

# NUCLEAR SHORTS

## Reactor Wastewater Killing Billions of Fish

PITTSBURGH, Penn. — The Environmental Protection Agency has issued federal standards regarding massive fish kills at nuclear reactors. A coalition of six states is suing the EPA over the inadequacy of the regulations.

Alex Matthiessen, director of Hudson Riverkeeper, the New York group leading the coalition, charges the EPA with rewriting the Clean Water Act to allow utilities to continue functioning “as aquatic slaughterhouses.”

Nuclear reactors like Indian Point on the Hudson River in New York and Diablo Canyon in California take in over 2.5 billion gallons of cold water per site each day in order to cool the generated steam used to spin turbines for electricity production. The systems spew the water back into the ocean or river at temperatures near 110 degrees — putting the lie to industry claims that it doesn’t contribute to global warming.

The Salem nuclear reactor in New Jersey — which takes in 250 million gallons of water a day — acknowledges killing three billion fish a year, but company spokesman Neil Brown said the fish kill has “absolutely no impact on the fishery,” because, “more than 99% of the three billion were eggs and juvenile fish.” The Eddystone reactor sucked in 150 million fish larva in 1977 and destroys 33,000 juvenile and adult fish each year. The Armstrong reactor on the Allegheny River trapped 49 million larval fish in 1978.

Reactor operators could convert to closed-cycle cooling which doesn’t draw water continually, but recycles it instead — using cooling towers — which means needing to replenish just 1% to 5% of the cooling water a year. Because a closed-cycle reduces intake volume and velocity, fish kills are decreased between 95 and 99%. Revamping the cooling systems by switching to cooling towers might cost an additional \$1.10 a month for ratepayers and save three billion fish. — *Pittsburgh Post Gazette*, Aug. 22, 2004; Paul & Linda Gunter, *License to Kill*, Nuclear Information & Re-source Service, Feb. 2001.

## Tennis Champion Fleed Chernobyl Fallout

WIMBLEDON, England — You have to hand it to the surprise Wimbledon champion Maria Sharapova (right) for getting news of the Chernobyl radiation disaster into sports sections and pop culture rags. The 17-year-old tennis powerhouse — who won the coveted Wimbledon title July 3, by trouncing two-time winner Serena Williams — was born in the Russian town of Nygan in western Siberia. As sports fans around the world learned, she was two when her family fled, “fearing the fallout from the Chernobyl nuclear accident.” *Rolling Stone* reported that the town’s average temperature of minus 1.7°F, “wasn’t reason enough for the Sharapova family to emigrate — but the fallout from the Chernobyl nuclear reactor meltdown, which happened a year before the family’s only child, Maria, was born, pushed them over the edge.” Now, as the latest tennis marvel travels the world winning more trophies, she can use the opportunity to warn the world about the dangers of exposure to low-dose radiation.

— *St. Paul Pioneer Press*, July 4, & *Rolling Stone*, Aug. 19, 2004.

## Nuclear Waste Pipe Connected to Drinking Water

NORTHERN TERRITORY, Australia — A wastewater system contaminated with uranium and toxic chemicals was mistakenly connected to the potable water supply used by employees at Australia’s Rio Tinto Ranger uranium mine. For eight days workers drank and showered in the poison 100 times more radioactive than the legal limit. Twenty-eight of them reported symptoms of radiation poisoning including headaches and vomiting. The Public Relations department at Energy Resources of Australia Ltd. (ERA), a Rio Tinto subsidiary, asserted as usual that there would be no long-term health effects for those contaminated. Net profit for ERA for the first half of this year totaled \$11.35 million.

— *The Courier-Mail*, July 23, & Australian Radio, *PM* transcript, April 13, 2004

## Dangerous Incinerator Nears Explosion

COLUMBIA, South Carolina — A dangerous concentration of uranium has built up in a South Carolina incinerator owned by Westinghouse Electric Company for the seventh time in the past eight years. The NRC has fined Westinghouse \$24,000 for negligence. Enough uranium has collected that it significantly increases the likelihood of a “criticality event” — an uncontrolled fission explosion. The incinerator burns

radioactively-contaminated waste. Westinghouse blamed the problem on its workers. — Union of Concerned Scientists, *Bulletin Wire News*, Aug. 13, 2004

