**GUIDANCE DOCUMENT**

**CLOSURE OF CENTRAL ACCUMULATION AREAS**

**BY LARGE QUANTITY GENERATORS OF HAZARDOUS WASTE**

**(“LQG CLOSURE GUIDANCE DOCUMENT”)**

**(IN ACCORDANCE WITH LAC 33:V.1015.B.8)**

**August 31, 2023**

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**Louisiana Department of Environmental Quality**

**Office of ENVIRONMENTAL SERVICES**

**WASTE PERMITS DIVISION**

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| --- | --- |
| *Questions regarding LQG closures should be directed to the appropriate division or section as indicated below. See* ***Section 12.1*** (Contact Information & How to Submit Documents) *for details.* | |
| Contact Waste Permits Division regarding:  The LQG Closure Guidance Document and technical issues about LQG closures | Office of Environmental Services  Waste Permits Division  P.O. Box 4313  Baton Rouge, Louisiana 70821-4313  Phone: 225.219.3070 |
| Contact Public Participation and Permit Support Services Division - Notifications and Accreditations Section regarding:  Submittal of the HW-1 form | Office of Environmental Services  Public Participation and Permit Support Services Division  Notifications & Accreditations Section  P.O. Box 4313  Baton Rouge, LA 70821-4313  PHONE: 225.219.1352 |
| Contact Remediation Division regarding:  Technical issues about risk evaluations and/or remedial activities | Office of Environmental AssESSMENT  REMEDIATION Division  P.O. Box 4314  Baton Rouge, Louisiana 70821-4314  Phone: 225.219.3386 |

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# **1.0 INTRODUCTION**

On July 20, 2020, the Louisiana Department of Environmental Quality (LDEQ) adopted the Generator Improvements Rule issued by the U.S. Environmental Protection Agency (USEPA). The rule amended the hazardous waste (HW) regulatory program (*i.e.*, LAC 33:V.Subpart 1) as relating to generators and included additional closure requirements for large quantity generators (LQGs). (See **Attachment 1** for the full text of the regulations regarding LQG closure requirements [*i.e.*, LAC 33:V.1015.B.8].)

LDEQ’s final rule contains provisions regarding LQG closure notifications that are not included in USEPA’s rule and are applicable only in the state of Louisiana. These provisions are: broader in scope than USEPA’s rule (clarify and expound upon the federal rule and preamble); consistent with USEPA’s rule, preamble, and historical policies from both USEPA and LDEQ; and based upon discussions with various LDEQ personnel & stakeholders. Louisiana-specific provisions include, but are not limited to, the following:

1. Information to be included in the operating record for closure notifications;
2. Information to be included with the closure notifications for facilities;
3. Presumptive demonstration of closure for container storage;
4. For tank systems, containment buildings, and drip pads:
   1. Additional information (*e.g.*, decontamination, confirmatory sampling) submitted with prior closure notification;
   2. Numerical closure performance standards, including potable water (i.e., drinking water) standards for rinsate, and applicable RECAP (Risk Evaluation/Corrective Action Program) limiting screening option standards for soil and groundwater; and
   3. Closure report submitted with subsequent notification for approval by LDEQ;
5. Flexibility in demonstrating the closure performance standards have been met through sufficiency demonstrations;
6. Use of risk-evaluation (RECAP) and remedial activities;
7. Closures with contamination from other sources;
8. Grandfathering closures initiated prior to final regulations (*i.e*., July 20, 2020); and
9. Allowance for guidance.

The purpose of this “Closure of Central Accumulation Areas by Large Quantity Generators of Hazardous Waste” Guidance Document (a.k.a. “LQG Closure Guidance Document”) is to provide additional explanation and guidance to LQGs for closures as required by LAC 33:V.1015.B.8. Under these HW regulations, closure of individual central accumulation areas and the LQG’s entire facility (*i.e.*, all central accumulation areas collectively managed by the LQG) are subject to notification requirements to ensure that the closure performance standards are met. A central accumulation area (*i.e.*, “unit”) is defined as “any on-site HW accumulation area with HW accumulating in units subject to LAC 33:V.1015.” Units addressed under this guidance document include container storage, tank systems, drip pads, and containment buildings. LAC 33:V.1015.B.8 specifies that these closure requirements are NOT applicable to satellite accumulation areas as delineated in LAC 33:V.1011 (*i.e.*, initial HW accumulation in containers at or near the point of generation, which is under the control of the operator of the process generating the HW).

As specified in LAC 33:V.1015.B.8.j, this guidance document has been prepared by the LDEQ’s Office of Environmental Services (OES) - Waste Permits Division, and is intended to assist LQGs in best management practices, consistency, and production of technically defensible closures. This guidance document does not have the force of regulations and shall not substitute for the requirements of LAC 33:V.1015.B.8 or any other parts of the HW regulations. (See **Attachment 1** for the full text of LAC 33:V.1015.B.8.) This guidance does not impose any new requirements. The LDEQ shall retain discretion to use approaches on a case-by-case basis that differ from this guidance where appropriate. The LDEQ will base decisions regarding closure activities required by LAC 33:V.1015.B.8 on the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. and regulations as applied to the specific facts of the closure. Whether or not the recommendations in this guidance document are appropriate in a given situation will depend on site-specific circumstances.

# **2.0 OVERVIEW OF CLOSURE REQUIREMENTS (LAC 33:V.1015.B.8)**

The primary requirements for closures by LQGs of individual central accumulation areas (*i.e.*, “units”) and the entire facility (*i.e.*, all individual units collectively managed by the LQG) involves submittal of notifications to the LDEQ in order to ensure that the closure performance standards are met. **The closure notifications include the LDEQ’s most current Notification of Hazardous Waste Activity Form (HW-1 form) with required cover letter and supplemental information.**

As discussed in **Section 3.0** (Unit Closures), LQGs have two options for the closure of individual units:

1. Notify the LDEQ (**Section 3.1**) utilizing the same notification requirements for the closure of an entire facility (**Section 4.0**) and completely address the closure performance standards (**Section 6.0**); or
2. Place a notice with all required information in the LQG’s operating record (**Section 3.2**) and address the closure performance standards when the entire facility is closed (**Section 4.0**).

As discussed in **Section 4.0** (Facility Closures), LQGs are required to perform each of the following for the closure of the entire facility:

1. Submit prior notification to the LDEQ before closure activities commence (**Section 4.1**). The prior notification includes the HW-1 form along with a required cover letter containing:
   1. Supplemental information required for all closures (**Section 4.1.1**);
   2. Information required for any unit that is container storage (**Section 4.1.2**); and
   3. Information required for any unit that is a tank system, containment building or drip pad (**Section 4.1.3**).
2. Conduct the necessary closure activities (**Section 4.2**).
   1. Container storage has special closure provisions (**Section 4.2.1**). A presumptive demonstration of closure (**Section 4.2.1.1**) is allowed whereby documentation of proper container management serves to close the unit and the closure performance standards (**Section 6.0**) are presumed to have been met without the need to perform additional decontamination procedures or confirmatory sampling and analysis. There is no requirement that a LQG submit a closure report with the subsequent closure notification for LDEQ approval (**Section 4.3.2**). In summary, a presumptive demonstration of closure includes:
      1. Necessary information in the operating record;
      2. Containers removed and subsequently managed properly;
      3. Inspection logs and other information show there were no HW releases, or that the releases were properly managed;
      4. If there was long-term secondary containment, inspection records and other information show that its integrity was maintained and that there are no signs of contamination;
      5. Additional closure activities (**Section 4.2.1.2**) are not necessary; and
      6. A signed statement from the responsible official stating the closure performance standards have been met.
   2. Tank systems, containment buildings and drip pads have more extensive closure requirements (**Section 4.2.2**). Removal and/or decontamination of all contaminated equipment, structures, and containment system components is required. Removal of all contaminated soil beneath and around the unit is also required. Once decontamination and/or removal activities have been completed, confirmatory sampling and analysis of the rinsate and soil (and groundwater, if deemed necessary) are required. (See **Section 7.0** regarding special provisions for managing debris and scrap metal.) The LQG is also required to submit a closure report with the subsequent notification to the LDEQ for approval.
3. Submit subsequent notification to the LDEQ after closure activities are completed (**Section 4.3**). The subsequent notification includes the HW-1 form with a required cover letter containing:
   1. Information included in the prior notification;
   2. Information for a presumptive demonstration of closure for any unit that is container storage; and
   3. Closure report for any unit that is a tank system, containment building, or drip pad.

