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RCRA Guidance for Small Quantity Generators of Hazardous Waste (SQGs)

This document is for guidance only and does not contain all hazardous waste, universal waste, and used oil management rules. Note, many of the rules described are paraphrased. For specific state rules regarding hazardous waste and the Codes of Federal Regulations (CFRs) incorporated therein, refer to 62-730, Florida Administrative Code (FAC). For specific state universal waste requirements, refer to 62-737, FAC, and for specific state rules regarding used oil requirements, refer to 62-710, FAC.

☐ Hazardous Waste Determination (40 CFR 262.11):

Hazardous waste determinations must be accurate and made at the point of generation before dilution, mixing or other alteration occurs, and at any time in the course of management that the waste changes properties such that the RCRA classification of the waste changes.

- o For each solid waste generated, the generator must determine whether the waste is excluded from regulation under 40 CFR 261.4 or characteristic/listed using generator knowledge or testing. Samples of the waste must be representative and analyzed in accordance with SW-846.
- o Documentation of waste determinations must remain on-site for 3 years.
- o Claims that waste is conditionally exempt from regulation or not a solid waste must be documented (40 CFR 261.2(f)) and 62-730.030(3), FAC).

☐ EPA Identification Number and Re-Notification (40 CFR 262.18):

SQGs must not treat, store, dispose of, transport, or offer for transportation, hazardous waste without having received an EPA ID number, which will remain with the property.

o SQGs are required to re-notify every four years starting in 2021. The re-notification must be submitted by September 1st of each year the re-notification is required.

☐ Generator Category Determination (40 CFR 262.13 and 40 CFR 262.16(a)):

A hazardous waste generator must determine its generator category based on the amount of hazardous waste generated each calendar month and include all hazardous waste generated at the site. In a single calendar month, SQGs generate:

- o Greater than 100-kg (220-lbs) but less than 1,000-kg (2,200-lbs) of non-acute hazardous waste;
- o AND less than or equal to 1-kg (2.2-lbs) of acute hazardous waste,
- o AND less than or equal to 100-kg (220-lbs) of residues from a cleanup of acute hazardous waste

☐ Maximum On-Site Accumulation Volume (40 CFR 262.16(b)):

SQGs may not accumulate more than 6,000-kg (13,200-lbs) on site at any given time. This includes all areas with hazardous waste at the facility.

Maximum On-Site Accumulation Time (40 CFR 262.16(b)(1)):

SQGs may accumulate hazardous waste on site for no more than 180 days.

SQGs that accumulate hazardous waste for more than 180 days are subject to permitting requirements for Treatment, Storage and Disposal Facilities (TSDFs) unless the SQG has been granted a 30-day extension from the Florida Department of Environmental Protection (FDEP) (40 CFR 262.16(d)).

Emergency Preparedness and Prevention (40 CFR 262.16(b)(8)):

SQGs must comply with the following requirements for emergency preparedness, prevention and emergency procedures for all areas where hazardous waste is generated or accumulated:

o Maintenance and Operation of Facility (40 CFR 262.16(b)(8)(i)):

Facility must be maintained and operated to minimize the possibility of a fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

• Required Equipment (40 CFR 262.16(b)(8)(ii)):

SQGs must have the following equipment unless none of the hazards posed by waste handled at the facility requires it, or the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment specified:

- Internal communications or alarm system that provides emergency instruction (voice or signal) to personnel
- A device, such as a telephone or a hand-held radio must be immediately available at the scene of operations and capable of summoning emergency assistance from external emergency assistance
- Fire extinguishers and fire control equipment, spill control, and decontamination equipment
- Adequate water volume and pressure to supply fire hoses, automatic sprinklers, or water spray systems

• Testing and Maintenance of Equipment (40 CFR 262.16(b)(8)(iii)):

All facility communications or alarm systems, fire protection equipment, spill control equipment and decontamination equipment must be tested and maintained to assure proper operation in the event of an emergency.

O Access to Communications or Alarm (40 CFR 262.16(b)(8)(iv)):

Whenever hazardous waste is being handled, all personnel involved must have immediate access (e.g., direct or unimpeded access) to an internal alarm or communication device. Visual or voice contact is allowed.

