



# 2023 Annual Report for Code of Good Practice of the Virginia Biosolids Council

The Virginia Biosolids Council (VBC) Code of Good Practice was initially drafted and then approved in 2007. This annual update provides a progress report on how the Council's membership performed under these guiding principles.

## VIRGINIA BIOSOLIDS COUNCIL

Representatives of municipal utilities in Virginia and metropolitan facilities in Washington and Maryland that beneficially manage biosolids in Virginia make up the Virginia Biosolids Council. Companies that recycle biosolids on Virginia's farms, forests, and public spaces are also members of the VBC. Established to educate the public and to provide information on the production, beneficial use, and recycling of biosolids, the VBC serves as the voice of biosolids in the Commonwealth.

VBC members are committed to our Code of Good Practice, which requires an ongoing effort to exceed compliance with Virginia's extensive regulatory requirements for biosolids. The Code also addresses the need for social responsibility and transparency with the public. Our members have placed an emphasis on researching high-priority trace organics and advocating for the development of sound policy and regulations. As a member organization, VBC maintains a commitment for our municipal facilities to minimize social impacts and to share technologies and practices on the generation and application of this valuable amendment.

## PERFORMANCE SUMMARY

Biosolids are an endless renewable resource. In Virginia, the regulation of biosolids is a very public and transparent process. VBC continues to serve as a leader in communicating public health and safety facts. Our collective role in public health is never lost in any operation or on any VBC member. We take our role in research, management, and communication seriously.

In 2018 and 2019, Virginia experienced extreme weather events that prevented the land application of biosolids. This created stress on our members ability to properly store and manage biosolids. Working in conjunction with fellow stakeholders, VBC led an effort to pass House Bill 870, allowing DEQ to adopt plans for storage issues in extreme inclement weather, which prevents the use of biosolids as a soil amendment.

Biosolids are carbon- and nutrient-rich material produced during wastewater treatment. Solids and nutrients are recovered from wastewater that would otherwise be discarded, and processed into an effective, soil-enhancing product. When recycled, biosolids boost crop yields, improve soil health and help fight and adapt to climate change by capturing carbon in the soil. Biosolids are an endlessly renewable, safe, reliable resource with multiple benefits — good for people and the planet.



## Per- and Polyfluorinated Substances (PFAS)

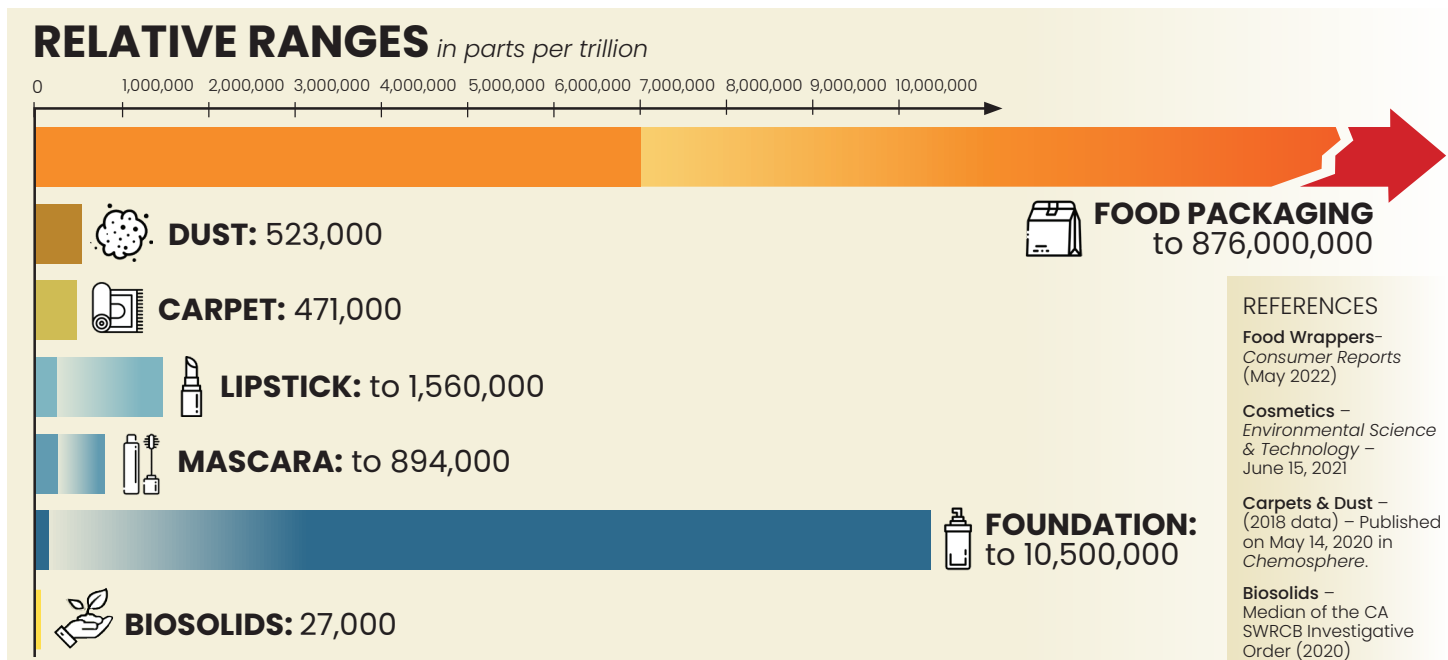
Municipal wastewater utilities are committed to the research behind innovative technology and policy development, especially as it relates to emerging contaminants known as per- and polyfluoroalkyl substances, or PFAS.

