



Extended producer responsibility (EPR)

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May 15, 2025

- General EPR overview (international / national)
- Old-school policies
- Mid-term programs: electronics and paint
- New programs: packaging and boat wrap
- Lessons learned from EPR and product stewardship
- Environmental outcomes and toxics reduction
- What's next for Minnesota

What is extended producer responsibility

A law that extends a producer's financial and managerial responsibility for its products and packaging beyond the manufacturing stage – both upstream to product design and downstream to post-consumer use, recycling, or safe disposal.



The concept was established in the 90s in Sweden and Germany

- German Packaging Ordinance in 1991 (Green Dot)
- Pollution Prevention Control Group established the fundamentals of EPR policies in 1994-1998
- European Level requirements:
 - Packaging and Packaging Waste Regulation
 - Waste from Electrical and Electronic Equipment
 - Batteries

National landscape

- Majority of states have at least one EPR-driven program
- 141 laws across the country, spanning 20 product categories (from PSI)
- Packaging and batteries have been big focus in recent years, but there are also laws on:
 - Textiles (California)
 - Household Hazardous Waste (Vermont)
 - Pharmaceuticals (Oregon, Washington, Illinois, multiple others)
- Most common: electronics (23 states)

Old-school policies

Rechargeable batteries (1991, MINN STAT [115A.9157](#))

Prohibits a person from putting a rechargeable battery in the solid waste stream (trash or recycling) and a manufacturer of the battery or products powered by rechargeable batteries are responsible for the collection costs.

Mercury thermostats (1992, MINN STAT [116.92](#))

A manufacturer of thermostats that contain mercury is responsible for the costs of collecting and managing the replaced mercury-containing thermostats to ensure that the thermostats do not become part of the solid waste stream (and must establish incentives to support compliance).

There is also a prohibition on disposal of mercury in solid waste or wastewater (1992, MINN STAT [115A.932](#))

Pesticides (1989, MINN STAT [18B.065](#))

A fee is charged on agricultural and non-agricultural pesticide products registered in the state for the purpose of collecting and managing unwanted pesticides. The Department of Agriculture is required to work with the Minnesota Pollution Control Agency and establish a system of collection and management.

Collection requirements (not EPR):

Lead acid batteries (1989, MINN STAT [325E.1151](#))

A fee of at least \$10 at the time of purchase to be reimbursed upon the return of the battery to a retailer – the retailer must facilitate the program and post information about it. Retailers must accept up to five batteries per day for recycling.

There is also a prohibition on disposal of lead acid batteries in the solid waste stream (1987, MINN STAT [115A.915](#))

Following a disposal ban on cathode ray tubes (CRTs) the Electronics Recycling Act was passed in 2007. Many other states passed laws around video display devices like TVs, computer monitors, and other electronics.

To be considered video display devices, the products must:

- Be marketed to households in Minnesota. Include televisions (TV and TV-DVD/VCR combinations, home security displays, and CCTV systems) and computer monitors. Not be refurbished, recertified, open box, or used products.

Covered electronic devices are consumer electronics that can be collected, recycled, and sold to meet a manufacturer's recycling obligation. They must be:

- From households in Minnesota. Collected and recycled by stakeholders registered with the MPCA in the relevant program year. Any brand of video display device, computer, laptop, tablet, and peripherals (including keyboards, printers, or other devices used with a computer), fax machines, DVD players, and VCRs.



