

# C.A.R.D. NEWSLETTER

December 7, 2007



## Coloradoans Against Resource Destruction

CARD, PO Box 143, Wellington, CO 80549, 970-372-0029 (leave message) [www.nunnglow.com](http://www.nunnglow.com)

### Donations Urgently Needed

CARD has taken the leadership in northern Colorado on uranium issues. CARD's efforts have led to important actions opposing mining, such as the resolutions by the Fort Collins City Council and the Colorado Medical Society. We have educated thousands of people at public forums and through our famous "flyer flurries."

To date, your donations to CARD have mostly been used for posters and brochures for town hall meetings.

Now we face a far greater financial challenge. When State Representatives John Kefalas (D) and Randy Fischer (D), with the support of Senators Steve Johnson (R) and Brandon Shaffer (D), introduce legislation related to uranium mining in January 2008, **we need to hire a lobbyist**. We need to raise \$10,000 to ensure that we are adequately represented and that our representatives are given all the help and support we can possibly offer.

This is where the "rubber hits the road" in the effort to stop uranium mining. We need your financial support -- and the support of every other person who receives this newsletter. If every person who gets this newsletter sent \$50, we'd be well on our way!

At this time of year, many of us write checks to favorite charities or donate to causes that are important to us. Few things are more important than defending our water, protecting our local economy, preserving our way of life, and avoiding serious health issues. **This year, please make the effort to stop uranium mining your first cause of choice.** Now is the time -- this simply cannot wait. The legislative session starts next month.

You can donate at the [www.nunnglow.com](http://www.nunnglow.com) website or send your money order or check to CARD, PO Box 143, Wellington, CO 80549. If for some reason you don't want to be publicly acknowledged for your contribution, please let us know.

### City of Fort Collins

On December 4, the City of Fort Collins passed a resolution opposing uranium mining in northern Colorado. The strongly-worded resolution passed 7 – 0 with one Council member

abstaining. This resolution is an important step forward for those who oppose the proposal to mine here, and CARD is grateful for the City's action.

For the full text of the resolution, see the City's website: <http://citydocs.fcgov.com/?dt=RESOLUTION&dn=City+Clerk&vid=4&cmd=showdt>

## Company Could Avoid Paying Severance Taxes

Excerpted from an article by Steve Porter, *Northern Colorado Business Report*, November 23, 2007.

NUNN - Powertech USA hopes to earn millions of dollars from uranium mining operations in Weld County, which company officials have promised would inject money into the local economy through jobs as well as property and other taxes paid to local and state governments.

Whether the Vancouver, Canada-based company will pay any severance taxes - the taxes incurred by businesses that extract Colorado's resources such as oil, gas and coal - remains an open question.

Under Colorado's severance law, companies that mine metallic minerals, including uranium, pay a tax of 2.25 percent on gross income after the first \$19 million earned in a given year.

In addition to the first \$19 million in gross sales being tax-free, Powertech would also be able to deduct 50 percent of its county taxes under the state's ad valorem tax rule.

Colorado now collects more than \$240 million in severance taxes each year - mostly from oil and gas operations. Critics of the system say that could be much higher if the state would update its severance-tax rates and get rid of the ad valorem rule.

Rep. Randy Fischer, D-Fort Collins, said an interim committee that looked into the state's severance-tax system last summer concluded that any effort to raise the rates would require a statewide vote under TABOR and would likely be a difficult battle.

Fischer said the state's "numerous exemptions and credits" could mean that Powertech - which still must obtain a permit to begin mining operations in 2010 - might be able to extract uranium without much of a tax liability "and the people won't see much economic impact."

"It's doubtful they'll be paying any severance tax at all," he said.

Sen. Gail Schwartz, D-Snowmass, is vice-chair of the Senate Natural Resources and Energy Committee and chairs an interim committee that is looking at possible changes in the severance-tax system.

"We need to make sure all of our extractor industries are paying their fair share in Colorado, which is not the case right now," she said.

## Next Town Hall Meeting: BRIGGSDALE!

Our next town hall meeting will take place in Briggsdale on **January 16** at the old gym. More information later.

## Company Posts Deceptive Promotional Signs

Excerpted from a posting on [www.powertechexposed.com](http://www.powertechexposed.com) - updated November 25, 2007

Neighbors recently reported Powertech workers have been posting small green signs on land purchased by the company. The signs are apparently part of a public relations campaign hatched by Peter Webb Public Relations, Inc.

