

sierra club
radioactive waste
campaign

the Waste Paper

Volume 7 Number 2



The Grand Canyon Uranium Mining Hole?

Nowadays, it's getting harder to know what is natural and what is artificial. For instance, that giant hole in the ground in Arizona may not be the Grand Canyon, formed naturally by the Colorado River—but may, in fact, be a giant uranium strip mining operation.

Under the Mining Act of 1872, Energy Fuels Nuclear, has claimed the rights and is mining within 16 miles of the Canyon's North Rim, while preparing to open another mine within 13 miles of the South Rim, and two miles from the park's

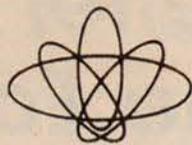
main entrance. The company projects it will mine 200 tons of ore per day, translating to ten 18-wheeler truckloads per day, using the National Park's main access road on its way to its uranium mill 240 miles away in Utah.

Energy Fuels Nuclear says it will return the sites to their natural beauty once the mining operations end. Until that time, the *Waste Paper* encourages Grand Canyon visitors to ask park rangers where the "real" Grand Canyon is located.

photo by Brian H. Starkey

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Tennesseans Organize Against High-Level Waste Storage

First it was RSSF, then AFR. Now MRS is the Department of Energy's (DOE) latest plan to "temporarily" store irradiated nuclear fuel from power reactors. The MRS, or Monitored Retrievable Storage Facility (MRS), proposed by DOE for the former Clinch River Breeder Reactor site near Oak Ridge, Tennessee, would receive, store, and repackage waste from commercial nuclear reactors. The packaged nuclear waste would later be shipped West to a permanent deep underground repository, yet to be identified.

No matter which initials are used, they spell storage, rather than disposal, and the opposition has been intense over the years. DOE, hoping to find a politically receptive area of the country, has seen opposition by Tennessee environmental and citizens' organizations grow since it first proposed the MRS on April 25th of this year. Local citizens say that transporting this highly radioactive fuel is risky, and they fear that the MRS will become a de-facto permanent waste facility.

"Utilities can store in on-site storage until a permanent repository is built. Having a 'temporary facility' takes the pressure off DOE to pursue a real solution to this country's radioactive waste problem," said David Twiggs, organizer for Tennessee Valley Energy Coalition (TVEC), a valley-wide group with over 6,000 members that has led the battle to keep the MRS out of Tennessee.

Pushed by their constituents, an array of State and Federal officials have now lined up against the MRS facility. Five U.S. Representatives, including Representative Marilyn Lloyd, who represents the Oak Ridge district, and chairs the Subcommittee on Energy Research and Production, now oppose the facility. Congress must approve the MRS plan, sure to come before Representative Lloyd's Committee this January. According to Lloyd, "The area has been maligned in the press, both locally and nationally, by the revelation of environmental problems over the past two years. Building the MRS would make it harder to promote the area as a good place to live and do business." Conspicuously absent from the opposition so far are the two U.S. Senators from Tennessee, Gore and Sasser.

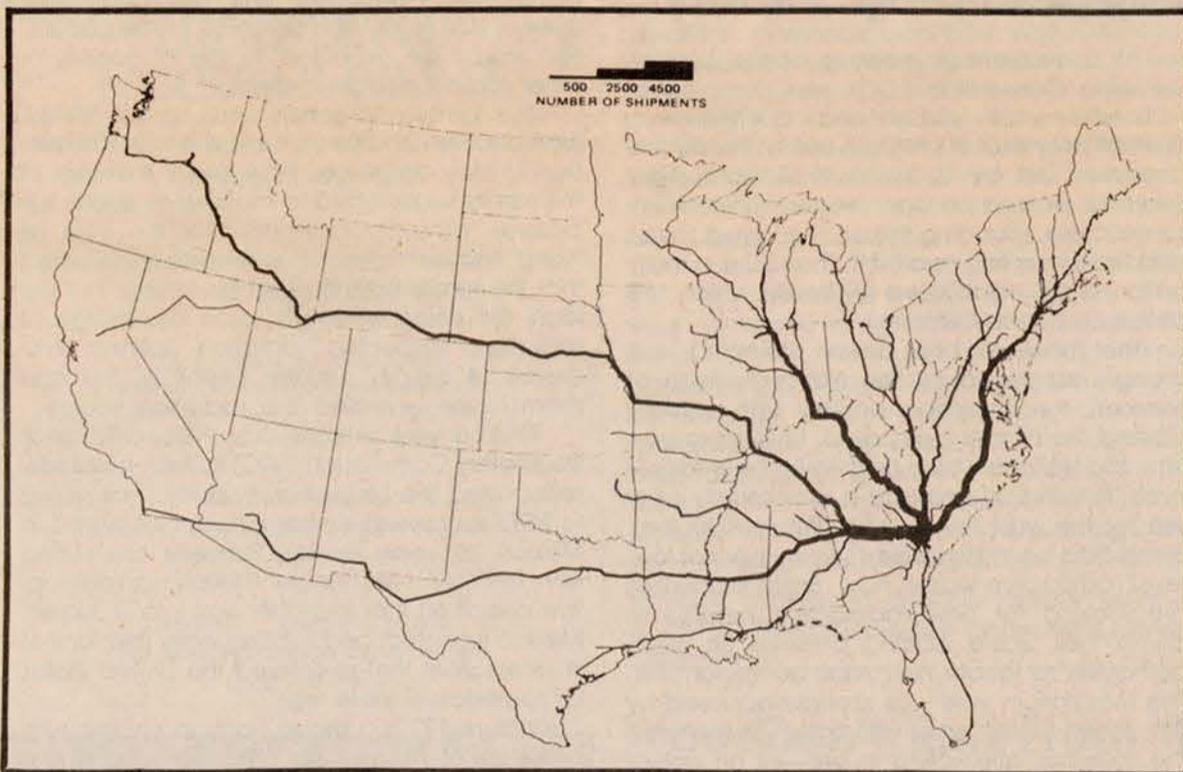
Many in the immediate Oak Ridge community favor the project. Oak Ridge is currently faced with the prospective layoff of 2,500 workers in the coming months, when the DOE's Gaseous Diffusion Plant shuts down. Some see the waste facility as an opportunity to save jobs in the area, though DOE projects only about 500 to 700, largely unskilled, jobs at the MRS. The Oak Ridge/Roane County Task Force, funded by a grant from DOE, in its final report released in mid-October, approved the MRS subject to certain conditions:

1) DOE must first cleanup past contamination problems before siting a new local facility. The mercury spill at the Y-12 plant, and proper decommissioning of the Gaseous Diffusion Plant, were cited in the report

- 2) DOE must pay to widen highways leading to the proposed Clinch River site, and put up sound barriers.
- 3) The County Task Force must oversee the operation, with the right to a veto.
- 4) DOE must put a cap on the allowed tonnage at the site.
- 5) DOE must provide tax payments as if it were a private industry.

While these conditions, if followed to the letter, will be impossible for DOE to satisfy, environmental observers expect these conditions are only negotiating points and that the local community will compromise in order to bring in the "waste" industry. Since only a part of the \$100,000 grant was used to produce the local report, the County Task Force has proposed using the remainder to lobby the State Legislature on behalf of the DOE proposal. MRS opponents are questioning the legality of using federal tax money to lobby State Legislatures.