**Section 5.0** (Closure Extension Requests) addresses time extensions needed by the LQG to complete closure activities. The LQG is required to notify the LDEQ by submitting the HW-1 form with justification.

**Section 6.0** (Closure Performance Standards) discusses the closure performance standards. As summarized in **Section 6.1**, the closure performance standards require: protection of human health and the environment; removal of all HW; removal or decontamination of any contamination; minimization of the need for future maintenance; and minimization of the post-closure escape of HW into the environment. Numerical closure performance standards are discussed in **Section 6.2**. As specified in **Section 6.2.1,** analytical results for rinsate sampling shall be compared to the potable water (i.e., drinking water) standards, as applicable. As specified in **Section 6.2.2**, analytical results for soil (and groundwater, if deemed necessary) sampling shall be compared to the Screening Option **soil and groundwater** Screening Standards defined in LDEQ’s Risk Evaluation/Corrective Action Program (RECAP), as applicable. As specified in **Section 6.3**, any individual units for which the closure performance standards cannot be met shall be closed as a landfill (*i.e.*, closed with waste in place) and post-closure care conducted.

Other options for the LQG to demonstrate the closure performance standards have been met are discussed in **Section 7.0** (Special Provisions for Managing Debris and Scrap Metal), **Section 8.0** (Sufficiency Demonstration), **Section 9.0** (Risk Evaluation/Corrective Action Program [RECAP] & Remedial Activities), and **Section 10.0** (Contamination from Other Sources). A summary of these options is listed below:

1. **Section 7.0** (Special Provisions for Managing Debris and Scrap Metal) contains mostly self-implementing provisions for managing debris destined for disposal and scrap metal destined for recycling.
2. **Section 8.0** (Sufficiency Demonstration) discusses the process for a LQG to petition the LDEQ for alternate, reduced or eliminated closure requirements. These closure requirements may include, but are not limited to, documentation, submittals, decontamination procedures, and confirmatory sampling and analysis. **A sufficiency demonstration shall not alleviate the LQG’s requirement to meet the closure performance standards (Section 6.0), but rather the demonstration of how the closure performance standards have been met.**
3. **Section 9.0** (Risk Evaluation/Corrective Action Program [RECAP] & Remedial Activities) allows a LQG to demonstrate that the closure performance standards have been met by conducting risk evaluation and/or remedial activities if there is suspected or confirmed contamination in the environmental media (*i.e.*, soil and/or groundwater). The risk evaluation and/or remedial activities may be conducted, either in addition to, or instead of, the confirmatory sampling and analysis required for closure. The risk evaluation and/or remedial activities shall be conducted in accordance with LAC 33:I.Chapter 13 (Risk Evaluation/Corrective Action Program) and under the direction of the Remediation Division.
4. **Section 10.0** (Contamination from Other Sources) allows the LQG to demonstrate that any contamination in the environmental media is either commingled with or from a source other than the HW managed in the unit. The LQG shall agree to address any contamination remaining in the environmental media through remedial activities under the direction of the Remediation Division in accordance with LAC 33:I.Chapter 13 (RECAP).

As specified in **Section 11.0** (Notification of Newly-Identified Release), the LQG shall report any newly-identified HW release into the environment. In an emergency, the release shall be reported to the Louisiana State Police, Department of Public Safety. In a non-emergency, the release shall be reported to the LDEQ’s Single Point of Contact (SPOC).

**Section 12.0** (LDEQ overseeing Closure Notifications) discusses the LDEQ’s involvement in the closure notification process.

1. **Section 12.1** (Contact Information & How to Submit Documents) details the various LDEQ contacts associated with the closure notifications.
2. **Section 12.1.1** -The Public Participation and Permit Support Services Division is the initial contact for receiving the closure notifications (HW-1 form with required cover letter and supplemental information), and forwards the closure notifications to the Waste Permits Division.
3. **Section 12.1.2** - The Waste Permits Division is responsible for reviewing the closure notifications and receiving other related closure documents.
4. **Section 12.1.3** - The Remediation Division is responsible for overseeing risk evaluation and/or remedial activities.
5. **Section 12.2** (LDEQ Inspection of Closures) details the inspections that may be conducted by LDEQ personnel before, during, and after the closure activities have been performed by the LQG.
6. **Section 12.3** (LDEQ Review of the Closure Notifications) details the level of review of the closure notifications by the Waste Permits Division.
7. **Section 12.3.1** - cursory review of all prior notifications;
8. **Section 12.3.2** - cursory review of the subsequent notifications for a presumptive demonstration of closure for container storage; and
9. **Section 12.3.3** - approval of the subsequent notifications and closure reports for tank systems, containment buildings, and drip pads (and container storage requiring additional demonstration efforts).

As specified in **Section 13.0** (Closures Initiated Prior to Promulgation of Rule), LQGs that initiated closure prior to July 20, 2020, shall either: 1) comply with the new notification requirements; or 2) complete all closure activities by January 3, 2021, and submit a Certification of No Hazardous Waste Activity Form.

# **3.0 UNIT CLOSURES (LAC 33:V.1015.B.8.a)**

The LQG has two options for closing an individual central accumulation area (i.e., unit):

* 1. Notify the LDEQ and address the closure performance standards (**Section 3.1**); or
  2. Place a notice in the facility’s operating record and ensure that the closure performance standards are met for that unit at facility closure (**Section 3.2**).

*NOTE 1: Option 2 does not require meeting the closure performance standards at this time. However, upon closure of the facility, the closure performance standards shall be addressed for all units, including any units closed under this option.*

*NOTE 2: The LDEQ recommends that the LQG meet the closure performance standards as soon as possible in order to avoid future problems with the closure notifications.*

If the closed unit is subsequently reopened by the LQG, an updated notice shall be placed in the LQG’s operating record indicating that the unit has been reopened.

## **3.1 OPTION 1 – NOTIFY THE LDEQ (AND ADDRESS CLOSURE PERFORMANCE STANDARDS) (LAC 33:V.1015.B.8.a.i)**

As required by LAC 33:V.1015.B.8.a.i, the LQG shall notify the LDEQ utilizing the facility closure notification procedures (**Section 4.0**) and address the closure performance standards (**Section 6.0**).

## **3.2 OPTION 2 – PLACE A NOTICE IN FACILTY’S OPERATING RECORD (LAC 33:V.1015.B.8.a.ii)**

As required by LAC 33:V.1015.B.8.a.ii, the LQG shall place a notice in the LQG’s operating record documenting that a unit has been closed. This notification shall be completed within 30 days of the closure and shall include the information in **Section 3.2.1** (Information Required for All Units) and, if applicable, **Section 3.2.2** (Information Required for Container Storage) below.

