

MINUTES
ENVIRONMENTAL POLICY ADVISORY COMMITTEE
JUNE 5, 2014

A meeting of the Environmental Policy Advisory Committee (EPAC) was convened on Thursday, June 5, 2014, at 5:15 p.m., in the Pueblo County Department of Planning and Development Conference Room, 229 West 12th Street. Chair Kester called the meeting to order at 5:30 p.m.

ROLL CALL

Those members present were:

Susan Finzel-Aldred
Betty Alt
Doris Kester

Gene Michael
Chad Wolgram

Members absent were: Lois Illick (excused) and Ted Lopez.

Guests present: None.

Staff present was: Sandy Blanco, EPAC Recording Secretary.

APPROVAL OF MINUTES FROM THE APRIL 3, 2014 MEETING

Mr. Wolgram moved to approve the minutes from the April 3, 2014 meeting. Ms. Finzel-Aldred seconded the motion. The motion carried unanimously.

CHAIR'S REPORT – DORIS KESTER

Chair Kester reported she and Mr. Michael attended the PACOG meeting in April and reported on the information from the EPA, noting they haven't heard back from them and don't know if they discussed it.

ENVIRONMENTAL COORDINATOR (EC) REPORT – SUSAN FINZEL-ALDRED

Ms. Finzel-Aldred reported there was a Town Hall meeting on April 7, 2014, about the City Waste and Recycling Ordinance, noting there were heated opinions on both sides. The ordinance was moving forward and was scheduled before City Council on April 14, 2014, as first reading. She noted the ordinance was removed from the agenda and tabled indefinitely. Chair Kester questioned why it was tabled indefinitely. Ms. Finzel-Aldred replied they felt the issue of mandatory trash and illegal dumping was more important than recycling, pay-as-you-throw and trash hauler licensing.

Ms. Finzel-Aldred stated the Bessemer Clean-Up was held on April 26, 2014, with 135 households participating. They collected 17 roll-offs of solid waste and three roll-offs of yard waste and branches that will be chipped. They assisted one resident in the County with some roll-offs after her mobile home was completely destroyed by fire. They did a lot of education classes in May, noting they presented "Discovering Water in Pueblo" to over 125 kids at CSU-Pueblo, and stormwater pollution classes were done at Morton Elementary and Goodnight Elementary for another 200 kids. She was the guest speaker at the Eagleridge Estates Homeowners Association on May 13, 2014, and made a short presentation about her work, programs, and the latest information on solid waste management. There were mixed opinions

from the attendees on the recent City Council actions regarding the potential changes to licensing, collection services, and proposed ordinances. The Association is working toward a more comprehensive service agreement with their single hauler to include recycling. They had Litter Bee presentations at Ascension Church Preschool on May 15-16, 2014, and Paper Recycling at Fountain Magnet School, Science Day, on May 15, 2014. The Recyclable Waste Collection Day was held on May 10, 2014, which was successful. They served 667 vehicles in five hours thanks to the sponsorship from the City Stormwater Utility and the City of Pueblo Wastewater Department. The motor oil, filters, and antifreeze contractor cancelled in late April and a replacement could not be arranged in time. They did press releases, changed their advertising in the newspaper, did a radio PSA, and prepared a detailed map showing all of the businesses that accept those materials year round. The participants understood and seemed satisfied. They collected 1,160 tires, 1,000 pounds of dry cell batteries, and the biggest number coming from electronic waste at 35,840 pounds. It was a big jump from last year and the majority of the residents came from the 81004, 81005, 81006, and 81007 zip codes. Out of all the participants, 45% brought paint and 40% brought e-waste. They had 14 staff members and 25 volunteers from Municipal Court and the Youth Offender System (YOS). On Saturday, May 17, 2014, the Spring Clean-up Day at the Landfill was hosted by the City of Pueblo and Waste Connections of Colorado. The landfill unofficially reported that 486 vehicles participated and brought in 700 cubic yards of waste, which is down by 40%. The Eastside Clean-Up Event was held on May 31, 2014, at St. Leander's Church. City Council members Eva Montoya, Sandy Daff, Ed Brown, Steve Nawrocki, and City Manager Sam Azad volunteered with five other neighborhood volunteers. The participation was down by 30%, noting they only had 62 loads of waste from 50 households. They served seniors and disabled at the curb and the Municipal Court/Graffiti Removal Program provided juveniles and their parents to pick up litter and tires in alleys and the open prairie. They also cleaned an abandoned and heavily vandalized property on the Lower Eastside. The Recycle Hotline is receiving hundreds of calls. Chair Kester questioned what kind of questions were being asked. Ms. Finzel-Aldred replied the majority of the questions are related to household hazardous waste, followed by electronics and newspapers. Ms. Alt questioned if the Pueblo Chieftain advertised the recycling ads for free or if they had to pay for them. Ms. Finzel-Aldred replied they have to pay for them, noting the Pueblo Chieftain used to donate 50% but the program faded away three years ago.

