

VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT  
ADVISORY COMMITTEE MEETING  
September 24, 2013  
MINUTES

Neither the Chair nor Vice Chair was in attendance, so the committee elected Michael Kuhn as Chair Pro Tem. Mr. Kuhn convened the meeting at approximately 7:35 p.m.

I. Director's Report

Mike Villegas, Air Pollution Control Officer, discussed the Carl Moyer program. The Ventura County Star published an article by Carmen Ramirez, Chair of the Ventura County Air Pollution Control Board, and Mr. Villegas about the Carl Moyer program and its benefits to air quality. The Carl Moyer reauthorization bill passed the legislature and was sent to Governor Brown, who has publicly stated that he will sign it. The bill funds the Carl Moyer grant program through 2023. This was a major effort by Mr. Villegas and he worked with the legislative delegation to obtain the bipartisan support needed to pass the bill as an urgency measure that requires 2/3 majority.

This summer was hot but monsoonal moisture helped prevent inversion layers in Ojai and Simi Valley so smog levels stayed low. It appears that this will be a quite clean year and Mr. Villegas will present the data at the next meeting. Committee Member Keith Moore asked how far we are from compliance and how many tons are needed to attain the ozone standard. Mr. Villegas stated that the number of tons will be determined in the planning process. The monitoring manager believes the district had only 4 days over the standard and two of those days were during the Springs fire. The standard is based on the 4<sup>th</sup> highest day and we might be able to get two days flagged as exceptional events which would give us a year of compliant data. This shows how close we are to attainment, but we cannot expect the weather to continue to be so favorable. We have until 2021 to achieve attainment. Emissions have come down, because a few days were favorable for ozone formation and the ozone levels did not climb above the standard.

As part of the air quality management plan development, we will come up with a carrying capacity for the District. The carrying capacity will be two numbers: tons of reactive organic compounds and tons of nitrogen oxides. Our task will be to reduce emissions to those levels by 2021.

Committee Member Moore asked about openings for creative opportunities. Mr. Moore stated he had ideas regarding the definition of a point source. He proposed a trial study to determine if his concept would be effective and asked if the District has the resources available to undertake such an effort. Mike Villegas stated that some resources are available and he would be willing to meet with Committee Member Moore to explore options. Mr. Moore stated that we might be able to set an example for other districts with this concept.

Mr. Villegas informed the Committee of a presentation he gave to the Board about light duty vehicle technology. It was a presentation Mr. Villegas received from the California Air Resources Board. It showed projections of vehicles on the road in 2025 and 2050. The conclusion is that hybrids, plug-in hybrids, battery vehicles and fuel cell vehicles will be about 80% of the mix by 2050. If that comes to fruition, air quality will dramatically improve. The Committee expressed interest in the presentation and Mr. Villegas stated he would provide it at a future meeting with a brief rule presentation.

Committee Member Joan Burns asked about the effect of emissions from the shipping industry. Mr. Villegas stated that the District was active in the effort to get new regulations through the International Maritime Organization (IMO) and allow the U.S. to negotiate in that treaty. Shipping emissions are in the neighborhood of 15% of NOx emissions in the District. If trade and the economy improve again, that could climb to near 40% because we continue to drive down emissions from other sources on shore. The ships last so long that even though their emissions might not climb, they become a bigger piece of the small pie. This issue is beyond the reach of the U.S. and in fact Russia is pushing to relax the IMO treaties.

## II. Call to Order

Chair Pro Tem Michael Kuhn called the meeting to order at approximately 7:41 p.m.