### **3.2.1 INFORMATION REQUIRED FOR ALL UNITS (LAC 33:V.1015.B.8.a.ii.(a) – (i), (k) & (l))**

Each closure notice placed in the LQG’s operating record shall contain the following information (Items 1 through 11):

1. Reason for closure;
2. Name and/or other unit designation (any previous and alternate identifications are also recommended);
3. Description of the type of waste accumulation (*e.g.*, single roll-off box accumulating solids, tank system with secondary containment, *etc.*);
4. Basic design and construction information (required for any unit that is a tank system, containment building, or drip pad);
5. Basic design and construction information for secondary containment (*e.g.*, long-term [*i.e.*, fixed, immovable] or temporary, materials of construction, coating, *etc.*) (Information shall include sumps or engineered swales serving as a receptacle for drainage in the secondary containment.);
6. Location within the facility:
   1. A general location relative to a fixed building or unit along with cardinal direction and distance, at a minimum;
   2. Geographic coordinates required for long-term (*i.e.*, fixed, immovable) units; and
   3. A map is also recommended;
7. Period of time of use (*i.e.*, start and end dates);
8. Description of the HW and waste codes (waste profiles and chemical analysis are recommended for tank systems, containment buildings and drip pads);
9. Documentation showing how the last stored HW was managed (*e.g.*, copies of final manifests or written/signed notation if sent off site for treatment or disposal; written/signed notation if transferred elsewhere on site for treatment, storage, or disposal as may be authorized by LAC 33:V.Subpart 1);
10. Any information that might be needed in support of a sufficiency demonstration (**Section 8.0**); and
11. Any other information that might be deemed relevant by the LQG to show waste has been removed, no contamination is present, and the unit has been properly closed (*e.g.*, documentation regarding additional activities necessary to meet the closure performance standards, photographs, manifests, *etc.*).

### **3.2.2 INFORMATION REQUIRED FOR CONTAINER STORAGE (LAC 33:V.1015.B.8.a.ii.(j))**

In addition to Items 1 through 11 in **Section 3.2.1**, closure notices for container storage placed in the LQG’s operating records shall include Items 12 and 13 to support a presumptive demonstration of closure in accordance with LAC 33:V.1015.B.8.d.i (**Section 4.2.1.1**).

1. Weekly inspection logs, a summary, or other information (*e.g.*, photographs, written documentation of spill clean ups, *etc.*) to demonstrate during the entirety of the accumulation period that:
   1. There were no spills, leaks, or releases of HW or hazardous constituents onto the secondary containment or soil immediately surrounding and beneath the unit, or they were properly cleaned up and managed in order to meet the closure performance standards; and
   2. For container storage with long-term (*i.e.*, fixed, immovable) secondary containment, there were no visible signs of significant cracks, gaps, or deterioration of the secondary containment, or they were properly repaired in a timely manner. Any sumps or engineered swales serving as a receptacle for drainage in the secondary containment should be clearly mentioned.
2. For container storage with long-term (*i.e.*, fixed, immovable) secondary containment, after removal of all waste, a final inspection log/report and other information (*e.g.*, photographs, *etc.*) to demonstrate that:
   1. There was no significant staining or other signs of contamination from HW on the secondary containment, including sumps or engineered swales serving as a receptacle for drainage in the secondary containment; and
   2. There were no visible signs of significant cracks, gaps, or deterioration for sumps or engineered swales serving as a receptacle for drainage.

# **4.0 FACILITY CLOSURES (LAC 33:V.1015.B.8.b)**

These notification requirements are for a LQG closing the entire facility (*i.e.*, all individual units collectively managed by the LQG) as required by LAC 33:V.1015.B.8.b, or if the LQG chooses to notify the LDEQ regarding closure of an individual unit as allowed for by LAC 33:V.1015.B.8.a.i (**Section 3.1**).

The LQG shall notify the LDEQ at least 30 days prior to closure of the facility (**Section 4.1**) by submitting the HW-1 form with required cover letter and supplemental information (**Sections 4.1.1** through **4.1.3**). After submitting the prior notification, the LQG shall conduct the necessary closure activities (**Section 4.2**) on each individual unit in order to ensure that the closure performance standards (**Section 6.0**) are met. Subsequently, within 90 days after closure, the LQG shall notify the LDEQ by submitting the HW-1 form with the required cover letter and supplemental information (**Section 4.3**) indicating whether the closure performance standards have been met, or not. Any individual units for which the closure performance standards cannot be met shall be closed as a landfill (*i.e.*, closed with waste in place) and post-closure care conducted (**Section 6.3**).

## **4.1 PRIOR NOTIFICATION OF CLOSURE OF A FACILITY (LAC 33:V.1015.B.8.b.i)**

As required by LAC 33:V.1015.B.8.b.i, the LQG shall notify the LDEQ at least 30 days prior to closure of the facility. This prior notification shall consist of the HW-1 form with a required cover letter and supplemental information as indicated in **Sections 4.1.1** through **4.1.3** below.

See **Section 12.1.1** for information regarding submittal of the HW-1 form with required cover letter and supplemental information.

See **Section 12.3.1** regarding the LDEQ’s review of the prior notification.

### **4.1.1 INFORMATION REQUIRED FOR ALL CLOSURES (LAC 33:V.1015.B.8.b.i.(a) – (i))**

Each prior notification of facility closure shall contain a cover letter with the following supplemental information (Items 1 through 10):

1. Contact information for the person(s) responsible for closure (*i.e.*, name, title, company affiliation, address, telephone number, email address);
2. Reason the facility is being closed (*e.g.*, LQG status no longer needed, going out of business, *etc.*);
3. List of all units being closed including their names and/or other unit designations (any previous and alternate identifications are also recommended) – This includes any unit previously closed where notification was placed in the operating record as allowed for by LAC 33:V.1015.B.8.a.ii (**Section 3.2**);
4. For each unit, description of the type of waste accumulation (*e.g.*, single roll-off box accumulating solids, tank system with secondary containment, *etc.*);
5. Basic design and construction information (required for any unit that is a tank system, containment building, or drip pad);
6. Basic design and construction information for secondary containment (*e.g.*, long-term [*i.e.*, fixed, immovable] or temporary, materials of construction, coating, *etc.*) (Information shall include sumps or engineered swales serving as a receptacle for drainage in the secondary containment.)
7. Location of each unit within the facility:
   1. A general location relative to a fixed building or unit along with cardinal direction and distance, at a minimum;
   2. Geographic coordinates required for long-term (*i.e.*, fixed, immovable) units; and
   3. A map is also recommended;
8. Period of time (*i.e.*, start and end dates) of use for each unit;
9. Description of the HW and waste codes for each unit (waste profiles and chemical analysis are recommended for tank systems, containment buildings and drip pads); and
10. Documentation for any sufficiency demonstrations approved under LAC 33:V.1015.B.8.e (**Section 8.0**).

### **4.1.2 INFORMATION REQUIRED FOR CONTAINER STORAGE (LAC 33:V.1015.B.8.b.i.(j))**

In addition to Items 1 through 10 in **Section 4.1.1**, Item 11 shall be addressed in the cover letter of the prior notification for any facility closure that includes units that are container storage.

1. For any unit being closed that is container storage, provide either:
   1. A statement that the unit will be closed in accordance with LAC 33:1015.B.8.d.i (presumptive demonstration of closure); or
   2. Supplemental information required by LAC 33:V.1015.B.8.b.i.(k) (*i.e.*, information required in **Section 4.1.3**, Item 12 below).

### **4.1.3 INFORMATION REQUIRED FOR TANK SYSTEMS, CONTAINMENT BUILDINGS AND DRIP PADS (LAC 33:V.1015.B.8.b.i.(k))**

In addition to Items 1 through 10 in **Section 4.1.1**, Item 12 shall be addressed in the cover letter of the prior notification for any facility closure that includes units that are tank systems, containment buildings, or drip pads (or container storage requiring additional demonstration efforts of closure under LAC 33:V.1015.B.8.d.ii – See Item 11 above).

