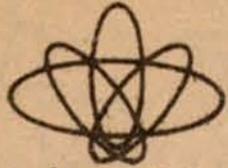
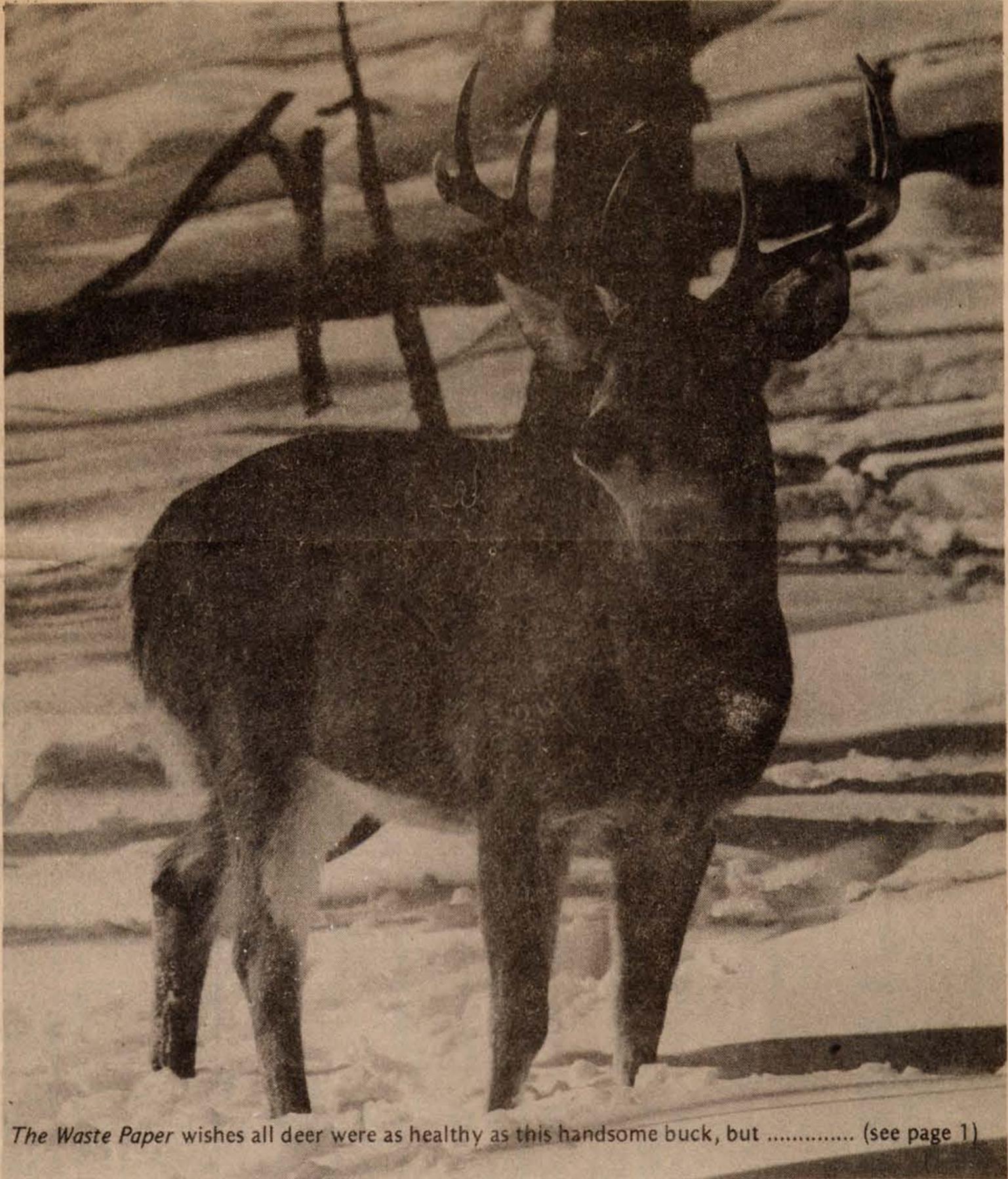


# the Waste Paper



sierra club  
radioactive waste  
campaign

Volume 3 Number 1

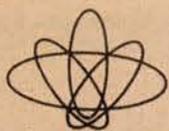


*The Waste Paper* wishes all deer were as healthy as this handsome buck, but ..... (see page 1)

photo by Leonard Lee Rue III

Secret Plutonium Shipment — page 1 / West Valley: Sand Lenses and Swamps — page 2  
The Waste Paper Puzzle — page 6 / Uranium Mining in NJ and NY — page 7

Collection *Lanka Foundation*  
www.lanka.org  
Digitized 2017



## Deer Hunters Beware

The box on the Sierra Club doorstep looked like just one more late Christmas gift. Except why were those dogs hungrily sniffing at the carton? In an unexpected expansion of Campaign activities, the Sierra Club had become the recipient of two deer livers — suspected of radioactive contamination.

A Niagara Gazette reporter acted as a middle man between worried hunters in Lewiston, NY, seven miles north of Niagara Falls, and Dr. Marvin Resnikoff, our scientific consultant. The hunters were fearful that deer shot in the vicinity of an old Manhattan Project dumpsite, the Lake Ontario Ordnance Works (LOOW), were contaminated. (The Manhattan Project was the secret project to develop the first atomic weapons.) There were rumors of deformed antlers. There were stories of warts and tumors all over the deer's bodies. But the hunters were scared. Everyone wished to remain anonymous.

So the Niagara Gazette contacted a radiological laboratory and the Sierra Club. The lab conducted tests which revealed a high radiation content in the deer liver. Dr. Resnikoff independently confirmed this result.

His test showed a reading of 9.5 picocuries per gram of Cs-137, Radium and its daughters in the liver. The radiation levels in this deer were higher than in any of the 18 deer tested each year at West Valley during its six years of operation — except for one animal. And the deer at West Valley used to drink from lagoons on site contaminated with radioactive liquids from the plant.

Needless to say, the radioactive deer story hit the headlines in a hurry. Associated Press, Sixty Minutes and 20-20 arrived on the scene. The New York State Department of Health hurriedly moved to discredit Resnikoff's figures.

A Health Department official, John Matuszek, claimed that a person would have to eat "4000 to 40,000 pounds of deer meat to exceed State Health Department standards." Matuszek's cavalier attitude was not shared by Lewiston Councilwoman Joan Gipp. She was deeply concerned about the fact that many hunters eat the deer liver. Yes, the liver is considered a delicacy and often cooked while on the hunt. Gipp, who has been a persistent critic of the LOOW site, called for a health

study of residents in the area of the LOOW site which contains 20,000 pounds of uranium ore residue left over from early weapons development.

The radioactive materials must be removed or the soil and vegetation will pose a threat to humans and animals and contaminate groundwater in the area. And how much harm is being done to animals like the deer? It is hard to separate fact from rumor in this frightened community. Until a careful controlled study of animals is conducted, citizens will not know for sure the extent of the problem.

But as we go to press, we just learned that a deer processor in Niagara County states that 85% of the deer (mostly bucks) that were shot within a two-mile radius of the LOOW site have severe deformities of their legs. He explained the condition as a knot, the size of a baseball, protruding from the joint we know as the elbow. Two bones were growing in the animal's legs at the joint. A puss-like substance was found under the skin. As yet, testing of these deer has not yet been conducted.



**SECRET SHIPMENT** The map traces the route of a secret shipment on its way to the Ginna nuclear power plant near Rochester, NY. It travelled through densely populated suburbs of Erie County and downtown Rochester. The shipment contained over 100 lbs. of plutonium. It only takes 10-12 lbs. to make an atomic bomb the size of the one dropped on Nagasaki. State and local officials were not notified in case of an emergency. The censored report was obtained through a Freedom of Information Act suit in December, 1980. The shipment was expected to arrive at Ginna on February 28, 1980.

The Sierra Club Radioactive Waste Campaign is launching a campaign to educate the public and local officials concerning these hazardous shipments. If you are interested in the campaign or would like to know the exact route, call or write.

## Radioactive Milk?

Farmers around the Three Mile Island and Oswego nuclear reactors and the West Valley ex-nuclear fuel reprocessing plant have reported health problems with cow herds (see "Bovine Blues," Spring, 1980 edition, *The Waste Paper*). These problems involved low tolerance to infections, mastitis, sterility, reduced fertility, tumors and brittle bones. The cause of these problems is unknown but all the animals were located on farms near nuclear facilities. The finger seems to point to radiation emitted from these facilities.

The cow problems at West Valley seem to have cleared up when the plant ceased operation in 1972. The severe cow problems at TMI did not occur until after the accident on March, 1979 and then the problem leveled off. However, the problems at Oswego, where the Fitzpatrick and Nine Mile Point-1 nuclear reactors are located, have persisted.

The owner of the Fitzpatrick plant, the Power Authority of the State of New York, has steadfastly denied that radiation, particularly Cs-134 and Cs-137, was

being released from the facility. However, recently detected high levels of cesium (Cs) in milk seem to imply that radiation is indeed being released from the plant, though PASNY and a contractor for a recently released study, NUS Corporation, continue to deny that the reactors are causing high Cs radiation levels.

The cow problems at Oswego have persisted since 1978. Farmers have been left frustrated and angry by the machinations of the Power Authority and the State Health Department. Several farmers including Linda Clark of Mexico requested a Health Department cow study in 1979. Linda's herd like other local herds had unusual problems with abortions, failure to conceive, twin births, and large calves (Oswego Valley News, Oct. 21, 1980). Health Commissioner David Axelrod promised to help Oswego farmers, but no study was funded.

