



# The Shareholder's Right To Know More

2006 Update

**Despite DuPont's Recent Concessions to EPA,  
Shareholder Value Remains At  
Risk from PFOA**

# DuPont Shareholders for Fair Value

Dear Shareholder,

The enclosed report updates DuPont investors on important issues of disclosure and financial impact on share value. As you may know, perfluorooctanoic acid (PFOA) is the controversial chemical intermediate involved in the production of numerous DuPont products, including stain and grease resistant coatings for consumer products such as carpets, textiles and food packaging. There has been significant media attention to some aspects of this issue over the last year, but the forward looking financial impacts are largely unexamined and in our opinion have not been well disclosed by DuPont.

Although DuPont management has taken several actions regarding PFOA, including a record \$16.5 million settlement of civil charges brought by EPA and a commitment to reduce emissions and develop PFOA product content caps over the next ten years, this report describes imminent market, reputational and liability concerns through which shareholder value remains at risk.

DuPont Shareholders for Fair Value (DSFV), the issuer of this report, is an informal group of DuPont shareholders organized by the United Steelworkers (USW) and concerned with proper disclosure and accountability on the issues relative to PFOA. DSFV includes Amalgamated Bank, United Steelworkers, Sisters of Mercy, Merion Regional Community, Merion, PA and Green Century Capital Management.

We hope that after you read the report you will join with us in pressing DuPont management for more expeditious action and more complete disclosure on these matters.

Sincerely,



Sanford Lewis, DuPont Shareholders for Fair Value

## SYNOPSIS

PFOA (perfluorooctanoic acid) is a chemical used to help make fluoropolymers and fluoroelastomers. E. I. du Pont de Nemours & Co. (DuPont) is the only US producer of PFOA. Fluoropolymers are used in architectural fabrics; chemical processing piping and vessels; automotive fuel systems; telecommunications and electronic wiring insulation; and computer chip processing equipment and systems, and consumer products such as cookware and apparel. PFOA is used as a processing aid in the manufacture of fluoropolymers for use in non-stick surfaces such as Teflon coated cookware. Fluoroelastomers are synthetic, rubber-like materials used in gaskets, O-rings and hoses. This report follows up on a prior report, *The Shareholder's Right to Know More: E. I. du Pont de Nemours and the Growing Financial Challenges of PFOA* (April 2005).

In January 2006, DuPont voluntarily agreed with a U.S. Environmental Protection Agency request to work toward eliminating emissions of PFOA, and to gradually cap the levels of PFOA in DuPont products. Contrary to widely reported news, DuPont did not commit to phase out the use or production of PFOA. Indeed, from the terms of its commitment expressed in a letter to EPA, it is apparent that some so-called "trace" quantities of PFOA may remain in DuPont products for the foreseeable future.

In addition, the company recently settled civil charges filed by the U.S. Environmental Protection Agency relating to alleged concealment of information regarding health and environmental impacts of PFOA, an intermediate used in the production of various DuPont products. In February, the EPA's scientific advisory board, a panel of independent experts convened by the EPA, announced its determination that PFOA be declared a "likely human carcinogen."

Despite the recent DuPont concessions to EPA, shareholder value remains at risk. To date, DuPont has failed to detail any actual impacts on shareholder value or company earnings resulting from consumers concerns, reputational damage or market fluctuations related to PFOA. This document describes threats to shareholder value that may have imminent impact, despite the company's commitment to a ten year phase-out schedule:

- Manufacturer, retailer and consumer migrations from DuPont's PFOA products. Major retailers, such as Wal-Mart and McDonalds, have recently indicated intentions to reduce PFOA in products sold. DuPont's Teflon non-stick cookware products continue to receive media scrutiny.
- Entry of competitors into DuPont markets. The search for alternatives is driving DuPont's competitors, who are bringing PFOA-free products to market.
- Possible expedited US, state or foreign regulatory action. On March 7, the USEPA published a Federal Register notice asserting that it can no longer presume that long chain polymers similar to PFOA 'will not present an unreasonable risk to human health or the environment.' The agency proposed withdrawing a longstanding exemption to premanufacture notice under the Toxic Substance Control Act for those seeking to manufacture or import new substances of this kind.
- Potential liability related to consumer and environmental exposures to PFOA at DuPont and other companies.

### **Background on DSFV**

DuPont Shareholders for Fair Value (DSFV), the publisher of this report, is an informal group of DuPont shareholders organized by the United Steelworkers (USW) and concerned with proper disclosure and accountability on the issues relative to PFOA. USW is a DuPont shareholder, and also represents approximately 1,800 DuPont employees in New York, New Jersey, Delaware and Kentucky. DSFV includes Amalgamated Bank, United Steelworkers, Sisters of Mercy, Merion Regional Community, Merion, PA and Green Century Capital Management. Collectively this group holds over 411,000 shares of DuPont stock.

Some members of DuPont Shareholders for Fair Value have filed complaints with the Securities and Exchange Commission regarding the failure of DuPont management to disclose information historically and recently known to the company regarding the financial, health and environmental risks associated with PFOA. Disclosure of such information may have better informed shareholders regarding the extent to which the management's adherence to PFOA chemistry has harmed shareholder value. Some members of DSFV have also filed shareholder resolutions for annual meetings in 2005 and 2006 related to disclosure of issues related to PFOA.

### **Author Background**

Sanford Lewis, the author of this report, is an attorney and expert on corporate environmental disclosure issues, including requirements for disclosure under the securities laws. The author wishes to acknowledge the assistance of Nathaniel Johnson, Shawn Gilchrist and April Dreeke in the preparation of this document.

## **BACKGROUND ON DUPONT & PFOA**

PFOA (perfluorooctanoic acid) is a surfactant, a water-soluble chemical that can emulsify oils or liquids in water, suspend small particles in water or act as a wetting agent. APFO (sometimes referred to as C-8) is the ammonium salt of PFOA and the chemical form used in fluoropolymer manufacturing. In this document, we will refer to PFOA generally to include interchangeably the salts (APFO and C-8) as well as its other formulations. **E. I. du Pont de Nemours & Co. (DuPont) is the only current U.S. producer of PFOA.**

PFOA is used to help make fluoropolymers and fluoroelastomers. Fluoropolymers are used in architectural fabrics; chemical processing piping and vessels; automotive fuel systems; telecommunications and electronic wiring insulation; and computer chip processing equipment and systems, and consumer products such as cookware and apparel.<sup>1</sup> PFOA is used as a processing aid in the manufacture of fluoropolymers for use in non-stick surfaces such as Teflon coated cookware. Fluoroelastomers are synthetic, rubber-like materials used in gaskets, O-rings and hoses.