• If there is just one person at the facility, while in operation, they must have immediate access to a telephone or two-way radio capable of summoning external emergency assistance.

o Required Aisle Space (40 CFR 262.16(b)(8)(v) and 62-730.160(4)), FAC:

Aisle space must be maintained to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in the event of an emergency (this includes areas where hazardous waste is generated and at satellite accumulation areas). Generators required to inspect containers shall maintain adequate aisle space between containers of hazardous waste to allow for inspection of the condition and labels of the individual containers.

SQGs must attempt to make arrangements with the local police department, fire department, other emergency response teams, emergency contractors, equipment suppliers, and local hospitals taking into account the types and quantities of hazardous waste handled at the facility. The requirements apply to all areas of the facility where hazardous waste is generated or accumulated on-site.

- o SQGs attempting to make arrangements with its local fire department must determine the potential need for the services of the local police department, other emergency response teams, emergency response contractors, equipment suppliers and local hospitals.
- o SQGs must attempt to familiarize local emergency authorities with the:
 - Layout of the facility,
 - Properties of hazardous waste handled at the facility and associated hazards,

- Description of the types and quantities of hazardous waste handled at the facility,
- Places where facility personnel would normally be working,
- Entrances to roads inside the facility,
- Possible evacuation routes,
- Possible injuries or illnesses that could result from fires, explosions, or releases at the facility
- o Where more than one police and fire department might respond to an emergency, agreements must be made designating primary emergency authority to specific police and fire departments, and agreements with any others to provide support to the primary emergency authority.
- o Records must be maintained documenting the arrangements with the local fire department as well as any other organization necessary to respond to an emergency. On-site documentation must include either a confirmation that the required arrangements have been made or that attempts to make such arrangements were made.
- O Alternatively, a facility possessing 24-hour response capabilities may seek a waiver from the authority having jurisdiction over the fire code within the facility's state or locality as far as needing to make arrangements with the local fire department as well as any other organization necessary to respond to an emergency, provided the waiver is documented in the operating record.

\Box Emergency Coordinator (40 CFR 262.16(b)(9)(i)):

At all times, there must be at least one employee, either on the premises or on call, with the responsibility for coordinating all emergency response measures.

o On-call means able to respond to an emergency by reaching the facility within a short period of time.

\Box Emergency Information (40 CFR 262.16(b)(9)(ii)):

SQGs must post the following information by telephones at the facility or in areas directly involved in the generation and accumulation of hazardous waste:

- o Name and phone number of the emergency coordinator;
- o Location of fire extinguishers, spill control equipment, and fire alarms; and
- o Phone number to the fire department, unless the facility has a direct alarm.

\Box Training (40 CFR 262.16(b)(9)(iii)):

SQGs must ensure all employees are thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal facility operations and emergencies.

\Box Emergency Response (40 CFR 262.16(b)(9)(iv)):

The emergency coordinator or his designee must respond to any emergency that may arise as follows:

- o If there is a fire, call fire department or attempt to extinguish it using a fire extinguisher;
- o If there is a spill, contain the flow of a hazardous waste spill and clean up hazardous waste and contaminated soils or materials;
- o If a fire, explosion, or other release threatens human health outside the facility, or a spill has reached surface water, the generator must immediately notify the National Emergency Response Center and report the information noted in 40 CFR 262.16(b)(9)(iv)(C).

Inspection Records ($\frac{40 \text{ CFR } 262.16(b)(2)(iv)}{2000}$ and $\frac{62-730.160(3)}{2000}$;

At least weekly, SQGs must inspect the central accumulation areas(s) looking for leaking containers and deterioration of containers caused by corrosion. The generator shall keep the written documentation of the inspections under this section for at least three years from the date of the inspection. At a minimum, this documentation shall include:

- o The date and time of the inspection,
- o the legibly printed name of the inspector,

- o the number of containers,
- o the condition of the containers,
- o a notation of the observations made, and
- o the date and nature of any repairs or other remedial actions.

☐ Manifest Requirements (40 CFR 262, Subpart B):

A generator who offers for transportation, hazardous waste for off-site treatment, storage, or disposal must properly prepare a hazardous waste manifest in accordance to the regulations.

- o The manifest must consist of at least the number of copies which will provide the generator, each transporter, and the designated disposal facility with one copy each for their records and another copy to be returned to the generator (40 CFR 262.20).
- o The generator must sign the manifest certification by hand and obtain the handwritten signature of the initial transporter and date of acceptance on the manifest (40 CFR 262.23).
 - The generator must retain one copy, in accordance with 40 CFR 262.40(a).
 - The generator must give the transporter the remaining copies of the manifest.

