IN THE CIRCUIT COURT FOR MONTGOMERY COUNTY, MARYLAND

COMPLETE LAWN CARE, INC., et al.				*							
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	Plaintiffs	5				*					
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	V.					*	Civi	Action	1 No. 42	27200V	
						*	Judg	e: Terr	ence J. 1	McGann	
MO	NTGOMI	ERY C	OUNT	Y, MA	RYLAN	ND*					
				,		*					
Defendant			*								
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*	*	*	*	*	*	*	*	*	*	*	*
AN	ITA GOO	DMA	N, et al			*					
						*					
	Plaintiffs					*					
						*					
V.			*	Civil Action No. 427253V							
						*	Judg	e: Terr	ence J. I	McGann	
MC	NTGOMI	ERY C	OUNT	Y, MA	RYLAN	ND*	-				
						*					
]	Defendant					*					
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BRIEF OF AMICI CURIAE BEYOND PESTICIDES, CENTER FOR FOOD SAFETY, CENTRAL MARYLAND BEEKEEPER ASSOCIATION, FOOD AND WATER WATCH, MARYLAND PESTICIDE EDUCATION NETWORK, MARYLAND PIRG FOUNDATION, ORGANIC CONSUMERS ASSOCIATION, PHYSICIANS FOR SOCIAL RESPONSIBILITY, SAFE GROW MONTGOMERY <u>COUNTY IN SUPPORT OF DEFENDANTS</u>

Jonathan Nace, Esquire Nidel & Nace, P.L.L.C. 5335 Wisconsin Avenue, N.W. Suite 440 Washington, D.C. 20015 Counsel for Amici Curiae

Dated: April 26, 2017

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CORPORATE DISCLOSURE STATEMENT

Amici, Beyond Pesticides, Center for Food Safety, Central Maryland Beekeepers Association, Food and Water Watch, Maryland Pesticide Education Network, Maryland PIRG Foundation, Organic Consumers Association, Physicians for Social Responsibility and Safe Grow Montgomery County are all nonprofit corporations, have no parent corporations, and do not issue stock.

Respectfully Submitted,

Dated: April 26, 2017

Jonathan Nace, Esquire Nidel & Nace, P.L.L.C. 5335 Wisconsin Avenue, N.W. Suite 440 Washington, D.C. 20015 Counsel for Amici Curiae

INTERESTS OF THE AMICI CURIAE

Amici are nonprofit, public interest organizations with missions of safeguarding public health and protecting the environment. To this end, *Amici* actively work on reducing human exposure to the adverse effects of pesticides and raising awareness of the threats pesticides pose to human and environmental health.

Amici have strong interests in the court upholding Bill 52-14 (the "Ordinance"), which prohibits the use of state-registered pesticides on County lawns and other private property. This law will provide significant protection to the health and wellbeing of residents of Montgomery County, Maryland from unnecessary exposure to harmful pesticides. Further, *Amici* support the county in its determination that the Ordinance does not violate preemption laws within the state with regards to pesticide regulation by local entities.

Amici have strong interests regarding the decision of the court to uphold the Ordinance. *Amici* are stakeholders whose interests and memberships will be harmed by the use of unnecessary pesticide products in Montgomery County, Maryland.

Amicus Beyond Pesticides is a national nonprofit corporation that promotes safe air, water, land, and food, and works to protect public health and the environment by encouraging a transition away from the use of toxic pesticides. Beyond Pesticides routinely helps local communities like Montgomery County transition away from conventional lawn care management by providing technical training and information, as well as educational support, on natural and organic lawn care practices. With the resources of Beyond Pesticides made available to the public on a national scale, Beyond Pesticides contributes to a significant reduction in unnecessary pesticide use, thus improving protection of public health and the environment. In 2015 Beyond Pesticides filed comments and presented testimony to the Montgomery County

Council in support of Bill 52-14.

Amicus Center for Food Safety (CFS) is a national nonprofit organization dedicated to addressing the environmental, health, and socioeconomic impacts of industrial agriculture, and promoting sustainable alternatives. CFS represents over 750,000 members across the country, including many farmers and beekeepers, as well as consumers. As part of its mission, CFS has a actively works to reduce the adverse effects of toxic pesticides on human health and the environment. CFS utilizes scientific, policy, educational, legislative, regulatory, and grassroots campaigns to spearhead action from government agencies, policymakers, and the public, to protect food security and the environment by requiring robust analyses of pesticides' adverse impacts, and suspending or curbing their use as needed. CFS previously filed written testimony in support of Montgomery County's Bill 52-14.