Animal and human studies have found a likely association of PFOA with a wide array of health harms, ranging from elevated cholesterol, to liver damage, birth defects, and cancer. As a result of these studies, most involving animal testing, PFOA has come under increasing scrutiny in regulatory, consumer and judicial forums.

### **Voluntary Capping of PFOA in Products**

In 2005, DuPont management announced a commitment to reduce the presence of PFOA in certain products. DuPont announced that it had developed a new technology to reduce the presence of PFOA in aqueous fluoropolymer applications, thereby reducing the emissions of PFOA that could occur at processors by 90%. However, this reduction in direct emissions of PFOA still left the company vulnerable due to the continued presence of PFOA in DuPont products. In addition, even though a product may contain no PFOA, available evidence suggests that various DuPont products may break down into PFOA in the environment or in the human body.

On January 25, 2006, EPA invited DuPont and several other companies to participate in the “2010/15 PFOA Stewardship Program” involving a voluntary commitment to goals set by EPA. The EPA program sets interim goals for 2010 of 95% reduction of PFOA emissions and PFOA and PFOA precursors in product content. It also calls for companies to commit to working toward the elimination of PFOA, PFOA precursors, and related higher homologue chemicals from emissions and products by five years thereafter, or no later than 2015.

In order to commit to the program, companies are required to submit a letter describing their commitment. The DuPont letter talks about **reducing** PFOA emissions and residual product content over the next decade. In the letter, the company did not commit to **eliminate** the use and production of PFOA and its precursors by 2015. Instead, the company discussed emissions reduction measures and caps on the amount of PFOA and its precursors in company products.

In short, a commitment to cap PFOA residuals in products is not the same as a commitment to eliminate the use or production of PFOA. Since DuPont is the sole producer of PFOA in the U.S., it is unfortunately ambiguous from their letter whether the company is committed to end PFOA production.

The DuPont letter to EPA also makes vague reference to the company's hope to develop new "breakthrough" and "sustainable" fluorotelomer products. But nowhere in the letter does the company's stated interest in developing such new products explicitly link with a commitment to move out of PFOA chemistry, PFOA production, or the complete elimination of the use of PFOA and its precursors.

The management's "commitment" also hinges on what it views as "feasible." What the management deems feasible is a concept freighted with the interpretation and discretion of the management. For instance, in 2001 the management chose to BEGIN producing PFOA despite its competitor's decision to phase out the production of the chemical in light of the environmental concerns associated with it.

It is certainly not clear that DuPont is committed to eliminate the use and production of PFOA on the EPA's ten year timeline. The focus of the DuPont letter on emissions and residuals rather than on eliminating PFOA use and production leave doubt as to the firmness and scope of the DuPont "commitment."

The DuPont commitment to cap PFOA residuals in products does not equate with a commitment to eliminate the use or production of PFOA.

Moreover, in other press materials the management of DuPont has referred to its commitment to EPA regarding PFOA in products as a commitment to "virtually" eliminate the presence of PFOA. Given that it regards current amounts of PFOA in products as trace quantities, we believe that the company might assert that it has already "virtually" eliminated the presence of PFOA. Yet it appears that the presence of those quantities is sufficient to affect market acceptance and potentially also to affect liability.

What is missing from the management's discussion is a clear statement of commitment to eliminate the chemicals in question as expeditiously as possible. While DuPont's efforts to manage the growing controversy over its products that contain PFOA or PFOA precursors are understandable from a crisis management standpoint, we believe DuPont is merely prolonging its problems. We believe that the public will only accept total elimination of PFOA and related materials from its products—not "capped" product content levels.

The voluntary agreement with EPA does not resolve the question of the pace at which DuPont may otherwise be forced to withdraw these materials from the marketplace. This paper will review DuPont's vulnerability under this timeline – the formidable impacts of market and regulatory trends, and of potential liability associated with the use or emission of PFOA.

### **Civil settlement**

On December 14, 2005, DuPont signed a \$16.5 million settlement of a civil case by the EPA. The civil case alleged DuPont's failure to disclose information to the EPA regarding potential risks of perfluorooctanoic acid (PFOA) to health and the environment. Under the terms of the settlement, DuPont admitted to no legal liability.

The agreement reached between DuPont and the EPA resulted from multiple allegations of violations of section 8(e) of the Toxic Substances Control Act (TSCA) which states that:

"Any person who manufactures (includes imports), processes or distributes in commerce a chemical substance or mixture and who obtains information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment shall immediately inform the (EPA) Administrator of such information unless such person has actual knowledge that the (EPA) Administrator has been adequately informed of such information."

EPA alleged that among other things, the following information was not reported by DuPont as required by law:

- In 1981, the 3M Company, DuPont's supplier of PFOA, advised DuPont about the potential for PFOA to cause birth defects in rats. Specifically, 3M advised DuPont that researchers observed what appeared to be treatment related damage to the eye lenses of some rat pups.
- In 1981, the company observed PFOA in blood samples taken from pregnant workers at the Washington Works facility, in West Virginia where Teflon is manufactured, and at least one woman had transferred the chemical to her fetus.
- DuPont detected the chemical in public water supplies as early as the mid-1980s in West Virginia and Ohio communities in the vicinity of the Washington Works facility. By 1991, DuPont had information that the chemical was in water supplies at a greater level than the company's exposure guidelines indicated would cause no effect to members of the community.
- In 2004, DuPont had data concerning human serum sampling of twelve members of the general population living near the Washington Works facility after it had obtained this information from its contractor, Exygen. The study shows that on average, Teflon chemical serum levels in this group — all of whom had consumed tap water contaminated with the Teflon chemical from DuPont's Washington Works operations and only one of whom had ever worked at the facility — were 12 times higher than levels measured previously from the general population (67 ppb versus 5 ppb).<sup>2</sup>