☐ Recordkeeping:

- o Manifests must be kept on-site for three years (40 CFR 262.40(a)).
- o SQGs that do not receive a copy of the manifest with the handwritten signature of the owner or operator of the designated facility within 60 days of the date the waste was accepted by the initial transporter must submit (to the FDEP) a legible copy of the manifest, with some indication that the generator has not received confirmation of delivery.

Notified TSDFs and Transporters (40 CFR 262.18(c)):

A generator must not offer its hazardous waste to transporters or TSDFs without EPA ID numbers.

- □ Land Disposal Restrictions (40 CFR 262.11(e), 40 CFR 262.16(b)(7), and 40 CFR 268.7): Generators of hazardous waste must determine if the waste meets the treatment standards in §268.40, 268.45, or §268.49 before it can be land disposed.
 - o If the hazardous waste does not meet the treatment standards, or if the generator chooses not to make the determination that the waste must be treated, the generator must send a one-time written Land Disposal Restriction (LDR) notice with the initial shipment of waste to each treatment or storage facility and place a copy in the file. No further notification is necessary until such time that the waste or facility change, in which case a new notification must be sent and a copy placed in the generator's file.

\Box Episodic Generation (40 CFR 262.16(f)):

SQGs experiencing an episodic event may accumulate hazardous waste in excess of SQG limits in accordance with 40 CFR 262 Subpart L in lieu of becoming a large quantity generator (under 40 CFR 262.17) as long as all conditions of Subpart L are met.

- o SQGs are limited to one episodic event per calendar year unless a petition for a second event is approved by the FDEP. Notification of the event is required:
 - Unplanned Events (e.g., spill) within 72-hours after
 - Planned Events (e.g., cleanout) at least 30 days prior

☐ Satellite Accumulation Area Regulations (40 CFR 262.15):

SQGs may accumulate as much as 55-gallons of non-acute hazardous waste and/or either one quart (1-qt) of liquid acute hazardous waste or 1-kg (2.2-lbs) of solid acute hazardous waste for more than 180 days without being subject to permitting requirements as long as the following conditions are met:

- o The containers must be located at or near any point of generation where wastes initially accumulate **and** under the control of the operator of the process generating the waste.
- o All containers must be in good condition. If the container is not in good condition or it begins to leak, the hazardous waste must immediately be transferred to another container.
- o Compatibility Requirements:
 - SQGs must use a container made of or lined with materials that will not react with, and are
 otherwise compatible with, the hazardous waste to be accumulated, so the ability of the
 container to contain the waste is not impaired.
 - Incompatible wastes must not be placed in the same container.
 - Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.
 - Incompatible wastes must be separated from other incompatible waste or material or protected from them by any practical means.
- o The containers must be closed at all times except when adding, removing or consolidating waste; or when temporary venting is necessary.
- o Hazardous waste containers located at a satellite accumulation area must be marked with the words "Hazardous Waste" **and** an indication of the hazards of the contents (i.e., ignitable, corrosive, reactive, toxic).
- o A generator who accumulates either acute or non-acute hazardous waste in excess of the above amounts must comply with the following:
 - Within three consecutive calendar days, comply with the applicable central accumulation area regulations in 40 CFR 262.16(b); or
 - Remove the excess from the satellite accumulation area within three consecutive calendar days and move it to an on-site central accumulation area, an on-site permitted (or interim status) storage area, or an off-site designated facility.
 - During the three-consecutive-calendar-day period, the container(s) holding the excess hazardous waste must be marked with the date the excess amount began accumulating.

☐ Hazardous Waste Central Accumulation Areas (40 CFR 262.16(b)(2)):

SQGs may accumulate hazardous waste on-site in a central accumulation area(s) for up to 180 days provided the following requirements are met:

- o All containers must be in good condition. If the container is not in good condition or it begins to leak, the hazardous waste must immediately be transferred to another container.
- o Compatibility Requirements:
 - SQGs must use a container made of or lined with materials that will not react with, and are otherwise compatible with, the hazardous waste to be accumulated, so the ability of the container to contain the waste is not impaired.
 - Incompatible wastes must not be placed in the same container.
 - Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.
 - Incompatible wastes must be separated from other incompatible waste or material or protected from them by any practical means.
- o The containers must be closed at all times except when adding, removing or consolidating waste; or when temporary venting is necessary.
- All hazardous waste containers in the central accumulation area must be marked/labeled with: the
 words "Hazardous Waste," an indication of the hazards of the contents (i.e., ignitable, corrosive,
 reactive, toxic), and the date on which accumulation began.
- o Prior to shipping the hazardous waste off site, the containers must be marked with all applicable EPA hazardous waste codes and comply with applicable DOT rules (40 CFR 262.32).