Amicus Central Maryland Beekeepers Association (CMBA) is a non-profit organization dedicated to supporting and promoting beekeepers and the viability of honeybees in Maryland. CMBA has more over 350 member beekeepers who are experiencing the devastating impacts of pesticides, with bee losses of 50%, and higher, for consecutive years. Maryland hive losses have risen sharply with the increased use of pesticides, including neonicotinoids, in lawn and garden treatments. CMBA supports Montgomery County's efforts to protect human health, the environment and declining pollinator populations by limiting the use of toxic pesticides.

Amicus Food and Water Watch (FWW) is a national, non-profit, public interest consumer advocacy organization with its headquarters in Washington, D.C. and several offices and organizers located across the country, including Maryland. Our over 35,000 members in Maryland include several who reside in Montgomery County who will be directed impacted by the outcome of this matter. One of our organization's primary purposes is to advocate for safe

food and water systems, including efforts to ensure that local waterways and public areas are kept free from pollutants and toxins. We and our members are very concerned about the impact that the use of pesticides will have on nearby waterways, groundwater, surface lands and human health. We believe strongly that local communities should be able to determine how and when these dangerous substances are used in their neighborhoods and that by preempting the local ordinance at issue in this case, the health and safety of our members will be put at greater risk.

Amicus Maryland Pesticide Education Network (MPEN) is a 501(c)3 organization. MPEN's mission is to address the impact of pesticides on the health of people, wildlife and waterways. MPEN promotes safer alternatives to toxic pesticides. MPEN encourages the adoption of pest and land management practices that are safe for children, adults, wildlife and the environment, including the Chesapeake Bay, promotes right-to-know policies and laws regarding pesticide use, exposures and impacts, and educates the public, policymakers, pest and land care management professionals, health care and public health professionals, water keepers, the agricultural community, and others about the hazards of pesticide exposure and safer alternatives. MPEN also promotes programs, policies and laws that reduce or eliminate reliance on hazardous pesticides and works collaboratively with local, state and federal agencies and private organizations in the state of Maryland and nationally to promote and advance their organizational objectives.

Amicus Maryland PIRG Foundation is an independent, non-partisan group that works for consumers, the public interest, and public health. Through research, public education and outreach, we serve as counterweights to the influence of powerful special interests like chemical and pesticide manufacturers that threaten our health, safety or well-being. We investigate problems, craft solutions, educate the public, and offer Marylanders meaningful opportunities for

civic participation. Our Maryland members, including members who live and work in Montgomery County, are concerned about the effects of pesticide use and of toxic chemicals on their health and well-being, both of which will be impacted by the outcome of this litigation.

Amicus Organic Consumers Association is a non-profit public interest organization campaigning for health, justice, and regenerative agriculture. OCA deals with crucial issues of food safety, industrial agriculture, genetic engineering, children's health, corporate accountability, Fair Trade, climate change and pesticides. The two million people in OCA's network are linked through email and social media, and take action on local, state and national campaigns by educating their communities and reaching out to decision makers. Their policy board is broadly representative of the organic, family farm, environmental, and public interest communities.

Amicus Physicians for Social Responsibility, Chesapeake, Inc. (Chesapeake PSR) is dedicated to creating a healthy, just and peaceful world for both present and future generations. Among other efforts, Chesapeake PSR supports efforts to reduce human exposure to toxicants and to educate medical professionals on health issues associated with pesticides exposure.

Amicus Safe Grow Montgomery County ("Safe Grow") is an all-volunteer organization of residents in Montgomery County, MD. The organization works to end exposure to nonessential lawn pesticides in Montgomery County to protect human health and the local environment.

<u>ARGUMENT</u>

I. Bill 52-14 will limit the use of toxic pesticides in the County, protecting the human health and the environment of the County

Bill 52-14's overall intent is to protect the health and wellbeing of the citizens of the County by reducing the unnecessary use of hazardous pesticides applied for aesthetic purposes. This legislation will affect a shift to sustainable management practices and least-toxic materials, an approach to pesticide use that is critical to the protection of children and elderly, and vulnerable population groups that suffer from compromised immune and neurological systems, cancer, reproductive problems, respiratory illness and asthma, Parkinson's, Alzheimer's, diabetes, and learning disabilities in the County.

