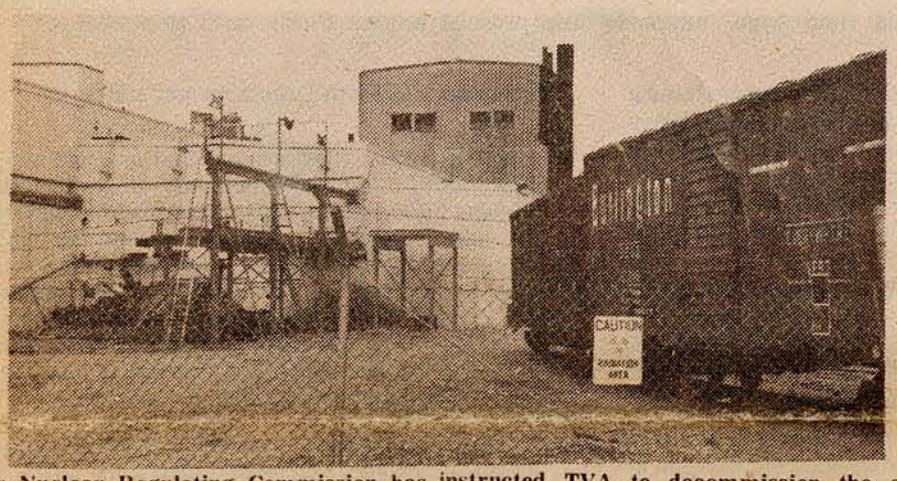
BLACK HILLS REPORT PAHA SAPA

July, 1979 — *Volume 1, Number 1*

An open letter to the world community



The Nuclear Regulating Commission has instructed TVA to decommission the old uranium mill at Edgemont, S.D. 3½ million tons of tailings must also be removed from the site.

The Black Hills Alliance has become increasingly concerned over the energy development proposals effecting the Great Plains area. We see this as a potential threat to all forms of life.

We believe that the people of the Black Hills, the northern plains area and the nation at large have a right to know what is planned for the future of the land and their children.

Many of these plans have been on the drawing boards for a decade or more. Others have appeared in the last few years. We are extremely alarmed that very few people have been informed of the extent or immediacy of these plans. Some have already been implemented -- others may begin this year.

We want to present to you, the people, a few of the plans, some of the forces involved and the possible consequences. This first issue of the **Black Hills-Paha Sapa Report** by no means outlines the entire story -- only a tiny portion.

The immediacy of the situation demands that the problems be confronted openly and directly. We will strive to provide a balanced report on issues vital to the Black Hills and the human race.

The fate of this region will affect all people of all races -- both near and far. For this reason, we have united in the Black Hills Alliance and ask your support. We welcome your suggestions. We stand together.

Edgemont tailings' 25 Year tale

Three and one half million tons of radioactive mill tailings lie on the banks of Cottonwood Creek and the Cheyenne River -- as well as within a stone's throw of the town of Edgemont, S.D. These tailings, as well as several large, open pit mines and many abandoned shafts, are the remains of uranium mining in the southern Black Hills during the 1950's and 60's.

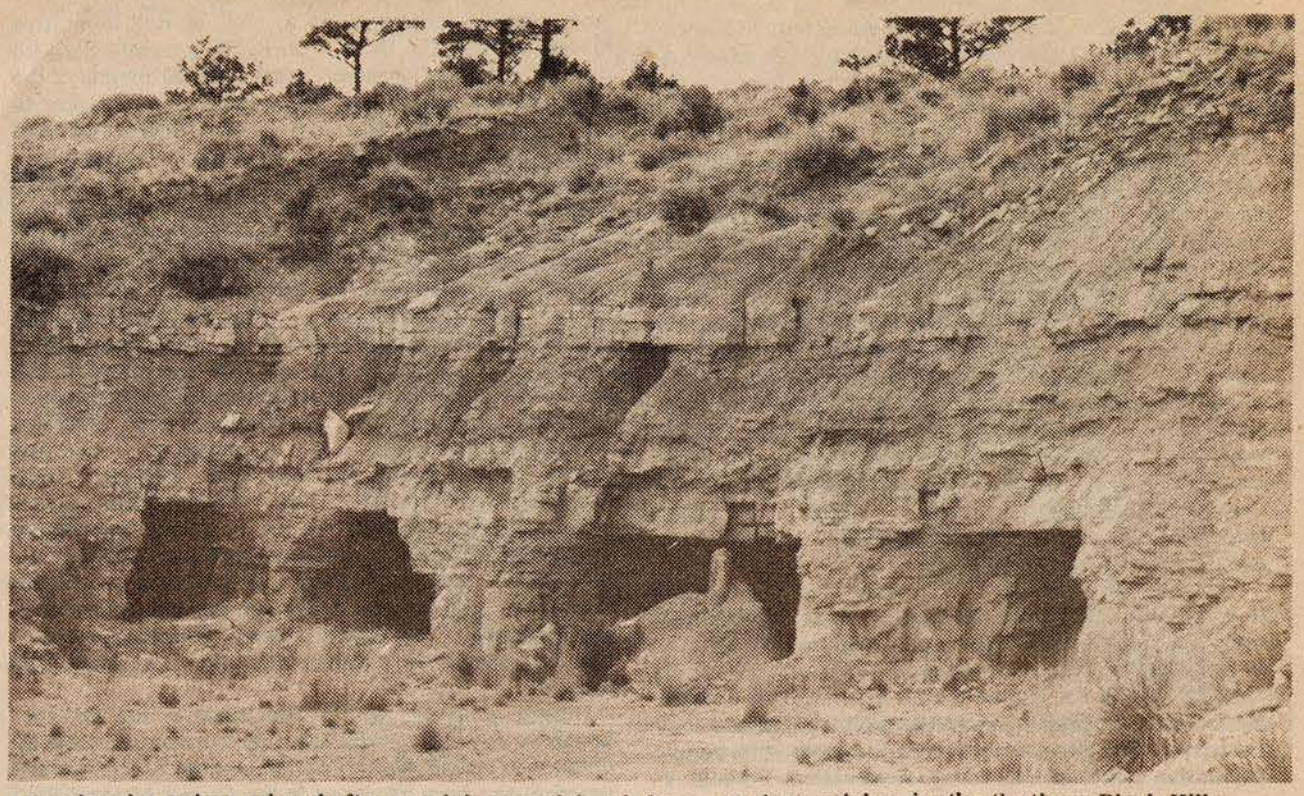
Nearly 99 percent of the ore which is processed in a uranium mill is waste material, or mill tailings. Only about one or two percent of the total volume of ore is actually "yellowcake," the fuel supply of nuclear reactors.

Mill tailings constitute the greatest radiation hazard of the entire nuclear fuel cycle, according to the Nuclear Regulatory Commission. And since much of the radiation is released in the form of radon gas, which travels freely in the wind, populations many, many miles away can be affected.

The Nuclear Regulatory Commission decided in 1978 that the old uranium mill at Edgemont was extremely "hot" -- that it must be decommissioned and buried. The tailings too, it was finally determined, were a health hazard to the local community. They must be moved and stabilized in another location.

The nation was then in the midst of a national debate over who has the responsibility of cleaning up old mill tailings. It was finally decided that the corporations responsible for creating them would assume no liability. State government would assume 10 percent of the costs of tailings stabilization, and the Federal Government 90 percent. Or, in short, the people would assume 100 percent of the financial costs for removal of this health hazard.

At that time, the Tennessee Valley Authority (TVA) -- a federal agency which purchased the old uranium mill, mill tailings, and over 100,000 acres of mineral claims from Susquehanna Western, Inc., in the early 1970's -- made a heroic commitment for the full responsibility of the inactive mill tailings. The Nuclear Regulatory Commission (NRC) has since directed TVA to remove and stabilize the tailings in another location.



Abandoned uranium mine shafts were left unreclaimed from previous mining in the Southern Black Hills.

'Uranium mining and milling are the most significant sources of radiation exposure to the public...' **NRC**

TVA recommends that the tailings be buried approximately 2½ miles southeast of Edgemont, at a cost of "$10 to $12 million in 1978 dollars." The tailings would be transported by open truck during the estimated two year operation. The burial site would cover approximately 125 acres. No beginning date has been mentioned and the plan has not yet been approved by the NRC. In the meantime, local residents are receiving high radiation doses.

The residents of Cottonwood (a community adjacent to Edgemont) are receiving 2,105 millirems per year, over four times the national standard of 500 MRY maximum allowable dose, according to a 1978 report by the engineering firm of Ford, Bacon, Davis and Utah.

Another radiation survey performed on November 6-8 by the U.S. Environmental Protection Agency and the South Dakota Department of Environmental Protection found 82 abnormalities (incidences of above normal radiation) in the communities of Edgemont and Dudley. Background levels of 350 to 100 counts per second (CPS)

NATIONAL SACRIFICE AREA? . . . . See Back Page

THE HISTORY OF URANIUM MINING

Who are these companies and where did they come from?

Uranium was first used as the "mother element" for the atomic bomb. Uranium, like other radioactive elements, gives off "ionizing" radiation – in high dosages, it causes death almost immediately; in lower dosages, it causes cancer, genetic defects and other health concerns which often do not appear for up to twenty years. When the atomic bomb was dropped on Japan, the blast killed hundreds of thousands of people within a few days. But many more died in the decades that followed, because they had received a dose of low-level radiation. The uranium used to produce this atomic bomb came from a large uranium ore field near Great Bear Lake in Canada.

According to the report, 'Energy Resource Development in South Dakota' (Office of Energy Policy, June, 1977):

> Following the war, the Federal government felt the need to insure an adequate, independent supply of uranium, primarily for military purposes. In response, the Atomic Energy Act was passed in 1946. It established the Atomic Energy Commission (AEC) and gave it the responsibility for the development, use and control of atomic energy. To encourage private, domestic prospecting and mining of uranium, the 1946 act included guaranteed price schedules, initial production bonuses, haulage allowances, exploration and development assistance, and markets at AEC ore buying stations. ...the AEC...at that time was the only market for uranium ore. Prior to 1954, all uranium milling was done at AEC owned facilities...

The first directors of the Atomic Energy Commission were appointed by the Secretary of War. Their duty, was the development of a nuclear industry in the United States.

In 1950, a Navajo sheepherder named Paddy Martinez found an unusual rock on his sheep range in northwestern New Mexico. He talked to a local geologist, and was told that he had discovered uranium. Paddy didn't know what uranium was, but the Atomic Energy Commission did. Shortly thereafter, a team of survey people was sent to the area, and the word was out --northwestern New Mexico was heaven for uranium prospectors.

Anaconda, a major copper producer, was quick to move in on the Martinez discovery. A large part of the ore deposit was on the Laguna Pueblo, so the company neogitated with the Bureau of Indian Affairs (BIA) and the Laguna Tribal Council for a lease. The BIA has "trust responsibility" for Indian lands, which means that the Bureau is to advise tribes and approve their actions to insure that any actions taken are in the short and long-term interests of the people.

