



PIMA COUNTY ENVIRONMENTAL QUALITY ADVISORY COUNCIL
150 W. Congress Street, Suite 109, Tucson, AZ 85701

Summary Minutes – March 19, 2008
Conference Room, 6th floor
130 W. Congress Street, Tucson, AZ
1:30 p.m.

Members Present:

Dr. Roger Caldwell
Mr. William R. Reilly
Mr. Allan MacDonald
Mr. Daniel G. Rowe
Mr. Warren Thompson
Mr. Jeff Yockey

Members Absent:

Dr. Mark Witten
Dr. Eric Betterton
Mr. Ben Dorris
Mr. Peter Livingston

Others Present:

Ursula Kramer, Director, PDEQ
Richard Grimaldi, Deputy Director, PDEQ
Vicki Bennie, Council Secretary, PDEQ
Roxanne Linsley, ADEQ Southern Regional Office
Colleen Crowninshield, Pima Association of Governments

I. CALL TO ORDER AND INTRODUCTIONS

Mr. Thompson called the meeting to order and introductions were made.

II. APPROVAL OF THE JANUARY 16, 2008, MINUTES

Mr. Rowe made a motion, seconded by Mr. MacDonald, to approve the January 16, 2008, minutes. The motion passed with a unanimous vote.

III. SORGHUM TOPIC

Mr. Livingston was unable to attend. This item was tabled until another meeting.

IV. ETHANOL FUELS UPDATE

The Clean Cities Coalition promotes the use of clean fuels and clean-fuel vehicles in partnership with the U.S. Department of Energy's Clean Cities Program. The Clean Cities Coalition coordinates with member jurisdictions to develop clean-fueling infrastructure, educate the public on the understanding of the benefits of clean-fuel vehicles and work to develop clean corridors on interstate highways and trade routes.

Ms. Crowninshield stated that the clean fuel options currently are:

- Biodiesel (B20 or B100)
- Ethanol (E85)
- Compressed Natural Gas (CNG)
- Hybrid Electric
- Propane
- Hydrogen

V. ETHANOL FUELS UPDATE (CONTINUED)

Biodiesel

Biodiesel Emission Type Benefits	B20	B100
<i>Regulated</i>		
Total Unburned Hydrocarbons	-10%	-40%
Carbon Monoxide	-10%	-50%
Particulate Matter	-15%	-70%
NOx	+2%	+9%
<i>Non-Regulated</i>		
Sulfates	-20%	-100%
Ozone potential of speciated hydrocarbons	-10%	-50%

Biodiesel is made from oils such as soy or safflower or from recycled yellow grease.

Ethanol (E85)

Ethanol (E85) Emission Type Benefits	
<i>Regulated</i>	
Total Unburned Hydrocarbons	-15%
Carbon Monoxide	-40%
Particulate Matter	-20%
NOx	-10%
<i>Non-Regulated</i>	
Sulfates	-80%

Ethanol E85 is 100% pure grain alcohol made unfit to drink by adding 15% gasoline. Ethanol can be made from corn, potatoes, wood, waste paper and other ag products. Ninety percent of the ethanol production in the U.S. comes from corn.

Flex fuels vehicles can run on both alternative fuels and diesel. The lack of infrastructure discourages consumers from purchasing flex vehicles. Consumers feel if they go on a road trip, they may end up in an area where alternative fuels are not available, forgetting that their flex fuel car will also run on diesel.

Compressed Natural Gas

CNG Emission Type Benefits	Reduction from Gasoline
<i>Regulated</i>	
Carbon Dioxide	-25%
Carbon Monoxide	-90% - -97%
Particulate Matter	Little to no pm
NOx	-35% - -60%
<i>Non-Regulated</i>	
No evaporative emissions	
Non- methane hydrocarbons	-50% - -70%

The cleanest of all alternative fuels is compressed natural gas (CNG), in terms of tailpipe emissions. It is also the least expensive fuel right now. There is one CNG station in the Tucson area.

The only car dedicated CNG-fuel vehicle is the Honda Civic.

Challenges for alternative vehicles

- Lack of fueling infrastructure discourages consumers from purchasing vehicles that use clean alternative fuels.
- Clean alternative fuels need to be supported by state governments as a benefit by offering incentives such as the Federal Jobs Bill offered for biodiesel and ethanol.
- Manufacturing of renewable fuels and lack of production facilities make transportation costs high, keeping the end user cost high.
- It is imperative to educate the general public and policymakers on the need for energy security and petroleum independence.

Tucson Coalition Accomplishments

- Coalition saved 4.2 million gallons of petroleum through the use of alternative fuels in 2006
- Opened 6 new E85 and 2 new biodiesel sites
- Assisted the NFL Environment and FOX with alt fuels and vehicles for the Super Bowl
- Global Warming Rally Step It Up Solar Rock event.
- Reverb and Music Matters concerts; assisted in finding fuel for artists and hosting a table on alternative fuels at each concert.
- Alternative Energy Expo - September 2007

VI. PDEQ STAFF REPORT

Ms. Kramer provided information regarding EPA's new ozone standard. On March 12, 2008, EPA significantly strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone. These revisions reflect new scientific evidence about ozone and its effects on public health and the environment. The final revisions affect two types of ozone standards:

- *Primary standard* to protect public health, including the health of "sensitive" populations such as people with asthma, children, and older adults; and
- *Secondary standard* to protect public welfare and the environment, including sensitive vegetation and ecosystems.

Specifically, EPA has revised the level of the primary and secondary 8-hour ozone standards to 0.075 parts per million (ppm). The law requires EPA to review the scientific information and the standards for each pollutant every five years, and to obtain advice from the Clean Air Scientific Advisory Committee (CASAC) on each review.

