

## **Detailed Description and Rationale for Proposed Repeal of Hawaii Administrative Rules, Title 11, Chapters 260 to 280 and Adoption of Hawaii Administrative Rules, Title 11, Chapters 260.1 to 279.1 Regarding Hazardous Waste Management**

Hawaii is an authorized state for the U.S. Environmental Protection Agency (EPA)'s national hazardous waste program implementing the Resource Conservation and Recovery Act (RCRA), Subtitle C. In order to maintain authorization and EPA funding for this program, Hawaii is required by the Code of Federal Regulations (CFR), Title 40 Part 271 (40 CFR 271) to adopt state rules equivalent to and at least as stringent as the program's federal regulations, which are primarily found in 40 CFR 260 to 279.

The proposed replacement of chapters 11-260 to 11-280, HAR with chapters 11-260.1 to 11-279.1, HAR is in response to changes made by EPA to 40 CFR Parts 124 and 260 to 279. Chapters 11-260 to 11-279, HAR were based on the contents of the corresponding federal regulations at the time of their adoption in 1999. The new chapters 11-260.1 to 11-279.1, HAR will adopt current federal regulations (as of July 1, 2016) by reference, with appropriate modifications, bringing the department's regulations up to date with numerous changes in federal hazardous waste regulations.

The proposed rule changes will return the department to compliance with EPA's regulations pertaining to state program authorization (40 CFR 271). The department will be more effective in ensuring compliance with regulations to protect human health and the environment because we will be in compliance with federal regulations, the applicable state regulations will be clearer, and EPA and other nationally available program guidance will align more closely with Hawaii Administrative Rules.

In addition to changes required to bring the department's regulations into alignment with EPA program requirements, the department proposes to amend the hazardous waste regulations to:

1. Simplify administrative and permit procedures
2. Make clarifications and corrections to regulatory language
3. Add electronic items as a category of universal waste
4. Require importers of universal waste to notify the department of their activities
5. Require small quantity handlers of universal waste, transporters of universal waste, and used oil generators to maintain records of shipments
6. Require surface impoundments, landfills, or land treatment facilities managing hazardous waste and choosing an alternate groundwater monitoring system to submit system plans
7. Require used oil processors to keep records of testing/maintenance of communications/alarm system, fire protection equipment, and spill control and decontamination equipment
8. Require Small and Large Quantity Generators to keep records of weekly inspections of container storage areas
9. Require testing of used oil for halogen content

The general rationale for these proposed changes is to simplify applicable regulations and their wording, where appropriate, in order to ease regulatory burden and increase compliance (items 1-3), to increase the department's inspection and enforcement capabilities (items 4-9), and to

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ensure that used oil and hazardous waste management methods are adequately protective of human health and the environment (item 9). The rationale for each state-initiated proposed change is discussed in more detail below.

The hazardous waste regulations are complex and a change to one section often requires numerous conforming changes in sections of other chapters. Therefore, changes are described in terms of theme and content rather than by chapter and section number of the regulatory text. The below list of proposed changes to the hazardous waste regulations and additional explanations, as necessary, is organized as follows:

- A. Administrative procedures
- B. Permit procedures
- C. Definition of solid and hazardous waste
- D. Land Disposal Restrictions (LDRs)
- E. Management standards for specific wastes
- F. Import and export of hazardous wastes
- G. Standards applicable to treatment, storage, and disposal (TSD) facilities and combustors of hazardous waste
- H. Uniform hazardous waste manifest
- I. Recordkeeping
- J. Minor changes and corrections to clarify regulatory language

### A. Administrative procedures

1. Incorporation of 40 CFR §§260.20 and 260.23 to 260.34  
These sections prescribe procedures by which petitioners may request changes to hazardous waste program administrative rules and criteria by which the department will judge such requests, including requests for non-waste determinations, variances from classification as a solid waste or to be classified as a boiler, and the addition of new categories of universal waste. This change codifies procedures for certain types of rulemaking petitions, increasing the program's responsiveness to the regulated community and the public. This change incorporates the current EPA regulations.
2. Changes in approved analytical methods used in characterization of wastes as hazardous or non-hazardous  
This change incorporates the current EPA regulations.
3. Repeal without replacement of chapter 11-280, HAR ("Hazardous Waste Management: Public Information")  
Program authorization requires public availability of information and treatment of confidential business information to be substantially similar to EPA's federal regulations. Chapter 11-280 contains out-of-date procedures for handling confidential business information and requests for public information. Requests for public information will be handled under sections 342J-14 and 342J-14.5, HRS and applicable provisions of chapter 92F, HRS and chapter 2-71, HAR, which will be referenced in the incorporated 40 CFR §260.2. This change is state-initiated.