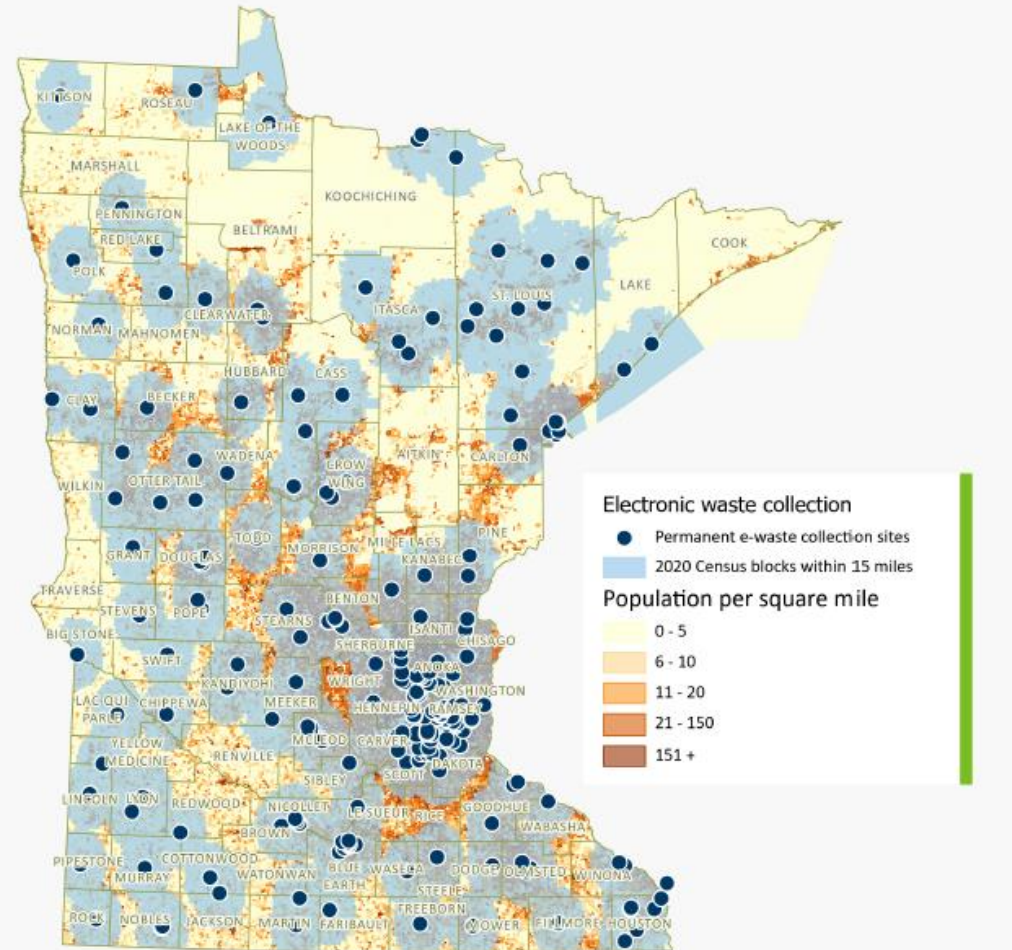
Collection Availability

Convenience Standard

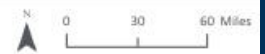
- Based on 2020 population estimates from the U.S. Census Bureau, 93% of Minnesota's population lives in a Census block that is within 15 miles of a permanent electronic waste collection site.