1. For any units being closed that are tank systems, containment buildings, or drip pads (or container storage requiring additional demonstration efforts of closure) provide the following information regarding closure activities:
   1. Decontamination method(s) of aboveground components (*e.g.*, tank, piping, ancillary equipment, containment, *etc.*);
   2. Protocol/methods and list of constituents for confirmatory sampling and analysis of rinsate (See **Section 7.0** regarding special provisions for managing debris and scrap metal.);
   3. Protocol/methods, list of constituents, and locations and depths for confirmatory sampling and analysis of soil immediately surrounding and beneath the unit:

Soil sampling shall consider locations that are both random and targeted (*i.e.*, specific locations under the containment including sumps, or engineered swales serving as a receptacle for drainage, and areas where there may have been visible signs of significant staining, cracks, gaps, or other deterioration).

* 1. Protocol/methods, list of constituents, and locations and depths for confirmatory sampling and analysis of groundwater, if deemed necessary, immediately surrounding and beneath the unit:

If there is confirmed soil contamination resulting from a release of HW or hazardous constituents from the unit, or if there is otherwise reason to believe that the groundwater may have been impacted by a release of HW or hazardous constituents from the unit, the LQG shall conduct confirmatory groundwater sampling and analysis from the uppermost water-bearing zone. The extent of any confirmatory groundwater sampling and analysis shall be based upon site-specific conditions, including but not limited to:

* + 1. Concentrations of constituents from confirmatory soil sampling and analysis;
    2. Depth to the water table;
    3. Information regarding any suspected or known contamination in the environmental media;
    4. Potential mobility of the constituents;
    5. Site-specific conditions that may encourage constituent mobility; and
    6. Extent and effectiveness of any previous response actions.

Based upon the results from the initial groundwater sampling event, additional samples in lower zones may be warranted.

The list of constituents (*i.e.*, parameters) for confirmatory sampling and analysis shall be based on the HW accumulated in the unit.

*NOTE: In lieu of confirmatory sampling and analysis of soil (and groundwater, if deemed necessary) for closure, the LQG may state its intent to demonstrate that the closure performance standards for soil (and groundwater, if deemed necessary) have been met through RECAP and remedial activities. (See LAC 33:1015.B.8.f.ii for container storage, tank systems, and containment buildings and LAC 33:V.2809.B.2 for drip pads) (****Section 9.0****).*

## **4.2 CLOSURE ACTIVITIES**

**Section 4.2.1** contains closure activities required for container storage. **Section 4.2.2** contains closure activities required for tank systems, containment buildings and drip pads. All closure activities shall be conducted to ensure that all closure performance standards (**Section 6.0**) are met. If the LQG cannot meet the closure performance standards for a unit, the LQG will close the unit as a landfill (*i.e.* closed with waste in place) and conduct post-closure care as required by LAC 33:V.1015.B.8.c (**Section 6.3**).

Any HW generated by the LQG during the closure shall be managed in accordance with all applicable standards of LAC 33:V.Subpart 1. This shall include removing any HW contained in these units within 90 days of generation and managing the HW at a duly authorized RCRA subtitle C HW treatment, storage, and disposal facility.

### **4.2.1 CONTAINER STORAGE (LAC 33:V.1015.B.8.d)**

LAC 33:V.1015.B.8.d contains special provisions for closing container storage whether the container storage has temporary or long-term (*i.e.*, fixed, immovable) secondary containment. Accordingly, LAC 33:V.1015.B.8.d.i allows for a presumptive demonstration of closure (**Section 4.2.1.1**) whereby documentation of proper container management during the life of the unit serves to close the unit. However, LAC 33:1015.B.8.d.ii requires additional demonstration efforts of closure, including decontamination procedures and confirmatory sampling and analysis, if all conditions of the presumptive demonstration of closure are not met or if additional demonstration efforts are needed to meet the criteria for future use of the area (**Section 4.2.1.2**).

### **4.2.1.1 PRESUMPTIVE DEMONSTRATION OF CLOSURE (LAC 33:1015.B.8.d.i)**

LAC 33:V.1015.B.8.d.i allows for a presumptive demonstration of closure for container storage. That is, the LQG shall be presumed to have performed due diligence and met the closure performance standards provided certain conditions are met; therefore, extensive decontamination procedures and confirmatory sampling and analysis shall not be required. The LQG shall meet the following conditions for a presumptive demonstration of closure:

1. All information has been placed in the operating record as required by LAC 33:V.1015.B.8.a.ii (**Section 3.2**);
2. All containers were removed from the unit and were either sent off site for treatment or disposal or were transferred elsewhere on site for treatment, storage or disposal as may be authorized by LAC 33:V.Subpart 1; and
3. Weekly inspection logs, summary or other information (*e.g.*, photographs, written documentation of spill clean ups, *etc.*) demonstrate during the entirety of the accumulation period that:
4. There were no spills, leaks or releases of HW or hazardous constituents onto the secondary containment or soil immediately surrounding and beneath the unit, or they were properly cleaned up and managed in order to meet the closure performance standards; and
5. For container storage with long-term (*i.e.*, fixed, immovable) secondary containment, there were no visible signs of significant cracks, gaps, or deterioration of the secondary containment, or they were properly repaired in a timely manner. (Any sumps or engineered swales serving as a receptacle for drainage in the secondary containment should be clearly mentioned.)

4. For container storage with long-term (*i.e.*, fixed, immovable) secondary containment, after removal of all waste a final inspection log/report and other information (*i.e.*, photographs, *etc.*) in the operating record demonstrate that:

* + 1. There was no significant staining or other signs of contamination from HW on the secondary containment, including sumps or engineered swales serving as a receptacle for drainage in the secondary containment; and
    2. There were no visible signs of significant cracks, gaps or deterioration for sumps or engineered swales serving as a receptacle for drainage;

5. Additional demonstration efforts of closure as specified in LAC 33:V.1015.B.8.d.ii are not necessary (**Section 4.2.1.2**); and

6. A signed statement from the LQG’s responsible official is submitted with the subsequent notification as required by LAC 33:V.1015.B.8.b.ii.(b).(i) stating the closure performance standards have been met through the presumptive demonstration of closure requirements.

***NOTE: Additional demonstration efforts of closure shall be required if all conditions are not met or the future use of the area dictates otherwise (see Section 4.2.1.2 below).***

### **4.2.1.2 ADDITIONAL DEMONSTRATION EFFORTS OF CLOSURE (LAC 33:1015.B.8.d.ii)**

It is the responsibility of the LQG to be aware of the closure performance standards (**Section 6.0**) and to make a good faith effort to demonstrate that the closure performance standards have been met for container storage. Additional decontamination procedures and confirmatory sampling and analysis of the final rinsate and/or soil (and groundwater, if deemed necessary) shall be required if either:

1. Any of the conditions of the presumptive demonstration of closure required by LAC 33:V.1015.B.8.d.i (**Section 4.2.1.1**) are not met; or
2. The potential future use of the area requires additional efforts to demonstrate that sufficient decontamination has been achieved (*e.g.*, if a secondary containment area has a potential future use for storing food grade products, then decontamination procedures and confirmatory sampling and analysis of the final rinsate may be required to verify that it has been adequately decontaminated).

