

**UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF ILLINOIS**

EUGENE BYNES, JR.,

Plaintiff,

v.

SYNGENTA CROP PROTECTION, LLC;  
SYNGENTA AG; CHEVRON U.S.A., INC.; and  
CHEVRON PHILLIPS CHEMICAL COMPANY  
LP,

Defendants.

Court File No.: 3:21-pq-789

**COMPLAINT FOR DAMAGES**

DEMAND FOR JURY TRIAL

Plaintiff Eugene Bynes, Jr. (hereinafter referred to as “Plaintiff”), by and through his undersigned attorneys, alleges upon information and belief and complains of Defendants Syngenta Crop Protection, LLC (“SCP”) and Syngenta AG (“SAG”) (together with their predecessors-in-interest, referred to collectively as the “Syngenta Defendants” or “Syngenta”); Chevron U.S.A., Inc. and Chevron Phillips Chemical Company, LP, together with their predecessors-in-interest, and states:

**NATURE OF THE CASE**

1. This case arises out of Defendants’ wrongful conduct in connection with the development, manufacture, testing, packaging, promotion, marketing, advertising, distribution, and sale of paraquat dichloride, also known as paraquat methosulfate (“Paraquat”), the active ingredient in herbicide products that are now known to increase the risk of Parkinson’s disease. Since 1964, Paraquat has been used in the United States to kill broadleaf weeds and grasses before the planting or emergence of more than 100 field, fruit, vegetable, and plantation crops, to control weeds in orchards, and to desiccate (dry) plants before harvest. Products that contain Paraquat as

an active ingredient may be known to growers under many brand names, e.g., Gramoxone, Firestorm, Helmquat, and Parazone. Plaintiff used and/or was otherwise exposed to Paraquat and subsequently developed Parkinson's Disease as a result of his use of and exposure to Paraquat.

## **PARTIES**

2. Plaintiff Eugene Bynes ("Plaintiff") is a citizen and resident of Arapahoe County, in the State of Colorado. Plaintiff used, applied, and was otherwise exposed to Paraquat in and around Middlesex County in the State of Massachusetts.

3. Defendant Syngenta Crop Protection, LLC ("SCP") is a Delaware limited liability company with its principal place of business in Greensboro, North Carolina. SCP is a wholly owned subsidiary of Syngenta AG.

4. SCP advertises, markets, promotes, sells and distributes Paraquat and other products to distributors, dealers, applicators, and farmers throughout the United States.

5. Defendant Syngenta AG ("SAG") is a corporation organized and existing under the laws of Switzerland with its principal place of business at Schwarzwaldallee 215, 4058 Basel Stadt, Switzerland. Syngenta AG was formed in 2000 as a result of the merger of Novartis Agribusiness and Zeneca Agrochemicals. ChemChina, a Chinese state-owned entity, acquired Syngenta AG in 2017.

6. Syngenta AG holds itself out as a global company and maintains a central function that governs SCP, and other business entities under the Syngenta umbrella.

7. SAG, through its Board of Directors and/or the Executive Committee, exercises significant control over and coordinates all Syngenta businesses, including that of SCP. Indeed, employee reporting relationships for the Syngenta businesses cross corporate lines and members

of Syngenta AG's Board of Directors and/or the Executive Committee also serve as members on the Board of Directors for SCP.

8. Defendant Chevron U.S.A., Inc. is a Pennsylvania corporation with its principal place of business in San Ramon in Contra Costa County, California. Chevron U.S.A., Inc. is the successor in interest to Chevron Chemical Company.

9. Defendant Chevron Phillips Chemical Company, LP is a Delaware limited partnership with its principal place of business in The Woodlands, Texas.

10. Defendants Chevron U.S.A., Inc. and Chevron Phillips are collectively referred to herein as "Chevron."

11. The Chevron defendants similarly came about through a series of mergers and acquisitions.

12. In 1928, Chevron Chemical Company was organized under the laws of the State of Delaware.

13. In 1997, Chevron Chemical Company merged into Chevron Chemical Company, LLC, a limited liability company under the laws of the State of Delaware.

14. In 2000, Chevron Chemical Company, LLC merged into and/or continued to operate under the same or similar ownership and management as Defendant Chevron Phillips Chemical Company, LP.

15. Chevron Phillips Chemical Company, LP is a successor by merger or continuation of business to its corporate predecessor Chevron Chemical Company, LLC.

16. Collectively, Defendants SCP, SAG, and Chevron are referred to herein as "Defendants."

17. Defendants worked in concert under agreements or other arrangements to act in a collective manner and/or in joint ventures regarding the actions and events addressed in this Complaint.

18. At all relevant times, Defendants were the agent, servant, employee, joint venture member, alter ego, successor-in-interest, and predecessor-in-interest of each of the other, and each was acting within the course and scope of their agency, service, joint venture, alter ego relationship, employment, and corporate interrelationship.

### **JURISDICTION AND VENUE**

19. This Court has jurisdiction over Defendants and this action pursuant to 28 U.S.C. § 1332 because there is complete diversity of citizenship between Plaintiff and each Defendant and the amount in controversy exceeds the jurisdictional amount.

20. This Court has supplemental jurisdiction pursuant to 28 U.S.C. § 1391.

21. Venue is proper within this District pursuant to 28 U.S.C. § 1407 and Case Management Order Number 1.

22. This Court has personal jurisdiction over Defendants because Defendants transact business in the District and conduct regular business within the District. Defendants knew that their Paraquat products are and were promoted, marketed and sold throughout the United States, including the State in which Plaintiff purchased, used, or was otherwise exposed to Paraquat, and Defendants exercised sufficient contacts with the State such that this Court's exercise of personal jurisdiction over them does not offend traditional notions of fair play and substantial justice.

## HISTORY OF PARAQUAT

23. In 1926, four British chemical companies merged to create the British company that was known as Imperial Chemical Industries Ltd. and ultimately was known as Imperial Chemical Industries PLC.

