

Strategy for Addressing the Retail Sector under the Resource Conservation and Recovery Act's Regulatory Framework

The Retail Strategy lays out a cohesive and effective plan to address the unique challenges the retail sector has with complying with the hazardous waste regulations while reducing burden and protecting human health and the environment.

Strategy for Addressing the Retail Sector under RCRA's Regulatory Framework

September 12, 2016

I. Introduction

A. Background

Regulation of hazardous waste generated by the retail sector under the federal Resource Conservation and Recovery Act (RCRA) presents unique challenges that are not found in more "traditional" RCRA-regulated industries. The retail sector as a whole handles a very large number of diverse products which change over time and may, in many instances, become regulated as hazardous waste under RCRA when discarded. As a result, retailers are required to make hazardous waste determinations for a variety of products at stores located across the country. Additionally, the reverse distribution process where retail stores generally send unused goods to reverse logistics centers and rely upon arrangements with suppliers/vendors to determine the ultimate disposition of these goods is a well-established business practice in the retail sector.

Nevertheless, how the reverse distribution processes are regulated, or should be regulated, under RCRA has resulted in a number of questions from both retailers and regulators. This issue becomes more complicated for retail chains with store locations in many different states, where states have taken various positions on how RCRA regulations apply.

In 2008, the U.S. Environmental Protection Agency (EPA or Agency) began a review of how RCRA hazardous waste regulations apply to the retail sector in order to better understand challenges in complying with RCRA regulations. EPA's review consisted of discussions with various members of the retail community and states through meetings, conferences and site visits.

On January 11, 2011, President Obama signed Executive Order (EO) 13563 regarding the retrospective review of regulations, which required federal agencies such as EPA to develop a plan to "...determine whether any such regulations should be modified, streamlined, expanded, or repealed so as to make the agency's regulatory program more effective or less burdensome in achieving the regulatory objectives."

EPA published a Notice of Data Availability (NODA) for the Retail Sector, dated February 14, 2014 (79 FR8926) as part of the Agency's continuing efforts to better understand concerns from all stakeholders regarding RCRA's applicability to the retail sector, as well as to obtain information and feedback on issues affecting the retail sector. The NODA was also intended to satisfy EPA's commitment under this EO to solicit public comment on issues associated with the retail sector. Additional information regarding the NODA is presented in Section II.A.

1. Although the terms "products" and "goods" are used and generally described at times as "items" or "materials" in this document, use of these terms is not intended to indicate if or when such items/materials become wastes either at the store or during the reverse distribution process.
2. The term discarded is defined at **40 CFR 261.2(a)(2)**. When a material, such as a retail item, is discarded is a key question because, once a decision to discard is made, the material becomes a solid waste and the person making this decision is a generator of solid waste. At such point and time, the generator would be required to make a hazardous waste determination.
3. EPA is aware that the term "reverse distribution" is often used for pharmaceuticals, whereas "reverse logistics" is used for non-pharmaceuticals; however, the former term appears throughout this document and is intended to apply to all retail items under this process.
4. The terms "supplier" and "vendor" (latter more commonly used in the retail industry) appear more often in this document, as compared to "manufacturer," since it is more likely the flow of goods/products occurs between retailers and suppliers/vendors (or agents thereof), although suppliers themselves may also be manufacturers or product formulators.

EPA's ongoing outreach efforts, combined with the comments received on the NODA, have improved the Agency's understanding of the challenges arising when managing unused/intact consumer goods that have become unsalable at retail stores and are moving through the reverse distribution system.

B. Objective:

EPA's considerable engagement with the retail sector and regulators to date has resulted in development of this strategy, which lays out a cohesive plan to address the unique challenges faced by the retail sector in complying with RCRA regulations while reducing burden and protecting human health and the environment.

In crafting this strategy, EPA recognizes that RCRA regulations, which were developed primarily for manufacturing settings, are not necessarily the best fit for the retail sector. EPA is also aware that the Agency has, in the past, made efforts to tailor RCRA regulations to address certain types of unique waste management circumstances (e.g., used oil, universal wastes, spent lead-acid batteries, academic laboratory waste). EPA further recognizes that there are occasions when unused/intact consumer goods, including customer returns, cannot be sold by the original retailer for a variety of reasons such as mandatory or voluntary recalls, seasonal changes, overstock and expired shelf-life.

Finally, the Agency is taking into account retail sector practices already in place, such as the reverse distribution process, to promote sustainability by ensuring that retail items remain marketable as commodities for donation or liquidation, thus reducing the amount of waste generated and encouraging recycling of wastes that are generated, as opposed to being disposed as solid or hazardous waste.

With this in mind, our strategy consists of a three-pronged approach, which is further discussed in Sections III and IV of this document:

1. Issue Agency policy, guidance and rulemaking to ensure a better fit between RCRA regulations and the retail sector.
2. Research retail hazardous waste management practices and related issues in the area of reverse distribution, universal waste and other challenges.
3. Using the results of our evaluation and research, identify additional approaches to address outstanding RCRA retail sector issues if needed.