## III. Roll Call

### Present

|                |                    |
|----------------|--------------------|
| Joan Burns     | Hugh McTernan      |
| Raymond Garcia | Keith Moore        |
| Randy Johnson  | Richard Nick       |
| Michael Kuhn   | Duane Vander Pluym |
| Kim Lim        | Steven Wolfson     |

### Absent

|                            |                              |
|----------------------------|------------------------------|
| Robert Cole                | Thomas Lucas (excused)       |
| Todd Gernheuser            | Lindy Moore Palmer (excused) |
| Sara Head (excused)        | Alice Sterling               |
| Martin Hernandez (excused) |                              |

### Staff

Mike Villegas  
Chuck Thomas  
Tyler Harris

### Public

None

IV. Minutes

The minutes of the August 27, 2013 meeting were approved as drafted.

V. Chairman's Report

There was no chairman's report.

VI. Public Comment

There was no public comment.

VII. Old Business

There was no old business.

VIII. New Business

A. Proposed Amendments to Rule 54, Sulfur Compounds, and Proposed Amendments to Rule 42, Permit Fees

Tyler Harris of the District gave a presentation of the proposed amendments to Rule 54, Sulfur Compounds, and amendments to Rule 42, Permit Fees. Staff is proposing to amend Rule 54 to add the 2010 sulfur dioxide National Ambient Air Quality Standard (NAAQS) to the ground or sea level concentration limits, address deficiencies identified by the USEPA in the combustion exhaust sulfur dioxide emission limit and clarify the baseline period for determining the flare gas volume allowance. Staff is also proposing to amend the flare gas volume provisions in Section N of Rule 42 to maintain consistency with the Rule 54 requirements. Notice of this Advisory Committee meeting was sent to all known sources of sulfur dioxide in the District.

Mr. Harris summarized the historical sulfur dioxide air monitoring data. The District had an active SO<sub>2</sub> monitor at the El Rio station from 1980 through 2004 when the sulfur dioxide concentration was deemed too low to justify continued monitoring. Even though the data shows two points (1980 and 1988) with maximum hourly concentrations above the 2010 NAAQS limit of 75 ppb, due to the design nature of the limit these would not indicate an exceedance. He also summarized the history of Rule 54 and its amendments. The current proposed amendment is necessary to keep the District rule consistent with federal requirements and ensure that any new sources do not interfere with attainment of the standard.

In 2010 the USEPA promulgated a new primary SO<sub>2</sub> NAAQS. The standard is 75 ppb by volume with an averaging time of one hour. Compliance with the standard is demonstrated by comparing a design value, the 3-year average of annual 99<sup>th</sup> percentile daily maximum 1-hour

concentrations, to the 75-ppb standard. EPA guidance indicates dispersion modeling will be used to determine attainment in most areas of the US. In August, EPA published nonattainment designations for 29 areas based on ambient air monitoring data but none of the areas are in California. EPA does not expect to complete designations for areas based on modeling until 2017 or 2020.

Mr. Harris summarized the amendments to Rule 54 required to add a new ground or sea level limit based on the 2010 SO<sub>2</sub> NAAQS. A new subsection is added with the limit and a description of the design value. Mr. Harris described the method of calculating the design value. He noted that the design value is defined in the rule amendment, but a detailed description of the calculation method is not included. Design value calculation instructions are available published documents by EPA and others.

The Rule 54 amendments include options for demonstrating compliance with the 75-ppb ground or sea level concentration limit using dispersion modeling or ambient air monitoring at the District's discretion. Mr. Harris stated that due to the nature of the standard, monitoring is impractical and prohibitively expensive. In addition, there is no active monitor in the District so current ambient SO<sub>2</sub> concentration data is not available. The preferred model is AERMOD, available for free from EPA. The rule amendments also include the option to demonstrate compliance using screen modeling and the preferred model is AERSCREEN.

Mr. Harris discussed the affected sources based on EPA guidance and District practice. EPA requires all large sources, with SO<sub>2</sub> emissions greater than 100 tons per year, to demonstrate compliance using dispersion modeling. Ventura County has no sources with SO<sub>2</sub> emissions greater than 100 tons per year. EPA also requires modeling for new sources with potential emissions greater than 40 tons per year and is considering issuing a short term modeling threshold. The cost for modeling to demonstrate compliance depends on the complexity of the source and environment. A screen model of single simple source will cost approximately \$1000, but it could cost more than \$20,000 to model multiple sources with complex terrain and building environment.