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## B. Permit procedures

1. Clarifications to requirements for post-closure permit applications and alternative mechanisms under various authorities so the state can impose post-closure care requirements more tailored to particular facility circumstances  
This change incorporates the current EPA regulations.
2. Streamlined permit procedures for corrective action and remediation-only facilities  
This change incorporates the current EPA regulations.
3. Repeal without replacement of chapter 11-271, HAR, subchapter B (“Rules Governing Contested Case Hearings”) and subchapter C (“Declaratory Rulings”) Contested case hearings regarding RCRA permits will be handled under department-wide regulations in chapter 11-1, HAR. Having a separate set of regulations for one program that are very similar to those in chapter 11-1, but have some differences, has created unnecessary confusion that will be eliminated by this change. This change is state-initiated.

## C. Definitions of solid and hazardous waste

1. Expanded exclusion for mixtures and/or derivatives of wastes listed solely for the ignitability, corrosivity, and/or reactivity characteristics  
This change incorporates the current EPA regulations.
2. Codification of legitimate recycling requirements, which apply to all recycled secondary hazardous materials  
These requirements have been described in policy for many years and were codified by EPA in 2015. This change incorporates the current EPA regulations.
3. Clarification of the scope of the characteristic of ignitability, relating to compressed gasses and oxidizers  
This change incorporates the current EPA regulations.
4. Listed hazardous wastes  
The majority of these listings were adopted under the authority of the Hazardous and Solid Waste Amendments of 1984 (HSWA) and have been federally effective and enforceable for many years. State adoption of the same regulations will make these regulations enforceable by the department, which is the primary enforcement authority in Hawaii. These changes incorporate the current EPA regulations.
  - a. New listings K169 to K172, petroleum refining process wastes.
  - b. New listings K174 and K175, chlorinated aliphatics industry waste
  - c. New listings K176 to K178, inorganic chemical manufacturing wastes
  - d. New listings K181, wastes from production of dyes, pigments, and colorants
  - e. De-listing of U202, saccharin and its salts. EPA determined that toxicological and waste generation and management information demonstrate that saccharin and its salts do not meet listing criteria.

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- f. Delisting of K140 and U408, 2, 4, 6-tribromophenol. These listings were vacated by a U.S. Court of Appeals decision.
  - g. Delisting of K064, K065, K066, K090, K091, wastestreams of primary copper, primary lead, primary zinc, and ferroalloys industries. EPA determined that it lacked information demonstrating threats to human health or the environment to justify these listings.
  - h. Revision of listing F019 to exclude wastewater treatment sludge from zinc phosphating processes used in automobile assembly.
5. Exclusions from the definition of solid waste
- Some of these exclusions are conditional, meaning that the waste is only excluded from full hazardous waste regulation if certain management standards and other conditions are met. These changes incorporate the current EPA regulations.
- a. New exclusion of secondary materials from mineral processing from which minerals, acids, cyanide, water, or other values are recovered
  - b. Revision to existing exclusion of recovered oil from petroleum refining processes, to include oil-bearing secondary hazardous materials from petroleum refining
  - c. New exclusion of zinc fertilizers made from hazardous secondary materials and hazardous secondary materials used to make zinc fertilizers
  - d. New exclusion of secondary materials being reclaimed under the control of the generator or sent to a verified reclamation facility
  - e. New exclusion of specific high-value solvents sent for remanufacturing
  - f. New exclusion of reusable solvent-contaminated wipes
6. Exemptions from the definition of hazardous waste
- Many of these exemptions are conditional, meaning that the waste is only exempt from full hazardous waste regulation if certain management standards and other conditions are met. These changes incorporate the current EPA regulations.
- a. Revisions to existing exemption of waste from extraction, beneficiation, and processing of ores and minerals
  - b. Revision to existing exemption of spent wood preserving solutions that have been reclaimed to include wood preserving wastewater prior to re-use
  - c. New exemption of leachate or gas condensate from landfills where waste meeting K169 to K172 listings was disposed *before* the effective date of the listing
  - d. New exemption of low-level mixed wastes and naturally occurring and/or accelerator-produced radioactive material managed under license and agreement with the U.S. Nuclear Regulatory Commission
  - e. Revisions to wastewater treatment exemptions, known as “headworks exemptions”
  - f. New exemption of disposable solvent-contaminated wipes
  - g. New exemption of dredged material that is subject to the requirements of a permit issued under §404 of the Federal Water Pollution Control Act or §103 of the Marine Protection, Research, and Sanctuaries Act