Moving away from Oak Ridge, support for the MRS rapidly declines. Statewide office seekers have made it a campaign issue. Governor Lamarr Alexander's Safe Growth Team (SGT), funded to the tune of \$1.4 million by DOE, has held several meetings, and has appointed a team of experts to review the MRS proposal. The SGT report, to be issued in December, will present findings, but no conclusions. In public hearings, members of the Team have questioned the need for the facility. The Legislature has also been holding statewide hearings on the issue. The last hearing, to be held December 2 in Nashville, will be preceded by a motorcade organized by TVEC. The State Attorney General has sued DOE because the State was not consulted prior to the MRS decision, as required by the Nuclear Waste Policy Act.



Like little brooks feeding into a raging river, highly dangerous irradiated nuclear fuel would converge on the MRS facility at Oak Ridge, if the Department of Energy has its way.

But Tennessee opposition is intense. The map shows shipments to Barnwell, South Carolina, but the concept is the same.

map courtesy of the National Academy of Sciences

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Radscope

What if They Threw a Nuclear Accident and No One Brought Geiger Counters

The New Jersey emergency response system has been widely acclaimed by the Nuclear Regulatory Commission. The NRC, in report NUREG-2225 says the New Jersey system relies "on fast 'first-strike' actions by qualified state-level responders who have 'basic' response kits in personal automobiles, and are located throughout the state so that they can get to a scene within an hour or less."

Well, yes, they can get to the scene rapidly all right, but scratch the "basic response kits." Apparently, money in the Nuclear Emergency Response Fund was used to purchase televisions, radios, videocassette recorders, personal computers, hardware and building supplies, according to an October 27 article in the *New Jersey Star Ledger*. The Fund, financed by a charge against utilities, is designed to provide money to help localities prepare emergency response plans.

Eugene Fisher, Chief of the Bureau of Radiation Protection, was suspended without pay after charges involving misuse of public property and conduct unbecoming a state employee were brought against him. His assistant, Joseph Chiacchio, died of self-inflicted gunshot wounds August 27. Chiacchio was responsible for signing the vouchers. According to one investigator, "What we seem to have is a lot of questionable purchases."

Sea Dumping Victory!

At a September meeting of the London Dumping Convention (LDC), sea dumping of radioactive waste was banned indefinitely. In a dramatic reversal of previous policy, twenty-five countries, led by Spain, Australia and New Zealand, passed an open-ended moratorium; six countries, including Britain, the United States and France, voted against it. The LDC is a multinational body, established by treaty, which sets policy on ocean dumping.

The move to ban ocean dumping was strongly supported by the National Union of Seamen, the European workers who actually pushed the barrels overboard. Under pressure from the National Union and environmental activists, Britain had imposed a moratorium on itself for the past three years. Previous to that, Britain had been the largest sea dumper of low-level radioactive waste. Now, British authorities are looking for new radioactive landfills to dump their waste, putting pressure on British authorities to locate new radioactive landfills. The moratorium vote was strongly opposed by the United States, who, with Britain, filibustered the meeting, attempting to prevent an actual vote.

British Labour Party Says No to Nukes

With 62% of the vote, and against the wishes of its Executive Board, the Labour Party urged that Britain's nuclear power program be halted, and that all existing plants be phased out. The surprising October 2 vote was led by the National Union of Mineworkers (NUM), who oppose the import and transport of nuclear waste and waste within Britain.

Up to now, most European parties which represent workers have supported nuclear power because of the jobs created. But British mine workers racked by a coal strike for the past year, view nuclear power as a net job loss. The coal miners' strike was caused by Prime Minister Thatcher's desire to close "unprofitable" mines. "Profitability" is a relative question, considering her tremendous subsidies for the nuclear power industry.

Fortunately, no nuclear accidents occurred in the State, though a large number of irradiated fuel shipments have taken place from West Valley, New York, to the Oyster Creek reactor over the past year. Imagine the surprise in getting to a transportation accident and finding nothing in your "basic response kit."

Moroccan Family Dies of Radiation Exposure But It Was Only "Low-Level"

Life being what it is, it's not surprising that a family of eight might die in Morocco in 1984. What makes the event unusual and tragic is that the family died of massive radiation exposures.

In March 1984, an iridium-192 (Ir-192) radiation source, used to radiograph welds at a fossil fuel power plant construction site, was discovered by a laborer and taken home. Unbeknownst to the worker, the gamma radiation source, about the size of a button and shiny as jewelry, was emitting extremely high levels of radiation, 150 rems per hour at one foot from the source. A three hour exposure produces a dose of 450 rems, at which 50% of the population would be expected to die of cancer or other radiation-related effects.

The family and guests were continually exposed to the source in their one-room house. During May and June, 1984, every member of the family succumbed to massive radiation exposures, clinically diagnosed at the time as "lung hemorrhages." It was initially assumed that the family died of food poisoning, but the local fire chief, who had some knowledge of radiation, suspected radiation sickness syndrome. A geiger counter check of the one room home revealed the radiation source.

Over a year later, in July 1985, a Nuclear Regulatory Commission (NRC) Bulletin belatedly recognized the Moroccan tragedy. According to NRC sources, a similar incident occurred in Mexico 20 years earlier. Parallels are strong with another 1984 incident involving radioactive cobalt-60 that found its way into a Juarez, Mexico junkyard, and subsequently into tons of stainless steel that re-entered the United States as radioactive table legs.

Iridium-192 is a strong gamma emitter, with a half-life of 74 days. For use in radiography, it is attached to a wire, called a pigtail, and sits inside a shielded container when not in use. To radiograph welds, the container is placed in a pipe, and the radiation source is pushed down the pipe by a drive cable attached to the pigtail. Strong radiation fields, detected on photographic film similar to X-rays, indicate faulty welds. After each use, the button-sized source is drawn back into its shielded container. Operators are supposed to perform a geiger counter check of the shielded container to determine if the radiation source was returned to its housing. It is not clear if the safety check was performed, or if the radiographers thought the source had become weak.

A 30-curie source of Ir-192 is classified by the NRC as class B low-level waste, and can be tossed into a radioactive landfill. But as the Moroccan incident clearly shows, "low-level" does not mean it's safe. In fact, "low-level" waste could kill you.

Letter to the Editor

Editor's Note: the following excerpts are taken from a letter to the Waste Paper which, due to space considerations, cannot be printed in full.

Dear Editor:

It is time the Department of Energy (DOE) was held more accountable for its actions . . . DOE self-regulation should be stopped, and DOE regulatory, monitoring, and health responsibilities given to other federal agencies and the states and regions affected by DOE releases. Regional/state independent scientific and political peer review panels should oversee and approve all DOE research, publications, and construction.

DOE and Congressional resistance may prevent a final and complete environmental accounting of all DOE facilities. The known levels of contamination on and around the DOE nuclear and hazardous wastedumps are extensive, and DOE guidelines have apparently been changed to significantly reduce clean-up costs. Obviously, changing the DOE criteria makes the levels of contamination look better, but the actual contamination is still in the environment.

In the past, DOE apparently published only health studies by DOE contractors so that DOE would have been able to control the studies and their conclusions. Past DOE health studies tended to combine data to wash out or dilute their impacts. For example, a DOE health study on Savannah River Plant employees reported a statistically significant cancer effect, but the report was not published; instead, the data from the study was subsequently diluted by mixing the original employee population into a larger population, washing out the cancer effect.

Over one million curies of airborne radionuclides (primarily tritium and Krypton-485, but also others including uranium and plutonium, are annually released from the Savannah River Plant. In 1984 DOE radioactive waste guidelines omitted criteria for radioactive airborne emissions. Stack release-point emission standards have been replaced by plant-wide site airborne emission standards meaning that airborne releases are diluted significantly before releases are measured against standards. At the Savannah River Plant, the nation's largest radioactive airborne waste emitter, this change saved the plant \$200 million in 1984 dollars.

