convened the meeting at approximately 7:30 p.m.

I. Director's Report

Mike Villegas, Air Pollution Control Officer, provided a response to a request, at the previous meeting, by Committee Member Paul Meehan for information on traffic synchronization. Mr. Villegas stated he had his staff check with the Ventura County Transportation Commission. There are currently no traffic synchronization projects in the pipeline. However, recently Simi Valley spent \$1.1 million on projects for six arterial roadways. In addition, Thousand Oaks completed two projects at \$480,000 and \$450,000 and Oxnard completed a project at a cost of \$450,000. So we have seen approximately \$2.48 million in recent traffic synchronization expenditures.

According to an article in the Acorn, they tried to synchronize the lights on Kanan Road and the residents opposed the project. It had impacts on people coming out of the smaller streets onto Kanan. So not everyone sees synchronization as a great benefit. Also, an article in the NY Times covered traffic signal synchronization in the City of Los Angeles. They synchronized all of their traffic signals – over 4500 lights. They increased average speeds on surface streets from 15 mph to a little over 17 mph. This could be a significant benefit for the number of cars affected.

Committee Member Randy Johnson noted an increase in the number of vehicles on the road and an increase in the speed. Mr. Johnson believes it could be related to change in vehicle technology such as the increase in responsiveness, acceleration and deceleration. Mr. Johnson asked about the population of Ventura County and the number of registered vehicles. Mr. Villegas said the population is about 840,000 and he can get information on the number of registered vehicles.

Committee member Thomas Lucas stated the increase in traffic could be related to the improving economy. The improving economy could also increase air pollution and affect air quality. Committee Member Keith Moore asked if there was any change in air quality due to the changes in traffic flow. If we eliminate a lot of starts and stops it should improve the air quality. Mr. Villegas agreed and noted LA would be a good test case but he has not seen any papers on the subject yet. Mr. Johnson stated it might be difficult to see the effects due to changes in population and other factors.

Mr. Meehan observed that in the previous meeting, there were comments that Simi Valley, Thousand Oaks and Oxnard did not have the stop-and-go traffic problems of concern. These are

the same cities that recently spent significant amounts of money on traffic synchronization. Mr. Meehan thanked Mr. Villegas for looking into the issue.

Mr. Kuhn noted citizens think these improvements should come overnight, but in reality it takes a lot of money. Also, it doesn't solve problems city-wide, it just helps in the specific areas. A controller for one intersection can cost anywhere from \$100,000 to \$175,000. Mr. Meehan asked about the NY Times article, and Mr. Villegas stated it was from April 2, 2013. Mr. Villegas said he would forward the email with the links.

Mr. Villegas continued his report with discussion of an item that will go to the Air Pollution Control Board on September 9<sup>th</sup>. We are working with the Santa Barbara County Air Pollution Control District on a voluntary vessel speed reduction program in the Santa Barbara Channel. About 25% of the NOx in our emissions inventory comes from marine vessels transiting the channel – container ships visiting the two ports at Los Angeles and Long Beach. The transiting ships' emissions dwarf the emissions from ships docking at Port Hueneme due to the volume of traffic in the channel.

We are providing an incentive of \$2,500 per transit. Six shipping companies have signed up. They will slow down to under 12 knots from average speed of over 14 knots. Remember that drag is proportional to velocity squared, so you get a significant drop in power requirements and emissions when you reduce velocity by even a small amount. We will get about a 50% reduction in NOx emissions from participating ships. 50% of 25% of the inventory is significant.

What we are trying to do is show that this voluntary program can work. The voluntary program has 90% participation at the twin ports. The pilot program runs July 1, 2014 through October 31, 2014, which coincides with smog season which is beneficial. It also coincides with blue whale season so we should have a lower incidence of whale strikes and they should be less dangerous to the whales if they are hit at lower speeds.

The funding for the program – \$30,000 is our share – comes from the Reliant Energy mitigation fund. Back when we had the energy crisis, Reliant had to run uncontrolled peakers at the Mandalay plant. They created a mitigation fund for nitrogen oxides. A lot of the money in the fund has been used for more typical Carl Moyer type projects. We felt this was something beyond EPA's, ARB's and the District's reach at this time, but we could do something voluntary. The hope is someone like a Wal-Mart will see this as good PR and keep the program going.

Speed reduction also reduces fuel use, so ships are trading fuel savings for lost time at the port. An LA Times article states it will take an extra 4 hours on average to make the transit at lower speeds. The article does not mention the District because we have not yet received Board approval. Committee Member Hugh McTernan asked if the committee should vote to recommend that the Board approve the District's contribution. Mr. Villegas noted the issue is not on the agenda so the committee cannot take action. It is very likely the Board will approve the project so support from the Advisory Committee is not necessary.

