

McCoy's White Paper

Changes to Hazardous Waste Generator Regulations

Seminar Supplement

 McCoy and Associates





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understand your environment.

12596 West Bayaud Avenue, Suite 210, Lakewood, CO 80228
t. 303-526-2674 f. 303-526-5471 understandrcra.com

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This white paper addresses issues of a general nature related to the federal RCRA regulations. Persons evaluating specific circumstances dealing with hazardous waste regulations should review state and local laws and regulations, which may be more stringent than federal requirements. In addition, the assistance of a qualified professional should be enlisted to address any site-specific circumstances.

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Changes to Hazardous Waste Generator Regulations

On November 28, 2016, EPA promulgated a final rule making significant changes to the hazardous waste generator regulations. [81 *FR* 85732] One of the primary objectives of this rule is to consolidate most of the generator requirements into Part 262 to reduce cross-references to Parts 261 and 265. Other key issues addressed are discussed below.

In addition to finalizing new regulatory requirements, EPA used the preamble to this rule to provide significant guidance and best management practices for hazardous waste generators; a summary of the new guidance and best practices is given at the end of this document.

VSQGs Replaces CESQGs

The term “very small quantity generators” (VSQGs) has replaced the term “conditionally exempt small quantity generators” (CESQGs). The same monthly hazardous waste generation rates and accumulation quantity limits that previously defined a CESQG continue to apply to the new generator category of VSQG.

VSQGs Allowed to Send Hazardous Waste to an Offsite LQG

The existing regs at §261.5(f)(3) and (g)(3) give CESQGs seven offsite options to which they may ship their hazardous waste. The 2016 final rule gives VSQGs an eighth option: shipping hazardous waste without a manifest to a large quantity generator (LQG) that is under the “control” of the same “person” as the VSQG. “Control” is defined as “the power to direct the policies of the generator, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate generator facilities on behalf of a different person . . . shall not be deemed to ‘control’ such generators.” [new §§262.14(a)(5)(viii)(A), 262.17(f)] “Person” is already defined in §260.10. For example, an Army National Guard unit that is a VSQG can send its hazardous waste to an active Army base that is an LQG. [81 *FR* 85774]

To take advantage of this additional management option, the VSQG must mark its containers with 1) the words “Hazardous Waste,” and 2) an indication of the hazard(s) associated with the contents (e.g., the applicable hazardous waste characteristic(s), a DOT label or placard, an OSHA hazard statement or pictogram, or an NFPA hazard label).

There is no limit on the amount or types of hazardous waste that an LQG can receive from VSQGs. The LQG

must 1) notify EPA (using Form 8700-12) at least 30 days prior to receiving the first shipment from VSQGs; 2) maintain records of waste shipments from VSQGs for at least 3 years; 3) mark accumulation units with the date the hazardous waste was received from the VSQGs; and 4) manage the waste received from VSQGs under all regulations applicable to LQGs (but not in satellite accumulation areas), including reporting hazardous waste from VSQGs on biennial reports. (EPA will include a new source code in the biennial report instructions that LQGs will use to identify hazardous waste received from a VSQG.)

EPA noted that failure on the part of the LQG to meet one of the conditions for exemption would not mean that the VSQG is subject to a permit, interim status, and operating requirements, provided that the VSQG met its conditions for exemption and vice versa. [81 *FR* 85775]

Note that this provision allowing a VSQG to ship hazardous waste to a LQG (if both facilities are under the same control) without a manifest does not eliminate the need for DOT compliance. [81 *FR* 85774] Thus, any shipment of hazardous waste that meets DOT’s definition of a hazardous material is still subject to DOT’s packaging, marking, labeling, placarding, and shipping paper requirements.

In the case of interstate shipments where a VSQG transfers its waste to an LQG located in a different state than the VSQG, the VSQG must ensure that both states have adopted the provision (including the exemption from the requirement to ship using a hazardous waste manifest). Additionally, if a VSQG waste transits through states that have not adopted the provision, EPA recommends that generators contact the transit states to ascertain their policy about such shipments. [81 *FR* 85775–6]

Finally, certain states (e.g., Minnesota) already operate VSQG hazardous waste consolidation programs; additionally, certain state practices allow the removal of small hazardous waste streams from remote, unstaffed locations. EPA noted in the rule preamble that it is not its intention to interfere with these existing state consolidation programs. [81 *FR* 85776]

New Provisions for Episodic Generation

Provisions in new Part 262, Subpart L allow VSQGs and small quantity generators (SQGs) to maintain their existing generator category in the event of planned or un-

planned episodic generation (i.e., generators do not have to count hazardous waste managed as part of the episodic event when making their monthly generator-status determination). [new §262.13(c)(8)]

The final regulation defines planned and unplanned episodic events to distinguish between the two. Additionally, EPA noted that long-term demolition or remediation projects and other large, long-term projects do not appear to be the kind of event that EPA would consider an “episodic” event. Instead, hazardous waste generated during these non-episodic events requires the facility to change to the larger generator waste category for the duration of the event to properly manage the hazardous waste. [81 FR 85788]

This relief for an episodic event is allowed only once per calendar year, although a facility can petition its state/EPA for relief a second time in that year per new §262.233. (However, the second event in that year must be unplanned if the first one was planned and vice versa.) This relief is contingent on meeting the following conditions:

Notification—The generator must notify EPA (using Form 8700-12) no later than 30 days before a planned episodic event or within 72 hours of an unplanned event. Notification of an unplanned event may be made via phone, fax, or email with follow-up submittal of Form 8700-12. The required notification includes identification of an emergency coordinator. A VSQG would also have to obtain an EPA ID number.