## Truck Carrying Radioactive Tools Crashes

PEEKSKILL, New York — A truck carrying radioactively contaminated tools to the Indian Point-2 reactor smashed into a highway overpass Aug. 13, prompting a massive emergency response and the evacuation of 100 residents. Police closed off a three-mile stretch of highway until after they announced there had been no radiation leak. Reactor maintenance and refueling happens infrequently enough that operators rent equipment and tools from outside vendors. The tools — which become contaminated from exposure to waste reactor fuel — are shuttled between facilities in secure containers. The contaminated tools were being carried on a flatbed truck. The accident, which happened less than two miles from Indian Point, occurred when the driver failed to pass under the arched Main Street bridge in the left lane, as posted signs require. The left lane has more clearance space than the right lane. Marilyn Elie, head of Westchester Citizens’ Awareness Network, told the *Journal News*, “The industry says it can transport more than 1,000 shipments of high-level radioactive waste safely, and here they can’t transport even one shipment of low-level radioactive tools.” Ms. Elie asked, “What is it going to take before people understand we have to close this [Indian Point] plant down?”

— *The White Plains (New York) Journal News*, Aug. 14, 2002

## More Irradiated Fuel Rods Gone Missing

KING SALMON, Calif. — Pacific Gas and Electric is trying to trace the movements of three 18-inch segments of an irradiated waste fuel rod, missing from the shutdown Humboldt Bay reactor since 1968. The highly radioactive waste was cut from a fuel rod for an inspection that never took place. PG&E’s advertising department assures the public that the rods have not been stolen.

The missing waste could be in any number of places: a nearby cooling pond; the Battelle Memorial Institute in Columbus, Ohio (which denies having them); General Electric’s Vallecitos Nuclear Center in Livermore, Calif.; Nuclear Fuel Services in West Valley, New York (records from 1968 have been destroyed); a disposal site at Beatty, Nevada; Hanford in Richland, Wash.; the dump at Barnwell, S.C.; or the Humboldt Bay cooling pond itself.

Employees are reading voluminous records, nuclear waste shipping documents and interviewing former reactor personnel in their search for the waste.

Once the 390 fuel assemblies submerged in the Humboldt Bay’s cooling pond are removed, searching will be made easier.

Meanwhile, a reactor in Connecticut has never found several full-size rods lost since the late 1990s, and in April this year a reactor in Vermont warned that fuel was missing, only to admit later that it was in the cooling pond.

— *The (Eureka, Calif.) Times-Standard*, Aug. 22, & *PRNewswire-FirstCall* Aug. 17, 2004

## Big Utility Wins \$300 Million High-level Waste Suit

NEW YORK — Nuclear utilities signed onto the 1982 Nuclear Waste Policy Act in part because it promised that by Jan. 31, 1998 the federal government would take possession of and assume legal liability for the industry’s waste fuel. There is still no permanent dump site.

Exelon Corp. of Illinois, the country’s largest reactor operator — which sued the DOE over its failure to open the dump on time — will initially receive a check for \$80 million to pay for storage of its waste fuel. The fuel rods are held in dry casks on concrete pads outside of Exelon’s Peach Bottom Station (21 casks), Dresden in Illinois (21 casks) and Oyster Creek in New Jersey (eight casks). Exelon expects receipts to total \$300 million by 2010.

Nuclear reactor operators and their customers have paid \$24 billion into a federal dump site fund. About \$7 billion has been spent to test and prepare Yucca Mountain, Nevada to hold 77,000 tons of the accumulating waste. Exelon will continue to pay into the fund as well as receive the court-ordered reimbursement for dry cask storage.

— *York (Pennsylvania) Daily Record*, Aug. 18, 2004

## Dimona’s Pollution Causing Sterility & Cancer?

NEGEV DESERT, Israel — Israel’s Dimona nuclear weapons production site and radioactive waste storage area is being blamed for sterility and an increase in cancer among downwinders.

Some reports say the reactor building is cracked and leaking radioactivity. Other reports say buried radioactive

waste is the problem. An investigative report on Israeli Television in 1996 claimed that tons of radioactive waste are stored in 30-year-old containers buried above a large aquifer under the Negev Desert. At that time, the Agriculture Ministry said the water wells near the Dimona facility had already been contaminated for seven years. A lawsuit has been filed by survivors of five Dimona workers who, the relatives claim, died of radiation-induced cancers. Another report by Israeli TV revealed two years ago that Dimona’s reactor wastes are buried in areas east of the Al Bureij refugee camp and the town of Deir El Balah. Israel disallows inspections of its Dimona complex by the International Atomic Energy Agency (IAEA).

