



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

Summary Minutes – September 16, 2009  
Bank of America Building, Conference Room, 7<sup>th</sup> floor  
33 N. Stone, Tucson, AZ  
1:30 p.m.

Members Present:

Mr. Jeff Yockey  
Mr. Daniel G. Rowe  
Mr. Allan MacDonald  
Mr. Ben Dorris  
Dr. Mark Witten  
Mr. Warren Thompson

Members Absent:

Dr. Eric Betterton  
Dr. Roger Caldwell  
Mr. Curt Lueck  
Mr. Peter Livingston

Others Present:

Ursula Kramer, Director, PDEQ  
Richard Grimaldi, Deputy Director, PDEQ  
Robin Johnson, Environmental Specialist, PDEQ  
Vicki Bennie, Council Secretary, PDEQ  
Wendy Gort, RWRD  
Kerry Baldwin, NRPR  
Robert Wallin, ADEQ  
Steven Vaughn, URS

**I. CALL TO ORDER AND INTRODUCTIONS**

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

Handouts:

Buffelgrass Control Research Project Background Information  
Understanding Toxicology – The Dose Makes the Poison  
PDEQ's Integrated Waste Management Plan  
PDEQ's Administrative Policy, ADM-060, Waste Reduction Plan  
Fact Sheet, EPA to Reconsider Ozone Pollution Standards

**II. APPROVAL OF THE MAY 20, 2009, MINUTES**

It was recommended to correct the name of the person that called the meeting to order to Dr. Caldwell. A motion was made by Mr. Yockey, seconded by Mr. Rowe, to approve the May 20, 2009, minutes as amended. The motion passed unanimously.

**III. BUFFELGRASS STATUS REPORT**

Kerry Baldwin, Natural Resources Parks and Recreation Department, provided some background information on the buffelgrass control research project. In February, 2009, an interagency workshop was held to discuss current trends, research findings and control methods for invasive plants. Out of that conference, a group of representatives from local agencies, jurisdictions and experts began to consider the use of aerial spraying for buffelgrass. Spraying will only be effective when the plant is 50% green or during July and August.

### III. BUFFELGRASS STATUS REPORT

The project would consist of two concentration levels, one using five gallons per acre and one using ten gallons per acre. The active ingredient of the herbicide will be glyphosate. The Tucson Mountain Park area was selected because:

- Rugged terrain that is close to town;
- Residences are extended distances from the spray area;
- Dense stands of buffelgrass exist on hard to reach rugged slopes;
- Local support for buffelgrass eradication in Tucson Mountain Park since early 2000;
- In-kind, no-cost contribution from Pima County as a partner in the research project; and
- Cooperation for City in providing access to plot of land in immediate proximity to the park.

Mr. Baldwin reported very strong public reaction to the plan. The Board of Supervisors directed staff to hold two public meetings to get more public input. The majority of the comments from the public were negative comparing the spaying to Agent Orange that was sprayed in Vietnam. The public asked that the Board of Supervisors consider alternative options such as:

- Mechanical control  
Staff said the option is very labor intensive, hard to get to, and very hot when the plant is green. In addition, buffelgrass has a 3 to 5 year seed bank;
- Hand application of herbicide  
Staff responded that this option is difficult, requires training and is expensive;
- Other organic sprays  
Staff said that some organic sprays are more toxic, vinegar does not work, staff looked at other sprays and found them not as effective;
- Control Burn  
Staff said that the fire does not kill the roots, buffelgrass will actually grow faster and better after being burned;
- Grazing animals (goats)  
Staff said grazing does not kill roots and grazing animals will eat other native vegetation along with buffelgrass; and
- Do nothing  
Staff's response is this is not an option.

The test area is right off Ajo Way, east of Kinney Road. The test safety precautions are:

- 1) Established and extensively tested low toxicity herbicide;
- 2) Low concentration of herbicide applied once;
- 3) Safe for wildlife and stable in environment;
- 4) Computer and GPS controlled application system;
- 5) Provisions for wind, rain, drift and local area residences; and
- 6) Extensive safety plans (such as would not operate if winds are 5 MPH or more, residences in area would be notified, helicopter would be used instead of airplane, large droplet size, low delivery angle).