The Ordinance will also promote overall environmental health by reducing the amount of pesticides applied to, and present in, the environment. Typically, 3.2 to 9.8 lbs per acre on average are applied to suburban lawns and gardens annually, higher than the 2.7 average pounds per acre used in agriculture.¹ By restricting pesticide use on both public and private green spaces within the County, the Ordinance will prevent hundreds-of-thousands of pounds of unnecessary pesticides from entering the environment and exposing citizens of the County to the risks posed by toxic pesticides. This includes miles of streets and sidewalks that are managed by the County as public rights-of-way. In addition to health risks, the U.S. Geological Survey has linked private lawn pesticide use to harmful runoff into waterways.

¹ National Research Council. 1980. Urban Pest Management. National Academy of Sciences; Abrams, R., Attorney General of New York. 1991. "Toxic Fairways: Risking Groundwater Contamination from Pesticides on Long Island Golf Courses," Environmental Protection Bureau; Pimentel, D, et al. 1991. "Environmental and Economic Impacts of Reducing U.S. Agricultural Pesticide Use," Handbook of Pest Management in Agriculture, 2nd ed. CRC Press, Florida, p.679.

a. Health effects of pesticide use threaten children, the elderly, and other vulnerable populations

Children face unique dangers from pesticide exposure. The National Academy of Sciences reports that children are more susceptible to chemicals than adults and estimates that 50% of lifetime pesticide exposures occur during the first five years of life.² In fact, studies show children's developing organs create "early windows of great vulnerability" during which exposure to pesticides can cause irreversible chronic damage.³ Additionally, according to researchers at the University of California-Berkeley School of Public Health, exposure to pesticides while in the womb may increase the odds that a child will have attention deficit hyperactivity disorder (ADHD).⁴

In 2012, the American Academy of Pediatrics (AAP) released a landmark policy statement, *Pesticide Exposure in Children*, on the effects of pesticide exposure in children, acknowledging the risks to children from both acute and chronic effects.⁵ AAP's statement notes that, "Children encounter pesticides daily and have unique susceptibilities to their potential toxicity." *Id.* The report discusses how children are exposed to pesticides every day in air, food, dust, and soil. Children also frequently come into contact with pesticide residue on pets and treated lawns and gardens as well as indoor spaces.

² National Research Council, National Academy of Sciences. 1993. Pesticides in the Diets of Infants and Children, National Academy Press, Washington, DC: 184-185.

³ Landrigan, P.J., L Claudio, SB Markowitz, et al. 1999. "Pesticides and inner-city children: exposures, risks, and prevention." Environmental Health Perspectives 107 (Suppl 3): 431-437.

⁴ Marks AR, Harley K, Bradman A, Kogut K, Barr DB, Johnson C, et al. 2010. Organophosphate Pesticide Exposure and Attention in Young Mexican-American Children: The CHAMACOS Study. Environ Health Perspectives 118:1768-1774.

⁵ Roberts JR, Karr CJ; Council On Environmental Health. 2012. Pesticide exposure in children. Pediatrics. 2012 Dec; 130(6):e1765-88.

Pesticides, such as glyphosate and its formulated products (Roundup) and 2,4-D, both widely used on turf and lawns, are tracked indoors, resulting in repeated, long-term exposures. Scientific studies show that pesticides such as 2,4-D that are applied to lawns drift and are tracked indoors where they settle in dust, air and on surfaces and may remain in carpets.⁶ Pesticides in these environments may increase the risk of developing asthma, exacerbate a previous asthmatic condition, or even trigger asthma attacks by increasing bronchial hyper-responsiveness.⁷ This is especially important as infants crawling behavior and proximity to the floor account for a greater potential than adults for dermal and inhalation exposure to contaminants on carpets, floors, lawns, and soil.⁸ Of the 30 most commonly used lawn pesticides, 17 are linked to cancer, 18 are endocrine disruptors, 19 are reproductive toxicants, 11 are linked to birth defects, 14 are neurotoxic, 22 cause kidney liver effects, and 25 are irritants; thus, a change in Montgomery County's pesticide use practices is necessary to protect the health and wellbeing of the citizens of the County.

A study published in the Journal of the National Cancer Institute finds that household and garden pesticide use can increase the risk of childhood leukemia as much as seven-fold.⁹ Similarly, a 2010 meta-analysis on residential pesticide use and childhood leukemia finds an

⁶ Nishioka, M., et al. 1996. Measuring lawn transport of lawn-applied herbicide acids from turf. Env Science Technology, 30:3313-3320; Nishioka, M., et al. 2001. "Distribution of 2,4-D in Air and on Surfaces Inside Residences. Environmental Health Perspectives 109(11).