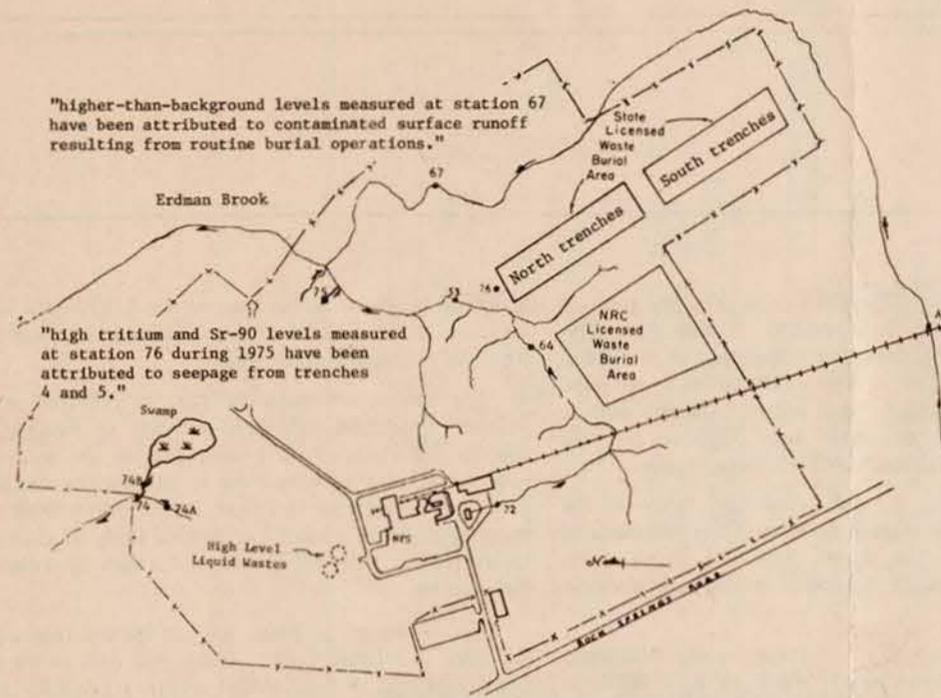
A year later in September, 1980, high cesium levels in milk were reported at the farm of Charles Parkhurst, up to 53 picoCuries per liter. Soon thereafter, the creamery refused to accept milk from the Parkhurst farm and it

went out of business. The radiation levels in the Parkhurst farm milk were over *ten times* the levels at farms further from the Oswego nuclear plants. The Parkhurst farm was located within two miles of the reactors.

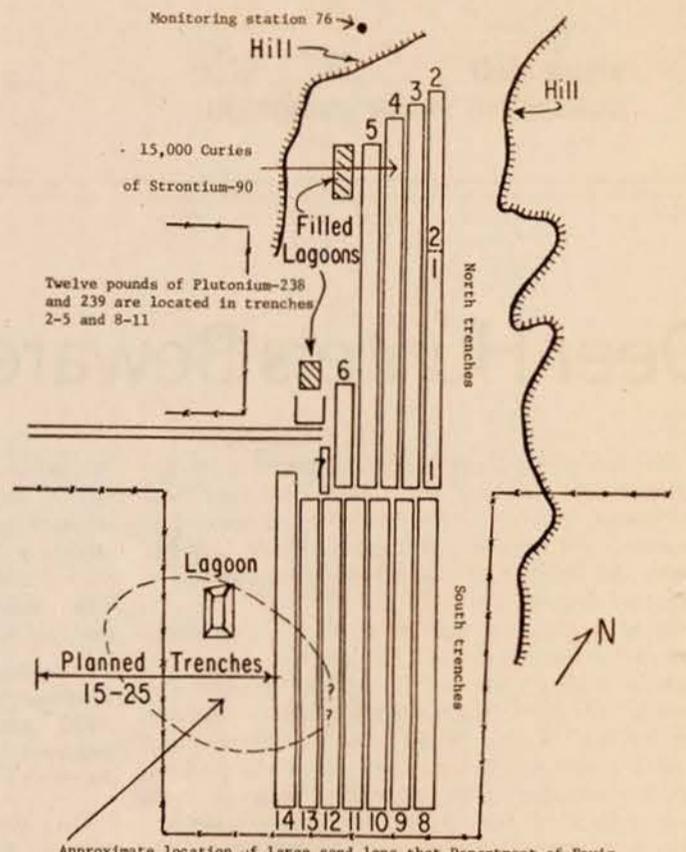
John Matuszek, State Health Department official who so easily discounted the radioactive deer liver issue (see *Deer Hunters Beware*, above), had a quick explanation for the high Cs levels in milk — laboratory error (Oswego Valley News, Nov. 29, 1980). Matuszek is a former military officer and now Health Department official. But a contractor for the Power Authority has ruled laboratory error out as a possibility and the Health Department has not backed up its casual assertions with careful analysis.

The story boils down to a "whodunit" mystery. Cesium is reported in milk, but no one's talking. The Power Authority hired NUS Corporation, a favorite contractor of the utilities, to study the matter. In a recently released report ("An Evaluation of the Cesium

# West Valley Dumpsite: Sand Lenses and Swamps



Map 1. Nuclear Fuel Services plant and burial grounds at West Valley. Adapted from "Annual Report of Environmental Radiation in New York State, 1975," New York State Dept. of Environmental Conservation.



Map 2. New York State licensed burial trenches. Adapted from "Annual Report of Environmental Radiation in New York State," New York State Dept. of Environmental Conservation, 1975.

"It boggles my non-technical mind that any dope would come up with the idea," Jim Larocca, Chairman of the New York State Energy Research and Development Authority, has characterized the idea of dumping radioactive material in the ground at West Valley in this manner. WE AGREE. The problems that justify this remark are detailed below. Many of the same problems that have plagued West Valley will occur at other burial sites currently under consideration unless the West Valley lesson is learned.

The West Valley burial ground is located about 900 feet from the old reprocessing facility which has been shut-down since 1972. As is evident from map 1, the burial area is immediately adjacent to several small creeks that drain into Erdman Brook. This brook, in turn, leads to Buttermilk Creek, which is a tributary of Cattaraugus Creek. Cattaraugus Creek drains into Lake Erie, the water supply for 11 million persons. In 1978, radioactive isotopes were found in Lake Ontario that could be traced back to the nuclear reprocessing facility.

The numbers on the map refer to radiological monitoring stations within the plant area. The explanatory captions are from the U.S. Department of Energy (DOE), Western New York Nuclear Services Center Study of 1978, TID-28905-2, pages 2-22. We have superimposed the DOE text on the original map. Note how close the "high tritium and Strontium (Sr)-90 levels" of station 76 is to the creek.

The high levels of radioactivity noted at station 76 have decreased markedly since the burial ground was closed in 1975 and since extensive pumping of accumulated water from these trenches. The SR-90 levels at station 76 were on the average 14,102 picocuries per liter (pCi/l) in 1975 with a maximum of 270,000 pCi/l that year! In 1976, the average Sr-90 was down to 375 pCi/l—still way above the state-wide average of 6.9 pCi/l and suggestive that all is not well.

Also note that map 1 which was prepared in 1975 by the New York Department of Environmental Conservation correctly places a swamp

near to monitoring station 74 B. Another swamp which appeared in the 1963 Safety Analysis Report of Nuclear Fuel Services has not been included. This swamp is located adjacent to the southern trenches. (See map 3)

As can be seen in map 2 the northern trenches are alarmingly close to steep slopes that lead down to the streams shown on map 1. According to a report by the U.S. Environmental Protection Agency (EPA), erosion is a serious problem here. The report "Summary Report on the Low Level Radioactive Waste Burial Site, West Valley, New York, 1963-1975," EPA-902/4-77-010, says "rapid surface water runoff has caused significant soil erosion to these slopes." EPA also states "the area needs to be protected from further gullying."

The northern trenches have had a persistent problem with water accumulation. It is, in part, because of this water leakage that NYSEDA has sued NFS to prevent the company from walking off the site (see page 5). In March, 1975, water had reached such high

levels in the trenches, they overflowed. Over 6.4 million liters of water have been pumped from these trenches since 1975. Unfortunately, the trenches 3, 4, and 5 which overflowed radioactivity into nearby streams and required pumping, contained some of the most hazardous isotopes at the burial ground.

The 15,000 Ci of Sr-90, 46,000 Ci of Co-60 and about twelve pounds of Pu 238 and 239 were sited in these trenches (Note location on map 2). Current regulations would not permit burial of such high-level and long-lived isotopes in a burial ground. Some of these materials have travelled far down stream. Sediment at the Springville Dam 2 miles downstream contains all of these isotopes in significant quantities.

It is not only the northern trenches that have had water accumulation problems. The southern trenches are also now filling up with water. A pump-out of these southern trenches was begun in November, 1980.

Supposedly, because these trenches had

-continued on page 3

## A Fable

Betty Quick lives in Englewood, N.J. one mile from Interstate 95. She says, "I represent myself, my children, and my grandchildren, two of whom live in MA., close to I-95 on the east and I-195 on the west. I also represent Bergen County Sane." Betty's fable is based on events described in the book "Custer Died for Your Sins."

Once upon a time, long long ago there were many Indians living here on their land. White people came and wanted the land. The native Indians were in the way. Various methods were used to get them out of the way. One of the more subtle methods used by the U.S. Army was to distribute blankets to the Indians - blankets infested with Small Pox virus.

Now at the same time there were a few white people who protested. Not many, because most people didn't know about the blankets. The protesters claimed that shipping Small Pox infested blankets to the Indians could be dangerous to their health. What if an Army wagon train had an accident in their town and dumped some of these blankets near their homes or their water supply? And weren't the Army drivers at risk? The white citizens were assured that the wagon trains were safe. As an extra precaution every fifth blanket was stamped DANGER-SMALL POX and the Army hired only drivers who could read and write.

The white citizens were still concerned. They started passing local ordinances banning the shipment of these blankets through their towns. These citizens believed that they had a right, through their locally elected government, to protect their own health and safety. A small but vocal minority urged a ban on ALL shipments of deadly blankets because of a concern for all people, Indian as well as white.