The herbicide will be released by a computer-drive application, not pilot driven. Research outcomes will determine the effectiveness, long term impacts, if the application is cost effective and will generate field data.

The Board supports the project. Staff will not spray this year because there were not enough monsoon rains to green up the plants. Staff plans to spray in about a year when plants are green.

#### **IV. REGIONAL WASTEWATER RECLAMATION DEPARTMENT SOLAR PROJECT**

Wendy Gort of the Regional Wastewater Reclamation Department (RWRD) Solar Project reported on the Pima County solar projects. Pima County Master Agreements for power purchase were signed in August 2008 for solar projects at the Roger Road facility with Solon and at various sites (roof and ground mounted) with Sun Edison.

As a result of the RWRD Solar Project power purchase agreement, an RFP was issued on December 18, 2008, for a project at the Ina WRF underway.

A Tucson Electric Power (TEP) Solar RFP was issued on September 11, 2009 for both utility scale and distributed generation on City, County and U of A land. A proposed community solar tariff was drafted.

Under the Pima County master agreement, the Roger Road Wastewater Reclamation Facility (WRF) was selected as the first Pima County project. This project is located on 10 acres of land north of the existing reclamation facility. It will generate 1MW electricity (DC). Both Solon and SunEdison submitted proposals and Solon was chosen to build the project. The Board of Supervisors (BOS) approved the proposal on December 16, 2008.

Pima County entered into a 20 year solar services agreement (SSA), solar licensing agreement (SLA) and operating and maintenance agreement (O&MA) on June 8, 2009 with Solon Solar. The Renewable Energy Credit (REC) Purchase Agreement with TEP will be signed this month (required an amendment to the SSA/SLA with Solon PM1, LLC).

The Solon solar facility at Roger Road:

- Fixed SSA Price: \$0.0959 per kilowatt (kWh) for 20 years;
- TEP Price (Rate 40): \$0.096/kWh but is expected to increase over the next 20 years;
- 1.0692 MW DC (3,960 P250/270 modules);
- Avg. 1,927,850 kWh/yr (38 MM kWh – 20 years);
- Total electrical cost of \$3.7 MM over the contract term (Approx. \$1.8 MM savings);
- Forty percent of TEP purchased power (kWh);
- Five percent of Roger Road Facility's total energy use (kWh);
- Net Metering capability;
- Solar Facility will supply energy to the new Regional Optimization Master Plan (ROMP) Water Reclamation Campus (WRC) scheduled to be on line in 2014;
- Single-axis tracker;
- Panels produced in Tucson (3,960 modules);
- Educational Kiosks;
- Website with Solar Data;
- Construction began in July 2009;
- Notice to Proceed issued July 20, 2009;
- Groundbreaking held August 12, 2009;
- Expected Start-up: December 2009;
- Final Completion: January 2010 and
- After 20 years, the SSA/SLA expires in 2029. At that time, Pima County will have two options:
  - Option 1: County can buy system at fair market value
  - Option 2: County can have Solon remove the system

**IV. REGIONAL WASTEWATER RECLAMATION DEPARTMENT SOLAR PROJECT (CONT.)**

Environmental Aspects

- 38,557,055 kWh = 27,690 metric tons of CO<sub>2</sub>  
(Calculation from <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>)

Renewable energy at RWRD

- Roger Road Energy Portfolio:
- Solar – 15%
- Methane – 30%
- TEP - 22%
- Natural Gas – 33%
- Solar, methane from digesters, wind
- Twenty percent of RWRD energy from renewable sources

Summary

Solar projects provide another opportunity to increase the use of renewable energy and lower energy costs in Pima County. They help achieve Pima County's Sustainability Goal (Resolution No. 2007-84) that 15% of energy used by County facilities shall come from renewable resources by 2025. RWRD has a varied portfolio of energy sources and a comprehensive energy strategy that maximizes the use of renewables and minimizes costs.

