

Aimee H. Wagstaff, Esq. PA ID No. 337573
Ian Forgie, Esq. (*pro hac vice forthcoming*)
WAGSTAFF LAW FIRM
940 N. Lincoln Street Denver, CO 80203
Tel: (303) 376-6360
Fax: (888) 875-2889
Email: Awagstaff@wagstafflawfirm.com
Email: Iforgie@wagstafflawfirm.com



ATTORNEYS FOR PLAINTIFF

**COURT OF COMMON PLEAS
PHILADELPHIA COUNTY**

Alexander Ramos
72 Westfield Cir.
Selden, New York 11784

Plaintiff,

June Term, 2026

v.

Case No. _____

DEMAND FOR A JURY TRIAL

CORTEVA, INC.
Serve R/A - The Corporation Trust Company
1209 Orange St.
Wilmington, DE 19801

CORTEVA AGRISCIENCE LLC
Serve R/A - The Corporation Trust Company
1209 Orange St.
Wilmington, DE 19801

THE DOW CHEMICAL COMPANY
Serve R/A - The Corporation Trust Company
1209 Orange St.
Wilmington, DE 19801

FMC CORPORATION
2929 Walnut St.
Philadelphia, PA 19104

Defendants.

NOTICE TO PLEAD

NOTICE You have been sued in court. If you wish to defend against the claims set forth in the following pages, you must take action within twenty (20) days after this complaint and notice are served, by entering a written appearance personally or by attorney and filing in writing with the court your defenses or objections to the claims set forth against you. You are warned that if you fail to do so the case may proceed without you and a judgment may be entered against you by the court without further notice for any money claimed in the complaint or for any other claim or relief requested by the plaintiff. You may lose money or property or other rights important to you.

AVISO Le han demandado a usted en la corte. Si usted quiere defenderse de estas demandas expuestas en las paginas siguientes, usted tiene veinte (20) dias de plazo al partir de la fecha de lan demanda y la notificacion. Hace falta asentar una comparencia escrita o en persona o con un abogado y entregar a la corte en forma escrita sus defensas o sus objeciones a las demandas en contra de su persona. Sea avisado que si usted no se defiende, la corte tomara medidas y puede continuar la demanda en contra suya sin previo aviso o notificacion. Ademias, la corte puede decidir a favor del demandante y requiere que usted cumpla con todas las provisiones de esta demanda. Usted puede perder dinero o sus propiedades u otros derechos importantes para usted.

YOU SHOULD TAKE THIS PAPER TO YOUR LAWYER AT ONCE. IF YOU DO NOT HAVE A LAWYER OR CANNOT AFFORD ONE, GO TO OR TELEPHONE THE OFFICE SET FORTH BELOW TO FIND OUT WHERE YOU CAN GET LEGAL HELP.

LLEVE ESTA DEMANDA A UN ABOGADO INMEDIATAMENTE. SI NO TIENE ABOGADO O SI NO TIENE EL DINERO SUFICIENTE DE PAGAR TAL SERVICIO, VAYA EN PERSONA O LLAME POR TELEFONO A LA OFICINA CUYA DIRECCION SE ENCUENTRA ESCRITA ABAJO PARA AVERIGUAR DONDE SE PUEDE CONSEGUIR ASISTENCIA LEGAL.

**PHILADELPHIA COUNTY BAR ASSOCIATION
LAWYER REFERRAL AND INFORMATION SERVICE
ONE READING CENTER
PHILADELPHIA, PENNSYLVANIA 19107
TELEPHONE:
(215) 238-6333
TTY (215) 451-6197**

**ASOCIACION DE LICENCIADOS DE FILADELFA
SERVICIO DE REFERENCIA E INFORMACION LEGAL
ONE READING CENTER
PHILADELPHIA, PENNSYLVANIA 19107
TELEPHONE: (215) 238-6333
TTY (215) 451-6197**

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Defendants.

PLAINTIFF'S COMPLAINT AND DEMAND FOR JURY TRIAL

Plaintiff hereby submits this Complaint (“Complaint”) against the above-captioned Defendants. Plaintiff seeks equitable relief, monetary restitution, and/or compensatory and punitive damages. Plaintiff makes the following allegations based upon personal knowledge and information and belief, as well as the investigation carried out by Plaintiff’s Counsel.

SUMMARY

1. This is a products liability action against the designers, manufacturers, marketers, distributors, and sellers of chlorpyrifos-containing insecticides (“Chlorpyrifos” or “CPF”).

2. Chlorpyrifos (O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate) is a broad-spectrum organophosphate insecticide that kills all forms of insects. Chlorpyrifos kills insects by inhibiting a critical neurotransmitter called acetylcholinesterase (“AChE”). Dow Chemical Company¹, Defendant Corteva Inc.’s predecessor and former corporate parent, patented² Chlorpyrifos in 1962 and first registered it for sale in the United States pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”) in 1965. In the decades since, Chlorpyrifos became the most widely-used insecticide in the country: people applied it on their farms and golf courses, in their homes and parks, and virtually everywhere else.

3. Chlorpyrifos’s widespread use has exacted a significant toll on American society. Human brains, like insect brains, rely heavily on acetylcholinesterase, and Chlorpyrifos inhibits AChE in the human brain just as it does in the insect brain. Indeed, this is the mechanism by which Chlorpyrifos’s chemical cousins, like sarin gas, kill when they are used as chemical weapons.

¹ Dow/Corteva underwent multiple acquisitions, sales, and other restructurings during the time it sold Chlorpyrifos. This history is briefly discussed herein. For ease of discussion, this Complaint refers to each of the Dow entities that sold Chlorpyrifos as “Dow.”

² Dow applied to patent Chlorpyrifos in 1961. The patent was granted in 1966.

Chlorpyrifos also interferes with the functioning of mitochondria (the “powerhouse” of brain cells), reduces the brain’s supply of adenosine triphosphate (“ATP,” the brain’s most important storehouse of energy), causes accumulation of damaging proteins in the brain, and triggers a host of other damaging effects in the brain that result in life-altering neurological effects.

4. Substantial scientific research published in peer-reviewed journals by some of the world’s most renowned epidemiologists, toxicologists, neurologists, and other researchers shows that chronic exposure to Chlorpyrifos at levels regularly encountered by Americans on their farms, at their jobs, and in their homes causes Parkinson’s disease, a devastating and incurable condition that progressively incapacitates those it afflicts before ultimately killing them.

5. Despite this mounting evidence of Chlorpyrifos’s neurotoxicity, Defendants fought tooth and nail to continue selling Chlorpyrifos to the unsuspecting American public. In the four decades following its introduction, Chlorpyrifos became increasingly central to Dow’s profitability. Prior to the late 1970s, Dow’s core businesses had been in petrochemicals and plastics. But those markets had grown crowded, leading Dow to seek out more favorable markets. Simultaneously, demand for Chlorpyrifos skyrocketed following the EPA’s banning of the insecticide DDT and the termiticide chlordane. Defendants responded to these developments by doubling down on Chlorpyrifos, which became nearly ubiquitous in American homes and lives by the early 1990s.

6. As exposure to Chlorpyrifos grew with its market share, more and more Americans experienced the devastating effects of Chlorpyrifos exposure. In 1995, the EPA fined Dow a record amount for hiding incidents of adverse health effects caused by Chlorpyrifos. National news coverage of Chlorpyrifos’s devastating effects on the developing brains of children followed. Defendants placated the public’s concerns by agreeing to voluntarily withdraw residential

Chlorpyrifos products in 2000. However, the agreement allowed Defendants to continue selling Chlorpyrifos for both agricultural and other non-residential purposes (for example, on golf courses).

7. After the EPA renewed Chlorpyrifos's FIFRA registration in 2006, non-profit groups sued to force the EPA to either ban Chlorpyrifos or explain the scientific justification for allowing its continued sale. Years of litigation followed, during which the EPA twice announced its intent to ban Chlorpyrifos entirely. After years of declining sales, competition from generic manufacturers, and increasing public scrutiny regarding Chlorpyrifos's safety, Defendants phased out the manufacture and sale of their Chlorpyrifos products beginning in 2020. But Defendants' tainted history with Chlorpyrifos continues, as the insecticide remains legal to manufacture, sell, and use in the United States to this day.

8. Defendants are the former designers, manufacturers, and distributors of Chlorpyrifos. Corteva, Inc. is a successor to the original designer and manufacturer of Chlorpyrifos. On information and belief, Corteva Agriscience LLC is a wholly-owned subsidiary of Corteva, Inc. and is the operating entity through which Corteva, Inc. conducts business, including the design, registration, formulation, marketing, and sale of Chlorpyrifos. The Dow Chemical Company is a successor to the original designer and manufacturer of Chlorpyrifos. FMC Corporation (hereinafter "FMC") formulated and sold Chlorpyrifos for many years in the United States.

9. Defendants worked in tandem to design, manufacture, and distribute Chlorpyrifos, and to ensure that the causal link between Chlorpyrifos and Parkinson's disease remained hidden from the public, from Plaintiff, and from the medical and scientific communities. Defendants are jointly and severally liable to Plaintiff.

10. Defendants have known, or should have known, that Chlorpyrifos is unreasonably dangerous since before it first entered the stream of commerce in or around 1965. Defendants chose to conceal that information from the public despite being fully aware of the exceptionally high risk that their misrepresentations would result in harm to Chlorpyrifos end-users.

11. Plaintiff is an end-user of Chlorpyrifos. He is among the intended users of Chlorpyrifos: farmers, agricultural workers, employees of pest control companies, groundskeepers at golf courses and other sporting fields, and homeowners and renters seeking to keep their homes free from pests. As a result of his exposure to Chlorpyrifos, Plaintiff has developed Parkinson's disease or precursor ailments that will progress into Parkinson's disease.

