

Florida's Department of Environmental Protection (DEP) developed second thoughts to DuPont's assertion that Benlate material was not hazardous when they found out about the flusilazole. Florida's DEP now wish contaminated soil was not approved to be dumped in landfills.⁸⁰

Despite the evidence, DuPont denies Benlate was ever contaminated. It wrote in its 1993 annual report: "Based on our science, we are convinced that our product did not cause any damage and that it is safe when applied at label rates."⁸¹

However, DuPont's cases to convince juries and judges that Benlate was safe have included withholding evidence⁸² and possibly committing fraud, as some plaintiffs claim. In 1998, DuPont was sued for conspiring with the law firm Alston & Bird to commit fraud by manipulating tests.⁸³ A Georgia Judge also ordered the U.S. attorney for the Middle District of Georgia to investigate charges that DuPont committed wire fraud, witness tampering and mail fraud.⁸⁴ Before the judge could rule on the case, DuPont agreed to give \$10 million for legal professionalism and ethics courses at four Georgia universities and \$1 million for an annual legal symposium, plus legal fees.

DuPont's attempts to manipulate the judicial system include several other cases:

- In 1997, the Hawaii Supreme Court upheld the findings that "DuPont engaged in fraud and intentional misconduct," and acted "in bad faith, wantonly and for oppressive reasons" during product liability hearings in the state.
- In 1996, Miami-Dade Circuit judge found that DuPont committed discovery violations.⁸⁵
- Courts in Delaware and Georgia also sanctioned DuPont for withholding evidence. A \$100 million sanction was later reversed.
- \$5 million penalty to pay for fees and costs for attorney's of Ecuadorian shrimp farmers in 1999. The judge found three main areas of violation: DuPont hid documents that showed Benlate does run off after application; the company denied the existence of any federally mandated reports to the EPA of alleged toxic impact from Benlate products; and DuPont denied requests that the company admit it did not test Benlate's suitability to the Ecuadorian environment.

⁸⁰ Beall, Pat. December 23, 1994. DEP to survey state landfills for Benlate. Orlando Business Journal.

⁸¹ Form 10K, filed with the Security and Exchange Commission, for the year ended December 31, 1993, page 5.

⁸² Chemical Week. June 14, 2000. DuPont loses Benlate consolidation bid.

⁸³ Mantius, Peter and Rankin, Bill. December 3, 1994. Law firm sued over DuPont case; Alston & Bird calls it 'old and cold' issue. The Atlanta Journal and Constitution.

⁸⁴ Pedreira, David. January 1, 1999. DuPont's \$11 million endowment ends Benlate suit in Georgia. The Tampa Tribune.

⁸⁵ Ellman, Steve. July 8, 2003. DuPont slammed; Broward judge orders company to pay \$5 million for improperly delaying shrimp farmers' Benlate suit. Broward Daily Business Review (Florida).

- The EPA filed a complaint against DuPont on September 30, 1999 “for the company’s failure to report timely information about possible human adverse effects from its pesticide Benlate Fungicide.”⁸⁶

After years of lawsuits over Benlate, shareholders had finally had enough. After reviewing the company’s Benlate disclosures, and the costly liabilities resulting from Benlate, shareholders alleged in a securities fraud class action that DuPont made false and misleading statements and omissions about Benlate 50 DF, with the effect of inflating the price of DuPont's stock. DuPont settled the suit for \$77.5 million.⁸⁷

Teflon-chemical

The Teflon-chemical story begins back in 1938 when DuPont chemist, Dr. Roy Plunkett, made an astounding discovery: the most slippery substance known to man.⁸⁸ In 1951, the company began making the substance, Teflon, at the Washington Works plant near Parkersburg, West Virginia by using ammonium perfluorooctanoate, or APFO, in the manufacturing process.⁸⁹ In 1962, the Food and Drug Administration (FDA) approved Teflon non-stick cookware for food contact.⁹⁰ Five years later, the FDA also approved Zonyl, a fluorotelomer, to be used on paper packaging.

