

Electronics recycling rulemaking overview

Waste and Materials Management Study Group

April 1, 2021



Landfill and incinerator bans

- ▶ Televisions
- ▶ Computers (desktop laptop, netbook, tablet)
- ▶ Computer monitors
- ▶ Computer accessories (mice, keyboards, external hard drives, etc.)
- ▶ Desktop printers & fax machines
- ▶ E-readers
- ▶ DVD players, VCRs and DVRs
- ▶ Cellphones

Which Electronics Are Banned From Wisconsin Landfills?



Wisconsin's electronics recycling law bans most electronics from landfills and incinerators. Electronics contain valuable materials and must be reused or recycled. To find a collection site near you, visit dnr.wi.gov and search "ecycle."



- ❌ Computers: desktop, laptop, netbook, notebook
- ❌ TVs and computer monitors
- ❌ Cell phones, tablets and e-readers
- ❌ Fax machines and desktop printers, including printers combined with fax machines, scanners and copiers
- ❌ Computer accessories, including keyboards, mice, hard drives, scanners, speakers, flash drives and other devices
- ❌ DVD players, VCRs, DVRs and other video players



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8108-WA-1-07-2015



dnr.wi.gov "ecycle"

E-Cycle Wisconsin

- ▶ Manufacturers of TVs, computers, monitors and printers must register and meet recycling targets based on weight of covered electronics sold in WI
- ▶ Collectors and recyclers can choose to participate; must meet program requirements
- ▶ Only weight from registered collectors and recyclers eligible for manufacturer credit

E-Cycle Wisconsin process



Manufacturer's role

Manufacturers sell electronics through retailers, distributors and/or directly. Some of these products are sold into Wisconsin, which has a law covering electronics manufacturers.

The law assigns manufacturers annual "recycling targets" based on the weight of covered products the manufacturer sells in Wisconsin.

Manufacturers make agreements with registered recyclers or with brokers that work with registered recyclers to pay a certain number of cents per pound to meet recycling targets.

Manufacturers fulfill their contracts with recyclers, keeping costs lower for the public.

Requirements for registered collectors



- ▶ Must register with E-Cycle Wisconsin IF working with a registered recycler or another registered collector
 - ▶ Annual report/re-registration submitted to DNR (no fee)
 - ▶ Sites/events where electronics collected from the public are reported and displayed on DNR's website (can include restrictions, like community residents only)
- ▶ Solid and hazardous waste requirements and BMPs apply to everyone
- ▶ No OFR, even if dismantling

Requirements for registered recyclers

- ▶ Must register with E-Cycle Wisconsin IF working on behalf of a registered manufacturer
- ▶ Annual report/re-registration submitted to DNR (no fee)
- ▶ Pollution liability insurance of at least \$1 million
- ▶ Maintain proof of financial responsibility for closure and cleanup and a written contingency plan for environmental releases
- ▶ Comply with all federal, state and local requirements concerning storage, transportation, processing and exporting of eligible electronics and materials derived from eligible electronics
- ▶ Comply with federal requirements for occupational and environmental health and safety training for employees
- ▶ May not use prison labor to recycle electronics under E-Cycle Wisconsin
- ▶ Keep detailed records, including sources and downstream vendors for eligible electronics

Current regulation outside of E-Cycle Wisconsin

E-Cycle WI does not cover:

- ▶ Non-eligible devices
- ▶ Devices from businesses, some private K-12 schools, higher education, government and institutions
- ▶ Collection and recycling activities not done on behalf of manufacturers

Limited DNR oversight

- ▶ Compliance with solid waste disposal requirements where salvageable material exemptions don't apply
- ▶ Hazardous waste requirements for management of cathode ray tubes and circuit boards
- ▶ Universal waste requirements for batteries, lamps and mercury equipment removed from electronics
- ▶ Solid waste processing approvals for a few advanced processing operations

Problems to address

- ▶ More enforcement cases
- ▶ Expensive “backyard scrapping” cases
- ▶ Regulatory uncertainty and gaps for legitimate recyclers that have problems
- ▶ Uncertainty for generators—who is a responsible recycler?
- ▶ Misapplied scrap metal exemption given current electronics makeup
- ▶ Need for more consistency with other solid waste and recycling processors



Rulemaking goals

[Full scope statement](#)

Protect human health and the environment by providing more consistent oversight of electronics recycling operations in Wisconsin.

Ensure the electronics recycling program created by s. 287.17, Wis. Stats., continues to function well, including maintaining streamlined registration and reporting practices and preserving a level playing field among program participants.