12. At all relevant times, it was reasonably foreseeable to Defendants that Chlorpyrifos would cause Plaintiff's injuries. Plaintiff asserts strict liability, negligence, and intentional theories of liability against Defendants. Plaintiff prays for relief—including compensatory and punitive damages—for injuries suffered as a result of his exposure to Chlorpyrifos.

JURISDICTION AND VENUE

13. This Court has personal jurisdiction over Plaintiff because Plaintiff consented to the jurisdiction of this Court by filing a case in this Court.

14. This Court has personal jurisdiction over Defendants because, at all relevant times, Defendants regularly solicited and conducted business in Pennsylvania such that they can be said to have purposefully availed themselves of the privilege of conducting activities in Pennsylvania. Defendants have each exploited the agricultural markets in Pennsylvania, done substantial business in Pennsylvania, and realized substantial profits as a result.

15. Defendant FMC is domiciled in Pennsylvania because its principal place of business is in Philadelphia and it is registered to do business in Pennsylvania. It is essentially at home in Pennsylvania and this Court possesses general jurisdiction over FMC.

16. Defendants Corteva, Inc. and Corteva Agriscience LLC (collectively, “Corteva”) have purposefully availed themselves of the privilege of conducting activities in Pennsylvania, including exploiting the Pennsylvania market for agricultural products, entering into contracts with Pennsylvania-domiciled corporations (including FMC), and marketing and selling Chlorpyrifos to Pennsylvania distributors and end-users:

a. At all relevant times, Corteva, Inc. and its predecessors have been registered to do business in Pennsylvania as a foreign corporation. When Corteva registered to do business in Pennsylvania, it consented to the general jurisdiction of Pennsylvania courts. *Mallory v. Norfolk Southern Railway Co.*, 600 U.S. 122 (2023).

b. Corteva maintains a corn breeding and field research station in Lancaster County, Pennsylvania.

c. Corteva marketed Chlorpyrifos to end-users in Pennsylvania. This included ads and other promotional materials.

d. Prior to exiting the Chlorpyrifos market in or about 2020, Corteva sold and distributed Chlorpyrifos to distributors and end-users in Pennsylvania.

17. Corteva’s myriad contacts with Pennsylvania are more than random, isolated, or fortuitous; they are purposeful, continuous, and sufficiently related to Plaintiff’s allegations that Chlorpyrifos causes Parkinson’s disease such that it would not offend traditional notions of fair play and substantial justice to maintain this suit against Corteva in Pennsylvania.

18. Defendant The Dow Chemical Company has purposefully availed itself of the privilege of conducting activities in Pennsylvania, including registering to do business in Pennsylvania as a foreign corporation. In addition to selling its materials and specialty chemicals products to buyers in Pennsylvania and registering to do business, The Dow Chemical Company maintains at least four research and/or manufacture facilities in Pennsylvania.

19. Venue is proper in Philadelphia County because at least one of the Defendants, FMC Corporation, maintains its principal place of business in Philadelphia County and at least one of the Defendants does substantial business in Philadelphia County. *See* Pa. R. C.P. 1006(c) and 2179.

20. This is an action for damages in excess of fifty thousand dollars (\$50,000).

21. Plaintiff has timely-filed this action within two years of discovering his causes of action as defined and required by Pennsylvania 42 Pa. Cons. State. § 5524(2). Further, Defendants fraudulently concealed facts that delayed Plaintiff's ability to know his injuries and its cause.

PLAINTIFF

22. Plaintiff Alexander Ramos is a natural person and at all relevant times a resident and citizen of Suffolk County, New York. Plaintiff brings this action for personal injuries sustained by exposure to Chlorpyrifos. As a direct and proximate result of being exposed to Chlorpyrifos, Plaintiff developed Parkinson's disease.

DEFENDANTS

Dow

23. The Dow Chemical Company discovered chlorpyrifos's insecticidal properties in the 1950s and patented it and registered it for sale in the early 1960s. Between the time it first sold

Chlorpyrifos in 1965 and its 2020 decision³ to discontinue the manufacture and sale of Chlorpyrifos, Dow was by far the largest manufacturer and seller of Chlorpyrifos sold in the United States.

24. In 1989, The Dow Chemical Company formed DowElanco, a joint venture with pharmaceutical company Eli Lilly & Company. In 1997, Dow bought out Eli Lilly's stake in DowElanco and renamed the entity Dow AgroSciences LLC. In 2019, after a temporary merger with DuPont, Dow spun off Dow AgroSciences as Corteva, Inc., a separate entity that is sometimes referred to as "Corteva Agrisciences." On information and belief, at the time of its formation, Corteva, Inc. assumed the liabilities of Dow AgroSciences LLC. On information and belief, Corteva, Inc. operates through its wholly-owned subsidiary, Corteva Agriscience LLC. Dow sold chlorpyrifos-containing insecticides under various brand names, including but not limited to: Dursban (directed to the residential market), Lorsban (directed to the agricultural market), and Cobalt. On information and belief, The Dow Chemical Company inherited some or all of the liabilities of its predecessors The Dow Chemical Company, DowElanco, and Dow AgroSciences LLC related to Chlorpyrifos.

FMC

25. FMC Corporation, formerly known as the Food Machinery Corporation, was founded to manufacture spray pumps used in agricultural settings, including pesticides. In 2015, FMC acquired Cheminova, A/S, a Danish agrochemical company. Both before and after the acquisition, Cheminova registered for sale, designed, manufactured, distributed, and sold chlorpyrifos-containing insecticide products in the United States. On information and belief, FMC

³ On February 7, 2020, Dow announced its intention to cease manufacture and sale of Chlorpyrifos. On information and belief, Dow had ceased manufacturing Chlorpyrifos by the end of 2020. However, Dow maintained active FIFRA registrations for some Chlorpyrifos products until as recently as June 25, 2024.

assumed the liabilities associated with Cheminova's prior sales of Chlorpyrifos when it acquired the company. Both before and after acquiring Cheminova, FMC sold its own chlorpyrifos-containing insecticide products in the United States. FMC sold chlorpyrifos-containing insecticides under various brand names, including but not limited to Bolton, Nufos, and Stallion.

26. FMC is incorporated in Pennsylvania and its principal place of business is in Philadelphia.

TERMS

27. As used in this Complaint, "Chlorpyrifos" refers to all formulations of insecticides containing the active ingredient chlorpyrifos (O,O-diethyl O-3,5,6-trichloro-2-pyridyl phosphorothioate), including, but not limited to, Dursban, Lorsban, Cobalt, Bolton, Nufos, and Stallion.

28. As used in this Complaint, "formulator" refers to a company that combines technical chlorpyrifos and other essential Chlorpyrifos chemical ingredients with other chemicals to create a product that is sold to end-users. As used here, the active ingredient(s) for all such products include(s), but is not necessarily limited to, chlorpyrifos.

THE ALLEGATIONS

Discovery and Design of Chlorpyrifos

29. Chlorpyrifos is a man-made compound that belongs to a class of chemicals called organophosphates. Organophosphates are distinguished from other chemicals by the fact that they contain a phosphorous atom double-bonded to an oxygen or sulfur atom and single-bonded to three other oxygen-containing substituents.

30. In the 1930s, chemists working for the German chemical giant IG Farben discovered that organophosphates are powerful inhibitors of the neurotransmitter⁴ cholinesterase.

31. Cholinesterase is critical to the proper function of animal brains, including human brains. The brain uses cholinesterase to break down two other neurotransmitters, acetylcholine and butyrylcholine. The brain cells in animal brains use acetylcholine and butyrylcholine to tell the animal's muscles to move. These neurotransmitters operate, in essence, as the brain's "on-switch" for muscles. The brain uses cholinesterase⁵ as its "off-switch" for acetylcholine and butyrylcholine. Without cholinesterase, animal brains cannot stop telling muscles to fire, resulting in numerous serious health problems, up to and including death, for the affected animal.⁶

32. IG Farben discovered that, by disabling the cholinesterase off-switch, organophosphates exhibit fatal neurotoxicity to both insects and human beings alike. As a group, organophosphates now include some of the world's most toxic chemical weapons, including sarin, VX gas, and the Novichok class of chemical agents.

33. In the 1950s, scientists at Dow synthesized chlorpyrifos and recognized its potential as an insecticide. Dow applied to patent chlorpyrifos in 1962 and registered the first chlorpyrifos-containing products⁷ pursuant to FIFRA in 1965. While Dow and others would eventually

⁴ A neurotransmitter is a chemical used by brain cells, called neurons, to send signals to other neurons.

⁵ There are two types of cholinesterase, one each for acetylcholine and butyrylcholine. The first is acetylcholinesterase. The second is butyrylcholinesterase.

⁶ Or, in the words of Dow's website, as of March 2003: "Chlorpyrifos is an organophosphate insecticide. Like other organophosphates, its insecticidal action is due to the inhibition of the enzyme acetylcholinesterase resulting in the accumulation of the neurotransmitter, acetylcholine, at the nerve endings. This results in excessive transmission of nerve impulses, which causes mortality in the target pest."

⁷ FIFRA prohibits the sale of insecticides that have not been registered with the EPA (or with the United States Department of Agriculture, prior to the EPA's 1970 creation). Registration is done on a product-by-product basis, meaning that the registrant must procure and maintain a separate registration for each different formula it wishes to sell, even if other products containing the same active ingredient(s) are already registered. Registrants must also submit safety data regarding the products, but these data are specific at the active ingredient level, rather than the formula level (i.e., safety data regarding technical/pure chlorpyrifos may be used to support registration of chlorpyrifos formulations. Registrants are required to propose labels containing information sufficient to convey adequate safe use information, including warnings regarding potential effects of the product's use. Finally, registrants must propose and

reformulate and redesign Chlorpyrifos to target particular markets – such as the agricultural market and the termiticide market - the first Chlorpyrifos products were marketed to control pests in turfgrass and ornamental plants and to control indoor pests.