PFAS are in countless commercial, consumer, and industrial products and are acknowledged by the U.S. Environmental Protection Agency (EPA) to be widely present in the environment. Due to their prevalence and the potential for harm, EPA is committed to a focused and integrated approach on researching and remediating PFAS. VBC continues to engage with EPA in anticipation of their expected release of the biosolids risk assessment by the end of 2024.

VBC has engaged in a number of research projects to better understand the nature and prevalence of PFAS. VBC is engaged in a national PFAS research project led by Dr. Ian Pepper of the University of Arizona. Dr. Pepper's collaborative national study focuses on the fate and transport of PFAS following long-term land application of biosolids and has submitted data from the VBC's research plot at the Warsaw Agricultural Research and Extension Center. The VBC and several of its individual members have provided financial support to Dr. Pepper's study.

The Hampton Roads Sanitation District (HRSD), a long-time VBC member, has four research projects funded by U.S. EPA actively underway on its Progress Farm. For more than 40 years, Progress Farm has served as a critical asset to understanding biosolids management. For more information about HRSD's progress farm, [click here](#).

When considering PFAS in biosolids, it is important to remember PFAS presence in biosolids is the inevitable byproduct of its widespread use in society. More than 650 PFAS chemicals are used in commerce today—like non-stick cookware, stain and water-resistant clothing and other fabrics, cosmetics, firefighting foams, electronics, and automotive manufacturing.



"PFAS By The Numbers" data and images provided by CASA — California Association of Sanitation Agencies <https://casaweb.org>

## Our organization observed the Code of Good Practice in the following ways in 2023:

- Engaged in a continuing research project with Virginia Tech to better understand how carbon is captured in biosolids
- Engaged with Virginia Tech's Eastern Virginia Agricultural Research and Extension Center for biosolids research
- Advanced the organization's outreach through universally accessible social media platforms
- Engaged with U.S. Environmental Protection Agency (EPA) regularly regarding research activities on trace organics
- Provided information and education on biosolids at the State Fair of Virginia, Virginia Small Grains Field Day and Ag Expo
- Facilitated informational session on PFAS and Biosolids at Environment Virginia

Information on biosolids inspections and complaints collected by DEQ supplies the Council with measurements of our organization's performance. Provided below is a summary of this information, which is available to the public.