Collection sites for
electronic waste recycling

mn MINNESOTA POLLUTION
CONTROL AGENCY



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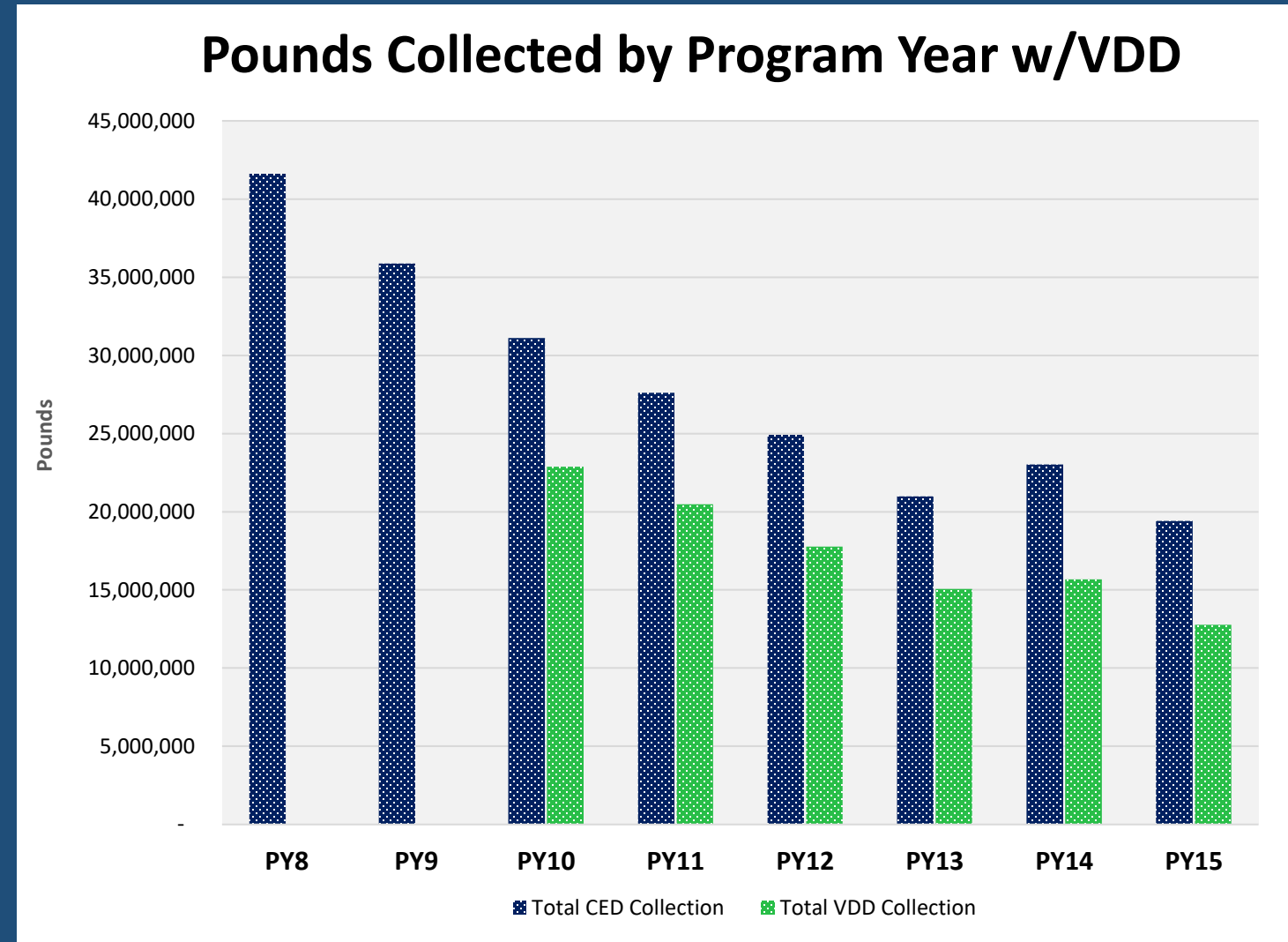
November 29, 2023

Annual due dates

- Program year: July 1 – June 30
- March 1: manufacturers report on their sales of VDD from the previous calendar year
- May 1: MPCA assigns manufacturer obligation
- June 30: manufacturers need to meet their obligation by this date
- July 15: collectors and recyclers report on pounds of MN household covered electronic devices collected and recycled
- August 15: manufacturers report on how they met their obligation and register (\$2500 registration fee/potential recycling fee)

Collection Trends

- Collection of VDD declining at rate consistent with that of total collection
- VDD % of total collection:
 - PY10: 73.6%
 - PY11: 74.1%
 - PY12: 71.3%
 - PY16: 67.6%
 - PY17: 57.7%



Architectural Paints

Architectural paint - interior and exterior architectural coatings sold in containers of five gallons or less.

