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Leach v. E.I. du Pont de Nemours & Co. & Related Cases (Re PFOA Exposure & Contamination in the US)

Abstract

In 2001, 80,000 Americans in West Virginia and Ohio filed a variety of claims under state tort law arising from perfluorooctanoic acid (PFOA) contamination of their water supply by DuPont. In 2004, the parties reached a settlement of \$405 million in payments and DuPont agreed to fund an independent science panel to study the connection between PFOA and human health before any suits claiming health impacts could be brought. Since the science panel discovering probable links between PFOA and serious human diseases, over 3,500 personal injury suits have been brought culminating in settlements of \$670.7 million.

Table of Key Facts

Case name	Leach v. E.I. du Pont de Nemours & Co. ¹ & 3,500+ related cases ²	
Date	2001-Present	
Jurisdiction	West Virginia, & Ohio, U.S.A.	
Plaintiffs Carolyn S. Leach (Class action representing 80,000 individuals). Supported by Robert Billot (Taft, Stettinius, & Hollister LLP), et. al.	Defendants E.I. du Pont de Nemours & Co., Chemours, 3M	

¹ Leach v. E.I. Du Pont de Nemours Co., et al., No. 01-C-608, 2002 WL 1270121, at *1 (W.Va. Cir. Ct. April 10, 2002).

² “DuPont’s Deadly Deceit: The Decades-Long Cover-up behind the ‘World’s Most Slippery Material’ | Salon.Com.” Accessed April 15, 2019. https://www.salon.com/2016/01/04/teflons_toxic_legacy_partner/.

Decision	The case was settled for \$335 million, plus \$70 million for community health & education project. The defendants were obligated to fund a multimillion dollar independent human health impact study (Science Panel) & install filtration systems in contaminated water districts. If the science panel found probable link between PFOA and any diseases, DuPont obligated to pay for medical monitoring of affected group in perpetuity and DuPont not shielded from personal injury suits. Class members are forbidden from filing suits until conclusion of study.
Prior procedure	<i>Tennant v. E.I. du Pont de Nemours & Company (1998-2001)</i> : Settled for an undisclosed amount in 2001. Revealed DuPont dumping PFOA into Ohio River.
Subsequent procedures	Over 3,500 personal injury claims filed against DuPont and Chemours in Ohio and West Virginia stemming from Science Panel Findings. Settled in February 2017 for \$670.7 million. Additional \$25 million per year for the next five years or \$250 million payment issued subject to liabilities arising outside of settlement's scope. Actual settlement figures for each class member undisclosed. ³ Litigation for PFOA offshoots, PFAS, against DuPont, Chemours, & 3M ongoing. In 2011, Science Panel released findings: probable link between PFOA and six human diseases, following which DuPont was obligated to pay for medical monitoring of the Leach Plaintiffs that could legally prove the link between PFOA and onset of at least one of the six ailments.

Background

PFOA & Its Impact on Human Health

Perfluorooctanoic acid, or PFOA, is a man-made, non-degradable chemical manufactured by the American company 3M in 1947.⁴ In 1951, DuPont, the world's largest chemical company, began

³ "DuPont's Deadly Deceit: The Decades-Long Cover-up behind the 'World's Most Slippery Material' | Salon.Com." Accessed April 15, 2019. https://www.salon.com/2016/01/04/teflons_toxic_legacy_partner/.

⁴ National Center for Biotechnology Information. PubChem Database. Perfluorooctanoic acid, CID=9554, <https://pubchem.ncbi.nlm.nih.gov/compound/9554> (accessed on Apr. 15, 2019)

using PFOA to produce Teflon, a synthetic waterproofing agent used in everyday items such as Gore-tex®, non-stick pots, pizza boxes, stain resistant clothing, and implantable medical devices.⁵