II. Identification of Retail Sector Issues:

A. Retail NODA

The objectives of the 2014 Retail NODA were to share information EPA had collected and, more importantly, to obtain additional information that would allow the Agency to better understand and address issues encountered by industry and regulators with respect to the application of RCRA regulations, guidance and policy to the retail sector.

In the NODA, EPA requested comment on a series of topics related to retail operations, waste management practices and management of materials that may become hazardous waste when discarded. This specifically included requests for information regarding aerosol cans (e.g., quantity generated, classification and management

The term “liquidation” (also known as salvage) is used in this document to describe sale of products on the secondary market for use by consumers. Routine maintenance activities and cleanup of **spilled materials**, as well as the occurrence of damaged/leaking products no longer considered commodities and “unknowns” (item contents cannot be identified), also result in waste generation. Options, including handling as universal waste), since aerosol cans comprise a large percentage of the retail sector’s hazardous waste stream. The NODA comment period closed on May 30, 2014.

EPA received comments from 44 stakeholders, with comments consisting of feedback from:

- Companies consisting primarily of retailers [nine commenters]
- Industry/trade Associations [nine commenters]
- Government and related organizations [seven commenters]
- Recyclers [three commenters]
- Waste management and treatment, storage and disposal facilities [three commenters]
- Law firms [three commenters]
- Reverse logistics provider [one commenter] and anonymous [nine commenters].

The NODA and supporting documents, along with comments on the NODA, are available at <http://www.epa.gov/hwgenerators/hazardouswaste-management-and-retail-sector>.

B. Summary of Comments on Retail NODA:

As part of developing this strategy, EPA has reviewed all NODA comments to identify stakeholder issues/concerns, including suggestions on how to better address the retail sector under RCRA. Feedback from NODA commenters reinforced EPA’s understanding that the retail sector differs from the industrial/manufacturing sector in the following key respects:

- Large number of stores in many locations handling consumer goods that, in many situations, could become hazardous waste upon discarding.
- Numerous varieties of goods, which are generally manufactured by someone else and whose ingredients are often not fully known, make hazardous waste determinations difficult.
- Unpredictable quantity of waste generation due to episodic generation (e.g., recalls and customer returns).

- Hazardous waste training at the store level is difficult due to high employee turnover.
- Use of the reverse distribution process to manage unsalable products - including those that become hazardous waste when discarded EPA grouped suggestions from NODA commenters into the following major categories (approximate percentage of commenters suggesting a particular approach is shown in parentheses)7:
 - Address Pharmaceuticals (42%)
 - Remove P-listing for nicotine-containing products (23%)
 - Manage as Universal Wastes (17%)
 - Endorse Reverse Distribution Retail Paradigm - encompasses point of generation and waste determination issues (40%)
 - Exclude Retail Goods Managed under the Reverse Distribution Process from the Definition of Solid Waste (15%)
 - Expand Universal Waste Regulations to Other Waste Categories
 - Aerosol Cans (35%)
 - Pesticides (19%)
 - Electronics (17%)
 - All Retail Goods 8 (14%)
 - Provide Flexibility for Episodic Generation and Hazardous Waste Quantity Determinations (19%)
 - Exclude Retail Goods as Household Hazardous Waste/Expand “Household Hazardous Waste” Exemption (10%)
 - Revise and Update Satellite Accumulation Area Requirements (9%) EPA identified the following additional NODA commenter suggestions that did not fall into major categories:
 - Universal waste percentages include instances where certain items (pharmaceuticals, aerosol cans, pesticides and electronics) were identified individually and where retail goods as a whole were mentioned. Assumed to include, but would not necessarily be limited to, pharmaceuticals, aerosol cans, pesticides and electronics.
 - Determine the actual extent of the retail sector “universe” in terms of the numbers of retailers, types of retail items handled, and amount of wastes generated, as well accurately designating generator categories (i.e., large quantity, small quantity and conditionally exempt small quantity generators).
 - Coordinate with other federal agencies (e.g., Department of Transportation and Food and Drug Administration) when issuing guidance/policy or developing regulations that may affect management of materials/wastes in the retail sector in order to avoid unnecessary conflicts or duplication of effort.
 - Clarify the Agency’s position regarding whether aerosol cans are considered a reactive hazardous waste.
 - Conduct outreach activities such as identifying/providing opportunities for training and offering compliance assistance.

- Support use of e-Manifest and other electronic means of documenting compliance with RCRA regulations.
- Recognize challenges associated with waste management under differing state regulations.
- Eliminate the requirement for large quantity generators to store ignitable or reactive waste at least fifty feet from the facility's property line.

To the extent they are not already being addressed through policy, guidance and rulemaking or other EPA actions, the Agency will consider the aforementioned issues as part of implementing this strategy.

III. Response to Household Hazardous Waste Exemption NODA Comments:

Some NODA commenters suggested that EPA expand the "household hazardous waste" exclusion at 40 CFR 261.4(b)(1) to include either retail goods as a whole or certain types of retail goods. The Agency has already addressed this issue as part of a previous rulemaking that responded, in part, to a petition from the American Retail Federation (ARF).