- o Hazardous waste management units other than containers, as applicable:
 - Tanks: 40 CFR 262.16(b)(3)
 - Drip pads: 40 CFR 262.16(b)(4) and 40 CFR 265 Subpart W (except 40 CFR 265.445(c))
 - Containment buildings: 40 CFR 262.16(b)(5) and 40 CFR 265 Subpart DD
- o All containers must be in good condition. If not or it begins to leak, the hazardous waste must be transferred to another container that is in good condition.
- o Containers must be compatible with the material stored in within.
 - Incompatible wastes, or incompatible wastes and materials, must not be placed in the same container.
 - Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material.
 - If incompatible wastes must be stored nearby each other, they must be physically separated from the other materials or protected by means of a dike, berm, wall, or other device.

Used Oil ($\underline{40 \text{ CFR } 279}$ and $\underline{62-710, \text{FAC}}$):

Used oil generated at a site that is destined to be recycled, may be managed under <u>40 CFR 279 Subpart C</u> – Standards for Used Oil Generators. The basic requirements for used oil generators include:

- Used oil must be stored in containers and/or tanks that are in good condition (no severe rusting, apparent structural defects or deterioration) and not leaking (40 CFR 279.22(a) & (b) and 62-710.401(6), FAC).
- o Used oil must be stored in tanks or containers that are covered or otherwise protected from the weather. (62-710.401(6), FAC)
- o If tanks or containers are not double-walled, they shall be stored on an oil-impermeable surface, such as sealed concrete or asphalt, and must have secondary containment which has the capacity to hold 110% of the volume of the largest tank or container within. (62-710.401(6), FAC)
- Each container and/or tank (or fill pipes used to transfer used oil into underground storage tanks) must be labeled with the words "Used Oil" (40 CFR 279.22(c) and 62-710.401(6), FAC). Note that waste oil is not the same as used oil. Used oil is destined for recycling. Waste oil is destined for disposal or does not meet the definition of used oil:
 - "Used oil" means any oil which has been refined from crude oil or synthetic oil and, as a result of use, storage, or handling, has become contaminated and unsuitable for its original purpose due to the presence of physical or chemical impurities or loss of original properties. (403.75(7), FS)
- Upon detection of a release of used oil to the environment, the following steps must be taken (40 CFR 279.22(d)):
 - Stop the release;
 - Contain the released used oil;
 - Clean up and manage properly the released used oil and other materials; and
 - If necessary, repair or replace any leaking used oil storage containers or tanks prior to returning them to service.
- Used oil must be transported off-site by a used oil transporter with an EPA ID number. (40 CFR 279.24)
- o Used oil may be self-transported provided (40 CFR 279.24 and 62-710.600(1), FAC):
 - Containers are secured and in a totally enclosed section of the vehicle;
 - no more than 55-gallons of used oil is transported at a time;
 - no more than 500-gallons is transported annually;
 - the used oil was generated on site and transported in a vehicle owned by the generator or by an employee of the generator; and