Chair Kester questioned the ads that the trash haulers have been putting in the newspaper. Mr. Wolgram replied they relate to the City's plans for solid waste. The ads claim that false information was provided, but it's not true. Ms. Finzel-Aldred stated the latest ad questioned where the solid waste landfill user fee funds were going and the budgeting process for the expenditures. They compared a lot of apples to oranges that were misleading to readers. Chair Kester stated they're spending a lot of money to get their point across. Ms. Finzel-Aldred stated the EC Program that funds her salary and events comes from discretionary funds, in addition to funding she gets for specific tasks. They keep very tight records and have receipts for everything. Chair Kester questioned if there was anything that EPAC could do to help. Mr. Wolgram replied they could talk to City Council to get them to move forward, noting this is their third attempt at getting a solid waste management plan or a change to the solid waste enforcement for the past ten years. They get close and then they get shut down. The City is going to hire a consultant to put together a business plan for a solid waste enterprise. Chair Kester asked Mr. Wolgram if the solid waste enterprise would be a function of the City government. Mr. Wolgram replied a few options were presented at the last meeting. The City could mandate solid waste for every household in the City and contract for private haulers; the residents could choose their hauler and the City would handle all the billing and create an

enterprise to clean up illegal dumping and pay the haulers for their contracts. They are trying to find something palatable for both sides. The trash haulers don't like anything that's going on and are opposed to everything that's being proposed. Ms. Finzel-Aldred stated the first reading of the ordinance would require the haulers to offer pay-as-you-throw to their customers and voluntarily offer recycling at the curb. In conjunction with the ordinance, they successfully received the RREO Grant, which was funded at the end of April. It provided free or low cost recycling totes to all the haulers and a City-wide education campaign. When the ordinance was tabled, the City informed the State Health Department that they had to decline the grant. She suggested inviting somebody from the Full Service Trash Committee or a member of City Council to the next EPAC meeting for an update. Chair Kester asked Ms. Finzel-Aldred if she could suggest which City Council member to invite. Mr. Wolgram replied Ami Nawrocki or Sandy Daff. Ms. Finzel-Aldred suggested Ami Nawrocki or Carla Sikes, the Assistant City Attorney.

WATER QUALITY SUBCOMMITTEE – GENE MICHAEL

Mr. Michael distributed the new national criteria for selenium titled "External Peer Review Draft Aquatic Life Ambient Water Quality Criterion for Selenium – Freshwater 2014". He stated they have a number, based on concentration of selenium in the water column, but EPA is convinced it's not the best way to regulate it. It is considered to be a bio-cumulative pollutant and something that builds up in the bodies of organisms that are exposed. They are presently recommending the four element model. If they have measurements for selenium in fish eggs and fish ovaries, the standard would be 15.2 milligrams per kilogram. If they have information on fish whole-body selenium concentrations, it would be 8.1 milligrams per kilogram for whole-body, or 11.8 for fish muscle, noting 4.8 is what they're using right now in the river. If these numbers were applied today in Colorado, they would make no difference because the average concentration of selenium in the Arkansas River runs 18 parts per billion, which is high. They did some studies and analyzed fish whole-body concentrations, fish eggs, and fish ovaries. The fish eggs and fish ovaries were the closest, noting 15 was proposed and their numbers were 30. Mr. Wolgram questioned if the water column was done below Pest House Gulch where it enters, or upstream. Mr. Michael replied the Arkansas River generally runs 18 parts per billion, Wildhorse Creek 500 parts per billion, and upstream of Highway 50 3,000 parts per billion. There were meetings last week in Rocky Ford with the State and water quality people from Kansas, noting there's no regulation driving any mandatory requirements and no chance that anybody is going to be meeting selenium standards from here to the eastern border of Kansas. They have a long way to go and a short time to get there and nobody has any good ideas on how this can be done.