⁷ Hernández, AF., Parrón, T. and Alarcón, R. 2011. Pesticides and asthma. Curr Opin Allergy Clin Immunol.11(2):90-6.

⁸ Bearer, CF. 2000. The special and unique vulnerability of children to environmental hazards. Neurotoxicology 21: 925-934; and Fenske, R., et al. 1990. Potential Exposure and Health Risks of Infants following Indoor Residential Pesticide Applications. Am J. Public Health. 80:689-693.

⁹ Lowengart, R. et al. 1987. Childhood Leukemia and Parent's Occupational and Home Exposures. Journal of the National Cancer Institute. 79:39.

association with exposure during pregnancy, as well as to insecticides and herbicides. An association is also found for exposure to insecticides during childhood.¹⁰

Prenatal exposures to pesticides can also have long-lasting impacts on infants and children. Herbicides, like glyphosate, can adversely affect embryonic, placental and umbilical cord cells, and can impact fetal development. Preconception exposures to glyphosate have been found to moderately increase the risk for spontaneous abortions in mothers exposed to glyphosate products.¹¹ One 2010 analysis observed that women who use pesticides in their homes or yards were two times more likely to have offspring with neural tube defects than women who did not use pesticides.¹² Studies also find that pesticides, like 2,4-D, can also pass from mother to child through umbilical cord blood and breast milk.¹³

Biomonitoring has also documented pesticide residues in children. Residues of lawn pesticides, like 2,4-D and mecoprop, were found in 15-percent of children tested, ages three to seven, whose parents had recently applied the lawn chemicals. Breakdown products of organophosphate insecticides were present in 98.7-percent of children tested.¹⁴ In one study, children in areas where glyphosate is routinely applied were found to have detectable

¹⁰ Turner, M.C., et al. 2010. Residential pesticides and childhood leukemia: a systematic review and meta-analysis. Environ Health Perspect 118(1):33-41.

¹¹ Arbuckle, T. E., Lin, Z., & Mery, L. S. (2001). An Exploratory Analysis of the Effect of Pesticide Exposure on the Risk of Spontaneous Abortion in an Ontario Farm Population. Environ Health Perspect, 109, 851–857.

¹² Brender, JD., et al. 2010. Maternal Pesticide Exposure and Neural Tube Defects in Mexican Americans. Ann Epidemiol. 20(1):16-22.

¹³ Pohl, HR., et al. 2000. Breast-feeding exposure of infants to selected pesticides. Toxicol Ind Health. 16:65-77; Sturtz, N., et al. 2000. Detection of 2,4-dichlorophenoxyacetic acid (2,4-D) residues in neonates breast-fed by 2,4-D exposed dams. Neurotoxicology 21(1-2): 147-54.

¹⁴ Valcke, Mathieu, et al. 2004. Characterization of exposure to pesticides used in average residential homes with children ages 3 to 7 in Quebec. National Institute of Public Health, Québec.

concentrations in their urine.¹⁵ While glyphosate is excreted quickly from the body, it was concluded, "a part may be retained or conjugated with other compounds that can stimulate biochemical and physiological responses." A 2002 study found that children born to parents exposed to glyphosate show a higher incidence of attention deficit disorder and hyperactivity.¹⁶

b. The Ordinance Will Protect the Environment From Harms Associated With Pesticide Use

The common sense Ordinance is a timely necessity, given the threats to the environment routinely caused by excessive and unnecessary pesticide use on residential private property, while not harming those who wish to maintain their lawns with less toxic and harmful practices. With this Ordinance, Montgomery County is taking the lead among communities seeking to stop involuntary poisoning and non-target contamination from runoff, pesticide drift, and volatilization that occurs as toxic chemicals move off of treated private yards. The ordinance is similar to a law adopted by the city of Takoma Park, Maryland, following restrictions on cosmetic or aesthetic pesticide use on lawns that have been in place in Canadian provinces for many years.

The Ordinance will not only improve the health of Montgomery County's waterways, but it will also enable a large-scale shift away from chemically intensive practices that threaten the health of soil, plants and organisms living within the county. Specifically, it would help improve the health of pollinators, who are negatively and dramatically affected by the use of systemic neonicotinoid pesticides, exhibited by the fact that we are currently experiencing the worst

¹⁵ Acquavella, J. F., et al. (2004). Glyphosate Biomonitoring for Farmers and Their Families: Results from the Farm Family Exposure Study. Environ Health Perspect. 112(3), 321-326.