Sales of Chlorpyrifos Explode Following DDT Ban

34. Just as Chlorpyrifos was coming on the market, public concern about the harmful environmental effects of another insecticide, DDT, was rising to a crescendo. Between the end of World War Two and 1972, DDT became ubiquitous in the United States due to its ability to kill a broad spectrum of insects and perceived safety. However, its deleterious effects on the strength of eggshells nearly drove many bird species to extinction, including the bald eagle.

35. DDT's 1972 ban presented Dow a golden opportunity to expand the market for Chlorpyrifos exponentially. Like DDT, Chlorpyrifos is extremely versatile: it kills virtually all insects, from crickets to root maggots to asparagus aphids. Chlorpyrifos can be absorbed and act on the animal brain via contact, ingestion, or inhalation. Additionally, chlorpyrifos can be formulated into several forms, including an emulsifiable concentrate, a granular wettable powder, pellets, and the more familiar spray. This versatility enables chlorpyrifos to be applied by a variety of means, including handheld sprayers, irrigation systems (in so-called “chemigation” set ups), and by airplane. In short, Chlorpyrifos presented all the hallmarks of a blockbuster product, and it came on the market at just the right time.

36. Dow acted quickly, formulating Chlorpyrifos products for sale to the as-yet untapped agricultural market in the mid-1970s. At the same time, Dow began to face stiffening

secure EPA approval for particular uses of each particular product. In other words, a product approved to combat corn rootworm might not necessarily be approved for use to combat codling moths that prey on apples.

competition and diminishing profits in its core operations in the petrochemicals and plastics markets.

37. In 1978, thirty of Dow's senior managers met to discuss refocusing the company away from the petrochemicals and plastics industries. As of 1979, those businesses comprised 85% of Dow's overall business, but Dow management recognized that the industries had become crowded since Dow began dominating them in the 1930s. Thus, they decided to shift strategies and focus more on higher value-added products, including agricultural chemicals and consumer products, which they hoped would contribute 50% of the company's overall business by 1987. Implementing this strategy, Dow sold significant portions of its petrochemicals business in 1982, 1983, and 1984. Immediately following these significant sales, Dow acquired multiple consumer products businesses. By 1986, Dow had fully implemented the strategy envisioned in 1978 and the higher value-added products, like Chlorpyrifos, constituted 52% of Dow's overall revenues.

Dow Deepens its Commitment to and Reliance on Chlorpyrifos

38. By the early 1980s, Dow's incentive to push Chlorpyrifos had grown even stronger. Its pivot from petrochemicals to agricultural chemicals and consumer products was paying dividends, as the company's agricultural chemicals business alone was bringing in approximately \$500 million annually.

39. Chlorpyrifos's profitability grew further when, in 1988, the EPA banned chlordane, one of the most commonly-used termiticides in the United States. Chlorpyrifos had been registered for use as a termiticide in 1980 and was positioned to capture the market share left open by the chlordane ban.

40. In 1989, Dow formed a joint venture with Eli Lilly and Company⁸, which it called DowElanco, to expand its focus on the agricultural chemicals industry. Eli Lilly's Elanco Products Company division had been a major player in the expanding market for veterinary pharmaceuticals. Internal assessments performed in connection with the merger evince Chlorpyrifos's importance to Dow: pyridine⁹ pesticides like Chlorpyrifos comprised 70% of Dow's agricultural chemicals business, which had become its core business. In 1997, Dow bought out Eli Lilly's interest in DowElanco, which it then renamed "Dow Agrosiences." Purchasing Eli Lilly's Elanco division was the first in a spree of Dow acquisitions in the agricultural chemicals sector in the late 1990s, cementing the company's shift towards agricultural chemicals, like Chlorpyrifos.

Dow Misleads the Public and EPA as Chlorpyrifos Dominates the Insecticide Market

41. By the time Dow bought Eli Lilly out of DowElanco, Chlorpyrifos had become the overwhelmingly dominant force in the American insecticide market. By 1992, household use surveys showed that 17 percent of American homes used Chlorpyrifos. An estimated 200 million household-related applications were being made each year, in addition to the 10 to 20 million pounds of Chlorpyrifos applied in agricultural settings and the more than one million pounds applied as termiticide. A 1994 survey found chlorpyrifos residues in the urine of 82% of the 1,000 Americans tested. Chlorpyrifos was everywhere.

⁸ While Eli Lilly and Company is today known as a pharmaceutical company, it has a robust history in the agricultural chemicals industry as well. Eli Lilly first entered the agricultural chemicals industry in 1954. Its agricultural chemicals division, called the Elanco Products Company, comprised a significant portion of the American market for veterinary pharmaceuticals prior to its merger with Dow to form DowElanco.

⁹ A "pyridine" pesticide is any pesticide that contains a pyridine ring, a ring of five carbon atoms and one nitrogen atom bonded in a hexagon.

42. At the same time, evidence of Chlorpyrifos's neurotoxicity mounted as public scrutiny of the compound increased.

43. In the early 1990s, the New York Attorney General (the "NYAG") investigated Dow for making false and misleading safety claims in its advertising of Chlorpyrifos. Dow's marketing materials repeatedly claimed that Chlorpyrifos exposure does not cause any long-term health issues, despite the fact that Chlorpyrifos works by inhibiting a neurotransmitter critical to the proper functioning of the human brain. In 1994, Dow entered an "assurance of discontinuance," essentially a settlement agreement, with the NYAG in which the company agreed to stop making false safety claims in its Chlorpyrifos marketing materials.

44. Later that same year, litigation regarding Chlorpyrifos's damaging effects on the developing brains of fetuses and infants uncovered Dow's shocking failure to report to the EPA 249 "adverse health effects" associated with the use of Chlorpyrifos. FIFRA requires pesticide registrants to report such events to the EPA within thirty days. Dow simply refused to report these adverse health effects until its knowledge of them was uncovered as part of the discovery process in the 1994 litigation. As punishment for these hundreds of violations, the EPA issued Dow its then largest-ever fine.

45. But Chlorpyrifos's profitability apparently proved too alluring for Dow, as it immediately and repeatedly violated its assurance of discontinuance. The NYAG's investigation of Dow resumed in the early 2000s and it filed suit in a Manhattan court regarding Dow's violations of the 1994 assurance. To resolve the suit, Dow agreed in 2003 to pay a fine of \$2 million and to cease all pesticide advertising in the state of New York.

Evidence Accrues that Chlorpyrifos is Seriously Neurotoxic in Various Ways

46. As Chlorpyrifos's market dominance grew, so too did evidence of its neurotoxicity and Dow's efforts to ignore and hide that evidence.

47. Since Dow first applied to patent it, Chlorpyrifos's inventors, formulators, distributors, and sellers have known that Chlorpyrifos is toxic to the human brain. Chlorpyrifos kills insects by inhibiting a critical neurotransmitter that both insect and human brains use to signal muscle movements. Many of Chlorpyrifos's chemical "cousins" within the organophosphate family of chemicals, including sarin and VX nerve gases, kill human beings by this same mechanism.

48. It is no surprise, then, that by the early 1970s, the scientific literature was replete with reports of organophosphate poisoning resulting from Chlorpyrifos's neurotoxicity. For example, a 1971 article published in the world-renowned journal JAMA observed that "organophosphates are the pesticides most often involved in serious human poisoning" and warned that "[t]hat involvement is likely to increase" in light of the DDT ban. Reports of neurotoxic Chlorpyrifos poisonings appeared regularly in the scientific literature. For example, in 1986, a publication in the Journal of Occupational Medicine described the poisoning by Chlorpyrifos of five office workers whose building had been sprayed. The office workers "developed symptoms compatible with organophosphate intoxication" and their cholinesterase levels did not return to normal for three months following the incident.

49. As Chlorpyrifos's market share grew, so too did the concerns of regulators and the public. In September 1991, the EPA issued a "data call-in" regarding Chlorpyrifos after it concluded that "additional data on chlorpyrifos are needed in all discipline areas." Reports emerged in the press describing serious poisoning incidents involving Chlorpyrifos. In 1993, an article appeared in *McCall's* magazine detailing the serious developmental issues prenatal Dursban

exposure caused to multiple children of a family in Suffolk County, New York. In 1995, the CBS television program *Eye to Eye with Connie Chung* presented a long-form report about three serious Chlorpyrifos poisonings. Dow responded to the report by writing a letter to CBS in which it compared Chlorpyrifos's toxicity to that of caffeine. Asked to evaluate Dow's description, a top EPA pesticide regulator rejected the comparison and noted that "[w]e have information that this product might be causing long-term neurological effects" even in cases in which the individuals involved never exhibited symptoms of acute pesticide poisoning. More bad press followed in 1999, when *US News & World Report* published another story about a man in Texas who was paralyzed virtually overnight after he applied Chlorpyrifos at his home.

50. Meanwhile, toxicological evidence accrued evidencing the extent of Chlorpyrifos's neurotoxicity, which went well beyond its primary mechanism of AChE inhibition. For example, studies conducted in the 1990s demonstrated Chlorpyrifos's ability to generate reactive oxygen species, to damage DNA, and to cause leakage of lactate dehydrogenase (a signal of cell death). Other studies showed that Chlorpyrifos disrupts the brain's ability to utilize two other critical neurotransmitters, dopamine and serotonin. Building on this research, subsequent studies proved that, by generating reactive oxygen species, chlorpyrifos causes the death of dopaminergic cells by inhibiting the activity of mitochondria. Mitochondria, often described as the powerhouse of all cells, are critical to the proper functioning of the human brain because the brain consumes the bulk of the energy used by the human body.