- Establish a producer responsibility organization, PaintCare
- PaintCare to have a plan for collection and recycling
- A stewardship assessment is added to the purchase of architectural paint purchased in the state to cover program costs
- PaintCare uses stewardship assessment revenues to reimburse collectors and divert paint to be reformulated into new product or applied as beneficial use



A large pile of discarded glass and plastic bottles and cans, representing waste. The background is a dense collection of various bottles, including beer and soda, in different colors and shapes. A dark blue rectangular overlay is centered over the image, containing the text "New Programs" in white.

New Programs

A large pile of discarded plastic bottles and containers, including beer bottles and food containers, illustrating the problem of plastic waste.

In early 2024, Minnesota became the fifth state to establish an extended producer responsibility (EPR) law for packaging and paper products.

EPR policies incentivize more sustainable design and hold producers responsible for reducing the environmental impacts of the items they produce and managing them throughout the entire life cycle.

What materials are covered?

Covered materials include:



Packaging – *materials to transport, market, protect, or handle a product*



Food packaging – *materials to market, protect, handle, deliver, serve, contain, or store food and beverages*



Paper products – *excluding bound books or products deemed unsafe or unsanitary to handle by recycling and composting facilities*

Exempt materials

- Includes a list of specific exemptions primarily focused on packaging related to drug or medical devices, certain hazardous products, and materials managed through another program (e.g., PaintCare). It also includes news and magazine publications of a certain circulation limit.
- Defines a process where the MPCA can approve additional exemptions **if** a specific federal or state health and safety requirement prevents the material from being reduced or made reusable, recyclable, or compostable.

What are the program outcomes?



Developed by the MPCA – overarching statewide requirements for:

- Recycling rate, Composting rate, Reuse rate, Return rate
- % of covered materials to be reduced overall
- % of postconsumer recycled content to be used, as applicable by materials

Proposed by the PRO – material specific performance targets to benchmark to the statewide requirements:

- Recycling rate, Composting rate, Reuse rate, Return rate
- % of covered materials to be reduced overall
- % of postconsumer recycled content to be used, as applicable by materials

After January 1, 2032, all covered materials must be reusable, refillable, recyclable, or compostable, and covered under an approved stewardship plan to be sold in Minnesota.

How does the program work?





Advisory Board

The advisory board provides recommendations and oversight of both the PRO and the agency on program implementation.



Producers

Producers must establish a Producer Responsibility Organization (PRO) and pay fees to the PRO based on what is sold into Minnesota.



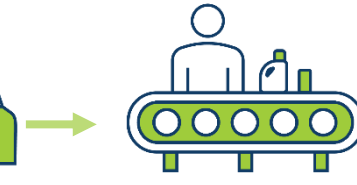
Producer Responsibility Organization

The PRO puts together a plan and reimburses costs of the reuse, recycling, and composting of covered materials.

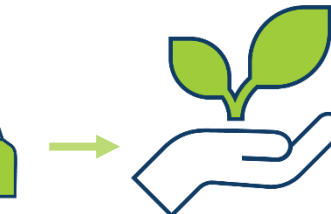


Service Providers

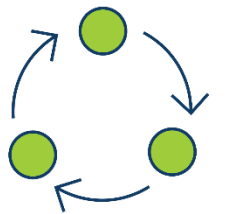
Examples include haulers, recycling facilities, and cities that contract for collection services.