Container storage requiring additional demonstration efforts of closure shall meet the prior notification requirements of LAC 33:V.1015.B.8.b.i.(k) (**Section 4.1.3**) and subsequent notification requirements of LAC 33:V.1015.B.8.b.ii.(c) (**Section 4.3**), unless a sufficiency demonstration is approved by the LDEQ in accordance with LAC 33:V.1015.B.8.e (**Section 8.0**). The LDEQ shall review and approve the subsequent notification and closure report submitted by the LQG to ensure that the closure performance standards have been met (**Section 12.3.3**).

### **4.2.2 TANK SYSTEMS, CONTAINMENT BUILDINGS, AND DRIP PADS**

The LQG shall close tank systems, containment buildings and drip pads according to the prior notification that was submitted to the LDEQ, including the information required by LAC 33:V.1015.B.8.b.i.(k) (**Section 4.1.3**). This shall require the following additional demonstration efforts:

1. Decontamination method(s) of all aboveground components – The LQG shall decontaminate and/or remove all contaminated equipment, structures, and containment system components, and shall ensure all HW residues are removed. This shall include removing all contaminated soil beneath and around the unit, bases, concrete pads, structures, and contaminated equipment.
2. Confirmatory sampling and analysis of rinsate (See **Section 7.0** regarding special provisions for managing debris and scrap metal.);
3. Confirmatory sampling and analysis of soil immediately surrounding and beneath the unit; and
4. Confirmatory sampling and analysis of groundwater, if deemed necessary.

## **4.3 SUBSEQUENT NOTIFICATION OF CLOSURE OF A FACILITY (LAC 33:V.1015.B.8.b.ii)**

As required by LAC 33:V.1015.B.8.b.ii, the LQG shall notify the LDEQ within 90 days after closing the facility indicating whether the closure performance standards have been met. This subsequent notification shall consist of the HW-1 form along with a required cover letter and supplemental information as indicated in **Sections 4.3.1 through 4.3.3** below.

See **Section 12.1.1** for information regarding the submittal of the HW-1 form with the required cover letter and supplemental information.

### **4.3.1 INFORMATION REQUIRED FOR ALL CLOSURES (LAC 33:V.1015.B.8.b.ii.(a))**

Each subsequent notification of facility closure shall contain a cover letter with the following supplemental information (Item 1):

1. Information included in the prior notification required by LAC 33:V.1015.B.8.b.i.(a)-(i) (**Section 4.1**);

### **4.3.2 INFORMATION REQUIRED FOR CONTAINER STORAGE (LAC 33:V.1015.B.8.b.ii.(b))**

In addition to Item 1 in **Section 4.3.1**, Items 2 and 3 shall be addressed in the cover letter accompanying the subsequent notification for any facility closure that includes units that are container storage being closed under a presumptive demonstration of closure in LAC 33:V.1015.B.8.d.i (**Section 4.2.1.1**).

1. A signed statement from the responsible official stating that the closure performance standards have been met through the presumptive demonstration of closure requirements of LAC 33:V.1015.B.8.d.i; and
2. Documentation for any sufficiency demonstrations approved under LAC 33:V.1015.B.8.e (**Section 8.0**);

***NOTE: If the closure of the container storage required additional demonstration efforts of closure in accordance with LAC 33:V.1015.B.8.d.ii (Section 4.2.1.2), the LQG shall include information required by Section 4.3.3 below instead.***

See **Section 12.3.2** regarding the LDEQ’s review of the subsequent notification for a presumptive demonstration of closure for container storage.

**4.3.3 CLOSURE REPORT REQUIRED FOR TANK SYSTEMS, CONTAINMENT BUILDINGS, AND DRIP PADS (LAC 33:V.1015.B.8.b.ii.(c))**

In addition to Item 1 in **Section 4.3.1**, Items 4 through 8 shall be addressed in a closure report accompanying the subsequent notification for any facility closure that includes units that are tank systems, containment buildings, or drip pads (or container storage requiring additional demonstration efforts of closure under LAC 33:V.1015.B.8.d.ii).

1. Brief overview of closure activities;
2. Details of the closure activities including:
3. Removal of final waste, contaminated debris, and contaminated soil (including any management of debris or scrap metal pursuant to **Section 7.0**);
4. Decontamination procedures;
5. Analytical results of the rinsate compared to the numerical closure performance standards in **Section 6.2.1** (*i.e.*, potable water standards); and
6. Analytical results of the soil (and groundwater, if deemed necessary) compared to the numerical closure performance standards in **Section 6.2.2**:
   1. The numerical closure performance standards are the applicable limiting screening option standards as defined by RECAP in LAC 33:I.Chapter 13;

For soil, the residential screening standard or industrial screening standard with conveyance notice may be used. (*NOTE: Submittal of conveyance notice is required if industrial screening standards are used.*)

* 1. In lieu of conducting confirmatory soil (and groundwater, if deemed necessary) sampling and analysis for closure, the large quantity generator may state that the closure performance standards for soil (and groundwater, if deemed necessary) will be met through RECAP and remedial activities (See **Section 9.0** – LAC 33:V.1015.B.8.f.ii for container storage, tank systems, and containment buildings and LAC 33:V.2809.B.2 for drip pads.);

1. Supporting documentation including:
   1. Sampling and analysis protocol/methods, locations and depths, and borehole logs, as applicable;
   2. Analytical lab data reports; and
   3. Supporting documentation deemed relevant by the large quantity generator (*e.g.*, photographs, manifests, description of any other actions relevant to the closure not otherwise mentioned, *etc.*);
2. Documentation for any sufficiency demonstrations approved under LAC 33:V.1015.B.8.e (**Section 8.0**); and
3. A written statement signed by the responsible official stating that the closure performance standards have been met.

See **Section 12.3.3** regarding the LDEQ’s review and approval of the subsequent notification and closure report to ensure that the closure performance standards and all other regulatory requirements have been met.

**5.0 CLOSURE EXTENSION REQUESTS (LAC 33:V.1015.B.8.b.iii)**

In accordance with LAC 33.V.1015.B.8.b.iii, the LQG may request additional time to close and meet the closure performance standards. The extension request shall be submitted on the HW-1 form to the LDEQ within 75 days of the prior notification being submitted in accordance with LAC 33:V.1015.B.8.b.i. Justification shall also be submitted with the request.

See **Section 12.1.1** for information regarding submittal of the HW-1 form.

*NOTE: In accordance with LAC 33:V.1015.B.8.k.iii.(b).(i),* ***Section 13.0*** *contains different extension request procedures for closures initiated prior to July 20, 2020, the adoption date of the Generator Improvements Rule by LDEQ.*

# **6.0 CLOSURE PERFORMANCE STANDARDS (LAC 33:V.1015.B.8.c)**

The closure performance standards required in LAC 33:V.1015.B.8.c for closure of a unit by a LQG are qualitative (*i.e.* general). (See LQG closure regulations in **Attachment 1** for the full text of the closure performance standards.) A summary of the closure performance standards is found in **Section 6.1** below. The numerical closure performance standards (*i.e.*, the analytical targets) are found in **Section 6.2**. **Section 6.2.1** contains the numerical closure performance standards for rinsate; **Section 6.2.2** contains the numerical closure performance standards for soil (and groundwater, if deemed necessary). **Section 6.3** discusses the requirements for closure as a landfill (*i.e.*, closed with waste in place) by the LQG if the closure performance standards are not met.

## **6.1 SUMMARY OF CLOSURE PERFORMANCE STANDARDS**

The closure performance standards for container storage, tank systems, and containment buildings are found at LAC 33:V.1015.B.8.c.i. Most importantly, the regulations require these units to be closed in a manner that is protective of human health and the environment. In doing so, all HW and any contamination (*i.e.*, residues) shall be removed or decontaminated. Closures shall minimize the need for further maintenance, and minimize the post-closure escape of HW into the environment. Finally, all waste generated in the process of closing shall be properly managed in accordance with all applicable regulations, including but not limited to, the HW regulations (LAC 33:V.Subpart 1).