DOE is no longer completely self-regulating. The 1984 hazardous waste lawsuit lost by DOE at Oak Ridge, Tennessee has resulted in DOE being regulated by the EPA Resource Conservation and Recovery Act (RCRA) regulations for hazardous waste. This profound change has resulted in state regulation of the large volumes of liquid hazardous wastes, especially in those states with aggressive state regulation or where demanded by local action. DOE has begun to catalog their liquid radioactive and hazardous wastes but does not plan to publicly release this information, although this is one of the major impacts DOE has on the environment . . .

These are some additions to your excellent publication, the *Waste Paper*. Please keep your radioactive waste campaign active.

W.F. Lawless
Assistant Professor of Mathematics
Paine College
Augusta, GA 30910

Job Announcement

The Sierra Club Radioactive Waste Campaign is seeking an inquisitive, critical, and creative individual, with a strong background in chemistry or geology to research military landfills. Ability to write and work with community groups and collectively with Campaign staff is important.

For job description, write Sally Sevcik, Director, Sierra Club Radioactive Waste Campaign, 625 Broadway, New York, New York, 10012. Deadline to apply is December 14, 1985. Salary: \$14,000 plus health and dental benefits.

Editorial

On Re-Opening the West Valley Dump— If the Public Only Knew

As of this writing, legislation to re-open the leak-prone West Valley dump has not yet been enacted, but the smell from Albany is permeating the whole state.

It's almost Hollywood. Roll the cameras! A band of fearless citizens and their local officials protecting their community and water supply versus the electric utilities and their legislative cronies making late-night deals in smoke-filled backrooms of Albany. Unfortunately, it's real life.

The impetus for re-opening West Valley (the dump, that is—the town is open) stems from distant forces. All so-called "low-level" radioactive waste goes primarily to two out-of-state radioactive landfills, Barnwell, South Carolina and Hanford, Washington. Under Federal legislation passed in 1980, those states could limit access to New York State waste beginning in January 1986.

Panic set in among NYS waste generators as the deadline approached, particularly the medical community in New York City. No waste disposal, they threatened, means no medical care and a return to the days of the Bubonic plague. The main generators of radioactive waste in New York State, the utilities and Cinichem, a subsidiary of Hoffman-La Roche, were content to let the medical community take the ball.

In response, the Governor proposed legislation that would re-open West Valley as an above-ground *temporary storage* facility, if the medical community had no out-of-state home for their wastes. Meanwhile, state agencies would look for a permanent waste facility. With plutonium migrating underground at West Valley, no one was publicly proposing that the landfill be re-opened permanently. At least, not now.

The "B" version of the LLW bill was not perfect. It had some logic, but was filed in someone's back pocket in Albany. At the literal eleventh hour of the last day of the legislative session in July, Senator Dale Volker, marched into a meeting with Majority Leader Daniel Walsh, with a "C" version of the bill proposed by the utilities. It is a killer: West Valley would be re-opened "temporarily" (always, "temporarily"), not just in an emergency, but if the utilities did not have an out-of-state dump "on reasonable terms." In other words, if out-of-state dumps charged too much, the utilities could re-open West Valley. That's greed, and was negotiated by two Western New York legislators, with Governor Cuomo's encouragement. Fortunately, Speaker Fink pulled the plug on the "C" version, for reasons having nothing to do with the merits of the bill, or it would be law today.

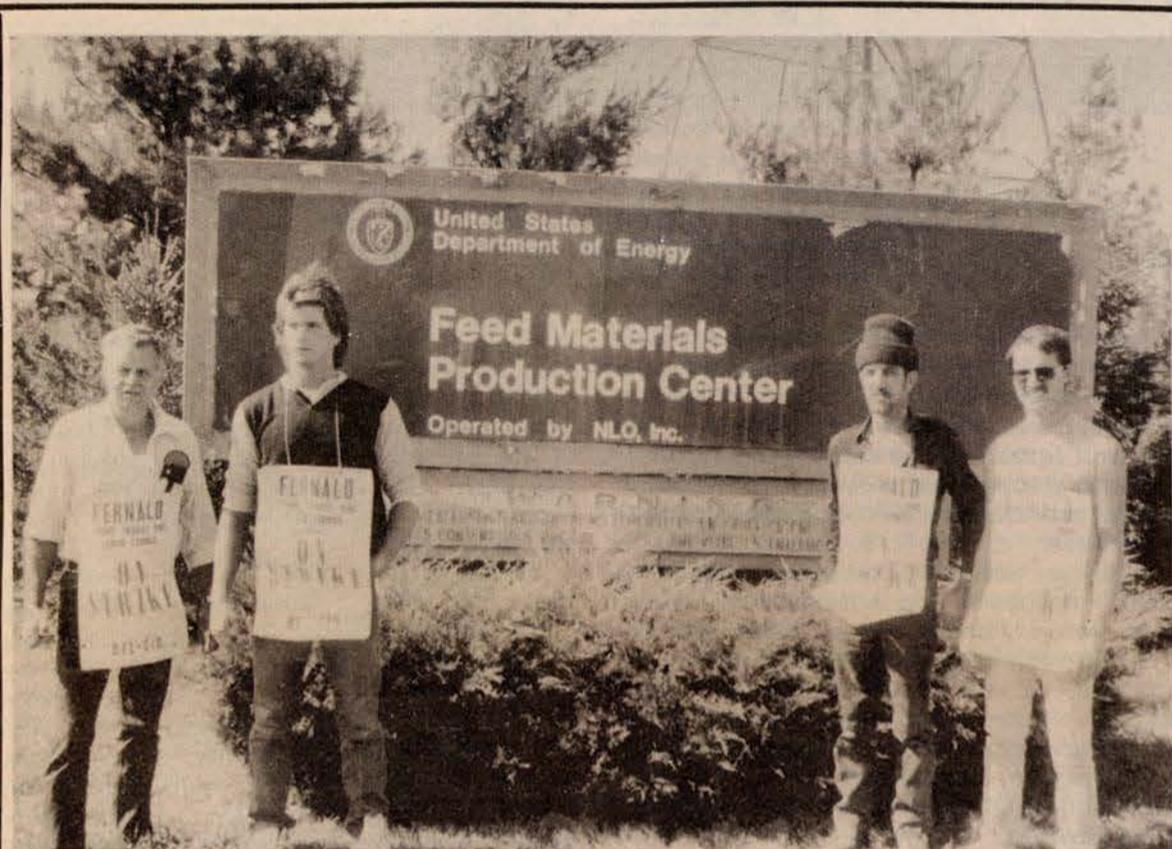
The irony of this charade is that no temporary storage facility is needed. Utilities can provide their own space, and are doing so. Meanwhile the pressure on the Federal level has somewhat eased. Federal legislation will be enacted shortly that allows NYS waste generators continued, but reduced, access to out-of-state dumps. In this new reality, NYS should do what all other states and regions are doing—proceed with all dispatch to find a permanent waste facility, choosing the best location on its merits. It should be above-ground, and the long-lived waste should be removed. The B version should strike all reference to West Valley and temporary facilities. The C version should be filed in the wastebasket.

Meanwhile, hurrah for the over 100 towns and organizations in WNY that have passed resolutions opposed to the re-opening of West Valley. They need our support. Perhaps WNY legislators and the Governor should heed the call. We wonder how the Governor could cope with the national scene if he can't hear a few reasonable voices on a single issue in New York State!