In 2011, a comprehensive study found a probable link between PFOA exposure and birth defects, kidney cancer, testicular cancer, thyroid disease, ulcerative colitis, hypercholesterolemia, and pregnancy-induced hypertension and preeclampsia.⁶ Subsequent studies have determined connections between PFOA and endocrine disruption, DNA damage, male infertility, lower sperm count, and smaller testicular volume and penile length. PFOA can be dispersed through air, water, use of PFOA laced items such as nonstick cookware, and through blood, including neonatal exposure.⁷ It is in the blood of 99.7% of Americans and the approximate safe level of PFOA in water systems are exceeded by factors of 100 or more in 27 states.⁸

Leach v. E.I. du Pont de Nemours & Company (2001-2004):

Under the 1976 Toxic Substances Control Act (TSCA), the E.P.A. need only regulate chemicals when evidence of harm is established. Human harm from PFOA was not established until 2011 as a result of this case.

A prior case, *Tennant v. E.I. du Pont de Nemours & Company (1998-2001)*, established that DuPont dumped more than 7,100 tons of PFOA-laced sludge onto Plaintiff Tenant's property and into the Ohio River, from which the chemical seeped into the ground and entered the local water table. After *Tennant*, class action certification was sought by approximately 80,000 West Virginians claiming PFOA contamination of their water supply by DuPont's "Washington Works" plant in West Virginia in August 2001. The plaintiffs brought a variety of claims under state tort law including equitable, injunctive, and declaratory relief, along with compensatory and punitive damages. Class certification was granted in 2002.

In November 2004, the parties created the Leach Settlement Agreement to determine whether the class members could sue DuPont for causation of human diseases. Along with \$405 million in payments, DuPont agreed to fund a Science Panel to study the connection between PFOA and human health. Class members could not bring personal injury suits against DuPont until the conclusion of the study.

⁵ DowDuPont is the world's largest chemical company in terms of sales, its value near \$150 billion as of Sept. 1, 2017. <https://www.ocj.com/2017/09/dowdupont-inc-is-now-the-worlds-largest-chemical-company/>; *The Annals of Occupational Hygiene*, Volume 56, Issue 9, 1 November 2012, Pages 1025–1037, <https://doi-org.proxy.bc.edu/10.1093/annhyg/mes023>

⁶ Frisbee, Stephanie J., A. Paul Brooks, Arthur Maher, Patsy Flensburg, Susan Arnold, Tony Fletcher, Kyle Steenland, et al. "The C8 Health Project: Design, Methods, and Participants." *Environmental Health Perspectives* 117, no. 12 (December 2009): 1873–82. <https://doi.org/10.1289/ehp.0800379>.

⁷ Id.

⁸ Calafat AM, Wong LY, Kuklenyik Z, Reidy JA, Needham LL. Polyfluoroalkyl chemicals in the U.S. population: data from the National Health and Nutrition Examination Survey (NHANES) 2003-2004 and comparisons with NHANES 1999-2000. *Environ Health Perspect.* 2007;115(11):1596-602.; "States of Uncertainty" Table: <https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html>

In 2011, the Science Panel determined a probable link between PFOA and six human diseases: kidney cancer, testicular cancer, thyroid disease, ulcerative colitis, hypercholesterolemia, and pregnancy-induced hypertension and preeclampsia.⁹ DuPont was thus obligated to pay for medical monitoring of the Leach Plaintiffs who were still alive and could legally prove the link between PFOA and onset of at least one of the six ailments.

More than 3,500 class action lawsuits were brought against DuPont in West Virginia and Ohio alone, each claiming personal injury of one of the six Science Panel ailments. Monetary results of some landmark rulings are detailed in the timeline below. In 2017, DuPont & Chemours agreed to pay between \$671 million and \$921 million to settle the 3,500+ lawsuits in Ohio Valley.¹⁰

The EPA also sued DuPont in 2004, after legal discovery in *Tennant* revealed that DuPont and 3M had known of clear health and environmental impacts of PFOA as early as 1976 but failed to disclose the impacts to the U.S. Environmental Protection Agency.¹¹ In 2005, the EPA and DuPont settled, resulting in DuPont paying a \$10.5 million penalty, the largest civil administrative penalty in EPA history.¹² The payment represented less than 2% of profits earned by DuPont that year. An additional \$6.25 million payment was enforced to fund Supplemental Environmental Projects (SEPs) investigating PFOA.¹³ DuPont also agreed to phase out PFOA by 2015.¹⁴

Timeline of Key Events

Date	Key Events
1947	3M invents PFOA
1951	DuPont uses PFOA to make Teflon
1976	DuPont and Congress draft Toxic Substances Control Act (TSCA) EPA regulates chemicals only if they are known to cause human harm.