Although DuPont denied that it had a duty to disclose this information, it settled the claims for \$16.5 million, the largest civil administrative penalty settlement the EPA has obtained to date. The amount included a \$10.25 million penalty and a commitment by DuPont to spend an additional \$6.25 million on environmental projects.<sup>3</sup>

### **Ongoing Criminal Investigation Related to Disclosure**

The EPA civil settlement may not resolve all claims against DuPont regarding its concealment of information on this matter. DuPont is also the subject of a PFOA-related Department of Justice grand jury probe. In May 2005, DuPont was served with a grand jury subpoena from the U.S. District Court for the District of Columbia. The subpoena ordered DuPont to release documents related to PFOA, its salts, C8, ammonium perfluorooctanoate, and FC-143. This investigation is apparently still ongoing as this paper goes to press, and could ultimately result in separate criminal charges being brought against DuPont or its officers.

**Shareholders have asked the SEC to investigate DuPont's failures to disclose historically and currently known info regarding health and financial risks of PFOA.**

### **Shareholder Correspondence with SEC**

In addition, some members of DuPont Shareholders for Fair Value have filed letters of complaint with the Securities and Exchange Commission requesting an investigation of DuPont management's failure to disclose information material to investors regarding PFOA. The correspondence with the SEC requests an evaluation of whether the company should have disclosed to investors, or should now be ordered to disclose, information including the following:

- Liability indicators such as environmental contamination and blood tests associated with all DuPont facilities where PFOA is used or produced;
- A more balanced description of the scientific evidence arrayed against PFOA, which suggests that it is likely to be harmful to human health despite the company's reiterated denials of such effects;
- Regulatory and market trends, including regulatory developments in Canada, Europe and Australia, and consumer and retail developments that may restrict markets for DuPont products.

### **Likely carcinogen determination by EPA science advisers**

On February 16, 2006, the EPA's scientific advisory board, a panel of independent experts convened by the EPA, announced the board's determination that PFOA be declared a "likely human carcinogen." The advisory board's determination that PFOA is a "likely human carcinogen" went beyond EPA's prior assessment that PFOA should be listed as a "suggested human carcinogen."<sup>4</sup>

## **IMPACT ANALYSIS**

### **CONCERN OVER PFOA IS ALREADY DRIVING CHANGE IN MARKETS**

#### **Vulnerable Domestic Food Packaging Market**

Companies who use food packaging containing DuPont products with PFOA or PFOA precursors are facing pressure to eliminate these materials in their packaging.

In November 2005, a former DuPont chemical engineer named Glenn Evers

made national news when he disclosed information and documents related to DuPont's Zonyl paper coating products. Evers appeared on ABC World News Tonight and in the Washington Post, among other outlets, discussing how popcorn products, fast food, pizza boxes, and various other food packaging products expose consumers to fluorotelomers that are believed to break down to PFOA in the body. The whistle-blower also brought to light his knowledge that the company had been developing alternatives to PFOA decades ago, but that those have apparently not been widely deployed to substitute for PFOA.

In a January 30, 2006, Wall Street Journal article a representative of McDonald's corporation reported the company's intention to reduce its use of PFOA-related products.<sup>5</sup> On February 2, 2006, the Toronto Globe & Mail reported that McDonald's Canada said its packaging suppliers had begun a phase-out, and that McDonald's Canada will be using alternatives that are PFOA-free.<sup>6</sup>

The pressure to curtail or outright eliminate PFOA content in food packaging and product lines is also being felt by major retailers such as Wal-Mart. Wal-Mart is the current subject of a campaign by the consumer-rights group, Ohio Citizen Action, which is urging its members to contact Wal-Mart to request the retailer: "...use its considerable clout to ensure that the first order of business in the phase-out is to remove these chemicals from food packaging, such as microwave popcorn, candy wrappers, and frozen foods."<sup>7</sup> Wal-Mart has recently stated that it is exploring its options with respect to reducing the presence of PFOA in products it carries in its stores. In a February 14 Los Angeles Times article, Wal-Mart spokesperson Karen Burke told reporter Jerry Hirsch: "We are working with our suppliers and the regulatory agencies to reduce the presence of PFOA in products in our stores."<sup>8</sup>

In addition to requesting action from Wal-Mart and food retailer Kroger and numerous local grocery retailers, consumers have addressed their concerns directly to DuPont as part of Ohio Citizen Action's campaign. As of February 15, 2006, a total of 15,090 people had sent handwritten letters and petitions to DuPont demanding the company take Teflon (PFOA) chemicals off the food packaging market. In addition, 13,437 people have sent handwritten letters and petitions to local grocery stores urging them not to carry products with the PFOA-related chemicals in the packaging.<sup>9</sup>

**In February 2006, DuPont attempted to allay domestic consumer concerns arising from PFOA-related publicity with full page ad-buys in the New York Times and other major papers.**

### **Nonstick Cookware**

The potential health risks that may be associated with the use of Teflon non-stick cookware products continue to receive the bulk of PFOA-related scrutiny in the major media and lifestyle publications. In a growing number of cases concerns over potential health risks associated with Teflon are finding a receptive audience in America's kitchens and altering consumer behaviors. Home cooks like Janeen Cunningham of Seal Beach, California have stopped using Teflon pans altogether and returned to using stainless steel cookware. Cunningham told Los Angeles Times reporter Jerry Hirsch that "I stopped

using those pans because of what I have heard about Teflon and carcinogen properties over the past few months.”<sup>10</sup> Such actions are proving alarming to major cookware manufacturers. T-Fal, a New Jersey based subsidiary of French Cookware SEB recently launched a line of uncoated pans as a diversification move. “The concern is that there is a steady drip-drip about this and it will become part of the common knowledge about cookware even though people won’t get PFOA from cookware,” said Scott Meyer, President of T-Fal.<sup>11</sup> (Note, however, that some experts assert that trace residues of PFOA can escape from some Teflon cookware heated to between 600 and 752 degrees Fahrenheit. According to the Environmental Working Group, a Teflon pan can reach 600 degrees on high heat in two to five minutes.)