In each municipality where an ordinance had been passed, the local toll collector was taught to look for shipments of Army blankets. The Army began to have difficulty making deliveries to the Indians. They engaged private carriers. The private carriers encountered the same road blocks. A driver would be moving down the turnpike, come to a little town and stop at the toll booth. The local toll collector would check the cargo. If it contained blankets marked DANGER-SMALL POX he or she would refuse to turn the pike thus effectively blocking the road.

Many people were upset by this. They included the Army, the private carriers, horse breeders and traders, cartwrights, blanket manufacturers, sheep growers, and of course, the manufacturers of Small Pox virus.

Something had to be done. The Army appealed to the Dept. of Transportation. The Dept. of Transportation, after many months of study, said that a locality had a right to protect the health and safety of its citizens. However, if exercised this right interfered with interstate commerce, then the United States government could pre-empt local authority.

One public hearing was held. It was held in Springville, Pa., a very small out of the way rural town not served by public transportation. The hearing was not widely publicized. The few people who came were assured that the shipments of Small Pox infested blankets were safe for both the drivers and the local populace. And the Indians? Some of the survivors protested.

The moral of this tale is: there is a higher law in this land, a law that gives me the right to protect the health and safety of myself, my children and my grandchildren. This law cannot be pre-empted.

## the Waste Paper

Published by the Sierra Club Atlantic Chapter Radioactive Waste Campaign.

Business Office: 3164 Main Street  
Buffalo, New York 14214  
(716) 832-9100

New York City Office: 800 Second Avenue  
New York, NY 10017  
(212) 687-5559

Peter Dalton ..... Office Manager  
Lisa Finaldi ..... Assistant Editor  
Mina Hamilton ..... Organizer  
Marvin Resnikoff ..... Staff Scientist

### Advisory Board

Beatrice Anderson, Dorothy Cairns, Ruth Caplan, Dave Finnell, Steve Galac, Judith Kessler, Warren Liebold, Richard Lippes, Paul Maggionto, Mark Miksic, Sam Sage, Ray Stiefel.

Special thanks to Linda Pelino and University Press for their time and patience. Also thanks to Sue Titus for her graphic work and June E. Peoples and Charles H. Hoagland for their crossword puzzle.



# West Valley Dumpsite . . .

—continued from page 2

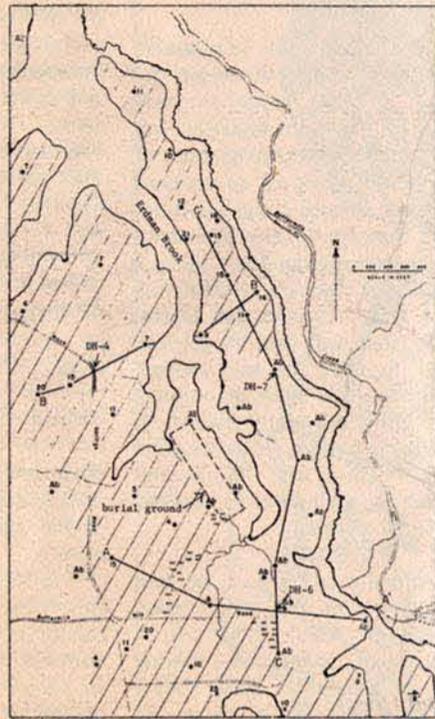
an eight-foot clay cover on top, instead of the four-foot cover used on the leaky northern trenches, there would be no further problems with a "bath-tub" effect. In 1978, DOE stated "filtration through the caps should now cease and erosion should be prevented." Promises, promises.

Why is there a chronic problem with water infiltration at the burial ground? There is much controversy regarding the answer to this important question. One problem is that as cardboard cartons, wooden crates, animal carcasses and drums disintegrate inside the trench, its contents slump and shift. And the trench covers naturally also slump and settle. This leaves indentations on the surface through which water can travel. This process will continue for decades—until the trench contents are an even mush.

In addition to the water infiltration problem through the top of the trench covers, there is an unresolved issue regarding horizontal movement through the soil surrounding the trenches. The position of Nuclear Fuel Services, the U.S. DOE, the New York Department of Health, NYSERDA and the NY Geologic Survey has been that the soil surrounding the trenches is of a virtually impermeable, silty, clay-like consistency.

The U.S. EPA does not share this confidence regarding the soil medium's impermeability. According to the EPA report mentioned previously, there needs to be further research conducted regarding the location of sand lenses (strata of sand-like soil along which water could move) in the region of the burial ground. In 1977, EPA called for an investigation of the "extent and location of sand lenses." The agency was concerned because during a field investigation of the site, EPA staff had discovered a one-foot by 65-foot sand lens in trench 12.

Since then, the Department of Health has stated that the sand lens is "pod-shaped" and does not interconnect with a horizontal strata. But the geologic survey and the Department of Environmental Conservation, in recent conversations with Campaign staff, said they have data regarding a huge sand lens located at trench 13 and 14 and extending west that has never been made public. This sand lens is truly enormous with dimensions of 100' by 200'. The agencies refuse to voluntarily release the data showing the extent of the lens so the Campaign has initiated a Freedom Of Information Request to obtain all memos and correspondence pertaining to the lens. It looks like that "impermeable clay" is disappearing into a sand lens and a swamp. And the USGS reports that the sand lens was in trench 13, not 12. Look at a map (see map 3) of the site prepared by Nuclear Fuel Services back in 1962. It

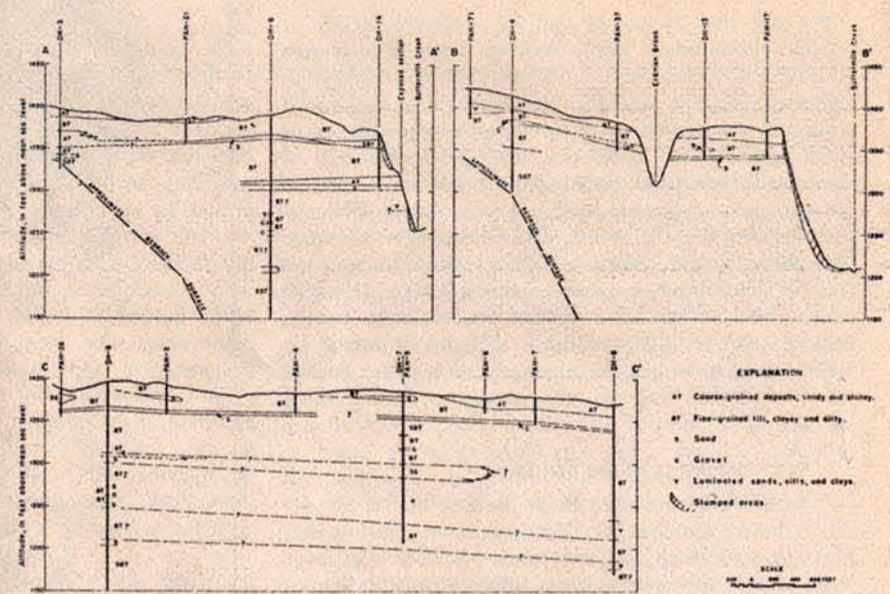


Map 3. Map showing location of geologic borings, distribution of surface deposits, and presence of swamps. Geologic cross-sections are found in Map 4. Use DH-4, -6, -7 to locate cross-section. Grass hatching shows location of swamps. Ab shows absence of coarse surface deposits. Adapted from Figure 2.22a, Safety Analysis Report, Nuclear Fuel Services, 1962.

reveals the location of a swamp extremely close to the trenches 12 and 13. Is there a connection between the sand lens and this swamp?

Have adequate borings been conducted at the site to verify soil impermeability? Our map 3 is from the Safety Analysis Report, which NFS had to prepare in order to obtain a license from the Atomic Energy Commission. It shows the location of test bores that were done in the area planned for the reprocessing facility located at DH-4. Few borings were made in the area of the burial ground. We have superimposed a rough sketch of the dimensions of the burial site on the NFS map. Note the extensive swamp area near the southern trenches. Also note tributaries from this area draining into Erdman Brook. On this map appear lines showing the location of geologic cross-sections derived from the original borings which were conducted on the site. We have superimposed some of the drilling locations noted in the next diagram on these cross-sections to help the reader relate the two maps.

Map 4 is also from the original Safety Analysis Report of 1962. Note that fairly consistently throughout the site



Map 4. Map showing geologic cross-sections at the plant and burial ground area. From figure 2.23, Safety Analysis Report, Nuclear Fuel Services, 1962.

there is a horizontal, continuous strata marked S (Sand). This strata appears at altitude 1350 (altitude in feet above mean sea level). The question is what is the exact extent of this strata? And has any part of the burial trenches intersected with this strata?

According to rough schematic drawings prepared by the EPA, the trench bottoms are down to a depth of about 20 to 25 feet, or to elevation 1355 or 1360. However, there is considerable guesswork involved in this estimate of trench depth because, according to DOE, "there are no records of the original site preparation activities." There is the distinct possibility that one of the trenches has intersected

with this strata.

There are many disturbing uncertainties regarding sand lenses and swamps at the dumpsite. It is the position of the Radioactive Waste Campaign that the West Valley burial ground is an unstable and hazardous location for dangerous isotopes. In particular the Sr-90 and Plutonium should be exhumed and placed in above ground, concrete or steel bunkers that can be properly monitored and repaired.

We agree with James LaRocca's original "only a dope" statement and would add "only a dope" would leave the West Valley burial ground in its current condition. ☸

## Gold is Forever

Forty-eight "hot" gold rings turned up in western New York as well as New York City, Bradford, PA., Louisville, KY, and Toronto, Canada. The gold was originally used as "seeds" and implanted in tumors, a process utilized in cancer therapy at research hospitals located in Buffalo and New York city. Somehow some of the gold seeds, which contained radon gas, were smelted with unadulterated gold and entered the jewel market as rings. The gas decays into radioactive lead (Pb-210) and is dangerous for 100 years.