⁹ Frisbee, Brooks, Maher, Flensburg, Arnold, Fletcher, Steenland, et al. “The C8 Health Project: Design, Methods, and Participants.” *Environmental Health Perspectives*

¹⁰ “DuPont and Chemours Settle Teflon Toxin Lawsuit for Up to \$921M.” Accessed April 15, 2019. http://www.earthisland.org/journal/index.php/articles/entry/dupont_and_chemours_settle_teflon_toxin_lawsuit_for_up_to_921m/.

¹¹ Id.

¹² “Reference News Release: EPA Settles PFOA Case Against DuPont for Largest Environmental Administrative Penalty in Agency History.” Overviews and Factsheets. US EPA, June 19, 2017. <https://www.epa.gov/enforcement/reference-news-release-epa-settles-pfoa-case-against-dupont-largest-environmental>.

¹³ US EPA, OECA. “E.I. DuPont de Nemours and Company PFOA Settlements.” Overviews and Factsheets. US EPA, May 9, 2013. <https://www.epa.gov/enforcement/ei-dupont-de-nemours-and-company-pfoa-settlements>.

¹⁴ Id.

	• No mandatory impact testing required before entering market.
1998	Begin PFOA Discovery Litigation • Tennant v. E.I. du Pont de Nemours & Co. (West Virginia). Parties settle in 2001 for undisclosed amount. • DuPont in-house counsel condemns DuPont, reveals knowledge of PFOA dangers in internal email: DuPont bans female employees from Teflon division after birth defects found (1981), begins internal investigation of local water pollution (1984). This serves as key evidence in litigation.
August 2001	Landmark Class-Action Lawsuit in Environmental Law History • Leach v. E.I. du Pont de Nemours & Co. (West Virginia). Parties settle in 2004 for combined total of over \$405 million. Science Panel commissioned.
2004	U.S. EPA sues DuPont for nondisclosure of risk • Parties settle in 2005. DuPont pays \$10.5 million: The largest civil administrative penalty in EPA history. An additional \$6.25 million payment funds Supplemental Environmental Projects (SEPs) to evaluate DuPont products.
2006	Eight U.S. Companies, including DuPont, agree to phase out PFOA by 2015¹⁵
2011-2012	Leach Science Panel Delivers Probable Link Findings • Linked diseases include: kidney cancer, testicular cancer, thyroid disease, ulcerative colitis, hypercholesterolemia, pregnancy-induced hypertension, preeclampsia. Litigation on linked diseases begins under <i>Leach</i> agreement. • Delivered no probable link for 40+ human diseases. Any claims based upon these disease may be dismissed with prejudice under <i>Leach</i> agreement.
2015	Landmark Ruling • Bartlett v. E.I. du Pont de Nemours & Co. (West Virginia) Jury awards \$1.6 million compensatory damages for PFOA exposure causing Plaintiff's kidney cancer. No punitive damages. On appeal.
2016	Landmark Ruling

¹⁵ Eilperin, Juliet. "Harmful Teflon Chemical To Be Eliminated by 2015," January 26, 2006. <http://www.washingtonpost.com/wp-dyn/content/article/2006/01/25/AR2006012502041.html>.