Mr. Michael distributed an EPA article titled "Human Health Ambient Water Quality Criteria: Draft 2014 Update". He stated this is a revision of the methodologies they use to calculate what human health criteria should be. It lists specific chemicals and compares some of the older numbers with some of the newer numbers. They are trying to create a special group of criteria that would be applied to waters where a significant amount of the public's food intake comes from the fish. They don't have to worry about the Arkansas River downstream or the Fountain Creek, noting the Lower Arkansas Valley doesn't have a lot of fisheries other than the lakes. Ms. Finzel-Aldred asked Mr. Michael if the chemicals on the list were manmade or naturally occurring. Mr. Michael replied most of them were human created.

Mr. Michael made his presentation and distributed "Water Quality 501 An Overview of Clean Water Act Flaws". He stated the Federal Clean Water Act Public Law 92-500 passed in 1972, and was intended to establish consistent nationwide framework while preserving the State's rights. They included water rights, groundwater, and the ability to establish more stringent protection than the Federal standard. He questioned if they were trying to protect the natural environment from any further damage caused by humans or were they in fact prepared to dig up the natural environment and rebuild it according to their ideal. They introduced rabbits in Australia, starlings and other Shakespearian birds all over, brought the tamarisk to Colorado, the kudzu to Georgia, tried irrigating farming in Kansas and Nebraska, and depleted the Ogallala Aquifer. They tried dry-land farming in the same locations and got a dust bowl. They don't have a very good track record on trying to re-engineer the environment. Things are very complicated and they don't know that much about biology so it may take decades or centuries before they can really tell what the impact was. They had some big changes in society, noting in the 1950s through the 1970s everybody said nothing was perfect. They built a sewage treatment plant and 99% of the time it works fine and 1% of the time it breaks down and sewage is spilled into the river. It's better than what they have today and most of the time it works fine. In the 1980s and 1990s it changed, and today they have a zero tolerance policy. The Clean Water Act talks a lot about nonattainment and what actions must be taken to remedy it. It specifies regulations, penalties, total maximum daily loads, and other calculations the State has to make. No Clean Water Act has ever defined what attainment means. Anybody can look at a river and say it's not good enough, noting it's a one man veto authority that can throw the entire system to cause an uproar. It's a reason why they have so much continual controversy over the quality of the environment. If they can't articulate what it looks like when it's good or good enough, how will they know when they reached their goal?

Mr. Michael stated when the water quality criteria was originally put together they looked at good and bad published papers, and the EPA took them all. They combined them all together and took a very deliberate and conservative approach, noting over time they may have overemphasized it. All of the studies that were recorded based on laboratory results, are very simple and don't adequately represent the natural environment. In many cases, the criteria are overprotected and don't address the conditions. Research has shown when they're talking about fish and aquatic life, the controlling variable is the physical antidote. The insects that fish eat like to live on rocks, noting they don't like living in the sand or mud because they can't grow very well. A lot of people look at the types and numbers of fish and the types and numbers of bugs and say the Arkansas River is polluted, but it's not. It has poor physical habitat. The river in Cleveland that caught fire had a physical habitat situation and the problem they had in 1972 was from industrial discharge. Once the Clean Water Act took charge, the industries were controlled, the water pollution went away, and the fish came back. There are no industrial discharges to the Arkansas River, noting the City does a good job of treatment, but it doesn't have fish and never will. They are looking at the wrong thing. They use multiple taxa when they put the criteria together, meaning they need at least two species of fish and have to bring in frogs and amphibians. They are protecting all the species that live in or around the United States, both fresh and salt water. They take all those species and give every site standards based on the criteria even if they don't live there. They always use the most sensitive taxa, noting insects are often more sensitive than fish. They use geometric means, which yield much lower values than arithmetic averages, and all calculated values are rounded down in criteria calculations. They are protecting 95% of the species, but 5% might not be protected. The chronic value normally controls. They can have a concentration of pollutant present for the long- term, noting the fish would always be exposed to it, but it needs to be lower than the acute

