SIDEBAR ON TOXINS FOUND AT RAYTHEON PLANT

All of the industrial chemicals listed below are showing up in an underground plume of pollution that has been leaking from the Raytheon plant site in St. Petersburg for at least 17 years. The Florida Department of Environmental Protection first discovered the pollution when the plant was owned by E Systems. The information below from the Agency for Toxic Substances & Disease Registry (ATSDR) summarizes of some of the possible health risks associated with human exposure to those chemicals. Raytheon says it commissioned a confidential study in 2005 that concluded no one was at risk from these pollutants at its St. Petersburg plant site. Raytheon says an updated assessment of the pollution and any possible health risks to nearby residents and plant workers is currently in progress. More complete information on the known pollutants from the ATSDR is available at the website listed below each description.

1,4-Dioxane

This is a clear liquid that dissolves easily in water and is used as a solvent in the manufacture of chemicals and as a laboratory reagent.

Few studies are available that provide information about the effects of this chemical. Exposure to very high levels can result in liver and kidney damage and death. Eye and nose irritation has been reported by people inhaling low levels.

Some studies show this chemical can cause cancer in rats and mice, there are no studies indicating it will cause cancer in humans.

Children who live near hazardous waste sites that might be contaminated with 1,4-dioxane are discouraged from playing in water and mud and should follow careful hand washing.

http://www.atsdr.cdc.gov/tfacts187.html

Vinyl Chloride

This chemical is a colorless gas that sometimes results form the breakdown of other chemicals.

It can cause symptoms ranging from dizziness to death when breathed at high levels.

Vinyl Chloride is a known carcinogen. Exposure can cause skin reactions, organ damage, and might affect the growth and development of children.

The affects of drinking vinyl chloride are unknown.

http://www.atsdr.cdc.gov/tfacts20.html

Trichloroethylene (TCE)

This is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent.

Exposure to small amounts may cause headaches, lung irritation, dizziness, poor coordination and difficulty concentrating.

Breathing large amounts may cause impaired heart function, unconsciousness and death.

Drinking small amounts may cause organ damage. Drinking large amounts can cause death.

Skin contact may cause skin rashes. There is some evidence this chemical is carcinogenic in animals and humans.

http://www.atsdr.cdc.gov/tfacts19.html

Chloromethane

Also known as methyl chloride this chemical is a clear, colorless gas, heavier than air and is extremely flammable.

Breathing high levels can have serious effects on your nervous system, including convulsions and coma.

Lower exposures can cause staggering, blurred vision, dizziness, fatigue, personality changes, confusion, tremors, nausea and vomiting.

These symptoms can last for months or years. It can cause organ damage. There is no evidence it causes cancer in humans. There are no studies showing the effect on children.
http://www.atsdr.cdc.gov/tfacts106.html

1,1 Dichloroethene

This industrial chemical is a colorless liquid with a mild sweet smell that is not naturally occurring in the environment.

It enters the environment form industries that make or use it.

The main effect form breathing high levels is on the central nervous system.

It can cause organ damage and exposure to skin or eyes can cause irritation.

There are no conclusive studies indicating this chemical is carcinogenic.
http://www.atsdr.cdc.gov/tfacts39.html

1,2 Dichloroethane

This industrial chemical is not naturally occurring in the environment and can travel a long way underground and contaminate drinking wells.

Small exposures are not harmful. Larger exposures can cause organ damage and nervous system disorders.

It has not been associated with cancer in humans.
http://www.atsdr.cdc.gov/toxprofiles/tp38.pdf