	Freeman v. E.I. du Pont de Nemours & Co. (Ohio) Jury award \$5.1 million compensatory damages, PFOA exposure responsible for testicular cancer. \$500,000 punitive damages. On appeal.
2016	Obama signs Frank R. Lautenberg Chemical Safety for 21st Century Act Amends TSCA. EPA to evaluate existing chemicals, assessed on risk-based standard, expanded authority to more quickly require chemicals information
January 2017	Landmark Ruling Vigeneron v. E.I. du Pont de Nemours & Co. (Ohio) Jury awards \$2 million in compensatory damages for Plaintiff's PFOA exposure and resulting testicular cancer. \$10.5 million punitive damages. On appeal.
February 2017	Landmark Ruling: DuPont & Chemours paid between \$671 million and \$921 million to settle 3,500+ lawsuits in Ohio Valley Expected \$1.5 million to each plaintiff with cancer, lesser amount to those with other conditions. DuPont's net sales 2017: \$79.5 billion.¹⁶
2017-2018	Environmental Defense Fund Sues EPA Over its (Non) Implementation of Amended TSCA¹⁷
October 2018	Nationwide Class Action against DuPont and eight other PFOA offshoot manufacturers commence.
February 2019	EPA Releases PFOA, PFAS action plan.¹⁸ Calls for more research, still has not regulated PFOA or offshoots.

Impact

PFOA exposure has significantly impacted millions of lives and will continue to impact lives on a global scale. Litigation for PFOA and offshoots (PFAS) may be replicated on a global scale. In terms of compensation, million dollar payouts make litigation financially sustainable for

¹⁶ "DowDuPont Reports Fourth Quarter and Full Year 2017 Results," February 1, 2018. <https://www.businesswire.com/news/home/20180201005534/en/DowDuPont-Reports-Fourth-Quarter-Full-Year-2017>.

¹⁷ "5 Ways Chemical Safety Is Eroding under Trump." Environmental Defense Fund. Accessed April 15, 2019. <https://www.edf.org/blog/2018/05/01/5-ways-chemical-safety-eroding-under-trump>.

¹⁸ US EPA, OECA. "E.I. DuPont de Nemours and Company PFOA Settlements." Overviews and Factsheets. US EPA, May 9, 2013. <https://www.epa.gov/enforcement/ei-dupont-de-nemours-and-company-pfoa-settlements>.

plaintiff attorneys, especially with the amount of attorneys required for class action litigation. These payouts also draw headlines.

The DuPont agreement with EPA to phase out PFOA allows new, similar chemicals to be used commercially.¹⁹ Eight manufacturers of PFOA in America (DuPont, Arkema, Asahi, BASF, Clariant, Daikin, 3M/Dyneon, Solvay Solexis) worked with the EPA in reducing their PFOA emissions and products in the U.S. and abroad.²⁰ However, they have resorted to a newly developed chemical, PFAS, which is similar to PFOAs and likely harmful. In October 2018, a class action against DuPont and other manufacturers was filed on behalf of everyone in the United States as a preventative measure against PFAS, because the EPA has yet to actually regulate any of these chemicals.²¹ Instead of cash penalties, the suit seeks to “create an independent panel of scientists tasked with thoroughly studying and confirming the health effects that can be caused by contamination of human blood with multiple PFAS.”²²

There were also indirect impacts on government policy. In terms of federal legislation, *Leach* and related cases influenced then President Barack Obama in 2016 to amend the Toxic Substances Control Act, which was authored in part by DuPont in 1976 and allows the EPA to regulate chemicals.²³ The amendment titled “The Frank R. Lautenberg Chemical Safety for 21st Century Act” imposes a duty on the EPA to evaluate existing chemicals, assessed on a risk-based safety standard, and expands EPA authority to more quickly require chemicals’ information. Though it is also important to note several caveats. For example, TSCA’s fundamental framework is still intact. Under TSCA, the EPA regulates chemicals only if they are known to cause human harm. No mandatory impact testing is required before entering the market and chemical identification may be shielded as trade secrets. The EPA has also banned/widely restricted just 9 chemicals under TSCA in 40 years (asbestos, PCBs, dioxin, CFCs) and because of this TSCA is regarded as one of the “worst environmental laws on the books” by environmentalists.²⁴

The EPA’s failure to take a more proactive approach in regulating chemicals has been influential for state agencies, with several states issuing standards higher than the EPA’s.

