

# Radioactive warfare: DU update

By John LaForge

## Official estimate of uranium weapons used on Iraq

The Pentagon claims it shot about 127 tons of depleted uranium (DU) ammunition into Iraq during the United States' 2003 invasion. There has been no independent verification of the amount. The figure comes from Dr. Michael Kilpatrick of the Deployment Health Support Directorate, who spoke at a March 6 conference at the Massachusetts Institute of Technology. The estimation does not include an undisclosed amount of DU used by the Marines, or 1.9 tons said by the Ministry of Defense to have been fired by British forces.

DU munitions are made of waste uranium-238 left from the process used to make reactor fuel and H-bombs. It is a toxic heavy metal with a radioactive half-life of 4.5 billion years. Shaped into anti-armor shells, 40 to 70 percent of the uranium burns and is pulverized on impact, dispersing a fine dust that can permanently contaminate soil and water.

Unlike the estimated 350 tons of DU shot into Iraq and Kuwait in 1991, the 2003 DU bombardment was conducted in and around major cities, like Baghdad and Basra, where population density is high.

## Sick guard members complain of DU poisoning

Four members of the 442nd National Guard Military Police Company from New York have been contaminated by uranium while serving in Iraq, the *New York Daily News* has reported.

After suffering headaches and joint pain, nausea, fatigue, dizziness and excessive urination, six of the soldiers sought uranium testing from Army doctors. The Army repeatedly refused so the soldiers contacted the *Daily News*, which hired Dr. Asaf Durakovic to do the testing. Durakovic runs the Uranium Medical Research Center in Washington.

Durakovic said of the tests, "These are amazing results, especially since these soldiers were military police not exposed to the heat of battle." He told the *Daily News*, "Other American soldiers who were in combat must have more depleted uranium exposures."

The *Army Times* reports that the 442nd camped at Samawah, Iraq in a huge train depot and train repair yard. Soldiers from the Netherlands, intending to camp at the same place, measured "high levels of radioactive material," and they moved far away from it, according to a member of the 442nd.

An Army physician who spoke anonymously told the *Army Times* that exposure to DU "does not cause headaches, rashes, overactive bladder or anything like that. Uranium naturally occurs in the environment and every day you eat, drink and breathe it."

However, as Frida Berrigan reports in *In These Times*, a 1998 report by the Agency for Toxic Substances and Disease Registry says that inhalation of DU can lead to symptoms such as fatigue, shortness of breath, lymphatic problems, bronchial complaints, weight loss and an unsteady gait. Even the Army's own training manuals warn that DU is hazardous, and require all who come within 25 meters of DU-contaminated equipment or areas to wear respiratory and skin protection.

Following confirmation of the Guard MPs' DU contamination, the Army at Fort Dix and Walter Reed said they would test all returning members of the 442nd. It has taken over 800 urine samples, but the Army's April 29 memo for commanders says, "I am not advocating urinalysis for DU for every deployed Soldier."

Independent experts assert that the Army's testing methods are bogus. Glen Lawrence, a professor of biochemistry at Long Island University, told *The News*, "They are using an instrument that apparently isn't very accurate." Leonard Dietz, formerly of the federal Knolls Atomic Laboratories who invented an instrument for measuring uranium isotopes agreed, telling *The News*, "The instruments they used are just not sophisticated enough to give accurate readings."

Lt. Col. Mark Melanson, at Walter Reed Army Medical Center said doctors involved in health physics told *The News* that the Army does not even bother to analyze a sample for depleted uranium unless the total concentration is more than 268 nanograms (parts per billion) per liter.

"That's an extraordinarily high cutoff," Dr. Tom Fasy, a pathologist at Mount Sinai Medical Center, told *The News*.

## Biggest DU arms maker wins multi-million dollar anti-tank ammo contracts

Alliant Techsystems in Edina, Minn. — the nation's biggest assembler of depleted uranium (DU) munitions — announced April 6 that it won new contracts in excess of \$38 million for heavy battle tank ammunition.

Alliant is to supply 120-millimeter ammunition for the Army's M1/A1 main battle tank to the Army's Armament Research Development and Engineering Center at the Picatinny Arsenal, N.J. Questions Nukewatch asked the arsenal about the new contracts were directed to Alliant's public relations department, which likewise would not confirm the company's use of uranium. Company spokesman Bryce Hallowell told the *St. Paul Pioneer Press* June 1 that, "depleted-uranium munitions and cluster bombs are not part of Alliant's product line." The statement is questionable and nuanced.