¹⁶ Cox C. 2004. Journal of Pesticide Reform. Vol. 24 (4) citing: Garry, V.F. et al. 2002. "Birth defects, season of conception, and sex of children born to pesticide applicators living in the Red River Valley of Minnesota." Environ. Health Persp. 110 (Suppl. 3):441-449.

decline of bee populations in history. Upholding the Ordinance is necessary to protect Montgomery County's environmental resources and to protect the County's overall environmental health.

c. Systemic Pesticides, Neonicotinoids and the Health of Pollinators

Since 2006, honey bees and other pollinators in the U.S. and throughout the world have experienced ongoing and rapid population declines. The continuation of this crisis threatens the stability of ecosystems, the economy, and our food supply, as one in three bites of food are dependent on pollinator services.¹⁷ Pollination services are valued at over \$125 billion globally¹⁸, with global insect and animal pollination contributing to 35% of global food production.¹⁹ According to a 2014 Presidential Memorandum, pollinators provide \$24 billion annually to the economy and honey bees account for \$15 billion of that amount.²⁰ Similarly, native pollinators (such as bumblebees, squash bees, and mason bees) contribute over \$9 billion in pollination services to the U.S. agricultural economy, and contribution to pollination of garden plants.²¹

A recent government-sponsored national survey indicates that U.S. beekeepers experienced a 44.1% annual mortality rate with their hives between April 2015 and March

^{17 17} Environmental Protection Agency (EPA). (2013, May 2). USDA and EPA Release New Report on Honey Bee Health. <u>https://www.usda.gov/media/press-releases/2013/05/02/usda-and-epa-release-new-report-honey-bee-health</u>

¹⁸ Center for Food Safety Pollinators and Pesticides Fact Sheet http://www.centerforfoodsafety.org/files/pollinatorspesticides_03498.pdf

¹⁹ White House Blog- Fact Sheet, The Economic Challenge Posed by Declining Pollinator Populations <u>https://obamawhitehouse.archives.gov/the-press-office/2014/06/20/fact-sheet-economic-challenge-posed-declining-pollinator-populations</u>

²⁰ White House Blog: New Steps to Protect Pollinators, Critical Contributors to Our Nation's Economy http://www.whitehouse.gov/blog/2014/06/20/new-steps-protect-pollinators-critical-contributors-our-nation-s-economy

²¹ Office of the Press Secretary, Fact Sheet: The Economic Challenge Posed by Declining Pollinator Populations, <u>https://obamawhitehouse.archives.gov/the-press-office/2014/06/20/fact-sheet-economic-challenge-posed-declining-pollinator-populations</u>

2016.²² The same survey found that during the winter of 2015/2016 nearly two-thirds of beekeepers experienced loss rates greater than the established acceptable winter mortality rate.

Systemic pesticides like the neonicotinoid class of insecticides, commonly used as part of lawn maintenance, have been shown, even at low levels, to impair foraging, navigational, and learning behavior in bees, as well as suppress their immune system to the point of increasing their susceptibility to pathogens and disease.²³ Concentrations of neonicotinoids in soils, waterways, field margin plants, and floral resources overlap substantially with concentrations that control pests in crops, and commonly exceed levels that are known to kill beneficial organisms.²⁴ Birds are also at risk from neonicotinoids, as one study demonstrates that a single corn kernel coated with a neonicotinoid is toxic enough to kill a songbird.²⁵ Further, research from the Netherlands has showed that the most severe bird population declines occur in those areas where neonicotinoid pollution is highest.²⁶

To compound these findings, new research by the U.S. Geological Survey (USGS) also documents similar risks from neonicotinoids in the rivers and streams of the Midwest.²⁷ Morrissey at al. confirms all this in a review which finds that neonicotinoid concentrations

²² Bee Informed Partnership. Preliminary Results: Honey Bee Colony Losses in the United States, 2015-2016. <u>https://beeinformed.org/results/colony-loss-2015-2016-preliminary-results/</u>

²³ Harriott, N. 2014, Bees, Birds and Beneficials: How fields of poison adversely affect non-target organisms. Pesticides and You. Vol. 33, No. 4 Winter 2013-14.

²⁴ Goulson, D. 2013. REVIEW: An overview of the environmental risks posed by neonicotinoid insecticides. *Journal of Applied Ecology*. 50: 977–987. doi: 10.1111/1365-2664.12111

²⁵ Mineau P, Whiteside M. 2013. Pesticide Acute Toxicity Is a Better Correlate of U.S. Grassland Bird Declines than Agricultural Intensification. PLoS ONE 8(2): e57457.