Any source that modeling indicates causes or contributes to an exceedance of the standard must reduce emissions to a compliant level. In some cases, if the model shows a marginal exceedance using a short stack, raising the stack height to no more than good engineering practice height could be acceptable.

An important point here is that the District has been evaluating all new sources of sulfur dioxide for compliance with Rule 54 limits as a standard practice throughout its history. This rule amendment will not change this practice; it will only set a lower bar for the evaluation. The proposed amendments do not include a modeling threshold. Even a relatively minor source could cause an exceedance if it is very close to the property line and buildings or terrain affect dispersion. This gives the District engineers the authority to evaluate projects on a case-by-case basis to determine whether modeling is necessary.

Mr. Harris also described the proposed changes to the combustion SO<sub>2</sub> emission limit in Subsection B.1.a of Rule 54. The changes were requested by USEPA due to a deficiency

identified during the State Implementation Plan revision process in 2000. The limit itself will not change, however the amendments require that the limit be applied on a dry basis and corrected to a specific percent oxygen content based on the type of source. Mr. Harris noted that most combustion sources are also subject to Rule 64 – Sulfur Content of Fuels and if the source complies with the Rule 64 limits it will also be in compliance with the combustion limit in Rule 54 even after the amendments are adopted. In addition, the kilns at Trinity Expanded Shale and Clay will easily comply with the SO<sub>2</sub> emission limit after correcting to a dry basis and 15% oxygen.

The final proposed amendment to Rule 54 clarifies the method of calculating excess emissions fees for planned flaring that is exempt from the combustion emission limit and ambient concentration limit. In this case the change to the rule text reflects current District policy and aligns the rule text with the original intent as stated in the 1994 staff report and Board documentation. The revisions change the date for the baseline period for calculating the flare volume allowance. The baseline period for existing sources will be calendar years 1988 through 1993 and for any new sources it will be the first six full years of operation. Similar changes are proposed to Rule 42 Subsection N in order to maintain consistency between the rules.

Committee Member Hugh McTernan asked how many flares there were in the District. Mr. Harris responded that he believed approximately 15 flares were currently operating in the District, but only the flares on Gilda and Gail were subject to the combustion limit exemption and planned flaring excess emission fees. The other flares both burned gas with low sulfur content and are not capable of exceeding the limit or they are subject to limits on the sulfur content of the gas burned.

Steve Wolfson stated that planned flaring is unconscionable – the gas should be recovered or disposed in another manner. In fact emergency flaring is also unnecessary; it is just a matter of drilling a disposal well or using an existing well rather than flaring it to the atmosphere. Committee Member Duane Vander Pluym asked why we are not requiring flares to be removed from the county. He mentioned the La Conchita flare as an example. Mike Villegas stated that the La Conchita facility is operated by a small, independent oil company. If they had the financial resources they would be more likely to treat the gas, compress it and put it in the pipeline. Mr. Villegas believes the operators will not recover that gas without a regulatory requirement. In addition, it is important to remember that a flare is a control device that destroys a large amount of ROC and creates a small amount of NO<sub>x</sub>. When examined from a smog potential, the flare does a lot of good rather than venting the gas directly into the atmosphere.

Mr. Villegas stated that the District has a flare minimization rule on the rule calendar. But even looking at the flare minimization rules from other districts, removing the La Conchita flare might not be cost effective. It gains a lot of attention due to its location and being not shrouded. The gas is of lower quality and would need to be treated to send it to the pipeline. Flaring is the least cost alternative.

There was discussion of the current SO<sub>2</sub> ground or sea level standard of 250 ppb versus the proposed standard of 75 ppb with the design value. It was noted that historical data showed two years with daily maximum 1-hour SO<sub>2</sub> concentrations over the proposed standard of 75 ppb. The

only District SO<sub>2</sub> monitor was shut down at the direction of USEPA in 2004 due to the low concentration readings over the previous decade. The District currently has no active SO<sub>2</sub> monitor.