Alliant used to boast of its DU "penetrators." "Alliant produces an entire family of tactical and training 120-mm rounds ... a kinetic energy anti-armor round designated the M829 ... an armor-piercing, fin-stabilized, discarding sabot tracer round with a depleted uranium penetrator." That was four years ago, when Alliant's 120-mm DU anti-tank shells

were boldly described on its web pages, under the heading "120-mm Tank Ammunition."

Alliant has recently removed all references to DU from its web pages and press releases. The editing is likely a result of the outcry from Europe, Afghanistan, Iraq and the U.S. over uranium contamination and illnesses among veterans.

By April 2000, Alliant had delivered "more than 120 million" rounds of medium caliber ammunition (25-mm and 30-mm) and over 2 million rounds of tank ammunition to the Pentagon and to "allied nations."

Back then, the company said, "We are aggressively pursuing opportunities to secure additional work in the ammunition distribution chain." Now, with April's multi-million dollar contracts, Alliant's rosy projection of future weapons profiteering — if not its continued use of DU — has been confirmed.

The medium-caliber DU rounds assembled by Alliant in 2000 included the 25-mm "M191 depleted uranium penetrator," and the "30-mm GAU-8 armor-piercing incendiary."

The grizzly effects of smashing burning shrapnel against soldiers, ammunition and fuel inside a targeted tank are described by the company's promos as if it were selling laundry soap. Alliant's GAU-8, "possesses a high-density depleted uranium penetrator and demonstrates the follow-through fragmentation and pyrophoric (burning) effects for maximum effectiveness."

Nowadays, Alliant's ads refer only to "anti-armor capabilities," "high-density penetrators," "armor penetration," and "fragmentation and pyrophoric effects" — all characteristics of the DU munitions the company so aggressively wanted to market.

## Tribunal convicts Bush of war crimes

An independent citizen's tribunal in Tokyo has found President Bush guilty of war crimes for attacking civilians with indiscriminate weapons including depleted uranium during the invasion and take over of Afghanistan.

The Tribunal's members spent two years investigating the consequences of the U.S. aggression, including eight field trips to Afghanistan and 20 public hearings.

As commander in chief, Bush failed to protect civilians from attacks, said British lawyer and tribunal judge Robert Akroyd. In particular, the military use of "indiscriminate weapons such as the Daisy Cutter, cluster bombs and depleted uranium shells," violated international conventions against attacking civilians.

In May 2002, scientists with the Uranium Medical Research Center found "astonishing" levels of uranium in the urine of Afghan civilians. While the control group averaged 9.4 nanograms (parts per billion) of uranium per liter of urine, one 12-year-old boy near Kabul had 2,031 nanograms. The maximum allowable level for the public in the U.S. is 12 nanograms per liter.

## NRC Rule Change: Another Industry Bailout

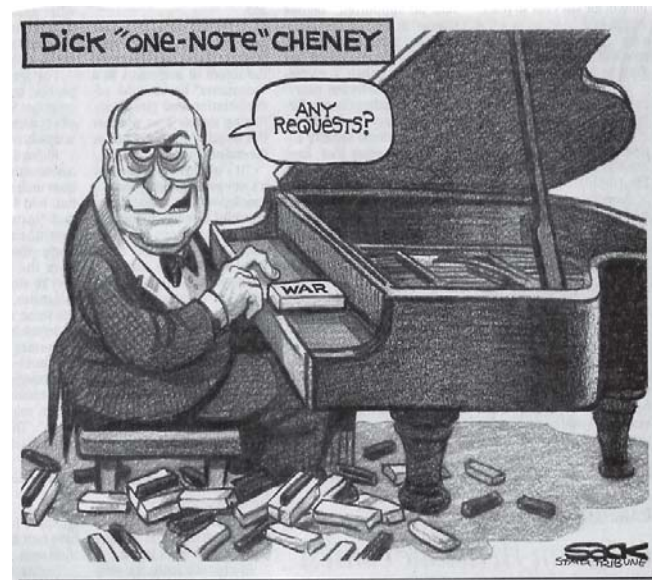
As part of the Bush administration's push to build dozens of new nuclear reactors by 2010, the Nuclear Regulatory Commission has barred the public from any form of meaningful participation in its licensing procedures for new reactors, relicensing for old reactors, and cleanup of decommissioned reactor sites. The NRC proposed the rule change in 2001, and despite nearly 1,500 comments in opposition, the revision went forward Jan. 14, 2004.

With the rule change, licensing hearings will no longer be "formal" in the sense of on-the-record, trial-type proceedings. The hearings will be stripped of key due process procedures. For example, the person or group filing to request a hearing must have all materials, sworn statements, arguments, and technical and scientific documents supported by expert declarations within 30 days of the request. There is no guarantee that the request will be granted, as the hearing officer has the power to reject it. Hearings are conducted without open discovery — no supplementary material is allowed at the hearing. The testimony of witnesses is severely restricted and cross-examination of NRC officials is not allowed.