Onsite accumulation—Hazardous waste generated from episodic events must be accumulated in containers or tanks. Containers must be:

- Marked/labeled with 1) the words “Episodic Hazardous Waste,” 2) an indication of the hazard(s) associated with the contents (e.g., the applicable hazardous waste characteristic(s), a DOT label or placard, an OSHA hazard statement or pictogram, or an NFPA hazard label), and 3) the date that the episodic event began.
- In compliance with Part 265, Subpart I requirements (except §§265.176 and 265.178) for episodic waste at SQGs. (Note that the Part 265, Subpart I standards for SQGs have been copied by the 2016 rule into a new §262.16(b)(2).) For episodic waste at VSQGs, containers must be in good condition, compatible with the hazardous waste being accumulated therein, and kept closed except to add or remove waste.

Tanks used to accumulate hazardous waste from episodic events must be:

- Marked/labeled with 1) the words “Episodic Hazardous Waste,” and 2) an indication of the hazard(s) associated with the contents (e.g., the applicable hazardous waste characteristic(s), a DOT label or placard, an OSHA hazard statement or pictogram, or an NFPA hazard label).
- Inventoried using onsite logs or other records that identify the accumulation start and end dates (for VSQGs, only the date that the episodic event began).
- In compliance with the old §265.201 standards if the site is an SQG. (Note that the §265.201 tank standards are deleted by the 2016 rule and moved to new §262.16(b)(3).) For episodic waste at VSQGs, tanks must be in good condition, compatible with the hazardous waste being accumulated therein, have overflow prevention measures or equipment in place, and be inspected daily.

Accumulation time—Hazardous waste generated during an episodic event must be manifested to an offsite RCRA-designated facility within 60 days from the start of the event. SQGs also have the option of treating hazardous waste generated during an episodic event within the same 60-day time frame. EPA noted that a generator could start and complete multiple projects (e.g., a small demolition project, a tank cleanout, and removal of excess chemicals) at different dates within the 60-day time limit, so long as all projects are completed within the 60-day start and end dates identified on the notification. Under that scenario, all hazardous waste generated would be considered part of the same episodic event. [81 FR 85783]

Additional requirements—SQGs must also comply with all of the conditions in new §262.16 for wastes managed during an episodic event (e.g., employee training and emergency preparedness and prevention conditions). [81 FR 85785] VSQGs must manage hazardous waste in a manner that minimizes the possibility of a fire, explosion, or release of hazardous waste or hazardous waste constituents to the air, soil, or water. [new §262.232(a)(4)(iii)]

Recordkeeping—Records of the episodic event must be maintained for 3 years from the end date of the event. The information that must be kept is identified in new §262.232.

Failure to meet conditions—“[S]hould a VSQG fail to meet the specified conditions, it loses the VSQG exemption and becomes the operator of a non-exempt storage

facility unless it also immediately complies with all of the conditions for exemption for an SQG or LQG. If an SQG fails to meet any specified condition for exemption, it loses its exemption and becomes the operator of a non-exempt storage facility unless it immediately complies with all of the conditions for an exemption for an LQG.” [81 *FR* 85783]

Conditions for Exemption vs. Independent Requirements

In the existing generator standards in Part 262, it may not be completely clear which requirements have to be met for an SQG or LQG to be exempt from the requirement to obtain a storage permit versus those that are independent of that exemption. Similarly, it may not be clear in existing §261.5 which requirements a CESQG (to be renamed VSQG) has to meet to be exempt from most hazardous waste management regulations. Therefore, EPA is using the 2016 final rule to separate the conditions for an exemption from the independent requirements:

1. Conditions for exemption—These are regulatory requirements primarily associated with satellite and 90/180/270-day accumulation areas that must be met for the generator to be exempt from the requirement to obtain a storage permit. Examples include hazardous waste container and tank standards, preparedness and prevention requirements, and personnel training provisions. Failure to comply with any of these conditions may result in the generator being charged with operating a non-exempt storage facility and potentially with non-compliance with the many permitting or interim status facility provisions in Parts 124, 264 through 267, and 270. Such noncompliance is subject to penalty (e.g., a notice of violation and/or civil or criminal penalty) and injunctive relief under RCRA Section 3008. The conditions for exemption are codified in new §§262.14–17.