As explained in a final November 13, 1984 rule (49 FR 44978), EPA excluded household hazardous waste because the legislative history of RCRA indicated an intent to exclude such wastes and not because these wastes can never pose the risks associated with hazardous wastes. Additionally, consistent with legislative history, EPA determined that it was necessary to establish two criteria that must be met to qualify for this exclusion when evaluating ARF's petition. First, the waste must be generated by individuals on the premises of a temporary or permanent residence and, second, the waste stream must be composed primarily of materials found in wastes generated by consumers in their homes. In this final rule, EPA denied ARF's petition to exempt consumer household products from retail sources because these wastes fail to meet both criteria. EPA continues to believe that retail goods, including those that could become wastes when discarded, do not satisfy the criteria for this exclusion.

IV. Current EPA Activities to Address Retail RCRA Issues:

Prior to issuing the NODA in 2014, EPA had already begun developing the Pharmaceuticals rule (starting in 2009) and the Generator Improvements rule (starting in 2011), as well as the Definition of Solid Waste (DSW) rule.

Because pharmaceutical hazardous waste is a large part of the retail sector's RCRA concerns, EPA mentioned in the NODA that the Agency was developing a proposed rule for healthcare facility-specific management standards for hazardous waste pharmaceuticals (the Pharmaceuticals rule).

Although, for the most part, it was not possible to address all the feedback received on the NODA in these rulemakings, EPA has tried to incorporate approaches in these rulemakings to address some of the NODA comments in

order to ease the burden of managing hazardous wastes in a retail setting. A discussion of these efforts is provided below:

A. DSW Rule:

The final DSW rule, dated January 13, 2015 (80 FR 1694), provides new conditional exclusions for hazardous secondary materials. If these materials are managed according to specified conditions, legitimately recycled and sent to a verified recycler, they would not be regulated as a solid waste. Retailers may be able to use this exclusion for recycling aerosol cans and possibly other retail items. Additional information on this final rulemaking is available at:

<http://www.epa.gov/hwgenerators/final-rule-2015-definition-solid-waste-dsw> .

EPA is coordinating with stakeholders and conducting outreach activities in order to implement and monitor effectiveness of the final DSW rule.

B. Generator Improvements Rule:

The proposed Generator Improvements rule, dated September 25, 2015 (80 FR 57018), advances approaches for addressing several issues facing the hazardous waste generator community, including the following issues relevant to the retail sector:

- Provides flexibility for episodic generators of hazardous waste.
- Allows consolidation of conditionally exempt small quantity generator waste at large quantity generators.
- Permits waiver of the 50-foot buffer requirement for ignitable/reactive wastes under certain conditions.

EPA plans to finalize this rule in fall 2016. Additional information on this rule is available at

<http://www.epa.gov/hwgenerators/proposed-rule-hazardous-waste-generator-improvements> .

C. Pharmaceuticals Rule:

The proposed Pharmaceuticals rule, dated September 25, 2015 (80 FR 58014), addresses a number of retailers RCRA concerns. The proposed rule:

- Advances an approach so that a healthcare facility, including a retailer with a pharmacy, who generates 1 kg of acute P-listed hazardous waste pharmaceuticals in a calendar month will not become the most stringently regulated generator (a large quantity generator).

- Sets forth a tailored set of management standards specifically designed to reduce the complexity and regulatory burden of the RCRA hazardous waste regulations for the management of hazardous waste pharmaceuticals by health care facilities, including hospitals, clinics and retail stores with pharmacies.
- Provides regulatory clarity on how the reverse distribution of pharmaceuticals is regulated under RCRA.
- Explores two possible approaches in the rule to address concerns with designating nicotine-containing smoking cessation products (e.g., gums, lozenges and patches) and other low-concentration nicotine-containing products as acutely hazardous (P-listed) wastes. For both approaches, EPA requested toxicity data for nicotine (P075). The two regulatory options are: (1) a narrow exemption from the P075 listing for Food and Drug Administration-approved over-the-counter smoking cessation products (patches, gums, and lozenges) and (2) broader, concentration-based approach to listing nicotine (P-listing for high concentrations and U-listing for low concentrations, similar to the approach taken for warfarin).
- Requests comment in the rule preamble on whether e-cigarettes and nicotine-containing liquids for e-cigarettes should be included within the scope of the definition of pharmaceutical and therefore managed as other hazardous waste pharmaceuticals under the pharmaceuticals rule.

Additional information on this rule is available at:

<http://www.epa.gov/hwgenerators/proposed-rule-managementstandards-hazardous-waste-pharmaceuticals> .

Beyond the pharmaceuticals proposed rule, EPA has issued guidance to provide regulatory clarity regarding the following issues:

- In letters dated May 8, 2015, EPA issued separate guidance clarifying that:
- E-cigarettes are P075 waste due to the attached cartridges of nicotine (RCRA Online 14850) and nicotine patches, gums, lozenges and e-cigarettes are not solid or hazardous waste when sent for nicotine reclamation (RCRA Online 14851).
- In a letter dated October 2, 2015, EPA also issued guidance clarifying that pharmaceutical controlled substances from households can be accepted at Drug Enforcement Agency-authorized collection receptacles, including those established at retail stores with pharmacies (RCRA Online 14853).