51. Between 1993 and 1996 alone, nearly 18,000 suspected Chlorpyrifos poisonings were reported to the EPA. Worse still, the majority of these poisonings involved children under the age of six. In 1996, Congress responded to the public outcry by passing the Food Quality

Protection Act (“FQPA”). The FQPA imposed new regulations on pesticides used on foods, with a particular emphasis on the health of children.

Chlorpyrifos Registrants Abandon the Residential Market to Save Chlorpyrifos’s Other Markets

52. In response to this growing scientific and public concern, Dow began fighting a rear-guard action to protect its blockbuster insecticide. In 1997, Dow agreed to withdraw Chlorpyrifos from a select handful of small, specialized markets, including indoor foggers and pet shampoos. Doing so bought the company time to continue selling Chlorpyrifos to larger residential, agricultural, and other occupational markets.

53. In 1998, Dow submitted to the EPA a study it had commissioned regarding the Chlorpyrifos’s developmental neurotoxicity. The researchers evaluated Chlorpyrifos’s developmental neurotoxicity by exposing pre- and post-natal rats to Chlorpyrifos and measuring various physiological and behavioral markers of development. Not only did Dow fund the study, the study’s lead author was a Dow employee. Unsurprisingly, the study concluded that Chlorpyrifos exposure does not cause neurodevelopmental harm.

54. Dow simultaneously commissioned another study, this time focusing on whether Chlorpyrifos exposure exacerbates sensitivity to cholinesterase inhibition. Again, Dow’s own employee led the study and again the study concluded that Chlorpyrifos exposure does not damage neurodevelopment.

55. Dow relied on these studies to refute claims of Chlorpyrifos’s developmental neurotoxicity for the next twenty years.

56. But Dow’s efforts could not withstand the growing scientific consensus regarding Chlorpyrifos’s broad and deep neurotoxicity. In 1999, an EPA Hazard Identification Assessment Review Committee recommended significantly increased restrictions on the use of Chlorpyrifos

(“HIARC”). Despite relying in part on Dow’s subsequently-discredited 1972 prisoner study, the HIARC concluded that humans exhibit greater sensitivity to Chlorpyrifos’s mechanism of action, inhibition of acetylcholinesterase, than do animals, including the rats studied in the Dow-commissioned studies. Directly contravening one of the Dow-commissioned studies, the HIARC concluded that “there is sufficient evidence in the scientific literature to suggest that exposure to chlorpyrifos results in increased sensitivity and susceptibility to neonates as compared to adult rats.”

57. Dow responded by going on a public relations offensive. It solicited advertisements in farmer trade journals that made apocalyptic threats should Chlorpyrifos be banned. One classic example depicts a farmer’s truck, covered in ants, with empty produce boxes, behind a sign that reads “Fresh Fruits and Veggies” covered by an “Out of Business” sticker such that the sign reads “Fresh Out of Business;” the cartoon is captioned “The World Without Lorsban” (Lorsban was Dow’s agriculture-focused Chlorpyrifos brand).

58. Eventually, though Dow gave up the ghost and sued for peace, sacrificing the residential market to prevent a wholesale ban on Chlorpyrifos. In June 2000, the EPA announced that it had reached a deal with Chlorpyrifos registrants to voluntarily withdraw virtually all registrations for residential Chlorpyrifos products. The deal preserved virtually all of the agricultural market, as well as the bulk of the occupational markets (such as use on golf courses).

FMC Enters the Market

59. Despite Chlorpyrifos’s checkered regulatory history and the substantial evidence of its neurotoxicity, FMC’s predecessor, Cheminova, began selling a chlorpyrifos-containing product, which it branded “Nufos,” in 1996. Cheminova registered a second chlorpyrifos-

containing product in 2012, which it branded “Bolton.” FMC itself began selling a chlorpyrifos-containing product, which it branded “Stallion,” in 2011. FMC acquired Cheminova in 2015.

60. On information and belief, FMC, like Dow, failed to adequately study Chlorpyrifos’s neurotoxicity. On information and belief, FMC knew, or should have known, that Chlorpyrifos interferes with critical neurological functions and that chronic exposure to Chlorpyrifos at levels likely to be encountered by those exposed to its Chlorpyrifos products can cause irreversible neurological injuries, including Parkinson’s disease. FMC, like Dow, failed to propose to the EPA a label for Chlorpyrifos that would have warned consumers that Chlorpyrifos causes neurodegenerative harm, such as Parkinson’s, at exposures likely to be encountered by the end users of its Chlorpyrifos products. FMC, like Dow, failed to warn consumers that Chlorpyrifos exposure is associated with neurodegenerative harm, including Parkinson’s.

The Growing Scientific Consensus regarding Chlorpyrifos’s Neurotoxicity Leads the EPA to Repeatedly Attempt an Outright Ban

61. The first decade of the 21st century witnessed a steady accumulation of the evidence of Chlorpyrifos’s neurotoxicity, both with regard to neurodevelopment and with regard to neurodegenerative diseases like Parkinson’s. This evidence, and the EPA’s diminishing ability to justify its continuing registration of Chlorpyrifos, eventually led the EPA to repeatedly announce its intent to revoke all Chlorpyrifos registrations, tantamount to an outright ban, only to be stopped by industry-sponsored litigation or unexplained reversals that contravened the agency’s own scientists and were apparently motivated by politics rather than science.

62. Notwithstanding the withdrawal of Chlorpyrifos from the residential market, the EPA renewed Chlorpyrifos’s registration in 2006. In 2007, Pesticide Action Network North America (“PANNA”) and the Natural Resources Defense Council (“NRDC”) petitioned the EPA to reverse this decision. The PANNA/NRDC petition identified and thoroughly discussed the

scientific evidence for Chlorpyrifos's neurotoxicity and federal law required the EPA to respond to the substance of the petition in a timely fashion.

63. But the EPA ignored the PANNA/NRDC petition for years, leading the organizations to seek a writ of mandamus to force the EPA to respond. Responding to that litigation, the EPA stated its intent to respond by February 2014 and, accepting this representation, the 9th Circuit Court of Appeals denied the writ.

64. In the meantime, in 2011, an EPA scientific advisory panel found "persuasive" evidence that Chlorpyrifos causes "enduring effects on the Central Nervous System" and that Chlorpyrifos exposure is associated with serious neurodevelopmental effects in children.

65. After February 2014 came and went without an adequate EPA response, PANNA and NRDC again sued for a writ of mandamus. In June 2015, the 9th Circuit gave the EPA 30 days to identify the date on which it would respond to the 2007 petition. Instead of providing the date, the EPA informed the court that it intended to revoke all Chlorpyrifos tolerances¹⁰ but, confusingly, that its decision might be unnecessary should certain changes be proposed to Chlorpyrifos labels.

66. In response to EPA's noncommitment, PANNA and NRDC renewed their request for a writ. Finding that, instead of responding completely and in good faith to the 2007 petition, the EPA had provided only "a litany of partial status reports, missed deadlines, and vague promises of future action," the 9th Circuit granted the writ and ordered the EPA to respond to the petition in full by October 31, 2015.

¹⁰ A "tolerance" in the context of FIFRA and its companion statute the Federal Food, Drug, and Cosmetic Act is the maximum legally allowable amount of pesticide residue in a food or feed commodity. Revocation of all tolerances amounts to a ban on the pesticide, at least with respect to its use on food or feed commodity,

67. In November 2016, after having received an extension (and being denied a second), the EPA announced its intention to revoke all tolerances for Chlorpyrifos based on its finding that Chlorpyrifos is too neurotoxic to be sold in the United States.

68. But, following a change in presidential administration, the EPA reversed itself, without scientific explanation much less justification, in March 2017. The EPA suddenly outright denied the 2007 petition but not because it disagreed with the science. Indeed, the EPA's denial does not take a position on the science. Rather, the EPA denied the petition on the ground that it was still reviewing the science and that it would announce its conclusions when Chlorpyrifos came up for re-registration, *in October 2022*.

69. More litigation followed, and the 9th Circuit twice more ordered the EPA to revoke all Chlorpyrifos tolerances or justify the scientific reasons for not doing so. Finally, in 2021, the EPA announced its intention to revoke all Chlorpyrifos tolerances, effectively banning the chemical's use in agricultural settings.

70. But then industry-related groups launched litigation of their own and, in 2023, the 8th Circuit Court of Appeals vacated the EPA's proposed revocation. The 8th Circuit found that the EPA had not adequately considered revoking tolerances except those relating to Chlorpyrifos's use on eleven specific crops.

71. Most recently, at the end of 2024, the EPA announced a proposed rule that would revoke all Chlorpyrifos tolerances other than those for the eleven crops the industry-related groups identified in their lawsuit. Notably, these crops represent the majority of existing agricultural Chlorpyrifos use.

Dow's Chlorpyrifos Research is Debunked, Leading It to Finally Abandon Chlorpyrifos

72. While the EPA's proposed ban wound its way up and down the court system, the research on which Dow had relied for decades to support Chlorpyrifos's registration crumbled under re-examination by independent researchers.

73. First, in 2018, independent researchers, including an editor-in-chief of the peer-reviewed journal *Environmental Health*, published an analysis (Mie et al. (2018)) of the disagreement between independent research and industry-funded research regarding Chlorpyrifos's neurotoxicity. Mie et al. observed that "independent epidemiological, in vivo and in vitro studies . . . point[] to adverse health effects of chlorpyrifos on the developing nervous system" and that "[t]hese outcomes have been observed at exposure levels far below those . . . in an industry-funded developmental neurotoxicity (DNT) study commissioned for regulatory purposes" by Dow (i.e., Maurissen et al. (2000)). Mie et al. (2000) noted that the differing conclusions were likely critical in securing EPA approval of Chlorpyrifos and that Dow had repeatedly submitted the study to the EPA in support of Chlorpyrifos's registration, including as recently as 2015.

