Form 1100-001P (Rev. 01/21)

# **Wisconsin Department of Natural Resources Natural Resources Board Agenda Item**

Item No. 4.A

#### SUBJECT:

Request adoption of germane modifications to Board Order WA-11-19, proposed rules to revise chapters NR 500, 502 and 520 and create chapter NR 530 for the purpose of implementing electronics recycling program requirements

FOR: June 2022 Board meeting

PRESENTER'S NAME AND TITLE: Kate Strom Hiorns, Recycling and Solid Waste Section Chief

#### **SUMMARY:**

The purpose of the proposed rule is to create a new administrative code chapter under the authority of s. 287.17, Wis. Stats., and to amend chs. NR 500, 502 and 520, Wis. Adm. Code, as they relate to electronics collection and recycling. The goals of this rulemaking are to:

- Ensure the E-Cycle Wisconsin program continues to function well by codifying numerous streamlined procedures developed by the department working with industry, keeping the program up to date with developments in the electronics industry, and preserving a level playing field among program participants.
- Protect human health and the environment by providing oversight of electronics recycling operations that is more consistent with oversight of other waste and material processing in Wisconsin.

Most elements in the rule come from discussions with E-Cycle Wisconsin stakeholders, whose concerns included a need for more actions to deter bad actors; a lack of consumer awareness about the need to recycle electronics responsibly; and economic and safety issues the changing electronic waste stream has brought to collectors and recyclers.

The proposed rule was adopted by the Natural Resources Board on October 27, 2021, approved by the Governor on November 18, 2021, and submitted to the Chief Clerk of each house on November 22, 2021.

While the rule was under review by the Joint Committee for Review of Administrative Rules (JCRAR), JCRAR expressed concerns with two provisions of the proposed ch. NR 530. On April 13, 2022, the department recalled the proposed rule to make germane modifications to address these concerns. The department has made the following germane modifications:

- 1. Deleted NR 530.04 (2), which was a list of devices that meet the definition of computer peripheral.
- 2. Added a note to NR 530.11 confirming this section applies only to retailers meeting the definition in s. 287.17 (1) (n).
- 3. Changed "shall" to "may" in the introduction of NR 520.11 (2), which lists steps retailers can take to comply with customer education requirements.
- 4. Deleted NR 530.11 (2) (b), the requirement for retailers to provide training to employees.

Modifications to the board order are shown in red font on pages 16, 17, 25 and 26.

The rule is expected to have a minimal (level 3) impact on small businesses.

**RECOMMENDATION:** That the Board adopt germane modifications to Board Order WA-11-19.

#### LIST OF ATTACHED MATERIALS (check all that are applicable): □ Background Memo Attachments to background memo Board order/rule Fiscal estimate and economic impact analysis (EIA) form Response summary

	Approved by	Signature	Date
	George B. Wolbert, Waste & Materials Management Program Director	1 / 1-	5/5/2022   3:05 PM CDT
	Gail E. Good, Acting Environmental Management Division Administrator	Mail E. Mood	5/5/2022   5:13 PM CDT
F	Preston D. Cole, Secretary	Sarali Barry	5/12/2022   12:29 PM CD

for

by Sarah Barry

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# CORRESPONDENCE/MEMORANDUM <sup>1</sup>

DATE: May 3, 2022

TO: All Members of the Natural Resources Board

FROM: Preston D. Cole, Secretary

SUBJECT: Background memo on Board Order WA-11-19, relating to revisions to chapters NR 500,

502 and 520 and creation of chapter NR 530 for the purpose of implementing electronics

recycling program requirements.

# 1. Subject of Proposed Rule:

The proposed rule addresses revisions to chapters NR 500, 502 and 520 and creation of chapter NR 530 for the purpose of implementing electronics recycling program requirements.

# 2. Background:

Wisconsin's electronics recycling law (2009 Wisconsin Act 50) established a statewide product stewardship program to collect and recycle certain electronics from Wisconsin households and schools (now in s. 287.17, Wis. Stats.) called E-Cycle Wisconsin. This recycling program is funded by manufacturers of TVs, computers, monitors and printers. The law also banned landfill and incinerator disposal of many electronics beginning in September 2010 under s. 287.07 (5), Wis. Stats.

To date, the department has not promulgated rules related to ss. 287.07 (5) or 287.17, Wis. Stats. Section 287.17, Wis. Stats., was intended to be detailed enough for the department to complete initial implementation without rulemaking and prohibited the department from promulgating rules during the first two years of the program.

Since 2009 Wisconsin Act 50 took effect, the electronics industry has changed significantly. The state's electronics recycling industry has grown and matured, and relationships among electronics collection points, consolidation points, recycling facilities and electronics manufacturers have become more complex. The department has worked extensively with program participants over the years to develop and improve streamlined, online registration and report forms. These allow the department to verify the accuracy of information that collectors, recyclers and manufacturers report, and also provide data to update a public list of electronics recycling options in real time, which the department identified as a high priority based on statewide surveys of Wisconsin households. In addition, the department has worked with stakeholders to put in place a flexible and efficient marketplace for the buying and selling of credit for recycled eligible electronic devices, making it easier for manufacturers to meet their recycling targets and for recyclers to recover costs. The proposed new ch. NR 530, Wis. Adm. Code, codifies many of these improved and streamlined registration and reporting practices.

The proposed rule was adopted by the Natural Resources Board on October 27, 2021, approved by the Governor on November 18, 2021, and submitted to the Chief Clerk of each house on November 22, 2021. While the rule was under review by the Joint Committee for Review of Administrative Rules (JCRAR), JCRAR expressed concerns with two provisions of the proposed ch. NR 530. On April 13, 2022, the department recalled the proposed rule to make germane modifications to address these concerns in accordance with s. 227.19 (4) (b) 4. Wis. Stats.

The department has made the following germane modifications:

1. Deleted NR 530.04 (2), which was a list of devices that meet the definition of computer peripheral, and renumbered accordingly.



- 2. Added a note to NR 530.11 confirming this section applies only to retailers meeting the existing definition in s. 287.17 (1) (n), Wis. Stats.
- 3. Changed "shall" to "may" in the introduction of NR 520.11 (2), which lists steps retailers can take to comply with customer education requirements.
- 4. Deleted NR 530.11 (2) (b), the requirement for retailers to provide training to employees, and renumbered accordingly.

# 3. Why is the rule being proposed?

Prior to the electronics recycling law's enactment in 2009, and anticipating increasing volumes of electronic devices reaching the end of their service life, the department modified requirements for electronics recycling to encourage development of e-cycling infrastructure. The department exempted electronics recyclers from solid waste processing license requirements under s. NR 502.08 (2) (f), Wis. Adm. Code, as "Facilities for the processing of scrap iron, steel or nonferrous metal using large machines to produce a principal product of scrap metal for scrap or use for remelting purposes." Transporters were also exempted from solid waste transporting requirements under s. NR 502.06 (2) (a), Wis. Adm. Code, as "Services for the collection and transportation of only gravel pit spoils, quarry materials, earth materials or salvageable materials other than those listed in s. 287.07 (3) or (4), Stats."

Since the department made these policy decisions, there have been several significant changes in the electronics recycling landscape that have led the department to re-examine this interpretation with this rulemaking and seek to define requirements for electronics collection, transportation and recycling activities. These included:

- Significant growth in Wisconsin's electronics recycling infrastructure, due largely to 2009 Wisconsin Act 50, including the rapid growth among a handful of high-tech recycling facilities in the state.
- An increase in enforcement cases resulting from irresponsible recyclers or "scrappers" removing high-value metals from electronics while illegally leaving hazardous materials behind. Since 2015, the department estimates these cases have led to more than \$2 million in completed or projected cleanups. The majority of these costs are covered either by taxpayers or by landlords who own the properties on which the material has been mismanaged.
- Changes in the market for glass from cathode ray tubes (CRTs), which have made recycling older TVs and monitors much more expensive and led to stockpiles of CRTs and lead-containing CRT glass which is a hazardous waste.
- Greater public awareness of the need to recycle electronics, and more demand for legitimate recyclers providing these services.
- The rapid and continued evolution of electronics, which has changed both the commodity value of electronic waste and the methods and tools needed to properly recycle it. Newer electronics have a lower metal content (more valuable as commodities) with a commensurate increase in plastic components with a lower commodity value. They contain fewer toxic materials, but more flammable, difficult-to-remove lithium-ion batteries, which add labor and fire prevention costs.

Many elements in the rule come directly from discussions with E-Cycle Wisconsin stakeholders over the years. At the most recent E-Cycle Wisconsin stakeholder meeting in May 2018, participants were generally supportive of the existing electronics recycling law, but noted several areas of concern, including a need for more actions to deter bad actors; the lack of affordable, convenient recycling for some state residents; a lack of consumer awareness about the need to responsibly recycle electronics; and economic and safety issues the changing electronic waste stream has brought to collectors and recyclers. The department addressed these concerns in the proposed rule.