V. Upcoming EPA Activities to Address Retail RCRA Issues:

EPA is currently focusing the Agency's near-term efforts on finalizing the Pharmaceuticals and Generator Improvements rules. However, we will be

undertaking a number of upcoming activities that will also address the RCRA concerns of the retail sector and other stakeholders.

Primarily, these activities include issuing a guide to recycling aerosol cans, proposing to add aerosol cans to the federal universal waste rules, and developing a policy that addresses the reverse distribution process for the retail sector as a whole.

To date, EPA has gathered useful information regarding management of consumer goods in the retail sector and the associated issues encountered during this process.

The Agency's strategy calls for continued engagement with the retail sector and other stakeholders, such as industry representatives and state/tribal/local governments, to support our efforts in moving forward to address the reverse distribution process and universal waste management. As necessary, in order to inform future EPA decisions, this outreach/coordination process is expected to involve attending meetings/conferences, conducting site visits and participating in work groups.

Upcoming activities are discussed in more detail below.

A. Guide to Recycling Aerosol Cans

EPA is developing a guide on how to recycle aerosol cans under the existing Subtitle C recycling exclusions, including recycling aerosol cans for scrap metal recovery. EPA anticipates that this guide will assist generators of aerosol cans and recyclers to increase their recycling of this ubiquitous waste stream.

B. Role of Universal Waste Regulations

EPA has been exploring the potential for adding certain retail items, such as aerosol cans, pesticides, and/or electronics, to the federal universal waste regulations by conducting the following activities:

- Obtain additional information regarding state programs currently in place to manage aerosol cans (e.g., California and Colorado) and electronics (e.g., Arkansas, California, Colorado, Connecticut, Louisiana, Michigan, Nebraska and New Jersey) as universal wastes.
- Identify and consult with states that are considering including aerosol cans, electronics or other types of items as categories of universal waste.
- Determine the extent to which states regulate other retail items, including pesticides beyond those recalled, as in suspended or cancelled, under the Federal Insecticide, Fungicide, and Rodenticide Act, as universal wastes.
- Evaluate information received from states, including any advantages/disadvantages and challenges associated with management of retail items as universal wastes. Additional information regarding EPA's

key observations and examples of stakeholder outreach efforts to date is provided in the Appendix to this strategy.

In addition to aforementioned, EPA considers a number of factors, as set forth in federal RCRA regulations, when determining whether a hazardous waste or category of hazardous waste should be included as universal wastes.

Taking into account feedback from NODA commenters and other information obtained to date, EPA believes that aerosol cans are likely to be good candidates for management under federal universal waste regulations.

Therefore, the Agency is moving forward with plans to develop a proposed rule to address aerosol cans as universal waste.

C. Policy on Reverse Distribution and RCRA:

EPA recognizes that, although there are areas within the program that work well, RCRA regulations may not always be the best fit for the retail sector. This has come to light in terms of the reverse distribution process used in the retail sector, particular as relates to when discard occurs or is intended to occur and the timing of waste determinations.

Therefore, EPA intends to develop a policy that addresses the reverse distribution process for the retail sector as a whole. In doing so, EPA is working from the Agency's understanding regarding the "flow" of consumer goods among different entities, as well as the roles/relationships of retailers, suppliers/vendors, reverse logistics centers and others with respect to unused/intact consumer goods that have become unsalable at retail stores for a variety of reasons and are moving through the reverse distribution system. Unsalable retail items include excess inventory, such as expired or outdated items, seasonal items, overstock, recalled (voluntary or involuntary) products and returned items.

In developing this policy, EPA will take into account key observations made to date (see appendix), with a particular focus on the nature/extent and significance of challenges encountered when managing consumer goods in the retail sector, by considering the following issues:

- Scope of the retail "universe," including the number of individually- or family-owned stores
- Positions of regulators such as EPA regions, states/tribes and, as necessary, local governments on the location of the point of generation
- Extent to which inspections by regulators continue to identify compliance issues in the retail sector, including failure to make hazardous waste determinations
- Extent to which the reverse distribution process results in appropriate management of unsalable consumer goods originating from retail stores,

such that the percentage of retail items disposed as solid or hazardous waste is reduced to the maximum extent possible

This policy is not intended to address wastes from routine maintenance activities and cleanup of spilled materials, as well as damaged/leaking products no longer considered commodities and “unknowns” (item contents cannot be identified).

Contact: Questions regarding this strategy should be directed to:

Drew Lausch at lausch.robert@epa.gov or 703-603-0721 or Kristin Fitzgerald at fitzgerald.kristin@epa.gov or 703-308-8286.

These factors are discussed at 40 CFR 273.81.

A diagram showing the flow of retail items and relationships among various organizations that manage consumer goods and wastes is available at

<http://www.epa.gov/hwgenerators/strategy-addressing-retail-sector-under-resource-conservation-and-recovery-act>.