24. Imperial Chemical Industries, PLC (“ICI”), as discussed below, is a legacy company of Syngenta. ICI claims to have discovered the herbicidal properties of Paraquat in 1955.

25. ICI developed, researched, manufactured and tested Paraquat in the early 1960s and produced the first chemical paraquat formulation. ICI was awarded a U.S. patent on herbicide formulations containing paraquat in 1962.

26. ICI also performed and submitted the health and safety studies regarding Paraquat to the United States Department of Agriculture and the United States Environmental Protection Agency to secure the registration of Paraquat for use in the United States.

27. Paraquat became commercially available for use in the United States in 1964 under the brand name Gramoxone.® Paraquatis now one of the most commonly used herbicides in the United States.

28. In or about 1964, ICI and Chevron Chemical Company (“Chevron Chemical”) entered into an agreement regarding the licensing and distribution of Paraquat (“the ICI-Chevron Chemical Agreement” or “Agreement”). Pursuant to the terms of the Agreement, Chevron Chemical obtained an exclusive license to the patent and other materials which permitted Chevron Chemical to formulate, use and sell Paraquat under the name Gramoxone® and other names in the United States. The Agreement also permitted Chevron Chemical to sub-license with other entities. The ICI-Chevron Chemical Agreement was renewed or otherwise in effect until ICI paid for the early termination of the Agreement in 1986. In 1971, ICI also created or acquired a wholly owned

U.S. subsidiary organized under the laws of the State of Delaware, which at various times was known as Atlas Chemical Industries Inc., ICI North America Inc., ICI America Inc., and ICI United States Inc. This subsidiary was ultimately known as ICI Americas Inc. (“ICI Americas”).

29. ICI and ICI Americas subsequently entered into a series of acquisitions and mergers, which ultimately resulted in creation of the Syngenta Group, whose parent corporation is Defendant Syngenta AG (SAG). Additional spin-offs and mergers ensued resulting in Syngenta Crop Protection, Inc., which in 2010, was converted to Defendant Syngenta Crop Protection, LLC (SCP). SCP’s parent corporation is SAG.

30. After 1986, SCP, and/or its predecessors-in-interest sold and distributed, and continue to sell and distribute, Paraquat throughout the United States.

31. Thus, from approximately 1964 through the present, the Syngenta Defendants and Chevron or their predecessors-in-interest have manufactured, formulated, distributed, and sold Paraquat for use throughout the United States.

32. SCP is now the leading manufacturer of Paraquat in the United States.

### **PARAQUAT USE IN THE UNITED STATES**

33. Since approximately 1964, Paraquat has been used in the United States to kill broadleaf weeds and grasses prior to planting or pre-emergence on more than 100 field, fruit, vegetable, and plantation crops, to control weeds in orchards, and to desiccate or dry plants prior to harvest.

34. Paraquat is commonly sprayed multiple times per year on the same land, particularly when used to control weeds in orchards or on farms with multiple crops planted on the same land within a single growing season or year.

35. Defendants typically sell Paraquat to end-users in the form of liquid concentrates (and less commonly in the form of granular solids) designed to be diluted with water before or after loading it into the tank of a sprayer and applied by spraying it onto target weeds.

36. Paraquat is formulated with one or more “surfactants” to increase the ability of the herbicide to stay in contact with the leaf, penetrate the leaf’s waxy surface, and enter into plant cells.

37. Instructions accompanying Paraquat typically instruct end-users to add a surfactant or crop oil (which as typically formulated contains a surfactant) before use.

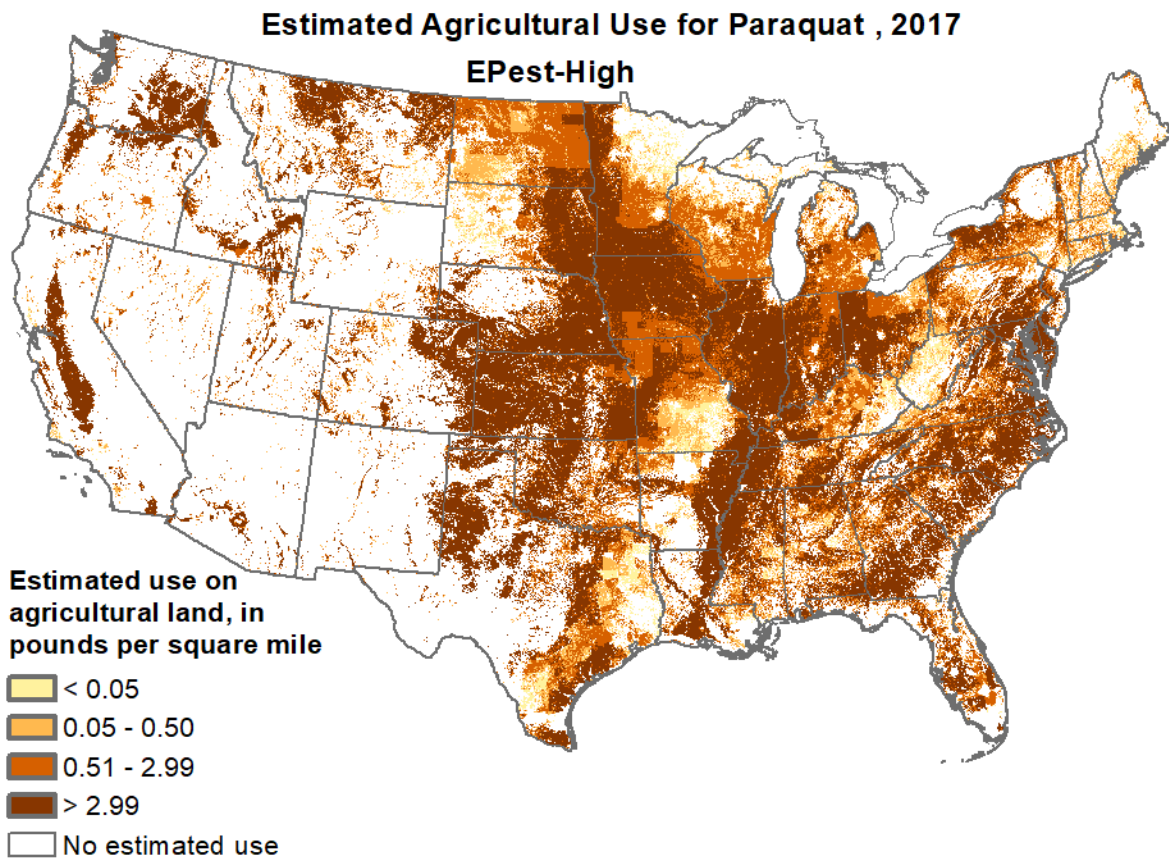
38. Users generally apply Paraquat with a knapsack sprayer, hand-held sprayer, aircraft (i.e., crop duster), truck with attached pressurized tank, or tractor-drawn pressurized tank.

