HANFORD

BOOMTOWN OF THE ATOMIC FRONTIER

BY RICHARD WHITE

At the beginning of World War II, the Danish physicist Niels Bohr told American scientists that "to get the fissionable materials necessary to make a bomb, you're going to have to turn the whole country into a factory." He exaggerated of course.

The factory took counties, not countries. The Hanford Engineering Works in a remote area of Washington became part of that factory, and its transformation of much of the West.

The decisions of where to locate the major works were made with incredible rapidity and by astonishingly few people. It was part of what gave the period the sense of dizzying change. In December 1942 Colonel Franklin Matthias, after a lightning tour, chose a sparsely populated stretch of struggling orchards, farms and ranches on the Columbia River between the mouth of the Snake and the mouth of the Yakima. That would be the site of nuclear reactors and the processing plants necessary to produce plutonium. The town of Hanford itself was tainted by failure — the failure of an irrigation project named for and promoted by an impeached federal judge.

Hanford had survived its failure. It would not survive the success of becoming a major government complex. The government bought out and evicted everyone within the new reservation, condemning some of the land and leasing the rest. The government created a new kind of space – an atomic space on the Columbia.

The 560 square miles of reservation that surrounded the complex of reactors and processing plants along the Columbia was half the size of Rhode Island — a state which we all know exists in the West largely as a yardstick to emphasize Western vastness and Eastern pettiness.

But this fractional Rhode Island was tightly bounded and heavily buffered, to keep in not only the toxic substances that plutonium production spilled out into the air, but also the knowledge of those dangerous substances.

Matthias chose Hanford primarily for its isolation. He emptied this land of its occupants, but even as he did this, he began bringing in new people, making the area far more populous than it ever would have been as a farming community.

Hanford was a place of centralized power, consuming electricity from the new Columbia River dams, producing the unknown might of atomic bombs. But what struck people building it — people who in fact did not know what they were building — was the social power of the place, the ability to assemble in the middle of the desert tens of thousands of human beings. The raw human power that flowed into the construction camps was harnessed by the chemical giant Du Pont, which had agreed to create and operate Hanford during the war on a contract that promised it a profit of $1.

In 1943, Nell Louise McGregor came to Hanford to work. This is what she said:

Hanford struck you with the full impact the moment you stepped off your bus. Buildings were going up noisily on every side. Steam shovels gouged out earth for sewers, cranes swung loads of lumber, telephone poles were being socked down into holes ready-dug, and linemen swarmed up them, stringing miles of wire. People of all sorts rushed around, Army jeeps and officers, station wagons rolled everywhere. It was the headiest atmosphere one could imagine. There was an awe-inspiring sense of tremendous power behind all this.

Earl Pomeroy, a journalist with *The Oregonian* , wrote, "The residents could go into a building and come out six hours later to find a new building had arisen where none was before."

This same haste characterized the building of the reactors where, when necessary, safeguards were omitted and standards lowered to make sure the production targets were met. All of this took place during the stress of wartime. Time was what mattered.

Virtually overnight, Hanford became a city of more than 50,000 people, complete with banks, stores, schools, a hospital and a nursery — the fifth largest city in the state.

The need for labor allowed the movement of new groups into jobs previously closed to them, and in the barracks of Hanford, at its peak, there were nearly 20,000 white men.

In separate, segregated barracks, there were 3,600 African-American men. There were barracks for 4,500 white women. In separate, segregated barracks, there were 560 African-American women. Later Hanford would recruit Mexican-American and Mexican labor.

Racial hostility was rampant. White and black workers, many from the South, worked side by side. But the government made sure they lived and ate separately.

It was also a place of incredible sexual tension. Women lived, quite literally, behind barbed wire. The barbed wire indicated that more than "no" was sometimes necessary. Disciplined labor power, mustered for a secret project, existed side by side with this sense of explosive social tension.

The fifth largest city in Washington was built and then destroyed within a few years. To replace it, the government built Richland, a middle-class community, and helped fuel the explosive growth of the towns of Kennewick and Pasco. A place chosen for its isolation became, ironically, a major urban center.

What happened at Hanford was not unique; it happened all over the West during World War II and the years that followed. Change the angle slightly and quite literally white becomes black, and black becomes white. Here was new opportunity for African-American workers; here was the institution of Southern-style segregation. Here was the breaking of gendered barriers in work; here were the familiar choices — be a slut or just say no. Here was an incredible scientific and technical achievement; here was the creation of a terrifying weapon of mass destruction. Here was the creation of a toxic West; here was a refuge for the West's battered wildlife.

World War II was opportunity.

As one African-American woman in L.A. put it, "It took Hitler to get us out of the white folks' kitchen." Here were women pouring into the work force and here too were race riots and segregation and confinement of blacks and women and Mexican-Americans to the lowest level of industrial work.

Federal authority of course also created the (Japanese-American) internment camps. What was happening here was astonishing — not only in its scale and sweep, but in its form: this mandated authoritarianism which appeared in the West on this scale for the first time.

The gains of African-Americans, Mexican-Americans, Native-Americans and women eroded after the war, but they didn't erode completely. Those groups fought to hold onto them. Too much had changed for things to go back the way they had been.

The West has struggled to understand those changes ever since. It has tried to make those changes a continuation of its mythic past; it has tried to fit them into frontier metaphors.

