# TOXICS REDUCTION PROGRAM 2021 Annual Report Overview

# HOW WE ACHIEVE OUR MISSION

The Toxics Reduction Program helps businesses generate less dangerous waste and even save money. We help by:



Finding ways to reduce the use of toxic chemicals.



Focusing on safer alternatives and green chemistry.



Increasing efficiency in the manufacturing process.



Improving worker safety.

# OUR SERVICES

Our team of engineers, chemists, toxicologists, and environmental specialists want to help. We provide **non-regulatory, confidential, and free** technical assistance.

We identify opportunities and implement projects in the following areas:

- Toxic chemicals used in production processes.
- Toxic chemicals in products.
- Toxic Release Inventory chemical emissions.
- Dangerous waste generated.
- Other measurable environmental impacts (e.g., energy use, water use/quality, solid waste generation).

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# OUR IMPACT

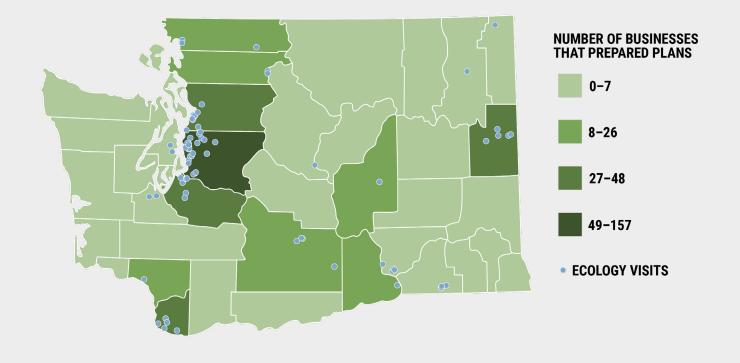
Toxics Reduction staff help businesses develop their pollution prevention plans. This year,\* businesses that prepared plans reported saving **\$3.2 million** in costs thanks to things like:



\* Numbers reflect reductions and savings achieved in 2020 that were reported by Washington state businesses in 2021.

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### TOXICS REDUCTION VISITS IN 2021



### **OUR TECHNICAL ASSISTANCE** IN 2021

Despite business closures and physical distancing requirements resulting from the COVID-19 pandemic, Toxics Reduction staff continued to make significant strides in reducing waste and preventing pollution. In the past year, our staff:



Engaged with **439 businesses**.

Visited 57 facilities.

Identified opportunities for improvement during **38 visits**.

Implemented projects during **15 visits**.



# TOXIC REDUCTION PROJECTS

Last year, we completed 11 projects that:





27,829 LBS.



Helped businesses save \$659.000.

# **PROJECT HIGHLIGHTS**

#### **PRODUCTION PLATING INC.**

- Reduced wastewater generation by an estimated 90–95% (20,000 gallons per day) after installing a wastewater reuse system that uses ion exchange recycling technology.
- Reduced annual dangerous waste generation by 160,000 pounds.
- Annual cost savings of \$490,000.
- Qualification for a certification to diversify client base and remain competitive.

#### FOOD AND BEVERAGE MANUFACTURING PROJECT

- Conducted technical assistance visits at **10 food and beverage** facilities and identified improvement opportunities at half of those facilities.
- Provided improvement recommendations that would lead to significant reduction in:
  - o Toxic chemical use.
  - Water use (up to 60,000 gallons per day).
  - Refrigerant leaks in cooling systems (\$50,000). 0

### SOLVENT REDUCTION AT ELECTRONIC MANUFACTURERS

- Helped two businesses lower their risk for exposure by eliminating methylene chloride use at both businesses.
- Removed **3,800 pounds** of solvent dangerous waste and saved an estimated \$15,000 in waste disposal by purchasing a solvent recycler.