The vast majority of facilities will be in compliance with the standards because the only SO<sub>2</sub> emissions are from combustion of pipeline-quality natural gas or CARB diesel, both of which have very low sulfur contents. The only facilities that require scrutiny are wastewater treatment plants, larger oil field operations and landfills. The only facility in the District that ever had problems with compliance is Trinity ESC, (formerly Pacific Custom Materials). Modeling showed potential exceedances of the 250 ppb standard so the District took enforcement action and required SO<sub>2</sub> controls and continuous monitoring at the stack to demonstrate compliance.

Generally the District does any required screen modeling as part of the authority to construct review so the facility does not need to contract for separate modeling. The only facility that will likely require greater scrutiny is the Toland Road landfill due to the multiple sources. However, recent modeling showed that they are well below the standard at the property line so this rule amendment will not likely have any significant impact on the regulated community. Toland Road Landfill monitors the sulfur content of the gas in order to ensure compliance.

Committee Member Keith Moore asked about the source of the averaging time in the standards, specifically the source of the three-minute average for the hydrogen sulfide ground or sea level standard in Subsection B.4. Committee Member Moore believes the three-minute averaging time is not practical for measuring or enforcement. He suggested District staff consider the averaging times in Rule 54 and how to measure them in a practical way. Mr. Harris stated that he believed that standard was based on a California Ambient Air Quality Standard. Mr. Harris stated he would research the origin of the three-minute averaging time and determine if the test methods cited in Rule 54 are capable of such time resolution.

Chair Pro Tem Michael Kuhn asked for staff comments on the letter from Phil White addressed to the Advisory Committee regarding flares. Mr. Villegas stated that the District will develop a flare minimization rule and make certain all flares have permits including stand-by flares. Regarding the La Conchita flare, the only way the operators will stop flaring and recover the gas is if they are forced to through regulations.

There was discussion of current flaring requirements. If a facility has an emergency or equipment breakdown that requires flaring of gas they generally request a variance from the District. Since an oil field cannot just shut down, if a compressor fails the operator will need an emergency variance to flare until the compressor can be repaired. The variance requirements would include milestones and deadlines for repairing the equipment and returning to normal operations. The facility would also pay excess emission fees which can vary.

Committee Member Keith Moore asked staff for opinions on the lack of industry and public participation and comment on the amendments to Rule 54. Mr. Villegas stated that staff had been discussing the rule amendments with VRSD, but since they determined their recent modeling results showed compliance with a decent margin they did not need to comment on the rule. The Trinity ESC facility appeared to be able to demonstrate compliance and the District is

sending engineers to observe source tests on the kilns over the next two days to ensure their emissions remain compliant at the stack.

There was additional discussion of the ability to convert flares to a useful product such as electricity using a micro turbine. Committee Member Duane Vander Pluym asked if Carl Moyer funding could be used to assist in replacing flares with turbines. Mr. Villegas stated that Carl Moyer will not apply since the sources are not diesel engines. If more gas is produced through fracking, it is unlikely it will be flared except for emergencies since producing gas is often the goal of fracking operations.

Committee Member Keith Moore made a motion to approve the recommended amendments to Rule 54 and Rule 42. Committee Member Randy Johnson seconded the motion. Chair Pro Tem Kuhn requested any additional discussion. Hearing none, he called the question for a vote. The vote was unanimous in favor of the motion so the motion carried.

#### VIII. Adjournment

Having no further business, Chair Pro Tem Kuhn adjourned the meeting at approximately 8:40 p.m.

Prepared by:

A handwritten signature in blue ink, appearing to read 'Tyler Harris', with a horizontal line extending to the right.

Tyler Harris  
Air Pollution Control District Staff