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### D. Land Disposal Restrictions (LDRs)

1. LDR Phase IV rules, revised land disposal restrictions and treatment standards for metals, mineral processing wastes, spent potliners from primary aluminum reduction, wood preserving wastes, zinc micronutrient fertilizers, carbamate, and radioactively contaminated cadmium-, mercury-, and silver-containing batteries  
Most portions of these federal rules were adopted under the authority of the Hazardous and Solid Waste Amendments of 1984 (HSWA) and have been federally effective and enforceable for many years. State adoption of the same regulations will make these regulations enforceable by the department, which is the primary enforcement authority in Hawaii. These changes incorporate the current EPA regulations.
2. New listed waste LDRs and management in surface impoundments  
Land disposal restrictions and treatment standards for newly listed wastes are usually adopted by EPA at the same time the wastes are listed. See “listed hazardous wastes” in section C.4 above. All associated LDR and treatment standards for wastes newly listed by EPA are also being incorporated by the department. A related change allows wastes to continue to be managed in a surface impoundment for two years when the surface impoundment is newly subject to RCRA regulations due to a new waste listing. These changes incorporate the current EPA regulations.
3. Alternative LDR treatment standards for contaminated soil  
This change incorporates the current EPA regulations.

### E. Management standards for specific wastes

1. Allowing 180 day accumulation time (or 270 days if the waste must be transported more than 200 miles) for LQGs for F006 treatment sludges from the metal finishing industry, if these wastes are recycled through metals recovery  
This longer accumulation time allowance is designed to reduce economic barriers to recycling F006 waste, while maintaining health and environmental protections. This change incorporates the current EPA regulations.
2. Addition of universal waste category: lamps  
This change incorporates the current EPA regulations.
3. Addition of universal waste category: mercury-containing equipment (replaces thermostats, a subset of mercury-containing equipment)  
This change incorporates the current EPA regulations.
4. Addition of universal waste category: electronic items  
EPA’s and the department’s criteria for defining universal wastes include that these hazardous wastes:
  - Are commonly generated by a wide variety of generators in different industries as well as households and conditionally exempt small quantity generators (CESQGs)
  - Are generated by a large number of generators in relatively small quantities by each generator

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- Can be accumulated and transported with relatively low risk to human health and the environment compared to other hazardous wastes, and can be managed safely under the universal waste rules
- Are likely to be diverted from non-hazardous waste management systems to recycling, treatment, or disposal in compliance with the universal waste regulations (from households and CESQGs, for example)

The majority of waste electronic items, because they contain a circuit board or other complex circuitry and/or a video display, are toxicity characteristic hazardous wastes due to the presence and concentration of one or more metals (e.g. lead, cadmium) and may also contain other dangerous constituents, such as a brominated (flame retardant) plastics. When electronic items are intact, their hazardous constituents are unlikely to be released to the environment, and these items can be safely managed under the universal waste standards. Therefore, the department believes that regulating electronic items as universal waste, rather than fully-regulated hazardous waste, will improve implementation and compliance, retain necessary environmental and health protections, and divert waste electronic items generated by households and CESQGs from non-hazardous waste management systems. The regulatory text of definitions and management standards associated with this change has been crafted based on careful research of comparable universal waste categories already codified by several other states with authorized hazardous waste programs. This is a state-initiated change.