74. But Mie et al. identified multiple shortcomings marring the Dow-sponsored research. First, the Dow researchers analyzed the weight of the entire rat subject brains, rather than analyzing the weights of specific brain regions and comparing them to the overall brain weight. The latter approach allows researchers to identify potential differential impacts on brain regions caused by the compound being researched (in this case, Chlorpyrifos). As Mie et al. observed, the EPA has identified weighing the entire brain, rather than piece-by-piece, as an "inappropriate and inconclusive manipulation of the data." When Mie et al. analyzed the weights of the separate brain

regions,¹¹ their analysis showed statistically significant changes in cerebellum height at all three Chlorpyrifos exposure levels, “indicating the presence of [developmental neurotoxicity] at all dose levels tested.” By comparison, Maurissen et al. (2000)’s analysis, limited to overall brain weight, reported changes in brain weight only at the highest dose. Mie et al. further noted that the Dow study failed to account for the differences in the prenatal neurodevelopment of rats and humans and that Maurissen et al. had adjusted their statistical protocol after the fact, without explanation, and assigned 0.02 as the cut-off for statistical significance, an unusually low figure (typically, the figure is 0.05) that rendered detection of a statistically significant¹² effect far less likely.

75. Just two years later, another group of independent researchers from the University of Washington published (Sheppard et al. (2020)) a re-analysis of Dow’s 1972 prisoner study (Coulston et al. (1972)) in the peer-reviewed journal *Environment International*. Sheppard et al. re-analyzed the data collected by Coulston et al., using both the original researchers’ statistical method and modern computational tools, and found two serious flaws that changed the study’s overall conclusions. First, because treatment dates and durations varied among the exposed groups, the original analysis could not estimate differences in effect between treatment groups; because of this, Coulston et al. could compare only between each exposed group and the controls, and could not compare exposed groups to one another. This inability to compare exposed groups to one another precluded the possibility of evaluating dose-response relationships, a critical measure of causal relationships like the Chlorpyrifos-neurotoxicity relationship Coulston et al. were studying.

¹¹ As Mie et al. note, Maurissen et al. (2000) reports the weight of some, but not all, separate regions of the rat brains analyzed in the study. Mie et al. also note that Maurissen et al. (2000) does not explain why some, but not all, regional weights were reported.

¹² Statistical significance is a tool used to assess the likelihood that the data reported in a study or analysis resulted from random chance.

76. Second, Coulston et al. simply omitted valid data they collected from their analysis. Specifically, Coulston et al. ignored baseline acetylcholinesterase level tests conducted for the low- and mid-level exposure groups – the two groups on which Dow based the no-effects level it reported to the EPA for decades.¹³ By ignoring these baseline measurements, Coulston et al. found that the differences in acetylcholinesterase levels between the exposed and unexposed groups were not statistically significant. Once the valid baseline measurements were re-introduced to the analysis, the differences in AChE levels achieved statistical significance and the no effects level could not have been set based on the Coulston et al. study, because effects were observed even at the lowest exposure level evaluated in that study.

77. Meanwhile, the market for Chlorpyrifos began to both dry up and split up. In addition to FMC/Cheminova, many smaller companies entered the Chlorpyrifos market once the patent expired in the early 2000s. Worse still for Chlorpyrifos registrants, the overall market for Chlorpyrifos shrunk significantly in the first two decades of the 21st century. Between 1987 and 1998, an average of 10,000 tons of Chlorpyrifos was applied on American farms. By 2016, that figure had dropped to 2,000 tons while just 2,700 tons were applied in all American contexts in 2017.

78. In early 2020, facing diminishing returns and an increasingly unfavorable regulatory environment, Dow announced its intention to exit the Chlorpyrifos market. Multiple other Chlorpyrifos manufacturers and sellers followed suit, though many continue to sell Chlorpyrifos to this day.

¹³ Dow only ceased relying on Coulston et al. (1972) in its Chlorpyrifos submissions to the EPA in 2009, after the EPA established a Human Studies Review Board (the “HSRB”) to evaluate all studies that involve intentional human exposure or dosing. Because Coulston et al. intentionally exposed prisoners to Chlorpyrifos, the study was slated for review by the HSRB. However, Dow withdrew Coulston et al. (1972) before the HSRB had a chance to review it.

Defendants Never Studied Chlorpyrifos's Link to Parkinson's and Never Warned the Public of Chlorpyrifos's Neurotoxicity

79. Despite designing, manufacturing, distributing, and selling Chlorpyrifos, by far the most popular insecticide in the United States during this time, for nearly six decades; despite Chlorpyrifos's belonging to a class of chemicals first developed by the Nazis as chemical weapons; and despite the substantial toxicological and epidemiological evidence that Chlorpyrifos is severely neurotoxic and that it causes Parkinson's disease, not one of the Defendants sufficiently studied Chlorpyrifos's relationship with Parkinson's disease.

80. Indeed, not one of the Defendants conducted *any* studies regarding the chronic neurological effects of Chlorpyrifos exposure on adults, millions upon millions of whom purchased, used, and were exposed to Chlorpyrifos.

81. The studies that Defendants did perform, including those it submitted to the EPA, were often poorly designed and executed. The deficiencies of their studies, whether intentional or not, masked the true relationship between Chlorpyrifos and its deleterious effects on the human brain.

82. Nor did any of the Defendants ever warn the public of Chlorpyrifos's causal relationship with Parkinson's disease or any of its precursor or related ailments. None of them proposed to the EPA a Chlorpyrifos label that warns customers of Chlorpyrifos's neurotoxicity and relationship with Parkinson's disease. None of them warned their customers or the general public via any other means – whether via advertisements, through its salespersons, or via any other means (such as through education or training programs offered through extension services). To the contrary, Defendants actively hid the dangers of Chlorpyrifos's neurotoxicity by failing to report adverse health effects of Chlorpyrifos exposure to the EPA, conducting shoddy and misleading

studies of Chlorpyrifos exposure, and falsely marketing Chlorpyrifos as safe for long-term use, despite being repeatedly caught out for doing so.

83. Rather than redesign Chlorpyrifos, withdraw it from the market, or even warn the public about Chlorpyrifos's neurotoxicity, Defendants fought strenuously to forestall regulation of Chlorpyrifos. For example, Defendants responded to the EPA's 2016 decision to revoke all Chlorpyrifos tolerances by intensely lobbying the EPA through their front group CropLife America. Soon after the 2017 change in administration, CropLife America's top brass met behind closed doors with the EPA's new leadership. The lobbying worked. Soon after the meeting, the EPA announced that it was abandoning the analysis of its own scientists in favor of those at the industry-friendly Department of Agriculture and reversing its stated intention to ban Chlorpyrifos. Contemporaneously, the EPA finally responded to PANNA/NRDC's 2007 petition, denying the petition on the dubious premise that it would issue a final scientific decision regarding Chlorpyrifos at the time of Chlorpyrifos's next re-registration deadline, in October 2022. Less than two months later, a CropLife America lobbyist was appointed senior adviser to the Secretary of Agriculture, the very agency whose analysis was used to override the EPA scientists who recommended banning Chlorpyrifos.

Plaintiff Was An End-User of Chlorpyrifos Who Was Exposed in A Reasonably-Foreseeable Way

84. Plaintiff Alexander Ramos was regularly exposed to Chlorpyrifos in his connection with his work for a pest control company between 1992 and 2015. During this period, he was exposed to Chlorpyrifos designed, manufactured, distributed, and/or sold by Defendants. Plaintiff applied Chlorpyrifos via multiple means, including by spraying from a truck-mounted tank and by handheld sprayers. Plaintiff was exposed to Chlorpyrifos when he personally mixed the chemical, when he personally applied the chemical, and when he was present while others applied the

chemical. He was diagnosed with Parkinson's disease in 2017. He files this suit within two years of learning of the connection between his Chlorpyrifos exposure and his Parkinson's disease.

85. At all times during which Plaintiff was exposed to Chlorpyrifos, safer alternatives were available, and safer designs were technologically and economically feasible. For example, numerous broad-spectrum pyrethroid and carbamate insecticides, as well as at least one broad-spectrum neonicotinoid insecticide, were available during the period when Plaintiff was exposed to Chlorpyrifos.

Parkinson's Disease Is Progressive, Debilitating, Lifelong, Incurable, and Ultimately Fatal

86. Parkinson's disease is a progressive neurodegenerative disorder of the brain that primarily affects the motor system—the part of the central nervous system that controls movement.

87. The characteristic symptoms of Parkinson's disease are its “primary” motor symptoms: resting tremor (shaking movement when the muscles are relaxed), bradykinesia (slowness in voluntary movement and reflexes), rigidity (stiffness and resistance to passive movement), and postural instability (impaired balance).

88. Parkinson's disease's primary motor symptoms often result in “secondary” motor symptoms such as freezing of gait; shrinking handwriting; mask-like expression; slurred, monotonous, quiet voice; stooped posture; muscle spasms; impaired coordination; difficulty swallowing; and excess saliva and drooling caused by reduced swallowing movements.

89. Non-motor symptoms—such as loss of or altered sense of smell; constipation; low blood pressure on rising to stand; sleep disturbances; and depression—are present in most cases of Parkinson's disease, often for years before any of the primary motor symptoms appear.

90. There is currently no cure for Parkinson's disease; no treatment will stop or reverse its progression; and the treatments most commonly prescribed for its motor symptoms tend to

become progressively less effective, and to increasingly cause unwelcome side effects, the longer they are used.