The New York State Health Department has known of the problem since 1967. The Health Department has sat on the issue for 13 years because they did not want to alarm the public. Several local and state officials have called for an investigation of

the State Health Department's conduct. A New York State Senate task force has been formed to probe the accusations of a cover up.

The department recommends that anyone who has a gold ring purchased before 1960 and has a history of soreness or skin irritation on their ring finger should contact their local, county or state health department to have the ring tested for radioactive contamination. If the test is positive, the ring will be confiscated, because, as a health department official stated, "it's against the law to have radioactive gold without a license!" In western New York, several individuals have had surgery to remove cancer of the finger and arm traceable to the contaminated gold. ☸

# Plutonium-Free Pizza

**Ingredients:**

- 3 cups whole wheat bread flour
- 3 tbsp olive oil
- 1 tbsp honey
- 1 tsp salt
- 1 package yeast
- Mozzerella cheese, sauce, peppers, oregano, garlic, tofu, brocolli, onion, mushrooms, whatever else you like on pizza.

1. Dissolve yeast in 1½ cups warm water.
2. Pour 2 cups of flour into a mixing bowl. Mix in the honey, salt, olive oil.
3. Add yeast and the rest of the flour. Mix. Add a bit more flour if the mixture is too moist and sticky.
4. Once you have a glob of dough that doesn't stick to the sides of the bowl, cover the bowl with a clean, dry cloth and allow the dough to rise for 20-30 minutes.

5. Preheat oven to 450°F. Grease a cookie sheet or whatever else you're going to use to put the pizza in. This recipe gives a medium thick crust in a pan measuring 11" x 17".
6. While the dough is rising, get the toppings ready. Make your own or use a commercially-available sauce. Thick sauces seem to work better for pizza than thinner ones. Cheese should be grated, veggies chopped, mushrooms and onions fried or sauteed (not mandatory, but it seems to work out better that way).
7. Once the dough has risen a little (it won't be dramatic), spread the dough out with your fingers (the fun part) over the lightly-greased pan.
8. Spread a light layer of sauce over the crust and place in the oven until the crust is almost-but-not-quite cooked (about 10-15 minutes).
9. Take the crust out of the oven and spread across it: more sauce and all of the other stuff you intend to

use. Place the whole thing in the oven and cook for about another 10 minutes (until the pizza starts to brown on top).

10. Eat.

**Notes**

1. Submitted by Su Jacobs and Warren Liebold. Based on an unpublished manuscript by Su Jacobs entitled "Pizza."
2. If you prefer plutonium in your pizza, simply prepare as outlined above, take the finished pizza and merely hold it outside a window approximately five days after a Chinese weapons test. Check local weather reports in order to time exposures correctly. Or wait at a busy corner of U.S. Route 20 for a plutonium oxide shipment going by. If there is a fire or accident hold the pizza downwind. Do you have a recipe to submit? Send it to the Food Editor, 3164 Main St., Buffalo, NY 14214.

# West Valley Update

On November 3, 1980, the New York State Energy Research & Development Authority (NYSERDA)-DOE agreement on the solidification of the high level liquid wastes at the shut-down West Valley reprocessing plant was signed. The agreement had few surprises. As environmentalists had feared, W.R. Grace and Getty Oil are basically being relieved of all future financial responsibility for the waste. The federal government or *You, the taxpayer*, picks up 90% of the cleanup costs and NYSEDA picks up the remaining 10%. This 10% which could be significant (current cost estimates for the project are at \$280 million) will be financed by NYSEDA's providing the building and facilities needed for the project and by the agency providing some support staff.

Some highlights of the contract:

\* DOE will take over all of the facilities at the site on or before October 31, 1981 *excluding* the low-level burial ground which will be retained by NYSEDA. New York State apparently wants the option of gaining revenue to help pay for the staff mentioned above by re-opening the burial ground.

\* DOE will hold a hearing before October 1, 1981 on proposed solidification technologies. (Stand ready, folks, to come in droves for this hearing.)

\* DOE will "decontaminate" and "decommission" all facilities at the site used for the project, but the agreement, explicitly, notes the agency will *only* decommission the NRC-licensed burial where the broken fuel hulls from Hanford, Washington reside, *if* Congress authorizes sufficient money. (In other words, according to present plans, the NRC burial ground will probably not be dug up.)

\* DEC will take responsibility for all monitoring stations at the site.

\* Irradiated fuel from the Ginna plant in Rochester, currently sitting in the irradiated fuel pool, will be allowed to remain on site.

\* The provisions of the Price-Anderson Act are going

to be examined to see if the conditions can be extended to apply to the West Valley site. The Price-Anderson Act sets a financial liability limit of \$560 million for each accident at a nuclear facility. If the Price-Anderson Act does not apply to this facility, the important question of who has financial liability in the event of an accident during the solidification process remains to be answered.

The contract makes no mention of any agreement by NYSEDA to re-open the burial ground but, clearly, there would be no purpose in the agency's reserving the burial ground, if it did not wish to retain this option. Since every year, New York state will have to get new Congressional appropriations to fund the solidification project, the pressure for re-opening the burial ground will continue to be brought by Congresspersons anxious to secure a trade-off for the federal funding. It seems quite possible that DOE will hold off taking over the site until New York has demonstrated its willingness to proceed with the re-opening of the burial ground.

\*\*\*

\*\*\*Stand By\*\*\* The environmental impact on the proposed AFR at West Valley and the solidification project is due at the end of March, 1981. Start preparing now to present statements and attend a hearing that is probably going to be located at West Valley. Write us if you want to receive materials in advance to help you develop your testimony. It is still unclear to us under what authorization DOE is proceeding with an impact statement on the AFR facility since *no authorizing legislation has, as yet, passed Congress*. Last session an AFR bill did pass the Senate, but it died, in large part due to citizen activists efforts, in the House.

\*\*\*

James Larocca, NYSEDA chairman, has been trying to squash plans for a DOE-funded Citizen Advisory Council that would be set up to watch-dog the DOE solidification project. Write Governor Carey and urge his support for this panel which would be the only mechanism for citizen in-put into the tricky and potentially hazardous solidification project.

# Irradiated Fuel Route Revealed

A lawsuit by the Sierra Club and other environmental groups forced the Nuclear Regulatory Commission (NRC) to release on October 24, 1980 previously secret transportation routes for spent fuel shipments in N.Y., PA. and down the east coast. The lawsuit was filed by the Sierra Club Radioactive Waste Campaign, American Friends Services Committee, and the Potomac Alliance. The legal action, which was initiated after months of negotiations, was filed under the Freedom of Information Act.

The environmental groups wished to obtain the route information so as to alert local governments and to allow for local participation in route selection (or prohibition) and to permit development of emergency preparedness plans. The NRC had refused to budge on grounds that revelation of the routes would help terrorists and besides, claimed the agency, the shipments posed no hazard. An irony of the dispute was that Sierra Club had already obtained and publicized most of the route in May, five months *before* the NRC release. (So much for the ability of the agency to keep the spent fuel shipment routes secret.)

In New York during 1980, the route was used for 14 shipments of irradiated fuel moving from an experimental reactor at Chalk River, Ontario to Savannah River, South Carolina. The route traversed New York from Ogdensburg, via routes I-81, NY-17 and US-15 to the PA. border. The section of the route not previously known included a by-pass around Syracuse — routes I-481, NY-31, 31C, NY-34 and US-20 and back to route 81. The New York route cuts through Auburn, Binghamton (including "Kamikaze Curve," see Binghamton Ban, page 6) and Elmira, N.Y. The spent fuel shipments traversed PA. on the winding and hilly two and three-lane route 15 and linked up with route 81 in Harrisburg.

A new amendment to the Atomic Energy Act passed by Congress in June, 1980 requires the NRC to reveal spent fuel shipment routes periodically. These routes will be periodically published by the NRC in NUREG 0725. *The latest one is Public Information Circular for Shipments of Irradiated Reactor Fuel*, September, 1980. It is available at regional NRC offices.



photo by Marvín Resnikoff

These citizens drove through the night to lobby Capitol Hill on nuclear waste.

## Vote Tallies

### Districts—New York

- 1—Carney (R) NO
- 2—Downey (D) YES
- 3—Ambro (D) YES
- 4—Lent (R) NO
- 5—Wydler (R) NO
- 6—Wolff (D) YES
- 7—Addabbo (D) YES
- 8—Rosenthal (D) YES
- 9—Ferraro (D) YES
- 10—Biaggi (D) YES
- 11—Scheuer (D) NO
- 12—Chisholm (D) ABSENT
- 13—Solarz (D) NO
- 14—Richmond (D) ABSENT
- 15—Zeferetti (D) YES
- 16—Holtzman (D) YES
- 17—Murphy (D) ABSENT
- 18—Green (R) NO
- 19—Rangel (D) YES
- 20—Weiss (D) YES
- 21—Garcia (D) ABSENT

### Districts—New Jersey

- 22—Bingham (D) YES
- 23—Peyser (D) NO
- 24—Ottinger (D) YES
- 25—Fish (R) YES
- 26—Gilman (R) NO
- 27—McHugh (D) NO
- 28—Stratton (D) NO
- 29—Solomon (R) ABSENT
- 30—McEwen (R) NO
- 31—Mitchell (R) YES
- 32—Hanley (D) ABSENT
- 33—Lee (R) YES
- 34—Horton (R) NO
- 35—Conable (R) NO
- 36—LaFalce (D) YES
- 37—Nowak (D) YES
- 38—Kemp (R) YES
- 39—Lundine (D) NO
- TOTAL: YES 19 NO 14 ABSENT 6

### Districts—New Jersey

- 1—Florio (D) YES
- 2—Hughes (D) YES
- 3—Howard (D) NO
- 4—Thompson (D) ABSENT
- 5—Fenwick (R) ABSENT
- 6—Forsythe (R) NO
- 7—Maguire (D) YES
- 8—Roe (D) NO
- 9—Hollenbeck (R) NO
- 10—Rodino (D) ABSENT
- 11—Minish (D) YES
- 12—Rinaldo (R) YES
- 13—Courter (R) NO
- 14—Guarini (D) NO
- 15—Patten (D) NO
- TOTAL: YES 6 NO 6 ABSENT 3

# Washington Legislative Report

One victory for environmentalists during the post-election doldrums—the McCormack nuclear waste bill (HR 7418) bit the dust. (In fact, "Atomic" Mike himself bit the dust, failing in his re-election bid.)