“It has been the agency’s longstanding position that generators that do not comply with a condition of a generator exemption fail to qualify for the exemption and (if they have not qualified for a larger generator exemption) they would be considered an operator of a non-exempt storage facility, in addition to being a generator.” [81 *FR* 85746]

2. Independent requirements—These are regulatory requirements that are applicable and enforceable and that are not legally tied to the accumulation of

hazardous waste. They are “independent” of the conditions for exemption from regulation as a storage facility. Examples include determining the category (VSQG, SQG, LQG) into which the generator falls, using a manifest to ship hazardous waste offsite, and most recordkeeping. Failure to meet an independent requirement will likely result in some form of enforcement action for violating that particular requirement (e.g., a notice of violation, civil or criminal penalty, or injunctive relief under RCRA Section 3008). The independent requirements are codified in new §262.10(a)(1).

Additional/Revised Generator Requirements

In addition to the provisions discussed above, the 2016 rule adds numerous additional requirements and revises existing requirements for hazardous waste generators. These additional/revised requirements are compared to the pre-existing generator regulations in Table 1.

Other Changes to the RCRA Regs

In addition to the requirements discussed above, the 2016 rule makes the following changes to the RCRA hazardous waste regs.

Changes to Biennial Reporting for LQGs and Recycling Facilities

A generator who is an LQG for at least one month of an odd-numbered year (reporting year) must complete and submit a biennial report that identifies all of the hazardous waste generated in the reporting year, not just the waste generated in months the facility was an LQG. [85 *FR* 85780] Previous EPA guidance and the biennial report instructions have not been completely clear on this issue, so the agency promulgated clarifying language in revised §262.41. As noted above, LQGs must include on biennial reports all hazardous waste received from VSQGs under their control.

EPA understands that states may have more frequent or additional data reporting requirements over and above the agency’s biennial reporting requirements for LQGs. Additionally, states may use a different, but equivalent, form to collect federal data and satisfy their own program reporting needs. [81 *FR* 85780]

Facilities who receive hazardous wastes from offsite and recycle them without storing them first are currently subject to the minimal requirements of §261.6(c)(2). The 2016 rule adds the additional requirement of biennial reporting for such recyclers.

Table 1: Comparison of Existing Generator Regulations With 2016 Rule Changes

Requirement	Existing generator regulations	2016 rule changes
Making a hazardous waste determination (asking the four questions)	<ol style="list-style-type: none"> 1. Is it a solid waste? 2. Is it exempt? 3. Is it listed? 4. Is it characteristic? Determination may be made using testing or knowledge 	<ol style="list-style-type: none"> 1. Is it a solid waste? Determination must be made for each solid waste at the point of waste generation ¹ 2. Is it exempt? 3. Is it listed? Determination must be based on knowledge of the waste ² 4. Is it characteristic? Determination may be made using testing ³ or knowledge ⁴
Documenting solid and hazardous waste determinations	Records of any test results, waste analyses, or other determinations made in accordance with §262.11 [§262.40(c)]	Records supporting its hazardous waste determinations, including records that identify whether a solid waste is a hazardous waste [new §262.11(f)] ⁵
Satellite accumulation maximum quantity limits	<ul style="list-style-type: none"> ■ 55 gallons of nonacute hazardous waste ■ 1 quart of acute hazardous waste 	<ul style="list-style-type: none"> ■ 55 gallons of nonacute hazardous waste ■ 1 quart of liquid acute hazardous waste <i>or 1 kg of physically solid acute waste</i> ⁶
Standards for incompatible wastes in satellite accumulation containers	None	Essentially the same as for 90/180/270-day accumulation containers in new §262.15(a)(3) ⁷
Times when satellite accumulation containers may be open	When adding or removing waste	<ul style="list-style-type: none"> ■ When adding, removing, <i>or consolidating</i> waste ■ When venting the container is necessary (e.g., for proper equipment operation or to prevent dangerous situations)
Satellite accumulation container marking/labeling	The words “Hazardous Waste” <i>or</i> other words that identify the contents	The words “Hazardous Waste” <i>and</i> an indication of the hazard(s) of the contents ⁸
SQG/LQG renotification requirements	None	<ul style="list-style-type: none"> ■ Beginning in 2021 and every 4 years thereafter, SQGs must renotify EPA by September 1 using Form 8700-12 ⁹ ■ LQGs must renotify EPA by March 1 of each even-numbered year using Form 8700-12 as part of their biennial report
SQG/LQG 90/180/270-day accumulation unit marking/labeling	<ul style="list-style-type: none"> ■ Containers: The words “Hazardous Waste” and the accumulation start date ■ Tanks: The words “Hazardous Waste” 	<ul style="list-style-type: none"> ■ Containers: 1) The words “Hazardous Waste,” 2) <i>an indication of the hazard(s) of the contents</i> ⁸, and 3) the accumulation start date ■ Tanks and containment buildings: The words “Hazardous Waste” <i>and an indication of the hazard(s) of the contents</i> ⁸
SQG/LQG preparedness and prevention requirements and emergency procedures	Apply to 90/180/270-day accumulation areas	Apply to <i>satellite accumulation areas</i> and to 90/180/270-day accumulation areas
SQG/LQG arrangements with local authorities	Must attempt to make arrangements, as appropriate, to familiarize police, fire departments, emergency response teams, emergency response contractors, equipment suppliers, and local hospitals with the layout of the facility and the properties of hazardous waste handled at the facility	Must attempt to make arrangements, as appropriate, to familiarize police, fire departments, emergency response teams, emergency response contractors, equipment suppliers, local hospitals, <i>and the LEPC</i> with the layout of the facility and the properties of hazardous waste handled at the facility ¹⁰

