



VX Hydrolysate to Dupont?

The U.S. Army is proposing to pre-treat stockpiles of VX nerve agent at its Newport Chemical Agent Disposal Facility in Newport Indiana, and then transport the resulting VX hydrolysate across the country to the Dupont Chambers Works facility in Deepwater, Salem County, NJ for processing and disposal into the Delaware River.

There is ample evidence that this proposal poses an unacceptable risk in terms of public health and safety and environmentally and therefore must be rejected. (See [Delaware Riverkeeper Network's Facts and Questions, The Proposal to Treat and Discharge VX Nerve Agent Hydrolysate into the Delaware River](#))

In addition to the technical and scientific problems with the Army proposal, there are basic questions that must be frankly asked and answered regarding the proposal itself as well as Dupont's competency to carry it out.

CASE STUDY

A review of Dupont's record with regards to Perfluorooctanoic Acid (PFOA or C-8) highlights the major credibility and treatment problems that need to be considered.

PFOA, made and used by Dupont, is used to make non-stick products such as Teflon pans. Dupont also uses fluorinated telomers, called "precursor chemicals", which are found to break down into PFOA. This family of chemicals is used in nonstick papers such as food containers, stain resistant and water-resistant fabric, and other commonly used products. Dupont pioneered their use in the 1950's as Teflon, dominating the PFOA market. Along with 3M, Dupont has used PFOA chemicals for decades.

PFOA use is so widespread and their nature so durable that PFOA has become ubiquitous in our environment. This is proven by blood studies that show the presence of PFOA chemicals in the blood of 96% of people in the U. S. The University of Pennsylvania School of Medicine found that PFOAs concentrate in the blood – because the chemical tends to build up in the human body and is difficult to excrete the levels in an individual's blood is about 105 times the amount in their drinking water.

A recent class-action lawsuit was brought against Dupont at their West Virginia Washington Works Plant by residents who were found to have excessive amounts of PFOA in their blood (298 to 369 ppb but some had ppb levels in the thousands); most people in the U.S. have about 3 to 5 ppb. A multi-million dollar settlement was reached and bottled drinking water is being provided to area towns until water treatment systems are installed in six community water systems. The EPA recently acknowledged that PFOA may be hazardous to human health and has ordered that the use of this family of chemicals be phased out. The federal report by an independent scientific review panel says the compounds are a "likely" cause of cancer; other health impacts are being studied such as organ damage and elevated cholesterol and blood triglycerides.

Dupont still manufactures PFOA, which was discontinued by 3M based on their own health studies. Dupont supplies PFOA nonstick products to McDonalds (fast food) and ConAgra (Act II and Orville Redenbacher microwave popcorn). Burger King stopped using PFOA-coated paper in 2002, IKEA phased out its use on upholstery several years ago based on health concerns.

AMONG THE QUESTIONS THAT NEED TO BE ASKED AND ANSWERED WITH REGARDS TO PFOA THAT MAY BE INDICATIVE OF HOW THEY WILL BEHAVE SHOULD DATA AND/OR PROBLEMS ARISE WITH VX HYDROLYSATE TREATMENT AND DISPOSAL

- Why has Dupont not halted the use of PFOA-related chemicals and their precursors in light of independent evidence of the human health impacts?
- In the early 1980's or early 1990's Dupont established a "Community Exposure Guideline" of 1 ppb. Why wasn't a safe drinking water standard established based on this Dupont evidence and why didn't Dupont inform area communities of its known dangers? Why did they not put controls in place then to prevent these chemicals from polluting waterways and water supplies where PFOA chemicals are used or manufactured (such as Chambers Works, NJ)?
- PFOA has been discovered in residents' tap water through water testing by Delaware Riverkeeper Network in communities that neighbor the DuPont Chambers Works facility, namely Deepwater, Penns Grove, and Carney's Point, New Jersey. A subsequent testing by Pennsville Water Company has turned up contamination of one of their supply wells. THIS CONTAMINATION COULD HAVE BEEN AVOIDED IF DUPONT HAD ACTED ON WHAT THEY KNEW ABOUT PFOA. Considering the many sources of PFOA in the average person's environment and the nature of the toxic chemical to build up in the body, why didn't Dupont institute testing of groundwater here for PFOA 25 years ago, when they knew of its dangers? Will they now treat the water for the affected NJ residents to remove this dangerous chemical?

A Dupont scientist discovered PFOA in 1938 but concerns about poisonous vapors from the chemical held up its use by Dupont. After about 15 yrs. it was made into Teflon and then into dozens of other applications. Why were the health and safety concerns that Dupont found almost 70 years ago not heeded? How could Dupont move ahead using this family of chemicals without comprehensive human health studies and regional water monitoring safeguards?

EPA has charged Dupont with knowing about PFOA pollution for decades, according to a report in Science News (www.sciencenews.org/articles/20050827/food.asp). The article says Dupont neglected to report the threats and concerns to EPA; their defense was they had no legal obligation to do so.

The British science journal Nature reports that when Teflon is heated a toxic PFOA-related fume (C-8) is emitted. EPA is testing shatter resistant light bulbs and sealants and other PFOA products but Dupont resists the charge that these are sources of PFOA contamination. Why is Dupont so defensive?

As we look closely at Dupont's handling of PFOA, we see a long standing resistance to regulation, a denial of harm, and evidence that Dupont either did not know or knew and did not act on many of the health hazards of PFOA chemicals. Now it comes out that the EPA finds these chemicals too dangerous to allow their use to continue. How can we as a community trust a company who has been using such toxic compounds for so long in so many products with knowledge of concerns?

Can we now trust Dupont to transport, handle, process, and discharge VX nerve agent waste? VX hydrolysate is one of the deadliest chemical weapons ever made; one drop of live VX kills an adult in minutes. VX hydrolysate may contain actual VX nerve agent as well as other highly toxic and dangerous contaminants. Can we have confidence in Dupont to be forthcoming and trustworthy in handling VX waste? Or can we expect more of the same from this company that mishandled PFOA so badly?

For more information:

www.delawareriverkeeper.org