The signs bear various pro-uranium mining messages, including the admonition to "Find truth in the facts." The sign implies that the "truth" will be revealed at the website [www.nunngrow.com](http://www.nunngrow.com). Problem is that there is no nunngrow.com website. Visitors are simply redirected to Powertech Uranium Corp.'s site.

Presumably on Webb's advice, Powertech has erected signs promoting uranium mining which conceal the fact the signs are financed by the mining company.

## Larimer County Commission to Hold Public Hearing

On December 4, the Board of County Commissioners of Larimer County agreed unanimously to hold a public hearing to receive public input on potential uranium mining in Weld County. The hearing will be held no later than February 15. Watch for more information!

## Have Things Changed?

Wondering if things have changed since the last uranium rush in the 1970s? Here are some excerpts from an article about a legal case in South Dakota in 1981. The case involved a permit request by Union Carbide Corporation ("UC" or "UCC") before the State Conservation Commission. The permit was for mining in Craven Canyon in the southern Black Hills. Besides Union Carbide, the parties involved were the State Division of Conservation and the Black Hills Alliance, a citizens' group. And watch for the Colorado connection...

### Excerpts:

"The parties brought in numerous witnesses. The Division called Steve Stampfli of Pierre, a land management specialist for the state who testified that Union Carbide had filed the papers correctly and posted bonds. Under cross-examination, Stampfli said that the Division of Conservation had not conducted a study of the amount of radiation to be released from UCC's project, and that recommendations from the Forest Service on how to store the radioactive waste were not followed.

"Richard Miller, a UC employee, came from Grand Junction, Colorado to testify. When asked by Alliance Attorney James Leach if he was environmental coordinator for the Craven Canyon project, he stated that he was, although UC officials sitting behind them shook their heads no. He stated he was an expert in aquatic biology and ecology. Miller also testified that he was not trained in mining, hydrology, or radiation control...Miller testified that he knew of no unreclaimed uranium mines in the country and that the subject of trace minerals and toxic elements should be considered in Union Carbide's reclamation plan, but was not."

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"The first witness called by the Black Hills Alliance was Paul Robinson, Environmental Analyst at the Southwest Information and Research Center in Albuquerque [*Note: Paul is still on the job in 2007*]...He explained the danger to human beings and wildlife from leakage of alpha radiation (radium, thorium, and radon daughters) and stated he thought it probable that Union Carbide's waste disposal plan was inadequate.  
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The next witness was Kent Keenlyne of the U.S. Fish and Wildlife Service. "Keenlyne echoed Robinson's concern that UCC's reclamation plan was inadequate and posed a great threat to wildlife. In an ominous tone, Keenlyne told the Commissioners, 'It's going to come back to haunt us. Uranium problems take 20 to 25 years to show up.' Keenlyne also told the Conservation Commission about seeing unplugged, unreclaimed Union Carbide uranium exploration holes."

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"The last speaker was Chelli Chasing Hawk, a seven-year-old girl from Red Scaffold, who pleaded with the Conservation Commission not to destroy 'our Mother Earth.' She cried as she said, 'They're taking big machines and tearing up Mother Earth. Please, listen to me!'

Union Carbide called Dudley Blancke to the stand as a rebuttal witness....He was heard to mutter, 'That's a hell of an act to follow' as he took the stand. Blancke, Public Relations Manager for Union Carbide in South Dakota, stated that a UCC study showed that there would be no harmful effects to ground water. Under cross-examination by Alliance attorneys, Blancke stated that he did not know where the study was or if it had ever been presented to the Conservation Commission."

-- from the *Black Hills/Paha Sapa Report*, January 1981

## Judge Says S.D. Uranium Drilling May Continue

Excerpted from an article by Bill Harlan, *Rapid City Journal*, November 21, 2007

RAPID CITY -- A Rapid City judge has ruled that drilling exploration holes for uranium can continue north of Edgemont. Circuit Judge Jack Delaney upheld the exploration permit issued to Powertech Uranium Corp. by the state Department of Environment and Natural Resources.

Defenders of the Black Hills, a Rapid City-based environmental group, had challenged the permit, arguing that the DENR did not follow its own procedures issuing the permit and that exploration holes might put groundwater at risk.