Requirement	Existing generator regulations	2016 rule changes
Exception for SQG/LQG preparedness and prevention equipment	If none of the hazards posed by waste handled at the facility could require a particular kind of equipment	<ul style="list-style-type: none"> ■ If none of the hazards posed by waste handled at the facility could require a particular kind of equipment, or ■ If the actual waste generation or accumulation area does not lend itself for safety reasons to have a particular kind of equipment ¹¹
LQG requirements for closing a 90-day accumulation unit	Comply with the general closure standards per §§265.111 and 265.114 and unit-specific closure standards for tanks, drip pads, and containment buildings	<ul style="list-style-type: none"> ■ Comply with one of the following: <ol style="list-style-type: none"> 1. Place a notice in the operating record within 30 days after closure identifying the location of the unit within the facility, but not comply with the formal closure performance standards of new §262.17(a)(8)(iii–iv) for container areas, tanks, drip pads, and containment buildings until the facility closes; or 2. Comply with the formal closure performance standards of new §262.17(a)(8)(iii–iv) for the unit, and notify EPA or the state using Form 8700-12 within 90 days after closing the unit ■ If the waste accumulation unit is subsequently reopened, the generator may remove the notice from the operating record
LQG requirements for closing the facility	None	<ul style="list-style-type: none"> ■ Notify EPA using Form 8700-12 at least 30 days prior to closing the facility ■ Notify EPA using Form 8700-12 within 90 days after closing the facility that it has complied with the closure performance standards of new §262.17(a)(8)(iii–iv) for all 90-day accumulation units ¹²
SQG/LQG pretransport marking requirements	<ul style="list-style-type: none"> ■ DOT marking ■ For containers of ≤119 gal capacity: <ul style="list-style-type: none"> □ “HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.” □ Generator’s name, address, and EPA ID number □ Manifest tracking number 	<ul style="list-style-type: none"> ■ DOT marking ■ For containers of ≤119 gal capacity: <ul style="list-style-type: none"> □ “HAZARDOUS WASTE—Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.” □ Generator’s name, address, and EPA ID number □ Manifest tracking number □ <i>EPA hazardous waste codes</i> ¹³
LQG facility personnel training options	Classroom instruction or on-the-job training	Classroom instruction, <i>online training (e.g., computer-based or electronic)</i> , or on-the-job training
LQG contingency plan emergency coordinator information	Names, addresses, and phone numbers (office and home)	Names and emergency phone numbers ¹⁴

Requirement	Existing generator regulations	2016 rule changes
LQG contingency plan summary (quick reference guide)	None	<ul style="list-style-type: none"> ■ Prepare and submit to local emergency responders the next time the contingency plan is amended [new §262.262(b)] ■ Update, if necessary, whenever the contingency plan is amended and submit to local emergency responders [new §262.262(c)]
LQG container location requirement for ignitable and reactive wastes in 90-day areas	Must be located at least 50 feet from the facility's property line	Must be located at least 50 feet from the facility's property line, <i>unless written approval to accumulate the waste in the restricted area is 1) obtained from the fire code authority, and 2) maintained as long as the waste is in the area</i>
SQG/LQG access to communication or alarm systems	Must have immediate access to an internal alarm, emergency communication device, telephone, or a hand-held two-way radio	Must have immediate access (e.g., <i>direct or unimpeded</i>) to an internal alarm, emergency communication device, telephone, or a hand-held two-way radio ¹⁵
LQG contingency plan submittal	To all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services	To all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services, <i>and it may also be submitted to the LEPC</i>

LEPC = Local Emergency Planning Committee; LQG = large quantity generator; SQG = small quantity generator.