Mr. McTernan also asked about finding further funds, since it seems like a good public private cooperative action. Mr. Villegas agreed the project is a win-win all around. Also, the potential for greenhouse gas emissions reductions are even greater than NOx, about 60% for carbon dioxide. There is potential to use cap and trade funds to fund an extended program. If you look at a map, the closest point where the shipping lanes come to land is near south Oxnard and Port Hueneme. So looking at the impact, using a tool like CalEnvironScreen which is an environmental justice look at California, south Oxnard and to a lesser extent Port Hueneme scored fairly high. They are good candidates for cap and trade funds since they are targeted toward environmental justice areas. They scored high not due to air quality but due to pesticide application rates.

Mr. Meehan asked if other counties were likely to sign up to participate. Mr. Villegas responded that we are the two counties affected by shipping emissions in the Santa Barbara Channel. Environmental Defense Center, NOAA and the National Marine Sanctuary Foundation are partners, and their focus is on whale impacts.

Mr. Lucas asked about the use of GPS to determine vessel speed. Mr. Villegas responded that all marine shipping vessels have transponders just like aircraft. Mr. Chuck Thomas, Rule, Planning and Incentives Manager with the District, suggested looking on the Internet at [www.marinetraffic.com](http://www.marinetraffic.com) and looking at the west coast of the United States. By maritime regulations all ships must have AIS transponders that track course, speed, etc.

Mr. Lucas asked about funding for trucks less than 26,000 pounds for air quality issues. Mr. Villegas stated he would get back to Mr. Lucas on that.

Mr. Meehan asked what happens when a vessel exceeds the target speed of 12 knots. Mr. Villegas responded that they would not receive their incentive payments. Mr. Tyler Harris, Air Quality Engineer with the District, stated he believes the incentive is provided if the average speed through the channel is less than 12 knots. The lost time at the port is the biggest drawback and cost to ships for slowing down. The fuel savings and incentive do not fully cover the cost of slowing down.

Committee Member Joan Burns asked about who has authority over shipping if EPA and ARB do not. Mr. Villegas confirmed the International Maritime Organization has authority over marine cargo vessels. Regulations cleaning up ship exhaust are set to become effective in the 2017 time frame. A recent conflict at the IMO occurred when Russia wanted to postpone the 2017 effective dates but Europe and the US wanted to keep them.

Mr. Kuhn asked about the air quality impact of ships in the channel. Mr. Villegas stated the ships account for 25% of the NOx in our inventory. Most ships heading south to San Pedro or Long Beach transit the channel because the route on the west side of the islands passes through the Navy's test range. Mr. Thomas noted that the marinetraffic.com website does show some ships traveling outside the islands, but most of the traffic is in the channel.

II. Call to Order

Chair Sara Head called the meeting to order at approximately 7:45 p.m.

III. Roll Call

Present

Joan Burns

Robert Cole

Raymond Garcia

Sara Head

Martin Hernandez

Randy Johnson

Michael Kuhn

Kim Lim

Thomas Lucas

Hugh McTernan

Paul Meehan

Keith Moore

Richard Nick

Steven Wolfson

Absent

Lindy Moore Palmer (excused)

Alice Sterling (excused)

Staff

Mike Villegas

Chuck Thomas

Tyler Harris

Public

None

IV. Minutes

The minutes of the June 24, 2014 meeting were approved as drafted. Mr. Meehan commented that he was surprised and pleased at how complete they were. Mr. Harris stated he used a recording and it took a lot of time to transcribe. He suggested they would likely be more of a summary for future meetings.

V. Committee Comment

Committee Member Keith Moore stated he is on several water boards also and the region needs to look for new sources of fresh water. This could involve any type of project that could create fresh water, either from the ocean or recycled water. It should be on our horizon if there would be air quality issues related to desalination or other water projects. Mr. Moore asked if the District was aware of any such projects. Mr. Villegas responded that he is not aware of any water projects in the District. Mr. Moore asked if District staff or other committee members had given thought to fresh water project impacts on air quality. Mr. Villegas stated that is a good

suggestion. Right now we are focused more on near term projects such as composting, so staff is ramping up to deal with those emissions.

Mr. Moore noted one project is NRG is considering replacing their power plant. One model includes using waste heat as a source to generate fresh water. It would meet a desperate need if they included fresh water generation in their project. Mr. Villegas stated NRG did meet with District staff recently on the repower, but did not mention the water portion. Mr. Moore said there is enough waste heat in the repower to generate significant fresh water and the location is good as well. It would likely be an evaporation/distillation process. It would pull vacuum and use low pressure to evaporate the water under vacuum. It can concentrate the salt water to almost a sludge material.

