

Cotter at the Crossroads

A community grapples with a uranium mill's past, present and future



A walkway connects thickener tanks at the Cotter plant.
Daily Record/Tamara McCumber

Hot items, hard times

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CANON CITY - Its mill has fallen on hard times and management is forced to lay off most of its workforce. The uranium market is severely depressed and Cotter Corp. is looking for something to keep the facility operating.

A government agency is cleaning up an out-of-state site contaminated with radioactive tailings containing uranium and thorium.

Cotter seizes the opportunity and wins the contract to ship the stockpiled tailings to Colorado. Company officials later deny that they have any interest in turning the mill into a disposal site for radioactive waste.

That was the late 1960s.

Fast forward 30 years and Cotter now finds itself in eerily similar circumstances, forced by economics and outside forces to rely on radioactive waste shipments as a way to stay afloat.

The beginnings

Cotter was founded in 1956 by a group consisting of Manhattan Project research chemist David Marcott and two oilmen, Robert O. Anderson and Parker Wilson.

Like other Atomic Age entrepreneurs, their goal was to carve out a profitable niche milling radioactive thorium and uranium for the burgeoning nuclear industry, which had been opened to the private sector only five years earlier.

The partners chose a site several miles south of Cañon City, which, according to a newspaper ad, was "ideally situated in an area midway between the thorium-rich areas in the Wet Mountains to the south and the uranium-rich areas to the north and west."

In 1958, they opened a pilot mill with a capacity to process 72 tons of ore a day. A government contract guaranteed the company \$8 for every pound of uranium oxide concentrate, or yellow cake, produced.

The mill struggled from its outset, burdened with an Atomic Energy Commission license that permitted it to process 72 tons of ore a day, only 36 percent of its 200-ton capacity. The mill later received approval for a \$1.25 million expansion, but it never reached its potential.

Then in 1964, things got worse.

The Atomic Energy Commission turned the tables on the

industry by ending the government's exclusive right to uranium and authorizing its sale on the open market. By mid-January 1965, Cotter had laid off 138 workers. A month later, after Cotter lost a lawsuit against the AEC and its government contract, the mill shut down. It would stay closed for the next 18 months.

When the mill reopened, Marcott, who ran the facility, purchased the Schwartzwalder Mine outside Golden to secure an in-house supply for all its uranium ore.

But according to Deyon Boughton, whose husband Lynn was the chief chemist at the mill from its opening until 1979, business did not immediately turn around, which left Cotter scrounging for revenue.

Marcott found one opportunity in 1968, when the Atomic Energy Commission auctioned off 100,000 tons of tailings waste -- containing 192 tons of uranium -- left over from the nation's first bomb-making project, the Manhattan Project.

"The mill was desperate," Boughton recalled. "They were facing losing everything. When you're in that situation, you grasp at any straws you can."

The mill processed the Manhattan Project waste for three years until 1971. The community didn't find out about it until eight years later. When they did, they peppered Marcott with questions about whether the mill's future was as a radioactive waste dump.

"Asked if Cotter intends to be a national dumping ground for radioactive wastes, Marcott said no," a May 1979 Cañon City Daily Record article said. "He added, however, that Cotter might accept future out-of-state tailings shipments 'if there are large recoverable values as a result.' "

During the late '60s and early '70s, Anderson, who had bought out Wilson in 1966, was not concentrating on processing uranium. He was, after all, on his way to building Atlantic-Richfield into one of the world's largest oil companies and himself into the largest landholder in the world, according to some reports.

"His main focus was to do whatever was necessary on paper to make it salable," Boughton recalled.

In 1975, Anderson's efforts paid off.

Electricity giant Commonwealth Edison, which was looking for a direct source of uranium to fuel its growing stable of nuclear reactors, bought Cotter in a stock swap worth \$17.9 million, according to Illinois Commerce Commission records.

But along with that security, ComEd also acquired a litany of environmental problems. Reports of livestock and people getting sick started surfacing in the early 1970s, and soon studies confirmed that there was uranium and molybdenum contamination in soil and well water in the

rural subdivision of Lincoln Park about two miles northeast of the mill.

"You have to remember that in the '50's and '60s, it was state-of-the-art to dump tailings directly into the ground," said Cotter executive vice president Rich Ziegler. "In fact, they (tailings ponds) were designed to seep into the ground."

As part of a facelift, Cotter constructed a new mill, which opened in 1979, and also built three lined tailings ponds and transferred all the old tailings to the new impoundments.

But the environmental damage had already been done.

Based on vocal resident complaints to the governor, the Colorado Bureau of Investigation began investigating Cotter in 1979 and came out with a scathing report a year later. Then, in 1983, the state filed a federal lawsuit against Cotter seeking \$50 million in damages to clean up contaminated groundwater and wells of Lincoln Park residents who lived downstream from the mill.