You can help your embattled friends in WNY—write or call your NYS legislator and the Governor. Say that West Valley should not be re-opened, and that the State should search directly for a permanent above-ground storage facility. Please hurry, before the smoke settles again in Albany.

Assembly Majority Leader Daniel Walsh
New York State Assembly Albany, New York 12248

Senate Majority Leader Warren Anderson
New York State Senate Albany, New York 12247



Fernald Workers Strike for Stricter Radiation Standards

by Robin Hewitt

On Wednesday, October 23, workers at the Department of Energy's (DOE) Feed Material Production Center in Fernald, Ohio, returned to work after a strike which forced plant closure for 18 days. Their demands were primarily for improved health and safety standards in the handling of radioactive and other toxic substances.

The Fernald facility recently came under heavy criticism when public attention was drawn to the large releases of uranium into the surrounding environment as well as numerous incidents of worker exposure to radiation. (see "Nuclear Woes at Fernald," *the Waste Paper* Vol.7, No.1)

Comments made by striking workers reveal their concern with the plant's environmental and safety record. As Albert Loos of Harrison, Ohio explained, "we're out here to get better health conditions from radiation inside the plant and also from other chemicals . . . for ourselves and the surrounding community." Jim Walsh, also of Harrison, added, "we don't need money. Money ain't an issue at all."

The plant shut down provided strong inducement for DOE to ensure that the strike was speedily resolved, since DOE depends heavily on the Fernald facility for the uranium products it uses in the production of nuclear weapons. Before the strike, the plant had been running 24 hours a day, 7 days a week to meet the Reagan Administration's call for increased arms production.

According to Gene Branham of the Fernald Atomic Trade and Labor Council, an international coalition of unions, agreements reached as a result of strike negotiations offer the plant's workers better safety standards by replacing the DOE standards for radiation exposure with International Exposure Limits.

Moreover, a committee, made up of three union representatives and three representatives from Westinghouse, the plant's newly contracted managing company, will be set up to further discuss standards for exposure limits and for better radiation monitoring.

The committee's recommendations will be presented to union members for a vote. This agreement thus provides for union input into the setting of plant safety standards, and Mr. Branham tells *the Waste Paper*, he is "very satisfied" with it.

Congratulations to the Fernald workers for obtaining a voice in the plant's safety standards.

photo by Bud Hoekstra



The blue crane, which sat on the West Valley burial ground ever since most neighbors could remember disappeared recently. When the Coalition on West Valley Nuclear Wastes inquired, Westinghouse PR people told the group that the crane was contaminated and had been buried on site.

In Texas, Go It Alone Means Question Authority

by Linda Lynch

Stretching for miles in Texas' arid, western-most Hudspeth County, a rich desert valley hold 70,000 acres of farmland. Here, the sweetest of vegetables, melons, grapes, nuts and the highest quality alfalfa, cotton, grains and livestock are produced; a livelihood created for generations of farmers and ranchers. It is an unusual picture for what would normally be termed "desert" but this valley rests above one of this country's major western aquifers—a closed water basin extending nearly 350 miles.

Just beyond the valley, deep blue ridges frame wild antelope. Directly east a magnificent ridge, made up of an ancient coral reef, lifts to Texas' highest elevation at 8,751 feet—the Guadalupe Mountains National Park. This rich farmland encircled by wilderness is where the State would most like to dump radioactive waste.

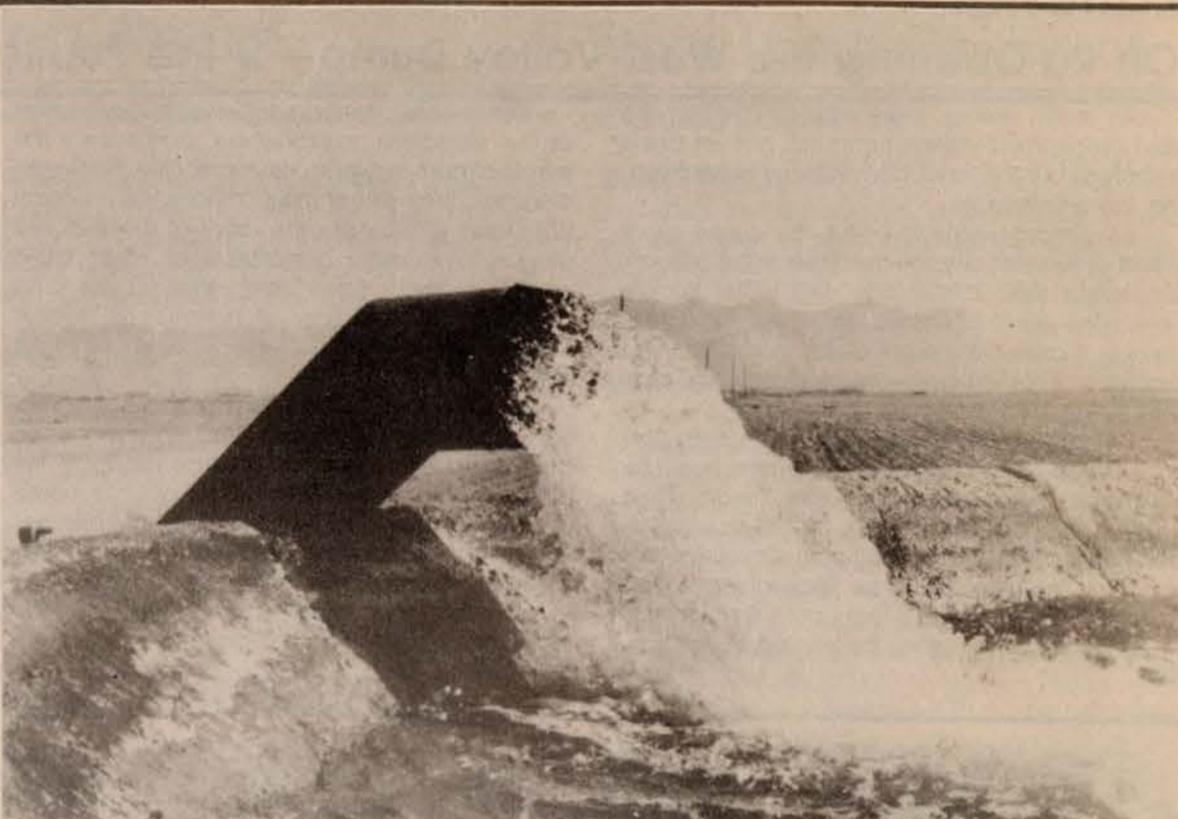
When Congress enacted the Federal Low-Level Radioactive Waste Policy Act in 1980, Texas decided to develop its own facility independent of a compact with any other state. It has since remained the only state to do so. This decision created what would continually be an area of great debate and concern over disposal policy in Texas. The Federal Act addresses the specific needs of compacts, but is silent on issues surrounding independent facilities. Consequently, Texas is left without Federal guidelines, much in the same way states seeking alternatives to shallow land burial are without guidelines from the Nuclear Regulatory Commission.

With passage of the State Low-Level Radioactive Waste Disposal Act of 1981, the State established the Texas Low-level Radioactive Waste Disposal Authority (the Authority)—a group of appointed individuals charged solely with siting a facility. The Authority is only one facet of what has become a bitter political struggle within the State that would rival even the most complex compact negotiations taking place outside its borders. Decisions that should be based on technical criteria have been shaped by other forces, including the Governor, the former Governor, the Land Commissioner, the Catholic Church, the University of Texas, and—waiting patiently in the wings—Chem-Nuclear, Inc.