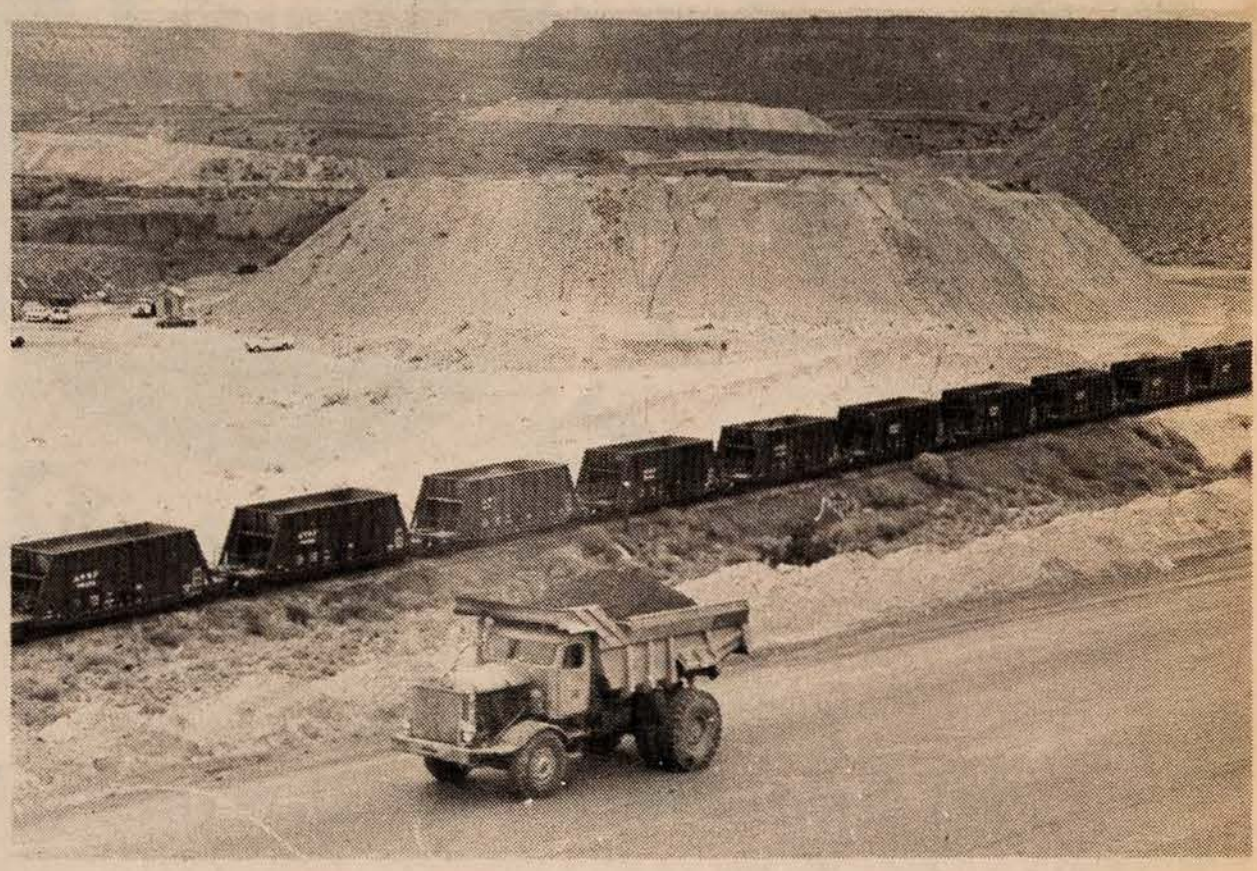
The post-war unemployment rate on the reservation was high (averaging over 50 percent) and the economy was unstable. The Bureau saw the mines as a welcome addition to the tribal economy, which had been based on agriculture, limited ranching and crafts for sale to outsiders. The BIA advised the tribe to sign a lease and the agreement was made with little argument.

The agreement provides for Anaconda to lease the land "for as long as the ore is producing in payable quantities." The BIA apparently did not see any need for concern over the mining's effect on the environment, as there were no provisions for environmental monitoring and enforcement. The Environmental Impact Statement had not yet been invented. Operations soon began at the Jackpile Mine, named after the supervisor. The area was roped off and blasted to remove the ore from rock deposits. The operation expanded from exploration and a small operation in the agricultural Paquate Valley into a large stripmine operation, operating 24 hours a day, seven days a week. Some Lagunas were trained to operate stripmining machinery, but most of the labor force was imported– skilled technicians and workers, and unskilled Chicano laborers.

Kerr-McGee Corporation became the first oil company to "diversify" into nuclear energy. Kerr-McGee had discovered uranium at the other end of the Grants Mineral Belt, which stretches throughout the Four Corners area of the United States. Kerr-McGee quickly moved in on the deposit, as well as the fertilizer and coal industries. The deposit was near Shiprock, the major population center of the Navajo reservation. Through a transaction similar to Anaconda's at Laguna Pueblo, the BIA and the Navajo Tribal Council negotiated a lease with Kerr-McGee. Mining began in 1954 and the ore was contracted to the AEC for its nuclear weapons program.

Since most Navajos were unskilled laborers, the company's first task was to import mine supervisors and technicians, and to train the Navajos. In a nutshell, the Navajo miners were told to "watch out for flying rocks" and not smoke cigarettes in the mine shaft.. At no time did the company or the government explain to the Navajos what nuclear radiation was, that uranium was radioactive or what the health effects of radiation were, despite requirements of the lease that the company "provide for the health and safety of the workers." When mining began, about 100 Navajos were employed at the underground mines. A few more were employed at the uranium processing plant, a mill located in the center of Shiprock.

Under the encouragement of the Atomic Energy Commission, companies began to discover uranium ore throughout the U.S.: on the Spokane reservation in Washington state; in the southern Black Hills; Colorado; Florida and Wyoming. As the nuclear industry expanded, some companies were formed solely for uranium mining and milling, while others came into the nuclear industry from the ranks of the oil, electric and chemical industries. Although each company entered the industry for specific reasons - either to diversify or to enter a guaranteed market - they shared a common goal of increase in corporate capital.



Uranium ore is transported from huge Anaconda strip mine at Laguna Pueblo in New Mexico.

There is one major catch in this seemingly simple picture - uranium is radioactive. The government knew this from the outset; otherwise, the atomic bomb would not have killed anyone. The radiation is contained within the Earth by deposits which surround the uranium, but when mining begins, the workers blast away this "protective" covering. When the uranium reacts with oxygen, it begins giving off various forms of radiation, all of which are invisible.

In 1965, the Indian Health Service Hospital at Shiprock reported that two Navajo uranium miners had died of lung cancer-- carcinoma. In a letter to Representative Manuel Lujan (D., N.M.), an HEW Assistant Surgeon wrote, "The Navajos died of anaplastic carcinoma of the lungs. Carcinoma results from excessive exposure to radiation." In 1970, 8 had died. By 1974, 18 had died. And in 1979, 25 have died and 45 more now have radiation-induced lung cancer.

In 1975, the Red Rock Cove Chapter of the Navajo Nation began requesting compensation from either the company or the government for the affected miners and their families. Kerr-McGee representative Bill Phillips told a Washington reporter, "I couldn't tell you what happened at some small mines on an Indian reservation, we have uranium interests all over the world." The company denied any responsibility and refused to pay medical expenses. The government was contacted because the government had approved the lease and purchased the ore. As Amanda Spake reported in the 'Washington Post' (June 4, 1974): "Official after official has denied responsibility for the 18 deaths, except one who denied that the mines even existed. Although the government did not willfully kill the Navajo uranium miners, its policy of death through inaction killed them just as surely." The Atomic Energy Commission stated that it regulated the uranium only after it was out of the ground.

Despite problems within "the state of the art" of uranium mining, production has continued-- and increased in recent years. Over 50 percent of the nation's uranium has been produced in the Grants Mineral Belt. The Environmental Protection Agency (EPA) determined in 1973 that "company-sponsored groundwater monitoring programs range from inadequate to nonexistent...contaminated water is supplied as potable (drinkable) to miners' families at the United Nuclear-Homestake operations, (and) there is widespread water contamination throughout the Grants Mineral Belt...."

Over 250 million tons of uranium mill tailings are located in the area, which emit radioactive substances into the environment. The Kerr-McGee operation at Shiprock has been closed down, while other operations have opened nearby. The companies have found new ore deposits, new water sources, and new workers for their operations. "A map of the area looks like a war zone," says Harvey Wasserman, journalist and safe energy activist. Uranium mines, coal mines, processing plants, power plants, railroads, and high-voltage transmission lines (between power plant and mine) all span the landscape.

Once the Federal government determined that uranium mining and the exploitation of other energy resources was in "the national interest," the nuclear industry prospered. As the 'Energy Resources Development in South Dakota' report states:

> By 1956 the AEC determined that uranium supplies were more than adequate to meet the projected demand and plans were made to slowly phase out the incentive program. In 1958, the AEC announced that no uranium ore reserves discovered after November, 1958, would be eligible for sale to the AEC. Although the phase out program took over a decade to carry through to completion, by late 1970, the Atomic Energy Commission uranium purchasing program had been terminated.
>
> Although the Federal government had stockpiled adequate uranium supplies necessary for military purposes by the late 1950's, the emergence of the nuclear power industry in the mid 1960's suggested that the demand for uranium would rise once again. The nuclear power industry promised a safe, non-polluting source of electricity, so long as adequate supplies of uranium were available to fuel the electrical plants. In response, the Federal government opened the market in 1970 to allow private individuals and companies to sell uranium....
>
> Initial forecasts by the government and the nuclear industry were that the demand for uranium would not only increase remarkably in the late 1960's but that the supply of uranium would possibly not be adequate to meet the expected demand. In response to these forecasts, uranium exploration and development once more accelerated, and significant deposits were discovered....

ESTIMATED URANIUM RESERVE HOLDINGS 1977

	Oil Firms	Non-Oil Firms
Kerr McGee	33.5	
Gulf Oil	18.5	
United Nuclear-Homestake Partners		9.6
Conoco- Pioneer Natural Gas	5.8	
Phelps Dodge (Western Nuclear)		5.5
Getty Oil	4.6	
Exxon	4.0	
General Electric (Lucky Uranium)		4.3
Atlantic Richfield-Anaconda	3.6	
Phillips Petroleum	2.8	
Rio Algom Mines (Canada)		2.1
Standard Oil-Ohio	1.0	
Union Pacific (Rocky Mt. Energy)		1.0
Union Carbide		1.0
Standard Oil- Calif (Amax)	.7	
TOTAL	74.5	23.5

SOURCE Oil Chemical and Atomic Workers Union, 1977

Until the 1970's, the Atomic Energy Commission both regulated and promoted the development of atomic energy -- an obvious conflict of interest. Accordingly, the AEC was abolished in 1975, replaced with two agencies, the Energy Research and Development Administration (ERDA) and the Nuclear Regulatory Commission (NRC). In 1976 the Federal Energy Administration was abosrbed into the new Department of Energy (DOE) under the Carter Administration, and the Energy Research and Development Administration. The

(cont. to page 3)

For Karen

Kerr McGee

'In the right place at the right time with the right resources'

Kerr-McGee, the largest nuclear fuel producer in the world, has recently leased over 15,000 acres of land in Pennington County, S.D. Kerr-McGee also owns 146,000 acres near Alzada, Mont., across the stateline from Harding County, S.D. Its three leases on private land in Custer County total over 17,000 acres.

