



F R O M	Name & Title	Reginald Moore, <i>Executive Director</i> 	CITY OF BALTIMORE	
	Agency Name & Address	City of Baltimore, Department of Recreation and Parks 3001 East Drive, Baltimore, Maryland (MD) 21217	MEMO	
	Subject:	City Council Bill 20-0495: For the purpose of regulating the use and application of pesticides in Baltimore City.		

TO: The Honorable Council President and
Members of the City Council
City Hall, Room 400
100 North Holliday Street

DATE: 4 May 2020

BCRP Position: Baltimore City Recreation and Parks hopes that any pesticide restrictions are aligned with the current state and federal regulations on signage, labeling, notice to property owners and schools. Current regulations are quite strong and most problems are from misuse or misapplication, and can be corrected by enforcement or regulation not additional legislation.

For these reasons, Baltimore City Recreation and Parks would like to work with Council to further revise this legislation and would then, conditionally support with amendments, the approval of City Council Bill 20-0495.

Baltimore City Recreation and Parks (BCRP) has been asked to comment on City Council Bill 20-0495 for the purpose of regulating the use and application of pesticides in Baltimore City; defining certain terms; requiring certain notices at the time of pesticide purchase; requiring certain notices prior to and after pesticide application; requiring marker placement after certain pesticide applications; prohibiting the use of certain pesticides in specified areas; prohibiting the use and application of glyphosate and chlorpyrifos; prohibiting neonicotinoid pesticide use on City-owned property; establishing certain penalties; and providing for a special effective date.

Pesticide regulation is just that, a regulatory process. Pesticides are reviewed and approved by the Environmental Protection Agency (EPA) through an extensive scientific process and at the state level in Maryland by the Maryland Department of Agricultural (MDA). Here in Maryland, the MDA has put forth a robust regulatory phase out of chlorpyrifos upon request of the agricultural community in order to maintain the integrity of the regulatory process. The expertise of health experts, scientists working in the field, and other subject matter experts should lead the discussion.

Recreation and Parks supports a ban on chlorpyrifos.

Recreation and Parks supports the regulatory process led by the EPA and the MDA to determine the fate of neonicotinoids and glyphosate.

Absent the regulatory process, we support a ban on neonicotinoids, however we request an exception for their use in the Howard Peters Rawlings Conservatory and limited use on the grounds of the Cylburn Arboretum. This request will be explained below. Neonicotinoids are used very sparingly in the Cylburn greenhouses as this falls under agricultural use permitted in this bill.

Absent the regulatory process, we do not support a total ban on Glyphosate and request its continued use in limited situations to control invasive plants in our natural areas and forests, and to control weeds in cracks on

basketball courts, tennis courts, and curb lines and sidewalks. Out of an abundance of caution we would not use it on playgrounds and near vegetable gardens.

The bill states that certain pesticides, especially those containing the chemical glyphosate, have been linked to cancer. Many governments have published risk assessments about glyphosate, finding it is unlikely to cause cancer in humans when used according to label directions as required.

- US Environmental Protection Agency, December 18, 2018
- European Food Safety Authority, November 12, 2015
- Australian Pesticides and Veterinary Medicine Authority, March 15, 2017
- New Zealand Environmental Protection Authority, August 2016
- Health Canada, 2015
- International assembly of experts: FAO/WHO May 16, 2016

The bill references the International Agency for Research on Cancer (IARC), a division of the World Health Organization and their conclusion that glyphosate is a probable carcinogen. To put the IARC determination in context, IARC put the following items in the same category as glyphosate, group 2A "probable human carcinogens."

- Red meat
- Indoor emissions from burning wood
- High temperature frying
- Late night work shifts

IARC placed the following items in a stronger evidence category, "Known human carcinogens."

- Processed meats
- All alcoholic beverages
- Sunlight
- Engine exhaust
- Outdoor air pollution

Recreation and Parks understands the intentions of this bill, but recommend that it address homeowner usage and prohibition separately from professional usage, regulation, and prohibition. This would allow each bill to align with the state and federal regulations more easily. BCRP is willing to coordinate with the City Council and the MDA to craft the language more clearly.

Use of these pesticides at Baltimore City Recreation and Parks divisions is deliberate and critical to our work, particularly within the Forestry and Horticulture divisions for Integrated Pest Management (IPM) and Integrated Vegetation Management (IVM) conservation practices.

To specifically articulate how pesticides are used within the agency, these unabridged testimonials from the Divisions of Horticulture and Forestry for pesticide applications are included as detailed illustrations:

APPLICATIONS IN BCRP HORTICULTURE DIVISION

Pesticides in the Neonicotinoid class are a vital part of a robust IPM (integrated pest management) program at both the Cylburn Arboretum and the Rawlings Conservatory. A good IPM program uses all control methods including good plant health care, cultural or mechanical controls and when necessary, pesticides. Pesticides are selected with consideration of the safety of the applicator, the efficacy of the product, targeting the right pest at the right life stage and chemical class. Using pesticides in different chemical classes reduces or eliminates the chance of a pest developing resistance.

Neonicotinoids were introduced as a 'new' class of chemical that helped reduce and now eliminate most of the use of organophosphates. Many organophosphates were dangerous for the applicator and fatal to ALL insects, whether they were targeted or not. Neonicotinoids that are used all have 'caution label', the safest labeling of any pesticide and they are used to treat piercing/sucking insect problems only.