#### 4. Summary of the rule.

# Changes to existing chs. NR 500, 502 and 520, Wis. Adm. Code

The department is proposing the following changes to chs. NR 500, 502 and 520, Wis. Adm. Code, to ensure safe collection, transportation and processing of electronic waste and to make regulation of these activities more consistent with other types of solid waste:

- **A. Definitions:** The rule creates and amends definitions in s. NR 500.03, Wis. Adm. Code, to make it clear that electronic devices are a different type of material than scrap metal, appliances or other materials defined in this section, and to clarify what is and is not included in electronics processing. This change is necessary because many appliances, cars and other items would now also meet the definition of an electronic device. The rule specifically excludes electronic devices from the definition of "salvageable materials" in s. NR 500.03 (203), Wis. Adm. Code, which required the department to amend or add language in several parts of ch. NR 502, Wis. Adm. Code, to clarify requirements for electronic devices.
- **B.** Storage of waste electronic devices at apartment buildings, commercial establishments, business establishments and industries: The rule amends language in s. NR 502.05 (3) (a), Wis. Adm. Code, to ensure electronics and similar devices that may not need to be stored in containers are still eligible for this exemption from solid waste storage licensing.
- C. Transportation of electronic waste: The rule adds and amends language in s. NR 502.06, Wis. Adm. Code, to exempt trucks carrying only electronic waste for recycling from the requirement to obtain a solid waste collection and transportation (C&T) license from the department, but to retain basic operational requirements to ensure the electronics remain recyclable and that haulers comply with the electronics disposal ban. It also creates an exemption from C&T licensing for parcel carriers transporting incidental amounts of solid waste for recycling, such as electronic devices, smoke detectors, or other items recycled through mail-back programs.
- D. Solid waste transfer stations that handle electronic waste: The rule amends an exemption in s. NR 502.07, Wis. Adm. Code, to ensure electronics collection sites can meet the conditional license exemption as transfer stations in s. NR 502.07 (2), Wis. Adm. Code, when electronics are appropriately stored in cardboard Gaylords or on pallets and do not need to be moved off-site weekly. It also creates a new conditional exemption from solid waste transfer facility licensing for facilities such as retailer logistics centers, where loads of electronics collected from stores are consolidated.
- E. Solid waste processing license requirements for electronics processing facilities: The rule adds language to s. NR 502.08, Wis. Adm. Code, to require electronics processing facilities to obtain a solid waste processing license from the department and meet applicable code requirements for obtaining and maintaining that license. The rule exempts very small-scale electronics processing activities from licensing, along with electronics repair, which pose a low risk to human health or the environment and for which obtaining department approval would be burdensome and inefficient for both the facility and for the department. An addition to s. NR 502.08 (6), Wis. Adm. Code, is meant to ensure that third-party haulers contracted by electronics processing facilities are informed of applicable requirements under s. NR 502.06 (2) (ag), Wis. Adm. Code.
- **F.** Clarification of solid waste fees and financial responsibility requirements: The rule makes small changes in ch. NR 520, Wis. Adm. Code, to ensure electronics processing facilities are covered by this chapter in the same way that other solid waste processing facilities are, including being exempted from annual licensing fees, and to clarify what must be included in closure cost estimates for non-landfill solid waste facilities. This part of the rule addresses the most common bad actor problem, where a facility removes the most valuable components and leaves less

valuable materials behind as waste.

Creation of ch. NR 530, Wis. Adm. Code, specific to the E-Cycle Wisconsin program
The new chapter only covers activities and entities regulated under s. 287.17, Wis. Stats. This includes both in-state and out-of-state brokers, collectors, manufacturers, recyclers and retailers.

Generally, the proposed ch. NR 530, Wis. Adm. Code, matches existing registration and report forms, guidance, and other current practices the department has developed in conjunction with E-Cycle Wisconsin stakeholders. These include:

- Clarification of which devices meet the definitions of "computer monitor," "computer peripheral" and "consumer computer" under s. 287.17 (1), Wis. Stats.
- Requirements for information submitted with annual registration and report forms.
- Eligibility of electronic devices recovered from waste loads or illegal dumping to count toward manufacturers' weight recycled.
- The use of brokers to facilitate transactions between recyclers and manufacturers.
- The reasons and process for suspension and revocation of program registrations.
- Options for electronics retailers to comply with the prohibition in s. 287.17 (2) (c), Wis. Stats., on selling unregistered brands of covered electronics.

Below are the requirements that are new or different under this rulemaking:

A. Criteria for determining when materials are "recyclable": The existing s. 287.17 (1) (m), Wis. Stats., defines recycling as "preparing eligible electronic devices for use in manufacturing processes or for recovery of usable materials and delivering the materials for use." It specifies that "recycling" does not include destruction by incineration or other processes or land disposal of recyclable materials and does not include reuse, repair, or any other process through which eligible electronic devices are returned for use by households or schools in their original form.

The statute does not provide criteria for the department, manufacturers or recyclers to determine whether a material is "recyclable." As markets for materials like cathode ray tube glass and plastics have shifted and dwindled, it has sometimes been difficult for the department to provide guidance on whether the weight of certain material from eligible electronic devices sent for disposal would still be eligible for manufacturer credit because it is not "recyclable." The proposed rule creates criteria to help the department make these determinations and provides clarity for the regulated community..

- **B.** Registered recyclers: The proposed rule makes changes to operational and reporting requirements for registered recyclers, primarily to ensure owner financial responsibility (OFR) required under s. 287.17 (8) (c), Wis. Stats., adequately covers facility closure and cleanup costs.
  - 1. On their annual registration, registered recyclers would need to list all facilities where they recycle or store eligible electronics (currently, they are only required to list facilities where they recycle eligible electronics) and maintain OFR for any storage facilities, in addition to the current requirement to maintain OFR for recycling facilities.
  - 2. In-state registered recyclers would be subject to the solid waste processing license requirement described in the previous section under (F), and would need to follow the OFR requirements in ch. NR 520, Wis. Adm. Code. For the most part, in-state recyclers' existing OFR should already meet these requirements. They would be required to name the department as the beneficiary or obligee for their OFR (nearly all do so already).
  - 3. To ensure a level playing field with in-state recyclers, there would be more specific requirements for the OFR maintained by out-of-state registered recyclers, including naming an independent third party as the beneficiary or obligee, estimating costs based on an independent third party performing the work, and notifying the department of OFR changes

- or cancelation in a timely manner.
- 4. The rule also adds a requirement for registered recyclers to use and keep records of bills of lading for shipments of electronic devices or components under E-Cycle Wisconsin for at least 3 years. The U.S. Department of Transportation already requires bills of lading for most shipments, but the rule specifies details that should be included in shipments of electronics under the program.
- C. Registered collectors: The proposed rule requires registered collectors to keep independent records of the dates and volumes of loads of eligible electronics they ship under the E-Cycle Wisconsin program. The goal is to maintain the ability to cross-check and verify reports provided to collectors by receiving facilities.
- **D.** Authorized brokers: Several entities have been operating as brokers of credit for recycled materials for manufacturers under E-Cycle Wisconsin since the program began. The proposed rule defines the term "authorized broker" as a person that provides services to registered manufacturers and registered recyclers for the purpose of cooperation under s. 287.17 (2) (b), Wis. Stats., and that complies with the notification requirement at s. NR 530.10 (2), Wis. Adm. Code. The only substantive change from existing practices is a requirement that registered recyclers that purchase credit for recycled weight (often called "paper weight") from other registered recyclers would be required to complete a broker form, as well as the registered recycler form.
- E. Electronics retailers: The proposed rule provides more information on how retailers may meet the customer education requirements in s. 287.17 (9), Wis. Stats. To meet the customer education requirement, retailers may include information on receipts for covered electronics about the electronics disposal bans and how to recycle eligible electronics. This could include linking to the department's website. In brick-and-mortar stores, this information could also be posted prominently in either the store's electronics section or by registers.
- F. Clarifying definitions of covered electronic devices: The proposed rule clarifies that components of video game systems, such as gaming consoles, are covered electronic devices if they meet the definition of "consumer computer" under s. 287.17 (1) (e), Wis. Stats. This would require manufacturers of these devices, the modern versions of which offer many of the same functional features as conventional computers, to register their brands, pay annual registration fees if applicable, and meet annual recycling targets based on the weight of these devices sold to Wisconsin households and covered schools.
- **G.** Addition of eligible electronic devices: The proposed rule adds three categories of devices to the list of eligible electronic devices under s. 287.17 (1) (gs), Wis. Stats., based on the department's determination under s. 287.17 (10) (i), Wis. Stats., that the disposal or burning of these devices in a solid waste facility may be harmful to human health or the environment, due primarily to the fire risk posed by lithium ion and other rechargeable batteries these devices typically contain.

The device categories are a telephone with a video display, a telephone accessory operated by a battery, and a component of a video game system or a portable hand-held video game device operated by a battery that does not meet the definition of a computer monitor or consumer computer. Telephones with video displays are already banned from landfills and incinerators under s. 287.07 (5), Wis. Stats., and the other two categories of devices are accessories to electronics that are or would be banned from landfills and incinerators. Adding these electronics as eligible electronic devices under E-Cycle Wisconsin will further facilitate and encourage their recycling and prevent them from causing fires during solid waste collection, transfer and disposal activities.

# 5. How does this proposal affect existing policy?

The proposed rule would make state regulation of collection, transportation and processing of electronic waste more consistent with how the department currently regulates these activities for other solid waste. The rule would not change the way most electronics collection sites and transporters are operating, but would set baseline standards to ensure they are handling electronic waste in a way that prevents pollution and protects human health. The rule would add additional requirements for electronics processing facilities to ensure proper management of electronic waste and reduce the likelihood that property owners or taxpayers will need to pay for cleanups of abandoned or mismanaged electronics waste.