"The company's beginning was a humble one," explains Dean McGee, long-time Chairman and Chief Executive. Its cofounder, Robert S. Kerr, was born in a log cabin in Oklahoma Indian Territory, near what is now Ada, Okla...." (Annual Report, 1975) The Anderson and Kerr Drilling Company was founded in 1929 with $50,000 in assets, including two steam-driven oil rigs. The company expanded its oil and gas operations for 20 years until, in the 1950's, diversification became a priority.

In the early 1950's, the company aimed to become a total energy company. In 1952, "The first oil company to enter the uranium industry," Kerr-McGee bought mining properties on the Navajo reservation in the Lukachukai Mountains of Arizona. In 1953, the company began using airplanes equipped with radiation detection equipment to search for uranium reserves. (Annual Report, 1978) Expansion into the uranium industry moved swiftly for Mr. McGee's company, as "in the fall of 1954, Kerr-McGee became the first oil company to add uranium mining and milling to its activities...." Throughout the 1960's and 1970's, the corporation continued to diversify into uranium, coal, chemicals and fertilizers, though the bulk of returning revenue still came from the oil projects.

In 1970, Kerr-McGee completed its uranium hexaflouride conversion plant in Sequoyah County, Okla. With the completion of that $26 million facility, Kerr-McGee became a participant in six of the eight processes in the nuclear fuel cycle. Boasts Dean McGee, "Kerr-McGee is now engaged in more segments of the nuclear fuel cycle than any other company in this country. We are proud of our deep involvement in nuclear energy.... Kerr-McGee looks forward to an increasingly important role in satisfying man's insatiable need for energy...." (Kerr-McGee Report, 1975) People who are aware of the corporation's past record on health and safety have reason to hope that their past is not "a prologue to the future," as will be documented below.

Although approximately 60 percent of the company's capital in 1974 came from oil and gas operations, the company today has not only major stakes in oil, gas, coal, uranium, and agricultural and industrial chemicals, but also in everything from lumber to helium.('Dun's, 'Dec., 1974) This year, Kerr-McGee ranks 142 in the Fortune 500 list of top U.S. companies, with assets of over $2 billion. Robert S. Kerr, now deceased, was cofounder of the corporation and remained on the corporate Board of Directors while he was a powerful member of the U.S. Senate. Dean McGee is also on the Board of Directors of 35 other corporations and foundations.

"Alternative energy development"

Kerr-McGee's role in "alternative" energy development is part of what 'Dun's Review' terms, "The Masterful Timing of Kerr-McGee," in an article explaining the company's place as one of the "five best-managed companies." (Dec., 1974) The article explained that its "top five" had survived the hostile economic climate of 1974 "because their own goals, their targets, were set beyond normal corporate reach." Another major magazine of the business world, 'Forbes,' explained Kerr-McGee's ascendance this way:

> McGee decided more than 25 years ago that Kerr-McGee would always be a relatively small petroleum company...he diverted a major part of his cash flow in other minerals. The result is that Kerr-McGee has a tremendous storehouse, including probably reserves of 160 million pounds of uranium, worth over $6 billion at today's spot prices; and 3 billion tons of coal, worth $70 billion at today's prices...and many other of the earth's elements as well...Kerr-McGee's 2.5 million tons of coal production this year will grow by 1983 to 16 million tons and shortly after that to 30 million tons." ('Forbes, Oct. 16, 1978)

This accumulation of reserves is part of the company's gamble that it will continue to be in the right place at the right time - and that coal and uranium will be "the right resources."

The future of the company depends, in particular, on uranium being "the fuel of the future." After 20 years of capital investments in uranium, totaling about $300 million, the company has returned big profits from the mineral only in the last few years: $25 million in 1976 and $18.3 million in 1977. 'Forbes,' Oct. 16, 1978) Kerr-Mc-Gee is counting on not only currently-operating reactors, but those on the drawing board and has begun contracting for large deliveries of uranium. In 1974, "the volume of contracts started to climb substantially...when K-M got new contracts for seven million pounds of uranium for delivery between 1976 and 1982. K-M's backlog is over 52 million pounds...." ('Forbes,' Aug. 1, 1975) Now that the price of uranium has increased substantially, as one Southwestern analyst put it, "K-M is in the position to make lots of money...."

Now Kerr-McGee is in a position of leadership in the industry, to put it mildly. In 1977, the company controlled 33.5 percent of all domestic uranium reserves and controlled the milling (processing) of 22.5 percent of those reserves. This is in addition to the conversion facility in Sequoyah, Okla., and the plutonium reprocessing plant at Cimarron, outside of Oklahoma City. ((Oil, Chemical and Atomic Workers International Union, 1977) Kerr-McGee Nuclear Corporation reported over $25 million in sales in 1978. (Annual Report, 1978)

Despite public opposition to nuclear power, the corporation remains confident that it can sell its uranium reserves and increase its sales. But the company struck a pensive note in its most recent report on the market:

> The 72 nuclear power plants currently in operation and an additional 94 under construction in the U.S. provide a growing market for Kerr-McGee's existing and planned uranium operations. At the present time, less than one-half of the uranium required for delivery after 1985 to fuel these reactors has been purchased by the utility industry.... Although new reactor sales have been depressed for several years, additional nuclear power plant orders and firmer schedules are anticipated....

What Kerr-McGee does not want to tell its stockholders and others who read annual reports, is that the company has caused substantial problems through its uranium mining and milling operations. Approximately 40 percent of the company's uranium comes from the Grants Mineral Belt in the Four Corners area of the Southwest. The first company venture in uranium was on the Navajo reservation and is detailed elsewhere in this report. In summary, after almost 20 years of operations, employing miners at as little as $1.60 an hour (non-union wages), the company has left the small Navajo town of Shiprock, N.M.

Kerr-McGee abandoned the Shiprock mine and mill complex in 1969 and moved into a different area of the Grants Mineral Belt to stake claims and begin operations. The Ambrosia Lake mill, completed in 1958, is the largest uranium mill in the world -- capable of processing 7,000 tons of ore per day. The company also has seven miles located near Ambrosia Lake. (Annual Report, 1978) Kerr-McGee's Churchrock Mine on the Navajo reservation is able to produce 900 tons a day, and Churchrock two and three are under construction. When they are completed, their combined estimated capacity will be 500 tons per day. ('Energetic New Mexico: the Power State,' Albuquerque Industrial Development Council, 1977)

The Federal government has helped provide workers for Kerr-McGee's mining operations through a federally financed uranium miner training program at Churchrock. As "Manpower Gap at the Uranium Mines" ('Business Week, Nov. 7, 1977) reports:

> Currently 3,200 miners work underground and 900 more are in open pit operations. By 1990, the industry will need 18,400 underground miners and 4,000 above ground...Kerr-McGee estimates that it costs approximately $80,000 per miner in training...as well as the costs for the trainees who quit. To try and trim these costs, and create an ample labor force, Kerr-McGee is now operating a training program... The $2 million program is sponsored by the Labor Department and is expected to turn out 100 Navajo miners annually. Labor Department sponsors hope the program will help alleviate the tribe's chronic unemployment, which is estimated at about 40 percent...."

Of course, the goal of jobs was left behind when the operation was abandoned. But, if the Shiprock operations set a precedent for future development, unemployment is among the least of Navajo workers' concerns.

Today, 25 of the approximately 100 miners from the Shiprock operation are dead and 45 more are dying from radiation-induced lung cancer. The company's legacy also includes 71 acres of uranium mill tailings, and the effects of the operations have spread throughout the Grants Mineral Belt. Kerr-McGee is among the companies that the Environmental Protection Agency (EPA) has accused of polluting the area. The EPA 'Survey of Water Supplies in the Grants Uranium Mining and Milling area of New Mexico' found much of the area's water to be infiltrated with water from uranium tailings ponds and with contaminated mine drainage containing radium and uranium." ('EPA,' 1975) There are now eight underground uranium mines operated by Kerr-McGee, with three more planned, in the Grants area.

The plutonium connection

Kerr-McGee's involvement in nuclear fuel reprocessing is the aspect that has raised the most controversy and concern of the company's involvement in the nuclear fuel cycle. The end result of the nuclear fuel and weapons cycle is plutonium--it is man-made and extremely deadly. Dr. Helen Caldicott has estimated that one pound of plutonium distributed equally could give every man, woman and child on Earth lung cancer. The deadliness of plutonium was the major problem at the Cimmaron Plutonium Reprocessing facility, which was closed in 1976 and was not included in Kerr-McGee's Annual Report. Violations of health regulations at the plant caused the plutonium contamination of 73 workers over a four-year period. ('N uclear Energy-- The Unviable Option,' John Berger, pg. 89) The seriousness of the situation came to light after the death of a 28-year-old lab technician, Karen Silkwood.

A company representative had failed to provide Silkwood with a proper-sized respirator, resulting in plutonium contamination in July, 1974. She then became active in the Oil, Chemical and Atomic Workers Union and complained to union officials about plant safety hazards and falsification of fuel rod quality control tests.

At the suggestion of union officials, Silkwood began documenting both the faking of safety tests and the doctoring of fuel rod x-rays. When Silkwood discovered that she had been contaminated with plutonium, she had her apartment checked for plutonium. Company radiation investigators discovered that cheese and bologna in her refrigerator had been contaminated with plutonium.

On her way to a meeting with 'New York Times' reporter David Burnham and an OCAW Union official on November 13, 1974, Silkwood's car was rammed from behind and knocked off the road. Karen Silkwood was killed. Although the Okla.State Partrol listed her death as accidental, an automobile accident expert hired by OCAW concluded that the car had been rammed off the road by another vehicle. Documentation of safety violations was never found.

Ms. Silkwood's family, including her three children, sued Kerr-McGee for gross negligence -- exposing her to plutonium. Kerr-McGee testified that Silkwood had contaminated herself to further her cause. After lengthy investigation and several months of court hearings "The jury found that Kerr-McGee was negligent in the contamination of Miss Silkwood and her apartment in 1974. It also rejected the self-contamination defense of Kerr-McGee...." and awarded her family $10.5 million in damages ('Rapid City Journal,' May 19, 1979).

The future of the company depends, in particular, on uranium being 'the fuel of the future.'