### 5. Requiring testing of used oil for halogen content

Mixing of halogenated solvents with used oil can make the used oil hazardous waste. The regulations include a rebuttable presumption that used oil containing over 1,000 ppm total halogens is a hazardous waste because it has been mixed with a listed hazardous waste. (Other circumstances such as mixing with sea water can cause high halogen content, so this assumption can be rebutted by, for example, laboratory testing showing that the oil does not contain significant concentrations of halogenated hazardous constituents.) An inexpensive field test is used to determine whether halogen content is below or above 1,000 ppm. Chapter 11-279 currently allows used oil transporters, processors, burners, and marketers to either use this test or apply “knowledge of the halogen content of the used oil in light of the materials or processes used”. However, the regulations also require transporters, processors, and marketers to have a department-issued permit and standard permit conditions require testing each batch of used oil picked up from a generator or repackaged/mixed with used oil from other sources. This change codifies existing permit requirements. The department believes that the option to apply knowledge is not appropriate for transporters, processors, burners, and marketers because only generators possess knowledge of materials/processes and because of the availability of a low-cost field test. Required testing ensures that hazardous waste used oil is identified and managed under full hazardous waste regulations. This is a state-initiated change.

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### F. Import and export of hazardous waste

1. Added export requirements for lead-acid batteries, including new notice and consent requirements for shipments of spent lead-acid batteries intended for reclamation  
States do not receive authorization for import and export functions, which are administered by EPA, but are required to adopt these rules to maintain a program at least as stringent as the federal program. This change incorporates the current EPA regulations.
2. Requirements implementing new Organization for Economic Cooperation and Development (OECD) agreements  
States do not receive authorization for import and export functions, which are administered by EPA, but are required to adopt these rules to maintain a program at least as stringent as the federal program. This change incorporates the current EPA regulations.
3. Requirement of additional consent documentation for import of hazardous waste  
States do not receive authorization for import and export functions, which are administered by EPA, but are required to adopt these rules to maintain a program at least as stringent as the federal program. This change incorporates the current EPA regulations.
4. Requirement to notify the department of universal waste imported from another state or country  
This is the same as the existing notification requirement for fully regulated hazardous waste. The import of universal waste into Hawaii should only occur when a receiving facility is treating, disposing or, and/or recycling the waste, which would require a RCRA permit. The department is currently not aware of any such facilities existing in Hawaii or any import of universal waste into the state. This is a state-initiated change.

### G. Standards applicable to hazardous waste treatment, storage, and disposal (TSD) facilities and combustors of hazardous waste

1. Clarifications and corrections to organic air emission standards for TSD facilities  
This change incorporates the current EPA regulations.
2. National Emissions Standards for Hazardous Air Pollutants (NESHAPS) for hazardous waste combustors  
This change incorporates the current EPA regulations.
3. More detailed standards for Corrective Action Management Units at TSD facilities  
These changes were adopted under HSWA authority and have been federally effective and enforceable since 2002. This change incorporates the current EPA regulations.
4. Requirement for owners/operators of surface impoundments, landfills, or land treatment facilities managing hazardous waste who choose to use an alternate groundwater monitoring system to submit their system plans to the department  
Currently, such facilities are required to maintain these plans in their facility operating records. The submission of these plans serves as notification to the department that the facility is using an alternate groundwater monitoring system, which allows the

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department to verify the appropriateness of the submitted plan. This is a state-initiated change.

### H. Uniform hazardous waste manifest

#### 1. Revised uniform hazardous waste manifest form and instructions

The revised form was adopted under joint EPA and U.S. Department of Transportation Hazmat authorities. This rule is uniformly applicable nation-wide beginning on September 5, 2006 under U.S. DOT Hazmat authority, but is not enforceable by EPA in Hawaii because it was not adopted under HSWA authority. This has caused confusion and reduced the department's ability to enforce for manifest violations. This change incorporates the current EPA regulations.

#### 2. Changes to manifesting and waste tracking procedures, such as including regulations for tracking and managing rejected shipments, adding a waste minimization certification for generators, and expanding regulations for exception reporting

This change incorporates the current EPA regulations.