¹ Point of waste generation is noted as being 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. [revised §262.11(a)]

² Acceptable knowledge that may be used in making an accurate determination as to whether the waste is listed may include waste origin, composition, the process producing the waste, feedstock, and other reliable and relevant information. [revised §262.11(c)]

³ When available knowledge is inadequate to make an accurate determination, the person must test the waste according to the applicable methods in Part 261, Subpart C or according to an equivalent method approved under §260.21 and in accordance with the following: i) persons testing their waste must obtain a representative sample of the waste; and ii) where a test method is specified in Part 261, Subpart C, the results of the test, when properly performed, are definitive for determining the regulatory status of the waste. [new §262.11(d)(2)]

⁴ Acceptable knowledge may include process knowledge (e.g., information about chemical feedstocks and other inputs to the production process); knowledge of products, by-products, and intermediates produced by the manufacturing process; chemical or physical characterization of wastes; information on the chemical and physical properties of the chemicals used or produced by the process or otherwise contained in the waste; testing that illustrates the properties of the waste; or other reliable and relevant information about the properties of the waste or its constituents. A test other than a test method in Part 261, Subpart C, or an equivalent test method approved under §260.21, may be used as part of a person's knowledge to determine whether a solid waste exhibits a characteristic. However, such tests do not, by themselves, provide definitive results. [new §262.11(d)(1)]

⁵ These records must comprise the generator's knowledge of the waste and support the generator's determination. The records must include, but are not limited to, the following types of information: the results of any tests, sampling, waste analyses, or other determinations; records documenting the tests, sampling, and analytical methods used to demonstrate the validity and relevance of such tests; records consulted in order to determine the process by which the waste was generated, the composition of the waste, and the properties of the waste; and records which explain the knowledge basis for the generator's determination. [new §262.11(f)]

⁶ The accumulation limits for acute hazardous wastes are not intended to be additive; so, in cases where a generator has both liquid and solid acute hazardous waste accumulating in a satellite accumulation area, the 1-kg (2.2-lb) limit will apply. [81 FR 85765]

⁷ A satellite container holding hazardous waste that is incompatible with any waste or other materials accumulated nearby in other containers must be separated from the other materials or protected from them by any practical means. EPA mentioned two methods to achieve this compatibility requirement: 1) segregating incompatible wastes onto separate pallets and ensuring that incompatible wastes are separated by at least one pallet width in all directions, and 2) providing drip trays or other secondary containers for satellite containers. [81 FR 85764]

⁸ Examples of an indication of the hazard(s) associated with the contents include the applicable hazardous waste characteristic(s), a DOT label or placard, an OSHA hazard statement or pictogram, or an NFPA hazard label.

⁹ Some states already require annual renotification by SQGs. As long as these state-collected data are transferred into the national RCRA information management system (RCRAInfo) by the state within the specified time frames, these existing state regulations will meet the new §262.18(d)(1) SQG renotification requirement. [81 FR 85777]

¹⁰ SQGs and LQGs attempting to make arrangements with their 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. [new §§262.16(b)(8)(vi)(A)(1), 262.256(a)(1)] SQGs and LQGs must maintain records documenting the preparedness and prevention arrangements with the local fire department as well as any other offsite organization necessary to respond to an emergency. This documentation must confirm either 1) that such arrangements actively exist; or 2) in cases where no arrangements exist, that attempts to enter into such arrangements were made. [new §§262.16(b)(8)(vi)(B), 262.256(b)] An SQG or LQG possessing 24-hour response capabilities may seek a waiver from the fire code authority 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 that the waiver is documented in the operating record. [new §§262.16(b)(8)(vi)(C), 262.256(c)]

¹¹ SQGs and LQGs may determine the most appropriate locations to locate equipment necessary to prepare for and respond to emergencies. [new §§262.16(b)(8)(ii), 262.252]

¹² If the facility cannot meet the closure performance standards of §262.17(a)(8)(iii–iv), it must notify EPA using Form 8700-12 that it will close as a landfill under §265.310 for a container area, tank, or containment building, or under §265.445(b) for a drip pad.

¹³ Except that lab packs that will be incinerated per §268.42(c) are not required to be marked with EPA hazardous waste codes, except D004, D005, D006, D007, D008, D010, and D011, where applicable. In lieu of marking their containers with EPA hazardous waste codes, generators may use a nationally recognized electronic systems such as bar coding (common industry practice) that includes the EPA waste codes, as required by new §262.32(b)(5) or (d). [new §262.32(c), 81 FR 85754]

¹⁴ In situations where the generator facility has an emergency coordinator continuously on duty because it operates 24 hours per day, every day of the year, the plan may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times. [new §262.261(d)]

¹⁵ Although cell phones are a useful means of communication, they should not be relied upon solely to satisfy this requirement. [81 FR 85791]

Source: McCoy and Associates, Inc.

Characterizing and Counting Mixtures Containing Hazardous Waste

The rule adds regulatory language in new §262.13(f) stating that, if a hazardous waste is mixed with a solid waste, the generator must make a hazardous waste determination for the resulting mixture (using the existing mixture rules). If the mixture is hazardous, the resultant mixture is a newly-generated hazardous waste for counting purposes. Thus, such mixing could elevate the generator to a higher generator category for that month.