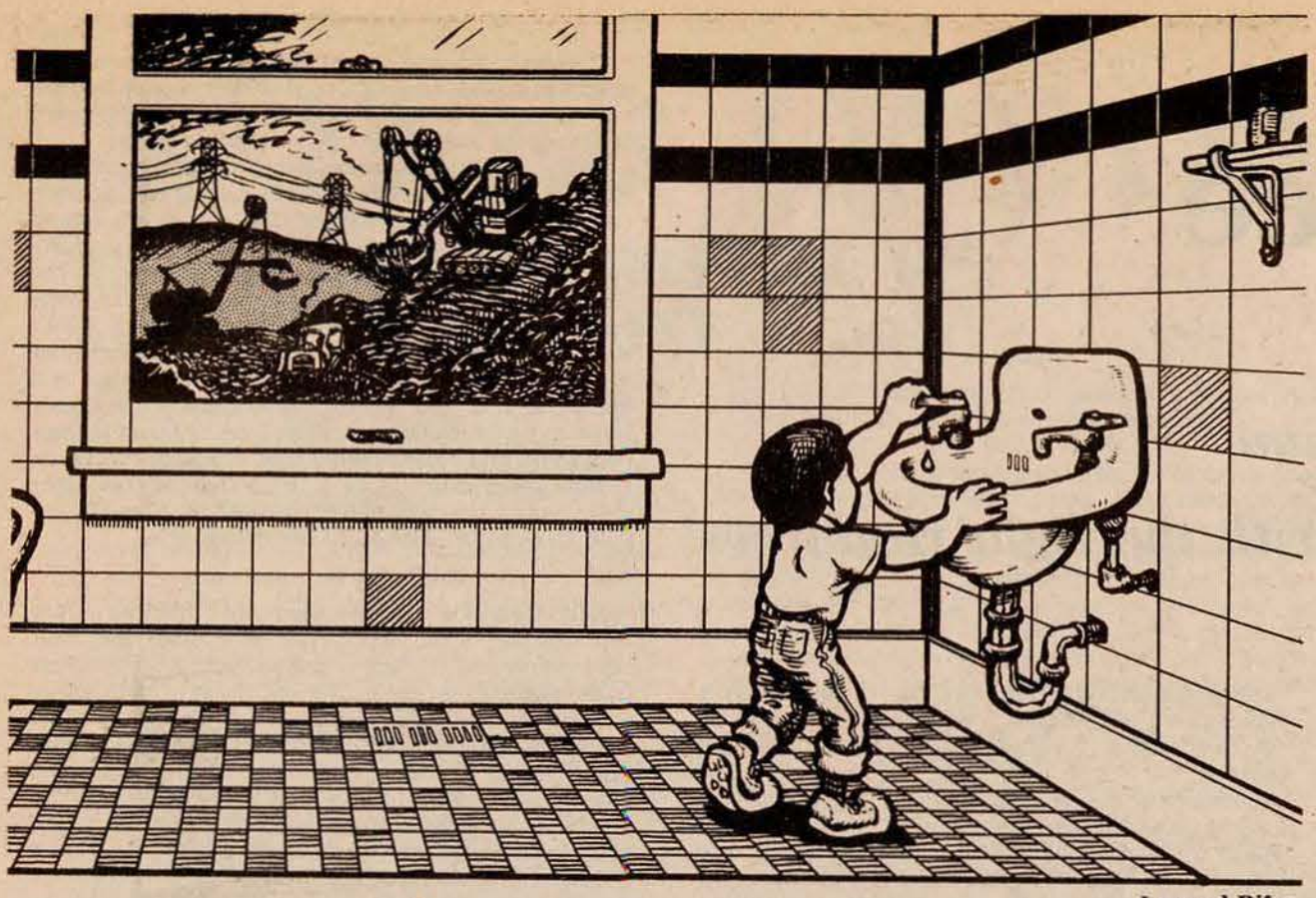
The fuel rods manufactured at the plant where Ms. Silkwood worked had been contracted to the Westinghouse Hanford Corp. from 1972 to 1976 for its test breeder reactor facility. The facility, near Richland, Wash., was managed for the Federal government. An article in 'Science' magazine, March, 1978, said of the fuel rods made for the plant:

> According to a Westinghouse spokesman, Hanford received a total of 19,568 fuel rods from Kerr-McGee, of which 688, or 3.5 percent were found unacceptable and sent back to Kerr-McGee. Kerr-McGee did not agree that most of these were rejectionable and refinished or repaired many of them. Thus in the final count only 91 were rejected. The Westinghouse spokesman said that, of the group finally accepted, some 541 were not deemed good enough to be used....

Westinghouse's failure to renew the fuel rod contract led to the closing of the Cimarron plant. Subsequent studies proved that laboratory analysts had touched-up negatives with a black felt-tip pen to hide defects in welds that held the fuel rods together. Other allegations made by Karen Silkwood have also been proved correct.

The Silkwood case, the deaths of Navajo miners, and the contamination of water supplies have all been charged to Kerr-McGee's operations. Critics of Kerr-McGee claim the company's program of "diversification" in the nuclear industry has shown little or no concern for its workers or the public.

The company's 1978 annual report gives this view of itself, "Now in its Fiftieth anniversary year, Kerr-McGee Corporation is a diversified business enterprise with extensive reserves of natural resources and processing facilities to convert such reserves to products needed in the U.S. economy...."



Leonard Rifas

WATER FOR INDUSTRY

The Madison Formation is a huge natural water reservoir, underlying parts of Nebraska, Wyoming, Montanta, and the Dakotas. Over a billion acre feet of water are contained in this very deep, geothermally heated formation.

The Madison Formation may soon become the water source of a coal slurry pipeline from near Gillette, Wyo., to Baton Rouge, Ky. or Pento, Ms.--distances of over 1,400 miles. Energy Transportation Systems, Inc., (ETSI) hopes to begin construction in late 1981 of a 38 inch diameter pipeline which would transport 25,000,000 tons of coal annually. The pipeline is to have an economic lifetime of 35 years and will require "no more than three years" to construct.

ETSI received authority from the Wyoming state legislature in 1974 to withdraw up to 20,000 acre feet of water annually from the Madison. 40 wells are to be drilled in a 125 square mile area of Wyoming, mostly in Niobrara County - approximately 25 miles north of Lusk, Wyo.

Despite a report from the Wyoming state hydrologist in 1974 that "there would be no impacts of ETSI's withdrawal of 15,000 acre feet per year that would be felt outside of the well fields themselves," the coal slurry proposal has come under frequent attack. Perry Rahn, professor of Geology at the South Dakota School of Mines and Technology, has prepared a paper to be published in the 1979 proceedings of the S.D. Academy of Science. Rahn indicates in that paper that geologists from the University of Wyoming have concluded that the drawdown of the Madison will reach 1,100 feet at Edgemont, S.D., which is less than 30 miles from the well fields and derives municipal water from the Madison.

ETSI believes that the annual recharge rate of the Madison Formation is approximately 150,000 acre feet annually. The U.S. Office of Technology Assessment has projected that the potential recharge exceeds all "existing" uses of the Madison by 50,000 acre feet per year, which, ETSI representative Frank Odasz says, would be enough water to accomodate three more ETSI sized coal slurry pipelines.

But Professor Rahn testified at the 1975 U.S. Congressional "Coal Slurry Pipeline Hearings" that the annual recharge rate of the Madison formation might be as little as 8,000 acre feet per year --- only half as much as ETSI plans to use each year.

Others have become concerned about the potential impact on the water level of shallower water tables. Experts suspect that natural faults in the earth connect all water formations. Thousands of exploration holes pierce the aquifers of western South Dakota and eastern Wyoming. It is feared that shallow water formation may eventually be drained into the lower Madison formation as large quantites of water are withdrawn from the underground reservoir.

ETSI has received the right of eminent domain through all states it will cross except Kansas and Nebraska, through Federal legislation introduced by Representative Bob Eckhart of Texas. Odasz says that ETSI has solved the problem of "harassment and resistence" of railroads by negotiating with the owners of private land upon which the railroad were built.

The Madison formation is not the only body of water being targeted for allocation to industry. The Missouri River is also being eyed for a massive diversion that could further upset natural water patterns in the west.

The Missouri finds its headwaters in the runoff of the northern Rocky Mountains. By the time it reaches the check station at Sioux City, Ia., it carries some 28 million acre feet of water per year.

Six major dams on the Missouri, four of them in South Dakota, have turned the river into a series of huge lakes. Hundreds of square miles, mostly Indian land, have been submerged. The Native people lived in the fertile river valleys, where fruits, berries, grasses and crops flourished -- providing food for livestock, wildlife and people.

Now these village sites and cropland lie below hundreds of feet of water. The people were forced to vacate by the Federal Government --- the Army Corps of Engineers. Schools and hospitals promised to the people have never been built. To date, the town of Wakpala has no running water, which a "modern day" town sits across the Oahe reservoir. The fertile soil is lost to all until the reservoirs are drained by nature.

Authority to build the dams was given to the Corps of Engineers and the Bureau of Reclamation by the Pick Sloan Act of the 1940's. Before the dams were built, South Dakotans were promised first opportunity for the use of the stored water. But other than recreation, small irrigation and limited electrical generation, these massive reservoirs are largely underused.

The Federally-authorized Oahe Project would have irrigated hundreds of thousands of acres of eastern South Dakota with Oahe Reservoir water by pipelines and canals, as well as supplying municipal water.

After nearly two decades of debate and limited construction, the project has found massive resistance. The very people which the project were to have benefited have opposed the project, which is now nearly dead. Deauthorization studies are now underway to investigate the use of the federal money for other water developments.

Pipeline to Gillette

A proposal is now under study to pipe more than 170,000 acre feet of Oahe Reservoir water annually to Gillette, Wyo. The "West River Aqueduct" would be eight foot in diameter and 311 miles in length. Most of the water would be shipped to Gillette for projected use in coal slurry pipelines, power plant cooling and other heavy industrialization. Although potential users of these large quantities of water have not been identified, proponents of the aqueduct are "banking" on future demand.

Seven pumping stations would be required to raise the water 3,500 feet in elevation enroute to Wyoming. The pumping stations would use an estimated 910,541,000 Kilowatts of electricity annually, costing $22,000,000. This power represents roughly one-fourth of the entire yearly electrical consumption of the state of South Dakota.

There have been efforts to influence South Dakotans that present ground water supplies are inadequate and of poor quality, thereby leading them to support such an aqueduct. However, a study by Professor Perry Rahn has indicated that as few as 6,000 residents of western South Dakota would actually receive higher quality water from the West River Aqueduct.

Each proposed route of the Aqueduct includes a branch line running parallel to the eastern or western slope of the Black Hills, extending nearly to Edgemont. Many residents fear that this may represent proposals for large scale industrial uses of water for uranium processing, taconite mining and possible power plant cooling. Proposals presently exist for the construction of at least one uranium processing mill and a taconite processing plant which would require more than 1,000 gallons of fresh water per minute.