"We're not surprised," Defenders of the Black Hills spokeswoman Charmaine White Face said. "It will always be an uphill battle going against a mining company in South Dakota. However, we're not through yet."

Powertech's exploration permit allows the company to drill 155 exploration holes near the tiny ranch communities of Dewey and Burdock.

## Health Issues

In the wake of the resolutions against uranium mining adopted by the Larimer County Medical Society and the Colorado Medical Society, we provide you with some excerpts from articles and papers related to health problems seen with uranium mining:

### Diseases Caused By Uranium Mining

Excerpted from information compiled by CARD member Bette Cantor. She used multiple sources for her article - from newspapers to federal agencies.

When uranium is mined, whether by in situ leach or by open pit mining, highly radioactive and toxic chemicals are released into the water, the air, and onto the land. These chemicals include uranium

as well as radium and radon, selenium and arsenic. Once these radioactive chemicals and metals reach the air, the wind picks them up and transports them to plants, livestock, and people. Dry, windy conditions in Northern Colorado promote the dissemination of radioactivity over a large area, especially from open pit mining.

ISL mining also causes these chemicals to leach into the ground water, where they can be ingested by people who use wells for their drinking water. The chemicals can move throughout the underground aquifer to reach more remote populations.

The National Academy of Sciences recently issued a report which concluded, "There is a linear, no-threshold dose-response relationship between exposure to ionizing radiation and the development of cancer in attaches to air dust particles and can cause lung cancer.

In other words, **there is no safe level of exposure to this radiation.** Any exposure can cause cellular changes which lead to cancer. But cancer is not the only health effect of uranium mining. Other risks are fetal effects, kidney disease, and nervous system disorders... circulatory disorders and skin changes... Children are often more susceptible than adults to the consequences of toxic exposures.

## Radium

Radium is a major contaminant in uranium mine wastes. It produces gamma radiation, the most penetrating and hazardous type of radiation. We take radium into our body by eating contaminated food, drinking water, or breathing air. Radium deposits in our bones, and can induce bone sarcomas. Tumors can continue to appear throughout your lifetime. Radium also decays to radon, which attaches to air dust particles and can cause lung cancer.

## Radon

Uranium produces the gas radon. Radon atoms can spontaneously change into electrically charged atoms and attach themselves to tiny dust particles which can easily be inhaled into the lung and adhere to the lining of the lung. Radon is classified as a Class A known human carcinogen. The additional exposure to radon from living in proximity to a uranium mine could dramatically increase the number of lung cancer. Even low doses of radon are dangerous. There is good evidence that a single alpha particle can cause major genomic changes in a cell, including mutation and transformation...

## Uranium

During ISL mining, uranium compounds dissolve in water. Uranium is one of the more mobile radioactive metals and can move down through soil with water, percolating into underlying groundwater. When mined uranium is exposed to the air, it attaches to dust. Very small dust-like particles of uranium fall out onto surface water, plant surfaces, and soil either by themselves or when rain falls.

The primary means of exposure are ingestion of food and water containing uranium isotopes and inhalation of uranium-contaminated dust. Ingestion is usually the exposure of concern unless there is a nearby source of airborne dust, such as a uranium mine or mill...The major health concern is kidney damage. A second concern is for uranium deposited in bone, where it can remain for many years, and which can lead to bone cancer. Uranium has also caused reproductive problems in animal studies.

## Selenium

The most common cause of poisoning in livestock in Colorado and Wyoming is from consumption of plants that are found where selenium is present in the soil. When the soil and rock are disturbed by mining, Se becomes available, and is taken up by plants. The plants concentrate, or "bioaccumulate" the selenium in their tissues. Commonly referred to as "locoweed," they can cause animals

to develop an acute disorder called "blind staggers. In arid and semi-arid regions, selenium compounds typically remain in a form that is available to plants and animals for long periods of time.

## **Arsenic**

Arsenic occurs in the soil and rock; therefore it can be released to the environment when ores are mined. It enters the air, water, and land from wind-blown dust and may get into water from runoff and leaching. Arsenic that is attached to very small particles can stay in the air for many days and travel long distances. These particles settle in the lungs and are circulated throughout the body.