39. When Paraquat was used in the manner intended or directed, or in a reasonably foreseeable manner, users of Paraquat would be exposed to Paraquat while it was being mixed and loaded into the tanks of sprayers, including as a result of spills, splashes, and leaks, or while spraying or in direct proximity of the spray.

40. Paraquat is widely used throughout the United States. Pursuant to the United States Geological Survey (2017) data, Paraquat agricultural use is particularly concentrated in the Midwest, parts of the South, Southeast, East Coast, and portions of California.<sup>1</sup>

---

<sup>1</sup> See [https://water.usgs.gov/nawqa/pnsp/usage/maps/show\\_map.php?year=2017&map=PARAQUAT&hilo=L&disp=Paraquat](https://water.usgs.gov/nawqa/pnsp/usage/maps/show_map.php?year=2017&map=PARAQUAT&hilo=L&disp=Paraquat), last visited April 26, 2021.

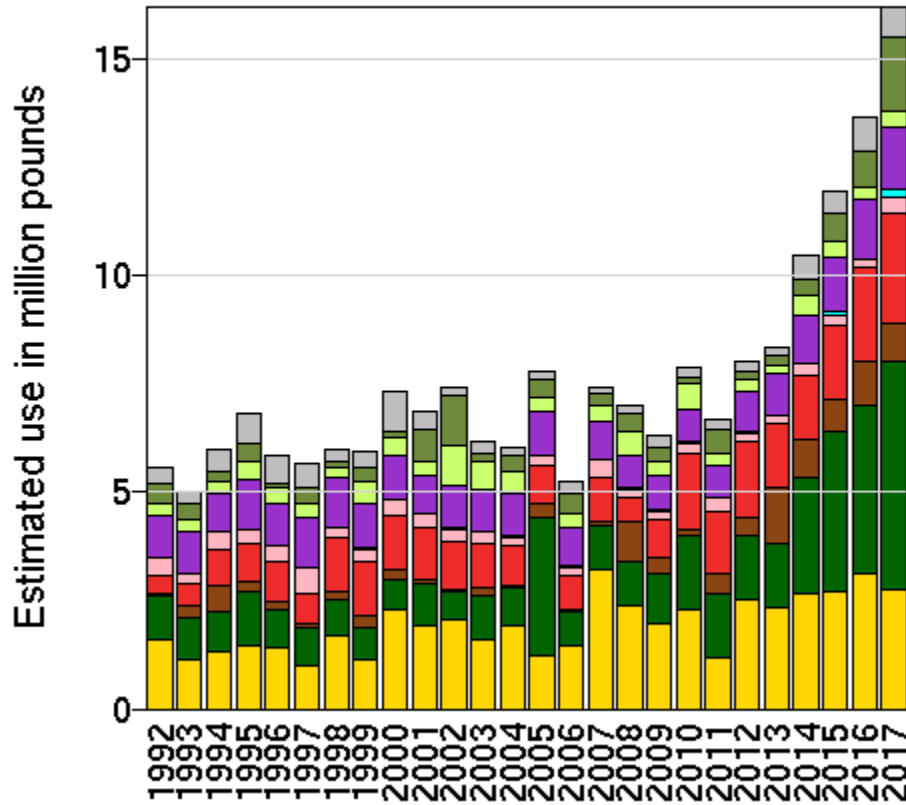


41. According to the USGS data, Paraquat use has doubled from 2013 to 2017, and now totals roughly 10,000,000 pounds annually.



42. Similarly, by 2017, Paraquat use on corn and soybean crops was extensive.<sup>2</sup>

## Use by Year and Crop



- Other crops
- Pasture and hay
- Alfalfa
- Orchards and grapes
- Rice
- Vegetables and fruit
- Cotton
- Wheat
- Soybeans
- Corn

<sup>2</sup>

See

[https://water.usgs.gov/nawqa/pnsp/usage/maps/show\\_map.php?year=2017&map=PARAQUAT&hilo=H](https://water.usgs.gov/nawqa/pnsp/usage/maps/show_map.php?year=2017&map=PARAQUAT&hilo=H), last visited April 26, 2021.

43. Indeed, use of Paraquat in the United States remains robust. Data from September 2020 indicates that Paraquat continues to be one of the most widely used herbicides in the United States, with an average of 8.5 million pounds applied annually to 15.8 million acres.

44. Since its initial sale in the United States, Paraquat has been used to kill broadleaf weeds and grasses before the planting or emergence of numerous field, fruit, vegetable and plantation crops, as well as for the control of weeds in orchards, and to desiccate (dry) plants before harvest. Paraquat use is also commonly used in no-till farming.