There have been hundreds of articles in U.S. papers covering DuPont and PFOA, with a number of those articles focusing on concerns related to Teflon coated cookware. In early February 2006, DuPont attempted to respond to domestic consumer concerns arising from PFOA-related publicity with full page ad-buys in the New York Times and other major papers.<sup>12</sup>

### **PFOA Alternatives Entering Marketplace**

The search for product alternatives to replace PFOA is driving research and product development among DuPont’s competitors, who are bringing PFOA free products to the market. On February 9, 2006 Asahi Glass announced the introduction of AsahiGuard E-series, a line of telomer chemicals that serve as fluorinated **water and oil repellents for textile and paper**. Asahi Glass claims that these products are free of PFOA, and PFOA precursors. The company has commenced production of AsahiGuard E-series products at a dedicated large scale manufacturing facility which at capacity will equal 1/4 of AsahiGuard’s current manufacturing capacity.<sup>13</sup>

Much of the research and development currently underway concerns the development of products which utilize short-chain fluorosurfactants instead of long-chain fluorosurfactants. Long-chain fluorosurfactants enter the body more readily, stick to blood proteins, and can break down to PFOA.<sup>14</sup> The 3M Company replaced a long-chain with a short-chain fluorosurfactant, known as C4 when it reformulated Scotchguard in June of 2003.<sup>15</sup> According to Dr. Scott Mabury of the University of Toronto, a leading expert in the study of the environmental effects of PFOA, the key to controlling the problem is to reduce: “...chain lengths to avoid bioaccumulation, and prudently select linkage chemistry for stable non-releasing materials.”<sup>16</sup>

At least one company, Omnova Solutions of Fairlawn, Ohio has aggressively pursued product development of these more environmentally friendly short-chain fluorosurfactants, which it asserts can deliver comparable product performance in many applications. Omnova has obtained new chemical regulatory approval in the U.S. and Europe, and has achieved partial approval in Japan. The company is pursuing regulatory approval in China, Korea, and Australia.<sup>17</sup> Bill Beers, Global Chemical Regulatory Manager for Omnova, states that: Omnova Solutions has: “...tailored structures that meet both the demands of our customers for performance and the demands of the global regulatory authorities to assure that there are no environmental issues.”<sup>18</sup>

Omnova’s Polyfox surfactants are now commercially available products utilized as alternatives to

**Alternatives to PFOA are entering the market from numerous firms and researchers.**

PFOA in a range of applications such as **varnishes and stains, automotive clear coats, electronic coatings, powder pigment dispersions, and adhesives.**<sup>19</sup> In conjunction with partners, Omnova Solutions is pursuing stain-resistant treatments for textile, carpet, and paper industries, among others.<sup>20</sup>

Interest in developing non-stick cookware alternatives to non-stick cookware utilizing DuPont's Teflon brand has also been driving product development. Ferro Corporation, a world leader in the ceramic glaze coating business, has announced that it has developed RealEase(TM), a **ceramic-based, nonstick coating.** Ferro claims it has developed a non-stick surface that delivers the ease of cleaning commonly associated with Teflon-based nonstick cookware combined with the improved heat resistance and abrasion and scratch-resistance of enamel.<sup>21</sup>

### **Consumer Teflon Panic in China**

Consumer responsiveness to concerns over potential threats to health posed by the presence of PFOA in Teflon non-stick cookware is by no means limited to domestic markets. The international press has also shown a marked readiness to cover PFOA-related stories with hundreds of PFOA-related articles published internationally. Consumers in important international markets such as China have demonstrated intense concern over the potential presence of PFOA in Teflon non-stick cookware with important consequences for future growth and the DuPont brand's international reputation. Concern about Teflon-coated cookware caused widespread panic in China beginning in July of 2004. A December 9, 2004 report from the Financial Times global newswire reported that Chinese manufacturers of non-stick cookware suffered 90% drops in sales in August and September as Chinese consumers shunned Teflon in favor of iron woks and ceramic rice makers.<sup>22</sup> In the July-August 2004 period Chinese department stores reportedly began removing Teflon-coated cookware from their shelves and Guangdong-based Elecpro Electrical Appliance Co Ltd reportedly stopped selling its Teflon-coated rice cookers and was planning to seek \$10 million in compensation.<sup>23</sup>

A July 22, 2004 article in The Standard reported on the reactions of Chinese consumers and retailers during the period:

“After some news reports saying a substance in Teflon-coated pans potentially poses health risks, we started to remove the related non-stick frying pans from our shelves,” an official at a ParknShop in Guangzhou's Tianhe District said.

Some individual homeware stores in Guangzhou's Tianhe and Wangfujing shopping centres also said they started to send Teflon-coated cookware back to warehouses as a temporary measure until the concern abates.

Although some large retail chains including Wanjie, Trust-Mart and Carrefour stores in Guangzhou still sell non-stick frying pans, their sales dropped more than 60 per cent in the past week, store employees said.

An official with one of the Wanjie stores in Guangzhou said sales of China-made brands of Teflon-coated cookware fell by more than 60 percent over the past week.

"Today, no one shows any interest in non-stick cookware," he said. This is because the worries that using Teflon-coated pans might increase the risks of cancer have not been dispersed." Safety concerns have also delayed China cookware makers' new-product promotions.

An official with Aishida, one of the largest cookware producers in China, said the company suspended the promotion of its new non-stick frying pans amid the increasing worries on non-stick cookware.

But the official, who declined to be named, said the Teflon controversy did not seriously affect its non-stick cookware sales because 90 per cent of its production is exported.<sup>24</sup>

While widespread concern may have subsided after the Chinese Academy of Inspection and Quarantine (CAIQ) declared that it found no PFOA in any of the non-stick cookware examined<sup>25</sup> the listing of PFOA as a likely human carcinogen may fuel renewed concerns over the safety of non-stick cookware in China and in other parts of the world.

The awareness and sensitivity of Chinese consumers to risks associated with DuPont products may be counter to DuPont's interest in investing and growing in China. Further analysis is needed to assess the extent to which DuPont's reputation has been undermined with Chinese consumers, and how this may affect expansion of demand in that crucial growth market.