This bill set up a hasty selection process for a federal nuclear waste repository and exempted the process from both the National Environmental Policy Act (NEPA) and the Nuclear Regulatory Commission (NRC) licensing provisions.

Environmentalists who have worked long and hard to kill HR 7418 before the election, were afraid it would come up again in the lame duck session. (In an election year, after Nov. 4, Congress is tagged with this uncomplimentary name.) But diligent lobbying by the Sierra Club, Friends of the Earth and the Environmental Policy Center saved the day.

There was an attempt by the nuclear industry to push through a substitute federal repository bill that included NEPA and NRC provisions. Although the bill

was an improvement over the McCormack bill, it had severe drawbacks. The bill set up an unrealistic time schedule such as the first two sites to be characterized (or studied in detail with geologic drilling) would be chosen by 1982 even though *criteria* for site selection may not be ready until 1981. The bill also had alarming provisions that put time limits on both Congressional debate and judicial review.

The prime failing of the bill was a weak state veto which could be overridden by either the House or the Senate. An important amendment offered by Kostmayer, Santini and Roth would have required a vote by *both* the House and the Senate to override a state veto. This state's rights amendment would have given New Yorkers (Ohioans or any other state) important protection against a federal repository in their backyard.

We feel where public health and safety is concerned, the states should have the right to protect their citizens. Please check the box above to see how your

representative voted on the Kostmayer amendment. *A correct vote is yes.* If your Congresspersons voted incorrectly, be sure to write them and express your support for the state veto of a nuclear waste repository.

In the next Congress, the industry will once again be pushing for an AFR — Away-From-Reactor storage for irradiated fuel. Even though West Valley seems to be currently not a candidate AFR site, citizens in New York state still remain vulnerable to hazardous irradiated fuel transport — as reactors through the northeast ship irradiated fuel across the state to the proposed AFR at Morris, Illinois.

In 1981, an AFR will move quickly through the Senate. The question is can we hold the line again in the House? We think we can, particularly if activists drum the facts on cask safety (see "Shipping Casks: Are They Safe?" fact sheet listed in Resources) into legislators heads.

# Illinois Poster Stint

Over 100 phone calls poured into the office of the Governor of Illinois, James Thompson, on Tuesday, September 23, 1980. The calls were from concerned citizens who were, suddenly, very worried about the possibility of radioactive contamination of their neighborhoods. The citizens had seen a poster that appeared mysteriously over night in communities through which spent fuel would travel on the way to a proposed AFR (away-from-reactor) storage facility at Morris, Illinois.

Currently, three sites are under consideration by the U.S. Department of Energy for an AFR — the Morris facility, 50 miles south of Chicago, Illinois plus a site at Barnwell, South Carolina and West Valley, New York. An AFR is large swimming pool that will serve as a centralized storage facility for the

—continued on page 5

# State Sues NFS, Getty Oil

On December 30, 1980 the State Supreme Court of New York ordered Nuclear Fuel Servies (NFS) to continue managing its "low-level" burial ground at West Valley, NY. The order came as a surprise to NFS, which intended to abandon the site two days later when its 17-year lease with the state expired.

The decision was a victory for the Sierra Club Radioactive Waste Campaign which has been working toward this action for over two years. The Campaign has actively urged the New York State Energy Research and Development Authority (NYSERDA) to sue NFS for compensatory damages for its careless management of the six-acre, state-licensed burial ground and its violations of the waste storage agreement.

Until now, NYSERDA has never made an attempt to seek financial assistance from NFS, a subsidiary of Getty Oil. If NFS walks off the site, the taxpayers of New York could be paying millions of dollars for hundreds of years.

Now NYSERDA will ask the court to require NFS to operate, survey and maintain the site until all contract requirements are met and all arrangements for future maintenance and security are decided.

In the court files, NYSERDA revealed that "the trenches are still filled with radioactive water and that the procedure to remove the water poses constant problems." NYSERDA has also stated that this abandonment would "result in immediate and irreparable injury and loss or damage . . . and threatens the health, safety and welfare of the public." This admission of the poor condition of the low-level burial ground is a major shift in policy by NYSERDA which has been hinting that the burial ground might shortly be opened for more waste!

The burial ground leakage has already caused problems for years (see West Valley Dump Site, page 2). Recently, there was a serious toxic spill. In November of 1980, about 1000 gallons of water containing radioactive materials were discharged at the work site when a coupling from a plastic hose broke. The water was being siphoned from the water-logged trenches to a treatment plant nearby.

This reflects yet another NFS negligent operation at the West Valley site. The discharge of radioactive water reaches the watershed of the Cattaraugus Creek. Downstream in Lake Erie is an intake which supplies southern suburbs of Buffalo with their drinking water.

This hazardous spill is among the two million gallons of "treated" radioactive water which NFS has pumped into the Cattaraugus watershed between 1975 and 1979. Some of the radioactive material is removed by treatment, but over 6700 curies of tritium (a radioactive isotope of hydrogen) have been released.

A second major development is that the suit filed by NYSERDA asks the court to prevent Getty Oil from collecting an \$18 million loan the company made to NFS back in the sixties. If Getty Oil were to collect this money, NFS would go bankrupt and not have the money to maintain the site. For years, the Campaign has been requesting that NYSERDA get Getty to pay for the high clean-up costs at West Valley. NYSERDA has always refused, claiming that the "corporate veil" (between parent company and subsidiary) could not be pierced. Now, NYSERDA seems to have changed its tune.

NFS and Getty Oil have asked that the case be removed to federal jurisdiction and that the restraining order be continued until a hearing date has been set. The hearing is now scheduled for March 30 at 11:00 a.m. in the federal district court in Buffalo. Is NFS scared that a New York court might not be as "objective" about the multi-million dollar clean-up that state taxpayers would have to pay?



**fast food faster with Atom**



these Magic pans save energy! Just fill and watch them cook.\*

# ATOM

**magic pans**

\*Be sure and follow manufacturer's directions.

1. Wear protective goggles, apron, and gloves.
2. Watch Magic pots at distance of 15 feet.
3. Avoid feeding food to pregnant women and children.

Atomic Pans graphics by Sue Titus

# Hot Heirlooms

Do you have no-stick pans in your kitchen? Well soon you may be able to buy "hot" pans if a Nuclear Regulatory Commission (NRC) proposal is approved. It seems that the Department of Energy (DOE) has 31 thousand tons of *slightly* radioactive scrap metal stored at its uranium enrichment centers in Portsmouth, Ohio; Paducah, Kentucky and Oak Ridge, Tennessee. The scrap iron, nickel, copper and aluminum was contaminated by Technetium 99 (half life 210,000 years) and low enriched uranium during the gaseous diffusion process. (Gaseous diffusion is a process which concentrates uranium 235 so it can be used for reactor fuel.)

Under the rubric of "conserving scarce resources," the NRC hopes to solve this exasperating waste problem by smelting the toxic scrap with uncontaminated materials. This recycled resource could then be made into a variety of goods such as children's toys, cooking utensils, furniture, water pipes, autos and tin cans.

The NRC is proposing, in effect, that the homes of millions of Americans become repositories for *minute* amounts of nuclear waste. If the NRC gets its way, we will have "hot heirlooms" to pass onto our progeny for hundreds of generations... some legacy to be remembered by.

A draft environmental impact statement by the NRC (NUREG-0518) has been prepared. Unfortunately, the public comment period has terminated (December 22, 1980). Citizens concerned by the hot heirloom policy might want to protest to local Congresspersons.

# Nuclear Lake Revisited

Watch the *Waste Paper* for a detailed analysis of a new survey on the Nuclear Lake near Pawling, N.Y.

Nuclear Lake, a beautiful 57-acre lake surrounded by a 1000 acres of attractive woodland, was bought by the National Park Service in 1979 for \$900,000. The Park Service plan was to re-route the Appalachian Trail along the lake. But some local residents became concerned that the lake and adjoining woods might be contaminated with unsafe levels of plutonium and other hazardous radioactive materials. The site was previously a plutonium factory run by United Nuclear and Gulf Oil. After an explosion at the plant in 1972, which blew out several windows of the facility and spewed radioactive dust into the environment, the plant was closed down. The area was "decontaminated" and released for unrestricted use by the Nuclear Regulatory Commission in 1975.

Were the tests done before the release adequate? Residents are concerned about insufficient sampling of sediment in the lake. According to a company memo, United Nuclear used to discharge 1000 gallons of effluent from the plutonium laboratory each *month* into the lake. But, thus far, only two sediment samples have been taken along the shore of the lake. No samples have been taken near the old discharge pipe that fed into the lake.

A recently released helicopter survey of the site shows near background levels. However, the lake water would act as a shield over the radioactive materials embedded in the sediment. Furthermore, the overflight only checked for the isotope, Americium-241, a by-product of Plutonium 241. This method of sampling does not adequately check for levels of Plutonium 238 and 239 which are apt to be present.

# Illinois Poster Stint . . .

—continued from page 4

irradiated, spent fuel which is currently being stored at individual reactor sites. Due to over-crowding of these individual storage sites, the industry and DOE is hoping to relocate the fuel at AFRs.

The posters that suddenly appeared in Illinois were placarded on utility poles and buildings. The public was warned that there would be a dramatic increase in radioactive shipments and folks were urged to call a listed number to obtain evacuation plans. The telephone number was that of the Governor and his public affairs division. Over 3000 of the posters were put up in northern Illinois communities.