Different considerations apply to setting NAAQS than to achieving them

- Setting NAAQS: health and environmental effects
- Achieving NAAQS: account for cost, technical feasibility, time needed to attain
- EPA last revised the ozone standards in 1997. At that time, both the primary (health-based) and secondary (welfare-based) standards were set at 0.08 ppm (effectively 0.084 ppm due to rounding), with an 8-hour averaging time.

Ozone can penetrate deep into the lungs and can:

- Make it more difficult for people working or playing outside to breathe as deeply and vigorously as normal;
- Irritate the airways, causing: coughing, sore or scratchy throat, pain when taking a deep breath, and shortness of breath;

- Increase asthma attacks and use of asthma medication;
- Inflammation and damage the lining of the lung by injuring the cells that line the air spaces in the lung;
- Increase susceptibility to respiratory infection;
- Aggravate chronic lung diseases such as asthma, emphysema and bronchitis;
- Repeated episodes of ozone-induced inflammation may cause permanent changes in the lung, leading to long-term health effects and a lower quality of life; and
- Ozone may continue to cause lung damage even when symptoms have disappeared.

Expected Implementation Timeline for Revised Ozone NAAQS

Milestone	Date
Signature—Final Rule	March 12, 2008
State Designation Recommendations to EPA	No later than March 12, 2009
Final Designations	No later than March 12, 2010*
Attainment Demonstration SIPs Due	2013*
Attainment Dates	2013-2030 (depends on severity of problem)

* In the event the Administrator has insufficient information to promulgate the designations by March 12, 2010, the date of final designations may be extended up to one year, but no later than March 12, 2011. SIPs will be due three years from final designations.

Pima County has until March 12, 2013 to develop a Standard Implementation Plan (SIP).

Implementation Considerations For Revised Ozone Standards

Designations

- No later than one year after EPA issues a revised standard, the Clean Air Act requires States and gives Tribes the option to recommend to EPA which areas **are** and which areas **are not** meeting the new standards.
- EPA is required to issue final designations within 2 years after establishing revised standards, but may take up to another year if insufficient data is available for designation.
- EPA is reviewing existing designations guidance and will be communicating with States and Tribes if additional guidance is needed.

1997 Ozone Standards

- For now, the 1997 8-hour ozone NAAQS and all the associated regulatory requirements will remain in place.
- States should continue their plans for implementing the 1997 NAAQS
- EPA will address any transition issues in a separate rulemaking

Monitoring Considerations Related to Revised Ozone Standards

EPA did not propose any specific changes to existing monitoring requirements, but invited comment on a number of issues. EPA will consider the following issues in a proposed monitoring rule in June 2008, and a final rule in approximately March 2009:

- Requirements in urban areas, including whether to require ozone monitors in smaller Metropolitan Statistical Areas (cities) of between 50,000 and 350,000 populations that do not currently have monitors.
- The length of the required ozone monitoring season, including whether the season should be lengthened in some areas to capture relevant measurements in calculating the revised NAAQS and the Air Quality Index.

Environmental Quality Division Report

Ms. Kramer reported that Davis Monthan Air Force Base proposed using a waste incinerator to create energy to power the base. There was a public meeting with Davis Monthan AFB and the City of Tucson approximately one year ago that resulted in a huge outcry against using an incinerator. The City formed a DM Advisory Group to look at alternatives to produce energy for DM. The DM Advisory Group is preparing a report listing suggestions and a list of pros and cons for the Mayor and Council.

Waste to energy is expensive due to low landfill tipping fees. TEP has a partial service requirement. Electric utilities may apply different rates and charges to distributed energy projects than they do to customers that do not generate electricity to recover the cost of providing back-up power. If you produce more than 100KW of energy and are still on the TEP grid, the partial service rates apply.

EQAC suggested adding this item to a future agenda.

Solid Waste Division Report

Staff has submitted the SW Division budget. The Tangerine Landfill is the only landfill that generates a revenue stream and it is closing next year. The Division does not have the funds to close the facility, so we are looking at ways to continue without meeting the limit for closure. If we stop taking garbage, we must close within 180 days of last receipt of waste to comply with the law.

PDEQ Budget Report

County Administration requested that departments complete a base budget and two supplemental packages: 2% reduction and 5% reduction.

Mr. Huckelberry submitted his recommendations and the Board of Supervisors will discuss at their public meetings in May.

Revenues are down due to the downturn in the building industry (fewer fees).

Ms. Kramer explained that staff wanted to give two delegated functions back to ADEQ. They are the Drinking Water Program and the Hazardous Waste Program. Fees received for these programs do not cover costs. The Board discussed at their March 11 meeting and continued until the April 8 meeting. They requested additional information regarding the two programs. If the two programs go back to the state, three PDEQ employees will be reassigned to the Air Quality Program.

There is a hiring freeze and a hold on all travel. County Administration is questioning all expenses. PDEQ is being very frugal.

VII. CALL TO THE PUBLIC

Mr. Thompson made a call to the public. There was no response.

VIII. NEXT MEETING

The next EQAC meeting will be on May 21, 2008, at 1:30 p.m. in the large 6th floor conference room, 130 W. Congress, Tucson.

May Agenda items are:

Thirsty for Answers: Water Supply in the Desert Presentation – Claire Zucker, PAG

PDEQ Budget Report – Ursula Kramer

PDEQ Staff Report – Ursula Kramer

- Environmental Quality Division
- Solid Waste Division

Future Agenda items are:

Sorghum Topic – Peter Livingston

Davis Monthan AFB Energy Report – Ursula Kramer

Ozone – Andrew Comrie (not July)

IX. ADJOURNMENT

Having completed all meeting agenda items, the Council adjourned.