### **ADDITIONAL REGULATORY ACTION IS LIKELY IN U.S. AND ABROAD**

In its 10K report to shareholders, published February 28, 2006, DuPont notes:

...there can be no assurance that the EPA or any other regulatory entity will not in the future choose to regulate or prohibit the production or use of PFOA. Products currently manufactured by the company representing approximately \$1 billion of 2005 revenues could be affected by any such regulation or prohibition.

Though the U.S. Environmental Protection Agency has so far set the voluntary ten year "Stewardship" program as discussed above, neither the EPA nor other regulators may wait for more expeditious, mandatory and restrictive action.

A week after DuPont published its form 10-K, on Tuesday March 7, 2006, the USEPA proposed one such restriction -- a new rule under the Toxics Substances Control Act which would require any person who intends to manufacture (or import) certain new long chain substances related to PFOA to file a premanufacture notice with the EPA.<sup>26</sup>

Any such substance "not already on the TSCA Inventory would have to complete the TSCA premanufacture review process prior to commencing the manufacture or import of such polymers. EPA believes

**On March 7, 2006, EPA published a Federal Register notice stating that it can no longer presume that long chain polymers similar to PFOA will not present an unreasonable risk to health and environment.**

this proposed change to the current regulation is necessary because, based on recent information, EPA can no longer conclude that these polymers ‘will not present an unreasonable risk to human health or the environment,’ which is the determination necessary to support an exemption under TSCA....” EPA notes that:

Biological sampling recently revealed the presence of PFOS and PFOA in fish, birds, and mammals, including humans across the United States and in other countries. The widespread distribution of the chemicals suggests that PFOS and PFOA may bioaccumulate. **PFOS and PFOA have a high level of toxicity and have shown liver, developmental, and reproductive toxicity at very low dose levels in exposed laboratory animals.** (emphasis added)

If the rule takes effect, EPA would require each company making or importing the affected fluoropolymers to submit a premanufacture notice the same as any businesses do for new chemicals other than exempted polymers. EPA reviews exposure and toxicity information on each chemical and can ask companies for more data, can require protective equipment for workers, or can restrict the uses of the target substances.

The Food and Drug Administration, state governments, and the governments of other countries may set more stringent and mandatory timelines for restriction or elimination of PFOA exposures or products.

### **Proposition 65 Petition**

For example, on February 22, 2006, a petition was filed with the state of California seeking to require a listing of PFOA under Proposition 65 as “a chemical that is known to the state to cause cancer.” The petition was filed by a coalition of organizations including the United Steelworkers, Sierra Club, Environmental Law Foundation, Environment California, U.S. Public Interest Research Group (PIRG), Natural Resources Defense Council (NRDC) and Environmental Working Group (EWG). If the listing petition prevails, businesses would be prohibited from knowingly discharging the chemical into sources of drinking water, and be required to provide warnings before knowingly exposing anyone to PFOA, unless they could show that the exposures create no significant risk of cancer.

**On February 22, 2006, petitioners asked the state of California to list PFOA under Proposition 65 as “a chemical that is known to the state to cause cancer.”**

### **International Regulatory Activities**

In 2004, Canada’s environmental protection agency temporarily banned three fluorotelomer chemicals used as stain repellents. This was the first time any government had banned such chemicals. PFOA and its relatives are now under increasing scrutiny by the environmental authorities in USA, UK, Norway, Sweden and Denmark. Further consideration of permanent regulatory restrictions is underway in Canada. In Norway, the Pollution Control Authority has announced that in the course of 2006 it will obtain more information about the health and environmental effects of PFOA in order to evaluate regulation of its use. The agency will also ask the Norwegian Institute of Public Health and the Norwegian Institute for Water Research to provide an overview of the

available information on the health and environmental effects of related compounds and use this information as a basis for evaluating whether it is necessary to introduce regulatory measures for other substances belonging to this group.

## **POLLUTION, LIABILITY AND PUBLIC PRESSURE TO END PFOA PRODUCTION**

### **DuPont's NC PFOA Production Site**

DuPont's Fayetteville Works production facility in Fayetteville, North Carolina is the only site in the U.S. where PFOA is produced. Despite the \$7 million DuPont spent on environmental controls to contain PFOA when it opened the plant in 2002, on-site testing at DuPont's 2,200 acre property detected PFOA in more than 25 monitoring wells, as have tests of residential wells up to a mile from the facility. Samples taken from the nearby Cape Fear River have also been found to contain PFOA.<sup>27</sup> DuPont's testing of its workforce at the facility shows that the average concentrations of PFOA in blood samples rose from an average of 11 parts per billion per worker in 17 workers in 2002 to an average of 450 parts per billion in 37 workers in 2005.

Some in North Carolina have voiced suggestions that a full DuPont phase-out should happen much sooner than the ten year voluntary EPA schedule for phasing out of PFOA. Hope Taylor-Guevara of Clean Water for North Carolina, responded to DuPont's ten year phase-out plan in a statement released January 30, 2006, saying: "DuPont should start working today to wind down all production by the end of 2008. All of the companies should stop manufacturing uses by 2010. There should be tens of thousands dollars in daily fines for failure to report, or to meet deadlines for reductions, to assure the public that this will actually happen..."<sup>28</sup>

**An Adjunct Professor at UCLA observed carpets dipped into open vats of stain repellants, permeating the working environment as carpets are lifted from the vats, and then dumped down the sewers.**

### **Additional Environmental Liabilities?**

DuPont has already experienced over a hundred million in liabilities due to environmental releases of PFOA, and this may be just the start.

DuPont's Washington Works facility in West Virginia where Teflon is manufactured has been a source of extensive groundwater contamination from PFOA. Since at least 1984 DuPont was aware that PFOA was being discharged from its Washington Works facility. The company conducted, but at the time did not publicly disclose testing of drinking water supplies in communities near the facility. These tests revealed elevated levels of PFOA. Ground and drinking water contamination from the Washington Works facility resulted in a 2001 class-action lawsuit brought on behalf of 80,000 West Virginia residents. A court approved settlement of this case in February of 2005.<sup>29</sup> Under the terms of the settlement, DuPont agreed to pay a minimum of \$107.6 million without admitting wrongdoing. The settlement includes PFOA water treatment facilities for six area water utilities and funding for a study to evaluate whether there is a probable link between PFOA exposure and human disease. Additional liabilities for

health monitoring or personal injuries are possible under the terms of the settlement depending on the outcome of the initial health impact assessment.