- In 2023, biosolids were applied to 36,145 acres. This represents less than 1% of all agriculture and forestry land in Virginia.<sup>1</sup>
- In 2023, DEQ conducted 230 inspections on fields where biosolids were recycled, nearly a 3% decrease in inspections from the previous year. The total inspections conducted in 2023 is similar to the number of inspections DEQ conducted in the previous year.
- In 2023, VBC members conducted more than 2,943 activities in the field and operated 333 days on more than 1,729 separate fields.
- Council members received nine warning letters in 2023, and there were No Notice of Violations (NOV) issued by DEQ last year.
- DEQ received 20 total biosolids-related complaints in 2023.

<sup>1</sup>[Virginia Agriculture Facts and Figures](#)

Virginia DEQ's biosolids regulations include notification of the intent to recycle biosolids to property owners adjacent to or nearby an application site. Our members work with DEQ to address questions or concerns that originate either during a public comment period or at an informational meeting. Signs are posted on fields as part of the land application process.

In 2023, there were two public meetings. DEQ notified 1,007 adjacent property owners by mail regarding permit informational meetings or pending permit actions. A total of 8 citizens attended these public meetings. The most attended meeting involved 7 citizens. DEQ issued 12 permit issuances, reissuances, and modifications in 2023.

Since 2017, DEQ has distributed more than 6,369 notices for public meetings and adjacent landowner notifications. The total number of responses resulting from these notifications is less than 6% of the total number delivered.

## COMMITMENT

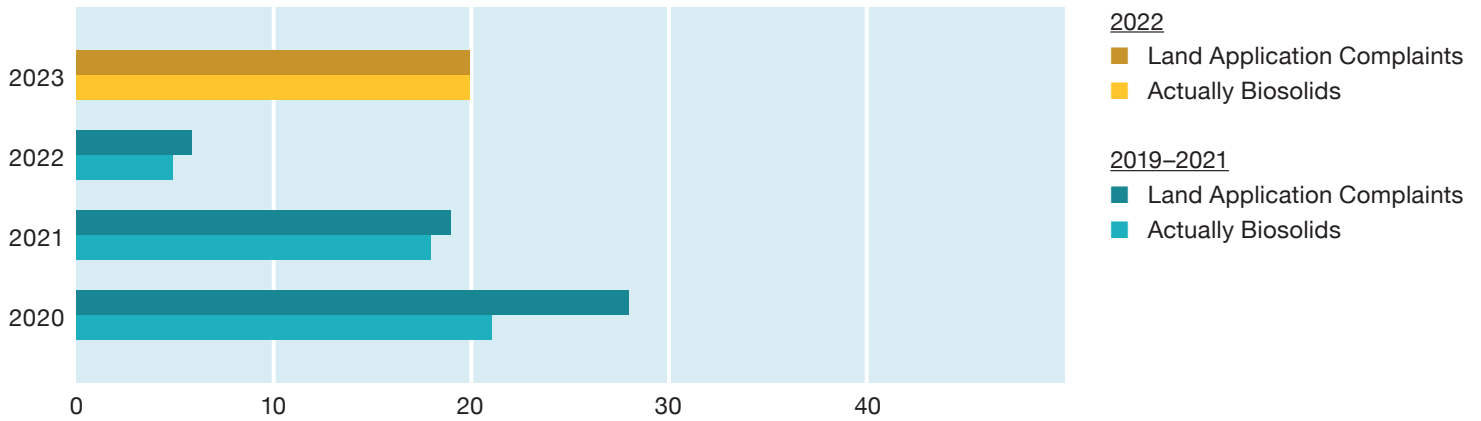
Our collective response to actively engage in research on today's most pressing challenge speaks to the VBC's commitment to protect public health and safety. Good policy is based on good science. The Council remains steadfast in its commitment to serving the public and to supporting the essential guidelines contained in the Code across Virginia.