45. At all relevant times, it was reasonably foreseeable that when Paraquat was used in the manner intended or directed, i.e., in a reasonably foreseeable manner, users of Paraquat and persons nearby would be exposed to Paraquat while it was being mixed and loaded into (or removed from) the tanks of sprayers, including as a result of spills, splashes, or leaks.

46. At all relevant times, it was reasonably foreseeable that when Paraquat was used in the manner intended or directed, i.e., in a reasonably foreseeable manner, persons who sprayed Paraquat or who were in areas where Paraquat was being sprayed would be exposed to Paraquat, including as a result of spray drift, the movement of herbicide spray droplets from the target area to an area where herbicide application was not intended, typically by wind, and as a result of contact with sprayed plants.

47. At all relevant times, it was reasonably foreseeable that when Paraquat was used in the manner intended or directed, i.e., in a reasonably foreseeable manner, users of Paraquat and persons nearby would be exposed to Paraquat, including as a result of spills, splashes and leaks while equipment used to spray was being emptied or cleaned or clogged spray nozzles, lines, or valves were being cleared.

48. At all relevant times, it was reasonably foreseeable that Paraquat could enter the human body via absorption through or penetration of the skin, mucous membranes, and other epithelial tissues, including tissues of the mouth, nose and nasal passages, trachea, and conducting airways.

49. Paraquat is highly toxic to plants, animals, and humans. Indeed, Paraquat is designed to kill plants and weeds through a process known as oxidative stress. Unfortunately, this mechanism also causes significant injury in humans, including Parkinson's disease.

50. Moreover, Defendants knew or have had reason to know of the association between Paraquat and severe injury to humans, i.e., Parkinson's disease, for decades. Notwithstanding, Defendants continues to market and sell Paraquat in the United States and denies any association with its product and Parkinson's Disease.

#### **PARAQUAT CAUSES PARKINSON'S DISEASE**

51. Parkinson's disease is classified as a progressive neurodegenerative disorder of the brain that affects the portion of the central nervous system that controls movement.

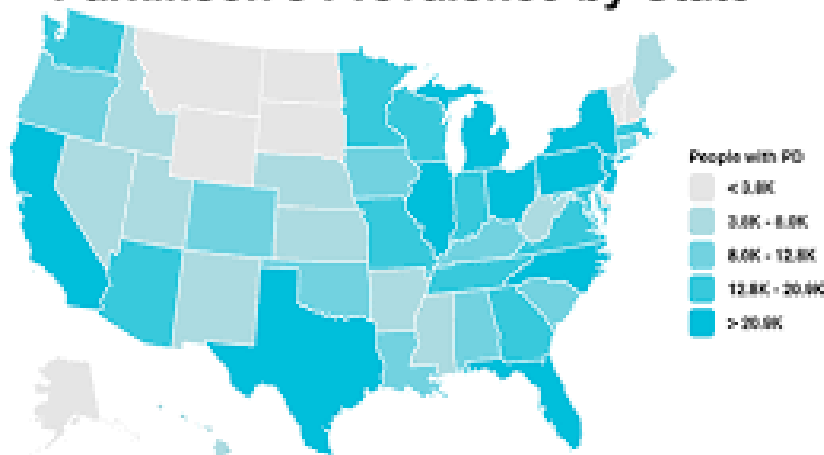
52. Approximately 60,000 Americans are diagnosed with Parkinson's disease each year. According to the Parkinson's Foundation, close to one million Americans have been diagnosed with Parkinson's disease.

53. According to researchers, the prevalence of Parkinson's disease is severely underestimated. Moreover, the rate of Parkinson's disease is particularly prevalent in the Midwest, California, Texas, Washington, and areas in the North and South East.<sup>3</sup>

---

<sup>3</sup> See <https://www.neurologyadvisor.com/topics/movement-disorders/parkinson-disease-prevalence-severely-underestimated-parkinsons-foundation-prevalence-project/>, last visited on April 26, 2021.

## Parkinson's Prevalence by State



54. The characteristic symptoms of Parkinson's disease may go undetected for years. However, symptoms often appear as impairment to the primary motor symptoms, including resting tremors, bradykinesia (slowness in movement and reflexes), rigidity (stiffness and resistance to passive movement), and postural instability (impair balance).

55. Parkinson's disease also manifests in secondary motor symptoms such as freezing of gait, shrinking handwriting, mask-like expression, slurred speech, monotonous or quiet voice, stooped posture, muscle spasms; impaired coordination; difficulty swallowing; excessive saliva; and/or drooling.

56. Individuals with Parkinson's disease may also experience non-motor symptoms, such as loss of or an altered sense of smell; constipation; low blood pressure; sleep disturbances; and depression. Unfortunately, these and other symptoms may linger for years prior to the onset of motor symptom impairment and, thus the disease is often undiagnosed or, at best, diagnosis is significantly delayed.

57. Once diagnosed, no treatment will stop or reverse progression of this disease. Moreover, the treatments commonly prescribed for Parkinson's disease tend to become

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

58. There is no cure for Parkinson's disease and people with Parkinson's disease are at higher risk of falling and serious infection, including pneumonia, and blood clots from their impaired mobility.

59. One of the primary pathophysiological hallmarks of Parkinson's disease is the selective degeneration and death of dopaminergic neurons (dopamine producing nerve cells) in a part of the brain called the substantia nigra pars compacta ("SNpc").

60. 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.

61. The death of dopaminergic neurons in the SNpc decreases the production of dopamine. Once dopaminergic neurons die, they are not replaced. When enough dopaminergic neurons have died, dopamine production falls below the level that the brain requires for proper control of motor function, resulting in the motor symptoms of Parkinson's disease.

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

63. Dopaminergic neurons are particularly susceptible to oxidative stress.

64. Scientists who study Parkinson's disease generally agree that oxidative stress is a major factor in the degeneration and death of dopaminergic neurons in the SNpc and the accumulation of Lewy bodies in the remaining dopaminergic neurons – which are the primary pathophysiological hallmarks of the disease.