The closure performance standards for drip pads are found at LAC 33:V.1015.B.8.c.ii, and are essentially the same as those for container storage, tank systems, and containment buildings. However, due to the nature of how drip pads are regulated and how HW is managed in drip pads, LAC 33:V.1015.B.8.c.ii references the closure performance standards in LAC 33:V.2809.

## **6.2 NUMERICAL CLOSURE PERFORMANCE STANDARDS (LAC 33:V.1015.B.8.b.ii.(c).(ii))**

As required by LAC 33:V.1015.B.8.b.ii.(c).(ii), analytical results of confirmatory sampling for tank systems, containment buildings, and drip pads (and container storage requiring additional demonstration efforts of closure) shall be compared to the appropriate numerical closure performance standards (*i.e.*, the analytical targets and goal of the closure effort).

### **6.2.1 CONFIRMATORY RINSATE SAMPLING AND ANALYSIS (LAC 33:V.1015.B.8.b.ii.(c).(ii).[c])**

This section provides the requirements for the collection of rinsate samples and using potable water standards as closure performance standards for tank systems, containment buildings, and drip pads (and container storage requiring additional demonstration efforts of closure).

As required by LAC 33:V.1015.B.8.b.ii.(c).(ii).[c], rinsate analytical results must meet drinking water standards (*i.e.*, Maximum Contaminant Levels [MCLs]). The Drinking Water Standards and Health Advisories Tables can be found on USEPA’s website (<https://www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations>). Application of the drinking water standards as closure performance standards will ensure that all closures of units are closed to protect human health and the environment.

If a Drinking Water Standard or Health Advisory is not available for a constituent, the USEPA Regional Screening Level (RSL) for tap water (i.e. “drinking water”) shall be used. These RSLs for tap water are available in the RSL Summary Table (<https://semspub.epa.gov/work/HQ/400750.pdf>) on the USEPA’s webpage for Risk Assessment – RSLs (<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>). (*BACKGROUND: The RSLs webpage is the source of risk-based screening levels for all of the USEPA regions. The RSL tables include comparison values for residential tap water [i.e., drinking water]. The risk-based screening levels are calculated using the latest risk assessment methods, toxicity values, default exposure assumptions and physical and chemical properties.*)

See **Section 7.0** (Special Provisions for Managing Debris and Scrap Metal). **Section 7.1** discusses options regarding debris destined for disposal. **Section 7.2** discusses the closure performance standards for scrap metal destined for recycling.

### **6.2.2 CONFIRMATORY SOIL AND GROUNDWATER SAMPLING AND ANALYSIS (LAC 33:V.1015.B.8.b.ii.(c).(ii).[d])**

This section provides the requirements for the collection of soil (and groundwater, if deemed necessary) samples and using LAC 33:I.Chapter 13, (RECAP), Screening Option Soil and Groundwater Screening Standards as closure performance standards for units that are tank systems, containment buildings and drip pads (and container storage requiring additional demonstration efforts of closure).

The RECAP Screening Standards are listed in the RECAP document for constituents frequently encountered at release sites. If soil (and groundwater, if deemed necessary) screening standards are not listed in RECAP for a chemical of concern (COC), a screening standard shall be calculated in accordance with the guidelines in RECAP. All requirements set forth in RECAP for the assessment of an area of concern under the Screening Option shall be met. Additional requirements include, but may not be limited to, requirements pertaining to data collection (sample collection protocols and data quality/evaluation); identification of the area of investigation concentration for soil; identification of the groundwater compliance concentration and point of exposure for a groundwater 1 zone; land use; institutional controls; demonstration of compliance with RECAP standards; and issues pertaining to self-implementation of RECAP. Application of the RECAP Screening Option as closure performance standards will ensure that all units are closed to protect human health and the environment.

For soil, the residential screening standard or industrial screening standard with conveyance notice may be used. (*NOTE: Submittal of conveyance notice is required if industrial screening standards are used.*)

## **6.3 CLOSURE AS A LANDFILL (*I.E.*, CLOSURE WITH WASTE IN PLACE) (LAC 33:V.1015.B.8.c.i.(c) or 2809.B.1)**

The unit is considered to be a landfill if the LQG cannot demonstrate: 1) that the wastes and contamination were removed or decontaminated; or 2) that the remaining contaminant levels are protective of human health and the environment. The LQG shall then close the unit (*i.e.*, close with waste in place) and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (LAC 33:V.4501.B and D for container storage, tank systems, and containment buildings; LAC 33:V.2521 for drip pads). In addition, for the purposes of closure, post-closure, and financial responsibility, such a unit is then considered to be a landfill, and the LQG shall meet all of the requirements for landfills (LAC 33:V.Chapter 43.Subchapters F and G for container storage, tank systems, and containment buildings; LAC 33:V.Chapters 35 and 37 for drip pads).

**7.0 SPECIAL PROVISIONS FOR MANAGING DEBRIS AND SCRAP METAL**

The special provisions contained in **Section 7.1** (Debris Destined for Disposal) and **Section 7.2** (Scrap Metal Destined for Recycling) are self-implemented by the LQG and do not require approval from the LDEQ with the exception of Item 3 in **Section 7.1** (*i.e.*, determination by LDEQ that a debris does not contain HW).

## **7.1 DEBRIS DESTINED FOR DISPOSAL (LAC 33:V.109.*hazardous waste*.6)**

LAC 33:V.2203.A defines *debris* as solid material exceeding a 60-mm particle size that is intended for disposal and that is a manufactured object, or plant or animal matter, or natural geologic material. Certain materials are excluded from this definition including: 1) materials (*e.g.*, batteries) for which a specific treatment standard is provided in LAC 33:V.Chapter 22.Subchapter A; 2) process and treatment residuals (*e.g.*, slag, sludge); and 3) HW containers that are not ruptured retaining at least 75 percent of their original volume. A mixture of debris with other material is subject to regulation as debris if the mixture is comprised primarily of debris.

Debris generated from the closure of a tank system, containment building, drip pad under **Section 4.2.2** or container storage under **Section 4.2.1.2** can be hazardous if it: 1) exhibits a characteristic (*e.g.*, toxicity), or 2) is contaminated with a listed HW. Therefore, LQGs have three options for managing debris generated from closure of the unit:

1. Conduct the closure activities required by **Section 4.2.2,** including decontamination and confirmatory sampling and analysis of rinsate for the debris, and meet the numerical closure performance standards for confirmatory sampling and analysis of rinsate discussed in **Section 6.2.1**. Debris not meeting the closure performance standards is considered hazardous debris under LAC 33:V.2203.A and must be managed accordingly.
2. Use the debris-specific, technology-based Alternative Treatment Standards for Hazardous Debris specified in LAC 33:V.2299.Appendix, Table 8 and meet the debris-specific performance standards specified therein. Most of these performance standards require treatment to a clean debris surface (*i.e.*, when viewed without magnification, the surface shall be free of all visible contaminated soil and HW except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than five percent of each square inch of surface area). Accordingly, in lieu of meeting the numerical closure performance standards for confirmatory sampling and analysis of rinsate, the performance-based extraction technologies (*i.e.*, physical, chemical, or thermal) or destruction technologies (*i.e.*, biological, chemical, or thermal) shall serve to demonstrate that the debris has been properly decontaminated. (This alternate demonstration does not apply to immobilization technologies [*i.e.*, macroencapsulation, microencapsulation, or sealing] listed in Table 8.) As specified in LAC 33:V.109.*hazardous waste*.6 the treated debris would be considered to no longer contain hazardous waste and would not be subject to the HW regulations (LAC 33:V.Subpart 1) provided the debris does not exhibit a HW characteristic identified in LAC 33:V.4903.B-E.
3. Request a determination from LDEQ that the debris does not contain HW as allowed for by LAC 109.*hazardous waste*.6.b. In considering the extent of the contamination, the LDEQ may require the LQG to propose site-specific decontamination methods and a way to evaluate whether decontamination is successful.