91. The primary pathophysiological hallmark of Parkinson's disease is the death of dopaminergic¹⁴ neurons in a region of the brain called the substantia nigra. Like acetylcholinesterase, dopamine is a neurotransmitter (a chemical messenger that transmits signals from one neuron to another neuron, muscle cell, or gland cell) that is critical to the brain's control of motor function (among other things).

92. Once dopaminergic neurons die, they are not replaced; when enough dopaminergic neurons have died, dopamine production falls below the level the brain requires for proper control of motor function, resulting in the motor symptoms of Parkinson's disease.

93. The presence of Lewy bodies (insoluble aggregates of a protein called alpha-synuclein) in many of the remaining dopaminergic neurons in the substantia nigra is another of the primary pathophysiological hallmarks of Parkinson's disease.

94. Dopaminergic neurons are particularly susceptible to oxidative stress, a disturbance in the normal balance between oxidants present in cells and cells' antioxidant defenses.

95. Scientists who study Parkinson's disease generally agree that oxidative stress is a major factor—if not the precipitating cause of—the degeneration and death of dopaminergic neurons in the substantia nigra and the accumulation of Lewy bodies in the remaining dopaminergic neurons that are the primary pathophysiological hallmarks of the disease.

96. While the precise mechanism by which Chlorpyrifos causes Parkinson's disease is not perfectly understood, scientific evidence shows that Chlorpyrifos causes numerous changes in the brain that are consistent with mechanisms known to result in the hallmarks of Parkinson's

¹⁴ Dopaminergic neurons are the brain cells involved in the production and use of dopamine.

disease. For example, Chlorpyrifos exposure causes reactive oxygen species, damages DNA, and inhibits the activity of mitochondria. The loss of mitochondrial function is particularly important in the development of Parkinson's disease because proper functioning of the brain requires so much energy and, within the brain, the substantia nigra is a particularly "power-hungry" region; the diminution of mitochondrial function thus impacts the substantia nigra's dopaminergic cells to a greater degree than it does other regions of the brain.

97. Plaintiff's Parkinson's disease will progress to become entirely debilitating. Plaintiff will lose the ability to control his motor functions. They are or will become unable to live independently. Parkinson's disease has or will result in permanent physical injuries, pain, mental anguish, and disability. These injuries will continue for the rest of Plaintiff's life.

98. Plaintiff will be required to incur significant costs and expenses related to medical care and treatment, as well as related costs.

99. Plaintiff has become unable to work or hold down steady employment as a result of his Parkinson's disease.

100. Plaintiff has suffered general (non-economic) damages in a sum in excess of the jurisdictional minimum of this Court.

101. Plaintiff has suffered special (economic damages) in a sum in excess of the jurisdictional minimum of this Court.

Plaintiff's Claims Are Timely

102. Plaintiff filed suit within two years of learning that his exposure to Chlorpyrifos designed, formulated, and manufactured by Defendants caused his Parkinson's disease.

103. Plaintiff had no reason to suspect that his diagnosis had anything to do with their exposure.

104. Plaintiff was never told either by a medical professional, by media, or by the Defendants that exposure to Chlorpyrifos could cause him to suffer Parkinson's disease.

105. Plaintiff did not know of the claims and their underlying facts asserted in this complaint, nor could any reasonably prudent person know of such claims.

106. Plaintiff did not possess sufficient facts to put him on notice that the wrongs and the acts and omissions discussed herein had been committed because Defendants were and continue to conceal the acts and omissions noted above.

107. At all relevant times, Plaintiff exercised reasonable diligence in investigating potential causes of their injuries by discussing their injuries with healthcare providers. None of the conversations gave Plaintiff a reason to suspect, or reasonably should have given Plaintiff a reason to suspect, that Chlorpyrifos or Defendants' tortious conduct was the cause of such injuries.

108. Plaintiff was reasonably unaware, and had no reasonable way of knowing, that his injuries described above were caused by Defendants' conduct.

109. Further, Defendants' acts and omissions misled Plaintiff with regard to his causes of action and prevented him from asserting such rights because the facts which would support their causes of action as alleged in this complaint were not apparent to a reasonably prudent person.

110. Defendants also prevented Plaintiff from asserting his rights by committing affirmative independent acts of concealment as noted above upon which Plaintiff relied.

111. Defendants' misconduct and fraudulent concealment of the relevant facts deprived Plaintiff and his physicians of vital information essential to the pursuit of the claims in this complaint, without any fault or lack of diligence on their part. Plaintiff relied on Defendants' misrepresentations and omissions and therefore could not reasonably have known or become

aware of facts that would lead a reasonable, prudent person to make an inquiry to discover Defendants' tortious conduct.

112. Defendants also affirmatively induced Plaintiff to delay bringing this complaint by and through their acts and omissions as alleged herein.

113. Plaintiff relied on Defendants' misrepresentations.

Plaintiff Makes No Claims Under Federal Law

114. Chlorpyrifos is regulated by government authorities, but Plaintiff makes no allegations under those statutes.

115. The Pennsylvania Pesticide Control Act of 1973, which regulates the labeling, distribution, use, and application of pesticides within the State of Pennsylvania, requires that pesticides be registered with the Pennsylvania Department of Agriculture before they are sold in Pennsylvania.

116. The Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136 et seq., which regulates the distribution, sale, and use of pesticides within the U.S., requires that pesticides be registered with the U.S. Environmental Protection Agency ("EPA") prior to their distribution, sale, or use, except as described by FIFRA. 7 U.S.C. 136a(a).

117. FIFRA has no private right of action and state tort claims do not arise under FIFRA.

118. The distribution or sale of a pesticide that is misbranded is an offense under FIFRA, which provides in relevant part that "it shall be unlawful for any person in any State to distribute or sell to any person ... any pesticide which is ... misbranded." 7 U.S.C. § 136j(a)(1)(E). A pesticide is misbranded under FIFRA if, among other things:

- a. (1) its labeling bears any statement, design, or graphic representation relative thereto or to its ingredients which is false or misleading in any particular, 7 U.S.C. § 136(q)(1)(A);
- b. (2) the labeling accompanying it does not contain directions for use which are necessary for effecting the purpose for which the product is intended and if complied with, together with any requirements imposed under section 136a(d) of this title, are adequate to protect health and the environment, 7 U.S.C. § 136(q)(1)(F); or
- c. (3) the label does not contain a warning or caution statement which may be necessary and if complied with, together with any requirements imposed under section 136a(d) of this title, is adequate to protect health and the environment,” 7 U.S.C. § 136(q)(1)(G).

119. As a result, a pesticide may be misbranded despite an EPA determination that it met FIFRA’s registration criteria. In other words, notwithstanding its registration, a pesticide is misbranded if its label contains “false or misleading” statements, has inadequate instructions for use, or omits warnings or cautionary statements necessary to protect human health. Similarly, a pesticide may be found to cause unreasonable adverse effects on humans when used according to the approved label despite a determination by the EPA that it would not.

120. Plaintiff does not seek in this action to impose on Defendants any labeling or packaging requirement in addition to or different from those required under FIFRA. Any allegation in this Complaint that a Defendant breached a duty to provide adequate directions for the use of or warnings about Chlorpyrifos, breached a duty to provide adequate packaging for Chlorpyrifos, concealed, suppressed, or omitted to disclose any material fact about Chlorpyrifos, or engaged in

any unfair or deceptive practice regarding Chlorpyrifos, is intended and should be construed to be consistent with that alleged breach concealment, suppression, or omission, or unfair or deceptive practice having rendered the Chlorpyrifos “misbranded” under FIFRA. However, Plaintiff brings claims and seeks relief in this action only under state law. Plaintiff does not bring any claims or seek any relief in this action under FIFRA.

121. Plaintiff’s causes of action arise solely under state law.

CAUSES OF ACTION

COUNT I— NEGLIGENCE (ALL DEFENDANTS)

122. Plaintiff incorporates the foregoing paragraphs as if set forth fully herein.

123. Defendants had a duty to exercise reasonable care in the designing, researching, testing, manufacturing, marketing, supplying, promoting, packaging, sale, and/or distribution of Chlorpyrifos into the stream of commerce, including a duty to assure that the product would not cause users to suffer unreasonable, dangerous side effects.

124. Defendants failed to exercise ordinary care in the designing, researching, testing, manufacturing, marketing, supplying, promoting, packaging, sale, testing, quality assurance, quality control, and/or distribution of Chlorpyrifos into interstate commerce in that Defendants knew or should have known that using Chlorpyrifos created a high risk of unreasonable, dangerous side effects, including, but not limited to, the development of Parkinson’s disease, as well as other severe and personal injuries which are permanent and lasting in nature, physical pain and mental anguish, including diminished enjoyment of life, as well as need for lifelong medical treatment, monitoring, and/or medications.