Sites such as the Fayetteville, North Carolina facility where PFOA has been discharged, but where environmental liability and remediation litigation has not yet commenced, may represent a significant future liability for the company.

### **Potential Environmental Liability for Users of DuPont PFOA and Related Products**

In addition, sites where DuPont's PFOA products are used by other manufacturers may represent an even larger liability pool, not only for those manufacturers, but also for DuPont. For example, fluorotelomer based carpet coating products are reported to be widely used in Dalton, Georgia, the carpet production "capital" of the U.S.

An Adjunct Professor at the UCLA School of Public Health who toured carpet facilities in that area has described extraordinarily lenient practices for managing stainmaster exposures and wastes. He described how the carpets are dipped in open vats of stain repellants containing chemicals that break down into PFOA (or may contain PFOA), and how these carpet facilities attempt to dry the stainmaster resulting in contaminating the air space of workers, as carpets are lifted from the vats, and how massive volumes of wasted (or colored) stain master are dumped down the sewers.<sup>30</sup>

**A class-action lawsuit filed against DuPont in 2005 seeks \$5 billion in damages due to the company's alleged failure to warn consumers of health risks associated with Teflon cookware.**

Some purchasers of PFOA-related products from DuPont have also suffered negative publicity and environmental scrutiny due to their releases of PFOA from their production process. A small Delaware factory, PTFE Compounds, Inc., which ran a Teflon baking operation, quietly dispersed unknown quantities of Teflon-related pollutants for years without catching the attention of regulators. In 1997, state regulators finally caught up with PTFE Compounds, Inc., when they learned the company had exceeded annual pollution limits in each of the previous four years. Paul Foster, an environmental engineer with the Delaware Department of Natural Resources and Environmental Control (DNREC) estimates that the plant would have released about 75 lbs of pollution per year. In 2003, DNREC took actions aimed at reducing Teflon-related pollution by requiring additional pollution control measures targeting these emissions. Regulators say only rough estimates are available for how much Teflon-related pollutant was released by the company into the environment over the years. Nor is information on the levels of worker exposure, which is monitored at similar, larger facilities, available.<sup>31</sup>

DuPont supplies various companies, both small ones similar to PTFE Compounds, Inc. as well as larger ones. Any of these companies may have released similar pollutants into the environment with little or no notice from regulators until recently. Now attention is growing on these companies, with concomitant pressure to eliminate emissions of PFOA and PFOA precursors.

### **Potential Consumer Liability: Class Action and "Duty to Warn" Notices**

Retailers and manufacturer purchasers of PFOA-containing products are being made aware of potential liability associated with sales of those products. Consumer protection laws in many states, including statutory as well as common law, provide that sellers of products may have a duty to warn consumers if they are exposing them to products that pose an unreasonable risk to health or safety.

A class-action lawsuit filed against DuPont in 2005 seeks \$5 billion in damages due to the company's alleged failure to warn consumers of health risks associated with Teflon cookware. The suit brought in eight states alleges that the company violated consumers' rights to be warned of known hazards of Teflon prior to purchasing the products. Notably, based on the legal theory of the case, the plaintiffs may not need to prove that Teflon has caused them any specific health damage in order to prevail. Instead the suit is based on the plaintiffs' rights as consumers to full disclosure of information known to the seller.

**Companies receiving notices of a potential legal duty to warn consumers of PFOA exposure included Rug Doctor, Stanley Steemer, Conagra Foods, McDonalds, Taco Bell, Levi Strauss, GAP, W.L. Gore, Wal-Mart, Sears, Mannington, Mohawk Industries, and Shaw Industries.**

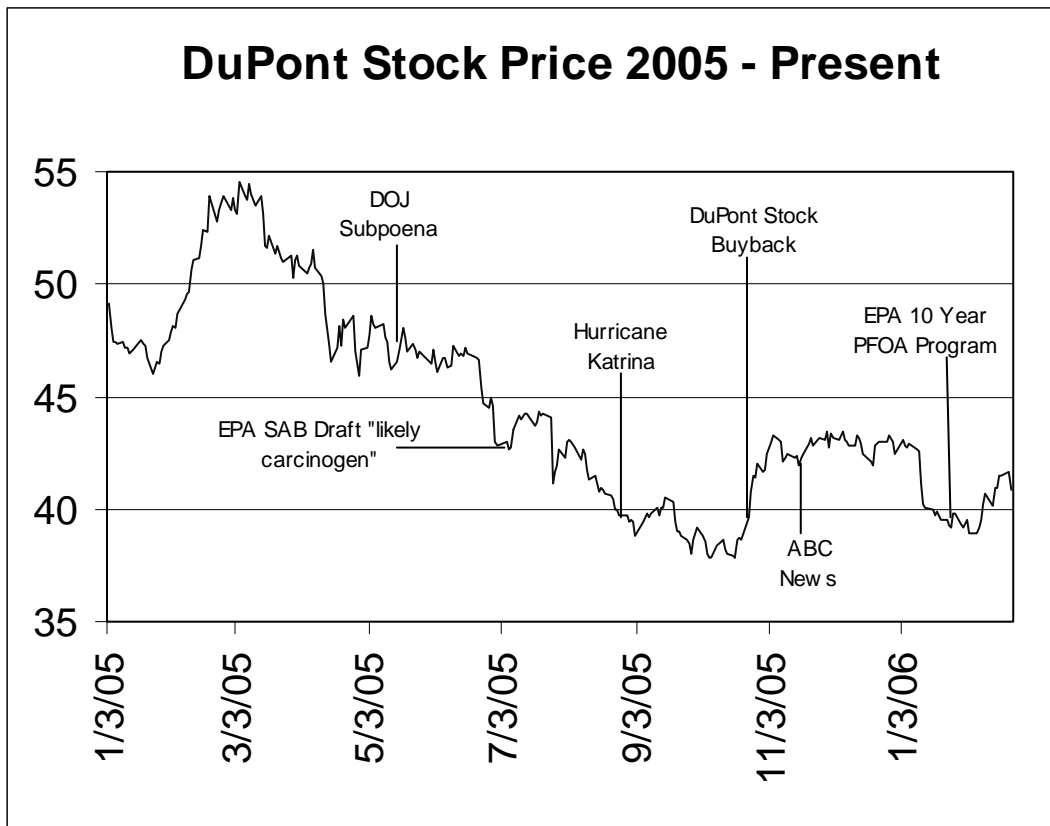
In addition, consumer related liability notices have been spread throughout the array of consumer oriented markets where PFOA related products are sold. On August 9, 2005, the United Steelworkers (USW) union released a statement saying they had sent letters to major carpet cleaning retailers and wholesalers, fast food chains, and major retail clothing companies, informing them that they may have "*a legal duty to warn*" their customers about potential health risks associated with exposure to products that contain PFOA. These letters informed recipients that they could face legal liability in the event that consumers sue and prove harm to their health.<sup>32</sup>