Recycle



Compost



Reuse



Provide oversight and enforcement requirements (goals)

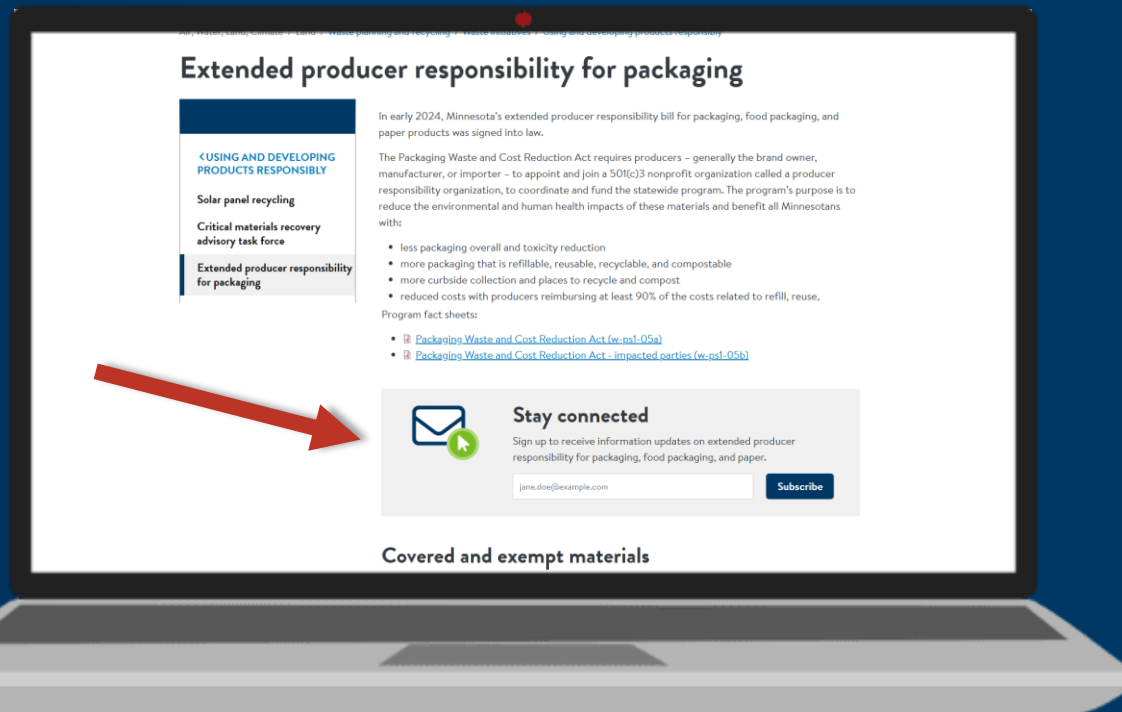


Complete needs Assessment



Create state-wide lists

Program updates



- ✓ 18-member advisory board appointed; meetings are monthly
- ✓ Initial service provider registration is live
- ✓ Producers appointed Circular Action Alliance (CAA) as the packaging producer responsibility organization (PRO) and MPCA confirmed registration
- ✓ MPCA Program lead hired!
- ✓ MPCA EPR data analyst hired!

In process: A preliminary assessment (due **December 31, 2025**) and initial needs assessment (due **December 31, 2026**) to gather data, to be completed by Eunomia



Scope

- Types of materials introduced (sold, distributed, etc.) and tons collected
- Processing capacity and technology at recycling and compost facilities
- Average term length of residential recycling and composting collection contracts
- Estimated total annual collection and processing service costs
- Available markets in MN and capacity
- Material sales by volume, weight, and type



Scope

- Existing waste reduction, reuse, recycling, and composting (inc. rates); current use of PCR
- Proposals for performance targets and statewide requirements
- Recommended collection methods to maximize efficiency, quality, and optimize service/convenience
- Proposed plans and metrics for measuring progress
- Evaluation of available third-party certifications
- Inventory of current infrastructure, capacity, performance, funding, etc.
- Evaluation of investments needed at all levels of hierarchy
- Recommended methodology for establishing reimbursement rates for service providers
- Assessment of viability and robustness of markets for recyclables
- Assessment of level and cause of contamination
- Assessment of toxic substances intentionally added to materials
- Best practices to increase public awareness and educate/outreach
- Identification of materials with the most significant impact on human health and the environment