## SUMMARY

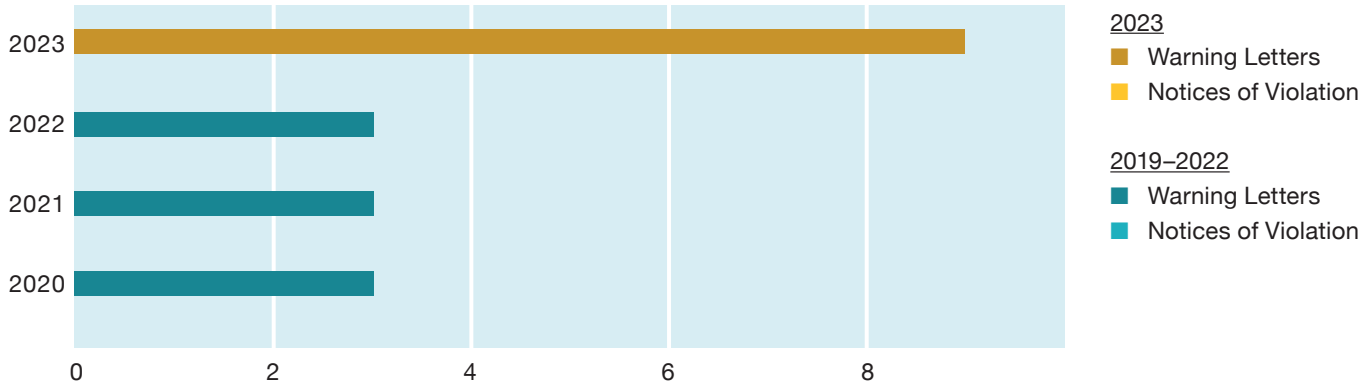
Biosolids recycling is essential to the recovery of valuable nutrients from our wastewater. In 2023, VBC spent time engaging with U.S. EPA, supporting high quality research on a variety of issues as well as advocating for [House Bill 870](#), a state waiver for storage issues in extreme inclement weather, which prevents land application. Finally, VBC's engagement on PFAS is timely to support science and evidence-based research results now and in the future.

Both our municipal facilities and in the landscape of Virginia, VBC members continue their commitment to the Code of Good Practice and to protecting the goodwill we have collectively worked so hard to develop.

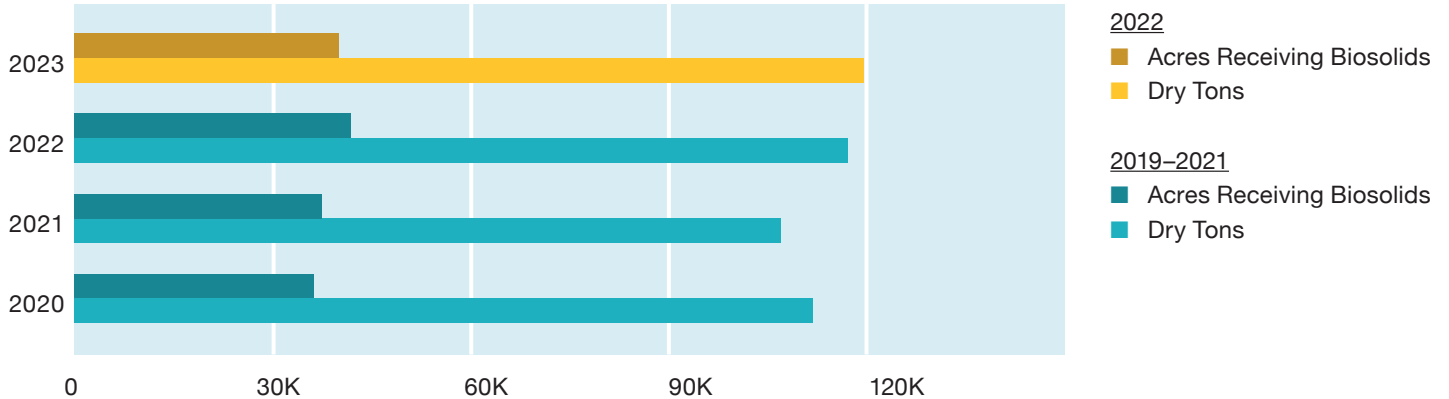
## VIRGINIA BIOSOLIDS COMPLAINTS



## BIOSOLIDS COMPLIANCE



## ACRES RECEIVING BIOSOLIDS



Questions concerning this report can be addressed to [info@virginiabiosolids.com](mailto:info@virginiabiosolids.com).

John Uzupis  
President, Virginia Biosolids Council  
Technical Services Director  
Synagro