APPENDIX:

Key Observations to Date

As part of developing this strategy, the Agency has been conducting outreach efforts (meetings, conferences, site visits, etc.) with key stakeholders and, based on these efforts, the following is noted in no particular order of

Importance:

- When and where hazardous waste determinations are made (i.e., at the store versus at a reverse logistics center) varies from retailer to retailer and from product to product - and may also vary with time.
- Positions of regulators on the location of the point of generation (when a product becomes a waste) vary and inspections of retail stores have identified compliance issues - and inspections are anticipated to occur in the future.
- Certain retail chains use safety data sheet-based scanning systems keyed to universal product codes (UPCs) or stock keeping units (SKUs) to assist in making waste determinations at the store; however, smaller retailers and individually- or family-owned stores may lack this capability and/or may not be fully aware of RCRA obligations.
- Information regarding the chemical content of certain manufacturers' products is sometimes made publicly available or, if it is considered

confidential business information, may be selectively shared with others in order to inform appropriate end-of-life management.

- There exists software that relies upon proprietary manufacturers' product information to determine appropriate disposition of unsalable retail items, although how widely this software is utilized across the retail sector is not fully known.
- Retailers are using third parties to ensure proper management of products determined to be hazardous waste at store locations, although the extent to which this occurs across the retail sector is uncertain.
- Reverse logistics centers also use an SDS-based UPC/SKU scanning system, although the extent to which reverse logistics centers as a whole are taking this approach is uncertain.
- Waste determinations typically occur at the reverse logistics centers for some retail goods when it's clear that these items have a high possibility of being donated, liquidated or otherwise recycled.
- Certain non-prescription drugs (e.g., hand sanitizers, multi-symptom cold relievers and sore throat medicines) and supplements such as vitamins are sent to reverse logistics centers where they are disposed as hazardous waste if, for example, the expiration date has passed.
- Protocols or corporate directives are in place that specify how retail stores, reverse logistics centers and suppliers/vendors handle excess inventory, make hazardous waste determinations and decide the ultimate disposition of products, although this seems less likely in the case of individually- or family-owned stores.
- Contracts or other written agreements exist between a retailer and supplier/vendor that specify how the process for returning unsalable items and awarding of credit works, as well as the extent to which particular products are required to be managed a certain way, such as prohibiting donation/liquidation and requiring disposal as hazardous waste due to "branding issues" or other concerns.

Since EPA is aware that a large percentage of unsalable retail items are "returned to the supplier/vendor," the ultimate disposition of these items is of interest to the Agency.

- Credit is provided to retailers for unsalable consumer goods, which have an inherent value in that they remain potentially marketable as commodities that could be donated or liquidated, which serves as incentive for proper management until such time credit is received.
- Retailers may also be assuming increased responsibility for management and ultimate disposition of unsalable retail items as part of the "Adjustable Rate Policy" process (supplier/vendor or agent not involved).
- Given past experiences or other information, such as agreements between suppliers/vendors and retailers, retailers may know beforehand that certain consumer goods will ultimately be disposed as hazardous waste, including products that are returned to ensure receipt of manufacturer/supplier credit.

- Reverse logistics centers play a key role in the management of consumer goods, performing functions such as data collection, financial reconciliation such as credit verification, recall management, material tracking and material disposition (i.e., reuse, recycling or disposal).
- Reverse logistics centers may also offer benefits such as increasing the likelihood that consumer goods may be donated or liquidated, due to economies of scale, and ensuring that hazardous waste determinations are properly performed.
- The role played by suppliers/vendors in management of retail products under RCRA, including providing credit to retailers, making hazardous waste determinations and influencing ultimate disposition, is critical and represents an area requiring further study.
- Suppliers/vendors play a critical role in management of retail products under RCRA, including providing credit to retailers, making hazardous waste determinations and influencing ultimate disposition.
- Retail items may be repaired/refurbished for ultimate use by consumers but how often and by whom is uncertain.
- Certain unsalable retail items may be returned to the manufacturer for use in preparing products (i.e., blended into existing formulations), although the extent to which this occurs is unknown.
- Feedback from state programs thus far indicates that management of items such as aerosol cans and electronics as universal wastes works well.
- Recycling of aerosol can propellant for use as fuel and the actual container as scrap metal, appear more common than recycling of can contents (product). It does not necessarily follow that these items will ultimately be donated or liquidated since they may become a waste in cases where a supplier/vendor requires disposal or where a reverse logistics center determines that disposal is the only remaining management option.

Additional information on the Adjustable Rate Policy and other reimbursement policies for unsalable items can be found in the publication entitled, 2008 Joint Industry Unsaleables Management Study: The Real Causes and Actionable Solutions. This publication is available at <http://www.gmaonline.org/downloads/research-and-reports/UnsaleablesFINAL091108.pdf>.