While we have eliminated using neonicotinoids on many crops already, they were a game changer for poinsettia production. Instead of weekly spray applications that had to cover every surface of the leaves, the neonicotinoids are applied as a drench or a small amount of granules on the soil surface. They are systemic which means they are taken up by the roots and move through the plants providing thorough effectiveness with a much safer application method. Additionally, they are effective for 8 or more weeks, reducing the number of applications. Neonicotinoids are also only permitted to be applied once per crop cycle so a different class of chemical is used, if needed, for subsequent applications.

Cylburn Greenhouses fall into the 'agriculture' category and should be permitted to continue to use neonicotinoids as part of a healthy IPM program. The greenhouse manager is a certified pesticide applicator that receives continuing annual education on proper applications. Additionally, neonicotinoids have been used on the Cylburn Arboretum grounds as part of an IPM program. We have specimen plants that receive particular care to maintain the quality in the gardens and occasionally that means the careful application of pesticides. To date, there is no evidence of injury to bees, and there are two healthy colonies at Cylburn that we know about, one of which swarms annually.

The Rawlings Conservatory should also be permitted to continue to use neonicotinoids as part of a healthy IPM program. This facility relies on manual 'washing' of foliage, good plant health care, good pruning and use of low-risk products as the first line of defense for all pests. However, there are pests that live deep in the plant material, or high above in the canopy where manual removal is either ineffective or impossible. The neonicotinoids, as indicated before, are systemic, meaning they move throughout the plant getting to all the surfaces that we cannot reach. It is often impossible to get good application on plant canopies that are overhead and applying any type of spray overhead, no matter how safe, puts the applicator at risk of excessive exposure. Additionally, the facilities at the Rawlings are open to the public; products that can be put on one-time and provide long-term systemic protection reduces the exposure to the public. Most of the neonicotinoids can only be applied once per year in this situation. The same rule (1x/year), applies to some of the other classes of chemical as well; if you can only apply a product once per year but you may need 3-4 applications per year, you need to have a variety of chemicals available – multiple tools in the toolbox. The greenhouse manager and the Conservatory director will be certified pesticide applicators before the end of the year, they are currently under supervision of certified applicators (it was not required in their previous job titles).

And finally, a closed environment, such as a greenhouse or display greenhouse, is an exceptionally hospitable environment for pests but due to the closed nature of the facilities natural predators and weather fluctuations do not contribute to pest control.

APPLICATIONS IN BCRP FORESTRY DIVISION

The Forestry Division largely values and understands the concerns behind ordinance 20-0495, though components of the ordinance could severely inhibit our efforts to manage non-native invasive vegetation in Baltimore City forested natural areas. We would like to amend the legislation to permit the use of Glyphosate as it relates to Integrated Vegetation Management (IVM) conservation practices.

Glyphosate is Essential for Non-Native Invasive Herbaceous Plants & Grasses in Conservation

Glyphosate is an essential chemical for the treatment of particular non-native invasive plant species. This systemic herbicide inhibits an important enzyme needed for plant processes, and is thus used for treatments requiring absorption through plant foliage. We rely on the chemical for certain herbaceous plants and grasses.

Brand-specific Glyphosate categorized as “aquatic-safe” is essential for the treatment and management of the prolific, invasive grass, *Phragmites spp.* (or Common Reed). This plant is found along waterways and increasingly around many of our City lakes and reservoirs. *Phragmites* requires decades of repetitive cutting to control it—or alternatively, aquatic-safe treatments of glyphosate over the course of several seasons. The use of Glyphosate is essential if we want to inhibit the spread of this aggressive, 10-20’ tall invasive.

Another grass, Japanese Stiltgrass, has overtaken some MD state parks like Elk Neck State Park, and it is present in large quantities in the forests surrounding DPW-controlled Loch Raven reservoir. BCRP can prevent the spread of this plant by hand pulling small patches and chemically treating large patches of the grass. This plant should be treated in summer, before it sets seed—and Glyphosate is the only chemical compound currently available that can systematically treat this plant during the heat of summer.

Preventing Herbicide Resilience Requires Diversified Chemical Use

Lastly, when using IVM, it is important to have a diversity of tools to treat problematic vegetation. Regarding herbicide use, we must occasionally alternate chemical compounds and Brands to prevent the build-up of resistance to certain chemicals and treatments. If the Forestry Division’s access is limited to fewer chemical compounds, we will eventually face stronger, more resilient non-native invasive plants.

Messaging Around Agriculture vs. Environmental Conservation

In 2014, over 90% of total Glyphosate use in the U.S. was for Agricultural purposes (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5044953/>). Thus, we would like to stress that the primary industry of concern for the overuse of Glyphosate is Agriculture, as opposed to Environmental Conservation. As currently written, the use of Glyphosate is specifically permitted for Agricultural purposes—which we believe may send a confusing message regarding the City’s concerns for the overuse or potential hazards of this chemical.

Baltimore City Recreation and Parks hopes that any pesticide restrictions are aligned with the current state and federal regulations on signage, labeling, notice to property owners and schools. Current regulations are quite strong and most problems are from misuse or misapplication, and can be corrected by enforcement or regulation not additional legislation.

For these reasons, Baltimore City Recreation and Parks would like to work with Council to further revise this legislation and would then, conditionally support with amendments, the approval of City Council Bill 20-0495.