The poster project was the brainchild of Greenpeace, an international environmental organization and Morris Alert, a Illinois-based safe energy group. According to the coordinator of the event, Bridget Roem, the poster project was timed to protest Governor Thompson's

veto of state legislation that banned the storage of irradiated fuel generated by out-of-state reactors.

Governor Thompson dismissed the phone calls as a response to a hoax. But on December 3, 1980, the Illinois legislature overrode the Governor's veto. The bill bans the transport, disposal and storage of out-of-state reactor fuel in Illinois, *unless* the state of origin has a facility specifically designed for storage of spent fuel and *unless* the state has entered into a reciprocity agreement with Illinois. The facility cannot be a spent fuel pool at an individual reactor site — it must be a facility similar to the Morris, Illinois site, designed to accept fuel from many reactors. The reciprocity agreement must be signed by a majority of both Houses of the Illinois legislature and signed by the Governor.

A similar poster project is planned for New York State in the Spring of 1981.

Sierra Club Radioactive Waste Campaign  
Box 64, Station G  
Buffalo, New York 14213  
(716) 832-9100

Name .....

Address .....

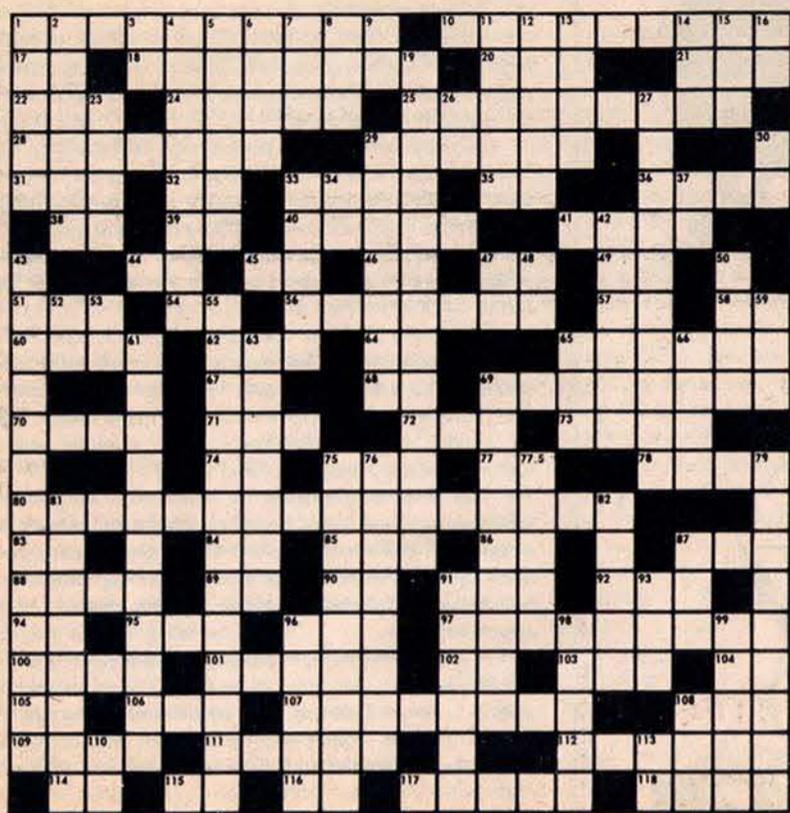
City ..... State ..... Zip .....

Phone: Work ( ) ..... Home ( ) .....

Please make checks payable to the Atlantic Chapter Radioactive Waste Campaign. Send to the above address. Thank you.

- Yes, I would like to subscribe to the *Waste Paper* at the reduced introductory rate of \$6.00 per year. I am enclosing a check in this amount.
- Yes, I would like to volunteer some time for the Radioactive Waste Campaign. I will help with research, clerical, organizing, public speaking (please circle your interest).
- Yes, put me on your mailing list.
- Yes, I would like to stop radioactive wastes. Here is my contribution of \_\_\_\_\_ to the Campaign.

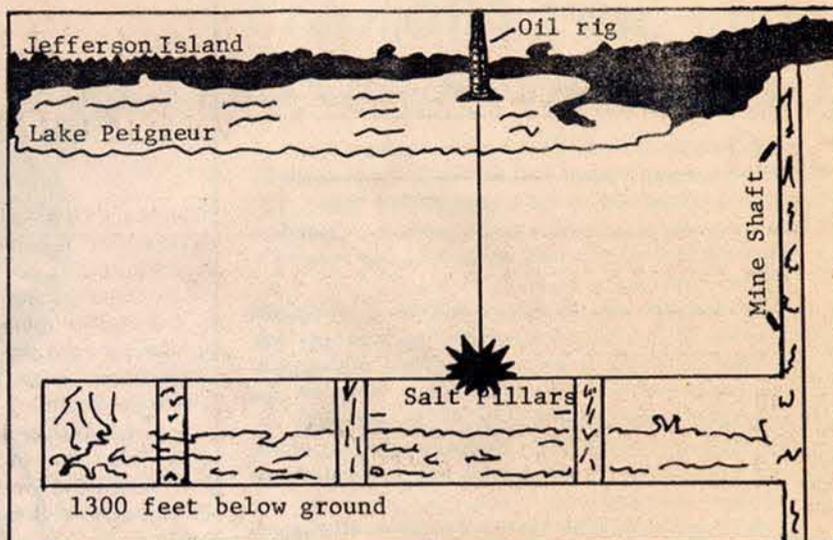
# The Waste Paper Puzzle



and June E. Peoples

© 1981 By Charles H. Hoagland

- Across**
1. WNYS dump site
  10. Anti-nuclear physicist from Buffalo
  17. Preposition
  18. Barnwell, South \_\_\_\_\_
  20. Past tense of eat
  21. Electrically charged atom
  22. Abb. for series
  24. Crucifixes
  25. \_\_\_\_\_ Island disaster
  28. Isotope of hydrogen
  29. U.S. Govt. \_\_\_\_\_ the bill for nuke industry
  31. Truman dropped bomb because of his \_\_\_\_\_
  32. Reactors come \_\_\_\_\_ line
  33. Smallest component of an element
  35. Howdy-Doody's initials
  36. Calif. think-tank
  38. Per. table element 39
  39. Abb. research and development
  40. To aid by speaking well of
  41. Long Island alliance
  44. Sub-atomic particle
  45. Per. table element 27
  46. Low frequency
  47. Per. table abb. for plutonium
  49. Overdose
  51. Five-star president
  54. Abb. for megacuries
  56. Chromosomal conjugation
  57. Large, three-toed sloth
  58. Monetary unit of Laos
  60. Punk rock group
  62. Abb. asbestos
  64. Per. table abb. for strontium
  65. Arab-American Oil Company
  67. Per. table element 90
  68. Abb. horsepower
  69. National Lead's shipping contractor
  70. WNYS anti-nuclear activist
  71. Basis for decimal system
  72. To go astray
  73. A tall grass
  74. Noble gas 18
  75. Feather stole
  77. Postal abb. Alaska
  78. Schlesinger and LaRocca made one
  80. Origin of recent waste shipments through WNYS
  83. Model railroad gauge 19 mm
  84. Air Force abb.
  85. Chemical suffix hydrocarbons
  86. Abb. senior
  87. Nuclear Regulatory Commission
  88. NYS's is acid
  89. Abb. for spaceship, minus the O
  90. Per. table abb. for sodium
  91. Predecessor of man
  92. Singular female pronoun.
  94. British sportscar
  95. WV trenches were built this way
  96. Daylight Savings Time
  97. A \$150,000-a-year GE spokesman in 1950
  100. Prefix meaning high
  101. Workers of the world. \_\_\_\_\_
  102. Abb. for treasurer
  103. Pentagon mentality, strange
  104. Legal secretary
  105. Per. table element 20
- Down**
1. What is stored at West Valley
  2. We get it from the sun
  3. 43 on per. table
  4. Different versions of the same text
  5. getting the run \_\_\_\_\_ from DOE
  6. Appearing threatening, like cooling towers
  7. Doctor of Law
  8. Environmental Impact Statement
  9. Yang's partner, missing an eye
  11. Third planet from sun
  12. Horse, mount
  13. We don't \_\_\_\_\_ nuclear power
  14. Black gold, texas tea
  15. enemy
  16. Abb. for footnote
  19. US nuclear power foreign program
  23. Scene after urban reactor meltdown
  26. Per. table abb. holmium
  27. Preferred description "spent" fuel
  29. Fission for energy is \_\_\_\_\_
  30. Ego's naughty companion
  33. Used on Hiroshima, Nagasaki
  34. Preposition expressing direction
  37. Abb. for advantage
  42. Scream 'till you're \_\_\_\_\_, no one listens
  43. Pro-nuke past chair House Sci and Tech Committee
  47. 3.141692 plus
  48. Home of free, land of brave
  50. A truth
  52. Biblical abb. for kings.
  53. Per. table element 99
  55. Waste water from WV trenches went here
  59. Appendage to foot
  61. Sponsor West Valley clean-up (?) bill
  63. County law enforcement official
  65. TMI released krypton gas into the \_\_\_\_\_
  66. Pt. and pp. of make
  69. Type of waste ban passed in Rockland Co., N.Y.
  75. Jack climbed it
  76. Elaborately adorned
  - 77.5. Silkwood's first name
  79. NRC pre-construction procedure
  81. Co-author of this puzzle
  82. Semi-circular, recessed
  87. Abb. for negative
  91. Carries blood from heart
  93. Pt. and pp. of have
  96. Double, in pairs
  98. Peasant base, grass \_\_\_\_\_
  99. Man's name
  108. Non-flying Australian bird
  110. Greek prefix for primeval
  113. North American capitalist state



The oil drill breaks through the roof of the abandoned salt mine. The salt pillars start to dissolve, followed by the collapse of the bottom of the lake. The rushing water creates a giant whirlpool, sucking up everything in its path.