Nuclear power plants require tremendous volumes of water for cooling. The S.D. State Geologist has indicated that several square miles of western South Dakota have been found "ideal for nuclear power plant siting or nuclear waste disposal". (Energy Development in the Sixth District," by the Sixth District Council of Local Governments, August, 1976.)

A $1 billion dollar price tag has been placed upon the West River Aqueduct and projected future costs of water delivery range between $1,800 and $2,400 per acre foot. Tax exempt government-backed bonds have been suggested for financing the project. 25 percent of the facility must be available for use (although not necessarily used) by the general public to qualify for such bonding authority. In effect, the general public could finance a project constructed primarily for private, industrial use.

No mention has been made public of a potential builder of the aqueduct. There is speculation in western South Dakota, however, that the contract might eventually be awarded to Bechtel, Inc. (the parent company of ETSI). Bechtel is among the largest construction companies in the world and has contracted projects such as the Alaskan pipeline and a huge Saudi Arabian industrial center. The original cost projections of this industrial complex were reportedly $9 billion, but recent projections indicate the final price tag may reach nearly $55 million. Considering the usual cost overruns, inflation and other unaccountable factors, the West River Aqueduct could also become a costly multi-billion dollar project!

ETSI has supported the West River Aqueduct and has spoken for 20,000 acre feet of Missouri River water annually. They have done so because the Wyoming legislature requires that ETSI show beyond a doubt that it has a water supply that will protect other Wyoming users-reliable under all circumstances.

The U.S. Bureau of Reclamation and the S.D. Dept of Natural Resource Development has been approached by ETSI about purchasing 5,000 to 7,000 acre feet of water annually from Keyhole Reservior. Although the reservoir is in northeastern Wyoming, South Dakota owns the water rights to about 90 percent of the water.

Although ETSI presently has no other plans for coal slurry pipelines, Odasz says "that as we look into the future and see the problems of supply and demand with oil and gas, it is highly probable that if ETSI solves its problems and demonstrates the effectiveness of this first coal slurry pipeline, we may be called upon to do more."

It is the underground water formations which give birth to the springs and streams of mountainous regions. These streams often disappear into "sink holes," where the water recharges underground water formations. Hydrologists and geologists consider the Black Hills to be the recharge area for underground aquifers extending as far away as Minnesota.

The total impact on water supplies from industrial development cannot be accurately predicted, although it could be severe and irreversible. The potential demand on surface and ground water supplies has caused concern that the demand for water may far exceed the recharge rate of underground water formations.

There is some concern that diversions of this scale would critically threaten the efficiencies of present pumping and diversion facilities, eliminating any further development of irrigable land.

Because of the potential effects of these proposals, Bob Alvarez of the Environmental Policy Institute in Washington, D.C., has suggested that the West River Aqueduct may actually be designed as the future water supply for taconite mining in Nemo Canyon, as well as for residents whose underground water supplies are someday depleted by the demands of industrial development.

by Arlen Crane

S.D. Water Congress

The newly-formed South Dakota Water Congress was organized as a "broad based citizens' group" to "identify, support and promote common interests which will unite water users to develop, protect and utilize the water resources of the State of South Dakota.

The participants at the first annual spring membership forum on June 4 and 5 in Pierre, S.D., listened to terms such as "achieving concensus, working together, citizen participation, future needs, awareness, and understanding."

The Water Congress is less than one year old but hopes to become a major mechanism for public dialogue on water use and development in South Dakota. The group claims at this time to support no specific water projects, although one participant at the forum charged that funds were raised in the name of the S.D. Water Congress to elect political candidates favoring the Oahe Project in the last election.

While some of the speakers at the spring forum came primarily to tell jokes, most of the speakers gave lengthy presentations about the merits of their particular federal or state agency. Few of the speakers addressed the issue of water development in South Dakota.

Like the speakers at the forum, most of the participants were state, federal, county, or municipal officials. The average citizen was not well represented.

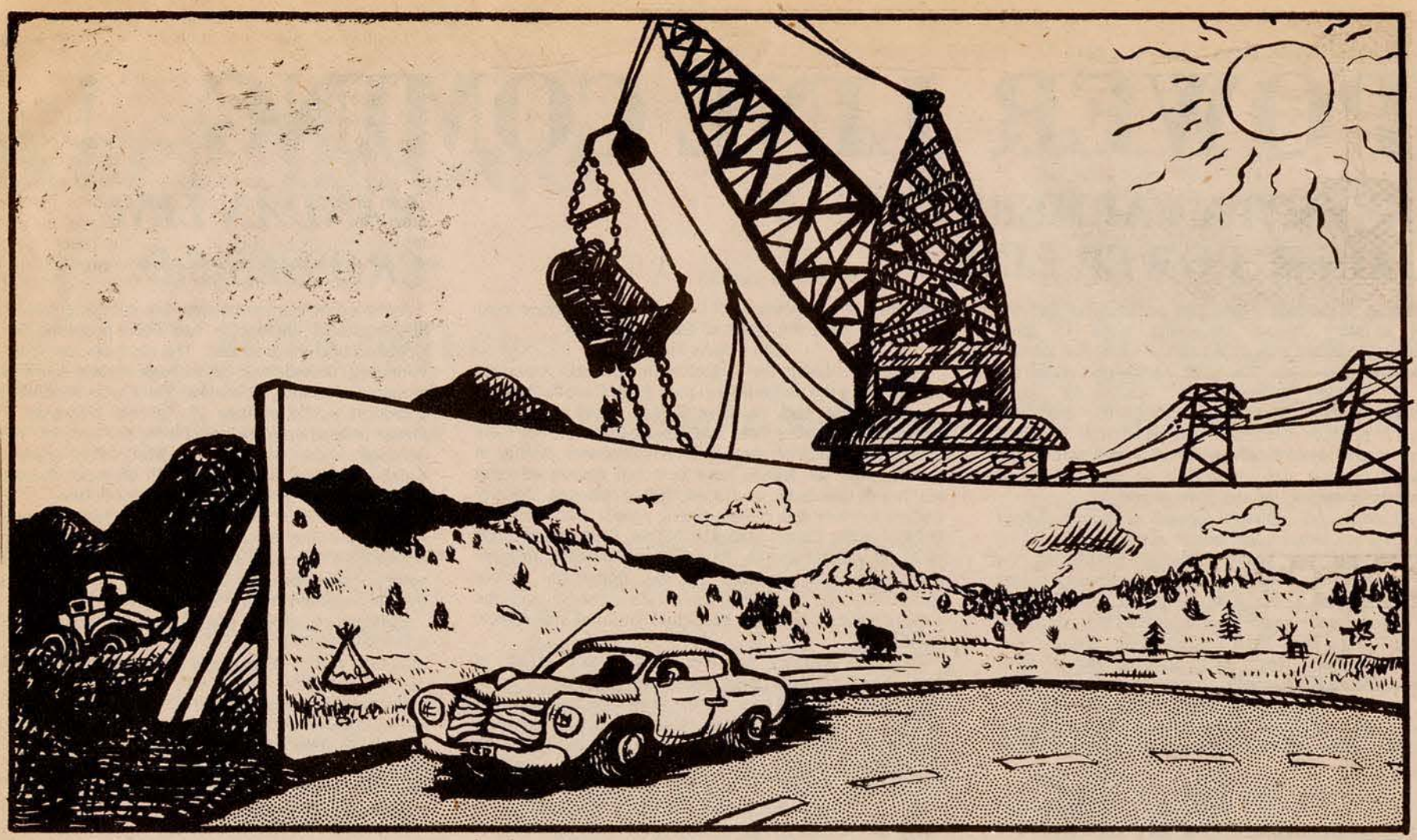
Several speakers at the forum expressed interest in developing the "Energy Bowl in our own backyard." The Water Congress was advised to find a middle ground and avoid court litigation which leads to collisions and prevention of development.

Several of the citizens attending the conference criticized the organizational structure of the Water Congress. There is presently no mechanism to involve citizen participation -- neither officers nor directors are elected by the general membership.

A position on the decision-making Board of Directors, which presently consists of many of the former members of the defunct South Dakota Water Development Association, can be purchased for the fee of $1,000. President Matt Sutton explains that his was the most feasible method of obtaining working capital for the new organization.

A general membership in the South Dakota Water Congress, such as that held by Homestake Mining Company and Bechtel, Inc., can be purchased for $35. The bylaws of the Water Congress call for two forums each year. Another forum is to be held later this year and board elections are scheduled for the spring of 1980.

For more information or membership applications, contact the South Dakota Water Congress, P.O. Box 536, Pierre, S.D. 57501; phone 605-224-7945.



Leonard Rifas

'There is no guarantee in anything.'

What is 10 feet wide, 12 feet high, and 2,000 feet deep? Union Carbide calls it an "exploration adit"...we call it a mine.

According to the operating plan submitted to the U.S. Forest Service, Union Carbide is to begin digging this uranium mine shaft on July 1, 1979, in Craven Canyon. This beautiful canyon is in the Black Hills National Forest, where many ancestral Lakota left their marks. Today, petroglyphs and cliff writings can be seen throughout the area. Investigation of the archeological remains has been minimal, although proposed mining is about to begin.

From this 2,000-foot shaft, Union Carbide plans to remove 5,400 tons of ore for "analysis" and to stockpile 2,500 cubic yards of ore for future processing. The shaft will penetrate the side of the canyon and angle downward. The mining company expects to encounter no water and claims that all impacts on the land will be insignificant.

Because this project is on National Forest land, it must receive approval of the U.S. Forest Service. A total of less than 10 days was allowed by the Elk Mountain Forest Service District for public comment on Union Carbide's proposed "adit exploration." The Forest Service has three basic options. It must (1) approve the plans, (2) approve the plans with modifications or (3) require an Environmental Impact Statement. At this writing, the District Ranger was still seeking information from radiation, soil and water specialists. The South Dakota Conservation Commission has not been formally contacted about the proposed adit operation and it is presently unknown whether the Forest Service will require an Environmental Impact Statement for the 2,000-foot shaft.

A Union Carbide public relations team entered the southern Black Hills in the Fall of 1978 to serenade local citizens with tales of the benefits or uranium mining. The smiling gentlemen arrived in their white limousine to inform the residents that the company had the best safety record of the industry. After a flurry of unanswered questions, the meeting was adjourned for coffee and donuts. A front page **Denver Post** article was displayed at the meeting by an aide to then-Senator Abourezk. The article revealed the use of Union Carbide tailings in Grand Junction, Colo., for construction purposes. "How can you believe what your read in the paper?" was the response from the company.

Union Carbide announced the original start-up date for their mining operations on the Chord Project as mid-1980. They have since announced that their plans have been delayed, and they are now in a a "holding pattern."