For the most part, the proposed ch. NR 530, Wis. Adm. Code, matches existing registration and report forms, guidance, and other current practices. The rule seeks to codify some of the streamlined approaches that have been developed by the department and industry and establishes rules for the marketplace in recycling credits that has developed since the 2009 statute was enacted.

#### 6. Has Board dealt with these issues before?

Yes. The Board approved the scope statement and conditionally authorized hearings for WA-11-19 at its December 2019 meeting, and previously approved the proposed rule at its Oct. 27, 2021, meeting.

#### 7. Who will be impacted by the proposed rule? How?

The creation of ch. NR 530, Wis. Adm. Code, will affect entities covered by Wisconsin's electronics recycling program, created by s. 287.17, Wis. Stats., and referred to as E-Cycle Wisconsin. Affected types of entities include:

- Electronics collectors as defined in s. 287.17 (1) (mg), Wis. Stats.;
- Electronics manufacturers as defined in s. 287.17 (1) (i), Wis. Stats.;
- Electronics recyclers as defined in s. 287.17 (1) (mr), Wis. Stats.; and
- Electronics retailers as defined in s. 287.17 (1) (n), Wis. Stats.

Changes to chs. NR 500, 502 and 520, Wis. Adm. Code, will affect individuals or facilities that collect, store, transport, sort, dismantle, shred or otherwise process electronics and components derived from electronics. Some of these may also be E-Cycle Wisconsin participants.

#### 8. Soliciting public input on economic impact synopsis

During the economic impact comment solicitation period, the department contacted all participants registered with E-Cycle Wisconsin, along with more than 8,000 stakeholders signed up for a department electronics recycling email list, as well as all local units of government that operated effective recycling programs.

#### 9. Small Business Analysis

The department estimates that approximately 75% of Wisconsin electronics recycling facilities (15 to 22 businesses) affected by the rule would be small businesses. The department estimates these businesses would have total aggregate one-time costs of \$14,250 to \$22,500. They would not have annual fees.

The proposed rule includes exemptions from solid waste processing license requirements for facilities that process fewer than 25 electronic devices per year. The department will also waive annual solid waste processing license fees for all facilities.

**Drafter:** Sarah Murray

Subject: Electronics recycling

# NATURAL RESOURCES BOARD GERMANE MODIFICATIONS 1-4 TO BOARD ORDER WA-11-19

June 22, 2022 – A permanent rule relating to implementing electronics recycling program requirements.

# Analysis

The proposed rule was adopted by the Natural Resources Board on October 27, 2021, approved by the Governor on November 18, 2021, and submitted to the Chief Clerk of each house on November 22, 2021. While the rule was under review by the Joint Committee for Review of Administrative Rules (JCRAR), JCRAR expressed concerns with two provisions of the proposed ch. NR 530. On April 13, 2022, the department recalled the proposed rule to make germane modifications to address these concerns in accordance with s. 227.19 (4) (b) 4. Wis. Stats.

The department has made the following germane modifications:

- 1. In SECTION 20 of the rule, deleted NR 530.04 (2), which was a list of devices that meet the definition of computer peripheral, and renumbered accordingly.
- 2. In SECTION 20 of the rule, in NR 530.11, added a note confirming this section applies only to retailers meeting the definition in s. 287.17(1)(n), Wis. Stats.
- 3. In SECTION 20 of the rule, in NR 520.11 (2), changed "shall" to "may" in the introduction to the list of steps retailers can take to comply with customer education requirements.
- 4. In SECTION 20 of the rule, deleted NR 530.11 (2) (b), the requirement for retailers to provide training to employees, and renumbered accordingly.

(END)

The statement of scope for this rule, SS 093-19, was approved by the Governor on August 29, 2019, published in Register No. 765A1 on September 3, 2019, and approved by the Natural Resources Board on December 11, 2019. This rule was approved by the Governor on November 18, 2021.

# ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD RENUMBERING AND AMENDING, AMENDING AND CREATING RULES

The Wisconsin Natural Resources Board adopts an order to **renumber and amend** NR 500.03 (203) and 520.07 (2); to **amend** NR 502.05 (3) (a), 502.06 (2) (am), 502.07 (1) (b), (c), (cm), (2) (a), (c) and (2f), 502.08 (2) (f), 520 Table 2 Footnote (4); and to **create** NR 500.03 (71g), (71m), (71r) and (203) (b), 502.04 (6) Note, 502.06 (2) (ag) and (L), 502.07 (2) (am), (cm), and (2d), 502.08 (1) (c), (2) (j), (k), and (6) (p), 520.07 (2m) and ch. 530 relating to implementing electronics recycling program requirements and affecting small business.

#### WA-11-19

#### **Analysis Prepared by the Department of Natural Resources**

# 1. Statute Interpreted:

Section 287.07, s. 287.17, and s. 289.05 (1), Wis. Stats.

# 2. Statutory Authority:

Section 287.03, s. 287.17, and s. 289.06 (1), Wis. Stats.

#### 3. Explanation of Agency Authority:

Section 287.03, Wis. Stats., directs the department to promulgate rules necessary to implement ch. 287, Wis. Stats.

In addition, s. 287.17, Wis. Stats., gives the department specific authority for promulgating rules related to certain aspects of the electronics recycling law. Section 287.17 (10) (k), Wis. Stats., gives the department authority to modify manufacturer registration fees. Section 287.17 (10) (i), Wis. Stats., gives the department authority to modify the list of eligible electronic devices in s. 287.17 (1) (gs), Wis. Stats., or the list of electronics banned from landfill or incinerator disposal in s. 287.07 (5) (a), Wis. Stats. Section 287.17 (8) (e) gives the department authority to modify or add to operational requirements for registered recyclers.

Section 289.06 (1), Wis. Stats., directs the department to promulgate rules implementing and consistent with ch. 289 and ss. 292.31 and 292.35, Wis. Stats.

#### 4. Related Statutes or Rules:

Chapter NR 500, Wis. Adm. Code, General Solid Waste Management Requirements

Chapter NR 502, Wis. Adm. Code, Solid Waste Storage, Transportation, Transfer, Incineration, Air Curtain Destructors, Processing, Wood Burning, Composting And Municipal Solid Waste Combustors

Chapter NR 520, Wis. Adm. Code, Solid Waste Management Fees And Financial Responsibility Requirements

Section 287.07, Wis. Stats., prohibitions on land disposal and incineration, including for electronic devices.

# 5. Plain Language Analysis:

Wisconsin's electronics recycling law (2009 Wisconsin Act 50) established a statewide product stewardship program to collect and recycle certain electronics from Wisconsin households and schools (now in s. 287.17, Wis. Stats.). This recycling program, funded by manufacturers of TVs, computers, monitors and printers, is called E-Cycle Wisconsin. The law also banned landfill and incinerator disposal of many electronics beginning in September 2010 under s. 287.07 (5), Wis. Stats.

To date, the department has not promulgated any rules related to ss. 287.07 (5) or 287.17, Wis. Stats. Section 287.17, Wis. Stats., was intended to be detailed enough for the department to complete initial implementation without rulemaking (it prohibited the department from promulgating rules during the first two years of the program).

Since 2009 Wisconsin Act 50 took effect, the state's electronics recycling industry has grown and matured, and relationships among electronics collection points, consolidation points, recycling facilities and electronics manufacturers have become more complex. The department has worked extensively with program participants over the years to develop and improve streamlined, online registration and report forms. These allow the department to verify the accuracy of information that collectors, recyclers and manufacturers report, and also provide data to update a public list of electronics recycling options in real time, which the department identified as a high priority based on statewide surveys of Wisconsin households. In addition, the department has worked with stakeholders to put in place a flexible and efficient marketplace for the buying and selling of credit for recycled eligible electronic devices, making it easier for manufacturers to meet their recycling targets and for recyclers to recover costs. The proposed new ch. NR 530, Wis. Adm. Code, codifies many of these improved and streamlined registration and reporting practices.

Prior to the electronics recycling law's enactment in 2009, and anticipating increasing volumes of electronic devices reaching the end of their service life, the department modified regulatory requirements for electronics recycling to encourage development of e-cycling infrastructure. The department exempted electronics recyclers from solid waste processing license requirements under s. NR 502.08 (2) (f), Wis. Adm. Code, as "Facilities for the processing of scrap iron, steel or nonferrous metal using large machines to produce a principal product of scrap metal for scrap or use for remelting purposes." Transporters were also exempted from solid waste transporting requirements under s. NR 502.06 (2) (a), Wis. Adm. Code, as "Services for the collection and transportation of only gravel pit spoils, quarry materials, earth materials or salvageable materials other than those listed in s. 287.07 (3) or (4), Stats."

Since these decisions were made, there have been several significant changes in the electronics recycling landscape that have led the department to re-examine this interpretation with this rulemaking and seek to define requirements for electronics collection, transportation and recycling activities. These included:

- Significant growth in Wisconsin's electronics recycling infrastructure, due largely to 2009 Wisconsin Act 50, including the rapid growth among a handful of high-tech recycling facilities in the state.
- An increase in enforcement cases resulting from irresponsible recyclers or "scrappers" removing high
  value metals from electronics while illegally leaving hazardous materials behind. Since 2015, the
  department estimates these cases have led to more than \$2 million in completed or projected
  cleanups. The majority of these costs are covered either by taxpayers or by landlords who own the
  properties on which the material has been mismanaged.
- A large change in the market for glass from cathode ray tubes (CRTs), which has made recycling older TVs and monitors much more expensive and led to stockpiles of CRTs and lead-containing CRT glass which is a hazardous waste.
- Greater public awareness of the need to recycle electronics, and more demand for legitimate recyclers providing these services.