VI. Public Comment

There was no public comment.

VII. Old Business

There was no old business.

VIII. New Business

A. Conflict of Interest Code

Mr. Villegas expressed appreciation that the Committee agreed to meet in August. Two days after the last meeting he received an email from the Clerk of the Board saying the Advisory Committee needed to update its conflict of interest code due to changes to state law. The Board of Supervisors oversees the conflict of interest code for all entities in the county – the school districts, the air district, assessment and appeals board, etc. They want to wrap this up the first week of October, so we want to go to our board September 9<sup>th</sup>.

At this time, we are proposing, along with all of the other agencies in the county, to adopt the state regulations by reference since they keep changing them. At one time we had an 8-10 page code for the Advisory Committee but we could hardly keep it current. So we are proposing to adopt the state regulations by reference. All of the committee members are subject to the disclosure category 1, which means you file for all disclosure categories.

Mr. Villegas wanted to point out the last page of the packet. This is a special condition adopted by the Air Pollution Control Board that allowed committee members to vote their interest. This was really critical a decade ago when the Advisory Committee was made up of many members with backgrounds in air quality and many members representing permitted facilities. Now the committee is almost entirely made up of general public, although we do have air consultants and a representative from Procter and Gamble. But

then we had representatives from oil production companies, and they were able to voice the concerns of the industry and vote based on those concerns, even on the oil and gas rules.

The District attorney left, so we have a new attorney. Mr. Villegas showed him this policy and he had several concerns with it. He is reviewing it now in light of the recent changes to the state regulations. He is not sure we will be able to stick with the “vote your industry” policy. Mr. Villegas will update the committee on counsel’s determination.

So the Board plans to adopt the state regulations by reference and all committee members will be disclosure category 1. Staff is also disclosure category 1. We will follow guidance provided on an annual basis with Form 700. Mr. Villegas thought it was appropriate to inform the committee of this and the formal review of the “vote your industry” policy before he took it to the Board.

Mr. Meehan stated he read the policy and was very surprised by it. He thought his role was to represent Ventura City Counsel, and by extension the citizens of the City. The policy seems to conflict with the disclosure members must sign. Mr. Villegas stated that is what is under review and counsel’s initial determination is that we will likely need to do away with the “vote your industry” policy.

Ms. Burns stated the disclosure does not prevent anyone from being on the committee. You must disclose your interests and remove yourself from votes where there is a conflict of interest.

Mr. Villegas noted the policy was implemented in 1979. It won’t be an issue for most committee members. There was a different conflict of interest code in state regulations that allowed them to carve this out. The District’s current counsel believes that situation no longer exists. Since the vast majority of members are citizen representatives, there won’t be any issues. The policy is set by the Board, and counsel will inform them on the effect on this policy.

Committee Member Martin Hernandez made a motion that the Advisory Committee recommend to the Air Pollution Control Board that the Board adopt the conflict of interest code as proposed by staff. Committee Member Hugh McTernan seconded the motion. The vote was unanimous in favor of the motion so the motion carried.

## B. Update on Ventura County Air Quality

Mr. Villegas expressed the appreciation of staff for the Committee’s input on the rules and other issues. His first slide shows the trend in air quality since this committee was formed. The slide shows the current ozone standard and the number of days in violation of various standards over the years. The air quality data lines are jagged due to meteorological

conditions. El Niño years, like this year, bring monsoonal moisture which keeps violations down but a really hot summer can drive them up. If you look back to the 1970's we see 160 days over the standard. We were down to four in 2013, showing a dramatic change.

When Mr. Villegas started with the District we were subject to the 120 ppb standard. We attained the standard in 2002 even though we had a statutory deadline in 2005. We attained the 84 ppb standard prior to the 2015 deadline also. We must meet the current 75 ppb standard by 2021. But, the EPA might tighten the standard again.

The county population has increased from just over 400,000 to 840,000 in the same time period. It is really dramatic how the air quality has improved in spite of population growth.

The first slide shows days over the standard. But attainment is determined based on the design value. The design value considers the 98<sup>th</sup> percentile of the data. The 3-year average of the 4<sup>th</sup> highest day is the design value. So for 2013 you get the 8-hour average ozone concentration on the 4<sup>th</sup> highest day for 2011, 2012 and 2013. Then take the average of those numbers for the design value. Looking at the slope of the line, it appears we will meet the standard by 2021.