**7.2 SCRAP METAL DESTINED FOR RECYCLING (LAC 33:V.105.D.1.m & 4105.A.1.b)**

The closure performance standards of **Section 6.0** along with decontamination and/or confirmatory rinsate sampling and analysis are not applicable for scrap metal destined for recycling. This allowance is only applicable to scrap metal that is recycled. The LQG must maintain documentation (*e.g.*, sales agreements, shipping papers, photos, *etc.*) proving the final destination and disposition of the material.

LAC 33:V.109 defines *scrap metal* as bits and pieces of metal parts (*e.g.*, bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (*e.g.*, radiators, scrap automobiles, railroad box cars), which when worn or superfluous can be recycled. Scrap metal destined for recycling can fall into one of the following categories:

1. Excluded scrap metal (*i.e.*, certain defined scrap metal, as defined below, that is excluded from the definition of solid waste under LAC 33:V.105.D.1.m); or

2. Other scrap metal *(i.e.*, other types of scrap metal not classified as excluded scrap metal that would otherwise be considered a solid waste, but are exempt from the HW regulations [LAC 33:V.Subpart 1] due to the recycling exemption under LAC 33:V.4105.A.1.b).

*Excluded scrap metal* is defined as processed scrap metal, unprocessed home scrap metal, and unprocessed prompt scrap metal. *Processed scrap metal* is defined as scrap metal that has been manually or physically altered to either separate it into distinct materials to enhance economic value or to improve the handling of materials. Process scrap metal includes, but is not limited to, scrap metal which has been baled, shredded, sheared, chopped, crushed, flattened, cut, melted, or separated by metal type (*i.e.*, sorted), and fines, drosses, and related materials which have been agglomerated. *Home scrap metal* is defined as scrap metal generated by steel mills, foundries, and refineries such as turnings, cuttings, punchings, and borings. *Prompt scrap metal* is defined as scrap metal generated by the metal working/fabrication industries and includes such scrap metal as turnings, cuttings, punchings, and borings. Prompt scrap metal is also known as industrial or new scrap metal.

# **8.0 SUFFICIENCY DEMONSTRATION (LAC 33:V.1015.B.8.e)**

As specified in LAC 33:V.1015.B.8.e, the LQG may petition the LDEQ prior to or during closure to meet the closure performance standards through alternate, reduced, or eliminated requirements for closure notifications. These requirements may include, but are not limited to, documentation, submittal information, decontamination procedures, confirmatory sampling and analysis on the rinsate, and confirmatory sampling and analysis on the soil (and groundwater, if deemed necessary) immediately surrounding and beneath the unit.

**A sufficiency demonstration shall not alleviate the large quantity generator’s requirement to meet the closure performance standards (Section 6.0), but rather demonstrate how the closure performance standards have been met.**

*NOTE: A sufficiency demonstration is not required in order for the LQG to manage debris and scrap metal under* ***Section 7.0*** *(Special Provisions for Managing Debris and Scrap Metal).*

The following is a partial list of factors the LDEQ may consider in approving a sufficiency demonstration: accumulation time period; quantity and nature of the HW; containment design and condition; proper operations and maintenance; any additional protections (*e.g.*, leak detection, *etc.*); soil and groundwater classification; overall compliance history; existing or future corrective action measures that include the unit and/or the facility (*e.g.*, site-wide corrective action being implemented through an enforceable agreement with the LQG, or an order of the LDEQ specifically includes the unit and/or the facility); and any other relevant information requested by the LDEQ. Additional factors may be considered, including, but not limited to: paperwork documentation, photographic documentation, results of confirmatory sampling and analysis, additional demonstrations, or maintenance and/or operational logs.

A few example scenarios for a sufficiency demonstration include, but are not limited to: decontamination might not be necessary for a tank system that accumulated diluted wastewater; confirmatory rinsate sampling and analysis might not be necessary for a tank system that will receive a HW permit to manage the same waste; and confirmatory soil and groundwater sampling and analysis might not be required for a tank system that was used for a one-time event.

A sufficiency demonstration will only be approved by the LDEQ if merited by the supporting information and site-specific conditions. The LDEQ’s approval of a sufficiency demonstration may require additional or alternate closure efforts or verification from the LQG depending on site-specific conditions.

Upon approval by the LDEQ, the LQG shall incorporate the relevant information of the sufficiency demonstration into the closure notification requirements, as applicable. The LQG shall maintain all documentation in support of the sufficiency demonstration.

# **9.0 Risk Evaluation/Corrective Action Program (RECAP) & Remedial Activities (LAC 33:V.1015.B.8.f)**

If there is suspected or confirmed contamination in the environmental media (*i.e.*, soil or groundwater) immediately surrounding and/or beneath the unit as demonstrated by the confirmatory sampling and analytical results specified in LAC 33:V.1015.B.8.b.ii.(c).(ii).[d] or by other evidence, risk evaluation and/or remedial activities may be conducted by the LQG in order to demonstrate that the closure performance standards have been met.

The risk evaluation and/or remedial activities may be conducted, either in addition to, or instead of, the required confirmatory sampling and analysis required for closure.

The risk evaluation and/or remedial activities shall be:

1. In accordance with RECAP as referenced in LAC 33:I.Chapter 13 (RECAP);
2. Under the direction of the Remediation Division; and
3. Subject to all cost recovery provisions of the LDEQ.

A site investigation work plan shall be submitted to the Remediation Division in accordance with Appendix B of RECAP.

The risk evaluation shall demonstrate that the closure is protective of human health and the environment and that post-closure care is not necessary in order for LAC 33:V.1015.B.8.c.i.(c) or 2809.B.1 (*i.e.*, **Section 6.3** - Closure as a Landfill) not to apply.

# **10.0 CONTAMINATION FROM OTHER SOURCES (LAC 33:V.1015.B.8.g)**

The LDEQ may conditionally approve the closure of a unit whereby the LQG agrees in writing to address contamination remaining in the environmental media (*i.e.*, soil or groundwater) through additional remedial activities under the direction of the Remediation Division. The LQG shall successfully demonstrate that either: 1) the contamination is from a source other than HW managed in the unit; or 2) the contamination caused by the HW managed in the unit is comingled with contamination caused by another source.

The LDEQ may require financial assurance for such remedial activities including closure and post closure, if applicable, depending on the nature and extent of contamination.

# **11.0 Notification of Newly-Identified Release (LAC 33:V.1015.B.8.h)**

Any newly identified release of HW into the environment must be reported either to the Louisiana State Police, Department of Public Safety in accordance with LAC 33:V.105.J.1 (Emergency Conditions) or SPOC in accordance with LAC 33:V.105.J.2 (Nonemergency Conditions). LAC 33:V.105.J.1 and 2 require such notifications to be made in accordance with LDEQ’s Office of the Secretary regulations (LAC 33:I.Chapter 39 - Notification Regulations and Procedures for Unauthorized Discharges).

