

# **CAC MINUTES**

## **FOR THE MEETING OF JUNE 16, 2011**

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**CAC MEMBERS IN ATTENDANCE:** Jim Ives, Mel Rettig, Becky Long, Carol Pace, David Spector, Don Schlup, Phil Lidov, Bruce Hutchins

**ABSENT:** Barry Hudson, Jeff Willis

**GUESTS:** Tim Flynn, Christy Honnen, Doug Flanders, Mike Freeman

**DENVER WATER STAFF:** Melissa Elliott, Paula Daukas, Cynthia Brady, Joe Sloan, Ellen Cinchock

### **OPENING REMARKS, PUBLIC COMMENTS, AGENDA AND MINUTES**

The May minutes and June agenda were approved without comment.

#### **DENVER WATER UPDATE (Melissa Elliott) –**

Denver Water placed second in the American Water Works Association National Water Taste Test at the ACE conference held in Chicago in June.

David Spector requested an update on the rate model being developed for the Distributors. Joe Sloan stated the first rate meeting with the Distributors will be held on June 26. The discussions will be on the Cost of Service Study which is part the rate-setting process.

Strontia Springs – Phil Lidov asked how the risk is being distributed between Denver Water and the contractor working on the project. Melissa said Bob Steger of Planning will give a presentation on the Strontia Springs project at a future CAC meeting.

#### **HYDRAULIC FRACTURING “FRACKING” DISCUSSION (Doug Flanders, Colorado Oil and Gas Association; Mike Freeman, Earthjustice) –**

David Spector introduced Doug Flanders, Director of Policy at the Colorado Oil and Gas Association (COGA) and Mike Freeman, attorney for Earth Justice, a non-profit public interest law firm.

Mr. Flanders thanked the committee for the invitation to the meeting. Mr. Flanders provided the CAC with a fact sheet from Chesapeake Energy on Hydraulic Fracturing, and gave an overview of the fracking process. Hydraulic Fracturing is the use of fluids to create multiple cracks by hydraulic pressure. There is then an injection of fluids into the fracture to make the holes grow larger. Sand is then used to help keep the holes open. Drilling for natural oil or gas occurs 7,000 feet below the earth, and the steel casing for the drills are covered with a protective layer of cement. Mr. Flanders noted all of the requirements are set by state or Bureau of Land Management (for state forests) regulations. Solid cementing and encasement of the well protects the groundwater.

The fluid formulas used for fracking vary by company. The fluid additives are transported in concentrated form and then added on-site to the fracking water. Mr. Flanders referenced a list of additives from the Chesapeake Energy fact sheet. Mr. Lidov asked how Mr. Flanders knew that this list is what is actually being used by fracking companies. Mr. Flanders said the additives are from the Halliburton website. He noted companies with patented formulas show the names of the additives being used but not the breakdown of their percentage amounts.

When fractures are created, the holes do not close. The footprint for a horizontal well is 1,280 acres. Compared to vertical wells, only one horizontal well is constructed, as opposed to 32 vertical wells over the same amount of space.

The Colorado Oil and Gas Association follow Hydraulic Fracturing guidelines that are regulated by state and federal laws (if the wells are on federally-owned land). Ms. Paula Daukas asked what legislation Congresswoman Diana DeGette is proposing. Ms. DeGette is discussing regulating Hydraulic Fracturing on a federal level, but many states are already having companies disclose the additives they put in fracking water. In Colorado, companies must follow the state's Rule 317B, for Public Water System Protection. Earlier this year, the Groundwater Protection Council created a Hydraulic Fracturing Disclosure Registry, a voluntary registry that allows operators to register their chemicals on the website and shows each chemical's concentration.