The first of these confrontations occurred in west Texas' Hudspeth County. Intense and unexpected local opposition, accompanied by the technical reports of two of Texas' most respected hydrologists and geologists, is believed to have forced that action. The reports, commissioned independently of the State by the University of Texas, declared the geology and hydrology of west Texas too complex for even the most sophisticated of landfills. The Authority, however, maintains that although sufficient barriers could be engineered, the costs to prove such may be too high.

As a result of these findings, the Vmonor River Basin was next considered for a dump. This area of the state is the home of one of Texas' largest Catholic populations, and dangerously close to one of the former Governor Dolph Briscoe's private ranches. Within weeks, local opposition, enhanced by the Arch Bishop and former Governor, became formidable. Despite the Authority's admitted belief in the superiority of south Texas clay to west Texas fractured limestone for its landfill, it was forced to retreat once again. This time, a Governor-supported bill, H.B. 449, would assure its inability to locate a dump nearby.

When H.B. 449 passed the Texas Legislature this spring, it was to the cheers of the Vmonor River Basin, but to the detriment of the State as a whole. Supported fully by the Governor, H.B. 449 did primarily two things: it permanently protected a favored portion of south Texas from the threat of a nuclear waste dump, and it gave the Authority the equivalent of a power it had never enjoyed, that of eminent domain.



Endangered Water? Arid Hudspeth County in West Texas is transformed from desert to rich farmland by wells such as this that pump water from a large underground aquifer. Will this be the site of the Lone Star State's radioactive waste facility?

Then to the disbelief of citizens in west Texas, the bill instructed the Authority to give preference in its siting procedure to State or University-owned land. That land, almost entirely in west Texas, was the same that had been declared geologically unsuitable and subsequently abandoned for consideration just one year prior.

With new status and official endorsement in hand, the Authority did indeed return to west Texas stating "the land is even better than we had originally thought." And, to boost the image of a landfill and the harmlessness of radioactive waste, Waste Management, Inc.'s Chem-Nuclear assisted the Authority by eagerly sponsoring an all-expense-paid visit for Hudspeth County officials to its landfill in Barnwell, South Carolina.

Opposition remains strong and members of ACES challenged Waste Management's Chairman of the Board, Dean Buntrock, to take his argument before the public locally in a debate. Neither Buntrock nor any representative accepted the challenge.

Texas is a big state, and one might think there has got to be some place that would be suitable for this homeless landfill. Part of the problem is that the Authority continues to advocate shallow land burial as its preferred method of disposal. The west Texas' Alert Citizens for Environmental Safety (ACES), on the

other hand, advocates the elimination of shallow landfill for more sophisticated above-ground storage facilities, at or near the site of waste generation. It also urges implementation of volume reduction, a realistic definition of "low-level," and placing financial liability on the shoulders of the waste generators, not on the taxpayers.

Much of the nation has been watching Texas in an effort to determine whether or not "go it alone" can work. The constitutionality of a state's right to refuse waste generated outside its borders remains an unanswered question at the heart of "go it alone." It becomes only more clouded as new federal legislation forms to assist the compacts. Continued access to new and existing sites will undoubtedly affect Texas, particularly if it completes it facility quickly. The state could become a fourth facility to the nation. Texas is not unaware of that possibility, nor is Waste Management, Inc. And as Land Commissioner Gary Mauro sees it, "Texas has thousands of non-revenue producing acres in the west." It also has one of its water resources there.

Linda Lynch, a Texas native, now lives in Manhattan. Linda's family still lives in Hudspeth County.

Maine Referendum on Low-Level Waste Passes

On Election Day this year, Maine voters opted, by just over 50%, for the right to vote on any plan for the storage or disposal of low-level radioactive waste in their state. This proposal, put forth by the Maine Nuclear Referendum Committee, was one of three competing measures on LLW on the ballot this year.

One competing measure, put forth by the Maine nuclear industry and supported by the Governor and State Legislature, read "Do you want to vote on any Maine site for disposal of Low Level Waste if it is not disposed of safely outside of Maine or at the Maine Yankee site?" The third measure, supported by some of Maine's better-established environmental groups, read "None of the above."

The Maine Nuclear Referendum Committee, which has mounted two unsuccessful referendum drives in 1980 and 1982 to close down Maine's only nuclear reactor, Maine Yankee, faced an equally tough challenge during its year-and-a-half campaign. With the Governor, the State Legislature, and every daily newspaper in the state opposed to their position, the MNRC collected more than the necessary 46,000 signatures to get the referendum on the ballot.

The MNRC gained some fuel for their position in October when they discovered that more than a third of Governor Joe Brennan's campaign money in support of the pro-nuke proposal came from out-of-state nuclear waste producers, and another \$200,000 came from Maine Yankee.

Important Legislation Taking Shape

Exciting Developments in Federal LLRW Legislation

Exciting developments are taking place in Congress on low-level waste legislation. Amendments to the Low-Level Radioactive Waste Act of 1980 (LLRWA) passed by the relevant House Committees now require the Nuclear Regulatory Commission to issue regulations on long-lived radioactive waste and alternatives to landfills. It is expected that House and Senate bills, which establish a new timetable for the development of regional waste facilities, will be passed by both Houses by Christmas recess, with differences ironed out in January.

Under pressure from the three States with operating radioactive landfills, the LLRWA established January 1986 as the date when each region of the country would have a disposal facility in place. During the intervening six years, no new facilities were opened. Citizens, citing the disastrous experience with leaking radioactive landfills, vigorously opposed new waste dumps. Thus, six years after enactment of the LLRWA, the goal of shifting dependence on the Barnwell, S.C. and Hanford, Wash. sites is no closer.

Recognizing this failure, HR. 1083, the so-called "Udall amendments" to the LLRWA of 1980 developed by two House Committees, sets a new timetable for siting waste facilities, and mandates the NRC to promulgate regulations for long-lived "low-level" waste. The timetable requires states or compact regions to designate a state and have a siting plan in place by January 1, 1988, and to have a licensing application by January 1, 1990. The site must be operable by the end of 1992. HR. 1083 also requires the NRC to promulgate regulations for alternatives to radioactive landfills within 12 months of passage. In addition, within six months of passage, the NRC must identify which waste streams have a hazardous life greater than 100 years, at the end of which it is assumed that State control of the landfill will cease. Within 18 months of passage, the NRC must specify how these long-lived materials are to be handled. The legislation is a major victory for environmental activists who have finally convinced House members that some "low-level" waste is not so low.

In another precedent-setting move, HR. 1083 specifies that mixed toxic chemical and radioactive waste will be regulated by both the NRC and the EPA. Because the NRC has had no experience in regulating hazardous chemical waste, environmental activists have promoted EPA as a co-regulator. It is expected that the House bill HR. 1083 will clear the House after Thanksgiving.

On the Senate side, bills S. 1517 and S. 1578 have been introduced to the Senate Energy & Natural Resources and Environment & Public Works Committees, respectively. Hearings were held October 8, and the first markup takes place before Thanksgiving. The Senate bill is expected to clear the Senate by Christmas recess. A joint House Senate Conference Committee will iron out differences, if any, in January. The Senate bills do not yet have provisions on long-lived waste and alternatives to landfills.

WHAT YOU CAN DO: Activists are urged to contact their Senators and to request that the Senate bills include the important provisions of HR. 1083. A copy of testimony by Brooks Yeager, Sierra Club Washington Representative, before the joint Senate Committees October 8, may be ordered from the Campaign.