Stakeholder Outreach Efforts

Since the close of the NODA comment period, EPA has been reaching out to various stakeholders and engaging in discussions in order to learn more about challenges associated with RCRA and the retail sector. Some examples include:

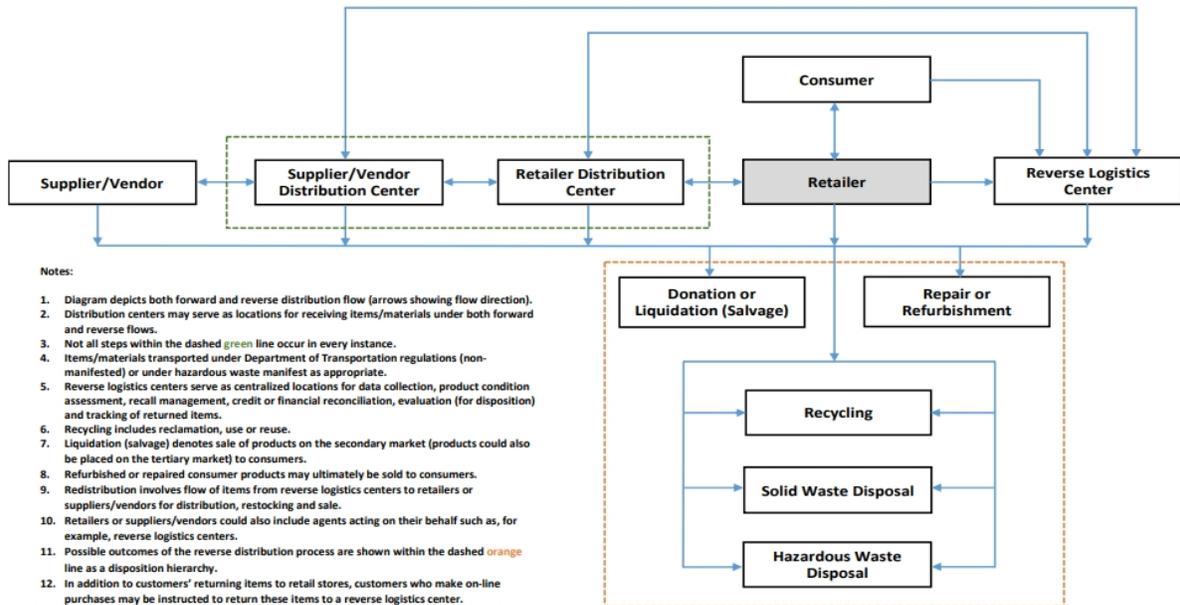
- EPA participated in the Retail Industry Leaders Association (RILA) conference during September 29-October 2, 2014 in Minneapolis, MN, which accorded an opportunity to network with various industry representatives regarding the Retail NODA and the Agency's retail initiative.

- EPA provided an update regarding the Retail NODA at the annual meeting of the Association of State and Territorial Solid Waste Management Officials on October 30, 2014 in Reston, VA.
- On November 20, 2014, EPA met with the World Floor Covering Association (WFCA) to learn more about WFCA's industry/membership and discuss the Retail NODA and better understand the relevance of Agency's retail initiative and retail strategy development on products manufactured by WFCA members.
- On January 7, 2015, EPA provided regulatory updates to regions and states including a discussion regarding the status of the Pharmaceuticals Rule, Generator Improvement Rule and Definition of Solid Waste Rule, as well as efforts associated with the retail initiative and retail strategy development.
- On January 14, 2015, EPA participated in a regulatory roundtable as part of the Council on Safe Transportation of Hazardous Articles Quarterly Membership meeting in Arlington, VA. Discussions involved Retail NODA comments and development of a strategy to address retailer concerns.
- EPA gave a presentation on the Retail NODA and development of a retail strategy as part of the RILA conference on February 10th in Atlanta, GA and Pesticide Stewardship Alliance conference on February 11th in Savannah, GA.
- During February 23-26, 2015, the Agency participated in a series of meetings and visits involving EPA Region 9, various levels of government in the State of California (Attorney General's Office, Cal EPA, local District Attorney Offices and counties), and industry representatives. This included tours of an electronics waste facility, retail stores (CVS, COSTCO and Lowes) and a reverse logistics center (Inmar Incorporated).
- During March 16-19, 2015, in support of implementing the EPA's Retail Sector Strategy, the Agency attended the Store Planning, Equipment, Construction and Facilities Services 2015 Annual Conference in Las Vegas, NV - where the Agency gave a presentation on RCRA and the retail strategy and sustainability management - toured a Walmart store and return center, and met with the State of Nevada's Division of Environmental Protection.
- On April 13, 2015, EPA participated in a Retail Waste Workgroup meeting sponsored by the California Department of Toxic Substances Control. This meeting included regulators at federal, state and local levels of government in California, as well as representatives from industry such as retailers and suppliers. EPA gave a presentation on efforts to date to address RCRA and the retail sector.
- On June 9, 2015, EPA provided an overview of the Pharmaceuticals Rule and Generator Improvement Rule, as well as the planned Retail Sector Strategy, at a Northeast Waste Management Officials Association training workshop in Sturbridge, MA.