Since then, industry studies have shown suspicion about the effects the Teflon-chemical has on workers. In 1981, DuPont began a study that showed 2 out of 8 Washington Works female workers had children with birth defects similar to those found in rats in another study.⁹¹ In 2004, EPA sued DuPont for hiding both studies and evidence of drinking water contamination.⁹² 3M stopped making APFO based on principles of “responsible environmental management” causing DuPont to manufacture APFO itself. Now, the EPA, communities around DuPont plants and consumers are concerned about the toxicity of a chemical that makes Teflon, a product that once provided so much convenience.

What is the Teflon-chemical?

The Teflon-chemical refers to perfluorooctanoic acid (PFOA) and its salts – its salts including APFO. Whereas Teflon and other fluoropolymers are made with APFO, fluorotelomers, such as Zonyl, are not made with APFO but break down into PFOA during the manufacturing process. PFOA, the acid, and its ammoniums and salts, are all often called C8 to make things easier. C8

⁸⁶ Environmental Protection Agency. October 14, 1999. Complaint Against DuPont for Not Alerting EPA of Possible Adverse Effects of a Pesticide. EPA Newsroom.

⁸⁷ Lewis, Sanford. April 27, 2005. The Shareholder’s Right to Know More. At: www.DuPontShareholdersAlert.org.

⁸⁸ Cortese, Amy. November 2003. DuPont’s Teflon Dilemma. How Chad Holliday, the champion of sustainability, is managing an environmental challenge. *Chief Executive*. Vol. 193.

⁸⁹ Hawthorne, Michael. February 16, 2003. Internal Warnings. Industry memos show DuPont knew for decades that a chemical used to make Teflon is polluting workers and neighbors. *Columbus Dispatch* (Ohio).

⁹⁰ Goldblatt, Jennifer and Biddle, Fred. February 23, 2003. Is there a danger in the air for cooks? DuPont says kitchen temperatures are not hot enough to release harmful fumes. *The News Journal* (Wilmington, DE).

⁹¹ Environmental Working Group. “PFCs - A Family of Chemicals That Contaminate The Planet.” At:

www.ewg.org

⁹² Ward, Ken Jr. Sept. 10, 2004. DuPont agrees to pay \$107 million; Wood county plant also must help reduce C8 in drinking water. *Charleston Gazette* (West Virginia).

represents an 8 carbon chain, which is why this chemical is of concern to the scientific community.⁹³

Why is this of concern? The 8 carbon chain has fluoride legs attached to it. When fluoride refuses to bind to anything else but itself, it creates a slippery surface. However, it also creates one of the toughest bonds in the world, which is devastating to the environment and possibly to humans. C8 never biodegrades in the environment.⁹⁴ In humans it has a half-life—that it is, half the amount in our bodies remains—for 4.4 years, by recent estimates.⁹⁵

The scientific community, mainly the EPA, is concerned it may be a carcinogen. In February, an independent scientific advisory looked at all the research the EPA had collected on C8, and came to the tentative conclusion that C8 is a “likely” carcinogen in humans.⁹⁶ Which, according to the EPA’s carcinogen scale, “likely” is a lot closer to being a carcinogen than the previously stated “probable.” A fact the EPA will acknowledge is that C8 is “definitively” a carcinogen in animals.⁹⁷ Lab animals, rats and monkeys have developed liver, testicular, mammary and pancreatic tumors after being exposed to C8.

Birth Defects in DuPont Plants

Lab animals also have high prevalence of birth defects when mothers are exposed to C8. And there is evidence that has linked C8 to birth defects in humans, especially in pregnant workers at DuPont plants. In 1981, two of eight female employees who handled C8 at DuPont’s Washington Works, West Virginia facility had children with birth defects. DuPont found this evidence in a preliminary survey after learning from its C8 supplier at the time, 3M, that rat pups had a high prevalence of eye birth defects after their mothers were exposed to C8.⁹⁸ The two children in the worker study also had defects in their eyes; one of the children was also missing a nostril.