¹⁹ Lerner, Sharon. “EPA Continues to Approve Toxic PFAS Chemicals Despite Widespread Contamination.” *The Intercept* (blog), October 25, 2018. <https://theintercept.com/2018/10/25/epa-pfoa-pfas-pfos-chemicals/>.

²⁰ US EPA, OCSPP. “Risk Management for Per- and Polyfluoroalkyl Substances (PFASs) under TSCA.” Overviews and Factsheets. US EPA, May 12, 2015. <https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/risk-management-and-polyfluoroalkyl-substances-pfass>.

²¹ US EPA, OA. “PFAS Laws and Regulations.” Overviews and Factsheets. US EPA, March 30, 2016. <https://www.epa.gov/pfas/pfas-laws-and-regulations>.

²² “U.S. Class-Action Case Targets Nine PFAS Makers.” Accessed April 15, 2019. <https://cen.acs.org/policy/litigation/US-class-action-case-targets/96/i41>.

²³ Schaidt, Laurel. “EPA’s Plan to Regulate Chemical Contaminants in Drinking Water Is a Drop in the Bucket.” *The Conversation*. Accessed April 15, 2019. <http://theconversation.com/epas-plan-to-regulate-chemical-contaminants-in-drinking-water-is-a-drop-in-the-bucket-111243>.

²⁴ “The President Just Signed a Law That Affects Nearly Every Product You Use - The Washington Post.” Accessed April 15, 2019. <https://www.washingtonpost.com/>.

- **Vermont:** Enacted a law to allow the state to require corporations to fund the extension of public water lines to private residences should the corporations be found responsible for PFOA contamination.²⁵
- **California:** Recently listed PFOA and PFOS under Proposition 65, and introduced a bill to ban PFAS in food packaging.²⁶
- **New Hampshire:** Issued guidance in 2016 requiring PFAS sampling at certain regulated sites based on previous PFAS use or exposure and at sites subject to groundwater monitoring requirements.²⁷

As far as judicial impact is concerned, we can point to a general conclusion. Many judges lack the scientific training that may be necessary for a reasoned judicial analysis, and this is a problem that has plagued environmental lawyers and the courts for years.²⁸ In litigation, judges and juries are not obligated to believe witnesses on the stand, regardless of their abundance of published papers or degrees. Similarly, both plaintiff and defendant may present scientific witnesses, sometimes leading to the illusion of an equal scientific debate, when actual scientific consensus may prove otherwise. The *Science Panel* directly resulting from the Leach case eliminated the need for both scientific witnesses and scientific explanation by lawyers. This contributed to judges better understanding the situation.

Globally, PFOA and similar classes of chemicals are under review to be eliminated or restricted under the Stockholm Convention of the United Nations.²⁹ If elimination is adopted after a proposal to the UN Conference of the Parties in 2019, the Stockholm Convention would require signatories (181 countries, plus the European Union, USA not a signatory) to take measures to phase out PFOA production.³⁰

²⁵ VT. Stat. Ann. tit. 10, § 6615e(b)(1) (2017); see also Act Summary Act No. 55 (S.10). Conservation and Land Development; Waste Management; Water Supplies; PFOA Contamination; Brownfields, <https://legislature.vermont.gov/assets/Documents/2018/Docs/ACTS/ACT055/ACT055%20Act%20Summary.pdf>; Lindsay Nielsen, VT Governor Signing PFOA Bill into Law in Bennington, News10 ABC (June 2, 2017), <http://news10.com/2017/06/02/vt-governor-signing-pfoa-bill-into-law-in-bennington/>.

²⁶ OEHHA, Perfluorooctanoic Acid (PFOA), Chemicals Considered or Listed Under Proposition 65, <https://oehha.ca.gov/proposition-65/chemicals/perfluorooctanoic-acid-pfoa-and-its-salts>, AB-958 Hazardous Materials: Perfluoroalkyl and Polyfluoroalkyl Substances, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB958.