- During July 7-9, 2015, the Agency participated in a series of meetings and visits involving EPA Region 4, the Alabama Department of Environmental Management and the Georgia Department of Environmental Resource's Environmental Protection Division. This included a meeting with Giant Cement Holding Incorporated representatives and tour of Giant Resource Recovery's aerosol processing/recycling facility.
- EPA participated in the RILA conference during September 14-17, 2015 in Austin, TX, at which time the Agency gave presentations on the proposed Hazardous Waste Pharmaceutical and Hazardous Waste Generator Improvements rules as well as provided an update on the Agency's retail strategy. EPA also met with representatives from the Texas Commission on Environmental Quality.
- EPA participated in the Consumer Products Regulatory Compliance Workshop co-sponsored by the Personal Care Products Council and Consumer Specialty Products Association in Sacramento, CA during September 29-30, 2015. EPA gave a presentation on the Agency's retail strategy and an overview of federal RCRA regulations as they pertain to the retail sector, including the proposed Hazardous Waste Pharmaceutical and Hazardous Waste Generator Improvements rules.
- On November 30, 2015 and December 1, 2015, the Agency participated in facility visits involving the Pennsylvania Department of Environmental Protection and New Jersey Department of Environmental Protection. This included tours of a manufacturer's distribution center (S.C. Johnson), a reverse logistics center (DRS Product Returns) and a pharmaceutical wholesaler (Cardinal Health).
- On February 25, 2016, EPA met with Eli Lilly, Merck, Johnson & Johnson, Pfizer and two other pharmaceutical manufacturers to discuss comments on the proposed pharmaceuticals rule.
- EPA met with representatives of the Consumer Healthcare Products Association on April 21, 2016 to discuss comments on the proposed pharmaceuticals rule.
- During May 11-12, 2016, EPA participated in the Consumer Specialty Products Association mid-year meeting at National Harbor, MD. EPA gave a presentation on the Agency's ongoing efforts to address the retail sector, including a discussion on aerosol cans.
- EPA met with representatives from CVS Pharmacy on May 17, 2016 to discuss comments on the proposed pharmaceuticals rule.
- On May 26, 2016, EPA provided an overview of the proposed pharmaceuticals rule during a Retail Waste Workgroup meeting sponsored by the California Department of Toxic Substances Control.
- EPA participated in the Northeast Waste Management Official's Association annual meeting on June 14, 2016 in Westford, MA. The Agency provided updates on major rulemaking efforts, as well as the retail strategy.

- On June 16, 2016, EPA met with representatives from Integrated Liner Technologies to discuss the proposed pharmaceuticals rule.

Retail System Players and Relationships
Conceptual Framework for Flow of Retail Items (Consumer Goods) and Wastes
 August 23, 2016



Although this diagram depicts EPA's current understanding of how unsalable consumer goods and wastes are managed in the retail sector, changes to these processes may occur in the future if/when additional information becomes available.

Reorganization of Generator Regulations

Provision	Previous Citation	New Citation
Generator Category Determination	§ 261.5(c)–(e)	§ 262.13
VSQG Provisions	§ 261.5(a), (b), (f)–(g)	§ 262.14
Satellite Accumulation Area Provisions	§ 262.34(c)	§ 262.15
SQG Provisions	§ 262.34(d)–(f)	§ 262.16
LQG Provisions	§ 262.34(a), (b), (g)–(i), (m)	§ 262.17

As part of this reorganization, the Agency made conforming changes to citations that reference § 261.5 and § 262.34

40 CFR Parts 239 through 282 [Non-HW, HW and other RCRA Regulations].

<https://www.epa.gov/rcra/resource-conservation-and-recovery-act-rcra-regulations>

Fact Sheet About the Hazardous Waste Generator Improvements Final Rule:

<https://www.epa.gov/hwgenerators/fact-sheet-about-hazardous-waste-generator-improvements-final-rule>

Hazardous Waste Management and the Retail Sector:

<https://www.epa.gov/hwgenerators/hazardous-waste-management-and-retail-sector>

Final Rule: Hazardous Waste Generator Improvements:

<https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements>

Strategy for Addressing the Retail Sector under the Resource Conservation and Recovery Act's Regulatory Framework:

<https://www.epa.gov/hwgenerators/strategy-addressing-retail-sector-under-resource-conservation-and-recovery-acts>

Frequent Questions About Implementing the Hazardous Waste Generator Improvements Final Rule:

<https://www.epa.gov/hwgenerators/frequent-questions-about-implementing-hazardous-waste-generator-improvements-final-rule>

Helpful resource:

<https://rcrapublic.epa.gov/rcraonline/results.xhtml?param=Hazardous+Waste+Exclusion>

Identification of HW:

<https://www.epa.gov/sites/production/files/2016-01/documents/rcra2614b-ref.pdf>

Webinar Series on the Hazardous Waste Generator Improvements Rule:

https://www.epa.gov/sites/production/files/2019-03/documents/epa_generator_rule_long_training_2019_webinars.pdf

Definitions of Terms

§ 260.10

- Acute hazardous waste/ Non-acute hazardous waste
- Central accumulation area
- Large quantity Generator/ Small quantity generator/ Very small quantity

Generator,

Revisions to § 262.10

- § 262.10(a)-(1) has been revised in a variety of ways to clarify the structure of the regulations and remove obsolete provisions.
- Obsolete provisions being removed are—
 - **§ 262.10(c)**