On August 2, 1992, radioactive waste water leaked into a national park and Israeli authorities covered up the incident and forbid an investigation. Parts of the park are still closed. Egypt is monitoring radiation levels along the Israeli-Egyptian border in southern Israel. The Jordanian newspaper *Al-Rai* reported Aug. 29 that Jordan’s Foreign Ministry has asked the IAEA to send experts and equipment to “determine whether there is a correlation between radiation from Dimona and the appearance of unusual diseases in the area.” Israel’s nuclear arsenal is estimated to hold about 200 bombs.

— *Haaretz Daily*, Aug. 31, 2004; *Nucleonics Week*, May 6, 1993; *Jewish Telegraphic Agency*, April 12, 1996

## Shoot-First U.S. Foreign Policy Spreading Fast

TEHRAN, Iran — Iran and Japan have taken a page from U.S. foreign policy and warned that they have the right to conduct unprovoked attacks, so-called pre-emptive strikes, in order to prevent attacks against them.

“We will not sit to wait for what others will do to us,” said Iranian Defense Minister Admiral Ali Shamkhani on Al Jazeera television Aug. 18, adding that Iran’s Shahab-3 missiles have the range to strike Israel’s Dimona reactor complex. “Preventive operations which the Americans talk about are not their monopoly. Any nation, if it feels threatened, can resort to that,” Shamkhani said.

Gen. Muhammad Baqer Zolqadr, commander of Iran’s Revolutionary Guards, threatened the same week to bomb the Dimona reactor if Israel bombed Iran’s nuclear sites. “If Israel fires a missile into the Bushehr nuclear power plant, it has to say good-bye forever to its Dimona nuclear facility, where it produces and stockpiles nuclear weapons,” Zolqadr said.

Likewise in Japan, Defense Agency Director Gen. Shigeru Ishiba made identical threats in February 2003, warning that his country would be entitled to attack North Korea if it were clear that the North Koreans were about to launch an attack on Japan. Japanese troops have recently been transferred from the north to western Japan close to the Korean Peninsula. The country is under pressure from right wing Japanese and U.S. politicians to rescind those sections of its constitution that keep Japan officially pacifist.

Given Japan’s aggression in World War II, it’s U.S.-imposed postwar constitution renounces “war as a sovereign right of the nation and the threat or use of force as means of settling international disputes,” and says any war-making power “will never be maintained.” — *New York Times*, Aug. 20, & *Minneapolis StarTribune*, Aug. 18, 2004

## Bomb Test Fallout Haunting Britain’s PM

EDINBURGH, Scotland — Prime Minister Tony Blair’s health was probably compromised by childhood exposure to radioactive fallout from an atom bomb test in Australia.

Mr. Blair was three and living in Adelaide, South Australia, when the British detonated an atom bomb in the desert Oct. 11, 1956, the British magazine *The Bulletin* said.

“Adelaide was plastered with radioactive fallout from October 11 to 16, 1956,” British toxicologist Richard van Steenis told the magazine. “As a youngster in Adelaide drinking local milk, Tony Blair is very likely to be at risk of bone cancer himself.” Dr. van Steenis said that the death of Blair’s mother, Hazel, from thyroid cancer 19 years after the blast could have been caused by exposure to fallout.

A Blair spokeswoman dismissed the theory, but Dr. van Steenis claimed that Blair would not acknowledge the impact of the bomb testing because his government could be sued by former servicemen involved in the bomb tests. “He has never denied that radioactive fallout in Australia was the cause of his mother’s death,” van Steenis told *The Bulletin*. “But he won’t acknowledge it because to do so would strengthen the legal case against his government for the compensation entitlements of British and Australian servicemen involved in the British atomic testing program.”

— *The (Edinburgh, Scotland) Scotsman*, Aug. 31, 2004

## Chernobyl’s Unending Legacy of Contamination

CARDIFF, Wales — Eighteen years after the world’s worst radiation accident at the Chernobyl power reactor, 359 Welsh farmers are still unable to sell their sheep without testing them for radioactive contamination. The sheep in question are raised on farms in a 53-square-mile area where fallout from the radiation accident in Ukraine was especially heavy. According to the May 17 *Western Mail*, one study suggests that it will take 50 years before all restrictions on agricultural items are lifted in northern Europe. Indeed, cesium-137, the most dangerous of the isotopes spewed by Chernobyl’s two



Photo by Eddy Risch

**Wimbledon’s surprise winner Maria Sharapova beat the odds, not just on the court but as a child of Chernobyl.**