

Grace lawyer says:

Chemical findings are inconsistent

By DANKENNEDY

BOSTON — Chemicals found in two contaminated Woburn wells are inconsistent with studies of W.R. Grace & Co.'s Cryovac manufacturing plant, a Grace lawyer said Tuesday.

Michael Keating made that assertion in U.S. District Court as he began his cross examination of Dr. George Pinder, a hydrogeologist who is working for the plaintiffs in the Woburn leukemia trial.

The plaintiffs contend chemicals dumped at the Cryovac site, located in East Woburn at 369 Washington St., contaminated municipal wells G and H, which were closed in 1979 after 15 years of use.

Grace's co-defendant in the case is Beatrice Foods Co., which owned the Riley Leather Co. tannery, 228 Salem St., from 1978 to 1983 and retains legal liability. The plaintiffs contend the tannery used a vacant lot northeast of the main grounds as a chemical dump.

The plaintiffs, eight East Woburn families, say the chemicals caused the leukemia deaths of five children and one adult and the illnesses of two others. The defendants deny they polluted the wells, and further deny that the chemicals cited by the plaintiffs cause leukemia.

Keating pointed out Tuesday that, when the wells were closed in 1979, chloroform — one of the chemicals cited in the case — was found in higher concentrations in well G (12 parts per billion) than in well H (1 ppb).

Well H lies between the Cryovac plant and well G. Keating suggested that if the plant were a source of chloroform contamination of wells G and H, chloroform levels should be higher in H than in G.

Keating also pointed to levels of trichloroethylene (TCE) and 1,2-trans-dichloroethylene (DCE).

In May 1979, tests showed no detectable levels of DCE in wells G and H, but did reveal the presence of TCE. Groundwater samples taken from the Cryovac site, Keating added, showed DCE was at least as prevalent as TCE.

Several months after the wells were closed, Keating said, DCE turned up in well G. DCE was not found in well H until 1981, he said.

Since Pinder had already testified that DCE travels through groundwater three times as quickly as TCE, Keating asked if it wasn't "more reasonable to conclude," given the absence of DCE in well H, that the Cryovac site was not a source of TCE contamination of wells G and H.

Pinder replied he would not come to such a conclusion. "The relative concentrations may vary from time to time," the Princeton University professor said, but added the data Keating was using did not prove that Grace was not a source.

In previous testimony, Pinder had estimated TCE in groundwater at the Cryovac site would flow into wells G and H, some 2,400 feet away, within three

years. The travel time for DCE would be about one year, he has testified.

Keating also pointed to the Hemingway Transportation property, northwest of wells G and H, as a possible source of TCE contamination. A soil sample taken from the site in September 1985 showed TCE concentration in the range of 390,000 ppb.

Another chemical cited in the case, tetrachloroethylene (PCE), likely flowed into the wells not from Cryovac but from Unifirst Corp., 15 Olympia Ave., Keating asserted.

Unifirst was originally brought into the federal trial as a co-defendant by Grace lawyers. Grace later dropped Unifirst from the case, whereupon the plaintiffs sued Unifirst in state court.

An out-of-court settlement with Unifirst was reached last year, with the plaintiffs receiving a reported \$1.2 million.

Under questioning by Keating, Pinder conceded the Unifirst property is about the same distance from the wells as Cryovac.

Unifirst is a dry-cleaning operation that cleans uniforms and, as such, uses PCE. By the company's own admission, a quantity of PCE was spilled at Unifirst sometime in the late 1970s.

Pinder said that spill could not have contaminated the wells before they closed in 1979 because PCE moves three times more slowly than TCE, and would not reach the wells for about 9½ years.

PCE has been found in concentrations of 7,300 ppb at the Unifirst site, some seven times higher than at Cryovac, which Keating said makes Unifirst a more likely source of PCE contamination than the Cryovac property.

Keating introduced into evidence an agreement Pinder made with Unifirst, as a condition of the legal settlement, that he not testify against Unifirst in any future lawsuit concerning chemical contamination.

Keating also asked Pinder whether any PCE in ground-

water at the Cryovac site would have reached the wells by 1979 if the chemical had not been used at Cryovac before 1974.

Pinder replied that, if Keating's assumption was correct, then no PCE would have reached the wells before they were closed.

Keating also criticized a huge cross-section diagram prepared under the direction of the plaintiffs.

The cross section shows the water level at a test well between Cryovac and well H dropping by some 20 feet during a pumping test conducted in December 1985.

Pointing to data logs prepared by a firm retained by the plaintiffs, Keating said the level of that well actually rose slightly during the pumping test — making the downhill portrayal as drawn on the diagram inaccurate.

Pinder agreed the diagram was inaccurate, but said he based his opinion of groundwater flow on the correct data rather than on the diagram.

Keating, as did his Beatrice Foods counterpart, Jerome Facher, pointed to numerous possible sources of contamination of wells G and H other than the two defendant properties.

A test well drilled between Aberjona Auto Parts and Whitney Barrel Co., about 900 feet south of wells G and H, showed TCE concentrations of 665 ppb and the presence of other chemicals as well, Keating said.

He added that, in one pre-trial affidavit, a Whitney official said the firm used 12 55-gallon drums of TCE per year.

Pinder conceded contaminants in that area would likely flow to the wells.

Keating also pointed to industries to the north and west of the wells as possible sources of contamination, saying a 1981 report identified 15 to 20 possible sites.

Pinder responded that didn't alter his opinion that Grace and Beatrice were sources of contamination.