The State Review of Oil & Natural Gas Environmental Regulations (STRONGER) is a non-profit organization that reviews state regulations and is made up of three review team members and three independent observers. STRONGER is reviewing recent regulations and should have their findings available in the next 90 days. Ms. Daukas said Wes Wilson, a member of STRONGER, recommended at a previous that companies use a closed loop system, as open pits may not be properly lined and leak chemicals into groundwater. Currently there are 44,000 wells in the state of Colorado, with 20% having open disposal pits. Twenty-five state inspectors in Colorado monitor the wells.

The CAC thanked Mr. Flanders for his presentation.

Mike Freeman, attorney for Earthjustice, thanked the CAC for their invitation to meeting. Mr. Freeman provided a history of Earthjustice – a law firm formed in 2008 after Colorado revised its environmental state regulations.

Mr. Freeman explained Earthjustice's main issues with Hydraulic Fracturing are:

- Well accidents/safety
- Current environmental statutes that do and do not apply to fracking companies
- Risk management

The EPA is performing an investigation on fracking pathways and reviewing well blowouts. Well pits and tanks can leak and enter the environment. Flowback materials contain water and additives, and although some are natural, can be dangerous to the environment. Encasement of wells is not always constructed properly, causing leaks that enter aquifers. Poor cement jobs can lead to seepage of fracking materials into nearby creeks.

Mr. Freeman quoted a Denver Post article that coal bed methane (CBM) wells frequently spill, and 28% of those spills reach water sources. Spills were not limited to fracking flowback, but included oil drilling, human error, and equipment malfunctions.

The current regulations for Hydraulic Fracturing need review. The registry for disclosure of chemicals is a great step, but the STRONGER commission does not request additive information from companies until there is a safety or health concern. The constituents of fracking chemicals vary by company, but benzene and antifreeze are commonly used. The fracking companies are using very large amounts of water, and the additives are concentrated but very toxic. Oil and Gas companies are also exempt from the Safe Drinking Water Act. COGA focuses on getting permits issued and then addresses problems as they happen, which is the opposite of other environmental laws. COGA should make an affirmation, well by well, that the surrounding areas will not be polluted. The fracking areas should be mapped and guarantees made that water sources will not be affected. There should be broader public notice requirements and analysis of injected water.

Mr. Flanders said each state could regulate fracking, but Mr. Freeman argued that federal requirement could be delegated by the state and the requirements could be broad. Some cities are passing ordinances to address fracking concerns.

Five million gallons of water is used in each horizontal well. Drilling exploration may take a few months, but the actual drilling can stretch 10 – 30 years. When the well is empty, it is cemented over and capped. Mr. Lidov asked if Denver Water should create a risk assessment to see how close current wells are to their water supplies. Mr. Spector thanked Mr. Freeman for his presentation and asked Ms. Paula Daukas if Denver Water has investigated possible fracking wells near their water supplies. Ms. Daukas said parcels around Antero reservoir were removed from a recent sale of land in Fairplay?? Mr. Spector asked if Denver Water could say with certainty that it knows of the existence of wells within their watershed. Ms. Daukas said Denver Water could not know about wells that are not on their lands. Ms. Cynthia Brady added the bulk of hydraulic fracturing is not occurring near Denver Water's watershed. Mr. Lidov said the basins that the reservoirs collect from are enormous, so volatile chemicals could be a concern. Mr. Sloan advised the committee that Water Quality goes up and down the watershed and collects water samples. Any trace of contamination would be detected and spills would be taken care of. Ms. Daukas said hydraulic fracturing is part of the priorities for Denver Water's Integrated Resource Plan under Watershed Quality Management. Ms. Long noted a risk assessment is being performed in Grand County on their watershed. Mr. Spector suggested discussing the issue further via email and addressing at a future meeting.

### **CAC BUSINESS** –

- July Tour – The annual tour will be held on July 21, 2011, in place of the committee's regular meeting. The CAC will tour Metro Wastewater, the Xcel Cherokee plant, Denver Water's Recycle Plant, and optional tours of the gravel pits time permitting.

The meeting was adjourned at 7:00 P.M.