

Residents fear atomic waste storage

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A number of Town of Lewiston residents, despite repeated assurances of safety, are fearful of living near about 255,000 cubic yards of radioactive waste and residue.

Some residents expressed their displeasure during a recent public meeting at the site at 1397 Fletcher Road. But Department of Energy (DOE) officials assured them no radiation was getting into the community.

Some speakers said Niagara County had a high rate of cancer, especially in the Ransomville area, and there must be some reason for it.

Others pointed out that the Town of Lewiston, which has the CWM Chemical Services toxic waste site and the Modern Disposal trash site, now must live in perpetuity with tons of radioactive material underfoot.

Joan Gipp said residents were victims of this legacy of harmful waste and indicated Lewiston was not a proper containment site. John Simon questioned why maps of the site showing utility locations could not be located.

Site Manager Ronald E. Kirk, up from Oak Ridge, Tenn. to answer concerns, said the tons of radioactive material are safely contained in a clay burial site. He said a ring of monitoring wells around the site show there is no escape of radioactivity.

However, residents remained concerned that some future event, perhaps an earthquake, could cause leakage. Western New York is on an earthquake fault line.

The DOE, Kirk said, wants to add a permanent clay cap over the material which is now covered by a five foot temporary cap. The federal Environmental Protection Agency (EPA) and state Department of Environmental Conservation (DEC) feel safety standards are not sufficient at this time for a permanent cap.

Kirk said 95 percent of the material, basically from the Manhattan project which developed the first atomic bomb, was low level radiation waste. However, there are about 5 percent radioactive residues from Belgium produced in the Belgian Congo war.

Kirk said the 5 percent of higher radioactive material is the only portion in dispute and that EPA wants it covered for a 10,000 year period. The temporary cap is rated for 50 years and a permanent cap would be good up to 1,000 years.

Kirk said DOE wants to put on the permanent cap - another five feet of material - and could always dig it up if required in the future. But, he said, there is no other site in the country rated to contain for 10,000 years.

Some questioned how the radioactive material came to be in a rural section of the Town of Lewiston in the first place. During World War II, the U.S. Army had an ordnance manufacturing facility in Niagara Falls, a prime chemical industrial area.

The Army then obtained 7,570 acres on Fletcher Road to manufacture TNT and called it the Lake Ontario Ordnance Works. In 1944, the Manhattan project scientists needed a site to store radioactive waste, and the army thought of its land in Lewiston.

In 1948, the Atomic Energy Commission acquired the land and, up to 1975, decontaminated portions and sold off land until the present 191 acres remained. Between 1980 and 1986, the DOE cleaned up the majority of the site and consolidated the material in the Waste Containment Structure, the clay burial ground.

One man at the public session said he worked at the site when the radioactive material from the Belgian Congo came. He said it was a dark sludge and came in wooden champagne barrels.

Kirk conceded that regulations regarding handling of radioactive materials are much more stringent today.

The DOE also distributed an informative paper to try to allay public fears. The paper noted that radiation is a natural part of the universe and radiates from the earth itself in the form of radon gas. Only 18 percent of radiation is from man-made sources.

Radioactive materials are composed of atoms that release energetic particles or waves as they change into more stable forms. These particles and waves are referred to as radiation. Radiation that has enough energy to disturb the electrical balance in the atoms of substances it passes through is called ionizing radiation.

There are three basic forms of ionizing radiation, Alpha, Beta and Gamma. Alpha particles move slowly and are stopped by a sheet of paper or skin. Beta particles move faster and can be stopped by a sheet of aluminum foil. Gamma radiation is the dangerous one, moving at the speed of light and requiring a thick shield of steel, lead or concrete to stop.