Price-Anderson Debate Begins

by Kathleen Welch

Amidst a storm of controversy, the Nuclear Regulatory Commission (NRC) announced to Congress earlier this spring that the likelihood of a meltdown at one of the nation's nuclear reactors is 45% within the next 20 years.

Even in official circles, there is considerable disagreement over the probable consequences of severe accidents. Although the nuclear industry insists that nuclear power is truly safe, government studies have shown the cost of an accident could exceed \$100 billion, and a panel of scientists from the American Physical Society recently concluded that several more years of research are needed before estimates of nuclear risks can be reduced.

Out of this muddled prognosis, one point remains clear. The public, not the nuclear industry, bears the burden of these risks. Since the first nuclear plant began generating electricity nearly three decades ago, the nuclear industry has refused to accept responsibility for nuclear accidents and has demanded special treatment from Congress. In response, Congress passed the Price-Anderson Act in 1957, the law that strictly limits the liability of the nuclear industry and the federal government in the event of an accident at a commercial nuclear power plant, a federal nuclear waste, weapons, or research facility, or in the transportation of nuclear materials.

Because of the Price-Anderson Act liability limits, if an accident occurred tomorrow at a nuclear power plant, only about \$640 million would be available to pay for all damages to the public. The federal government would only have to pay up to \$500 million for an accident at one of its facilities. No one is responsible for providing a penny more to compensate injured people.

In a serious nuclear accident, victims can bet on receiving only a few cents on the dollar for their injuries and losses. What's more, no insurance company in the world—even Lloyd's of London—will sell policies covering nuclear risks.

By shielding the industry from financial responsibility for its mistakes, the Price-Anderson Act not only provides an unquantifiable subsidy to nuclear power, it also removes critical safety incentives in the design, construction, and operation of nuclear facilities.

Congress is now debating the future of the Price-Anderson Act, which is slated to expire in 1987. If the law is allowed to expire, all reactors now operating or under construction will continue to be covered by the present system of limited liability. Unless Congress acts to drastically reform the Price-Anderson Act, the protection of millions of people across the country will continue to be woefully inadequate.

Environmental and consumer groups are calling on Congress to remove the Price-Anderson Act liability limits and establish a federal nuclear insurance policy that both assures full public compensation and increases safety incentives by restoring accountability to the nuclear industry.

Several Price-Anderson reform proposals are now facing Congress—ranging from the industry's proposal to raise the limit to \$1 billion (an amount barely comparable to inflation since 1957), to a proposal to remove the liability cap altogether. A bill introduced by Senator Stafford (S. 1761) 1) removes the limit on liability, 2) adds nuclear waste accidents to the list of compensatable nuclear accidents, and allows any party that causes a nuclear accident to be sued. With minor modifications the Stafford bill represents a comprehensive nuclear accident policy that goes a long way toward making the nuclear industry responsible for the accidents it engenders.

In the next few weeks, the Price-Anderson Act will be hotly debated in Congress. Although a final vote on the extension of the Act is not likely to occur until early next year, now is a critical time in the process to influence the content of legislation on Price-Anderson. **What You Can Do: Write your Senators and Representatives urging them to remove the Price-Anderson Act liability limits and support the approach of S. 1761. It is especially urgent if your Senator or Representative is a member of the House Interior and Insular Affairs Committee, the Senate Energy and Natural Resources Committee, or the Senate Environment and Public Works Committee.**

For More Information, Contact: Kathleen Welch, U.S. PIRG, 215 Pennsylvania Ave., SE, Washington, D.C., 20003. (202) 546-9707.

Kathleen Welch works on energy legislation for U.S. PIRG.

Charlie Ipcar, the MNRC press secretary, said the campaign focused on three issues: the threat of a low-level radioactive waste dump being sited in Maine, the danger that the waste would include out-of-state waste, and the fact that their proposal was the only one of the three which allowed citizens to vote on a compact agreement.

Ipcar attributed much of the campaign's success to its sophisticated use of the media to promote the referendum. MNRC spent approximately \$30,000, more than half of its total budget, on television and radio announcements, including a country-western jingle which Ipcar says helped bring in the rural vote. While the margin of victory was low—just over 50% of the total vote—the distribution of the votes was extremely uniform; the proposal won in all but 6 of 500 cities.

LISTEN TO THIS, ED - "SCIENTISTS SAY RADIOACTIVE WASTES DUMPED INTO THE OCEANS MAY HAVE ALREADY CAUSED GENETIC MUTATIONS IN SOME LIFE FORMS." HOW ABOUT THAT, ED? ED?



What's Hot in the Scrap Metal Business

How many ways can profits be made out of bombs? A new and highly profitable business supported by the nuclear weapons industry has come to light.

Over the years, small entrepreneurs have been licensed by the Nuclear Regulatory Commission (NRC) to receive radioactive contaminated scrap metal. These junkyard dealers buy radioactive metal, often from the Department of Energy (DOE), for very low prices, sort it according to the type of metal, and resell it to another dealer who smelts the metal and resells it.

A hot junkyard in the middle of downtown Knoxville, Tennessee has "exposed workers and probably neighbors to incredible levels of radiation" during fourteen years of operation, says Jackie Kittrell of the Tennessee Committee on Occupational Safety and Health (COSH). The junk dealer, David Witherspoon, bought radioactive scrap from weapons production facilities at Oak Ridge, Tennessee.

"Junk dealers don't know how to handle radioactive materials," says Mike Mobley, the State Director of Radiological Health. "They treat it just like any other junk." At David Witherspoon, Inc. workers—mostly women—were hired to sort the contaminated scrap metal from 1962 until 1976. No records of any health controls have been found, although State regulations require air sampling and personnel monitoring in such work. Although David Witherspoon stopped receiving radioactive scrap several years ago, much of the contaminated material is still in the yard.

Another 'hot' junkyard in Oak Ridge, Tennessee owned by DuPont Smith, a former Oak Ridge physicist, closed entirely, but the land it occupied is contaminated with levels of uranium more than eight times federal standards.

"The worst part of the problem with both of these dealers is that they continually received shipments of material from the Department of Energy (DOE) that were more dangerous than what they were licensed to handle," says Mobley. Witherspoon, for example received a large quantity of highly concentrated U-238 in the form of turnings, a by-product of hydrogen bomb production, probably at the Y-12 Nuclear Weapons Production Facility in Oak Ridge. This highly radioactive material sat around in open barrels for many years and was only removed recently after public outcry and state pressure.

Large quantities of contaminated scrap are still stored in Witherspoon's junkyard, reports Linda Sharpe, a leader of the Knoxville Citizens for a Better Environment, a group that is urging a thorough cleanup of the site. Although DOE sent materials that exceeded the license of the dealer, it refuses to take them back. It's not their responsibility, they say.

Our readers in the Buffalo, New York, area should be interested to know that Sabin Metals of Buffalo is also licensed to collect radioactive junk. "It seems there is a whole network of these highly profitable businesses," says Kittrell. The Waste Paper would like to hear from readers who know of any others.

Hart Introduces High-Level Legislation

In all the commotion to site a national high-level waste repository, it's clear that nobody wants it in their backyard. So it will probably be in a remote, hard-to-reach place. And how will the wastes get there?

Senator Gary Hart of Colorado and Senator Robert Stafford of Vermont have introduced Senate Bill 1162, which would direct the Department of Energy (DOE) to give full consideration to that question before selecting a site.

The bill would require DOE to: 1) Fully identify the route and the modes of transport to be used; to evaluate the condition and terrain of such routes; and to describe population densities and significant human activities which occur within ten miles of such routes; 2) Assess public health and environmental impacts associated with nuclear waste shipments throughout the region surrounding all potential sites; 3) Estimate the costs of upgrading and maintaining such routes; and 4) Provide to the states Federal assistance—technical and financial—necessary to upgrade and maintain such routes.