Liquids-in-Landfills Prohibition Extended to Generators

The placement of bulk or noncontainerized liquid hazardous waste or hazardous waste containing free liquids (whether or not sorbents have been added) in any landfill has been prohibited by the RCRA statute since 1984. This prohibition is codified at §§264/265.314(a) for hazardous waste landfills and §258.28(a–b) for municipal waste landfills. To emphasize that the responsibility for complying with this statutory provision falls not only on hazardous and municipal waste landfill operators but also on hazardous waste generators, EPA has added this prohibition to the generator regs at new §§262.14(b) and 262.35.

Prior to disposal in a hazardous waste landfill, liquids must meet additional requirements specified in §§264/265.314. For example, the absence or presence of free liquids in either a containerized or a bulk hazardous waste must be evaluated using Method 9095B, the paint filter liquids test. [§§264.314(b)/265.314(c)] Also, any material used to sorb liquid in containerized hazardous waste to pass the paint filter test must be nonbiodegradable. [§§264.314(d)/265.314(e), RO 11798, 13724] Note that this provision does not preclude a generator from sending liquid hazardous waste to a TSD facility where the waste will be stabilized or solidified (to meet LDR treatment standards and to pass the paint filter test) prior to landfilling. [81 FR 85779]

VSQGs are not required to meet the additional requirements specified in §§264/265.314 if they are disposing their waste in a municipal waste landfill, but they must still ensure that their waste contains no free liquids prior to disposal in any landfill. [81 FR 85779]

Clarification That SQGs May Use Drip Pads/Containment Buildings

The pre-existing RCRA regs contained no specific provisions allowing SQGs to use drip pads and/or containment buildings for hazardous waste accumulation. In guidance, EPA had noted that SQGs can utilize drip pads and/or containment buildings, but only if they comply with the LQG requirements in §262.34(a). [EPA/305/B-96/001, EPA/530/K-02/008I, EPA/530/K-05/008, RO 13696, 14662] The 2016 final rule added specific requirements applicable to an SQG using one of these units. [new §262.16(b)(4–5)]

The new/revised regulations for drip pads clarify that both SQGs and LQGs must remove all wastes from the drip pad at least once every 90 days. Any hazardous wastes that are removed from the drip pad are then subject to the satellite accumulation and/or 90/180-day accumulation limits, depending on the facility's generator category.

Performance Track Regulations Removed

EPA established its National Environmental Performance Track Program in June 2000 to provide regulatory and administrative benefits to Performance Track members. The agency issued less-stringent regulations for Performance Track members in an April 22, 2004 final rule. [69 FR 21737] In that rule and several subsequent rules issued over the next four years, the agency promulgated regulations that allowed members of this program to accumulate hazardous waste for longer periods of time, reduce inspection frequencies of hazardous waste containers and tanks, etc. Performance Track members were also supposedly subject to less agency

oversight (e.g., inspections of member facilities were to be a low priority).

On May 14, 2009, EPA published a notice in the *Federal Register* terminating the Performance Track Program. [74 *FR* 22741] The notice also announced that the low priority for routine inspections of Performance Track member facilities was ended. However, that 2009 notice did not remove the regulations pertaining to Performance Track Program members. The 2016 final rule removes all now-obsolete federal RCRA regulations that applied to this program.

Effective Date and State Authorization

The generator improvements final rule is promulgated under the base (non-HSWA) RCRA authority. Thus, the rule becomes effective in Alaska and Iowa six months after the date of publication in the *Federal Register* (i.e., May 30, 2017). In the 48 authorized states, the new requirements do not take effect until the state adopts equivalent state requirements. Moreover, authorized states are required to modify their programs only when EPA promulgates federal regulations that are more stringent or broader in scope than the authorized state regulations. The following requirements in this rule are more stringent than earlier regulations [81 *FR* 85801]:

- Subjecting satellite containers to incompatibility requirements and preparedness, prevention, and emergency/contingency plan requirements;
- Requiring SQGs and LQGs to mark/label satellite accumulation containers and 90/180/270-day accumulation containers and tanks with an indication of the hazard(s) of the contents and requiring 90/180/270-day accumulation containers to be marked with hazardous waste codes prior to shipment;
- Requiring SQGs to renotify every 4 years;
- Requiring LQGs to submit a biennial report that identifies all of the hazardous wastes generated in the calendar year, not just the months the facility was an LQG;
- Requiring facilities that recycle hazardous waste without storing the waste to prepare and submit a biennial report;
- Requiring LQGs updating their contingency plans to prepare a quick reference guide to assist responders in an emergency; and

- Requiring LQGs to notify EPA or their authorized state when they plan to close their facilities.

The rest of the final rule requirements are either 1) less stringent than the current hazardous waste regulations, or 2) neither more nor less stringent. Thus, authorized states may, but are not required to, adopt the rest of these changes (although EPA encourages all states to adopt all provisions to promote national consistency).

Guidance and Best Management Practices for Generators

EPA used the preamble to the 2016 generator improvements rule to provide guidance and recommend best management practices (BMPs) for hazardous waste generators. These are summarized below.