2.5*	Child - 2 plus years. Unconfirmed eye and tear duct defect.
0.048	Child - 4 months. One nostril and eye defect. <i>Media used 0.02 ppm</i>

Even though these findings provided evidence that C8 “presents a substantial risk of injury to health or the environment,” DuPont did not report the information to the EPA as is required

⁹³ Environmental Working Group. “PFCs - A Family of Chemicals That Contaminate The Planet.” At: www.ewg.org. And, EPA. Basic Information on PFOA. At: www.epa.gov/opptintr/pfoa/pfoainfo.htm#concerns

⁹⁴ Environmental Protection Agency. Basic Information on PFOA. At: www.epa.gov/opptintr/pfoa/pfoainfo.htm#concerns

⁹⁵ Burris JM, Lundberg JK, Olsen GW, Simpson D, Mandel JH. 2002. Interim report: Determination of serum half-lives of several fluorochemicals. AR226-1086. Washington, DC: U.S. Environmental Protection Agency.

⁹⁶ Eilperin, Juliet. June 29, 2005. Compound in Teflon a “likely carcinogen. The Washington Post.

⁹⁷ Environmental Protection Agency. January 2005. Draft Risk Assessment of the Potential Human Health Effects Associated with Exposure to Perfluorooctanoic Acid and its Salts. Office of Pollution Prevention and Toxics.

⁹⁸ Environmental Working Group. “PFCs - A Family of Chemicals That Contaminate The Planet.” At: www.ewg.org.

under the Toxic Substances Control Act (TSCA).⁹⁹ EPA did not learn that C8 had traveled from mother to child, as the DuPont study showed, until over 20 years later.

“Significantly Higher” Prevalence of Birth Defects

In a sworn statement in 2004, former DuPont medical doctor, Bruce Karrh, reported that DuPont epidemiologist Bill Fayerweather had proposed to do the 1981 survey of female Washington Works employees.¹⁰⁰ By Fayerweather’s estimates, two out of eight children born with birth defects was “significantly higher” than that of the general population. Karrh had asked a DuPont doctor to look into the matter: “. . .He came back to me and said he was satisfied that it was not workplace related.” Yet, Karrh does not know how the doctor made that decision to drop the study. No one prepared a written report.

When asked why DuPont did not report the data about human birth defects. Karrh answered, "If you reported every little thing because it wasn't - just because it very possibly a thousand years from now could be, then you'd lose the whole purpose of it."¹⁰¹

DuPont Does Not Tell the EPA or Communities

On or about June 14, 1984, DuPont also found C8 in West Virginia and Ohio tap water near the Washington Works plant,¹⁰² the same plant where Teflon is made and female workers had children with birth defects. DuPont disposes of waste from the plant in the Dry Run Landfill. Until recently, the landfill was unlined and polluting the soil, ground water and drinking wells with C8. Not until a local farmer sued DuPont for polluting Dry Run Creek and killing 280 cows in 1999 did the community begin to learn the extent of its drinking water contamination.¹⁰³ Even though levels exceeded DuPont’s original “community exposure guideline” of one parts per billion (ppb), the company did not tell residents or the EPA about the contamination for up to 20 years¹⁰⁴.

Residents in neighboring communities now drink only bottled water, as per the suggestion of a Pennsylvania scientist.¹⁰⁵ (Water purchases are reimbursed by DuPont.) Residents await more studies to determine if a link between disease and the C8 contaminated water exists. If it does exist, DuPont will have to pay \$235 million for medical monitoring as part of the settlement of a class action suit brought about by 50,000 to 80,000 residents.¹⁰⁶ DuPont has already paid \$107.6 million as a result of the settlement.