• The rapid and continued evolution of electronics, which has changed both the commodity value of electronic waste and the methods and tools needed to properly recycle it. Newer electronics have a lower metal content (more valuable as commodities) with a commensurate increase in plastic components with a lower commodity value. They contain fewer toxic materials, but more flammable, difficult-to-remove lithium ion batteries, which add labor and fire prevention costs.

Many elements in this rule come directly from discussions with E-Cycle Wisconsin program stakeholders over the years. At the most recent E-Cycle Wisconsin stakeholder meeting in May 2018, participants were positive about the electronics recycling law, but noted several areas of concern, including a need for more actions to deter bad actors; the lack of affordable, convenient recycling for some state residents; a lack of consumer awareness about the need to responsibly recycle electronics; and economic and safety issues the changing electronic waste stream has brought to collectors and recyclers. The department has addressed these concerns in the proposed rule.

# Changes to existing chs. NR 500, 502 and 520, Wis. Adm. Code

The department is proposing the following changes to chs. NR 500, 502 and 520, Wis. Adm. Code, to ensure safe collection, transportation and processing of electronic waste and to make regulation of these activities more consistent with other types of solid waste:

- **A. Definitions:** The rule creates and amends definitions in s. NR 500.03, Wis. Adm. Code, to make it clear that electronic devices are a different type of material than scrap metal, appliances or other materials defined in this section, and to clarify what is and is not included in electronics processing. This is necessary because many appliances, cars and other items would now also meet the definition of an electronic device. The rule specifically excludes electronic devices from the definition of "salvageable materials" in s. NR 500.03 (203), Wis. Adm. Code, which required the department to amend or add language in several parts of ch. NR 502 to clarify requirements for electronic devices.
- **B.** Storage of waste electronic devices at apartments, commercial establishments, business establishments and industries: The rule amends language in s. NR 502.05 (3) (a), Wis. Adm. Code, to ensure electronics and similar devices that may not need to be stored in containers are still eligible for this exemption from solid waste storage licensing.
- C. Transportation of electronic waste: The rule adds and amends language in s. NR 502.06, Wis. Adm. Code, to exempt trucks carrying only electronic waste for recycling from the requirement to obtain a solid waste collection and transportation (C&T) license from the department, but to retain basic operational requirements to ensure the electronics remain recyclable and that haulers comply with the electronics disposal ban. It also creates an exemption from C&T licensing for parcel carriers transporting incidental amounts of solid waste for recycling, such as electronic devices, smoke detectors, or other items recycled through mail-back programs.
- **D.** Solid waste transfer stations that handle electronic waste: The rule amends an exemption in s. NR 502.07, Wis. Adm. Code, to ensure electronics collection sites can meet the conditional license exemption as transfer stations in s. NR 502.07 (2), Wis. Adm. Code, when electronics are appropriately stored in cardboard Gaylords or on pallets and do not need to be moved off-site weekly. It also creates a new conditional exemption from solid waste transfer facility licensing for facilities such as retailer logistics centers, where loads of electronics collected from stores are consolidated.
- E. Solid waste processing license requirements for electronics processing facilities: The rule

adds language to s. NR 502.08, Wis. Adm. Code, to require electronics processing facilities to obtain a solid waste processing license from the department and meet applicable code requirements for obtaining and maintaining that license. The rule exempts very small-scale electronics processing activities from licensing, along with electronics repair, which pose a low risk to human health or the environment and for which obtaining department approval would be burdensome and inefficient for both the facility and for the department. An addition to s. NR 502.08 (6), Wis. Adm. Code, is meant to ensure that third-party haulers contracted by electronics processing facilities are informed of applicable requirements under s. NR 502.06 (2) (ag), Wis. Adm. Code.

**F.** Clarification of solid waste fees and financial responsibility requirements: The rule makes small changes in ch. NR 520, Wis. Adm. Code, to ensure electronics processing facilities are covered by this chapter in the same way that other solid waste processing facilities are, including being exempted from annual licensing fees, and to clarify what must be included in closure cost estimates for non-landfill solid waste facilities. This part of the rule addresses the most common bad actor problem, where a facility removes the most valuable components and leaves less valuable materials behind as waste.

## Creation of ch. NR 530, Wis. Adm. Code, specific to the E-Cycle Wisconsin program

The new chapter only covers activities and entities regulated under s. 287.17, Wis. Stats. This includes both in-state and out-of-state brokers, collectors, manufacturers, recyclers and retailers.

Generally, the proposed ch. NR 530, Wis. Adm. Code, matches existing registration and report forms, guidance, and other current practices. The rule seeks to codify some of the streamlined approaches that have been developed by the department and industry and to establish rules for the marketplace in recycling creidts that has developed since the 2009 statute was enacted. These include:

- Clarification of which devices meet the definitions of "computer monitor," "computer peripheral" and "consumer computer" under s. 287.17 (1), Wis. Stats.
- Requirements for information submitted with annual registration and report forms.
- Eligibility of electronic devices recovered from waste loads or illegal dumping to count toward manufacturers' weight recycled.
- The reasons and process for suspension and revocation of program registrations.
- Options for electronics retailers to comply with the prohibition in s. 287.17 (2) (c), Wis. Stats., on selling unregistered brands of covered electronics.

Below are the requirements that are new or different under this rulemaking:

A. Criteria for determining when materials are "recyclable": The existing s. 287.17 (1) (m), Wis. Stats., defines recycling as "preparing eligible electronic devices for use in manufacturing processes or for recovery of usable materials and delivering the materials for use." It specifies that "recycling" does not include destruction by incineration or other processes or land disposal of recyclable materials and does not include reuse, repair, or any other process through which eligible electronic devices are returned for use by households or schools in their original form.

The statute does not provide criteria for the department, manufacturers or recyclers to determine whether a material is "recyclable." As markets for materials like cathode ray tube glass and plastics have shifted and dwindled, it has sometimes been difficult for the department to provide guidance on whether the weight of certain material from eligible electronic devices sent for disposal would still be eligible for manufacturer credit because it is not "recyclable." The proposed rule lays out criteria to help make this determination.

- **B.** Registered recyclers: The proposed rule makes small changes to operational and reporting requirements for registered recyclers, primarily to ensure owner financial responsibility (OFR) required under s. 287.17 (8) (c), Wis. Stats., adequately covers facility closure and cleanup costs.
  - 1. On their annual registration, registered recyclers would need to list all facilities where they recycle or store eligible electronics (currently, they are only required to list facilities where they recycle eligible electronics) and maintain OFR for any storage facilities, in addition to the current requirement to maintain OFR for recycling facilities.
  - 2. In-state registered recyclers would be subject to the solid waste processing license requirement described in the previous section under (F), and would need to follow the OFR requirements in ch. NR 520, Wis. Adm. Code. For the most part, in-state recyclers' existing OFR should already meet these requirements. They would be required to name the department as the beneficiary or obligee for their OFR (nearly all do so already).
  - 3. To ensure a level playing field with in-state recyclers, there would be more specific requirements for the OFR maintained by out-of-state registered recyclers, including naming an independent third party as the beneficiary or obligee, estimating costs based on an independent third party performing the work, and notifying the department of OFR changes or cancelation in a timely manner.
  - 4. The rule also adds a requirement for registered recyclers to use and keep records of bills of lading for shipments of electronic devices or components under E-Cycle Wisconsin for at least 3 years. The U.S. Department of Transportation already requires bills of lading for most shipments, but the rule specifies details that should be included in shipments of electronics under the program.
- C. Registered collectors: The proposed rule requires registered collectors to keep independent records of the dates and volumes of loads of eligible electronics they ship under the E-Cycle Wisconsin program. The goal is to maintain the ability to cross-check and verify reports provided to collectors by receiving facilities.
- **D.** Authorized brokers: Several entities have been operating as brokers under E-Cycle Wisconsin since the program began. The proposed rule defines the term "authorized broker" as a person that provides services to registered manufacturers and registered recyclers for the purpose of cooperation under s. 287.17 (2) (b), Wis. Stats., and that complies with the notification requirement at s. NR 530.10 (2), Wis. Adm. Code. The only substantive change from existing practices is a requirement that registered recyclers that purchase recycled weight (often called "paper weight") from other registered recyclers would be required to complete a broker form, as well as the registered recycler form.
- **E. Electronics retailers:** The proposed rule provides more information on how retailers may meet the customer education requirements in s. 287.17 (9), Wis. Stats. To meet the customer education requirement, retailers may include information on receipts for covered electronics about the electronics disposal bans and how to recycle eligible electronics. This could include linking to the department's website. In brick-and-mortar stores, this information could also be posted prominently in either the store's electronics section or by registers.
- **F.** Clarifying definitions of covered electronic devices: The proposed rule clarifies that components of video game systems, such as gaming consoles, are covered electronic devices if they meet the definition of "consumer computer" under s. 287.17 (1) (e), Wis. Stats. This would require manufacturers of these devices, the modern versions of which have much the same functionality as conventional computers, to register their brands, pay annual registration fees if

applicable, and meet annual recycling targets based on the weight of these devices sold to Wisconsin households and covered schools.