Children are especially prone to ingesting arsenic because of hand to mouth contact and eating dirt. Children may also be more susceptible to health effects from arsenic than adults are, because once it is in their bodies, they can't easily convert it to less harmful forms. Arsenic can cross the placenta and has been found in fetal tissues. It has also been found in breast milk. Arsenic is a known human carcinogen that affects the liver, bladder, kidneys, prostate, and lungs. In addition, arsenic causes skin changes as well as circulatory and peripheral nervous disorders. There is some evidence that arsenic can interfere with normal fetal development. Finally, exposure of children to arsenic may result in lower IQ scores.

## **Researchers Document Special Risk to Young Children of Exposure to Uranium in Well Water**

*Kidney damage more likely in children who drink uranium-contaminated water*

Posted September 17, 2007 on the [www.powertechexposed](http://www.powertechexposed) website.

A recently-published scientific paper reveals the special sensitivity of young children to toxic uranium in water from private wells. Although this study looked at naturally-occurring uranium, its conclusions would apply to well water contaminated by in-situ leach mining of uranium.

### **Excerpts:**

"Uranium can enter the body via inhalation as well as through consumption of contaminated food or water... Ingested uranium is absorbed from the digestive tract and appears initially in the blood, bound to red blood cells. Most is excreted via urine and feces, and experimental studies in humans have shown that about two-thirds of an injected dose of uranium is excreted within the first 24 hr and 75% within 5 days. Retained uranium accumulates initially in the kidneys and liver and then in the skeleton."

"Uranium has the potential to be both chemically and radiologically toxic, but of principal concern in the context of ground-water exposure are the chemical toxic effects of uranium on the kidneys."

"Infants and young children are especially vulnerable to chemical contaminants in drinking water. This heightened vulnerability reflects the disproportionately greater water consumption of young children, who drink 7 times as much water per kilogram body weight per day as the average adult. It also reflects the inherent biological vulnerability of the young, which is a consequence of their rapid growth and development and their relative inability to detoxify and excrete many exogenous chemicals."

## **Tribal Officials Blast New Wave of Uranium Mining**

Excerpted from an article by Kathy Helms, *Gallup Independent*, November 1, 2007

WINDOW ROCK — Representatives of the Navajo Nation and the Pueblos of Acoma and Laguna told a state committee this week that a new wave of uranium mining will further contaminate their lands and precious water resources, in addition to damaging the health of tribal residents.

Navajo Nation Vice President Bennie Shelly told the committee that the legacy of uranium mining on the Navajo Nation “has devastated both the people and the land. Workers, their families, and our communities suffer increased incidences of cancer and other disorders that trace back to uranium exposure.”

Abandoned mines represent an ongoing health and environmental hazard, he said.

Gov. John Antonio Sr., Pueblo of Laguna, said his pueblo was once the operator of the world’s largest open pit uranium mine. “You may ask why we are against uranium because we have benefited, and I’ll tell you... Yes, financially we did benefit. But the cost of lives now, the impacts, the cancer we have brought in ... it’s not worth any other community to forgo. Our brothers here, the Navajo, have been attesting to the same impacts that we have all felt as Native communities.

“We have seen an increase in the number of cancer-related illnesses in those tribal members who live in the village of Paguete right next to the mine, and also with those individuals that worked all those years at the mine.

“How do we know this? By the number of patients now receiving cancer treatments, by the number of birth defects in newborns of those individuals living near the mine, and the number of ex-miners and their widows applying for benefits under the Radiation Exposure Compensation Act,” he said.

## Weld County Comprehensive Plan Update

These are upcoming Weld County Technical Advisory Committee meetings:

**December 6** at 6pm in the Greeley Planning Offices

**December 13** at 6pm, Southwest Weld Service Center

The meetings are available for the public to attend, but no public comment is allowed. Having a couple of uranium mining opponents at each meeting will keep the issue in their minds. They ask for introductions from the audience. Just indicate the interest and enjoy the meeting.

### Who Are We?

CARD (Coloradoans Against Resource Destruction) is a diverse collection of citizens concerned about the health, environmental and economic impacts of uranium-related activity. We are convinced this activity would have dire consequences for northern Colorado and set a dangerous precedent. Our goal is to prevent uranium mining in Colorado and protect our valuable resources, especially our water, for future generations.

The CARD website, [www.nunnglow.com](http://www.nunnglow.com), has a wealth of information about the proposed mining, the processes and the potential impact on our air and water. On our website you can learn what you can do to stop the proposed uranium mining, sign an online petition and make a donation.