A committee member asked about the driver behind the sloped line – what is causing the number of violations to go down? Mr. Villegas responded saying the emissions are going down. We discussed ship emissions earlier. Emissions are increasing due to the recovery in the economy. But then the IMO standards will hit the engines and ship emissions level off about 2017. At the last meeting we talked about motor vehicle standards. Motor vehicle emissions are expected to drop dramatically by 2025. That is another large piece the pie for both NOx and reactive organic compounds.

The motor vehicle standards are driven by ARB, but it is a holistic effort. We will be likely going to the committee in October with a regulation that achieves about 100 tons per year of reactive organic compound emissions reductions. The rule covers the transfer of liquid propane gas, such as taking LPG to homes in upper Ojai that don't have natural gas service and filling of bar-b-cue tanks. By getting low emission fittings and transfer equipment we reduce ROC emissions by another 100 tons. Coupling all of these efforts together causes air quality improvements.

The controls on heavy duty trucks, as expensive as it is and beyond the consternation of the truckers, bring a significant reduction in emissions. Mr. Lucas asked about the cost benefit analysis on the truck controls. Mr. Villegas responded that he could not speak for the Air Resources Board on their cost-benefit analysis. But everything staff brings to the committee will meet the Board's cost effectiveness thresholds. We do everything in our power to make sure the rules are workable. That is the stationary source piece of the puzzle.

Mr. Hernandez noted the ARB is the regulatory body for the state and asked if the District is basically a local enforcement agency for the ARB. Mr. Villegas responded that we are effectively a local enforcement agency for some state regulations such as portable equipment. They regulate mobile equipment. But we regulate with our own rules the

stationary sources. So everything from the proposed repower of Mandalay, which will be less than 2 ppm NOx under BACT or even lower, to the corner gas station where we regulate stage 1 and stage 2. We write the rules for those and all other stationary sources. We do the cost benefit locally for our regulations on stationary sources.

Part of this committee's role is to make sure we do that analysis correctly. At our rule meetings, we generally get the same public turnout we have tonight. That is because at the workshops we get to the point where the room is silent when we ask if there are any more changes needed. This means we are getting the rule workable. We expect to see people come to be sure there are no changes to the rule, but we do not expect to see people here saying you should not adopt this rule because it will force me out of business. That is the endless balance between environmental benefit and the cost. We call it socioeconomic impact. There is more than just cost benefit analysis, we consider loss of jobs and other aspects.

Mr. Moore asked if this means we are still a black spot on the EPA map. Mr. Villegas confirmed that was correct. Mr. Moore asked how close we are to attainment. Mr. Villegas stated we need to be at 75 ppm, and we are currently at 79 ppm. Mr. Moore stated that he asks this question every year, and asked how many tons we are short of attainment.

Mr. Villegas stated that will be determined by computer models. Staff is currently working on the emission inventory and accounting for every source of emissions in the county – mobile, stationary, etc. Mr. Thomas stated we do not yet know how many tons of reductions are needed to meet the standard. The Air Resources Board does modeling for the entire state. They are preparing for the modeling now but it won't be completed until the end of the year.

Mr. Villegas stated we have numbers for the 84 ppb standard. We have an air quality management plan that has the pie graphs showing the sources and the reductions needed. In that plan we set the targets and using the plan we met the targets. As a result, we met the 84-ppb standard.

Mr. Johnson asked what happens if we miss the deadline. Mr. Villegas responded that we do not want to miss the deadline. One thing that is different about air regulations is when they wrote the federal Clean Air Act they really put teeth in it.

If you miss the deadline the first thing they do is increase the offset ratio. Right now the offset ratio for new or modified sources of NOx or ROC is 1.3:1. So for emissions above the threshold the source must purchase 1.3 tons of credits for every ton of emissions. If we fail to meet the deadline, EPA raises that to 2:1, which will cause serious increases in cost for new projects. Businesses will choose not to expand or locate in the county as a result.

The second penalty for failure to meet the deadline is they cut off the federal highway funds. So you definitely do not want to fail to meet the deadline. Ms. Burns noted the District would also be required to develop a new state implementation plan (SIP). This takes staff away from other priorities.



Committee Member Steven Wolfson asked when was the last time we ran the model and how many tons did we need. Mr. Thomas stated the model was run for the last air quality management plan. The model projected at that time we would meet the old standard in 2013 and we met the standard in 2009. The details are available in that plan. We met the standard early and we have an official designation of attainment for that standard.

Committee Member Kim Lim noted it is not a simple question. Mr. Villegas responded once the model is run, there will be a simple answer. We will have a chart that says where we are in the base year, where we need to be for attainment, and that delta is the answer to Mr. Moore's question. We have this for the 84 ppm standard and the 120 ppb standard.