**G.** Addition of eligible electronic devices: The proposed rule adds three categories of devices to the list of eligible electronic devices under s. 287.17 (1) (gs), Wis. Stats., based on the department's determination under s. 287.17 (10) (i), Wis. Stats., that the disposal or burning of these devices in a solid waste facility may be harmful to human health or the environment, due primarily to the fire risk posed by lithium ion and other rechargeable batteries these devices typically contain.

The device categories are a telephone with a video display, a telephone accessory operated by a battery, and a component of a video game system or a portable hand-held video game device operated by a battery that does not meet the definition of a computer monitor or consumer computer. Telephones with video displays are already banned from landfills and incinerators under s. 287.07 (5), Wis. Stats., and the other two categories of devices are accessories to electronics that are or would be banned from landfills and incinerators. Adding these electronics as eligible electronic devices under E-Cycle Wisconsin will further facilitate and encourage their recycling and prevent them from causing fires during solid waste collection, transfer and disposal activities.

- **6. Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations:** There is no existing or proposed federal regulation for electronics recycling.
- 7. Summary of Comments Received on the Statement of Scope and How the Agency Took Those Comments into Account in Drafting the Proposed Rule: The department did not receive any comments on the statement of scope for this rule.
- **8.** Comparison with Similar Rules in Adjacent States: Four other Midwest states (Illinois, Indiana, Michigan and Minnesota) have electronics take-back laws. Iowa does not have a similar law. In all four, all collectors and recyclers receiving and processing residential e-waste are required to register with the take-back programs (the programs equivalent to E-Cycle Wisconsin). In contrast, Wisconsin's statute only requires collectors and recyclers participating in the manufacturer-funded E-Cycle Wisconsin program to register with the department.

Two of these states require recyclers to separately obtain a license or permit.

- Minnesota electronics recyclers are required to obtain a "permit by rule" as solid waste facilities, which requires a simple application and a sign-off by local governments that they have met zoning requirements. OFR is not required.
- Indiana issues permits to electronics recyclers that have 23 tons or more of material on-site for more than 5 days. The permits must be renewed every 5 years and require owner financial responsibility (\$200/ton for material on-site, with the state as the beneficiary).
- 9. Summary of Factual Data and Analytical Methodologies Used and How Any Related Findings Support the Regulatory Approach Chosen: The E-Cycle Wisconsin program began in 2010, and the department receives and analyzes annual reports from registered collectors, recyclers and manufacturers, and brokers. The department also conducts on-site inspections of registered collection sites and recyclers, and in-store and online inspections of electronics retailers. The department used data from these reports and inspections to identify areas where additional clarifications or requirements could improve the program's function and efficiency and provide a more level playing field for participants.

There are currently 16 recyclers registered with E-Cycle Wisconsin, 6 located in Wisconsin and 10 based

in other states. The department regularly requests and reviews paperwork from all registered recyclers to verify closure cost estimates and OFR methods and amounts. The department used this data to inform adjustments to OFR requirements in both ch. NR 520 and the new ch. NR 530, Wis. Adm. Code.

The department also reviewed estimated or actual cleanup costs from enforcement cases related to electronics mismanagement since 2007.

In addition, the department gathered information to inform these rule changes at several E-Cycle Wisconsin stakeholder meetings. At the most recent E-Cycle Wisconsin stakeholder meeting in May 2018, participants were positive about the electronics recycling law, but noted several areas of concern, including a need for more actions to deter bad actors; the lack of affordable, convenient recycling for some state residents; a lack of consumer awareness about the need to responsibly recycle electronics; and economic and safety issues the changing electronic waste stream has brought to collectors and recyclers.

10. Analysis and Supporting Documents Used to Determine the Effect on Small Business or in Preparation of an Economic Impact Report: The proposed rule requires a solid waste processing plan of operation for electronics dismantling and processing activities. This would entail a one-time cost for some facilities, including small businesses, which is addressed in Section 11 of this board order below. These facilities would also be required to obtain an annual license; however, the department would waive annual licensing fees, as it currently does for other solid waste processing facilities with a primary purpose of recycling. Some of these costs could be offset by attracting customers that are seeking to work with department-licensed facilities, to ensure electronics are legitimately recycled.

The department considered cost estimates from industry sources and department experience with other solid waste processing facilities in preparation of the economic impact analysis. This included the following:

- The department reviewed existing owner financial responsibility documents for registered E-Cycle Wisconsin recyclers to determine whether any of these recyclers would need to make changes based on the proposed rule language.
- Department staff experience was used to estimate the average number of hours each electronics recycling facility's staff would spend to obtain a solid waste processing license, and U.S. Bureau of Labor wage data was used to estimate costs for facility staff time.
- The department reviewed a list of known electronics processing facilities and estimated the number that were likely to meet the definition of a small business, based on department staff knowledge of the businesses, including through past inspections.
- 11. Effect on Small Business (initial regulatory flexibility analysis): The department estimates that approximately 75% of Wisconsin electronics processing facilities affected by the rule, or approximately 20 facilities, would be small businesses. The department estimates these businesses would have aggregate one-time costs of \$15,000-\$24,000 (or an average of \$750 to \$1,200 per facility). They would not be required to pay annual licensing fees to the department.

The proposed rule includes exemptions from solid waste processing license requirements for facilities that process fewer than 25 electronic devices per year. The department will also waive annual solid waste processing license fees for all facilities.

- **12. Agency Contact Person:** Sarah Murray, Wisconsin Department of Natural Resources, PO Box 7921, Madison, WI 53707-7921; <a href="mailto:Sarah.Murray@wisconsin.gov">Sarah.Murray@wisconsin.gov</a>; (608) 264-6001
- 13. Place where comments are to be submitted and deadline for submission: An online hearing was

held on June 28, 2021. Comments were accepted through July 7, 2021.

#### **RULE TEXT**

# **SECTION 1.** NR 500.03 (71g), (71m) and (71r) are created to read:

NR 500.03 (71g) "Electronic device" has the meaning specified under s. 287.17 (1) (gm), Stats., but does not include a major appliance, as defined under sub. (136), or a motor vehicle.

- (71m) (a) "Electronics processing" 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.
  - (b) "Electronics processing" does not include any of the following:
  - 1. Destruction by incineration or other processes.
  - 2. Land disposal of recyclable materials.
- 3. Reuse, repair, or any other process through which an electronic device is returned for use in its original form.
- 4. Removal of an electronic device from another device, such as from a major appliance or motor vehicle.
- 5. Hand disassembly of an electronic device in an educational setting for educational purposes.
- 6. Hand disassembly of a waste electronic device generated by a household on the property where it is generated.

(71r) "Electronics processing facility" means a solid waste processing facility that accepts electronic devices or components derived from electronic devices for the purpose of electronics processing.

# **SECTION 2.** NR 500.03 (203) is renumbered NR 500.03 (203) (a) and amended to read:

NR 500.03 (203) (a) "Salvageable material" means junk cars, machinery or equipment, scrap metal, or other junk or scrap materials which that are of further usefulness mainly as a raw material for reprocessing, or as imperfect stock from which replacement or spare parts can be extracted.

# SECTION 3. NR 500.03 (203) (b) is created to read:

NR 500.03 (203) (b) "Salvageable material" does not include electronic devices as defined under sub. (71g).

# **SECTION 4.** NR 502.04 (6) Note is created to read:

NR 502.04 (6) Note: Requirements for closure cost estimates for these facilities are found under s. NR 520.07 (2m).

# SECTION 5. NR 502.05 (3) (a) is amended to read:

NR 502.05 (3) (a) Storage facilities utilizing storing major appliances, electronic devices, or furniture, or that utilize containers such as lugger boxes or rolloffs for solid waste storage serving that serve apartments, commercial establishments, business establishments, and industries which that are located on the premises served, provided the facility complies with the performance standards and closure requirements inunder s. NR 502.04 (1) and (3) (a) and (b) and the operational requirements listed under sub. (5).

#### SECTION 6. NR 502.06 (2) (ag) is created to read:

NR 502.06 (2) (ag) Services for the collection and transportation of only waste electronic devices, or components derived from electronic devices, destined for reuse or recycling that comply with general operational requirements under sub. (4) (b), (d), (e), (f), and (g).

Note: A container that otherwise contains only waste electronic devices may contain de minimis amounts of packaging or contamination.

# SECTION 7. NR 502.06 (2) (am) is amended to read:

NR 502.06 (2) (am) Services for the collection and transportation of the materials listed inunder s. 287.07 (3) and (4), Stats., or non-hazardous materials derived from electronic devices, after the materials have been processed for reuse or recycling by conversion into a consumer product or a product whichthat is used as a raw material in a commercial or industrial process.

# SECTION 8. NR 502.06 (2) (L) is created to read:

NR 502.06 (2) (L) The operation of a vehicle owned or leased by the United States postal service or other parcel carrier service when solid waste constitutes an incidental portion of the carrier's business, if the solid waste is handled in accordance with all applicable state and federal regulations.

# SECTION 9. NR 502.07 (1) (b), (c), (cm), and (2) (a) are amended to read:

NR 502.07 (1) (b) Unless exempt under sub. (2), (2d), (2f), or (2m), owners and operators an owner or operator of a new or expanded solid waste transfer facilities facility shall comply with initial site inspection requirements in under s. NR 502.04 (2) and demonstrate compliance with the locational criteria listed under sub. (3).