65. Paraquat creates oxidative stress that causes or contributes to the degeneration and death of plant and animal cells. Indeed, Paraquat creates oxidative stress in the cells of plants and animals because of “redox properties” that are inherent in its chemical composition and structure: it is a strong oxidant, and it readily undergoes “redox cycling” in the presence of molecular oxygen, which is plentiful in living cells.

66. In other words, Paraquat creates oxidative stress because of the redox properties inherent in the chemical composition and structure of paraquat. More specifically, redox cycling occurs in the presence of molecular oxygen. This redox cycling interferes with cellular functions that are necessary to sustain life – i.e., photosynthesis in plants and cellular respiration in animal cells.

67. The same oxidation and redox cycling that makes Paraquat highly toxic to plant and animal cells, make Paraquat particularly toxic to human nerve cells, including dopaminergic neurons. This results in significant risk to users of Paraquat.

68. Additionally, the surfactants general used with Paraquat likely increase Paraquat’s toxicity to humans as the surfactants increase Paraquat’s ability to remain in contact with skin and other membranes or tissues.

69. Paraquat’s redox properties are well known to scientists.

70. Indeed, animal studies involving various routes of exposure have found that Paraquat creates oxidative stress that results in the degeneration and death of dopaminergic neurons in the SNpc, other pathophysiology consistent with Parkinson’s disease, and motor deficits and behavioral changes consistent with those commonly seen in human Parkinson’s disease.

71. Epidemiological studies have also found that exposure to Paraquat significantly increases the risk of contracting Parkinson's disease. A number of studies have found that the risk of Parkinson's disease is more than double in populations with occupational exposure to Paraquat compared to populations without such exposure.

72. Additionally, a March 2, 2016 EPA memorandum acknowledges the numerous studies linking Paraquat to Parkinson's disease and states “[t]here is a large body of epidemiology data on paraquat dichloride use and Parkinson's disease.”<sup>4</sup>

73. In 2019, researchers conducted a systematic review of the literature and meta-analysis to determine whether exposure to the herbicide paraquat was associated with the development of Parkinson's disease (PD). Observational studies that enrolled adults exposed to paraquat with PD as the outcome of interest were searched in the PubMed, Embase, LILACS, TOXNET, and Web of Science databases up to May 2019. Results from nine case-control studies indicated that PD occurrence was 25% higher in participants exposed to paraquat. *See, e.g.,* Vaccari, Carolina, et. al, *Paraquat and Parkinson's disease: a systematic review and meta-analysis of observational studies*, J. TOXICAL ENVIRON HEALTH B CRIT. REVIEW, 2019; 22(5-6):172-202.

74. Despite this knowledge, Paraquat remains available for purchase, currently by licensed applicators, in the United States market.<sup>5</sup>

75. Notwithstanding, numerous countries outside the United States have banned Paraquat. For example, Switzerland, the home of Syngenta AG headquarters, has prohibited the use of Paraquat since 1989, Paraquat use has been banned in the European Union since 2007 and Paraquat's use or sale in China has been prohibited since September 2020.

---

<sup>4</sup> Environmental Protection Agency, Paraquat Dichloride; Proposed Mitigation Decision (March 2, 2016), <https://www.regulations.gov/document/EPA-HQ-OPP-2011-0855-0031>.

<sup>5</sup> Paraquat is a “restricted use pesticide” under federal law pursuant to 40 C.F.R. § 152.175, which means that Paraquat is “limited to use by or under the direct supervision of a certified applicator.”

## PARAQUAT REGISTRATION

76. The Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”), 7 U.S.C. § 136 et seq., regulates the distribution, sale, and use of pesticides, including Paraquat, within the United States. FIFRA 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. § 136(a).

77. As part of the registration process, the EPA requires the registrant of the pesticide (e.g., Paraquat) to conduct a variety of tests to evaluate the potential for exposure to pesticides, toxicity to people and other potential non-target organisms, and other adverse effects on the environment.

78. Registration by the EPA is not an assurance or finding of safety. Rather, the EPA simply makes a determination in registering or re-registering a product that use of the product in accordance with its label directions “will not generally cause unreasonable adverse effects on the environment.” 7 U.S.C. § 136(a)(c)(5)(D).

79. FIFRA defines “unreasonable adverse effects on the environment” to mean “any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide.” 7 U.S.C. § 136(bb).

80. FIFRA generally requires that the registrant conduct health and safety testing of products such as Paraquat. However, FIFRA does not require the EPA itself to perform health and safety tests and the EPA generally does not conduct such tests.

81. Paraquat was registered in the United States in 1964. The EPA subsequently classified Paraquat dichloride as a Restricted Use Pesticide (RUP) due to high acute toxicity to animals and people from intentional or inadvertent exposure. This action was taken by the EPA



through regulations proposed in the September 1, 1977 (42 FR 44170) and finalized in the February 9, 1978 (43 FR 5782) issues of the FEDERAL REGISTER, which allowed for application of Paraquat by a certified applicator OR under the direct supervision of a certified applicator.

82. More recently, the EPA further limited use of Paraquat to certified applicators.

83. In Massachusetts, Statutes regarding Pesticide Control, Mass. Gen. Laws. Ann. Ch. 132B §1 (1994) et seq., also regulate the labeling, distribution, use, and application of pesticides. This statute requires that pesticides be registered with the Massachusetts Pesticide Board before they are distributed, sold, offered for sale, or transported within the State. 330 CMR 8.00: Mass. Gen. Law Ch. 132B §§ 5 and 7. Such statutes parallel the requirements of federal statutes and places no greater obligation on Defendants than that set forth in the federal requirements.