²⁶ Hallmann CA, et al. 2014. Declines in insectivorous birds are associated with high neonicotinoid concentrations. *Nature* doi:10.1038/nature13531.

²⁷ Hladik ML, et al. 2014. Widespread occurrence of neonicotinoid insecticides in streams in a high corn and soybean producing region, USA. *Env. Poll.* 193:189-196.

detected in aquatic environments pose risks to aquatic invertebrates and the ecosystems they support.²⁸

In recognition of the long-term impacts systemic pesticides have on the environment, the U.S. Fish and Wildlife Service (FWS) announced in June 2014 its decision to phase out neonicotinoid use. The service states that neonicotinoids "can be effective against targeted pests, but may also adversely impact many non-target insects," and that "the prophylactic use of neonicotinoids and the potential broad-spectrum adverse effects to non-target species do not meet the intent of IPM principles or the Service's Biological Integrity, Diversity, and Environmental Health (BIDEH) policy. These findings highlight the need for more immediate local action like the Ordinance now at issue, to protect vulnerable species like bees and other pollinators, and support the court's decision to uphold the Ordinance.

d. Residential Pesticide Use Aversely Impacts Water Quality

A 2012 Technical Report authored by the U.S. Environmental Protection Agency (EPA), FWS, and USGS, entitled *Toxic Contaminants in the Chesapeake Bay and its Watershed: Extent and Severity of Occurrence and Potential Biological Effects*,²⁹ makes several key points on how lawn care pesticides may result in adverse impacts to the Bay's fragile ecosystem. Montgomery Country is made up of eight major watersheds and almost 150 smaller watersheds.³⁰ Many of these smaller watersheds, particularly in the more developed southeast portion of the county, are

²⁸ Morrissey, C. et al. 2015. Neonicotinoid contamination of global surface waters and associated risk to aquatic invertebrates: A review. *Environment International*. doi:10.1016/j.envint.2014.10.024.

²⁹ USEPA, USGS, USFWS. 2012. Toxic Contaminants in the Chesapeake Bay and its Watershed: Extent and Severity of Occurrence and Potential Biological Effects. http://executiveorder.chesapeakebay.net/ChesBayToxics finaldraft 11513b.pdf.

³⁰ Montgomery County Stream Conditions 2011 – 2015. Available at https://www.montgomerycountymd.gov/water/streams/watershed-health.html

listed as in "poor" condition by the County Department of Environmental Protection.³¹ These County watersheds make up a portion of the larger Bay watershed. The Bay report cited above estimates per capita home, garden, and personal care pesticide loading at a rate of .42 pounds per year in the Chesapeake Bay watershed, which results in a loading to the watershed of about 6.5 million pounds of herbicides annually, not including agricultural uses. If we use those same numbers, looking at the population of Montgomery County estimated by the U.S. Census Bureau in 2013, Bill 52-14 has the potential to have a significant impact on the roughly 427,000 pounds of chemicals entering the Chesapeake Bay from Montgomery County.

The federal report notes that, although the total mass of pesticides being applied to the Bay watershed declined during the period 1985 to 2004, the potency of chemicals increased during the same time period. Thus, the "toxic units" (a measure of toxicity of the active ingredients to a range of animal and plant species) remained approximately static. Further, as a result of increases in usage and new analytical methods, synthetic pyrethroids –insecticides that are widely used in conventional land care programs– are detected in increasing frequency in both surface water and sediment in the Chesapeake Bay.

A 2014 study performed by the National Park Service on glyphosate contamination collected samples from streams and vernal pools in the Maryland and Washington DC region.³² Results found that vernal pools and adjacent streams can be contaminated by the use of herbicides within parks to control weeds in cropped areas or to kill invasive or nonindigenous

³¹ *Id*.

³² Battaglin, W. 2009. Information Crossfile: Glyphosate and other pesticides in vernal pools and streams in parks. Park Science 26(2):47–48. Available at http://www.nature.nps.gov/ParkScience/archive/PDF/Article_PDFs/ParkScience26(2)Fall2009_4 7-48 Battaglin 2647.pdf.

plants. It also noted that contamination also originated from pesticide use occurring outside park boundaries, indicating a need to address private residential pesticide use.

e. The Ordinance Enables Montgomery County to Shift from Toxic Chemicals Toward the Adoption of Systems Based Management Techniques

Chemically intensive turf and landscape management programs are generally centered on a synthetic product approach that continually treats symptoms rather than the root problem. In fact, toxic chemicals are not needed for successful turf management. Rather, a systems approach incorporates preventive steps based on building soil biomass to improve soil fertility and turf grass health, organic products based on a soil analysis that determines need, and specific cultural practices, like mowing height, aeration, dethatching, and over-seeding.