"Phase One," the initial five-year operation is to include seven open pit uranium mines and one underground shaft -- all in the Craven Canyon area. Total disturbed area was stated to be less than 200 acres.

The construction of a 500-foot square clay pad 6 to 12 inches thick will be among the first preparation activities. The pad will be piled with 125,000 tons of ore annually for four consecutive years. The pile will be "leached" with sulfuric acid each year, which will be collected in dikes after it has percolated through the pile. The leached ore will be transported in steel drums from the heap leaching site to Gas Hills, Wyo. There, Union Carbide Corp. plans to process the leaching solution into yellowcake at a company-operated mill. Union Carbide has a presently operating mill and has released an EIS for another proposed mill.

The site of the leaching pile is Robinson Flats, a high meadow in the Elk Mountain District of the Black Hills National Forest. The meadow commonly experiences very high winds, and is the originating point for numerous watersheds.

At the public relations meeting, questions about radiation were left answered. Union Carbine Environmental Specialist Rich Miller said that the leaching pile would remain radioactive for "slightly over 100,000 years," but that all radioactivity would be contained "forever" by a 6-by-12 inch clay pad. Miller could not elaborate on the radiation safety program and, when questioned about material leakage, responded: "There is no guarantee in anything."

by Arlen Crane

The future of the forest?

The Forest Service is now soliciting public comment on future use of the Black Hills National Forest. The comments will be incorporated into a plan, to be completed in 1981, which is to be "the single most important document produced by this forest in many years."

The Black Hills are widely sought after and a very valuable resource. Nearly every mineral on earth can be found in the Black Hills,and the dense pine forest supplies one-third of the timber production of 16 Rocky Mountain Regional National Forests. The beauty of the forest has elevated tourism to the second largest industry in the state, second only to agriculture.

Considering the varied interests in the forest, public comment is important. Comment sheets can be obtained from the Forest Service, or comments can be sent on plain paper. Name and address are not required. All comments should sent before the July 16, 1979, deadline to U.S. Forest Service, Box 792, Custer, S.D. 57730. Phone 605-673-2251.

Radioactivity means...

When uranium is chemically activated, as in exploration and mining operations, it becomes radioactive, meaning it begins a decay cycle by emitting tiny charged particles called isotopes. When these particles are ingested or inhaled into one's body, they continue the decay cycle. As a result, these tiny charged particles affect the cells within our body, causing the reproducing mechanisms to become confused. The cells begin dividing rapidly and uncontrollably, causing what is known as cancer.

Stripmining for gold

A State Forestry official was asked several months ago for tree management assistance by a mining company. But days later, the request was cancelled --- stripmining for gold was planned and tree management would not be necessary.

The company is Congdon and Carey Corp. from Denver, CO, a subsidiary of Cyprus Mining Company which has recently become partners with Amoco Oil Company. Congdon and Carey has leased (with an option to buy) numerous patented mining claims in the northern Black Hills from Commonwealth Mining Company.

Unplugged exploration holes have been found on the mining property near the abandoned Guilt Edge Gold Mine. Large rocks had been used to cover the holes.

State law requires that exploratory holes be filled with drill cuttings and soil to within 8 feet of the surface. The hole must then be filled with a five foot cement plug, which is to be covered with 3 foot of soil.

Mryon Lindquist, S.D. Conservation Commissioner, from whom exploratory permits must be obtained, was unaware until recently that the company was active in this area.

Lindquist met with Congdon and Carey officials last week about the exploration activities. The company pleaded ignorance to any knowledge of state laws. Lindquist believes the company actually was unaware of the regulations. He says Congden and Carey are now taking steps to remedy the situation.

The company is presently determining the economic feasibility of the mineral claims. The lease, signed in October of 1974, gives Congdon and Carey the right to construct the facilities necessary for exploration, mining and milling for as long as the minerals are produced in paying quantities. Congdon and Carey has purchase rights to the claims for $2½ million.

National Uranium Search

The National Uranium Resource Evaluation (NURE) is in the process of inventorying the nation (including 37 national parks) for uranium reserves. The survey was authorized by Congress in 1974 and began the same year, originally under the direction of the Energy Research and Development Administration (ERDA). Funding has increased from $2.9 million in 1974 to $56.3 million in 1978.

"We're often misunderstood," said Donald Everhart, project manager of the NURE program. "People like the National parks and environmental people get tense because they think that we're trying to find uranium there. We're not in the exploration or uranium development business".

However, the August 27 '78 Denver Post article says, "A 1975 news release from the Energy Research and Development Administration says, "The program is intended to assist private exploration efforts by furnishing information on the occurence and distribution of the uranium and by identifying new areas for uranium exploration."

The NURE program is now a project of the Department of Energy. Under this survey, uranium has been discovered in many national forests including the Black Hills National Forest.

The project is now in the process of sampling water from one well within every ten square mile radius of the entire United States. Union Carbide has a federal contract for analysis of the samples from the central United States. Union Carbide also recently received a contract to sample the wells in an area of South Dakota, including portions of Pennington, Meade and Lawrence County. The results of the analysis from this area will be available from the DOE in about one year.

POWER LINE COMING !

MINNESOTA FARMERS LINE UP AGAINST POWER LINE

by Winona LaDuke

Beginning in the late 1960's, the government and the energy industry began discussing ways to meet America's projected energy needs for industrial growth in generations to come. The plan, forwarded under the name of "Project Independence," called for large, centralized power plants which could use coal and uranium to produce electricity. This electricity would be fed into a grid system which dividing the nation into regions of varying size, depending on population and availability of space, for the plant sites.

Government and industry looked at where energy resources were located and where electricity would be needed, determining some "optimal conditions" for power plant siting. They determined that power plants should be located in "sparsely populated area" from which the electricity would be transported to large urban and industrial centers. Their reasoning was simple: one, sparsely populated rural communities rarely have strictly-enforced enviromnental regulations, especially if there has been little prior industrialization and two, environmental and health hazards associated with coal- and nuclear-fired power plants would affect a smaller population.

The southwestern United States is a "blueprint" for this energy policy. Four of the country's ten largest coal stripmines, surrounded by five of the largest coal-fired power plants, are located in the Southwest--all in the Four Corners area. The Navajo Nation exports electricity through hig-voltage transmission lines to metropolitan centers of New Mexico, Arizona, Nevada, Utah and southern California. "The annual output is enough electricity to supply the needs of the state of New Mexico for 32 years," according to Navajo Tribal Chairman Peper MacDonald in 1975. Yet, 85 percent of the Navajo households have no electricity today.

Extending northward

The blueprint, perfected by the Southwest experience, is now being adapted to the Northern Plains. One of the first of many projects is an 800 kilovolt (KV) transmission line from Underwood, N.D. to Delano, Min., linking into the Mid Continental Area Power Pool, a grid system of public and privately -owned utilities and members of the National Electrical Reliability Council. From Underwood, the line is DC (Direct Current); at Delano, it is converted into three separate 345 KV AC (Alternate Current) lines and put into the power grid.

The centralized energy grid is a plague to dairy farmers of West Central Minnesota. Accordi' to George Crocker of the General Assembly to Stop the . ower Line (GASP): "Starting almost a decade ago, the industry began to get ideas about the western coal front. As soon as the plans materialized, the people started fighting-a struggle which has taken many forms for almost eight years.

During the late 1960's, oil companies and coal producers (many of the same corporations) began to realize that America's continued industrial development was going to run against hard times in eastern labor-intensive underground coal mines-where almost 400 years' worth of coal remains. Instead, companies looked eagerly toward the "Great American Coal Basin"-the western United States. There the coal lies close to the surface and high production with minimal labor costs is the name of the game.

"The North American Coal Company is the second largest independent (not owned by oil companies) mining company in the United States, a leader in eastern underground coal mines," Crocker contined. "So the company began looking for a way to get into western coal and talked to the United Power Association (UPA) and the Cooperative Power Association (CPA), two small utilities based in Minnesota. An agreement was made--the North American Coal Company would produce the coal and the utilities would transport and distribute the electricity."

As David Thompson reported (in the Northern Sun News, May 1979): "When the Cooperative Power Association (CPA) began projecting costs during the early 1970's, they claimed that the low-grade lignite mined in North Dakota would be cheap enough to make up for the $220 million more it would cost to build the plant in North Dakota and to construct the 800 kv line. Once that decision was made, the cost of lignite quadrupled."

Thompson continues, "Falkirk Mining Company is a wholy-owned subsidiary of the North American Coal Company. The project was set up in such a way as to enable Falkirk to benefit from large, low-interest loans which CPA and UPA were able to obtain through the Rural Electrification Administration (REA). The contract between CPA and UPA and Falkirk is set up in such a way that the more Falkirk's cost of production increases, the more money they receive...The cost of the project has already increased from $536 million to $1,246 billion, and the electricity it produces is expected to be some of the most expensive in the state...."

Studies indicate that, although this coal uraniferous lignite, as it is called is low in sulphur, it is high in other toxic materials. The Environmental Impact Statement for a large coal-fired power plant (Sherburne, MN) indicates that one plant would emit one ton of uranium per year directly into the air from the smokestacks. It is the residents of Underwood, N.D., and other similar coal towns that bear the brunt of these emissions.

Side effects studied

The 800 KV line is the largest so far in North America, but others in the planning will pass from Canada through South Dakota and be even larger. Over such long distances, the power lines lose almost 50 percent of their electricity, which permeates the environment. Studies in Sweden and the USSR have detected decreased crop yields and incidence of nausea, dulled reflexes, sterility and many other side effects among people in the vicinity. Studies in the United States by Marin, Becker and other point to similar health hazards. In contrast, government-contracted research by the Bonneville Power Administration (a federal corporate agency) and the Edison Electric Institute has found minimal side effects to life.

At recent hearings, however, on the health effects of high-voltage transmission lines, held in West Central Minnesota, farmers from across the state testified that nausea, abnormal rashes, migraine headaches and nosebleeds were common to all communities. "The government and the companies tell the people along the DC line that the DC line is safest, and along the AC line that AC is the safest," says Crocker. Meanwhile, according to Gloria Woida, a dairy farmer and member of GASP, "The companies came out and told us to put grounding wires on tractors and equipment to prohibit shocks and other 'side effects.'" Cows have died from shock and crop yield is down in the Four Corners area, where high-voltage transmission lines are even lower in voltage than those in Minnosota.

The dairy farmers oppose the power lines not only because they are unhealthy and disrupt productive crop land. They despise the power lines because they represent large corporate and government interests, rather than the wishes of the people.

The people of Minnesota are determined to stop the power line-with their bodies, if necessary. George Crocker of GASP explains: **"All administrative and legal remedies have been consistently tried by the people resisting it--hearings, courtcases-we're always looking for new legal remedies. We're also engaging in civil disobedience and many arrests have taken place-interfering with construction, trespassing, and many more...we take it to the jury to decide. By and large in the courts, we've won. Of 42 misdemeanor charges, we've had 35 wins. In 70 misdemeanor charges where the people were indicted by a grand jury, when the people refused to plea bargain, the cases were all dropped...So far seven of the towers have gone down, this power line will never be a reliable source of electricity."**

Crocker summarizes in words which may apply to more than the dairy farmers of West Central Minnesota, "This is a giant corporate laboratory of a very ill-conceived experiment, of which the residents of the area are the guinea pigs." Farmers are now organizing throughout Minnesota.

