

Statement in support of Rep. Wes McKinley's House Bill on Rocky Flats signage:

RESEARCH: Dr. H. Nichols was asked by ERDA/DOE official to research Rocky Flats (RF) airborne particles in 1974, contract awarded 1975-1976. **I noted deficiencies in air sampling equipment and found large numbers of radionuclide particles in fresh snow** *******(see below). Reported to DOE, Gov. D. Lamm, Cong. Tim Wirth.

1987 ON RECORD I QUESTIONED ROCKWELL (DOE CONTRACTOR): "DID YOU ROUTINELY EMIT SMALL QUANTITIES OF TINY PLUTONIUM PARTICLES FROM YOUR STACKS?" ANSWER: "YES" (CO HR sub-committee on Rocky Flats, chair Rep. Dorothy Rupert and Sen. Ruth Wright, 9/30/1987). Confirmation: History of RF plutonium emissions by **Dr. John Till** for CDPHE, **showed from official DOE data that over 600 million nanocuries of plutonium were emitted from the RF stacks during routine operations from 1952/3 to 1989. These were minimal estimates according to Dr. Till. N.B. EPA official at RF, Tim Rehder "A nanocurie is a massive dose" (p.c. 2000).**

**** I conclude that the radionuclide particles I detected were plutonium, and the numbers greatly exceeded the J. Till total of over 600 million nanocuries; my estimates range up to tens of billions of plutonium particles per acre deposited across RF during routine operations.* Response to me from **Dr J. Till** at public meeting in Boulder, May 1, 2001: "Harvey, I believe your data." Witnessed by Dr. LeRoy Moore.

With help from offices of US Sen. Allard and Cong. Beauprez I got information about RF from EPA and US Fish and Wildlife Service (e.g. USFW letter 10/21/2003 to Cong. Beauprez) and learned that **I appear to be the only person ever to have sampled snowfall for radionuclides at RF, from which this current concern of mine arises.**

SOIL SAMPLING: DOE and Kaiser-Hill have analysed many soil samples at RF and maintain that plutonium levels in the Wildlife Refuge area are barely above "background" levels (i.e. from the atmospheric bomb tests of the 1950s/60s). NB the level of maximum radiological clean-up at the Refuge is 50 picocuries/gram, approx. 1000 times "background." **Professor Litaor** at Tel-Hai Academic College, Israel, former soil scientist at RF, stated that when he worked in the (future) Wildlife Refuge area in 1990 - 95 **"I commonly found that my personal protection equipment (PPE) was 'hot' by the day's end and was discarded into the 'hot' contaminated bin."** (p.c. letter March 23, 2004). **Dr. Litaor stated forcefully at a public meeting in Boulder in 2004 that from his direct experience at RF the scheme to allow recreation at Rocky Flats was "crazy."**

PLUTONIUM EXPOSURE & HEALTH; & CHANGING "SAFE" LIMITS:

DOE, Kaiser-Hill, and USFW say that the small amounts of plutonium still remaining in the Refuge area are no threat to public health. Throughout the 20th century the US radiation standards, originally regarded as safe, were repeatedly revised downwards, and we can expect this process to continue, as knowledge advances. "Safe" today may not

be judged safe tomorrow. Dr. Edward Martell of NCAR said that if he and Dr. Karl Morgan (founder of US health physics) were correct in suggesting that the US official radiological protection standards were too lax by factors of 100 or 1000, then there would be profound health consequences for exposure of the public to current “safe” levels of radiation (PBS Frontline TV program, 1993: “Secrets of a Bomb Factory”).

A PRISTINE REFUGE? The Colorado public has been told that the Wildlife Refuge is “pristine” (e.g. by DOE ecologist John Rampe, and RF spokesman Pat Etchart) but from the USFW there is acknowledgement that they do not regard the RFNWF as pristine: **“We have not referred to the Buffer Zone as “pristine” because we do not believe it to be so. Some areas of the Buffer Zone are publicly known to have very low levels of plutonium contamination; much of the Buffer Zone is also infested with exotic weeds. Since plutonium is not a naturally occurring element and these weeds are not native species, the Service does not consider the Buffer Zone to be pristine.”**(Oct. 21, 2003 USFW Regional Director letter to US Cong. Beauprez, forwarded to H. Nichols). I am concerned that at least one of our senior political representatives may have been influenced by this supposedly pristine status, and that may have colored his thinking about the matter at hand.

PUBLIC PERCEPTION AND THE NEED FOR “INFORMED CONSENT:”
Without full and frank language in the signage Wildlife Refuge visitors would assume that a site certified for recreation by EPA and CDPHE and managed by USFW would be safe, unaware of the toxic and radiological history of the site and the contamination remaining there. It is the firm belief of myself and former Boulder County Commissioner Paul Danish that such DOE sites need a “special status” for the indefinite future to protect the public, until further research shows whether they are safe, or not.

I therefore ask that the Committee support Rep. McKinley’s bill for informational signage at the Rocky Flats National Wildlife Refuge.

Harvey Nichols, Ph.D.

Emeritus Professor of Biology.
4255 Chippewa Drive, Boulder CO 80303
tel. 303 494 2700
Harvey.nichols@colorado.edu