Key milestones **not a comprehensive timeline*

★ Phase 1: Building the foundation

2025 - 2026	January 1, 2025	- Formation of the PRO → <i>complete; Circular Action Alliance (CAA) confirmed in Minnesota</i> - Appointment of the Advisory Board → <i>complete</i> - Registration of service providers with the MPCA → <i>in process; initial form is live</i>
	December 31, 2025	Completion of preliminary assessment
	December 31, 2026	Completion of needs assessment by the MPCA to gather additional data to inform the program, targets and requirements, and stewardship plans → <i>in process; RFP proposals are being evaluated by MPCA in preparation for awarding the contract</i>

Phase 2: Establishing the structure

2027 - 2028		- Establishment of the materials lists by the MPCA (July 1, 2028) - Establishment of the statewide requirements by the MPCA (no date)
	October 1, 2028	First PRO stewardship plan due to MPCA, including opportunity for public comments

Phase 3: Implementing change and tracking progress

2029 - 2032		Implementation of stewardship plan by PRO with producers and service providers
	February 1, 2029	Program cost reimbursement begins by PRO with 50% (75% by 2030, 90% by 2031)
	April 1, 2029	First annual report submitted by the PRO
	October 15, 2031	First biennial report to the Legislature by the MPCA
	January 1, 2032	Completion of studies on workplace conditions and equity, covered materials pollution and clean-up, conducted by the MPCA