Surplus electricity

Ironically, the electricity from the transmission lines is not currently needed; the utilities already have a surplus. As in the Four Corners area, the power lines are constructed to supply FUTURE electricity needs--for industrial and mining interests, not communities.

An articile in the November 1978 issue of **Engineering and Mining Journal**, titled "Minnesota: Action Heats Up in the North," reported that at that time, 35,000 acres had been leased for uranium exploration by five companies. Seven months later, in June 1979, exploration had intensified drastically. According to Don Olson:

"At least seven companies are exploring for uranium in Northern Minnesota, including such late arrivals as EXXON and Anaconda. The most heavily involved is Rocky Mountain Energy, a subsidiary of Union Pacific Railroad. Rocky Mountain has about three-fourths of the 125,000 acres that the companies have leased, all from private landowners hoping for a big pay day-few knowing beforehand the dangers of uranium mining and the nuclear fuel cycle. The area involved is about 100 miles north of the Twin Cities, and about 20 miles south of the Fond du Lac Reservation. So far, there has been no leasing of reservation land."

Olson continues; "An area group called Folks Organized for Responsible Energy has joined the Northern Sun Alliance in opposing the uranium development. They have tried to influence County officials, but have had little success. A battle in the legislature has resulted only in a standoff. The State regulatory agencies are lumbering into action but can barely keep up with the proposed copper and nickel mining. The State Executive Board will soon decide whether to allow exploration on state lands. Much education still needs to be done around the uranium mining issue."

The attempts by the government and companies over the last ten years have done little to ensure "reliable power" for industrial growth. The power lines still do not operate. If the work of GASP is a precedent, the industrialization and mining slated for "sparsely populated," rural areas might never come off the drawing boards.

Gloria Woida of General Assembly to Stop the Power Line is a featured speaker at the Save the Hills Symposium of the National Gathering of the People.

MANDAN LINE CROSSES S.D.

A 500 Kilovolt transmission line carrying 1,000 - 1,500 Megawatts of electricity has been proposed for construction beginning in 1981. The 630 mile line from near Winnepeg, Canada will cut through eastern south Dakota enroute to Norfolk, Nebraska. The Curtis Amendment to a federal public utilities law grants Nebraska Public Power federal eminent domain for the project. There is question about whether the McGovern amendment, which addresses states rights in eminent domain, actually gives the states any real jurisdiction.

Nebraska Public Power has not established a proposed route, according to representative Dan Rice. They have presented a 50 mile wide study area from which several potential corridors will be selected. The exact route will then be selected from these corridors.

Also participating in the estimated $500,000,000 project is Northwestern Public Service, Northern States Power, Manitoba Hydro, Minnekota Utilities, Ottertail Electric, and other utilities "south and east".

The project, scheduled for operation by 1984, is a seasonal diversity exchange project, which will transfer electricity from Nebraska to Canada or vice versa, during peak demand. The primary demand for this electricity presently stems from large scale center pivot irrigation in Nebraska.

Rice says the project is an "opportunity to use a renewable resource" and that the "real benefits of the Man Dan Project are to this region (eastern Missouri River area). We plan to work with the concerned groups, with the farmers. Nebraska Public Power could not survive if we stepped on the farmers," says Rice.

There appears to be little opposition to the Man Dan line at this time, although this may change when the exact route is announced. A public hearing was recently held in Sioux Falls, which was attended by 40 to 50 people, mostly utility representatives. Testimony included concern for the loss of irrigable land, lack of local government involvement, eminent domain, wildlife habitat and biological health effects of high voltage transmission lines.

Leonard Rifas

Safe limits?

"If the allowable level of radiation resulting from radon gas emissions is established as twice the existing background level, the people living in the southern Black Hills may be legally exposed to excessively high levels of radiation."

John Sanderford, chairman of the Black Hills Energy Coalition, claims the Tennessee Valley Authority may be purposely stalling the clean up of the old uranium mill tailings at Edgemont, to allow higher radiation emissions from their proposed mining operations.

Sanderford's comments were made in relation to the Draft Generic Statement, which indicated that the legal allowable standard for radon gas emissions may be established as twice the present level of background radiation. Sanderford claims that the background level of the southern Black Hills is uncalculable, but that the high radiation levels from the old mill tailings and the abandoned mines may be incorporated into the background standard. Sanderford says this would allow radiation emissions "far above safe limits".

A generic standard is to be set in the near future which will establish new standards for allowable radiation emissions from uranium mining and milling. The standards are to be set by the Environmental Protection Agency and will be enforced by the Nuclear Regulatory Commission.

We plan for survival - the international fair

The international alternative energy and lifestyle fair planned for the spring of 1980 in the Black Hills is focused on survival.

On Sunday, July 8, during the rally at Nemo Canyon, representatives from every alternative area of concern for the survival of our future generations will meet to plan the "BLACK HILLS GATHERING OF 1980." The Black Hills Survival Fair is an idea that has been in circulation for several years and which the Black Hills Alliance plans to make a reality. We plan to invite a large group of people with diverse backgrounds to discuss questions of survival such as decentralized, renewable energy; an end to nuclear proliferation; better community planning and organization; alternative education systems; a fair economy and a better understanding of cultural perspectives, to name a few.

The Survival Gathering will discuss these ideas, as well as three events that need to be organized in this coming year:

(1) A CITIZEN'S REVIEW COMMISSION ON THE ENERGY DEVELOPING CORPORATIONS: the effect of multinational practices and policies on People throughout the world, with witnesses and documentation from around the world;

(2) AN APPROPRIATE TECHNOLOGY DEMONSTRATION-EDUCATION PROJECT: to demonstrate, once again, the existing alternatives to wasteful and destructive technology and to provide representatives and observers from so-called "developing" countries with a vision of what the best minds in this post-industrial society can conceive for our future survival;

(3) A FORUM FOR THE TRADITIONAL NATIVE PEOPLE: to present their view of the land -- past, present, and future. We must emphasize that this effort will demand a serious attitude.

We invite you all to attend and participate in this plan for survival. Tomorrow depends on our actions today. Let us all help to make a better world for our children.

-- **Janeen Walker**

W.A.R.N.

In September of last year, Women of All Red Nations (W.A.R.N.) held a founding conference in Rapid City, S.D. Some 200 women attended the conference from Native American nations throughout the United States and Canada.

Since that time, organizing, research, and documentation around the primary issues of resource exploitation (human and non human) has been underway. Much of this research has contributed to this publication. In June of 1979, another W.A.R.N. conference was held in Seattle, Wash., attended by many Native people from Canada and the western part of the United States. People discussed and documented energy resource exploitation on Canadian Indian lands, in the state of Washington, on the Spokane reservation, and planned exploitation for the Black Hills area.

Several women who participated in this conference are now working with the Black Hills Alliance, including one of the keynote speakers for the June 6 Symposium - Madonna Thunderhawk. Larry Anderson from the Dine (Navajo) nation also attended the Seattle WARN conference and will be speaking at the Symposium.

AS I'M STANDING HERE ALONE, UP IN THESE SACRED HILLS
I SEE VISIONS OF YOU, GONE WHEN ALL THE LAND STOOD STILL
RICH PEOPLE WERE CRYING, THERE IN THE CITIES ALL ALONE
WITH NO PLACE TO SPEND THEIR MONEY, AND NO PLACE TO CALL THEIR OWN.

FOR THIS LAND YOU'RE STANDING ON IS STILL OUR GRANDFATHERS' LAND
YOU KNOW WHEN YOU FIRST CAME HERE WE SAID: BROTHER TAKE MY HAND
BUT YOU PUSHED US AND WE MOVED, YOU CHASED US SO WE RAN
YOU KILL US ONCE, WE DIED FOR YOUR PROGRESS AND GENOCIDE,
. . . YOU RAPE THE LAND.

BUT WE'RE BACK TO LET YOU KNOW, IT IS HERE WE MAKE OUR STAND
NO MORE WILL WE RUN FROM YOU, NO MORE WILL YOU RAPE THE LAND
WE KNOW YOUR WAY OF LIFE IS GOING, WE CAN SEE THE END IS NEAR
WE CAN SEE IT IN YOUR FACES, WE KNOW THAT YOUR HEARTS ARE FULL OF FEAR.

FOR THE LAND YOU'RE STANDING ON, IS STILL OUR GRANDFATHERS' LAND
IT WAS PAID FOR WITH THEIR BLOOD, FROM THE GUNS IN YOUR HAND
BUT WE'LL BE HERE WHEN YOU ARE GONE, FOR YOUR TIME IS RUNNING LATE
WE DIED ONCE AND YOU LIVED ON, BUT YOUR GREED HAS MADE US STRONG
. . . SO NOW WE WAIT.

by Wenjack

Navajo shepherd Emma Yazzie tends her sheep in the shadow of the 4-corners power plant. Pollution from this plant could be seen by the astronauts

We Thank the People

We would like to express our gratitude to the hundreds of people who have made the National Gathering of the People possible. Initially, we express thanks to the speakers and musicians at the Save the Hills Symposium: Larry Anderson; Sister Rosalie Bertell, Ph.D.; Jackson Browne; Dick Gregory; Freebo; Dr. Judith Johnsrud; Marvin Kammerer; David Lindley; Bill Means; Sara Nelson; Danny O'Keefe; Bonnie Raitt; Madonna Thunderhawk; John Trudell; Floyd Westerman; Gloria Woida; Jesse Colin Young and many more.

We would also like to thank the residents and businesses of Rapid City and surrounding area for their generous donations - Clutter Corner, Furniture Mart, Ray's Secondhand, Second Time Around, Sewell and Tobin Furniture, Self Service Furniture, Arrow Pawn Shop, Rapid Rent All, Valley Landscape Nursery, Plant World Inc., Jolly Lane Floral, Gary's Flowers and Gifts Inc, and a special thanks to Night Sky Music.

We also thank everyone who made this possible - more names than we can mention, including the tireless workers of the Alliance house, who furnished support, music and celebration. For the work and support of local and national people, may the struggle be easier for our grandchildren.

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Something 'left to fight for'

"We hear great things from Washington as to things they are going to give us in the form of armaments to defend us," says Sam Masten, an attorney from Canton, S.D. "Rather than than what they give us, I would like to have Congress consider what we're going to have left to fight for. That, to me, is the real guts to this Black Hills dispute."

Masten grew up in Nemo Canyon before the days of modern conveniences. He owns the property on which he was born and plans to defend that land from the proposed iron ore mining of the Pittsburgh Pacific Mining Company. He and many other residents of the Nemo Valley are deeply concerned about the impacts of the proposed mining.