⁹⁹ Environmental Protection Agency. July 8, 2004. EPA Takes Enforcement Action Against DuPont For Toxic Substances Reporting Violations. EPA News Room.

¹⁰⁰ Ward, Ken, Jr. July 10, 2005. DuPont proposed, dropped '81 study of C8, birth defects. Charleston Gazette (West Virginia).

¹⁰¹ Ward, Id.

¹⁰² Environmental Working Group. “PFCs - A Family of Chemicals That Contaminate The Planet.” At: www.ewg.org.

¹⁰³ Cortese, Amy. November 2003. DuPont's Teflon Dilemma. How Chad Holliday, the champion of sustainability, is managing an environmental challenge. *Chief Executive*. Vol. 193.

¹⁰⁴ Hawthorne, Michael. February 16, 2003. Internal Warnings. Industry memos show DuPont knew for decades that a chemical used to make Teflon is polluting workers and neighbors. Columbus Dispatch (Ohio).

¹⁰⁵ Newsinferno.com. August 22, 2005. Major Study Warns People to Avoid Drinking Water Tainted with Teflon-Related Chemical. And, Hrach, Tom. August 23, 2005. Free bottled water available for reimbursement from DuPont. The Marietta Times (Ohio).

¹⁰⁶ Ward, Ken Jr. Sept. 10, 2004. DuPont agrees to pay \$107 million; Wood county plant also must help reduce C8

Fayetteville, North Carolina

C8 has now been found in groundwater beneath the only U.S. facility that makes it. The high-tech \$23 million plant is located next to the Cape Fear River in Fayetteville, North Carolina. C8 contamination of groundwater at the North Carolina plant was quietly reported to the EPA in March 2003, only months after DuPont's new "APFO Plant" began operating.¹⁰⁷ That same month DuPont assured the local newspaper that its chemical process was safe, claiming to have spent \$7 million dollars on environmental controls and safeguards to keep C8 or component materials from leaking into the air or water. DuPont did not tell the public that its "leak-proof" C8 plant was already leaking.

In addition, when DuPont applied for the North Carolina C8 plant's air pollution permit in August of 2001, the company asked that there be no inspection or maintenance requirements for its scrubber, the APFO plant's main pollution control device. Currently, the environmental permits for the Fayetteville plant do not require monitoring or reporting of C8 discharges to the air or to surface waters.

DuPont workers in Fayetteville sampled water in four monitoring wells. C8 was found in trace amounts in three of the wells and at a higher level in the fourth, according to a report DuPont provided to state environmental staff. Limited testing of monitoring wells is being conducted for C8 pursuant to an agreement with the EPA. Sampling of the seepage from the sides of the channel leading to the Cape Fear River for C8 is only in the planning stage. The extent of C8 contamination beneath the facility has yet to be determined.¹⁰⁸

DuPont officials say the chemical did not come from the new \$23 million building where it is produced but from a leaking cement cistern beneath another building.¹⁰⁹ Plant officials said the two tests pointed them to the source: an underground concrete waste storage vault, or sump, underneath the plant where Nafion is produced. Nafion is a brand name for a fluorinated polymer, which is most likely made with telomer alcohol, although DuPont has not confirmed this. The company has said the C8 might be a breakdown chemical left after other chemicals biodegraded.¹¹⁰

DuPont officials never fully explained why the contamination occurred only two or three months after DuPont began making C8 at the Fayetteville plant.

Circleville, Ohio

"Frankly, we don't believe we're going to get all the information we need," Mary Ellen Weber, a director in the US EPA pollution prevention and toxics office, said about detecting C8 in water sources of yet another plant, Circleville, Ohio.¹¹¹ DuPont had failed to report evidence of C8 in wells near the plant because C8 levels fell below a detection level the company set, instead of measuring the pollution at the lowest detection levels, as is the EPA's standard practice.

in drinking water. Charleston Gazette (West Virginia).