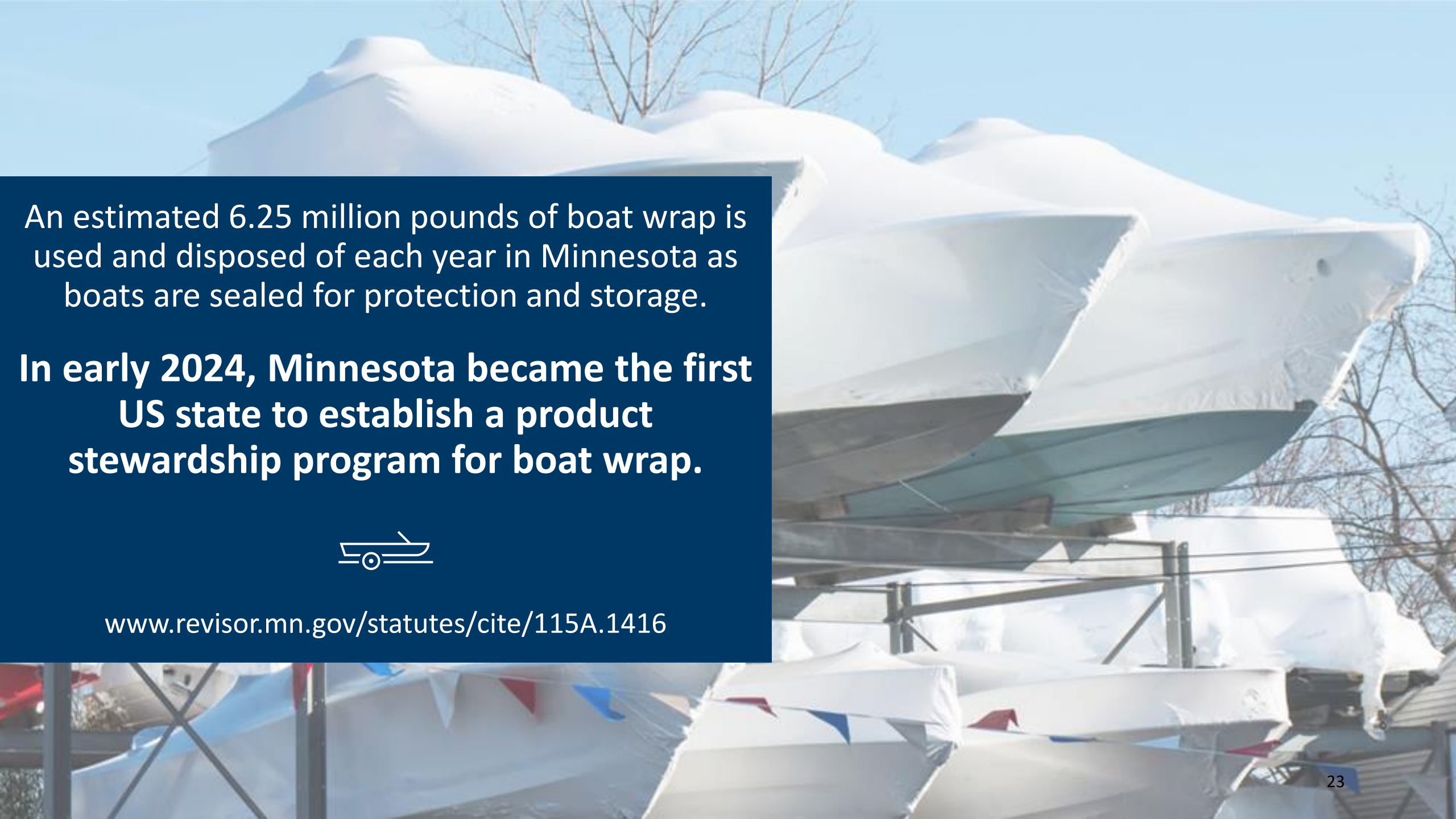


New 2024 product stewardship law

Minnesota's boat wrap product stewardship program

John Gilkeson

SWAA Winter Training – March 11, 2025



An estimated 6.25 million pounds of boat wrap is used and disposed of each year in Minnesota as boats are sealed for protection and storage.

In early 2024, Minnesota became the first US state to establish a product stewardship program for boat wrap.



www.revisor.mn.gov/statutes/cite/115A.1416

Who is involved in the stewardship program?

Minnesota Pollution Control Agency (MPCA)

- Establish annual performance goals that are incorporated into the stewardship plan and met by program
- Review and approve stewardship plans (every 5 years) and annual reporting that tracks program progress and outcomes
- Maintain a list of all compliant producers and brands participating in an approved plan
- Support program compliance and enforcement

Stewardship organization

- Implement the program on behalf of producers
- Develop stewardship plans (every 5 years) and annual reports that track program progress and outcomes
- Collect producer fees and pay annual admin fee to MPCA
- Provide educational materials to boat wrap purchasers and other stakeholders, including information on the available collection, transportation, reuse, and recycling options; set specs for clean material

Producers

- Become a member of a single stewardship organization and operate under an approved plan
- Pay producer membership fees

Collectors [install/remove]

- Collect according to SO and recycler specifications: Remove contaminants and accessories, keep material clean and dry

Retailers [install/remove]

- Review list of compliant producers to determine compliance and before purchasing boat wrap
- **May** elect to participate as a designated collection point of clean boat wrap

Local and Tribal Governments

- **May** elect to participate as a designated collection point of clean boat wrap
- **May** conduct outreach and education

How does the program work?



Annual performance goals

Established by the agency to drive program progress based on:

- (1) the most recent collection data available for the state;
- (2) the estimated weight of boat wrap sold and discarded annually;
- (3) actual collection data from boat wrap recycling or stewardship programs operating in other states; and
- (4) continuous progress necessary to meet statutory requirements.



Stewardship plans

Updated every five years; details methods to collect and manage boat wrap statewide, partner with existing establishment, measure progress, provide education and outreach, ensure strong opportunities for reincorporating recycled boat wrap into new production.



Statewide services for collection, reuse and recycling



Reduced environmental impacts resulting from the disposal of boat wrap

Annual reporting

Submitted every year to document progress on program outcomes and performance goals.