With plenty of ammo to aid its own inquiry, the U.S. Environmental Protection Agency began investigating Cotter, and in 1984 officially added the mill and Lincoln Park area to the National Priorities List, or Superfund.

It took five years of litigation, but in 1988, the state and Cotter reached a settlement over their lawsuit and agreed to a Remedial Action Plan to clean up Lincoln Park. The company was on the hook for \$11 million in cleanup - not the \$50 million originally sought - and also faced damages from several lawsuits filed by residents.

Legal liabilities were not the company's only problem.

Partly as a result of the mill's problems and partly due to the plummeting price of uranium, Cotter began laying off workers. By January 1985, the mill's workforce was down to 33, far below the 234 who worked there just five years earlier. A year later, it shut down, with the exception of skeleton crews kept to clean up the facility and maintain equipment.

Cotter would not process any ore for another 13 years.

When it reopened in March 1999 on a probationary basis, however, the market was still practically non-existent. With uranium prices continuing to decline, Commonwealth Edison made the decision to cut the Cañon City mill loose.

"Cotter does not fit into the company's future business plans as mining is not a core competency of ComEd," a press release said.

ComEd sold its investment in a facility worth tens of millions for \$1 million and wrote off a \$22 million after-tax loss as a result of the sale, according to federal Securities and Exchange Commission documents.

Enter General Atomics

On the buying end of the deal was General Atomics, a La Jolla, Calif.-based company with subsidiaries specializing in the conversion of yellow cake into uranium hexafluoride for fabrication into nuclear fuel and the construction of nuclear reactors. GA also owns a uranium mine in Australia and is involved in fusion research, radiation-related electronics, telecommunications and has defense contracts for unmanned military reconnaissance planes.

Privately owned by the Blue family of Denver, GA had estimated sales revenue of \$464 million and employed 1,750 people in 2000.

The company is probably best known for its research reactors. According to its Web site, General Atomics has 66 research reactors built or under construction "at universities, government and industrial laboratories, and medical centers in 24 countries," including one that went online in 1969 at the U.S. Geological Survey in Denver.

GA also constructed the Fort St. Vrain high-temperature gas-cooled nuclear reactor north of Platteville, an unsuccessful venture that ended in the power plant's conversion to natural gas.

Like Cotter, General Atomics was founded by a son of the Manhattan Project, prominent physicist Frederic de Hoffmann. According to one chronicler of the Atomic Age, it was "the first company anywhere dedicated to building atomic reactors."

Soon after, GA was acquired by industrial giant General Dynamics, which expanded the company's reactor construction activities.

General Dynamics sold its interest in General Atomics to Gulf Oil in 1967 and its ownership was swapped several times between it and Royal Dutch/Shell before the Blues acquired it in 1986. Neal Blue remains its chairman and chief executive officer.

In 1988, General Atomics purchased Sequoyah Fuels Corp., a plant built in 1970 in Gore, Okla., to convert yellow cake into uranium hexafluoride, an intermediate step in the manufacture of uranium dioxide for use in fuel rods and weapons.

Federal nuclear and environmental officials documented numerous violations and accidents at the plant, including a release of highly toxic uranium hexafluoride gas in 1986 that killed one worker and hospitalized another 42 people.

Scrutiny of the facility intensified in August and September 1990, when inspectors discovered widespread contamination of groundwater and that its "manager knew of the contamination before NRC was informed and took no action to deal with it."

In 1991, the NRC shut the facility down for six months after continued serious violations, including a health and safety

manager who "intentionally gave false information to investigators and withheld information from inspectors."

Following another gas release in November 1992, which resulted in more injuries, the NRC closed the plant again, and soon after General Atomics decided not to reopen the facility and applied for decommissioning.

A year later, the NRC ordered both Sequoyah Fuels and General Atomics to pony up \$86 million for cleanup and decommissioning. GA put up a strong corporate defense, suing the NRC on two fronts, and the agency settled in late 1996 for \$9 million in cleanup costs.

Meanwhile, General Atomics had also entered into a joint venture with Honeywell, forming the ConverDyn Corp. to operate the only remaining facility in the United States capable of converting yellow cake into uranium hexafluoride.

When General Atomics purchased Cotter in February 2000, the deal created a family of nuclear industry businesses, from the initial mining and milling to conversion and then reactors themselves. The mill also provides an added asset that GA and Sequoyah Fuels have already taken advantage of: a place put some of the radioactive waste that its operations generate.

"We're a subsidiary of General Atomics, but we have an independent board of directors," said Cotter President Richard Cherry, the former marketing director for Nuclear Fuels Corp. "We run as a stand-alone corporation."

Across the hall from Cherry are the southwest Denver offices of GA, Nuclear Fuels Corp., and ConverDyn, whose chief executive, Jim Graham, also serves as the chairman of Cotter's board of directors.

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