Guidance

- Generator categories (VSQG, SQG, LQG) are based solely on the amount of hazardous waste generated per calendar month. Accumulation quantity limits (e.g., 1,000 kg of nonacute waste for VSQGs, 6,000 kg of nonacute waste for SQGs) may trigger different generator regulations, but these accumulation limits do not affect a generator's category.
 - If a VSQG exceeds an accumulation limit, the exemption from permitting can be maintained if the waste is managed under the more extensive conditions for exemption of a larger generator category, but the VSQG does not itself have to become an SQG or LQG. To maintain the exemption from permitting, VSQGs that accumulate more than 1,000 kg of nonacute hazardous waste must manage the waste under the conditions for exemption for SQGs, and VSQGs that accumulate more than 1 kg of acute waste or 100 kg of any residue from the cleanup of a spill of acute hazardous waste must manage the waste under the conditions for exemption of an LQG. [new §262.14(a)(3–4); 81 *FR* 85741]
 - If a SQG accumulates more than 6,000 kg of nonacute hazardous waste, it must either 1) become an LQG and manage the hazardous waste as an LQG, or 2) lose its exemption from regulation as a storage facility and be subject to the requirements in Parts 264, 265, and 270. [81 *FR* 85741]
- Previous guidance from EPA noted that, since acute and nonacute hazardous wastes are counted separately, a generator could maintain SQG status for nonacute hazardous waste, while managing acute waste accord-

ing to LQG standards. In other words, the generator could be an SQG and an LQG at the same time! [RO 11288, 14031] In the 2016 rule, EPA stated that a generator should manage all of its waste under the same generator category: “it does not, in the end, make practical sense to have a generator that is operating in more than one category.” [81 *FR* 85743]

- Generators may choose to manage their nonhazardous wastes as hazardous. Even if the waste is nonhazardous, “over managing” the waste is acceptable and meets the requirements in §262.11 because the generator has made a determination intended to ensure proper and protective management of the waste within the RCRA regulatory program. [81 *FR* 85750]
- Generators are, and always have been, ultimately responsible for making accurate hazardous waste determinations. Hiring a third party contractor, waste broker, or consultant, or reliance on information provided by suppliers, does not transfer this responsibility to those third parties. [81 *FR* 85750]
- The point of waste generation (at which point a waste determination must be made) includes both the time and place the waste was first generated. The determination cannot be made downstream in the process, where other materials could be mixed with the waste or where the waste may have changed its physical or chemical characteristics. [81 *FR* 85750] Additionally, container marking and labeling requirements apply at the point of generation of the hazardous waste. [81 *FR* 85759]
- Consistent with previous guidance in RO 11424, if testing will be used to make a hazardous waste determination, the generator must manage the waste as hazardous until the results of the test are received. [81 *FR* 85750–1]
- Some facilities generate consistent amounts of hazardous waste over time (e.g., they are consistently an SQG or an LQG). Although the new regulatory language at §262.13 states that generator category is based on counting hazardous waste generation monthly, generators are not required to follow the steps included in §262.13 every month. However, LQGs must keep track of their hazardous waste generation amounts for the purpose of completing the biennial report (and paying state-imposed fees), when applicable. [81 *FR* 85755–6]
- If a solid waste is mixed with a characteristic hazardous waste, the solid waste must provide a useful and effective contribution to decharacterizing the hazardous waste (i.e., possess a unique property to remove the hazardous characteristic from the hazardous waste) instead of merely diluting it. [81 *FR* 85756]
- Generators using small containers for hazardous waste management may attach a tag to the container to comply with the marking and labeling requirements. Also, if a hazardous waste is in a container that already has appropriate marking and labeling (e.g., the hazardous waste is an unused commercial chemical product that is in its original container with an intact label), the existing marking and labeling would be sufficient to meet the new container marking and labeling requirements. [81 *FR* 85759]
- Existing RO 11317, that allowed a storage shed outside of a building where a D003 hazardous waste is initially generated to be considered a satellite accumulation area (SAA), is rescinded. EPA gave two reasons:
 1. The agency has reconsidered and now believes that a shed outside a building where the waste is initially generated is generally not “at or near the point of generation” (although state agencies will retain authority in making these determinations). EPA is not prohibiting remote accumulation; rather, it is clarifying that it is more appropriate to regulate the remote accumulation area as a 90/180-day accumulation area rather than an SAA.
 2. If a generator accumulates hazardous waste that is so dangerous it needs to be accumulated away from the point of generation, it should be accumulated under the more rigorous 90/180-day accumulation standards rather than the minimal requirements for SAAs. [81 *FR* 85766–7]
- Regarding the regulatory language that an SAA is “under the control of the operator,” EPA generally noted that the operator 1) is someone familiar with the operations generating the hazardous waste; 2) is aware of, and able to attend to these operations, if needed; and 3) provides some measure of controlled access. The agency gave the following examples of demonstrating that an SAA is “under the control of the operator” [81 *FR* 85767]:
 - The operator controls access to an area, building, or room in which the SAA is located by access card, key, or lock box.