By June 1, 2035, no less than **80%** of the total weight of boat wrap sold in Minnesota must be collected and recycled.

What is the general timeline?

MPCA staff hiring and preparation → *in process*

2025

March 1, 2025 | Stewardship organization submits **stewardship plan** to the MPCA for review and approval or rejection.

July 1, 2025 | MPCA must respond to draft plan within 120 days.

June 1, 2025 (annually thereafter) | MPCA identifies agency costs to administer and enforce the program.

July 1, 2025 (annually thereafter) | Stewardship organization pays the required administrative fee.

****Program requirement**** **September 1, 2025** | No person may use boat wrap, sell boat wrap, or offer boat wrap for sale in or into Minnesota unless the producer participates in an approved stewardship plan through a stewardship organization.

2026

March 1, 2026 (annually thereafter) | Stewardship organization must submit **annual report** to the MPCA.

MPCA must set program performance goals – these will likely be set in the first year with sales and collection data from initial operation of the program.

2030

****Program requirement**** **Stewardship plan must be updated and submitted for approval every five years.**

****Program requirement**** **June 1, 2030** | No less than **50%** of the total weight of boat wrap sold in Minnesota must be collected and recycled.

2035

****Program requirement**** **June 1, 2035** | No less than **80%** of the total weight of boat wrap sold in Minnesota must be collected and recycled.

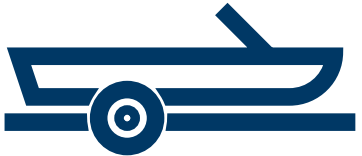
After June 1, 2035 | The MPCA may establish additional requirements for the % of boat wrap sold in the state that must be collected and recycled (no less than the amounts stated in statute).

Current status of MPCA and Producer activities



MPCA is in the process of:

- ☒ Sending program letters to producers, manufacturers, and retailers for outreach on upcoming milestones
- ☒ Creating high-level program resources, raising awareness on the law and requirements
- ☒ Public comment period for initial boat wrap stewardship plan April 1 – May 15
- ☒ Preparing to hire a program lead



Producers must:

- ☒ Identify and designate a boat wrap stewardship organization; initial stewardship plan submitted on **March 3, 2025 by CIFFRO**

Environmental outcomes and toxics reductions

- EPR does drive collection of end of life products and recovery of useful/valuable materials and parts
- It also deals with products that are problematic or hazardous – capturing or reducing the toxicity
- Old school policies focused on capture of toxics such as lead acid batteries or mercury thermostats...
- Or elimination of toxics – take it back or eliminate the problem. EPR should drive design and material changes but every manufacturer has different motivations
- Pollution prevention by the producer – the ultimate EPR



Lessons learned

- Mixed record of success on design for the environment
- Difficult to mandate DFE except for specific products or materials
- Market and technology niches are not readily abandoned by producers
- Competitors won't exert pressure on producers who 'need to change'
- Material/chemical ingredient disclosures to users/end markets needed
- Transparency and accountability of PRO and producers are essential through government oversight, annual reporting, explicit performance requirements
- Need regular plan updates and mechanisms to improve deficient performance

Program attributes and options

- Design and material changes can:
 - reduce lifecycle environmental impacts of product category, in production, use, and end of life mgmt
 - enhance ease of repair, upgrade, other strategies for longer product life
- Program financing: Internalize costs to manufacturers, advance disposal fees for users, hybrid approaches to eliminate externalized costs to society and end of life fees
- One PRO or several organizations; how are activities and reporting coordinated
- Publicly run programs are an option for some material categories; examples are Vermont e-waste program and Maine packaging program
- Education and outreach to product users is very important
- Convenient and free access to programs during product life and at end of product life

What's next for Minnesota

Update the rechargeable battery law and electronics recycling act.

Other ideas:

- Textiles [CA]
- Mattresses [CA, CT, OR, RI]
- Carpet [CA, NY]



Questions?

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Thank you!