Organic turf management, which meets the standards of the *Organic Foods Production Act*, is a "feed-the-soil" approach that centers on natural, organic fertilization, microbial inoculants, compost teas, and compost topdressing as needed. This approach builds a soil environment rich in microbiology that will produce strong, healthy turf able to withstand stress.

Bill 52-14 is not just about prohibiting pesticides, it is about respecting biological systems that are central to the sustainability of our environment.

Montgomery County's and our country's appetite for pesticides raises grave concerns about the effects of chemical-intensive practices, our relationship to nature, chemical effects at the cellular level, and insect and weed resistance to chemical controls. The U.S. Geological Survey has consistently linked lawn pesticide use to runoff into waterways, an issue the Ordinance aims to address through its residential pesticide ban.

II. State Pesticide Statutes do not Preempt County Bill 52-14

In response to the threats posed by pesticides as touched upon above, the County passed Bill 52-14 to protect its citizens and the environment. They did so as a chartered home-rule

county under Article XI-A of the Maryland Constitution. The County has the authority to regulate the sale and use of pesticides within the County so long as there is no state or federal statute that prohibits it from exercising that authority. Here, there is no such law.

Counties are given wide latitude to pass laws that protect the health and general welfare of their citizens. *See* Md. Ann. Code art. 25A, § 5; *see also*, *Ritchmount Partnership v. Bd. of Super. of Elections*, 283 Md. 48, 57 (1978); *Montgomery Citizens League v. Greenhalgh*, 253 Md. 151, 160-61 (1969). The County has specific authority to regulate within the County where the regulated activities may lead to "conditions detrimental to health". Md. Ann. Code art. 25A, §§ 5 (J), (S).

a. The General Assembly Rejected Restricting the County's Authority to Regulate Pesticides Multiple Times, Negating Any Possible Implication of Preemption

The doctrine of preemption is based on the authority of the General Assembly to reserve exclusive dominion for regulating in an entire field. *County Com'rs of Queen Anne's County v. Soaring Vistas Properties, Inc.*, 121 Md. App. 140, 152 (1997). Plaintiffs do not allege that the Maryland pesticide laws expressly preempt the Ordinance. In the absence of express preemption of the Ordinance, Defendants argue that the Ordinance preempts by implication. To find preemption without the express indication, the Court must find that it was the General Assembly's intention to exclusively occupy the field for purposes of regulation. The facts, particularly the legislative history in the General Assembly regarding pesticide regulation, belie such a finding.

While there is no "precise formula" for determining whether the General Assembly intended, impliedly, to preempt an entire field, the Court is guided by indicia of the Legislature's intent. *See Com'rs of Queen Anne's County*, at 153 (citations omitted). Even assuming that the "comprehensive" nature of the State pesticide laws suggest the Legislature's intent to occupy the

field to the exclusion of the County, the Legislature itself has indicated otherwise. The General Assembly considered preserving the right to exclusively regulate pesticides in the State and otherwise place restrictions on the power of counties within the State to pass restrictions on pesticides.³³ Each of these efforts to either completely preempt or expressly restrict the local governments' role in pesticide regulations was rejected. The only reasonable conclusion based on the rejection of each of these bills collectively is that the Legislature respected the essential role of local governments within the State to pass more stringent regulations within their jurisdiction to protect the health and welfare of its citizens.

Courts have long looked to the legislative history of the relevant laws, including both action and inaction by the General Assembly, to divine any implication of preemption that may be possible. *See e.g., Talbot County v. Skipper*, 329 Md. 181, 493 (1990) (discussing the General Assembly's rejection of a bill imposing certain requirements as indicia that it did not seek to impose those requirements). Here, the General Assembly, through its rejection of bills that would either completely or substantially have restricted the County's ability to regulate pesticides, provides the unquestionable indication that it did not intend to strip the County of its longstanding right to regulate "potentially obnoxious" activities within its jurisdiction. *See Com'rs of Queen Anne's County* at 155. Instead, the Legislature preserved the County's central role in the protection of the health and wellbeing of its citizens, negating any possible