On December 21, 2005, the United Steelworkers released another statement, reporting that they had mailed advisory information on potential PFOA-related health hazards to over 4,500 retail carpet dealers and to the CEOs of 35 carpet manufacturing companies. "We sincerely hope that our efforts will encourage carpet manufacturers and retailers to provide warnings and thereby protect the public," said Ken Test, Chair of the USW DuPont Council, a coordinating body for 1,800 USW members at DuPont. "Carpet company employees who may have the highest exposure to PFOA must also be warned and protected."<sup>33</sup> USW reports that it has sent about 40,000 "duty to warn" letters to various firms that may be buying PFOA-containing products.

The companies who have received duty to warn notices from USW read like a Who's Who of household consumer products. According to USW press releases, some of the thousands of companies receiving the notices included Rug Doctor, Stanley Steemer, McDonalds, Taco Bell, Papa John's, Pizza Hut, KFC, California Pizza Kitchen, Levi Strauss, Conagra Foods, GAP, W.L. Gore, Eddie Bauer, J. Crew, Wal-Mart, Sears, Nordstrom, Dillard's, Dalton Carpet Outlet, Carpet Giant, Carpet Land, Mannington, Mohawk Industries, and Shaw Industries.

## PFOA, Shareholder Value and DuPont Financial Reporting

During 2005, the traded value of DuPont stock dropped nearly a third – from a high of 54.47 on March 10 to a low of 37.60 on October 17. The decline in stock value occurred over the course of year with repeated bad news about PFOA – evolving news regarding PFOA being deemed a likely carcinogen, the announcement of the criminal subpoena by the U.S. Department of Justice, and published studies finding PFOA in household dust, in products and in babies' bodies. DuPont's stock price was also harmed by rising energy prices, and Hurricanes Katrina and Rita, which caused the company to have to close its DeLisle, Mississippi, titanium dioxide facility for an extended period. The hurricanes also effectively depressed some additional markets for DuPont products. Although the chemical industry in general was harmed by the energy and weather trends, DuPont's share price appeared to suffer worse than many of its competitors.



## **DuPont Stock Buyback to Prop Share Price**

In the midst of the share price drop, in October 2005 DuPont management announced a stock buyback geared towards shoring up the stock price. The repurchase of stock amounts to \$5 billion, or 12% of share value. The mechanism for conducting this share repurchase, “accelerated share repurchase”(ASR), was subject to financial press scrutiny in a recent article in The Wall Street Journal. According to the Journal this mechanism has been around for years but has newfound popularity since accounting decision-makers in 2003 shut down some similar loopholes. Under the accelerated share repurchase mechanism a company is able to boost its earnings per share immediately upon announcing the share repurchase. The Journal reports that DuPont was one of at least 30 companies announcing a buyback via this mechanism in the past year.

Because the full costs of the buyback only become known later in the process, some accounting analysts have warned that the initial per-share earnings gains from these ASR transactions may be transitory, and the companies may be at risk for shortfalls when the full costs of the deals become known.<sup>34</sup>

## **Lack of Disclosure Related to PFOA Impacts on Earnings**

DuPont has not disaggregated the impact on shareholder value, or company earnings, resulting from concerns related to PFOA.

In the fourth quarter of 2005, the DuPont Safety and Protection Division, which includes production of Zonyl®, Forafac®, and Foraperle® intermediate and surfactant fluorochemicals reported a volume drop of \$1 billion in sales compared with the prior year. The company asserts that the volume for the division would have increased by \$3 billion in the absence of the impacts of hurricanes Katrina and Rita. So far the company is not accounting separately in its public financial reporting for the losses in sales of Zonyl and other fluorochemicals sold by the division, even though public reports imply that some substantial customers are shifting from products.

**In the course of 2005, the traded value of DuPont stock dropped nearly a third.**

While DuPont blames higher raw materials for its slumping profits, Bank of America Securities analysts have stated that for at least one of DuPont's competitors higher prices for coatings have come close to offsetting raw material price increases. Bank of America Securities analysts maintained their buy rating for PPG Industries, a global supplier of coatings, chemicals, and Fiberglas, partly on the basis that increased prices for coatings: "...have so far offset 90% of raw material costs."<sup>35</sup> In a separate statement, U.S. coatings maker Valspar, Inc, reported a net income increase of 3% for 2005 in spite of higher raw material costs.<sup>36</sup>

There was no reporting in DuPont shareholder reports of the financial impacts of the Chinese Teflon panic of 2004. Despite what looked like a major market impact in China due to concern about health effects related to Teflon, DuPont made no qualitative or quantitative disclosure in its financial reports related to what happened in China. According to media reports, the company dispatched a crisis team to China to attempt to

ease concerns.

Similarly, there is no reporting in DuPont shareholder reports as to the extent of drop in sales of Teflon in the U.S. as negative publicity has mounted. What we do know from public reports is that company has mounted a PR campaign to attempt to quell public concern, both posting full-page ads in national media, and corresponding directly with sellers of products that may be affected, or are raising these concerns with DuPont.

Despite DuPont's concessions to EPA, we believe the evidence contained in this report shows that shareholder value remains at risk from the company's decisions, past and present, to rely on PFOA chemistry in its product lines. Based on the company's disclosures, the product lines involved represent at least a billion dollars in annual revenues.