The NRC claims the new hearing rules promote flexibility, efficiency and effectiveness. In reality the NRC eliminated due process in order to support the nuclear industry with easy permits for new reactors, fast re-licensing for old ones, and hasty, inadequate decommissioning for closed reactors. The move jeopardizes the health and safety of communities near operating, decommissioned or proposed reactors.

The Citizen's Awareness Network, an organization of environmental activists concerned about the health and safety effects of the nuclear fuel chain, along with other public interest groups, has filed an appeal of the new rule. The case, *Citizens Awareness Network v. U.S. Nuclear Regulatory Commission*, No. 04-1445, is currently pending before the United States Court of Appeals. Attorney Jon Block of Vermont has succeeded in using the Freedom of Information Act to get documents showing that Congress intended the NRC to provide formal hearings in reactor licensing.

The revision proves once again that the NRC is more a promoter than a regulator of the nuclear industry. Whether it decides to return public intervention to its rightful place or continue the deregulation of the poison power business, eliminating democratic public participation is now a key selling point for investors interested in building new reactors.



## British Gulf War Vets' Babies 50 Percent More Likely to Have Birth Defects

A major Ministry of Defense-funded (MOD) study from the London School of Hygiene and Tropical Medicine has found that babies whose fathers served in the 1991 Gulf war are 50 percent more likely to have physical abnormalities. They also found a 40 percent increased risk of miscarriage among women whose partners served in the Gulf.

Increased risks of genital, urinary and renal abnormalities and deformed limbs, bones and muscles were found in the MOD-funded survey. Of 13,191 pregnancies among the partners of male Gulf vets, 686, or 5.2 percent, had some form of physical abnormality, compared with 342, or 3.5 percent, of the 9,758 non-Gulf pregnancies.

The MOD has been hawking this study as the definitive analysis of pregnancy outcomes among veterans for some time, so it was difficult for them to downplay it. They still tried: A MOD spokesman said, "It is important to note the researchers have cautioned that the findings may be susceptible to recall bias, and that it is a comparison with a control group in which miscarriage may have been under-reported."

Extensive recall bias remembering our own children's birth deformities seems a little far fetched. — Campaign Against Depleted Uranium, *CADU News*, Spring 2004

## Goshutes, Utah's Governor Fight Private Nuclear Dump

SKULL VALLEY, Utah — The tribal chairman of the Skull Valley Goshutes — the leading proponent of building an open-air high-level nuclear waste storage dump on tribal land — was recently brought up on criminal and civil charges. Indicted by a federal grand jury in December 2003 on charges of embezzlement and tax fraud, Chairman Leon Bear had been investigated by the Interior Department's inspector general. Goshute tribal members who oppose the dump plan are asking the NRC to reconsider the project. The request came just before the NRC reaffirmed a series of rulings by its Atomic Safety and Licensing Board (ASLB) that rejected three-dozen arguments made by Native opponents and the state of Utah.

Chairman Bear is accused of withholding basic tribal services and benefits from tribal members who are openly in opposition to the waste storage plan. In response to complaints, the ASLB ordered a series of public hearings but the NRC reversed the decision. In its February 5 order, the NRC, for the most part, reaffirmed past rulings against objections to the plan as part of an effort to streamline completion of the licensing process for the facility. In 1997, Private Fuel Storage (PFS) worked with tribal leaders to broker a multi-million dollar deal to "temporarily" store up to 44,000 tons of high-level waste on the reservation — for 20 to 40 years.

A series of 12 arguments by the state of Utah were also rejected in the NRC's Feb. 5 order. However, the NRC did agree to look more closely at: 1) whether the benefits of the facility were overestimated; 2) whether the PFS inspection regimen is capable of "detecting and removing contamination" from transport and waste containers. With regard to the issue of environmental justice, the NRC said that there was no reason to foreclose Indian tribes from possible economic opportunities (such as the PFS contract, if it is built) under the guise of protecting tribes from environmental harm, no matter how slight the possibility.

The ASLB also raised concerns about the ability of the proposed high-level radioactive waste containers to withstand a collision with one of the F-16 fighter jets from a nearby military base. The ASLB found that this was a "credible accident scenario." At an upcoming hearing, Private Fuel Storage will attempt to demonstrate that there would not be significant radiological consequences of such a jet crash. The ASLB decision on the issue could set an important precedent, since the Yucca Mountain site — approved by Congress to store 63,000 tons of high-level waste — is also adjacent to an Air Force jet bombing range.

— Nuclear Monitor, NIRS and WISE, Feb. 13, 2004 & Radioactive Waste News, National Conference of State Legislatures, April 2004