- (c) Unless exempt under sub. (2), (2d), (2f), (2m), or (2r), no person may operate or maintain a solid waste transfer facility unless the person has received approval of a plan of operation as specified in under sub. (4).
- (cm) Unless exempt under sub. (2), (2d), (2f), or (2m), no person may operate or maintain a solid waste transfer facility unless the person has obtained an operating license from the department.
- (2) (a) Containers that do not hold only waste electronic devices shall be leak-proof and manufactured of nondegradable material such as metal, plastic or concrete.

# SECTION 10. NR 502.07 (2) (am) is created to read:

NR 502.07 (2) (am) Containers or packaging material holding only waste electronic devices shall be adequate to prevent breakage and spills, compatible with the contents, and manufactured of material that will remain structurally sound for the length of time material is stored. Electronic devices shall be stored in a manner that will prevent damage from weather, theft or vandalism.

Note: A container that otherwise contains only waste electronic devices may contain de minimis amounts of packaging or contamination.

#### SECTION 11. NR 502.07 (2) (c) is amended to read:

(c) Containers that do not hold only waste electronic devices shall be removed or emptied at least once per week and more frequently if conditions warrant.

# SECTION 12. NR 502.07 (2) (cm) and (2d) are created to read:

- (cm) A facility shall demonstrate that containers, pallets or other packaging material holding only waste electronic devices, along with any waste electronic devices stored outside of a container, are removed or emptied at least once per year.
- (2d) EXEMPT ELECTRONICS TRANSFER FACILITIES. A facility for the transfer of waste electronic devices intended for recycling that is not exempt under sub. (2) shall be operated and maintained in a nuisance-free manner and comply with the performance standards and closure requirements under s. NR 502.04 (1) and (3) (a) and (b), but is exempt from all other requirements of this chapter, provided the facility is operated and maintained in conformance with all of the following practices:
- (a) Containers or packaging material shall be adequate to prevent breakage and spills, compatible with the contents, and manufactured of material that will remain structurally sound for the length of time material is stored. Electronic devices shall be stored in a manner that will prevent damage from weather, theft or vandalism.

- (b) A facility shall demonstrate that containers, pallets or other packaging material holding only waste electronic devices, along with any waste electronic devices stored outside of a container, are removed or emptied at least once per year.
  - (c) The transfer facility and adjacent area shall be kept clean and free of litter.
  - (d) Burning of solid waste may not be conducted.
- (e) Effective means shall be provided to control rodents, flies, and other insects or vermin.
  - (f) An all-weather access road and parking area shall be provided and maintained.

# SECTION 13. NR 502.07 (2f) is amended to read:

NR 502.07 (2f) EXEMPT RECYCLING TRANSFER FACILITIES. Facilities A facility only for the transfer of items listed in under s. 287.07 (3) or (4), Stats., except waste tires listed in s. 287.07 (3), Stats., shall comply with the operational requirements inunder sub. (7) (a), (c), (d), (i), (k), and (o), and the performance standards and closure requirements inunder s. NR 502.04 (1) and (3) (a) and (b), and, for new or expanded facilities opening after July 1, 2005, the locational criteria inunder sub. (3), but are is exempt from all other requirements of this chapter.

# SECTION 14. NR 502.08 (1) (c) is created to read:

NR 502.08 (1) (c) Unless exempted under sub. (2) (j) or (k), an electronics processing facility shall comply with all requirements of this chapter beginning on the effective date of this section [LRB inserts date].

# SECTION 15. NR 502.08 (2) (f) is amended to read:

NR 502.08 (2) (f) Facilities A facility for the processing of scrap iron, steel, or nonferrous metal using large machines to produce a principal product of scrap metal for sale or use for remelting purposes. This exemption does not apply to a facility for the processing of electronic devices.

# SECTION 16. NR 502.08 (2) (j), (k) and (6) (p) are created to read:

NR 502.08 (2) (j) A person or electronics processing facility processing fewer than 25 electronic devices per year, provided the person or electronics processing facility complies with performance standards and closure requirements under s. NR 502.04 (1) and (3) (a) and (b), and the minimum operation requirements under sub. (6) (e), (g), (i), (k), (L), and (n).

- (k) A facility that only hand sorts and packages waste electronic devices, including removing cords, ink or toner cartridges, or batteries from electronic devices, for shipping or transport to an electronics processing facility without engaging in any additional electronics processing activities, provided the facility complies with performance standards and closure requirements under s. NR 502.04 (1) and (3) (a) and (b), and the minimum operation requirements under sub. (6) (e), (g), (h), (i), (k), (L), and (n).
- (6) (p) The operator of an electronics processing facility shall notify any collection and transportation service operating under s. NR 502.06 (2) (ag) that it contracts with of the need to comply with the operational requirements under s. NR 502.06 (2) (ag). The operator of the electronics processing facility shall meet all of the following requirements for notification:
- 1. Notification shall be in writing and provided at the time of entering into a contract for collection and transportation services and annually thereafter.
- 2. The electronics processing facility shall maintain documentation of this notification for the preceding calendar year.

# SECTION 17. NR 520.07 (2) is renumbered NR 520.07 (2) (intro.) and amended to read:

NR 520.07 (2) CLOSURE COSTS <u>FOR LANDFILLS</u>. At a minimum, closure costs <u>for a landfill</u> shall include; the all of the following:

- (a) The purchasing, hauling, placement, and documentation testing of all the final cover materials including soils, membranes, fabrics, and grids and topsoil; seeding.
  - (b) Seeding, fertilizing, mulching, and labor; the.

- (c) The installation of gas removal and treatment devices; the.
- (d) The cost of preparing an engineering report documenting the work performed; and.
- (e) A 10% percent contingency.

# SECTION 18. NR 520.07 (2m) is created to read:

NR 520.07 (2m) CLOSURE COSTS FOR FACILITIES REQUIRED TO PROVIDE PROOF OF FINANCIAL RESPONSIBILITY. (a) At a minimum, closure costs for a facility required to provide proof of financial responsibility under s. NR 502.04 (6) shall include all of the following:

- 1. Work to remove entire remaining inventory including equipment and materials, recycling or disposal costs, transportation, labor, supervision, overhead costs, and taxes.
  - 2. Decontamination.
  - 3. Equipment decommissioning.
  - 4. A 10 percent contingency.
- (b) Cost estimates under par. (a) shall be based on the maximum volumes approved to be on-site, including material stored before and after processing and material undergoing processing or on sort lines.

# **SECTION 19.** NR 520 Table 2 Footnote (4) is amended to read:

NR 520 Table 2 Footnote (4) The department shall waive the plan review fees and license fees for a processing facility, including a composting facility or an electronics processing facility, or incinerator which that has a primary purpose of converting solid waste into usable materials, products, or energy. The waiver does not include the initial site and construction inspection fees or the construction documentation review fee.

# **SECTION 20.** Chapter NR 530 is created to read:

# Chapter NR 530

# ELECTRONIC WASTE RECYCLING PROGRAM REQUIREMENTS

**NR 530.01 Purpose.** The purpose of this chapter is to ensure the electronic waste recycling program created under s. 287.17, Stats., functions well for participants and the public, and in a manner that protects public health and the environment. This chapter is adopted under ss. 287.03, 287.17 (8) and (10), and 289.06, Stats.

**NR 530.02 Applicability. (1)** Except as otherwise provided, this chapter governs all entities and activities regulated under s. 287.17, Stats.

(2) This chapter does not apply to an electronics collection or recycling facility that is not registered under s. 287.17, Stats.

**NR 530.03 Definitions.** In this chapter, the following definitions, as well as the definitions in s. 287.17, Stats., apply:

- (1) "Authorized broker" means a person who provides services to registered manufacturers and registered recyclers for the purpose of cooperation under s. 287.17 (2) (b), Stats., and who complies with the notification requirement under s. NR 530.10 (2).
  - (2) "Collection" has the meaning specified under s. 287.17 (1) (b), Stats.
- (3) "Recycled weight" means the weight of eligible electronic devices used by households or schools in this state that are recycled by a registered recycler that may count toward the total weight of eligible electronic devices recycled reported by a registered manufacturer under s. 287.17 (5) (b), Stats.
  - (4) "Registered collector" has the meaning specified under s. 287.17 (1) (mg), Stats.
  - (5) "Registered manufacturer" means a manufacturer registered under s. 287.17 (3), Stats.
  - (6) "Registered recycler" has the meaning specified under s. 287.17 (1) (mr), Stats.

NR 530.04 Electronic device categories. (1) A computer monitor includes any of the following:

- 4/8/2022 Germane Modification Pages 16, 17, 25 and 26 were amended since the October 2021 meeting. Changes are in red font.
- (a) A video display with a screen of at least 7 inches in the longest diagonal direction used with a consumer computer.
- (b) A video display with a screen of at least 7 inches in the longest diagonal direction intended to display video or other content from the internet.
- (c) A smart home device with a screen of at least 7 inches in the longest diagonal direction.
- (d) An e-reader or other portable electronic device with a screen of at least 7 inches in the longest diagonal direction that displays information from the internet or a processor.
- (e) Any other electronic device that meets the definition under s. 287.17 (1) (d), Stats., and is not specifically excluded in that section or this chapter.
  - (2) A computer peripheral includes any of the following:
  - (a) A camera designed for use with a consumer computer.
  - (b) An external CD/DVD drive.
  - (c) An external hard drive.
  - (d) An external modem or router.
- (e) A flash drive, memory stick, or similar storage device designed for use with a consumer computer.
  - (f) A game controller designed for use with a consumer computer.
  - (g) A keyboard designed for use with a consumer computer.
  - (h) A mouse or similar input device.
  - (i) A projector designed for use with a consumer computer.
  - (j) A scanner designed for use with a consumer computer.