Pittsburgh Pacific will mine 96 million tons of ore from Nemo Valley during a 20 year project. The production of one million tons of taconite (iron ore) pellets annually would net the company profits of $900,000 each year. An open pit mine covering 240 acres would result in the removal of a 400-foot high mountain in one of the oldest geologic areas of the Northern Hemisphere. A cold-water trout stream flows past the base of the mountains as it winds through the northern Black Hills. An open pit would extend below the valley flow where the mountain once stood.

John D. Boentje, Jr., President of Pittsburgh Pacific Company, claims, "One of the important things...is to gain the confidence of the people living in this part of South Dakota that we would be able to come in and be a good neighbor." The company has never addressed the community about its proposed operations.

Pittsburgh Pacific's mineral claims were filed in the mid-1950's under the 1872 Mining Act. Under that law, anyone may file a mineral claim on public land provided that the equivalent of $100 worth of work be performed on the claim each year. After five years, the holder of that claim may file for a patent, which would transfer the land from public to private ownership. Before a patent can be issued, it must be proven that sufficient quantity and quality of minerals exist within the claim, and that it would be economically feasible and profitable to mine by a person of "ordinary prudence."

Once a mineral claim becomes private land, the owner is free to develop that land through any method and for any purpose which it so chooses, provided that it is within the limits of state and local law. Pittsburgh Pacific has indicated that it would not mine its claims in Nemo Valley if a patent were denied.

A mineral patent has been granted to Pittsburgh Pacific, although the Forest Service has appealed that decision for many years. They have asked that the mineral claims become null and void on the grounds that the proposed mining operation is not economically feasible. Even after the mineral evaluation report and supporting data were presented to the Forest Service in 1970, they remained convinced that the claims were not economically feasible to mine, concluding that the report was either inaccurate or seriously lacking in detail.

Through various court proceedings, the Forest Service has contended that one 800-foot diamond drill hole drilled in 1957 is not sufficient to determine the extent of the ore body beyond the diameter of that hole. In addition to the 240-acre mine, 900 acres of land would be required for support facilities, such as a processing plant, tailings ponds, water reservoirs, waste dumps, etc.

Water needs

The Forest Service has further testified that the costs of purchasing and transporting water to the processing facility have not been included in the cost-benefit analysis. Nearly 25,000 gallons of water per minute will be required during magnetic separation at the processing plant. Despite the recycling of 95 percent of the water, the plant will require over 1,000 gallons per minute of fresh water. Goentje says, "We haven't gotten into a detailed analysis of this, but we are confident that this will not be an insurmountable problem."

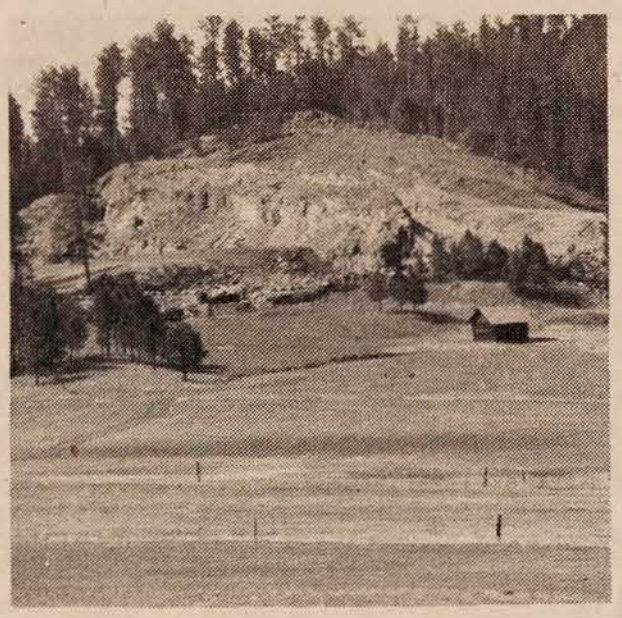
Box Elder Creek flows through the Valley at the rate of approximately 1,600 gallons per minute. While Pittsburgh Pacific has indicated intentions to use this water, the Forest Service has questioned the likelihood of the State Water Resources Commission issuing such a water permit.

Many of the residents of the northern Hills are concerned about not only the use of Box Elder Creek as a water supply, but also the inevitable pollution of the stream. The Creek disappears frequently into "sink holes," which are known to recharge underground water formations. Tests using colored dyes have found that the water of Box Elder Creek emerges in numerous areas of the northern Black Hills. This would indicate that leaching and runoff from the mine, as well as releases from the processing plant, could result in pollution to numerous watersheds of the northern Black Hills.

Local citizens at Nemo Valley organized in the early 1970's to stop the activities of Pittsburgh Pacific. Since Pittsburgh Pacific would probably not mine without receiving a patent on their claims, the group has lobbied the State legislature to enact strict reclamation standards which would prevent the mining in their valley. Despite frequent testimony and countless hours of research, the "Concerned Citizens of Nemo" have been left defenseless. The only result of their efforts was an act of the State legislature in 1975 which created a moratorium on all new mining in the Black Hills for one year. The law may have been unconstitutional and was never tried in court.

From a $28 million initial investment, Pittsburgh Pacific expects net annual profits of nearly $1 million a year and a total of nearly $20 million. However, a former industrial economist for the U.S. Bureau of Mines, Dr. Petrick, testified in 1971 that adjustments to the scenario of Pittsburgh Pacific could result in a net cash return of zero.

Although no specific markets for the annual production of one million tons of taconite pellets has been identified,



A small taconite mining project in Nemo Canyon has been contracted to Lien Construction by Colorado Fuel and Iron.

the company intends to ship the taconite to Chicago, St. Louis, or Pueblo, Colo. Rapid City has also been mentioned as a possible market place, which has led to speculation that a steel fabrication facility would be located in the area.

Ten thousand cars per year would be required to transport the pellets to the market place. The Burlington Northern has expressed great interest in the transportation of taconite from Nemo Valley and owns a railroad line from Edgemont to Deadwood. For the ore to be shipped along the Burlington route, a 12-mile branch line must be constructed along an abandoned railroad bed at the cost of approximately $150,000 per mile. Although less than 50 railroad cars are shipped per week between Edgemont and Deadwood, the company has begun rebuilding the 100-mile route.

NEPA

The National Environmental Policy Act (NEPA) requires that an Environmental Impact Statement be issued for any project of the federal government which constitutes a major action causing significant environmental impacts.

The State of South Dakota has appealed a decision by Federal Judge Andrew Bogue that no Environmental Impact Statement is required prior to the issuance of a mineral patent to Pittsburgh Pacific Company. Mr. Sam Masten has joined the State as an **amicus curiae** in appealing that decision. He is "opposed not only to the Pittsburg (Pacific) mining, but to any form of uranium mining."

The issue at hand is not whether the proposed mining operation of Pittsburgh Pacific will have a major environmental impact. The debate is whether the granting of a patent to the company is a major federal action which shall require an EIS.

The State of South Dakota contends since Pittsburgh Pacific has indicated that it will not mine if a patent is denied, the issuing of a permit is indeed a major federal action. The State feels that an EIS will help determine the environmental costs and consequences. If those costs are prohibitively high, thus making the project economically unfeasible, it would be reason enough to refuse the granting of a mineral patent.

It is not only the proposals of Pittsburgh Pacific that worry the local residents, but also the presence of other companies such as Johns-Mansville and Colorado Fuel and Iron (CFI). CFI owns portions of the Valley, which it leases to local residents on a yearly basis.

Johns Mansville has reportedly informed Senator McGovern that they are pulling out of the area, although they will still maintain approximately 2 dozen claims next year.

The citizens of Nemo Valley fear that the long-term land values of the area will drop. "We all like the way of life here. We really don't want it changed," says Barb Troxell, an organizer of the citizens' group. Survey crews trespassing on land she has owned for several decades have placed claim stakes in her driveway. Others have chased trespassers away at gunpoint.

The Concerned Citizens of Nemo have remained inactive for several years -- since they saw the futility of their efforts in the State legislature. But a renewed interest in mining within their valley, along with a growing concern about development throughout the Black Hills, has motivated the group to begin organizing once again.

The joining of forces by all the concerned Black Hills residents could mean big trouble for the mining interests.

by Arlen Crane

Whose Sacrifice?

"National Sacrifice Area." What do those words mean to you?

To the people of the Black Hills, many of whom trace their roots here for thousands of years, they could mean total devastation of lives and homeland. They could mean coal, iron and uranium mines with hundreds of square miles of land permanently destroyed by stripping. They could mean nuclear power plants, seventy coal-fired generators, huge coal slurry pipelines and dangerous overhead transmission towers. They could mean crowded, dirty industrial centers on the prairie. And they could mean an end to critical water resources, without which life here would not be possible.

The phrase "National Sacrifice Area" was first used to describe the effect of strip mining on the Great Plains area in a National Academy of Sciences study entitled "Rehabilitation Potential of Western Coal Lands.' The study funded by the Ford Foundation, concluded that those areas receiving less than ten inches of rainfall per year could not be reclaimed. Areas receiving slightly more rainfall had some chance of reclamation, but this land, too, would suffer severe consequences from the mining operations. In short, taking massive amounts of coal from the Great Plains could render much of it an ecological graveyard---a "sacrifice" to the energy crisis and the corporations behind it.

Further studies since the National Academy of Sciences report have concluded that geological formations containing coal also often contain other valuable resources, including uranium, taconite and copper--the mining of which has effects on the land little different from the mining of coal. Some minerals are more toxic than others, but all bring serious consequences for the land and water.

Over 25 corporations are now scouring western South Dakota for mineral and water resources. Multi-nationals, energy cartels and federal power agencies are investing millions of dollars in mining and industrial projects here from which they expect to reap billions.

National energy planners now seem intent on criss-crossing the Black Hills and the entire Great Plains with huge mines, pipelines, power plants, transmission lines and industrial projects, all in the "national interest."

But what about we Dakotans? This state lives on farming and tourism. Will the giant corporations that come here to mine our beautiful hills and take our water consider our well-being when they leave? Will the short term jobs in the mines compare to permanent jobs on our land? Will the multi-nationals be concerned about the air and water on which our children and future generations must depend? Once these essential elements are gone--they are gone forever.

Mining companies have abandoned 3½ million tons of radioactive mill tailings on the banks of the Cheyenne River, to be blown in the streets of one of our local communities. According to the Nuclear Regulatory Commission, uranium processing releases more deadly radiation into the environment than even the operation of atomic reactors.

A very serious question must be asked by every South Dakotan and every world citizen. Who shall decide the fate of our future? It may soon be decided for us!

It is time to bury past differences--differences of age, religion, race and attitudes. It is time to act like neighbors.

-BHA

BLACK HILLS - PAHA SAPA REPORT is published monthly by the Black Hills Alliance. Contributors this issue include -

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