**V. LEUKEMIA CLUSTER REPORT**

Dr. Witten stated that his data is back from Fallon, NV. He was in Washington, DC recently to meet with Senator Boxer and Lisa Jackson of EPA. EPA replicated some of Dr. Witten's research in their laboratories. EPA will investigate leukemia clusters and use some of the research that Dr. Witten uses to determine if there is a possible link between tungsten and cancer. There is no published paper on this yet. Unfortunately, more leukemia clusters are popping up across the country.

**VI. PIMA COUNTY'S INTEGRATED WASTE MANAGEMENT PLAN**

Robin Johnson, Environmental Specialist with PDEQ, is tasked with expanding the waste reduction program for all of Pima County. This is part of the Sustainability Program that the Board of Supervisors formed on May 1, 2007, with Resolution No 2007-84. Sustainability groups (S-Teams) were formed to implement action plans. Ms. Johnson is on a S-Team.

The guiding principals of waste reduction are:

- Integrated Waste Management
- Five Year Action Plan
- S-Team
- Reporting to the BOS and Public

Kick-off in Phases

Education and Implementation

Recycling saves natural resources, energy, air quality, water, landfill space, creates jobs, and reduces our carbon footprint.

Prevent/Reduce your waste by reusing what you can, recycling and composting and using proper disposal methods.

**VI. PIMA COUNTY'S INTEGRATED WASTE MANAGEMENT PLAN (CONT.)**

Those 3 arrows in the popular recycling symbol mean:

- Collect
- Remake
- Rebuy

Ms. Johnson provided the following facts:

It requires 4 tons of ore to create 1 ton of aluminum.

Recycling aluminum cans takes 95 percent less energy than creating new ones.

The energy saved from recycling one aluminum can could power a 100-watt light bulb for four hours or a television for three hours.

Simple waste reduction techniques such as composting or leaving trimmings on grass will reduce water needs.

Recycling 82 million tons of MSW saved the energy equivalent of more than 10 billions gallons of gasoline.

Every ton of mixed paper recycled can save the energy equivalent of 185 gallons of gas.

Following the waste hierarchy will reduce air and water pollution associated with making new products from raw materials.

The energy it takes to produce one can could produce 20 recycled cans.

The amount of solid waste generated per person per day has increased from 2.7 pounds in 1960 to 4.6 pounds in 2006.

Does recycling make a difference? It sure does -- it affects the earth's nonrenewable fossil fuel and material resources!

Ms. Johnson explained what the following terms mean: carbon footprint, carbon neutral, biodegradable, recyclable, green washing, hemp, all natural, free trade, organic, sustainable, PET, HDPE, pre-consumer materials, and post-consumer materials.

The EQAC members requested Ms. Johnson's presentation be emailed to them. Staff also plans to add all EQAC power point presentations to the PDEQ website, EQAC page.

**VII. PDEQ STAFF REPORT**

Ms. Kramer distributed a fact sheet regarding EPA's new ozone standards. Today, EPA announced it was reconsidering the 2008 national ambient air quality standards (NAAQS) for ground-level ozone. A final decision will be issued in August, 2010.

PDEQ will be moving to the Bank of America, 7<sup>th</sup> floor, after January 2010.

Mr. Grimaldi reported that we had four staff members from the air program resign within one month. We will not be filling the Environmental Manager position. We will be hiring three new Environmental Analysts.

Staff has been able to review the number of website "hits" by using Google's analytics program. PDEQ will be improving the portions of the website receiving the most hits.

**VIII. CALL TO THE PUBLIC**

The Chairman made a call to the public. There was no response.

**IX. NEXT MEETING**

The next EQAC meeting will be on Wednesday, November 18, 2009, at 1:30 p.m. The meeting location will be the Bank of America Building, 33 N. Stone, 7<sup>th</sup> floor conference room.

Agenda items are:

Ozone Discussion

Brainstorm issues for EQAC meetings in 2010

**X. ADJOURNMENT**

Having completed all meeting agenda items, the Council adjourned.