#### **PLAINTIFF'S EXPOSURE TO PARAQUAT**

84. Plaintiff applied and/or was otherwise exposed to Paraquat in and around Ayer, Massachusetts. Plaintiff worked cleaning and clearing firing ranges and was in close contact with Paraquat as he would mix, prepare, load, and spray Paraquat daily. Plaintiff also used a 3 gallon hand-held pressure sprayer to spray weeds and vegetation.

85. Plaintiff was repeatedly exposed to and inhaled, ingested, or absorbed Paraquat in the course of mixing, spraying, and otherwise applying Paraquat as well as from spray from the use of Paraquat around him.

86. After repeated and consistent Paraquat exposure, Plaintiff later began suffering neurological impairment. Doctors at Kaiser Permanente Skyline Medical Office subsequently diagnosed Plaintiff with Parkinson's disease in November 2010.

87. Paraquat entered Plaintiff's bloodstream, attacked his nervous system, and caused him to develop Parkinson's disease.

88. Until recently, Plaintiff had no reason to suspect his Parkinson's disease diagnosis was connected to his past Paraquat exposure.

### **FRAUDULENT CONCEALMENT AND TOLLING**

89. Plaintiff did not discover this earlier because he had no reason to suspect that his working with Paraquat could cause him to suffer Parkinson's disease.

90. Defendants took active steps to conceal this harmful side effect of Paraquat.

91. Indeed, in response to growing concerns regarding the safety of Paraquat, Syngenta published a website at [www.paraquat.com](http://www.paraquat.com) for the purpose of convincing the public that Paraquat is safe.

92. Syngenta's statements proclaiming the safety of Paraquat and disregarding its dangers were designed to mislead the agricultural community and the public at large – including Plaintiff.

93. Defendants knew or should have known that Paraquat was a highly toxic substance that can cause severe neurological injuries and impairment.

94. However, despite this knowledge, Defendants continued to promote its product as safe. In 2003, for example, Syngenta employee, Sherry Ford, acknowledged controversy surrounding the safety of Paraquat and a possible association with Parkinson's disease.

95. Defendants did not make this knowledge known to Plaintiff or the general public. Indeed, Defendants failed to adequately warn and instruct Plaintiff of a possible association between Paraquat use and Parkinson's disease.

96. Even today, Syngenta disavows any connection between Paraquat and Parkinson's disease. For example, the landing page for [www.paraquat.com](http://www.paraquat.com) begins with the "benefits"<sup>6</sup> of

---

<sup>6</sup> The website notes the "benefits" to the farm, the environment, and to rural communities. See <http://www.paraquat.com/en>, last visited on April 26, 2021.

Paraquat and states that “Paraquat is an important tool for farmers in the fight against glyphosate resistant weeds.”<sup>7</sup> The website also clearly states “Paraquat does not cause Parkinson’s Disease.”<sup>8</sup>

97. Defendants’ acts and omissions were a legal, proximate, and substantial factor in causing Plaintiff to suffer severe and permanent physical injuries, pain, mental anguish, and disability, as well as economic loss, and will continue to do so for the remainder of his life.

**CAUSES OF ACTION  
COUNT I  
STRICT PRODUCTS LIABILITY: DESIGN DEFECT**

98. Plaintiff incorporates by reference each allegation set forth in preceding paragraphs as if fully stated herein.

99. Defendants are liable to Plaintiff under a products liability theory for marketing a defectively-designed product, as well as for failing to adequately warn of the risk of severe neurological injury caused by chronic, low-dose exposure to Paraquat.

100. At all relevant times, Defendants and their corporate predecessors designed, manufactured, distributed, and sold Paraquat for use throughout the United States, including the State in which Plaintiff purchased and/or applied or was otherwise exposed to Paraquat.

101. At all relevant times and places, the Paraquat that Defendants and their corporate predecessors designed, manufactured, distributed, and sold was used in the intended or a reasonably foreseeable manner.

102. Plaintiff was exposed to Paraquat that Defendants and their corporate predecessors designed, manufactured, distributed, and sold. As a result of that exposure, Paraquat entered Plaintiff’s body causing Plaintiff to develop Parkinson’s disease.

---

<sup>7</sup> *Id.*

<sup>8</sup> See <http://www.paraquat.com/en/safety/safety-humans>, last visited on April 26, 2021.

103. The Paraquat that Defendants and their corporate predecessors designed, manufactured, distributed, and sold did not perform as safely as an ordinary consumer would have expected it to perform when used in the intended or a reasonably foreseeable manner, in that:

- a. it was designed, manufactured, formulated, and packaged such that it was likely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed; and
- b. when inhaled, ingested, or absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed, it was likely to cause or contribute to cause latent neurological damage that was both permanent and cumulative, and repeated exposures were likely to cause or contribute to cause clinically significant neurodegenerative disease, including PD, to develop long after exposure.

104. Alternatively, Defendants' and their corporate predecessors' Paraquat products were defectively designed in that the risk of danger inherent in the challenged design outweighed the benefits of such design, considering, among other relevant factors, the gravity of the danger posed by the challenged design, the likelihood that such danger would occur, the mechanical feasibility of a safer alternative design, the financial cost of an improved design, and the adverse consequences to the product and to the consumer that would result from an alternative design.

105. This defective condition existed in the Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed when it left the control of Defendants,

Defendants' corporate predecessors, and others with whom they acted in concert and was placed into the stream of commerce.

106. As a result of this defective condition, the Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed either failed to perform in the manner reasonably to be expected in light of its nature and intended function, or the magnitude of the dangers outweighed its utility.

107. The Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed was used in the intended and directed manner or a reasonably foreseeable manner.

**COUNT II**  
**STRICT PRODUCTS LIABILITY: FAILURE TO WARN**

108. Plaintiff incorporates by reference each allegation set forth in preceding paragraphs as if fully stated herein.

109. Defendants are also liable to Plaintiff under a products liability theory based on their failure to adequately warn of the risks of Paraquat.