Frontier metaphors—with their idea of a retreat to nature in order to ensure progress, with their idea of celebrating the primitive in order to stimulate development — have a deep appeal for Westerners. In the Depression, the Colorado River dams had been celebrated as marks of the last frontier. Hanford and Richland inhabitants also thought of themselves as people on the frontier — the frontiers of knowledge. They were pioneering in the desert.

Holidays in Richland became Atomic Frontier Days. But frontier metaphors could not hold their force. People outside Richland only laughed at the combination of the atom and the covered wagon that became Richland's symbol.

Attempts to maintain a frontier community more often gave way, to be replaced by the idea that a watershed had been reached, that a True West had vanished.

More and more, this story emerged, this loss of a True West, a West of nature, of community, of individualism and self-reliance that had somehow existed in this place before the boom of World War II.

This True West was as much a retrospective fantasy as all the other True Wests that had gone before. It was a creation of the war itself. And thus, it is the war which left us both the modern West and a construct, an image of the Western past.

Richard White is professor of history at the University of Washington. He was awarded a MacArthur "genius" grant in 1995. His article is based on a talk he gave at the Fishtrap Gathering in Oregon and is reprinted from *High Country News* ("A paper for people who care about the West"), which is published in Paonia, Colorado.

AMID THE LOVELY THE LETHAL REMAINS

BY KEN OLSEN

During the four decades the Hanford Nuclear Reservation produced weapons-grade plutonium, it laced eastern Washington's soil, water and air with radioactive sludge that may never disappear. Recently, Hanford also became synonymous with human radiation experiments that make the Cold War seem particularly chilling.

Hanford workers were unknowingly subjects of radioactive experiments, poisoned by the "trust-me" secret hand of government that ran the weapons complex.

Many living downwind and downriver of Hanford ingested untold doses of radioactive pollution. Anyone with a backyard cow within several hundred miles of Hanford — common in the days of Hanford's World War II beginning — took in the airborne contaminants that settled on vegetation, were eaten by cows and passed through to dairy products.

People who attended school in the area during the bomb building days are beginning to come forward with strange stories that make it sound as if they were part of the experiments. That could be the cruelest irony for Richland, the town nearest the Hanford Nuclear Reservation. Richland took such pride in its connection to nuclear weapons that its high school athletic logo is a mushroom cloud and its teams are named the "Bombers."

Perhaps most famous among the nefarious Hanford experiments was the Department of Defense's December 1949 "Green Run." It was called green because uncured uranium slugs, fresh from the reactor, were exposed to the atmosphere instead of being cured in a building that contained their radioactive emissions.

The reasons for the experiment are still classified.What is known is that 8,000 curies of radioactive iodine 131 were spewed into the atmosphere in just two days. Because the weather took an unexpected turn, much more of it was deposited in eastern Washington than government scientists anticipated. At one point, measurements showed nearby Kennewick getting 1,000 times the safe dose — and the threshold for a safe dose was much higher than it is today.

Billions of gallons of radioactive waste were dumped in the ground, leaving plumes of tritium and other radioactive pollution migrating through the aquifers to the Columbia River. Hundreds of tanks, many of them leaking, now harbor concoctions of waste that scientists cannot identify, much less divine how to deal with. Plutonium abandoned on the production line of mysterious concrete complexes like the PUREX plant slowly degrades to more deadly Americium.

All of this is lethal. Luckily, it covers only a fraction of the landscape.

Cleaning up the mess, Hanford's "mission" since the late 1980s, seems impossible. Some $8 billion has been invested; many people question whether the effort will succeed.Mountains of paper have been shuffled and tons of analysis generated, but there is little to report. The most tangible results are study, delay and study.

A report for the U.S. Senate Committee on Energy and Natural Resources, *Train Wreck Along the River of Money*, concludes that the nearby Yakima Indian Nation has "the clearest and most coherent vision for cleanup." But the report also concludes the Yakima view is largely ignored.

Meanwhile, public relations soaks up about $7 million a year and contractors have logged as much as $40 million in performance bonuses since 1989. A minuscule portion of the nearly $2 billion annually goes to pulling hazards out of the ground or the groundwater.

The performance bonus system was recently changed, however, and the "Contract With America" Congress is contemplating ending the gush of dollars to Hanford as part of balancing the federal budget. But what was once supposed to require 30 years and $60 billion could take 50 years and cost $1 trillion. That is one quarter of the total federal deficit.

Even then Hanford won't be clean in the Mr. Clean sense of the word. "People believe when you say 'cleanup' it goes away," says Rick Wojtasek of Westinghouse, the primary government contractor at Hanford. "It doesn't — you regain management control."

Ken Olsen writes for the Idaho *Spokesman-Review* in Couer D'Alene. His article is reprinted from *High Country News*. For more information about the fate of the Hanford Nuclear Reservation, contact the following: U.S. Senator Patty Murray, D-Wash., 202/244-2621; Columbia River United, P.O. Box 912, Bingen, WA. 98605 (509/493-2808); Hanford Education Action League, 1720 N. Ash, Spokane, WA 99205 (509/326-3370); Hanford Downwinder Health Concerns, Lois Camp, P.O. Box 52, LaCrosse, WA 99143 (509/549-3497).