Rules affected

Section	Changes
NR 500.03	New electronics recycling definitions; amended “salvageable materials” definition
NR 502.05	Include electronics in storage license exemption for facilities serving apartments, commercial and business establishments, and industries
NR 502.06	Electronic devices no longer meet transportation license exemption for “salvageable materials”; new exemption from C&T license if certain conditions are followed; exemption for mail-back recycling programs
NR 502.07	Ensure electronics drop-off and transfer facilities are included in exemptions from licensing; still need to meet basic requirements
NR 502.08	Clarify the electronics recyclers do not qualify for scrap metal processing license exemption, exempt very small electronics recyclers and collectors that do limited hand sorting from processing licenses requirements, require electronics recycling facilities to obtain solid waste processing license
NR 520	Ensure existing OFR requirements cover electronics recycling facilities
NR 530	New chapter implementing E-Cycle Wisconsin



Proposed definitions

- ▶ “Electronics recycling” means processing electronic devices for use in manufacturing processes or for recovery of usable materials, and includes processing electronic devices or components derived from electronic devices by disassembling, baling, crushing, grinding, and shredding. “Electronics recycling” does not include any of the following:
 - ▶ Destruction by incineration or other processes.
 - ▶ Land disposal of recyclable materials.
 - ▶ Reuse, repair, or any other process through which electronic devices are returned for use in their original form.
 - ▶ Removal of an electronic device from another device, such as from a major appliance or motor vehicle.
 - ▶ Hand disassembly of electronic devices in an educational setting for educational purposes.
 - ▶ Hand disassembly of a waste electronic device generated by a household on the property where it is generated.

Activities/facilities that would be exempt from processing license requirement



Reuse, repair, or other process through which electronic devices returned for use in their original form



Removal of an electronic device from another device, such as from a major appliance or motor vehicle



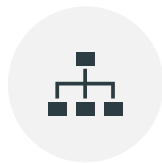
Hand disassembly in an educational setting for educational purposes



Hand disassembly of a household's own electronic devices



Electronics recycling facilities that recycle fewer than 25 devices a year



Collection sites/other facilities that only hand sort and package electronic devices for shipping to electronics recyclers without engaging in additional electronics recycling activities.

Facilities that would need a solid waste processing license

- ▶ Registered E-Cycle Wisconsin recyclers
- ▶ Registered E-Cycle Wisconsin collectors that disassemble some electronics
- ▶ Other facilities that disassemble, bale, crush, grind or shred electronic devices or components



New ch. NR 530:
E-Cycle Wisconsin
implementation

E-CYCLE
WISCONSIN



Summary of rule

- ▶ Most language reflects existing practices and guidance, clarifying or providing additional detail for statutory language governing registration, reporting, and DNR's administration of the program
- ▶ Definition clarifications would add smartphones and video game systems as covered devices
 - ▶ Increases overall manufacturer recycling target
 - ▶ Adds smartphones as eligible devices
- ▶ Clarifies and strengthens customer education requirements for electronics retailers

Requirements for registered recyclers

- ▶ On annual registration, list all facilities where they process or store eligible electronics (currently, only required to list facilities where they recycle eligible electronics) and maintain owner financial responsibility for any storage facilities, in addition to current requirement for recycling facilities
- ▶ In-state registered recyclers subject to the solid waste processing license requirement and must follow OFR requirements in ch. NR 520
- ▶ To ensure a level playing field with in-state recyclers, more specific requirements for out-of-state registered recyclers' OFR, including naming independent 3rd party as beneficiary or obligee, estimating costs based on independent 3rd party performing the work, and notifying DNR of OFR changes or cancelation in a timely manner
- ▶ Use and keep records of bills of lading for electronics loads

Economic Impact Analysis

- ▶ Small costs for obtaining OFR and solid waste processing license (license fee waived)
- ▶ Majority of costs due to classifying smartphones and video game systems as consumer computers
 - ▶ Additional manufacturers would need to register, pay fee
 - ▶ Existing and new manufacturers would have recycling target pounds based on sales of these devices
 - ▶ Would add funding to recycling system, potentially reducing collector/consumer costs



Next steps

- ▶ Accepting EIA comments through April 16
- ▶ Public hearing on rule language expected mid-2021
- ▶ Before NRB for adoption fall 2021
- ▶ Follow at [DNR solid waste rules webpage](#)

Rulemaking timeline (*estimated*)



2021 SB 248

Change program year to calendar year

Reduce/eliminate fees for small manufacturers

Authorizes min-grant program to develop infrastructure in underserved areas

Expand definition of schools to include all K-12

Slight tweak to desktop printer definition

Requires manufacturers to report by rural/urban pounds

Contacts



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