- the used oil is taken to a registered or permitted used oil collection center or to an aggregation point owned or operated by the generator
- Universal Waste (40 CFR 273 and 62-737, FAC): The Standards for Universal Waste Management, found at 40 CFR 273, applies to certain waste lamps, waste batteries, waste mercury-containing equipment and waste pesticides. Chapter 62-737, FAC, The Management of Spent Mercury-Containing Lamps and Devices Destined for Recycling, applies only to lamps and other mercury-containing devices. The facility may opt to manage these items under the more stringent hazardous waste requirements. Neither Rule applies to waste lamps, waste batteries, waste mercury-containing equipment, and waste pesticides that are not hazardous waste. Most universal waste handlers accumulate less than 5,000-kg (11,000-lbs) of universal waste on site at any time and are subject to the following requirements for Small Quantity Handlers:
 - O Universal waste must be managed in a way that prevents releases of any universal waste or component of universal waste to the environment (40 CFR 273.13).
 - o The universal waste must be accumulated in containers that are kept closed, structurally sound, adequate to prevent breakage and compatible with the contents of the container (40 CFR 273.13).
 - o Containers holding universal waste batteries, pesticides, mercury containing equipment / thermostats, or lamps must be labeled as follows depending on the contents (40 CFR 273.14):
 - "Universal Waste Batteries," "Waste Batteries," or "Used Batteries"
 - "Universal Waste Pesticide(s)" or "Waste Pesticide(s)"
 - "Universal Waste Mercury-Containing Equipment / Thermostat" or "Waste Mercury-Containing Equipment / Thermostat" or "Used Mercury-Containing Equipment / Thermostat"
 - "Universal Waste Lamps," Waste Lamps," or "Used Lamps"
 - o Universal waste may not be kept on site for more than one year
 - Containers of universal wastes must be dated or there must be some other way, such as recycling documentation, to demonstrate time on site. (40 CFR 273.15).
 - Universal wastes may be kept on site for more than a year if it is solely for the purpose of accumulating enough universal waste to facilitate shipping for recycling.
 - o The facility must train all employees handling or managing universal waste in proper handling and emergency response procedures appropriate to the type(s) of universal waste handled at the facility (40 CFR 273.16 and 62-737.400(4), FAC).
 - o The facility must respond to releases of universal waste immediately.
 - Any debris or other materials generated as a result of the cleanup must have a waste determination performed to determine if the material is a hazardous waste. (40 CFR 273.17)
 - Broken universal waste lamps may still be managed as universal waste under the state rule (62-737.400(5)(a), FAC), although the associated cleanup debris would analyzed to determine if it is characteristically toxic.
 - o Universal waste lamps may be crushed under the following conditions (62-737.400(6)(b), FAC):
 - The lamps are crushed by the person who generated them
 - The crushing equipment must be used at the site of generation
 - The crushing is done in a final accumulation container;
 - The lamps are crushed in a controlled manner that prevents the release of mercury vapor or other contaminants;
 - The crushing operations and maintenance of the unit are performed in accordance with written procedures developed by the manufacturer of the equipment including specific instructions for the frequency of filter changes; and
 - The employees using this equipment are thoroughly familiar with these written procedures and emergency procedures should equipment malfunction occur.

SUMMARY OF HAZARDOUS WASTE REGULATIONS

Requirements	VSQG	SQG	LQG
Quantity Limits	≤100-kg/month, and ≤1-kg/month of acute hazardous waste, and ≤100-kg/month of acute spill residue or soil §260.10	>100-kg and <1,000-kg/month §260.10	≥1,000-kg/month, or >1-kg/month of acute hazardous waste, or >100-kg/month of acute spill residue or soil §260.10
EPA ID Number	Not required	Required <u>§262.18</u>	Required <u>§262.18</u>
On-Site Accumulation Quantity	≤1,000-kg or ≤1-kg acute hazardous waste or ≤100-kg of acute spill residue or soil §§262.14(a)(3) and (4)	≤6,000-kg §262.16(b)(1)	No limit
Accumulation Time Limits	None	≤180 days §262.16(b)	≤90 days <u>§262.17(a)</u>
Accumulation Requirements (Storage Requirements)	None	Basic requirements with technical standards for containers, tanks, drip pads or containment buildings §§262.16(b)(2)-(5)	Full compliance for management of containers, tanks, drip pads or containment buildings §§262.17(a)(1)-(4)
Personnel Training	Not required	Basic training required §262.16(b)(9)(iii)	Required annually, must document §262.17(a)(7)
Contingency Plan / Preparedness and Prevention	Not required	Basic planning required §§262.16(b)(8) - (9)	Full plan required Part 262 Subpart M (from §262.17(a)(6))
Land Disposal Restrictions	Not required	Required <u>Part 268</u> from <u>\$262.16(b)(7)</u>	Required <u>Part 268</u> from §262.17(a)(9)
Manifest	Not required	Required Part 262 Subpart B	Required Part 262 Subpart B
Pre-Transport Requirements	Only if required by the USDOT or FDOT	Required <u>§§262.30-262.33</u>	Required <u>\$\$262.30-262.33</u>
Biennial Report	Not required	Not required	Required <u>§262.41</u>
Weekly Inspections	Not required	Required <u>§262.16(b)(2)(iv)</u>	Required <u>§262.17(a)(1)(v)</u>
Records of Weekly Inspections	Not required	Required 62-730.160(3), FAC	Required 62-730.160(3), FAC