- The operator accumulates waste in a locked cabinet and controls access to the key, even if the cabinet is stored inside a room to which access is not controlled.
- The operator is regularly within view of the SAA during the course of their job.
- The operator is able to observe any individuals that may enter or exit the SAA.

There can be more than one operator having control of an SAA. For example, as employees change shifts over the course of a day, the role of the operator can be transferred from one employee to another. Likewise, there can also be more than one operator having control of an SAA at the same time. For example, multiple operators may be running laboratory equipment in the same room and share hazardous waste containers located in a single SAA. However, the term “operator” refers to an individual or individuals responsible for the equipment or processes generating the hazardous waste; it does not refer to a company or entity as a whole. [81 FR 85768]

- EPA stated in the rule preamble that VSQGs may accumulate hazardous waste on drip pads as long as they comply with Part 265, Subpart W standards. (The 2016 rule added no regulatory language to this effect.) [81 FR 85768]
- In addition to the existing training elements for LQG facility personnel at §265.16(a)(3) [copied to new §262.17(a)(7)(i)(C)], EPA noted in the final rule preamble that training and a written job description would be beneficial for personnel who:
 1. Complete and/or sign hazardous waste manifests,
 2. Manage hazardous waste in accumulation areas,
 3. Maintain hazardous waste inventories,
 4. Conduct daily or weekly inspections of hazardous waste accumulation areas, and
 5. Plan or respond to hazardous waste emergencies. [81 FR 85797]

BMPs

Although not required by the regulations, EPA identified a number of “best management practices” for hazardous waste generators in the preamble to the 2016 final rule:

- EPA recommends that generators document their nonhazardous waste determinations, particularly in situations where the waste may display the attributes of a hazardous waste and where staff turnover may cause a worker to question the contents of a container. [81 FR 85754] However, according to EPA “inspectors have the existing authority to require a generator to perform a waste determination during an inspection to support their finding that the waste of concern is not a hazardous waste if no documentation exists.” [81 FR 85753]
- If a generator changes category (VSQG, SQG, LQG) several times a year, depending on inputs, demand, processing volume, and production, EPA recommends that the generator operate as an LQG all the time to simplify its regulatory compliance. However, the agency notes in the regulations [new §262.13] that actual generator category can change month to month. [81 FR 85755]
- EPA “expects” that generators will identify the contents of hazardous waste in their 90/180/270-day accumulation containers and tanks. This could be accomplished, for example, by marking these units with the name of the chemical (e.g., “acetone”), the type or class of waste (e.g., “organic solvents”), or the DOT proper shipping name and technical name. For tanks, this information could alternatively be maintained in operating records. The agency is making this recommendation considering both the operational and potential downstream regulatory problems (e.g., confusion during an emergency response) that may occur if the contents are not identified. [81 FR 85758, 85760]
- Although the satellite accumulation regulations require that the “excess” amount (>55 gal of nonacute waste, >1 quart of acute liquid waste, >2.2 lb of physically solid acute waste) be removed from the SAA within three days, the waste accumulated before the excess amount was generated is normally the waste that is moved within three days. Typically, a generator removes the older waste and continues to accumulate the most recently generated waste. For example, if a generator has a 55-gal drum in an SAA and that drum becomes full, the generator might begin accumulating newly generated waste in a second 55-gal drum while it moves the first drum to a 90/180-day accumulation area. [81 FR 85766]
- Although the regs require daily or weekly inspections of all 90/180/270-day accumulation units, they do not require documentation of those inspections

in every case. EPA recommends that generators document the required inspections of the following accumulation units: 1) 90/180/270-day container areas operated by SQGs and LQGs, 2) 180/270-day tanks operated by SQGs, and 3) 90-day drip pads operated by SQGs and LQGs. [81 *FR* 85772–3]

- SQGs/VSQGs with emergency plans (similar to contingency plans required at LQG facilities) should consider listing just the names and emergency phone numbers of the emergency coordinators. Also, such plans may list the staffed position (e.g., operations manager, shift coordinator, shift operations supervisor) as well as an emergency telephone number that can be guaranteed to be answered at all times. [81 *FR* 85790–1] Also, EPA encourages SQGs to develop a quick reference guide (i.e., summary) of their emergency plans and share this information with local emergency responders. [81 *FR* 85796]

- EPA encourages LQGs to work with first responders to determine whether electronic submission of contingency plans, including incorporating contingency plan information into existing software applications, is an acceptable approach either in lieu of, or in addition to, a hard copy submission. [81 *FR* 85796]
- EPA also encourages generators to ensure that all employees who work in areas where hazardous waste is accumulated, including SAAs, or are otherwise involved in hazardous waste management receive sufficient training to ensure that they are familiar with proper handling and emergency procedures. [81 *FR* 85797]

Additional Information

EPA has provided a summary of the final rule and answers to frequent questions at <http://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements>.