#### 3. Electronic manifest system

EPA has adopted regulations authorizing the use of the new electronic manifest system it is currently developing, consistent with the mandate of the Hazardous Waste Electronic Manifest Establishment Act (2012). When the e-manifest system is ready, rules requiring its use will be effective nationally under HSWA authority, but the department is still required to adopt these regulations to be consistent with the national program. This change incorporates the current EPA regulations.

#### 4. Clarifying the manifest responsibilities of multiple transporters

The department is proposing to add the following regulatory text within chapter 11-263.1: "Before transporting the hazardous waste, a transporter who receives hazardous waste from a previous transporter must sign and date the manifest acknowledging acceptance of the hazardous waste from the previous transporter. The new transporter must return a signed copy to the previous transporter before leaving the site where possession of the waste is transferred." This clarifies that a subsequent transporter has the same manifest responsibilities as a first transporter and will improve the department's ability to take enforcement actions against transporters who violate manifest regulations, which will increase transporter accountability and compliance. This is a state-initiated change.

### I. Recordkeeping

#### 1. Requirement for small quantity handlers of universal waste and transporters of universal waste to track shipments

These requirements are the same as those for large quantity handlers of universal waste and can be met with routine business records (e.g. invoices, manifests, bills of lading), so they will not pose an additional burden to businesses. Records are required to be retained for three years. These basic records of the movement of universal waste must be



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available for inspection so that the department can document compliance and ensure protection of human health and the environment. This is a state-initiated change.

2. Requirement for used oil generators to track shipments  
These requirements are the same as those for transporters and processors of used oil and can be met with routine business records (e.g. invoices, manifests, bills of lading), so they will not pose an additional burden to businesses. Records are required to be retained for three years. These basic records of the movement of used oil must be available for inspection so that the department can document compliance and ensure protection of human health and the environment. This is a state-initiated change.
3. Requirement for used oil processors to keep records of testing/maintenance of communications/alarm system, fire protection equipment, and spill control and decontamination equipment  
§11-279-52(a)(3), HAR currently requires each of these systems and pieces of equipment to be “tested and maintained as necessary to assure its proper operation in time of emergency.” This change simply adds a requirement for recordkeeping so that the department’s inspectors are able to verify that testing and maintenance have occurred on a reasonable schedule. This is a state-initiated change.
4. Requirement for SQGs and LQGs to record container storage area inspections in an inspection log or summary  
These facilities are already required to perform weekly inspections of container storage areas, looking for leaking or deteriorating containers. This change requires that these inspections be documented and the documentation be retained for three years. This will allow the department’s inspectors to verify compliance with the existing requirement and ensure protection of human health and the environment. This is a state-initiated change.

### J. Minor changes and corrections to clarify regulatory language

All of the changes listed in this section are state-initiated. Many minor clarifications in wording and technical corrections are included in the EPA final rules that are being adopted through incorporating current federal regulations by reference and are not listed here.

1. Clarifying the definition of “spent material”  
The definition of “spent material” currently in §11-261-1(c)(1) is being amended to add “, spilled, or otherwise contaminated”. It will read: “A ‘spent material’ is any material that has been used, *spilled, or otherwise contaminated* and as a result can no longer serve the purpose for which it was produced without processing;”. This will clarify the intended scope of the definition. This is a state-initiated change.
2. Correcting training requirement for facilities recycling hazardous secondary materials  
Within the requirements applicable to facilities recycling hazardous secondary materials, the following text is being added to the incorporated 40 CFR §261.420 as subsection (g): “Personnel training. All employees must be thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.”. This is a correction to a January 13, 2015 EPA

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final rule that was included in a September 25, 2015 EPA proposed rule but has not yet been finalized. This is a state-initiated change.