value because it kills them. The chronic value is the one that makes the population less healthy. The concentration has to be matched up with the frequency and duration of exposure. Carbon monoxide is toxic to human beings, noting somebody can walk through a maintenance garage for a minute and a half and breathe in car fumes and it won't kill them because they keep moving. The amount of time they spend in the garage is the duration, and the frequency is how often they walk through the garage. The same thing applies to fish, noting if there's a potentially hazardous chemical in the water it's probably not there all the time in toxic concentration. Those things have an impact so when they write their effluent standards that are applied in discharge permits, there are statistical methodologies that are taken into account. The final impact is they very often have an in-stream standard that works out to be much lower than the chronic criteria. If it depicts that a concentration of 10 parts per billion would be safe on a continuous exposure basis for the fish, the discharge permit would probably limit them to three or four parts per billion because they consider frequency and duration. Sometimes they don't have much chronic toxicity data and generally have one or two species with both acute and chronic, noting they take the ratio between the numbers, apply it across the board, and add in conservative factors, which is how their chronic values are generated.

Mr. Michael stated politics have had a major impact. A lot of people believe in 1972 Congress was moved by the need to act to protect the environment. That is how the Clean Water Act came to be and has a number of impacts. One of the big losers is science because scientists are trained to be very careful and conservative. They are very concerned about corruptness and not about being understood. Mr. William Proxmire gave science a bad name, noting he took a budget line item and stated a hammer cost \$100,000 when it didn't, noting the press ate it up and the public believed it. Ms. Finzel-Aldred stated it's similar to the ads in the Pueblo Chieftain. They took a huge budget, divided it up, and left out important factors like salaries, equipment costs, and the cost of fuel. Mr. Michael stated in 1972 they had environmental problems and the premise was to get something done now and fix the details later. The initial classification was broad-brushed and later on they found areas that were not at all suited for aquatic life. They tried to remove the classification but the Federal government wouldn't tolerate any change to the classifications. They have had a constant and deliberate misuse of science and referred to the Science Advisory Board. The Clean Water Act provides for the Science Advisory Board, who are people appointed to oversee the recommendations of the EPA and to make sure they're using good methodologies to come up with good numbers. Recently, with respect to ammonia and nutrients, the Science Advisory Board has repeatedly stated the EPA has used improper methodology and incorrectly interpreted their own calculations and standards. The EPA didn't agree and proceeded to put the rules in place. The result is what he referred to as institutionalized stupidity. Section 402 of the Clean Water Act states if a treatment was established for a particular chemical and later on science demonstrates the standard they are trying to achieve is overprotected and the treatment isn't needed, they won't turn off the treatment process. They may be spending \$1.5 million a year to operate an unnecessary process, noting the Clean Water Act states they don't care and they have to continue to operate regardless of the cost.

Mr. Michael stated the EPA established three separate means of identifying whether or not they are meeting the standards in the stream. The first is looking at the chemical concentrations and comparing them to the standards. The second one is going out and surveying the fish and bugs to find out whether they have a robust aquatic community. The third one is called leftover toxicity, where they take a living organism and expose it to different dilutions of the effluent to determine if the effluent is poisonous. The Independent Applicability Doctrine states if any one

of the three factors is found to be out of kilter, they would consider the stream to be impaired even if the other two are normal. They hear people say the water is worse today than it was before and every year there are more impaired waters, but that's not true. It's not because water quality is getting worse; it's because they keep lowering the standards, which allows them to classify the water as being impaired. Downgrading is the only alternative the Clean Water Act allows, noting if a stream is classified for aquatic life and later on evidence states it's not supporting a population of trout, the Clean Water Act would remove the aquatic life use entirely. The Fountain Creek won't support trout, noting it can support other fish so they should apply the other fish numbers in the Fountain Creek and the Arkansas River, but the EPA and the Clean Water Act don't allow that. They have to either destroy all protection at any level or live with the highest possible level of protection with no in-between. Ms. Finzel-Aldred questioned if every river was determined by trout. Mr. Michael replied most of them are, noting they have to use the most sensitive form of species and lake species don't live in rivers.