125. The negligence by the Defendants, its agents, servants, and/or employees, included but was not limited to the following acts and/or omissions:

- a. Manufacturing, producing, promoting, formulating, creating, and/or designing Chlorpyrifos without thoroughly testing it;
- b. Failing to test Chlorpyrifos and/or failing to adequately, sufficiently, and properly test Chlorpyrifos;
- c. Not conducting sufficient testing programs to determine whether or not Chlorpyrifos was safe for use; in that Defendants herein knew or should have known that Chlorpyrifos was unsafe and unfit for use by reason of the dangers to its users;
- d. Not conducting sufficient testing programs and studies to determine Chlorpyrifos's neurotoxic properties even after Defendants had knowledge that Chlorpyrifos is, was, or could be neurotoxic;
- e. Negligently failing to adequately and correctly warn Plaintiff, the public, the medical and agricultural professions, and the EPA of the dangers of Chlorpyrifos;
- f. Negligently failing to petition the EPA to strengthen the warnings associated with Chlorpyrifos;
- g. Failing to provide adequate cautions and warnings to protect the health of users, handlers, applicators, and persons who would reasonably and foreseeably come into contact with Chlorpyrifos;
- h. Negligently marketing, advertising, and recommending the use of Chlorpyrifos without sufficient knowledge as to its dangerous propensities;
- i. Negligently representing that Chlorpyrifos was safe for use for its intended purpose, and/or that Chlorpyrifos was safer than ordinary and common items such as caffeine, when, in fact, it was unsafe;

- j. Negligently representing that Chlorpyrifos had equivalent safety and efficacy as other insecticides;
 - k. Negligently designing Chlorpyrifos in a manner which was dangerous to its users;
 - l. Negligently manufacturing Chlorpyrifos in a manner which was dangerous to its users;
 - m. Negligently producing Chlorpyrifos in a manner which was dangerous to its users;
 - n. Negligently formulating Chlorpyrifos in a manner which was dangerous to its users;
 - o. Concealing information from Plaintiff while knowing that Chlorpyrifos was unsafe, dangerous, and/or non-conforming with EPA regulations; and
 - p. Improperly concealing and/or misrepresenting information from Plaintiff, scientific and medical professionals, and/or the EPA, concerning the severity of risks and dangers of Chlorpyrifos compared to other forms of insecticides.
126. Negligently selling Chlorpyrifos with a false and misleading label.
127. Defendants under-reported, underestimated, and downplayed the serious dangers of Chlorpyrifos.
128. Defendants negligently and deceptively compared the safety risks and/or dangers of Chlorpyrifos with common everyday foods such as caffeine, and other insecticides.
129. Defendants were negligent and/or violated applicable state law in the designing, researching, supplying, manufacturing, promoting, packaging, distributing, testing, advertising, warning, marketing, and selling of Chlorpyrifos in that they:

- a. Failed to use ordinary care in designing and manufacturing Chlorpyrifos so as to avoid the aforementioned risks to individuals when Chlorpyrifos was used as an insecticide;
- b. Failed to accompany its product with proper and/or accurate warnings regarding all possible adverse side effects associated with the use of Chlorpyrifos;
- c. Failing to submit for EPA approval proposed labels for Chlorpyrifos products that contain a warning that Chlorpyrifos exposure can cause Parkinson's disease;
- d. Failed to accompany its product with proper warnings regarding all possible adverse side effects concerning the failure and/or malfunction of Chlorpyrifos;
- e. Failed to accompany its product with accurate warnings regarding the risks of all possible adverse side effects concerning Chlorpyrifos;
- f. Failed to warn Plaintiff of the severity and duration of such adverse effects, as the warnings given did not accurately reflect the symptoms, or severity of the side effects including, but not limited to, the development of Parkinson's disease;
- g. Failed to conduct adequate testing, clinical testing and post-marketing surveillance to determine the safety of Chlorpyrifos;
- h. Negligently misrepresented the evidence of Chlorpyrifos's neurotoxicity;
- i. Were otherwise careless and/or negligent in the design, manufacture, marketing, distribution, and/or sale of Chlorpyrifos.

130. Despite the fact that Defendants knew or should have known that Chlorpyrifos causes, or could cause, unreasonably dangerous side effects, Defendants continued and continues to market, manufacture, distribute, and/or sell Chlorpyrifos to consumers, including Plaintiff.

131. Defendants knew or should have known that consumers such as Plaintiff would foreseeably suffer injury as a result of Defendants' failure to exercise ordinary care, as set forth above.

132. Defendants' violations of law and/or negligence were the proximate cause of Plaintiff's injuries, harm and economic loss, which Plaintiff suffered and/or will continue to suffer.

133. Defendants' negligence in the design, manufacture, marketing, distribution, and sales of Chlorpyrifos demonstrates a high degree of moral culpability, as it exhibits intentional or deliberate wrongdoing, fraudulent or evil motives, and/or conscious acts that willfully and wantonly disregard the rights of others, including Plaintiff.

134. As a result of the foregoing acts and omissions, Plaintiff suffered from serious and dangerous side effects including, but not limited to, Parkinson's disease, as well as other severe and personal injuries which are permanent and lasting in nature, physical pain and mental anguish, diminished enjoyment of life, and financial expenses for hospitalization and medical care.

**COUNT II—STRICT PRODUCTS LIABILITY FAILURE TO WARN
(ALL DEFENDANTS)**

135. Plaintiff incorporates the foregoing paragraphs as if set forth fully herein.

136. Defendants have engaged in the business of selling, testing, distributing, supplying, manufacturing, marketing, and/or promoting Chlorpyrifos, and through that conduct have knowingly and intentionally placed Chlorpyrifos into the stream of commerce with full knowledge that it reaches consumers, such as Plaintiff, who are exposed to it through ordinary and reasonably foreseeable uses.

137. Defendants did in fact sell, distribute, supply, manufacture, and/or promote Chlorpyrifos to Plaintiff. Additionally, Defendants expected the Chlorpyrifos that they were selling, distributing, supplying, manufacturing, and/or promoting to reach – and Chlorpyrifos did

in fact reach – consumers, including Plaintiff, without any substantial change in the condition of the product from when it was initially distributed by Defendants.

138. At the time of manufacture, Defendants could have provided warnings or instructions regarding the full and complete risks of Chlorpyrifos and chlorpyrifos-containing products because they knew or should have known of the unreasonable risks of harm associated with the use of and/or exposure to such products.

139. At all times herein mentioned, Chlorpyrifos was defective and unsafe in manufacture such that it was unreasonably dangerous to the user, and was so at the time it was distributed by Defendants and at the time Plaintiff was exposed to and/or ingested the product. The defective condition of Chlorpyrifos was due in part to the fact that it was not accompanied by proper warnings regarding its neurotoxic qualities and possible side effects, including, but not limited to, developing Parkinson's disease as a result of exposure and use.

140. Chlorpyrifos did not contain a warning or caution statement, which was necessary and, if complied with, was adequate to protect the health of those exposed in violation of 7 U.S.C. § 136j(a)(1)(E).

141. Defendants' failure to include a warning or caution statement which was necessary and, if complied with, was adequate to protect the health of those exposed, violated 7 U.S.C. § 136j(a)(1)(E) as well as the laws of the State of New York.

142. Defendants could have amended the label of Chlorpyrifos to provide additional warnings.

143. Defendants never proposed a Chlorpyrifos label to the EPA that contained a warning that exposure to Chlorpyrifos can cause Parkinson's disease.

144. This defect caused serious injury to Plaintiffs, who used Chlorpyrifos in its intended and foreseeable manner.

145. At all times herein mentioned, Defendants had a duty to properly design, manufacture, compound, test, inspect, package, label, distribute, market, examine, maintain supply, provide proper warnings, and take such steps to assure that the product did not cause users to suffer from unreasonable and dangerous side effects.

146. Defendants labeled, distributed, and promoted the aforesaid product that it was dangerous and unsafe for the use and purpose for which it was intended.

147. Defendants failed to warn of the nature and scope of the side effects associated with Chlorpyrifos, namely its neurotoxic properties and its propensity to cause or serve as a substantial contributing factor in the development of Parkinson's disease.

148. Defendants were aware of the probable consequences of the aforesaid conduct. Despite the fact that Defendants knew or should have known that Chlorpyrifos caused serious injuries, Defendants failed to exercise reasonable care to warn of the dangerous neurotoxic properties and side effect of developing Parkinson's disease from Chlorpyrifos exposure, even though these side effects were known or reasonably scientifically knowable at the time of distribution. Defendants willfully and deliberately failed to avoid the consequences associated with its failure to warn, and in doing so, Defendants acted with a conscious disregard for Plaintiff's safety.

149. At the time of exposure, Plaintiff could not have reasonably discovered any defect in Chlorpyrifos prior through the exercise of reasonable care.

150. Defendants, as the manufacturer and/or distributor of the subject product, are held to the level of knowledge of an expert in the field.

151. Plaintiffs reasonably relied upon the skill, superior knowledge, and judgment of Defendants.

152. Had Defendants properly disclosed the risks associated with Chlorpyrifos products, Plaintiff would have avoided the risk of Parkinson's disease by not using Chlorpyrifos.

153. The information that Defendants did provide or communicate failed to contain adequate warnings and precautions that would have enabled Plaintiff, and similarly situated individuals, to utilize the product safely and with adequate protection. Instead, Defendants disseminated information that was inaccurate, false, and misleading and which failed to communicate accurately or adequately the comparative severity, duration, and extent of the risk of injuries associated with use of and/or exposure to Chlorpyrifos; continued to promote the efficacy of Chlorpyrifos, even after they knew or should have known of the unreasonable risks from use or exposure; and concealed, downplayed, or otherwise suppressed, through aggressive marketing and promotion, any information or research about the risks and dangers of exposure to Chlorpyrifos.

154. To this day, Defendants have failed to adequately warn of the true risks of Plaintiff's injuries associated with the use of and exposure to Chlorpyrifos.

155. As a result of its inadequate warnings, Defendants' Chlorpyrifos products were defective and unreasonably dangerous when they left the possession and/or control of Defendants, were distributed by Defendants, and used by Plaintiff.

156. Defendants' negligence in the design, manufacture, marketing, distribution, and sales of Chlorpyrifos demonstrates a high degree of moral culpability, as it exhibits intentional or deliberate wrongdoing, fraudulent or evil motives, and/or conscious acts that willfully and wantonly disregard the rights of others, including Plaintiff.

157. As a direct and proximate result of Defendants' actions as alleged herein, and in such other ways to be later shown, the subject product caused Plaintiff to sustain injuries as herein alleged.