- (k) A speaker designed for use with a consumer computer.
- (L) Any other electronic device that meets the definition under s. 287.17 (1) (j), Stats., and is not specifically excluded in that section or this chapter.
  - (23) A consumer computer includes any of the following:
- (a) An all-in-one desktop-style computer with a screen that is integrated with the processor.
  - (b) A laptop, netbook, or notebook computer.
  - (c) A server used by a household or covered school.
  - (d) A tablet computer.
- (e) A thin client or other computer that runs from resources stored on a server instead of a local hard drive.
  - (f) A tower or box desktop-style computer without a monitor.
- (g) A component of a video game system that meets the definition under s. 287.17 (1) (e), Stats., of a consumer computer.
- (h) Any other electronic device that meets the definition under s. 287.17 (1) (e), Stats., and is not specifically excluded in that section or this chapter.

NR 530.05 Eligible electronic devices. (1) The department has determined under s. 287.17 (10) (i), Stats, that the disposal or burning of all of the following electronic devices in a solid waste facility may be harmful to human health or the environment and are eligible electronic devices under s. 287.17 (1) (gs), Stats.:

- (a) A telephone with a video display.
- (b) A telephone accessory operated by a battery.

(c) A component of a video game system or a portable hand-held video game device operated by a battery that does not meet the definition of a computer monitor or consumer computer.

NR 530.06 Eligibility of electronic devices for manufacturer weight recycled. (1) CRITERIA FOR DETERMINING WHETHER MATERIAL IS NOT RECYCLABLE. To determine whether a component or material from an eligible electronic device is not recyclable, and thus may be disposed of through land disposal, destruction by incineration, or other processes, while remaining eligible to count toward a registered manufacturer's weight of eligible electronic devices recycled under s. 287.17 (5) (b), Stats., the department shall consider all of the following:

- (a) Current end markets for the material documented by a registered recycler.
- (b) The efforts a registered recycler has documented to separate recyclable from non-recyclable components or materials.
  - (c) What percentage, by weight, of a device the component or material represents.
  - (d) Whether the material is hazardous waste.
- (e) Other factors a registered recycler or the department considers relevant to the determination.
- (2) ELIGIBILITY OF ELECTRONIC DEVICES RECOVERED FROM ILLEGAL DUMPING OR DISPOSAL TO COUNT TOWARD MANUFACTURER WEIGHT RECYCLED. If a registered collector receives an eligible electronic device recovered from waste loads or illegal dumping that can reasonably be assumed to have come from a household or covered school in this state, the eligible electronic device may be sent to a registered recycler for recycling on behalf of a registered manufacturer.

NR 530.07 Requirements for registered manufacturers. On the registration under s. 287.17 (3) (a), Stats., a registered manufacturer shall include all of the following:

- 4/8/2022 Germane Modification Pages 16, 17, 25 and 26 were amended since the October 2021 meeting. Changes are in red font.
- (1) The date on which the manufacturer began selling the brands of covered electronic devices offered for sale in this state and, if applicable, the date it stopped selling the brands.
- (2) A list of the brands and types of eligible electronic devices accepted through the manufacturer's mail-back recycling program, if applicable, and information on how households or covered schools can access the program, including a website address, if available.
- NR 530.08 Requirements for registered collectors. (1) REGISTRATION. (a) A registered recycler or manufacturer shall also register as a collector if the recycler or manufacturer is accepting electronic devices from a household or covered school for recycling on behalf of a registered manufacturer.
- (b) A registered collector shall include all of the following information with its registration under s. 287.17 (7) (a), Stats.:
- 1. A list of the electronic devices banned from disposal under s. 287.07 (5), Stats., that the collector accepts.
- 2. The site name, street address, and county for any location where the collector accepts eligible electronic devices used by households, and a phone number that households may call for more information about the location.
- 3. The date and time of any collection event to be held by the collector, if known at the time of registration, or any collection event held during the previous program year, along with the information listed under subd. 2 for the event.
- 4. Fees the collector charges households or covered schools to accept eligible electronic devices for recycling.
- (c) A registered collector shall notify the department in a timely manner if any of the information provided under par. (b) 1. to 3. changes before the time of its next registration under s. 287.17 (7) (a), Stats..
- (2) REPORTING. (a) In the annual report submitted under s. 287.17 (7) (b), Stats., a registered collector shall report to the department the total weight of eligible electronic devices

used by households or covered schools it collected in this state during the preceding program year. The report shall identify the following, as applicable:

- 1. The total weight of eligible electronic devices sent to registered recyclers during the preceding program year, along with the name of each registered recycler that received weight, and the weight sent to each.
- 2. The total weight of eligible electronic devices sent to other registered collectors during the preceding program year, along with the name of each registered collector that received weight, and the weight sent to each.
- 3. The total weight of eligible electronic devices received from other registered collectors during the preceding program year, along with the name of each registered collector that sent weight, and the weight received from each.
- 4. The total weight of eligible electronic devices dismantled instead of sending to a registered recycler during the preceding program year.
- 5. The total weight of eligible electronic devices sent to a non-registered recycler during the preceding program year.
- (b) For weights reported under par. (a) 1. to 3., the collector shall report separate totals for the weight of eligible electronic devices used in rural and urban counties. When the source county is unknown, the weight shall be counted in the total for urban counties.
- (3) RECORDKEEPING. (a) A registered collector shall maintain records of the dates it sent eligible electronic devices to another registered collector or a registered recycler, along with the bill of lading, scale receipt, or approximate weight or size of the load. These records shall be kept independently from receipts or other records received from the collector or recycler that received the eligible electronic devices.
- (b) A registered collector shall maintain records related to the program under this section and reports required under this section for at least 3 years and present records to the department upon request.

NR 530.09 Requirements for registered recyclers. (1) REGISTRATION. (a) A registered collector or manufacturer shall also register as a recycler if the collector or manufacturer is recycling eligible electronic devices on behalf of a registered manufacturer.

- (b) A registered recycler shall include all of the following information with its registration under s. 287.17 (8) (a), Stats.:
- 1. The street address of all facilities at which the registered recycler conducts recycling or stores eligible electronic devices or materials derived from eligible electronic devices.
- 2. A list of the electronic devices banned from disposal under s. 287.07 (5), Stats., that the recycler accepts.
  - 3. A list of applicable third-party certifications that the recycler maintains.

Note: Electronics recycling facilities may become certified by demonstrating to an accredited, independent third-party auditor that they meet specific standards to safely recycle and manage electronic devices. Currently two accredited certification standards exist: the Responsible Recycling ("R2") Standard for Electronics Recyclers and the e-Stewards® Standard for Responsible Recycling and Reuse of Electronic Equipment© ("e-Stewards®").

- 4. If the facility is located in Wisconsin, the solid waste processing facility operating license number obtained under s. NR 502.08.
- (2) REPORTING RECYCLED WEIGHT. (a) In the annual report submitted under s. 287.17 (8) (b), Stats., a registered recycler shall include all of the following:
- 1. The names of all registered collectors in this state from which the recycler received eligible electronic devices during the preceding program year.
- 2. The total weight of eligible electronic devices used by households or covered schools in rural counties and used by households or covered schools in urban counties received from each collector. When the source county is unknown, the weight shall be counted in the total for urban counties.

- 4/8/2022 Germane Modification Pages 16, 17, 25 and 26 were amended since the October 2021 meeting. Changes are in red font.
- 3. The total weight of eligible electronic devices that the recycler diverted for reuse or refurbishment, rather than recycled, during the preceding program year.
- 4. The total weight of eligible electronic devices that the recycler put in storage, rather than recycled or sent for disposal, during the preceding program year.
- 5. The total weight of recyclable material derived from eligible electronic devices that the recycler sent for disposal, rather than recycled, during the preceding program year.
- (b) To calculate total recycled weight for the preceding program year, the registered recycler shall subtract the weights reported in par. (a) 3. to 5. from the total weight reported under par. (a) 2.
- (3) REPORTING ASSIGNMENTS OF RECYCLED WEIGHT. (a) A registered recycler may assign recycled weight to an authorized broker or registered manufacturer.
- (b) On the annual report submitted under s. 287.17 (8) (b), Stats., a registered recycler shall identify the total recycled weight the recycler assigned to authorized brokers or registered manufacturers during the preceding program year, the name of all authorized brokers and registered manufacturers assigned recycled weight, and the recycled weight assigned to each.
- (c) A registered recycler shall report separate totals for the recycled weight used in rural and urban counties under par. (b). When the source county is unknown, the recycled weight shall be counted in the total for urban counties.
- (d) The total recycled weight reported under sub. (3) (b) may not exceed the total reported under sub. (2) (b).
- (4) OWNER FINANCIAL RESPONSIBILITY. (a) To meet the owner financial responsibility requirement under s. 287.17 (8) (c) 3., Stats., a registered recycler shall do all of the following:
- 1. Submit a copy of the registered recycler's current proof of financial responsibility to the department with its initial registration and upon request by the department.