¹⁰⁷ Based on USW research of North Carolina state documents

¹⁰⁸ Landis, Nomee. May 26, 2005. DuPont monitors chemical pollution. The Fayetteville Observer (North Carolina).

¹⁰⁹ Landis, Id.

¹¹⁰ Landis, Id.

¹¹¹ The Associated Press. August 17, 2005. U.S. EPA finds C8 in drinking water near Circleville.

Ohio EPA records show C8 was found in wastewater tests DuPont conducted in July and in October 2004, including one lagoon that drains to the Scioto River with levels ranging between 8.1 and 9.8 parts per billion.¹¹² Levels in wells used by the Little Hocking Water Association, now receiving bottled water because DuPont polluted its water, were 1.7 to 6.2 parts per billion in 2002.¹¹³ DuPont waited nine months to tell invited groups of area residents that C8 had entered the water and the air.¹¹⁴

Conclusion

Will DuPont repeat the story of lead and Benlate with the Teflon-chemical?

- Even though scientific evidence attributed deadly health effects to lead in paint and gasoline, DuPont denied there was anything wrong with lead levels in humans and used its own science to deny the prevalence of poisoning in children. After over 50 years of selling tetraethyl lead for gasoline, DuPont writes on its heritage website, “Tetraethyl lead is an extremely toxic substance.”¹¹⁵
- Even after plant devastation, bankrupt businesses and birth defects attributed to Benlate, the company still denies anything was ever wrong with the fungicide. Yet, the company stopped selling all varieties of Benlate in 2001.
- About the Teflon-chemical, C8, DuPont writes, “Based on existing scientific data, DuPont believes that PFOA [or C8] exposure does not pose any health risk to the general public.”¹¹⁶

But, like in the above cases, the scientific community is finding reason to believe C8 is hazardous to our health. Testing of workers who once made the chemical by 3M found workers were more likely to die or seek treatment for cancers in the reproductive tract and have weakened immune systems.¹¹⁷ DuPont disagrees there is evidence C8 may be toxic to humans, although the company concurs with the EPA that it is toxic in animals. DuPont writes there are no health effects even in workers who have “significantly higher exposure levels than the general population.”¹¹⁸ Yet, DuPont has announced it will reduce its use of C8 in Teflon products and reformulate telomer products, such as those that go on our clothes and carpeting, by the end of 2006.

The USW hopes DuPont is right this time and there are no negative health effects of C8 – for workers and for community members around its plants.

¹¹² The Associated Press. Id.

¹¹³ Hunt, Spencer. August 10, 2005. Chemical Found at Circleville Plant Site. *The Columbus Dispatch*.

¹¹⁴ *The Columbus Dispatch* (Ohio). Aug 11, 2005. C8 test data secret for months. DuPont revealed in April that EPA had it run tests for chemical in '04

¹¹⁵ www.heritage.dupont.com

¹¹⁶ www.pfoa.dupont.com

¹¹⁷ Environmental Working Group (EWG). 2003. PFCs: A chemical family that contaminates the planet. Available online at <http://www.ewg.org/reports/pfcworld/>

¹¹⁸ www.pfoa.dupont.com

DuPont's recent record does not give this hope promise. DuPont has created the most dangerous sites in the country and the pollution continues to make thousands of people sick. Even though the company is growing and expanding in markets in foreign countries, the polluted lands it leaves behind are un-developable and un-livable. DuPont's policy for sustainable growth is just greenwashing.

Denial and non-reporting seems to be the true walk of a company with so much talk. DuPont's current safety program under the name STOP encourages a system of non-reporting by blaming the worker and relinquishing management of responsibility. Harmful conditions result, and catastrophes at DuPont plants are catastrophes for workers and the public.

DuPont's true record is not an example of a corporation others should model in order to meet sustainable development and safety goals. DuPont must drastically change its performance and its course of direction to gain back the public's confidence.