³³ Plaintiffs argue that some of the bills considered, SB 429, SB 481 and HB 948, would have authorized the County to regulate pesticides, thus the rejection of these three bills along with the rejection of bills including express preemption provides no clear indication of legislative intent. Complete Lawn Care Br. at 30. However, these bills only authorized counties to regulate within certain restricted procedural and substantive limitations. Thus, the General Assembly's rejection of these bills, along with those expressly preempting local regulations collectively indicate the intention to preserve the local government's role in regulating in this traditionally protected area of health and safety.

implication otherwise.

b. The Ordinance's More Stringent Requirements Do Not Conflict With State Laws

Preemption may also be found where the local ordinance in question is in conflict with state law. However, here the Ordinance's restrictions do not conflict with the State's pesticide regulatory scheme, but rather further its purpose of protecting health and the environment. *See Mayor & City Council of Baltimore v. Hart,* 395 Md. 394, 408-09 (2006). Maryland courts have used this "functional" test to determine if there is an impermissible conflict between local ordinances and state laws and have allowed the application of local laws that, while seeming to prohibit conduct otherwise "permitted" under the state law, concurrently furthered the same purpose. *See e.g., City of Baltimore v. Sitnick,* 254 Md. 303, 255 (1969); *E. Coast Welding & Construction. Co. v. Refrigeration, Heating & Air Conditioning Bd.,* 72 Md. App. 69 (1987).

In these instances, the argument was made, as it is made here, that the local law prohibited something that was otherwise allowed by the State. For example, in *Sitnick*, Baltimore had established a more restrictive minimum wage at \$1.25 an hour, above the State's \$1.00 an hour minimum. *Sitnick* at 307. Arguably, the state "permitted" employers to pay wages anywhere between \$1.00 and \$1.24 an hour, but these were prohibited by the local law. Despite this discrepancy, the Court determined that there was no conflict in the concurrent regulations as they both sought to further the same purpose. *Id.* at 321.

Here, the County has acted to protect the health, safety and welfare of its citizens in light of developing science providing increasing evidence of health harms from residential pesticide use. This purpose is protected by the State Constitution and is furthered by the State pesticide laws. Given the shared purpose and Maryland's recognition of concurrent jurisdiction as well as the longstanding role of local governments in the protection of human health, there is no "conflict" for purposes of preemption under State laws.

CONCLUSION

Amici, public health-based non-profits including local citizens' groups, ask that this Court recognize and respect the threat to public health posed by the unnecessary use of toxic pesticides in areas where vulnerable populations, such as children and pregnant mothers, may be exposed. Recognizing this threat, *Amici* ask that the Court adhere to the legal principles that establish the central role of local governments in the State of protecting the public health and the co-extensive jurisdiction that they have in furthering this purpose along with the State.

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Respectfully Submitted,

Jonathan Nace, Esquire Nidel & Nace, P.L.L.C. 5335 Wisconsin Avenue, N.W. Suite 440 Washington, D.C. 20015

Rule 1-313 Certificate

This is to certify that I am an attorney licensed to practice law in the State of Maryland with an office in the District of Columbia.

Jonathan Nace, Esquire

CERTIFICATE OF SERVICE

I hereby certify that on the 26th day of April 2017 I caused a copy of the foregoing *Brief* of Amici Curiae Beyond Pesticides, Center for Food Safety, Central Maryland Beekeeper Association, Food and Water Watch, Maryland Pesticide Education Network, Maryland PIRG Foundation, Organic Consumers Association, Physicians for Social Responsibility, Safe Grow Montgomery County to be served upon the Court and the following via US Mail:

BEVERIDGE & DIAMOND, P.C. Gus B. Bauman Kathryn E. Szmuszkovicz James B. Slaughter Anthony L. Michaels 1350 I street, N.W., Suite 700 Washington, D.C. 20005-3311 *Counsel for Complete Law Care, Inc. Plaintiffs (Civ. No. 427200V)*

JOSEPH, GREENWALD & LAAKE, P.A. Timothy F. Maloney Alyse L. Prawde 6404 Ivy Lane, Suite 400 Greenbelt, Maryland 20770 *Counsel for Goodman Plaintiffs (Civ. No. 427253V)*

WILMER, CUTLER, PICKERING, HALE AND DORR, L.L.P. Catherine Carroll Arpit Garg 1875 Pennsylvania Ave., N.W. Washington, D.C. 20006 *Counsel for Goodman Plaintiffs (Civ. No. 427253V)*

Jonathan B. Nace