Stafford chairs the Senate Environment and Public Works Committee where the bill received its first hearing on October 30. Another hearing is expected after Christmas.

More Landspraying of Radioactivity

by Ann Hood

What do you do with 71 million gallons of radioactively contaminated water? If you are the Department of Energy (DOE) working on cleaning up the Manhattan Project dump at Weldon Spring, Missouri, you consider the following options: 1) discharging it to local streams and creeks; 2) discharging it via pipeline to the Missouri River and 3) spraying it on DOE and/or Army property.

Option 1 would meet with strong public opposition and along with Option 2 would require discharge permits and extensive treatment to meet strict water quality standards. Option 3 may also require a discharge permit, but the quality of the sprayed water would only have to meet DOE standards (600 pCi/l for uranium; 30 pCi/l for radium 226 or 228) instead of the more stringent EPA drinking water standards (10 pCi/l for uranium and 5 pCi/l for radium 226 and 228 combined). Since spraying the water would require less treatment and the permit process would be less rigorous, it is no surprise that DOE has indicated a preference for this option.

The water in question now covers 220 cubic yards of sludges and waste products generated during the processing of uranium and thorium ore concentrates for the Atomic Energy Commission. Major radioactive contaminants are uranium and radium 226. Other contaminants include nitrates, arsenic, fluoride, sulfates and selenium.

An engineering evaluation done for the DOE by Bechtel raised concerns about the permit process and the disposal methods and sparked extensive discussions among state and local officials and citizens. Some of these concerns will be covered in the draft Environmental Impact Statement due out this fall.

So far the DOE has not addressed the questions of potential off-site migration via surface run-off or its possible impacts on the food chain. All the sober discussion has almost hidden the irony of a cleanup project that ends up spreading pollution over vast new acreage.

Ann Hood is active in the St. Charles Countians Against Hazardous Waste in St. Louis Missouri. For more information on landspraying radioactivity, see the Waste Paper Vol. 6, No. 3, "Landspraying Radioactivity."

A Burning Issue in Kiski Valley

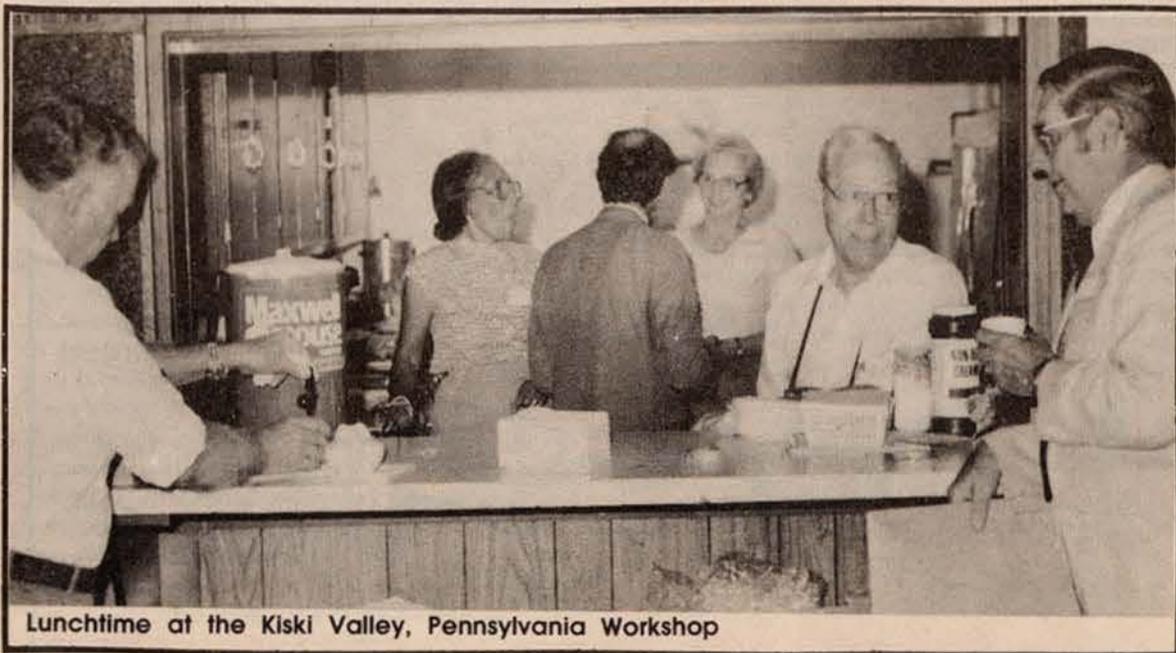
by Pauline Nixon

Kiski Valley residents in western Pennsylvania, unhappy with the fact that they could be inhaling or ingesting radioactivity from a proposed low-level waste incinerator, armed themselves with facts and met at a conference on August 23, 1985, to further explore how to halt the project.

The conference drew over 100 local citizens, many from the sponsoring groups that included the Kiski Valley Coalition to Save Our Children, the Allegheny Group and the Pennsylvania Chapter of the Sierra Club, the Radioactive Waste Campaign, the Environmental Coalition on Nuclear Power, the Leechburg Education Association and the Toolex Manufac-

turing Corporation. Conference participants discussed geographical and technical problems with the application by Babcock and Wilcox to install the incinerator, which would be the first such commercial venture in the United States. They also prepared strategy that includes testifying at hearings before the Nuclear Regulatory Commission (NRC) and the Pennsylvania Department of Environmental Resources (DER) where the application will be reviewed.

Babcock and Wilcox, a subsidiary of McDermott International, employs 22,000 people in four states with sales of almost \$1.9 billion in 1984. The company is a major worldwide supplier of nuclear reactors and fossil fuel boilers and has an extensive record of violations in this area. Kiski Valley residents are concerned about the management's commitment to health and safety. Dr. Resnikoff, of the Sierra Club Radioactive Waste Campaign questions the ability of government agencies to regulate the company given its past record. Both state and federal agencies have had difficulty controlling the company's other operations in Apollo, Pennsylvania, according to Resnikoff. Kiski Valley citizens believe they have already suffered enough from B&W's quarter century-old facility in Apollo which processes nuclear fuel rods.



Lunchtime at the Kiski Valley, Pennsylvania Workshop

The Seven Year Itch

Seven years after opening up shop in Buffalo, New York, near West Valley, the Radioactive Waste Campaign has packed up its banners, literature, and T-shirts and moved to New York City. With new staff, new stationery, and new directions, we now share a floor in Greenwich Village with the Sierra Club New York City Group and four other non-profit organizations.

Working in the new office is Sally Sevcik, the Campaign's new director, who is in charge of publications and fundraising. Sally comes to the Campaign with extensive experience in writing, editing, and teaching. Her articles have appeared in *The Village Voice*, *Parents Magazine*, and various, specialized journals. Marvin Resnikoff continues as staff scientist, working one day a week in the New York City offices and the rest of the time out of his farm in New Jersey. Laura Haight continues as our wonderful organizer.

The newest member of our staff is part-time office manager Jennie Tichenor, who is president of the New York City chapter of the Nurses' Alliance for the Prevention of Nuclear War. We are currently seeking a research associate with a strong background in chemistry or geology to work on our year-long military landfills project. (See job announcement, page X)

The decision to consolidate our offices in New York City came at a time when the Buffalo staff, former co-director Lisa Finaldi and office manager Mark MacAllister, decided to move on to greener pastures down South. Both continue on with the Campaign—Lisa, now living in Raleigh, North Carolina, serves on our Steering Committee; Mark, now in Chapel Hill, North Carolina, remains on call to handle computer crises.