110. At all times relevant to this claim, Defendants, Defendants' corporate predecessors, and others with whom they acted in concert were engaged in the business of designing, manufacturing, distributing, and selling pesticides, and designed, manufactured, distributed, and sold Paraquat intending or expecting that it would be sold and used throughout the United States, including the State in which Plaintiff purchased and/or was exposed to Paraquat.

111. When Defendants and their corporate predecessors manufactured and sold the Paraquat to which Plaintiff was exposed, it was known or knowable to Defendants and their

corporate predecessors in light of scientific knowledge that was generally accepted in the scientific community that:

- a. Paraquat was designed, manufactured, formulated, and packaged such that it was likely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed; and
- b. when inhaled, ingested, or absorbed into the body, it was likely cause latent neurological damage that was both permanent and cumulative, and that repeated, low-dose exposures were likely to cause neurodegenerative disease, including Parkinson's disease.

112. The Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed was in a defective condition that made it unreasonably dangerous when it was used in the intended and directed manner or a reasonably foreseeable manner, in that:

- a. it was not accompanied by directions for use that would have made it unlikely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed; and
- b. it did not contain a warning or caution statement, which was necessary and, if complied with, was adequate to protect those exposed from the risk of neurological damage.

113. This defective condition existed in the Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed when it left the control of Defendants, Defendants' corporate predecessors, and others with whom they acted in concert and was placed into the stream of commerce.

114. The Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed was used in the intended and directed manner or a reasonably foreseeable manner.

115. The risk of contracting Parkinson's disease from chronic, low-dose exposure to Paraquat presented a substantial danger to users of Paraquat when the product was used in a reasonably foreseeable manner.

116. As a result of this defective condition, the Paraquat that Defendants, Defendants' corporate predecessors, and others with whom they acted in concert designed, manufactured, distributed, and sold and to which Plaintiff was exposed either failed to perform in the manner reasonably to be expected in light of its nature and intended function, or the magnitude of the dangers outweighed its utility.

117. An ordinary consumer would not have recognized the potential risk of permanent, irreversible neurological damage, including the risk of contracting Parkinson's disease, from chronic, low-dose exposure to Paraquat.

118. Defendants and their corporate predecessors failed to adequately warn and instruct of the potential risk of permanent, irreversible neurological damage and Parkinson's disease, from chronic, low-dose exposure to Paraquat, and failed to provide adequate instructions regarding avoidance of these risks.

119. As a direct and proximate result of Defendants' and their corporate predecessors' development, marketing, promotion and sale of a defective product, Plaintiff suffered the injuries described in this Complaint.

**COUNT III  
NEGLIGENCE**

120. Plaintiff incorporates by reference each allegation set forth in preceding paragraphs as if fully stated herein.

121. At all relevant times, Defendants and their corporate predecessors designed, manufactured, distributed, and sold Paraquat for use throughout the United States, including the State in which Plaintiff purchased, used, or was otherwise exposed to Paraquat.

122. Plaintiff was exposed to Paraquat that Defendants and their corporate predecessors manufactured distributed, and sold intending or expecting that it would be sold and used throughout the United States, including the State in which Plaintiff purchased, used or was otherwise exposed to Paraquat.

123. The Paraquat to which Plaintiff was exposed was used in the intended or a reasonably foreseeable manner.

124. At all times relevant to this claim, in researching, designing, manufacturing, packaging, labeling, distributing, and selling Paraquat, Defendants and their corporate predecessors owed a duty to exercise ordinary care for the health and safety of the persons whom it was reasonably foreseeable could be exposed to Paraquat, including Plaintiff.

125. When Defendants and their corporate predecessors designed, manufactured, packaged, labeled, distributed, and sold the Paraquat to which Plaintiff was exposed, it was reasonably foreseeable that Paraquat:



- a. was designed, manufactured, formulated, and packaged such that it was likely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed; and
- b. when inhaled, ingested, or absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed, it was likely to cause or contribute to cause latent neurological damage that was both permanent and cumulative, and repeated exposures were likely to cause or contribute to cause clinically significant neurodegenerative disease, including PD, to develop long after exposure.

126. In breach of the aforementioned duty to Plaintiff, Defendants and their corporate predecessors negligently:

- a. failed to design, manufacture, formulate, and package Paraquat to make it unlikely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed;
- b. designed, manufactured, and formulated Paraquat such that it was likely to cause latent neurological damage that was both permanent and cumulative, and repeated exposures were likely to cause clinically significant neurodegenerative disease, including Parkinson's disease, to develop;

- c. failed to conduct adequate research and testing to determine the extent to which exposure to Paraquat was likely to occur through inhalation, ingestion, and absorption into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed;
- d. failed to conduct adequate research and testing to determine the extent to which Paraquat spray drift was likely to occur, including its propensity to drift, the distance it was likely to drift, and the extent to which Paraquat spray droplets were likely to enter the bodies of persons spraying it or other persons nearby during or after spraying;
- e. failed to conduct adequate research and testing to determine the extent to which Paraquat was likely to cause or contribute to cause latent neurological damage that was both permanent and cumulative, and the extent to which repeated exposures were likely to cause or contribute to cause clinically significant neurodegenerative disease, including Parkinson's disease;
- f. failed to direct that Paraquat be used in a manner that would have made it unlikely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed; and
- g. failed to warn that Paraquat was likely to cause neurological damage that was both permanent and cumulative, and repeated exposures were likely to

cause clinically significant neurodegenerative disease, including Parkinson's disease.

127. Defendants and their corporate predecessors knew or should have known that users would not realize the dangers of exposure to Paraquat and negligently failed to take reasonable steps to prevent the foreseeable risk of harm from exposure to Paraquat.

128. As a direct and proximate result of Defendants' and their corporate predecessors' negligence, Plaintiff suffered the injuries described in this Complaint.

