Group seeks safer nuke transport

By Kevin Flynn, News Staff Writer
June 28, 2002

Congress shouldn't approve storage of nuclear waste at Nevada's Yucca Mountain until it comes up with a safer method of transporting it, an environmental group said Thursday.

The Environmental Working Group, a Washington, D.C., organization, used government models to project the effects of potential accidents in 20 different cities through which waste is to be shipped, including Denver.

A moderately severe train accident in Denver under typical weather and wind conditions, the group estimated, could lead to 620 fatal cancers for people exposed for up to a year to the radioactive cesium that would be dispersed across the area.

The government anticipates 100 or more accidents over the 38 years of shipping waste to Nevada from throughout the country.

But a nuclear expert disputed the scenario, saying the cesium is contained in ceramic material and it would be impossible for it to disperse in a plume as sketched out in the environmental group's scenario.

The U.S. Senate is to vote next month on whether to authorize use of the Yucca Mountain site.

The scenario used by the environmental group involved a train accident on the Denver & Rio Grande Western rail corridor at West Bayaud Avenue.

If the seal on the shipping cask cracks, the group claimed, "the isotopes of cesium would create a plume of radioactive particulates that would be inhaled and ingested by those downwind from the accident site."

With average winds out of the south, cesium contamination would go as far north as Frederick in Weld County, nearly 27 miles north, the group estimated.

Within two minutes, 50 people within a two-block area would be exposed to the equivalent radiation of more than 1,000 X-rays -- the closest people would receive a dosage equivalent to 50,000 X-rays.

Exposure to 1.5 X-rays per year is considered the safe level.

"Our concern is this material is going to move on the highways and railroads for 38 years, and you'd better have a good plan for moving it," said Richard Wiles of the Environmental Working Group. "It's vulnerable to accident as well as terrorist attack."

John Graham of Denver, a former president of the American Nuclear Society who has worked with nuclear waste issues, said the group's calculations are based on assumptions that won't happen.
Nuclear waste can be shipped safely -- it's done every day in Europe and is currently being shipped from the former Rocky Flats plant in Jefferson County to New Mexico, he said.