**COUNT III— STRICT PRODUCTS LIABILITY DESIGN DEFECT
(ALL DEFENDANTS)**

158. Plaintiff incorporates the foregoing paragraphs as if set forth fully herein.

159. At all times herein mentioned, the Defendants designed, researched, manufactured, tested, advertised, promoted, sold, and distributed Chlorpyrifos that was used by Plaintiff.

160. Defendants' Chlorpyrifos was expected to and did reach the usual consumers, handlers, and persons coming into contact with said product without substantial change in the condition in which it was produced, manufactured, sold, distributed, and marketed by the Defendants.

161. At those times, Chlorpyrifos was in an unsafe, defective, and inherently dangerous condition, which was dangerous to users and, in particular, to Plaintiff.

162. The Chlorpyrifos designed, researched, manufactured, tested, advertised, promoted, marketed, sold, and distributed by Defendants was defective in design or formulation in that, when it left the hands of the manufacturer and/or suppliers, the foreseeable risks exceeded the benefits associated with the design or formulation of Chlorpyrifos.

163. The Chlorpyrifos designed, researched, manufactured, tested, advertised, promoted, marketed, sold, and distributed by Defendants was defective in design and/or formulation, in that, when it left the hands of the Defendants' manufacturers and/or suppliers, it was unreasonably dangerous, unreasonably dangerous in normal use, and it was more dangerous than an ordinary consumer would expect.

164. At all times herein mentioned, Chlorpyrifos was in a defective condition and unsafe, and Defendants knew or had reason to know that said product was defective and unsafe, especially when used in the form and manner as provided by the Defendants. In particular, Defendants' Chlorpyrifos was defective in the following ways:

- a. When placed in the stream of commerce, Defendants' Chlorpyrifos products were defective in design and formulation and, consequently, dangerous to an extent beyond that which an ordinary consumer would anticipate.
- b. When placed in the stream of commerce, Defendants' Chlorpyrifos products were unreasonably dangerous in that they were hazardous and posed a grave risk of Parkinson's disease and other serious illnesses when used in a reasonably anticipated manner.
- c. When placed in the stream of commerce, Defendants' Chlorpyrifos products contained unreasonably dangerous design defects and were not reasonably safe when used in a reasonably anticipated manner.
- d. Defendants did not sufficiently test, investigate, or study their Chlorpyrifos products.
- e. Exposure to Chlorpyrifos presents a risk of harmful side effects that outweigh any potential utility stemming from the use of the insecticide.
- f. Defendants knew or should have known at the time of marketing their Chlorpyrifos products that exposure to Chlorpyrifos and could result in Parkinson's disease and other severe illnesses and injuries.
- g. Defendants did not conduct adequate post-marketing surveillance of their Chlorpyrifos products.

h. Defendants knew, or should have known, that their Chlorpyrifos was in a defective condition.

165. At the time of Plaintiff's use of and exposure to Chlorpyrifos, the utility of Chlorpyrifos's design did not outweigh the risk inherent in its marketing and sale in light of Chlorpyrifos's utility to the public as a whole, its utility to Plaintiff in particular, the likelihood that Chlorpyrifos will cause injury, the availability of safer alternative designs, the possibility of designing, manufacturing, and labeling Chlorpyrifos so that it is safer but remains functional and reasonably priced, and Defendants' ability to spread the cost of safety-related design changes.

166. Plaintiff was exposed to Defendants' Chlorpyrifos, as described above, without knowledge of Chlorpyrifos's dangerous characteristics.

167. At the time of Plaintiff's use of and exposure to Chlorpyrifos, Chlorpyrifos was being used for the purposes and in a manner normally intended, as a broad-spectrum insecticide.

168. Defendants, with this knowledge, voluntarily designed their Chlorpyrifos with a dangerous condition for use by the public and, in particular, Plaintiff.

169. Defendants had a duty to create a product that was not unreasonably dangerous for its normal, intended use.

170. Defendants created a product that was and is unreasonably dangerous for its normal, intended use.

171. Defendants marketed and promoted a product in such a manner so as to make it inherently defective as the product downplayed its suspected, probable, and established health risks inherent with its normal, intended use.

172. The Chlorpyrifos designed, researched, manufactured, tested, advertised, promoted, marketed, sold, and distributed by Defendants was manufactured defectively in that

Chlorpyrifos left the hands of Defendants in a defective condition and was unreasonably dangerous to its intended users.

173. The Chlorpyrifos designed, researched, manufactured, tested, advertised, promoted, marketed, sold, and distributed by Defendants reached its intended users in the same defective and unreasonably dangerous condition in which the Defendants' Chlorpyrifos was manufactured.

174. Defendants designed, researched, manufactured, tested, advertised, promoted, marketed, sold, and distributed a defective product, which created an unreasonable risk to the health of consumers and to Plaintiff in particular, and Defendants are therefore strictly liable for the injuries sustained by Plaintiff.

175. Plaintiffs could not, by the exercise of reasonable care, have discovered Chlorpyrifos' defects herein mentioned or perceived its danger.

176. By reason of the foregoing, the Defendants have become strictly liable to Plaintiff for the manufacturing, marketing, promoting, distribution, and selling of a defective product, Chlorpyrifos.

177. Defendants' defective design of Chlorpyrifos amounts to willful, wanton, and/or reckless conduct by Defendants.

178. Defects in Defendants' Chlorpyrifos were the cause or a substantial factor in causing Plaintiff's injuries.

179. Defendants' negligence in the design, manufacture, marketing, distribution, and sales of Chlorpyrifos demonstrates a high degree of moral culpability, as it exhibits intentional or deliberate wrongdoing, fraudulent or evil motives, and/or conscious acts that willfully and wantonly disregard the rights of others, including Plaintiff.

180. As a result of the foregoing acts and omission, Plaintiff developed Parkinson's disease, and suffered severe and personal injuries, which are permanent and lasting in nature, physical pain and mental anguish, including diminished enjoyment of life, and financial expenses for hospitalization and medical care.

**COUNT IV — UNFAIR AND DECEPTIVE BUSINESS PRACTICES
(ALL DEFENDANTS)**

181. Plaintiff incorporates the foregoing paragraphs as if set forth fully herein.

182. Defendants falsely advertised and marketed Chlorpyrifos as safe to use when, in fact, Chlorpyrifos is neurotoxic and causes Parkinson's disease to those exposed by reasonably foreseeable use of Chlorpyrifos, including Plaintiff.

183. Defendants knew or should have known that their unfair and deceptive advertising and marketing of Chlorpyrifos was likely to cause substantial injury which was not reasonably avoidable by consumers, including Plaintiff, and that any benefits to consumers of the unfair and deceptive advertising of Chlorpyrifos did not outweigh the substantial injuries to consumers, including Plaintiff, resulting from Defendants' actions with regard to Chlorpyrifos.

184. Defendants' unfair and deceptive advertising and marketing of Chlorpyrifos materially took advantage of the lack of understanding by consumers, including Plaintiff, of the neurotoxicity and other dangers associated with the reasonably foreseeable use of Chlorpyrifos.

185. By obscuring the neurotoxic dangers of Chlorpyrifos, Defendants took advantage of the inability of consumers, including Plaintiff, to protect their health and wellbeing from Chlorpyrifos's neurotoxicity, including its propensity to cause Parkinson's disease when used in a manner reasonably foreseeable to Defendants.

186. By failing to include a Parkinson's warning on the Chlorpyrifos label, Defendants took unreasonable advantage of the reasonable reliance of consumers, including Plaintiff, on the

warning labels and other advertising and marketing materials used by Defendants to market and sell Chlorpyrifos.

187. By engaging in these unfair and deceptive trade practices, Defendants violated applicable state consumer protection laws, including New York General Business Law Section 349-350 and the Pennsylvania Unfair Trade Practices and Consumer Protection Law.

188. As a result of the foregoing acts and omission, Plaintiff developed Parkinson's disease, and suffered severe and personal injuries, which are permanent and lasting in nature, physical pain and mental anguish, including diminished enjoyment of life, and financial expenses for hospitalization and medical care.

**COUNT V — PUNITIVE DAMAGES
(ALL DEFENDANTS)**

189. Plaintiff incorporates the foregoing paragraphs as if set forth fully herein.

190. Defendants' acts and omissions with regard to Chlorpyrifos constitute willful or wanton negligence or recklessness.

191. In engaging in the acts and omissions described herein, Defendants acted with a high degree of moral culpability which manifests a conscious disregard of the rights of others.

192. As a result of the foregoing acts and omission, Plaintiff developed Parkinson's disease, and suffered severe and personal injuries, which are permanent and lasting in nature, physical pain and mental anguish, including diminished enjoyment of life, and financial expenses for hospitalization and medical care.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that this Court enter judgment in Plaintiff's favor for compensatory damages, together with interest, costs herein incurred, attorneys' fees,

punitive damages, and all other relief as this Court deems just and proper. Additionally, Plaintiff demands a jury trial on all issues contained herein.

Dated: June 16, 2026

Respectfully Submitted,


By: /s/ Aimee Wagstaff
Aimee H. Wagstaff, Esq.
PA Bar No. 337573
Ian Forgie, Esq.
(pro hac vice forthcoming)
WAGSTAFF LAW FIRM
Colo Bar 36819
940 N. Lincoln Street Denver, CO 80203
Tel: (303) 376-6360
Fax: (888) 875-2889
Email: Awagstaff@wagstafflawfirm.com
Email: Iforgie@wagstafflawfirm.com

Counsel for Plaintiff

VERIFICATION

I, Alexander Ramos, hereby state that I am a Plaintiff in this action and I verify that the statements made in the foregoing Complaint are true and correct to the best of my knowledge, information and belief. I understand that the statements therein are made subject to the penalties of 18 Pa. C.S. § 4904 relating to unsworn falsification to authorities.

Date: June 16, 2026



Alexander Ramos