Shareholders should press the management for a more expeditious phase-out of the use of PFOA and of any substances that can break down to PFOA, for better disclosure of the financial impacts the current issues are having and of the options for expediting DuPont's movement out of PFOA chemistry.

**We believe shareholder value remains at risk as long as PFOA is used in manufacture, or can be a breakdown byproduct, of DuPont products.**

## Endnotes:

<sup>1</sup> What is PFOA? From DuPont website online:

[http://www1.DuPont.com/DuPontglobal/corp/documents/US/en\\_US/news/releases/pdf/WhatisPFOA.pdf](http://www1.DuPont.com/DuPontglobal/corp/documents/US/en_US/news/releases/pdf/WhatisPFOA.pdf)

<sup>2</sup> Letter from Kenneth A. Cook, President, Environmental Working Group to Michael Leavitt, Administrator, U.S. Environmental Protection Agency (November 17, 2004) (Citations omitted).

<sup>3</sup> Juliet Eilperin, "DuPont, EPA settle chemical complaint," *Washington Post*, December 15, 2005. \$5 million of the \$6.25 million committed to environmental projects will fund the Fluorotelomer-based Product Biodegradation Testing Supplemental Environmental Project (SEP). The EPA states that this initiative: "...will help the public to better understand the inherent degradation potential of fluorotelomer-based products to form PFOA and the behavior of such products when released to the environment."

[www.epa.gov/compliance/resources/cases/civil/tsca/DuPont121405.html](http://www.epa.gov/compliance/resources/cases/civil/tsca/DuPont121405.html) 2/14/2005

<sup>4</sup> Randall Chase, "Teflon chemical likely a carcinogen, panel says," *Associated Press*, February 16, 2006

<sup>5</sup> Sara Schaeffer Munoz, "EPA probes safety of key chemical in Teflon," *Wall Street Journal*, January 31, 2006

<sup>6</sup> Martin Middlestaedt, "U.S. acts against chemical in non-stick pans," *Globe & Mail*, February 4, 2006

<sup>7</sup> Ohio Citizen Action, [http://www.ohiocitizen.org/campaigns/DuPont\\_c8/kro\\_mart.htm](http://www.ohiocitizen.org/campaigns/DuPont_c8/kro_mart.htm)

<sup>8</sup> Jerry Hirsch, "Safety concerns may stick to Teflon," *Los Angeles Times*, February 14, 2006

<sup>9</sup> Ohio Citizen Action, [http://www.ohiocitizen.org/campaigns/DuPont\\_c8/DuPont\\_c8.html](http://www.ohiocitizen.org/campaigns/DuPont_c8/DuPont_c8.html)

<sup>10</sup> Jerry Hirsch, *Los Angeles Times*

<sup>11</sup> *Ibid.*

<sup>12</sup> Marian Burros, "As Teflon troubles pile up, DuPont responds with ads," *New York Times*, February 8, 2006

<sup>13</sup> PR Newswire Europe, New York, February 9, 2006

<sup>14</sup> Rebecca Renner, "Clean & Green," *Scientific American*, January 2006

<sup>15</sup> Rebecca Renner, "The Long and the Short of Perfluorinated Replacements," *Environmental Science & Technology* Vol. 40 Issue 1, Jan 1, 2006

<sup>16</sup> Barry Rosenbaum, "Rocket Science Gives Surfactants a Boost," *Polymers Paint Color Journal* 194, vol. 4483 (Dec. 2004)

<sup>17</sup> Rebecca Renner, "Technology Solutions: The Long and the Short of Perfluorinated Replacements," *Environmental Science & Technology* Vol. 40, Issue No, 1

<sup>18</sup> *Ibid.*

<sup>19</sup> Polyfox Factsheet.pdf

[http://www.omnova.com/products/chemicals/documents/polyfoxFactSheetFinal\\_2\\_06.pdf](http://www.omnova.com/products/chemicals/documents/polyfoxFactSheetFinal_2_06.pdf), 2/21/06

<sup>20</sup> *Ibid.*

<sup>21</sup> Charles Baldwin et al "A Novel Nonstick Porcelain Enamel," *Appliance* Vol.61, No. 11, November 2004

<sup>22</sup> Financial Times Information, Global Newswire Asia-Africa Intelligence Wire, December 9, 2005

<sup>23</sup> Financial Times Information, Global Newswire Asia-Africa Intelligence Wire, August 23, 2004

<sup>24</sup> Olivia Chung, "Teflon Comes Unstuck in China Mass Panic," *Global News Wire - Asia Africa Intelligence Wire*, July 22, 2004

<sup>25</sup> AFX European Focus October 14, 2004

<sup>26</sup> 71 FR 11484

<sup>27</sup> Wade Rawlins, "Emission in ground water add to DuPont's tasks," *The News & Observer* (North Carolina), February 12, 2006

<sup>28</sup> Clean Water for North Carolina press release, January 30, 2006

<sup>29</sup> Associated Press, "Court Clears Settlement in DuPont Case," February 28, 2005

<sup>30</sup> Paul Rosenfeld, public comments at Mealey's C-8/PFOA Science, Risk & Litigation Conference October 24-25, 2005. By contrast it should be noted that some carpets, notably Shaw Ecoworks™ Carpet, have distinguished themselves by avoiding the use of PFOA related products. *Healthy Building News*, February 23, 2006.

<sup>31</sup> Jeff Montgomery, "Delaware plant releases C8-type chemicals," *The News Journal* (Wilmington, Delaware), February 4, 2006

<sup>32</sup> United Steelworkers Press Release, August, 9, 2005

<sup>33</sup> United Steelworkers Press Release, December 21, 2005

<sup>34</sup> "Stock Buyback Now May Spur a Big Bill Later," *Wall Street Journal*, January 31, 2006 page C1.

<sup>35</sup> (ICIS) Chemical News & Intelligence, "Bank of America keeps PPG rating on better coatings margin," Nov. 9, 2005

<sup>36</sup> (ICIS) Chemical News & Intelligence, "US Valspar's fiscal '05 profit up 3%, sales up 12%," November 21, 2005