129. Additionally, in the course of designing, manufacturing, packaging, labeling, distributing, and selling Paraquat, Defendants and their corporate predecessors violated laws, statutes, and regulations, including but not limited to: sections of Code of Massachusetts Regulations, 333 CMR 8.00 (Pesticides), and Mass. Gen. Law Ann. Ch. 132B (Massachusetts Pesticide Control Act) et seq.

130. Plaintiff was a member of the class of persons that said laws, statutes, and regulations were intended to protect.

131. The violations of said laws, statutes, and regulations by Defendants and their corporate predecessors were also substantial factors in causing Plaintiff's injuries.

132. The injuries that resulted from the violations by Defendants and their corporate predecessors are the kind of occurrences the laws, statutes, and regulations were designed to protect against.

**COUNT IV  
BREACH OF IMPLIED WARRANTY OF MERCHANTABILITY**

133. Plaintiff incorporates by reference each allegation set forth in preceding paragraphs as if fully stated herein.

134. At all relevant times, Defendants and their corporate predecessors engaged in the business of designing, manufacturing, distributing, and selling Paraquat and other restricted-use pesticides and held themselves out as having special knowledge or skill regarding Paraquat and other restricted-use pesticides.

135. At all relevant times, Defendants and their corporate predecessors designed, manufactured, distributed, and sold Paraquat for use throughout the United States, including the State in which Plaintiff purchased, used, or was otherwise exposed to Paraquat.

136. Plaintiff was exposed to Paraquat that Defendants and their corporate predecessors designed, manufactured, distributed, and sold.

137. The Paraquat to which Plaintiff was exposed was not fit for the ordinary purposes for which it was used, and in particular:

- a. it was designed, manufactured, formulated, and packaged such that it was likely to be inhaled, ingested, and absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed; and
- b. when inhaled, ingested, or absorbed into the bodies of persons who used it, who were nearby while it was being used, or who entered fields or orchards where it had been sprayed or areas near where it had been sprayed, it was likely to cause neurological damage that was both permanent and cumulative, and repeated exposures were likely to cause neurodegenerative disease, including Parkinson's disease.

138. As a direct and proximate result of Defendants' and their corporate predecessors' breach of implied warranty, Plaintiff suffered the injuries herein described.

**COUNT V  
VIOLATION OF STATE CONSUMER FRAUD STATUTES**

139. Plaintiff incorporates by reference each allegation set forth in preceding paragraphs as if fully stated herein.

140. At all relevant times, Defendants and their corporate predecessors designed, manufactured, distributed, and sold Paraquat for use throughout the United States, including the State in which Plaintiff purchased, applied, or was otherwise exposed to Paraquat.

141. Defendants and their corporate predecessors produced and published advertisements and deceptive and misleading statements regarding the safety and risks of Paraquat despite knowing of its inherent defects with the intent to sell Paraquat and increase sales.

142. Defendants and their corporate predecessors concealed their deceptive practices in order to increase the sale of and profit from Paraquat. Defendants violated state consumer fraud statutes, including but not limited to the Massachusetts Consumer Protection Act (Mass. Gen. Laws. Ch. 93A et sq.,) and Mass. Gen. Law Ch. 266, § 91, (Untrue and misleading advertisements; prohibitions), when they failed to adequately warn and instruct, or otherwise mislead, consumers (including Plaintiff) of the safety risks associated with Paraquat.

143. Such state statutes are designed to protect consumers and users from misleading conduct in the sale and marketing of products and place no greater obligation on Defendants that that imposed by federal law.

144. Defendants and their corporate predecessors violated this and other statutes by intending to sell and create customer demand for Paraquat by using deceptive or untrue statements of fact about Paraquat's safety and risks associated with it through promotional materials,

including but not limited to, Defendants' website, sales representatives and brochures distributed to consumers. The cumulative effect of Defendants' conduct directed at consumers was to create demand for and sell Paraquat. Each aspect of Defendants' conduct combined to artificially create sales of Paraquat.

145. Plaintiff relied upon Defendants' and their corporate predecessors' misrepresentations and omissions in determining which product to use.

146. Had Defendants and their corporate predecessors not engaged in the deceptive conduct described above, Plaintiff would not have purchased or used Paraquat in the same manner, would not have sustained injury, and would not have incurred related treatments and medical costs.

147. As a direct result of Defendants' and their corporate predecessors' deceptive, unfair, unconscionable, and fraudulent conduct and violation of state consumer fraud statutes, Plaintiff suffered and continues to suffer severe personal injury by the cumulative and indivisible nature of Defendants' conduct and economic injury including sums for the purchase of Paraquat and/or the costs of treating the associated injury.

148. As a direct and proximate result of Defendants' violations of state consumer fraud and consumer protection statutes, Plaintiff developed neurological injuries and Parkinson's disease; has suffered economic loss, severe and permanent physical pain, mental anguish, and disability, and will continue to do so for the remainder of his life. Indeed, Plaintiff and his family have suffered the loss of a normal life and will continue to do so for the remainder of Plaintiff's life.

**PRAYER FOR RELIEF**

WHEREFORE, Plaintiff requests this Court to enter judgment in Plaintiff's favor and against the Defendants for:

- a. actual or compensatory damages in such amount to be determined at trial and as provided by applicable law;
- b. pre-judgment and post-judgment interest;
- c. punitive and/or exemplary damages;
- d. costs including reasonable attorneys' fees, court costs, and other litigation expenses; and
- e. any other relief the Court may deem just and proper.

**JURY TRIAL DEMAND**

Plaintiff demands a trial by jury on all of the triable issues within this pleading.

Dated: July 8, 2021

LOCKRIDGE GRINDAL NAUEN P.L.L.P.

By:     s/ Yvonne M. Flaherty      
Yvonne M. Flaherty, #267600  
100 Washington Avenue South  
Suite 2200  
Minneapolis, MN 55401  
Phone: (612) 339-6900  
ymflaherty@locklaw.com

**Attorneys for Plaintiff**