Part of the problem is when EPA set the 75 ppb standard, the science advisors said set it no higher than 70. The Bush administration was very conservative and was worried about the effect on the economy so they set it at 75 ppb. There was litigation so even though the standard was set in 2008, the implementation regulations have not been finalized and aren't expected until the end of the year. There has been a huge delay and until the implementation regulation is final, ARB will not run the model.

Mr. Moore noted there is now talk of a new, tighter standard. He asked for staff opinion on attainment of a tighter standard. Mr. Villegas stated EPA plans to set it between 60 and 70 ppb. Mr. Moore stated that could put the entire country in non-attainment. Mr. Villegas agreed that large areas that are currently in attainment would be classified non-attainment at 60 ppb. Ventura County is currently classified as non-attainment, but it will make it tougher on us and pull areas that currently attain into non-attainment.

Mr. Moore asked about factoring in population growth, new development, new homes, water heaters, etc. and how is that addressed in the models. Mr. Villegas responded that the Southern California Association of Governments (SCAG) provides population forecasts based on housing allocations. The cities need to accommodate the increasing population so they come up with housing numbers. We integrate those into our plans so we know we are accounting for new water heaters, central furnaces, etc. based on population growth. More vehicle miles traveled is offset by the cleaner cars. Models account for new jobs needed for the new people as well.

ARB develops a model that factors growth versus control. The model accounts for the emissions and determines what reductions are necessary. Then we set an attainment date that meets the statutory deadline. It literally takes us a few years to get ready for the modeling by collecting all of the information needed.

Mr. Meehan asked if there is a new federal standard, will our attainment date deadline be pushed out again. Mr. Villegas confirmed that is the case and we do not know what our classification will be. We are currently classified as serious nonattainment. We could easily bump to severe because our rules are set for that status. It would have no real negative impact on the District or the regulated community. We were severe for the old 120-ppb

standard even though we met it early. Because of that classification, we had to set our rules at a more stringent level.

Between then and now, the EPA started to roll back some of their new source review rules. However, the California legislature said no district shall relax their rules to be any less strict than they were the day before the EPA took their action. That locked our rules at the severe level in some of our permitting regulations. So we could bump up one classification and get more time to attain the standard without causing grief to the regulated community.

We are trying to get there as soon as possible because we are a public health agency. We will try to meet the serious deadline. Where they set the new standard – 70 or 60 makes a big difference. If the standard is 70 ppb we can look at that line and say if current trends stay, we will probably be OK. If they set it at 60 ppb, that will be much harder to tell. The slope must level off somewhere.

Mr. Moore asked if we have information on the sources, such as natural, cars, etc. Mr. Villegas said he could provide the pie charts with that information. Mobile sources are over 50% of NOx emissions at this point and are close to 75%. Mr. Thomas stated natural sources are called biogenics. A number of years ago the District hired a consultant to develop a biogenic inventory of the county. We are not sure if ARB has updated that or not.

Another thing to remember is that the lower EPA pushes the standard, the closer we get to background. It gets tougher and tougher to reduce ozone levels as you approach background. Years ago background was considered 4 ppb, but more recent research indicates it is much higher. Fumigation of stratospheric ozone down to the surface occurs and increases surface ozone. Background could be as high as 30 ppb. Ms. Head noted air pollution from China also affects air quality here.

Mr. Meehan asked if the neighboring counties have a similar graph showing downward trends. Mr. Villegas confirmed they have similar trends which is very helpful to us. Some of our worst days are when we have east winds that bring some transport to us. Or, it takes the pollution out to sea and then post Santa Ana we get the brown cloud of NOx that comes on shore. But as L.A. gets cleaner, some of those bad days aren't as bad as they used to be. We transport to them and they transport to us, but their transport to us has a much greater impact than ours does on them.

The bottom line is the work of this district and the committee has come a long way. Back in the 1970's there were smog alerts in Simi Valley where kids were told no P.E. today. That just doesn't happen anymore.

Ms. Burns mentioned a series by marketplace.org called "We Used To Be China" and suggested that committee members listen online. It discusses L.A. extensively and provides a history of the Clean Air Act. There was general discussion by committee members and staff about the historical air quality in L.A. and how much it has improved.

The next meeting is tentatively scheduled for October 28, 2014 and should have a rule for committee review.

IX. Adjournment

Having no further business, the chair adjourned the meeting at approximately 8:25 p.m.

Prepared by:

Tyler Harris

Air Pollution Control District Staff