3. Clarifying requirement to post emergency information  
The requirement for SQGs to post emergency information near the telephone currently in §11-262-34(d)(5)(ii) is being amended to replace “telephone” with “nearest telephone and clearly visible from the storage area”. The introductory portion will read: “The generator must post the following information next to the nearest telephone and clearly visible from the storage area.”. This will clarify the intent of the requirement, increase compliance, and ensure that emergency information is accessible when needed. This is a state-initiated change.
4. Clarifying prohibition on underground injection of hazardous waste  
The requirements for owners/operators of facilities that manage underground injection in §11-264-1(d) and §11-265-430 are being replaced with the statement, “Underground injection of hazardous waste is prohibited in the State of Hawaii.”. The current language refers to underground injection being subject to a permit issued under the Safe Drinking Water Act; however, underground injection of hazardous waste is banned under Hawaii’s SDWA regulations and such permits are not issued within the state. Adding this language within the hazardous waste rules will make this clearer and reduce the need to refer to another set of regulations to interpret the hazardous waste rules. This is a state-initiated change.
5. Requiring demonstration of efforts by interim status TSD facility owners/operators to prevent unknowing and unauthorized facility entry  
The requirement for security at interim status TSD facilities in §11-265-14(a) is being amended by the addition of “he can demonstrate to the director that” after “unless”. The introductory portion will read: “The owner or operator must prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, unless he can demonstrate to the director that:” This change aligns the regulatory text of this section applicable to interim status TSD facilities with the text of §11-264-14(a), applicable to permitted TSD facilities. This is a state-initiated change.
6. Clarifying labeling requirements for universal waste batteries  
Universal waste batteries, when intact, are not required to be managed in closed containers because the casing of the battery itself provides containment for the hazardous constituents inside, preventing them from being released to the environment. We are replacing the requirement to label each battery or “container in which the batteries are contained” with the requirement to label “each battery or container or pallet containing universal waste batteries” (in chapter 11-273 §§14(a) and 34(a)). This will allow for practical, clear, and inspectable labelling of pallets where batteries are accumulated both before and after “shrink wrapping” for transport, while avoiding the confusions about the definition of “container” inherent in regulatory interpretations that allow labeling of a shrink wrapped pallet under the current rules. This is expected to reduce the burden on

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regulated facilities and increase compliance. This is a state-initiated change.

7. Clarifications on the applicability of used oil regulations
  - a. The statement “For used oil sent for disposal, a hazardous waste determination shall be made in accordance with [current citation is §11-262-11]” is being added within the incorporated 40 CFR §279.10(a). It is already true that used oil sent for disposal cannot be managed under chapter 11-279, which assumes that used oil will be processed and recycled/burned for energy recovery. This change helps to clarify the applicability of the Chapter 11-279 but does not change it. This is a state-initiated change.
  - b. A subsection is also being added to the incorporated 40 CFR §279.10 to clarify the applicability of used oil regulations to oily water. It will read: “Oily water, any water that is contaminated with more than de minimis quantities of used oil, is subject to regulation as used oil under this part.” Chapter 11-279 is already applicable to oily water, but this change will help to clarify that oily water is considered “used oil” under the regulations and is subject to the same management standards. These clarifications are expected to reduce the burden that understanding the regulations represents for regulated facilities and to increase compliance. This is a state-initiated change.
8. Clarification to used oil storage requirements

The storage requirements for used oil generators, transporters, processors, and burners are being amended to add the word “closed” under “condition of units”. It is already true that used oil storage containers must be kept closed except when adding or removing used oil. This change (to chapter 11-279 §§22(b), 45(c), 54(b), and 64(b)) will make the regulations easier to understand. This is expected to reduce the burden that understanding the regulations represents for regulated facilities and to increase compliance. This is a state-initiated change.
9. Reorganizing regulations for the used oil permitting system for clarity

These regulations are currently in Chapter 11-279 subchapter J. This reorganization is expected to reduce the burden that understanding the regulations represents for regulated facilities. This is a state-initiated change.
10. Removing the qualification “listed in §261.33” from an exclusion for commercial chemical product fuels being burned for energy recovery

Section 11-261-2(c)(2) explains which materials are and are not solid wastes when they are recycled by being burned for energy recovery. Most materials being burned for energy recovery are solid wastes, but commercial chemical products that are themselves fuels are not. The removal of the unnecessary reference to the lists of commercial chemical products makes it clearer that this exclusion is also meant to apply to unlisted commercial chemical products, such as gasoline. This is a state-initiated change.