Mr. Michael stated there's a prohibition in the Clean Water Act against cost-benefit analysis. Congress wanted the Clean Water Act and the President wanted to veto it. Congress overrode the veto and made a finding that clean water is worth the cost. There can be no consideration cost-benefit when it comes to water quality standards. It is prohibited to do a cost-benefit analysis as part of the development of the standards. The Safe Drinking Water Act came along in 1976, which stated no rule could be enacted for drinking water that was fed to children or used to cook with. No rule can be imposed unless they can demonstrate, through cost-benefit analysis, that the benefits outweigh the cost. If they're going to do water quality they have to do chemical analysis, noting there are limits to the liability of chemical analysis. There are a few mathematical definitions in doing chemical analysis, noting they would prefer to go with the FDL (Fantasy Detection Limit). If they could get down to zero and measure the reliably it would be easier to determine who was compliant, but they can't. If the effluent coming out of a treatment plant is toxic they could test it that way. They could take one set of fish and expose them to clean water, a second set to the effluent, and a third set to a mix of clean water and the effluent. The fish in the clean water should be fine, noting those are called the controls. The fish in the effluent, if it's toxic, should die, and the ones in the middle, maybe half of them would die. If the effluent is really toxic, they have to dilute it to get it down to the halfway level. That's the way it should work. But, what if the fish in the clean water and the pure effluent are fine and some of the ones in the half and half mix die? That is what happens in the effluent toxicity tests, noting somebody messed up the tests and it's not a matter of the effluent. What if no fish die anywhere and the fish in the effluent actually do better than the clean water fish? That is very common, noting if they have a non-toxic effluent it would have more nutrients than the laboratory pure water; therefore, the fish are going to grow faster and the water fleas are going to reproduce more quickly. The test talks about each statistically significant difference between the control versus the 100% effluent. They're assuming if the effluent wasn't up to standards the fish would be depressed, die, or gain weight more slowly. But, what happens if they don't die, survive better, and grow faster? It's a statistically significant difference and the law was poorly crafted. What if only a few fish die in the effluent or in the half and half and some of them die in the clean water? It is a problem with the test, noting every laboratory that does the test has to maintain a population of water fleas from which they draw their test organisms. Ms. Finzel-Aldred stated they're trying to pinpoint the exact variable and it's not realistic. Mr. Michael stated they made the test a matter of law. The EPA stated if no fish die they're okay for now, but if any fish die anywhere the discharger is at fault. It is not appropriate, noting the test criteria should incorporate a requirement for a strong dose response or in validating the test if

the controls die. The EPA made the argument that if the control organisms die they can still make a finding that the effluent is toxic.

Mr. Michael stated one of the most powerful lobbies in Washington is the Agriculture Lobby. They got the Clean Water Act through by excluding the agricultural activities from any controls of the Clean Water Act. Today, they have the Gulf of Mexico and the Dead Zone, which is caused by nutrient pollution from agricultural activities and it's untouchable. Non-point sources are difficult to deal with and agriculture is explicitly off limits. They control cities and direct discharging industries that are already there.

SOLID WASTE SUBCOMMITTEE – T. LOPEZ

There was no report given.

OTHER DISCUSSION

None.

AGENDA FOR AUGUST 7, 2014 MEETING

The next regularly scheduled EPAC meeting is Thursday, August 7, 2014, at 229 West 12th Street, from 5:15 p.m. to 6:30 p.m.

ADJOURNMENT

There being no further business before EPAC, the meeting was adjourned at 6:45 p.m.

Respectfully submitted,



Sandy Blanco
EPAC Recording Secretary

SJB