Outdated provision from the early days of RCRA when the regulations distinguished between generators that shipped off-site for management and those

that were also RCRA-designated facilities

▫ **§ 262.10(j)**

Laboratory XL regulations

• **§§ 262.10(b), (d), and (l)**

are updated to reflect the new structure of the regulations, but still point generators to counting requirements, import and export requirements, and regulations for academic laboratories

• **§§ 262.10(e), (f), (h), & (i)**

are unchanged,

Revisions to § 262.10

• § 262.1 contains definitions of conditions for exemption and independent requirement, used in § 262.10

• **§ 262.10(a)(1)**

lists the independent requirements for each generator category

• **§ 262.10(a)(2)**

points generators to the conditions for exemption for each generator category

• **§ 262.10(a)(3)**

states that hazardous waste must be sent to a designated facility (permitted TSDF or recycler)

• **§ 262.10(g)**

is revised to distinguish between independent requirements and conditions for exemption.

Hazardous Waste Determinations:

What Changed?

- Clarifies and emphasizes that waste determinations must be accurate!
- Confirms when a generator's hazardous waste determination must be made
- Elaborates on how to determine if a solid waste is either a listed and/or characteristic hazardous waste
- Reiterates what waste determination records must be kept

- Requires SQGs and LQGs to identify and mark RCRA waste codes on containers prior to sending hazardous waste off-site per

§ 262.32

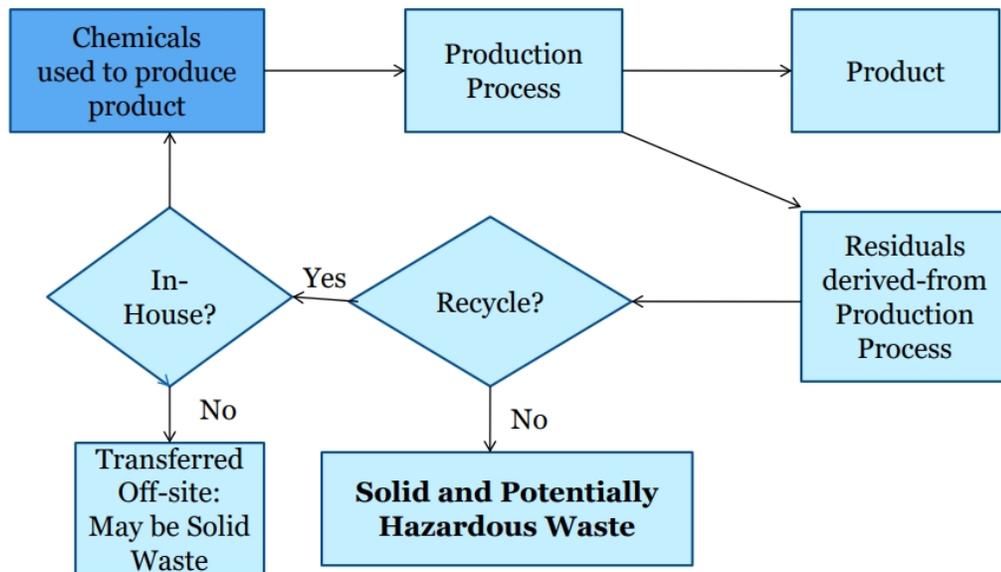
Why did we make these changes?

- To improve generator compliance and therefore program success
- From different Agency analyses, generators consistently fail to make an accurate hazardous waste determination, leading to the mismanagement of hazardous waste
 - Non-compliance rates range from 10 to 30 percent
 - Reasons vary from not understanding RCRA to not even being aware of

RCRA

- Making an accurate hazardous waste determination reduces the domino effect
 - Hazardous waste most likely will be managed safely from “cradle to grave”

Putting Things in Context



Making a Hazardous Waste Determination

• § 262.11(a)

The hazardous waste determination for each solid waste must be made

- at the point of waste generation,
- before any dilution, mixing, or other alteration of the waste occurs,
- and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

§ 262.11(a)

Hazardous Waste Determination

The hazardous waste determination for each solid waste must be made at the point of waste generation,...

RCRA Statute is clear:

The term “hazardous waste generation” means the act or process of producing hazardous waste. See Solid Waste Disposal Act, Section 1004.

Why at the point of waste generation?

▫ To Ensure:

Proper waste identification

Proper handling and management from “cradle to grave”

Compliance with LDRs

262.11(a)

Hazardous Waste Determination

The hazardous waste determination for each solid waste must be made at the point of waste generation, before any dilution, mixing, or other alteration of the waste occurs, and at any time in the course of its management that it has, or may have, changed its properties as a result of exposure to the environment or other factors that may change the properties of the waste such that the RCRA classification of the waste may change.

Why inclusion of this statement?

At any time in the course of its management...

- Generators need to understand the chemistry and chemical properties of their waste.

- A SW determined to be non-hazardous at the point of generation can in some cases become hazardous over time while being managed on-site through exposure to the environment (reactive wastes), settling (bi-phasic solvent waste), etc.
- Note: Opposite also true; hazardous wastes can become non-hazardous so long as not diluted or non-LDR compliance treatment
- Does this mean you need to monitor your waste 24/7?