²⁷ Letter from State of New Hampshire, Department of Environmental Services to Responsible Party/ Site Owner / Permittee (Oct. 19, 2017), https://www4.des.state.nh.us/nh-pfas-investigation/wp-content/uploads/2017/10/PFAS-Sampling-Clarification-Ltr-10_19_17.pdf.

²⁸ “Judges Are Terrible at Distinguishing Good Science from Bad. It’s Time We Stopped Asking Them to Do It. - The Washington Post.” Accessed April 15, 2019. https://www.washingtonpost.com/news/the-watch/wp/2017/09/28/judges-are-terrible-at-distinguishing-good-science-from-bad-its-time-we-stopped-asking-them-to-do-it/?utm_term=.760ebf3e7f57.

²⁹ “Chemicals Proposed for Listing under the Convention.” Accessed April 15, 2019. <http://chm.pops.int/TheConvention/ThePOPs/ChemicalsProposedforListing/tabid/2510/Default.aspx>.

³⁰ “PFOA: Teflon Chemical Contaminating Drinking Water May Be Banned — Quartz.” Accessed April 15, 2019. <https://qz.com/1403021/pfoa-teflon-chemical-contaminating-drinking-water-may-soon-be-banned/>.

This case helped change societal attitudes by garnering extensive coverage in the media. Non-profit organizations like [Keep Your Promises DuPont](#) and their multi-million dollar jury settlements for class actions and individual plaintiffs have attracted nationwide attention, garnering headlines in *The New York Times* and Reuters, among other news agencies. Although DuPont has never actually and publicly admitted fault, PFOAs have largely been a stain on their corporate image in the eyes of the public. Grassroots movements and media exposure can impact jury settlement awards and legislative action. Although previously known amongst lawyers, the public is also now more aware of the costs of fighting DuPont and other chemical manufacturers. Lawyers must take into account discovery costs, timing, and the lengthy process of scientific testing, understand the underlying politics behind bringing a civil vs. criminal suit, and consider the ramifications of negative public perception in challenging companies that bring livelihoods to manufacturing towns across the world.

Further Information

- [Official Judicial Opinion](#): IN RE: E.I. DU PONT DE NEMOURS AND COMPANY C-8 PERSONAL INJURY LITIGATION. United States District Court, S.D. Ohio, Eastern Division. July 6, 2015. (<https://www.leagle.com/decision/infdc020150810802>)
- Interactive PFOA Pollution *Map* (https://www.ewg.org/research/mapping-contamination-crisis?utm_source=newsletter&utm_campaign=PFCMapnews&utm_medium=email&fbclid=IwAR34Ss7yZLpRQLXGBzARp46E_ah1iN8VWPj1Gwlqj2M3HGAMsxxhTP8B-R2Q)
- Journalism on DuPont & PFOAs:
 - **Sharon Kelly**, https://www.salon.com/2016/01/04/teflons_toxic_legacy_partner/
 - **Sharon Lerner**, <https://theintercept.com/series/the-teflon-toxin/>
 - **Nathaniel Rich**, <https://www.nytimes.com/2016/01/10/magazine/the-lawyer-who-became-duponts-worst-nightmare.html><https://cen.acs.org/articles/95/i5/DuPonts-PFOA-trials-off-shaky.html>
 - **Marc S. Reisch**, <https://cen.acs.org/articles/95/i5/DuPonts-PFOA-trials-off-shaky.html>
- [Read More](#) on PFOA Exposure Worldwide (<https://theintercept.com/2016/04/19/teflon-toxin-contamination-has-spread-throughout-the-world/>)
- Watch:
 - **National Geographic**: [“Parched: Toxic Waters”](#) (episode about Leach case in Parkersburg, West Virginia).
 - **The Devil We Know** (documentary about Leach case in Parkersburg produced by *Sundance Institute Creative Distribution Initiative and Catalyst Forum*; (<https://thedevilwewknow.com/>))