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- 2. Provide proof of financial responsibility for all facilities where eligible electronic devices, or materials derived from eligible electronic devices, are stored or recycled.
- (b) In addition to meeting the requirements under par. (a), a registered recycler located in Wisconsin shall do all of the following:
- 1. Submit a closure cost estimate for all facilities listed under sub. (1) (b) 1. on a form required by the department., in accordance with s. NR 520.07.
- 2. Name the department as beneficiary or obligee and meet the requirements of s. NR 520.06, except the facility may only use one of the financial responsibility mechanisms under s. 287.17 (8) (c) 3. a. to e., Stats.
- (c) In addition to meeting the requirements under par. (a), a registered recycler not located in Wisconsin shall do one of the following:
- 1. Name the department as beneficiary or obligee and meet the applicable requirements of ch. NR 520.
- 2. Name an independent third party other than the department as beneficiary or obligee and meet all of the following requirements:
- a. Provide proof of financial responsibility using one of the mechanisms under s. 287.17 (8) (c) 3. a. to e., Stats. If selecting a performance or forfeiture bond as the means of proof of financial responsibility, the bonds shall be issued by a surety company among those listed as acceptable sureties for federal bonds in Circular 570 of the U.S. department of the treasury.
- b. Provide a closure cost estimate that does not count any assets as positive value and is based on the cost of an independent third party managing the facility closure and cleanup.
- c. Provide a copy of new or updated proof of financial responsibility within 10 days of its effective date.
- d. Notify the department at least 90 days prior to the cancellation date of proof of financial responsibility.

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- (5) TRANSPORTATION OF ELECTRONIC DEVICES. (a) A registered recycler shall use a bill of lading for all of the following:
- 1. Transporting electronic devices and their components from the point of collection or consolidation to the recycler's facility.
- 2. Transporting electronic devices and their components from the recycler's facility to other recyclers or end users of the material.
- (b) Each bill of lading shall include the date the load was picked up from the originating facility and a description of the load, including the type of materials and number of pallets or containers. Each bill of lading shall also include one of the following:
  - 1. The weight of the load, if a scale is available.
  - 2. The estimated weight of the load, if a scale is not available.
  - (c) Each bill of lading shall be signed by both the shipper and the receiver.
- (d) A registered recycler shall maintain bills of lading and other records required under this section for at least 3 years. The department may inspect records that are required under this section.
- NR 530.10 Requirements for authorized brokers. (1) MANUFACTURER COOPERATION. This section applies to any authorized broker providing services to a registered manufacturer for the purpose of cooperation under s. 287.17 (2) (b), Stats.
- (2) NOTIFICATION. A person, including a registered recycler, wishing to operate as an authorized broker on behalf of one or more registered manufacturers shall notify the department and provide the name, address, and contact information of an individual responsible for ensuring compliance with this section.
- (3) ANNUAL WEIGHT TRANSACTION SUMMARY. (a) An authorized broker may transact assignments of recycled weight with registered recyclers, authorized brokers, and registered manufacturers.

- 4/8/2022 Germane Modification Pages 16, 17, 25 and 26 were amended since the October 2021 meeting. Changes are in red font.
- (b) An authorized broker shall submit to the department no later than the first day of the third month of a program year, a report that includes all of the following:
- 1. The recycled weight assigned by others to the authorized broker during the preceding program year, the names of the persons who assigned the recycled weight, and the recycled weight assigned by each person.
- 2. The recycled weight the authorized broker assigned to others during the preceding program year, the names of the persons recycled weight was assigned to, and the recycled weight assigned to each person.
- (c) For weights reported under par. (b), the authorized broker shall report separate totals for the recycled weight associated with recycling of eligible electronic devices used in rural and urban counties. When the source county is unknown, the weight shall be counted in the total for urban counties.
- (d) The total weight reported under par. (b) 2. shall not exceed the total weight reported under par. (b) 1.
- NR 530.11 Requirements for retailers. (1) REGISTERED BRANDS. If a retailer determines that a covered electronic device is not listed as registered on the department's internet site, and that s. 287.17 (2) (c) 2., Stats., does not apply, the retailer shall do all of the following:
- (a) Remove the covered electronic device from the sales area of its in-person stores located in Wisconsin.
- (b) Remove the covered electronic device from its own internet store or block Wisconsin households and schools from purchasing the covered electronic device through its internet store.

Note: The department's internet site listing registered brands of covered electronic devices can be found at https://dnr.wi.gov/topic/Ecycle/.

(2) EDUCATION. (a) Under s. 287.17 (9), Stats., a retailer shall provide to purchasers information describing how eligible electronic devices may be collected and recycled and

provide a description of the prohibitions under s. 287.07 (5) (a), Stats. To meet this requirement, a retailer shall may do the following, as applicable:

- 1.(a) Provide the required information on receipts provided to purchasers of covered electronic devices.
- 2.(b) For in-person sales, post the required information in a prominent location either in the electronics section of the store or at the register where covered electronic devices are purchased.
  - 3.(c) For sales by telephone, provide the required information over the telephone.
  - 4.(d) For sales by catalog, provide the required information in the catalog.
- 5.(e) For sales over the internet, maintain a web page that is easily accessible to customers that includes the required information.
- (b) A retailer shall provide training to all employees who interact with purchasers of covered electronic devices about the requirement under s. 287.17 (9), Stats.

Note: This section applies only to a retailer as defined in s. 287.17 (1) (n), Stats.

# NR 530.13 Suspension and revocation of collector and recycler registrations. (1) REASONS FOR SUSPENSION. The department may suspend the registration of a collector under s. 287.17 (7), Stats., for failure to comply with any of the requirements under s. 287.17 (7), Stats. The department may suspend the registration of a recycler under s. 287.17 (8), Stats., for failure to comply with any of the requirements under s. 287.17 (8), Stats.

- (2) REASONS FOR REVOCATION. The department may revoke a collector or recycler's registration if the collector or recycler has failed to take action to return to compliance in a timely manner following a suspension.
- (3) ELIGIBILITY OF ELECTRONIC DEVICES COLLECTED DURING SUSPENSION OR REVOCATION. Beginning on the effective date of a suspension or revocation and continuing until a collector's registration is reinstated by the department, no eligible electronic device a collector

receives from a household or covered school, or delivers to a manufacturer or recycler, may be included in the weight of eligible electronic devices recycled by a registered manufacturer under s. 287.17 (4) (f), Stats.

- (4) ELIGIBILITY OF ELECTRONIC DEVICES RECYCLED DURING SUSPENSION OR REVOCATION. Beginning on the effective date of a suspension or revocation and continuing until a recycler's registration is reinstated by the department, no eligible electronic devices a recycler recycles are eligible to count toward the weight of eligible electronic devices recycled by a registered manufacturer under s. 287.17 (4) (f), Stats.
- (5) PROCESS FOR REINSTATEMENT FOLLOWING SUSPENSION OR REVOCATION. (a) After a collector or recycler's registration has been suspended or revoked, the collector or recycler shall do all of the following to be reinstated as a registered collector or recycler:
- 1. Resolve any outstanding compliance issues related to the suspension or revocation to the satisfaction of the department.
- 2. Demonstrate to the department full compliance with the requirements under s. 287.17, Stats., and other applicable laws.
- (b) The department shall reinstate a collector's registration under s. 287.17 (7), Stats., or a recycler's registration under s. 287.17 (8), Stats., once the collector or recycler has met all requirements under par. (a).
- (c) The department shall notify a collector or recycler in writing of its reinstatement and clearly indicate the complete time period for which collected or recycled electronic devices are not eligible to count toward a registered manufacturer's weight recycled.
- (d) The department shall notify all authorized brokers and registered collectors, recyclers, and manufacturers of the reinstatement.
- **NR 530.14 Revocation of manufacturer registrations. (1)** REASONS FOR REVOCATION. The department may revoke a manufacturer's registration under s. 287.17 (3), Stats., if the

manufacturer has failed to comply with one or more of the requirements under s. 287.17 (2) (a), (3), (4), or (5), Stats.

- (2) PROCESS FOR REINSTATEMENT FOLLOWING REVOCATION. (a) A manufacturer shall do all of the following to be reinstated as a registered manufacturer:
- 1. Resolve any outstanding compliance issues related to the revocation to the satisfaction of the department.
- 2. Demonstrate to the department full compliance with the requirements under s. 287.17, Stats., and other applicable laws.
- (b) The department shall reinstate a manufacturer's registration under s. 287.17 (3), Stats., once the manufacturer has met all requirements under par. (a).
  - (c) The department shall notify a manufacturer in writing of its reinstatement.

**SECTION 21. EFFECTIVE DATE**. This rule takes effect on the first day of the month following publication in the Wisconsin Administrative Register as provided in s. 227.22 (2) (intro.), Stats.

**SECTION 22. BOARD ADOPTION.** This rule with germane modifications was approved and adopted by the State of Wisconsin Natural Resources Board on [DATE].

Dated at Madison, Wisconsin		
	STATE OF WISCONSIN	
	DEPARTMENT OF NATURAL RESOURCES	
	BY	

For Preston D. Cole, Secretary