After our first month, when we were engulfed in cardboard boxes serving as storage, furniture, and decor, the office is looking pretty spiffy. Laura deserves credit for finding the office space, coordinating the whole move, and scrambling for donations of used office furniture, equipment, and even a "used" dracena tree liberated from an uptown life insurance company. (We are still in search of carpeting, sofa, bookcases and posters—any new donors?)

Now we need to develop a strong corps of volunteers to replace the wonderful people left behind in Buffalo. We hope everyone living in the New York City area, or just passing through, will drop by to see the new offices and say "Hi" to the staff. Make sure to come to our office opening on Thursday, January 9, from 6:00-9:00 p.m.



In the beginning: the Campaign's New Office in a New York City Loft

continued from page 1

While DOE's final plans and arguments will not be known until its proposal is presented to Congress January 15, the MRS would operate as follows. Beginning in 1996, two years before the projected opening of the high level waste repository, fuel from reactors throughout the country, including the West, up to 3,000 metric tons per year, more than ten times the historical yearly average number of shipments in the U.S., would come to the MRS by truck and train. At the MRS, fuel would be disassembled, that is, the fuel rods would be separated from fuel assembly hardware, and placed in containers, then into large rail transportation and disposal casks. This disassembly operation, placing fuel rods in actual contact with each other, allows 50% more fuel to be placed in disposal casks. On a regular basis, unit trains would then move to the repository, if and when one is available. 1) the number of ton-miles will increase (moving waste on two legs of a triangle rather than the hypotenuse directly to the repository), and 2) the fuel must be packed twice. To make matters more ridiculous, under the DOE plan, all fuel going into the first (Western) repository (70,000 metric tons) and also to the second repository, would pass through the MRS facility in Tennessee. Fuel in, say, California, would first move east to the MRS before coming back west to the repository in repackaged form. With 3,000 tons of uranium per year coming into and out of Tennessee, this maximum impact would obviously be felt in that state, as seen in the map.

What is most dangerous, and ultimately ludicrous, about the MRS plan is the transportation issue. It is easy to suspect that the MRS plan could appeal to bureaucrats who must listen to public worries about the large number of cross country shipments of waste that will take place from generators to the planned repository in the West. The MRS plan places more fuel into larger containers, and so makes these shipments less conspicuous. Of course, this "now you see it, now you don't" approach, does not lower the risks: Packing more fuel into a container also means that more catastrophes accidents are possible. Everything else being equal, the risk is actually greater under the MRS plan because

Special thanks to Marcia Winter of the Southeast Sierra Club office for her research on this issue.

the Waste Paper

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A SEMINAR on HIGH-LEVEL NUCLEAR WASTE

Towards Developing a Unified Approach
for Repository States

Sponsored By
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December 14, 1985
Discovery Ship New England Aquarium
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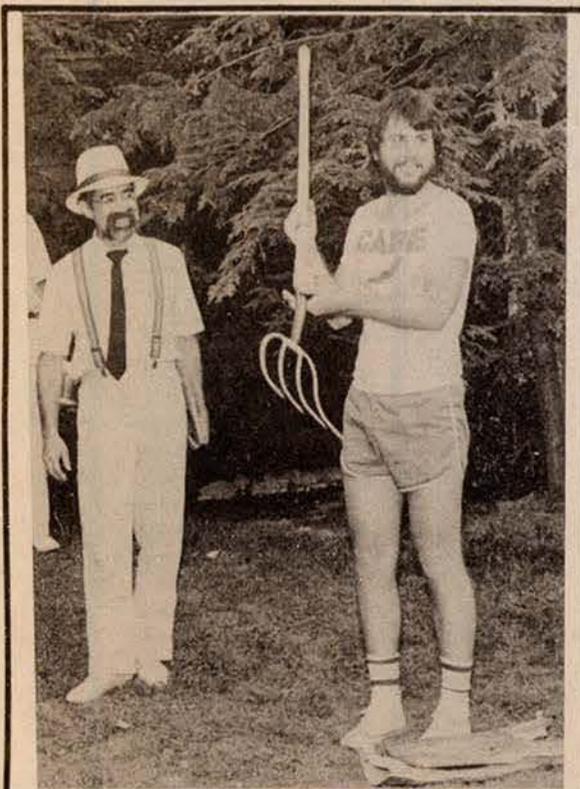


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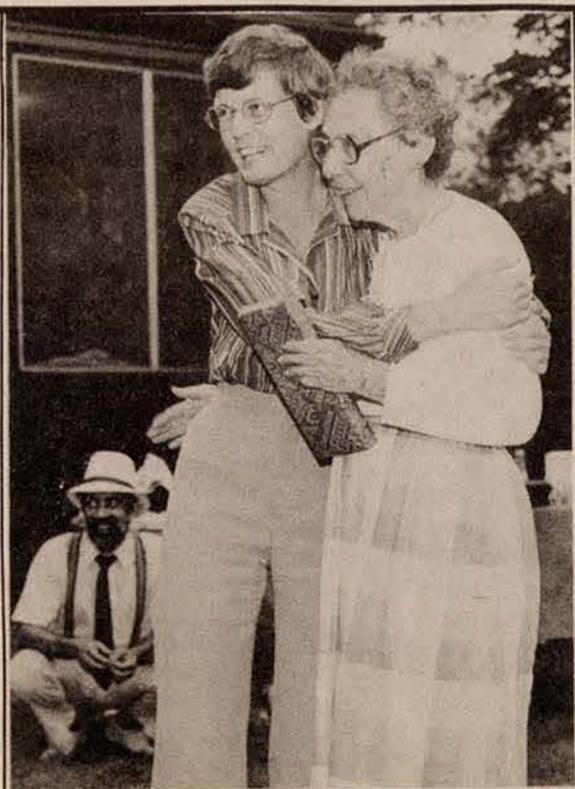


photo by Clyde Munz

You Can't Run From the Radioactive Waste Campaign Party!

Come celebrate the opening of our new offices in New York City on Thursday, January 9, from 6 to 9 p.m. Some of our special guests include Tom DeLuca, New York Mobilization for Survival; Fred Shapiro, author of *Radwaste*; Jean Kozlowski, New York City Sierra Club group chair; and New York State Assemblyman Richard Gottfried of Chelsea, Assistant Majority Leader of the Legislature. Entertainment, cash bar!

Fond Memories and Good Times at a Party for the Closing of the Campaign's Buffalo Office. Left photo: Mina Hamilton, former Campaign Director presents an activist award to Bernice Alpern, 80 years young, Buffalo lawyer, and 7 year office volunteer. Right photo: Mark MacAllister, departing office manager holds pitch fork presented to him by Marviin Resnikoff, former Campaign Co-Director, in honor of his heroic shoveling of the . . . paperwork.

NOW WITH MY PLAN WE USE ALL THE HIGH-LEVEL RADIOACTIVE WASTE
 TO FILL **EXTRA WARHEADS**. THAT WAY WE CAN STILL BUILD UP
 OUR ARSENAL, SAVE A FEW BUCKS AND
 GET ALL THOSE WASTE
 DUMP PROTESTERS
 OFF OUR BACKS!



I LIKE IT!
 I LIKE IT!

AND
 BEST OF
 ALL, WE
 CAN
 CALL
 IT...

TRASH WARS!



Suzanne Salinas
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