## Disappearing Lake

If you are looking for the Live Oak botanical gardens at Lake Peigneur, Louisiana, you won't find them. In fact, if you are looking for the lake, which was a plentiful shrimp and catfish site, you won't find it either. What is the baffling mystery of the lake?

A rig drilling for new oil pierced through the roof of a salt mine 1300 feet under Lake Peigneur in November 1980. The salt mine roof collapsed and the lake, which is only three to four feet deep, disappeared "down the drain" so to say. And with it, two rigs, five homes, nine barges, eight tug-boats, a mobile home and most of the botanical gardens. A giant whirlpool sucked it all in.

Fortunately, no lives were lost and hopefully a lesson was learned. We hope that lessons is — salt will not work! Both the Department of Energy (DOE) and the nuclear industry have, for the past 20 years, proposed isolation of nuclear waste in huge underground caverns scooped out of the deep salt deposits.

Salt mines have been a favorite candidate for storage of radioactive waste because a salt repository would be inexpensive to construct and supposedly adequately isolate the toxic material. Salt is water soluble. The government's theory is that since salt is present in huge deposits, it suggests there has been no water present for eons of geologic time. Otherwise, the salt would have dissolved.

Recently, the scientific community has started to have doubts about the long-term integrity of a salt repository. In 1979, the National Academy of Science (NAS) stated that water droplets contained in salt will be attracted by the heat of radioactive waste canisters. As these tiny droplets move toward the heat source, they will become highly corrosive brine. (Order our fact sheet "Salt Will Not Work")

During the 1960's, the opportunity to learn the "salt will not work" lesson was missed. The federal government spent millions of tax dollars exploring salt formations around Lyons, Kansas. After considerable effort, time and money, the old Atomic Energy Commission placed "demonstration irradiated fuel assemblies" in a proposed federal repository near Lyons. However, the salt formations were not integral. In fact, the federal Environmental Protection Agency stated that "considerable volumes of water had migrated in an unpredictable manner... as a consequence of dissolution of salt by ground water seeping into the repository." The water had apparently seeped into an old abandoned drill hole that had not been properly plugged.

The disappearing of the lake in Louisiana demonstrates that precise locations of old, underground shafts, mines and drill holes must be known prior to any experiment with radioactive waste storage. But in most states, accurate maps of old drilling locations are not available. Until the late 1970's, drillers were not required to register drill holes with state mining departments. This means the country is peppered with millions of oil drill holes that could provide a pathway for migration of water into a geologic repository.

Lake Peigneur and Lyons are a clear warning that the DOE and utility geologists should read the NAS report and start looking for other geologic media.

## Binghamton Transportation Ban

The city of Binghamton banned the transportation of nuclear waste through its city streets on December 29, 1980. The City Council voted 8-1 in favor of the ban. It was a result of over a year of careful educating and lobbying of local officials by the Susquehanna Safe Energy Alliance and the New York Public Interest Research Group.

Publicity by Binghamton newspapers concerning over 52 nuclear waste shipments which passed through the city since 1975 helped the transportation ban. The 52 shipments were going from two nuclear power plants in Oswego, New York, about 120 miles north of Binghamton to the Barnwell, S.C. dump site run by Chem-Nuclear.

The ban does not include sections of Interstate Routes 17 and 81, which are within Binghamton city limits. Supporters of the ban are concerned about the intersection of 17 and 81 called "Kamikaze curve" by local residents since it is the site of frequent accidents.

According to an editorial in the Binghamton *Sun-Bulletin*, a serious accident at this crossing could affect communities as far as the Chesapeake Bay area, since the intersection is near the Chenago River, which flows into the Susquehanna. Safe Energy groups will be working to extend the Binghamton ban to these interstate highways in coming months.



The Sierra Club Radioactive Waste Campaign T-Shirts are great gift ideas for any time. Buy one for a friend as well as for yourself. Shirts are white, all-cotton with 6 color design. Non-toxic dyes. They only cost

\$5.95 each, plus 55¢ postage and handling. (N.Y. residents, add 7% sales tax.) Bulk rates available.

All proceeds go to the Radioactive Waste Campaign.

Send your orders to:  
**Sierra Club**  
**Radioactive Waste Campaign**  
**3164 Main Street**  
**Buffalo, New York 14214**  
**Sizes Available:**  
**S (32-34), M (36-38),**  
**L (40-42), XL (44-46)**  
**Children's sizes 12 & 14**

# Ban

Yet another rural community passed a uranium mining ban on December 10, 1980. Warwick, NY joined Jefferson and West Milford, NJ which had already passed bans in the summer and fall of 1980. Originally, the community of about 18,000, located in Orange County a few miles north of the New Jersey border, had planned only a 10-year ban. But a citizen activist learned that since a moratorium on drilling passed in September, Exxon had rushed back to the county court house and extended 15 leases beyond the imposed 10-year ban, some to the year 2001.

Warwick was so incensed by Exxon's guile, that the town board decided to make the uranium mining ban a permanent one, rather than the 10-year ban originally intended. Citizens in the communities noted in the Uranium Mining chart (see below) who want to work on a ban should contact us for sample bans. ☸

# New Staff Welcomed

The Sierra Club Radioactive Waste Campaign is happy to welcome two new members to its staff, Peter Dalton and Lisa Finaldi.

Peter Dalton is the new office manager after having been a dedicated volunteer since the summer. (We are sorry to report the departure of Judith McDonnell, our previous office manager, who migrated to sunny Arizona.) Peter will be overseeing the whirlpool of office activities that regularly involves dozens of t-shirt orders, literature requests, midnight mailings and sometimes involves handling radioactive livers. (See *Deer Hunters Beware*, page 1) Peter holds a B.A. in Political Science from the University of Buffalo.

Lisa will fill a new position at the Campaign. As assistant editor, she will coordinate the growing *Waste Paper*. Budding authors, photographers, graphic designers and cartoonists should contact Lisa if they want to help. Lisa received her B.S. in Journalism from West Virginia University. ☸

# Radioactive Milk? . . .

-continued from page 1

Concentrations in Environmental Milk Samples and Their Significance at the Nine Mile Point—James A. Fitzpatrick Site," Nov., 1980) NUS completely absolves PASNY of all responsibility for Cs in milk, placing the blame instead on "past nuclear weapons testing and other sources of Cs-137." The "other sources" are hospitals and other nuclear power plants.

None of these explanations are credible. Fallout from nuclear testing is not expected to land in one small farm in New York State and nowhere else. Fallout would have contributed to increased levels at all farms. And fallout would have contributed Strontium-90, and other radionuclides as well. Strontium-90, however, was not found.

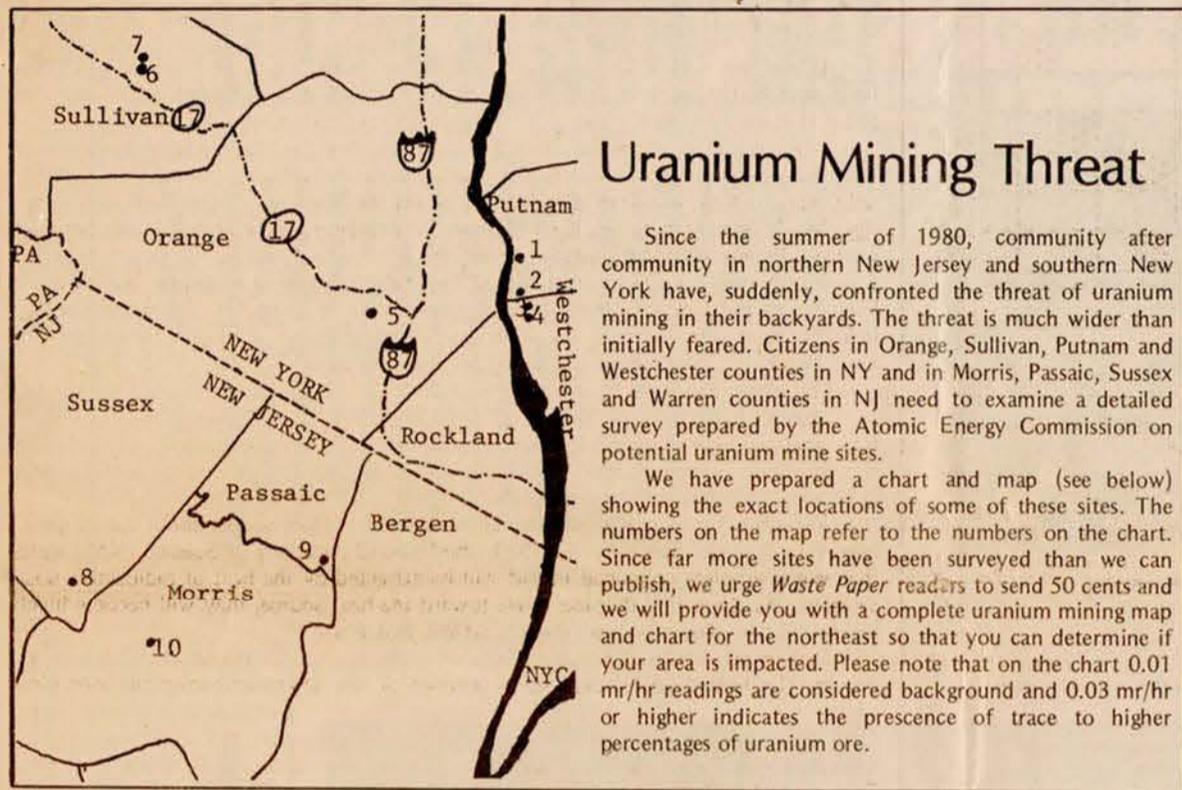
NUS cites hospitals as a possible Cs source, but this radionuclide is not used for radiation therapy or diagnosis. The NUS Cs Report fails to state which hospitals produced how much cesium and how the radionuclide got into milk on one farm in upstate New York. The NUS Cs Report does not identify a credible Cs source accounting for high Cs levels on the Parkhurst farm.

The Radioactive Waste Campaign has performed an analysis of the NUS Cs Report ("An Analysis of the NUS Cs Report," Feb., 1980, available from the Sierra Club for 50 cents). The Campaign analysis shows that the NUS Report is badly flawed and unscientific. The Report does not make a convincing case for ruling out the Fitzpatrick plant as a source for the high Cs Levels. It is clear that the farms close-in to the Oswego reactors have the highest levels of Cs.

Most importantly the milk samples contain Cesium-134. This isotope of cesium is not a direct fission product. It is caused by neutron bombardment of other fission products in a nuclear reactor. This process will not occur to nearly the same extent in an atomic bomb explosion. This isotope is not found in significant quantities in fallout.

Finally, the Cs levels in the air in the Oswego area have consistently been among the highest in the state, comparable and often exceeding those at the West Valley reprocessing plant when it was operating. The finger seems to point to the PASNY facility, according to the Waste Campaign Report.

The Sierra Club in its analysis, therefore recommends that the Nuclear Regulatory Commission perform an in depth investigation of the Fitzpatrick reactor to identify possible release routes for radioactive materials. The Club points out that one possible route is in the low level waste operations section of the PASNY plant. Since the radiation levels are high in the Oswego area, the Club also recommends a health study of Oswego cows, to be performed by the State Department of Agriculture and Markets. Because of foot-dragging by Commissioner Axelrod, the Campaign recommends in its report that the Health Department be taken off the case. ☸



## Uranium Mining Threat

Since the summer of 1980, community after community in northern New Jersey and southern New York have, suddenly, confronted the threat of uranium mining in their backyards. The threat is much wider than initially feared. Citizens in Orange, Sullivan, Putnam and Westchester counties in NY and in Morris, Passaic, Sussex and Warren counties in NJ need to examine a detailed survey prepared by the Atomic Energy Commission on potential uranium mine sites.

We have prepared a chart and map (see below) showing the exact locations of some of these sites. The numbers on the map refer to the numbers on the chart. Since far more sites have been surveyed than we can publish, we urge *Waste Paper* readers to send 50 cents and we will provide you with a complete uranium mining map and chart for the northeast so that you can determine if your area is impacted. Please note that on the chart 0.01 mr/hr readings are considered background and 0.03 mr/hr or higher indicates the presence of trace to higher percentages of uranium ore.

# Uranium Mining Chart

NEW YORK				Length, Width, Thickness of Deposit	Type of Ore or Mineral	Readings, Comments
County	Map No.	Name of Property	Directions to Site			
Orange	5	Clove Mine	½ mi. SE of Round Pond, 1½ mi. S of Monroe	?	Magnetite	.02-0.4 mr/hr %U <sub>3</sub> O <sub>8</sub> .13
Putnam	1	Denning Hill	N from intersect. of 90 & 403 for 3.6 mi., right 1½ mi., right ½ mi. on dirt road	L: 50' W: 20'	Uranium Minerals	.03-1.2 mr/hr
	2	Boomer Estate	Peekskill Quad. 1¼ mi. W of 9 along Put-West County line. 780 ft. up.	L: 1/3 mi. T: 30'	Uranium Minerals Uraninite	.02-.20 mr/hr grabsample 10.0 mr/hr
Sullivan	6	Feldman Quarry	W on 17 for 9 mi. from Wurtsboro, right .8 mi. to quarry	?	Uranium Minerals	.03-1.25 mr/hr
	7	Saperstein No. 1	W on 17 from Wurtsboro Post Office 9 mi., right 2 mi., right 1 mi. onto dirt road, walk 1000 f t. W	L: 10' T: ¾"	Uranium Minerals	.03-7.0 mr/hr %U <sub>3</sub> O <sub>8</sub> .45
Westchester	3	Canor No. 1	Albany Post Rd. out of Peekskill, left at Jack Rd., ¼ mi. up hill	L: 6' W: 1"	Magnetite	.03-4.0 mr/hr
	4	Watcher No. 1	Albany Post Rd. out of Peekskill, left at Jacks Rd. ½ mi. to Watcher home	L: 40' W: 2'	Uraninite Uranium Minerals	.03-4.0 mr/hr
NEW JERSEY						
Morris	9	Kord No. 3		L: 2' W: 4" T: 10'	Uranium Minerals	.04-7.0 mr/hr %U <sub>3</sub> O <sub>8</sub> 3.0
	10	Scrub Oaks Mines	N side of 46 on Mine Hill 2 mi. S of Dover	L: 180' W: 30' T: up to 24'	Magnetite	.015-1.0 mr/hr
Sussex	8	Rutherford Tract	S 2 mi. from Andover to Shore Rd. of Cranberry Lake, right .1 mi., left 1.1 mi., left .2 mi., walk 1000 yds. E	L: 140' W: 5' T: 35'	Uraninite Magnetite	.05-5.0 mr/hr %U <sub>3</sub> O <sub>8</sub> 3.8

# Resources

**Radioactive Waste Slide Show** — Includes review of the nuclear fuel cycle, problems of low level radiation, hazards of transportation, and an in depth portrait of West Valley. Excellent for community groups and teach-ins. Available with cassette or written script. \$55.00 purchase, \$15 one week rental.

**Sierra Club Fact Sheets:**

**Salt Will Not Work**, — a brief review of current concerns about the promotion of salt as the favored geologic method for a permanent repository.

**On The Job At NFS** — Reviews conditions that led to high worker exposure at West Valley, valuable graphs, excellent for organizing labor and health workers.

**West Valley, A Challenge For 1980**, — Detailed history of the West Valley site, includes explanations of current storage problems and burial ground leakage.

**Nuclear Transport: Is Your Community Ready?**, — Important facts on the transportation of high level radioactive waste, includes accident rates and review of NRC guidelines.

\$.10 each, include a self-addressed stamped

envelope.

**Sierra Club White Paper No. 2**, — Is Radioactive Waste Clean-up Technology Available? Analysis of the status of technology for cleaning up the West Valley radioactive waste dump. Applicable to radioactive waste problems in other states. \$1.00

**NUCLEAR WASTES — The Myths and the Realities** — Important information about the current myths and realities concerning nuclear wastes. \$1.00

We have back copies of *Waste Papers* available which contain important articles on irradiated fuel accidents, Manhattan Project dumps in New Jersey and Pennsylvania, and an analysis of the condition of the reactor at TMI. Please contact us for a complete listing of resources.

**NEW Shipping casks: Are they Safe?** An indepth analysis of irradiated fuel shipping casks. Can they withstand highway accidents and fires? Useful for all communities and groups impacted by "hot" fuel transport. \$.50

Dear Friend,

We would like to keep sending you the *Waste Paper*, the world's first paper to specialize in radioactive waste, but we just can't afford to do it. We are starting now to take subscriptions for 1981. If you are already a subscriber, please renew now. If you want the latest news on breakthroughs in the waste technology, up-to-date reports on citizen battles all over the country, tips on resources and organizing Please sign up now. Only \$6.00 for this important quarterly.

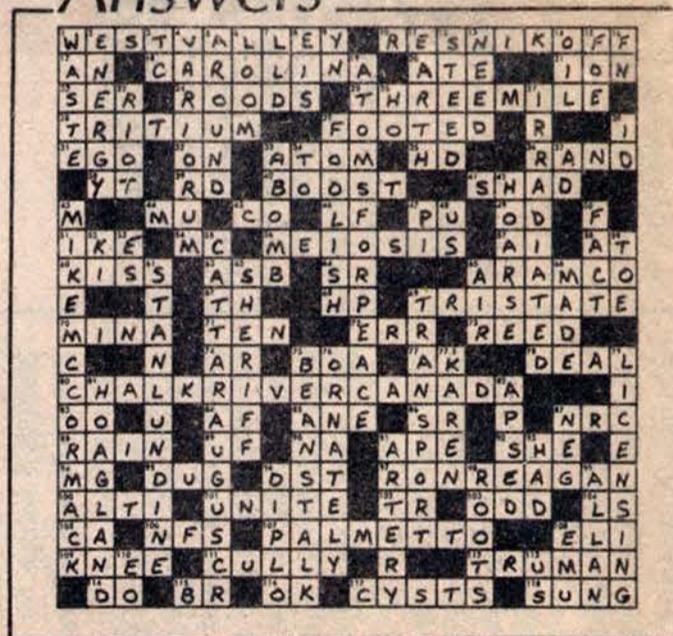
## May 16 Conference

"Nuclear Wastes and West Valley: Health Issues and Public Policy" will be the focus of a conference at the University of Rochester on May 16, 1981. The Sierra Club Radioactive Waste Campaign and Physicians for Social Responsibility will sponsor the speakers. Among the panelists Barry Commoner will discuss political issues and public policy of nuclear wastes.

K.Z. Morgan will open the conference with "Physics and the Nuclear Fuel Chain" and Katherine Kahn, M.D. will follow with "Medical Effects of Ionizing Radiation." Mina Hamilton and Marvin Resnikoff, co-directors of the Radioactive Waste Campaign, will discuss West Valley and its health effects in western New York. Dr. Leonard Solon from the New York city Department of Health will speak on transportation of irradiated fuel. Workshops will follow the meeting.

Registration will begin at 8:30 a.m. and the conference at 9 a.m. at Whipple Auditorium, Strong Memorial Hospital, University of Rochester. Questions or further information? Call the Sierra Club Radioactive Waste Campaign at 716-832-9100.

## Answers



3164 Main Street  
Buffalo, New York 14214

Non Profit Organ.  
**U. S. POSTAGE  
PAID**  
BUFFALO, NY  
PERMIT No. 868

Collection Laka foundation  
www.laka.org  
Digitized 2017