# **12.0 LDEQ OVERSEEING CLOSURE NOTIFICATIONS**

**Section 12.1** details the various LDEQ contacts associated with the closure notifications. The Public Participation and Permit Support Services Division is the initial contact for receiving the closure notifications (HW-1 form with required cover letter and supplemental information), and forwards the closure notifications to the Waste Permits Division (**Section 12.1.1**). The Waste Permits Division is responsible for reviewing the closure notifications and receiving other closure documents (**Section 12.1.2**). The Remediation Division is responsible for overseeing risk evaluation and/or remedial activities (**Section 12.1.3**).

**Section 12.2** details LDEQ inspections related to LQG closures.

**Section 12.3** (LDEQ Review of the Closure Notifications) details the level of review of the closure notifications by the Waste Permits Division. The cursory review of prior notifications is discussed in **Section 12.3.1**. The cursory review of subsequent notifications for a presumptive demonstration of closure for container storage is discussed in **Section 12.3.2**. The approval of subsequent notifications and closure reports for tank systems, containment buildings, and drip pads (and container storage requiring additional demonstration efforts) is discussed in **Section 12.3.3**.

## **12.1 CONTACT INFORMATION & HOW TO SUBMIT DOCUMENTS**

### **12.1.1 RECEIPT OF CLOSURE NOTIFICATIONS (HW-1 FORM) - PUBLIC PARTICIPATION & PERMIT SUPPORT SERVICES DIVISION**

The Public Participation and Permit Support Services Division is responsible for receiving the closure notification (HW-1 form with required cover letter and supplemental information), placing the document in LDEQ’s electronic filing system (EDMS), and entering the data into USEPA’s database (RCRA Info). The Public Participation and Permit Support Services Division will forward the closure notification to the Waste Permits Division for review as specified in **Section 12.3**.

Along with a required cover letter and supplemental information, the regulations require closure notifications to be made using the most current HW-1 form approved by the LDEQ. The HW-1 form can be found on the LDEQ’s website (<https://www.deq.louisiana.gov/page/hazardous-waste>). See LAC 33:V.105.A and 1017 for additional information on the HW-1 form and notification requirements. (*NOTE: This Louisiana-specific form shall be used in lieu of USEPA’s RCRA Subtitle C Site Identification Form [i.e., USEPA’s Form 8700‐12]. Although the HW-1 form is very similar to USEPA’s Form 8700-12, they are not the same.*)

Closure notifications requiring the use of the HW-1 form with required cover letter and supplemental information, include the following:

1. **Section 3.1** (Optional Notification of Closure of a Unit) - LAC 33:V.1015.B.8.a.i;
2. **Section 4.1** (Prior Notification of Closure of a Facility) - LAC 33:V.1015.B.8.b.i;
3. **Section 4.3** (Subsequent Notification of Closure of a Facility) - LAC 33:V.1015.B.8.b.ii;
4. **Section 5.0** (Closure Extension Requests) - LAC 33:V.1015.B.8.b.iii; and
5. **Section 13.0** (Closures Initiated prior to Promulgation of Rule, July 20, 2020) - LAC 33:V.1015.B.8.k. (*NOTE: In lieu of the HW-1 form, LDEQ’s Certification of No Hazardous Waste Activity form may be used.*)

The HW-1 form with required cover letter and supplemental information shall be sent to the Public Participation and Permit Support Services Division - Notifications and Accreditations Section at the following address:

Louisiana Department of Environmental Quality

Office of Environmental Services

Public Participation and Permit Support Services Division

Notifications & Accreditations Section

Post Office Box 4313

Baton Rouge, LA 70821-4313

Phone: 225.219.1352

Contact the Public Participation and Permit Support Services Division - Notifications and Accreditations Section with questions regarding the HW-1 form. Contact the Waste Permits Division with technical questions regarding contents of the cover letter and supplemental information.

### **12.1.2 REVIEW OF CLOSURE NOTIFICATIONS AND RECEIPT OF RELATED DOCUMENTS – WASTE PERMITS DIVISION**

The Waste Permits Division is responsible for overseeing the LQG closures. This includes reviewing the closure notifications (HW-1 form with required cover letter and supplemental information) listed in **Section 12.1.1** forwarded by the Public Participation and Permit Support Services Division and receipt of other related documents submitted by the LQG as part of the closure process. Related documents to LQG closures include the following:

1. General inquiries regarding LQG closures;
2. **Section 7.1** (Debris Destined for Disposal) – request for determination under LAC 33:V.109.hazardous waste.6.b that certain debris does not contain HW;
3. **Section 8.0** (Sufficiency Demonstration) - LAC 33:V.1015.B.8.e;
4. **Section 10.0** (Contamination from Other Sources) - LAC 33:V.1015.B.8.g; and
5. LQG Responses to LDEQ requests for additional information (see **Section 12.3** [LDEQ Review of the Closure Notifications]).

Documents related to LQG closures listed above in Items 1 through 5 and any technical questions regarding LQG closures should be directed to:

Office of Environmental Services

Waste Permits Division

P.O. Box 4313

Baton Rouge, Louisiana 70821-4313

Phone: 225.219.3070

**12.1.3 OVERSEEING RISK EVALUATION AND/OR REMEDIAL ACTIVITIES – REMEDIATION DIVISION**

The Remediation Division will oversee risk evaluation and/or remedial activities (see **Section 9.0**), as may be necessary for any LQG closure.

Submittals regarding risk evaluation and/or remedial activities and any related technical questions should be directed to:

Office of Environmental AssESSMENT

REMEDIATION Division

P.O. Box 4314

Baton Rouge, Louisiana 70821-4314

Phone: 225.219.3386

**12.2 LDEQ INSPECTION OF CLOSURES (LAC 33:V.1015.B.8.i)**

LDEQ personnel may inspect each unit before, during, or after closure activities. The LDEQ may inspect all areas where waste was stored, the area surrounding the units, the soil beneath the units, all records related to the units, and any applicable analytical results. Closure inspections may be performed to ensure that all waste material is removed, no visible contamination remains, and all relevant closure activities have been conducted.

*NOTE: The Waste Permits Division may coordinate with LDEQ’s Surveillance Division to assist with the closure inspections.*

## **12.3 LDEQ REVIEW OF CLOSURE NOTIFICATIONS**

### **12.3.1 LDEQ REVIEW OF PRIOR NOTIFICATIONS (LAC 33:V.1015.B.8.b.i)**

The Waste Permits Division will perform a cursory review for completeness and accuracy of all prior notifications of closure submitted by the LQG under LAC 33:V.1015.B.8.b.i (**Section 4.1**). The Waste Permits Division will inform the LQG if any issues are discovered during the review.

### **12.3.2 LDEQ REVIEW OF PRESUMPTIVE DEMONSTRATIONS OF CLOSURE (LAC 33:V.1015.B.8.b.ii.(b))**

Each subsequent notification for a presumptive demonstration of closure of container storage submitted by the LQG under LAC 33:V.1015.B.8.b.ii.(b) (**Section 4.3.2**) will receive a cursory review by the Waste Permits Division for completeness and accuracy. The Waste Permits Division will inform the LQG if any issues are discovered during the review. Should the documentation be determined to be incomplete or inaccurate, the Waste Permits Division may require the LQG to submit additional information, perform additional demonstration efforts (**Section 4.2.1.2**), or petition for a sufficiency demonstration (**Section 8.0**).

*NOTE: Because a presumptive demonstration of closure for container storage is intended to be limited and mostly self-implementing by the LQG, there is no requirement for the LQG to submit a closure report with the subsequent notification [****Section 4.3.2****] for LDEQ approval.*

### **12.3.3 LDEQ APPROVAL OF CLOSURE REPORTS (LAC 33:V.1015.B.8.b.ii.(c))**

Each subsequent notification of closure submitted by the LQG for a tank system, containment building or drip pad (or container storage requiring additional demonstration efforts) is required by LAC 33:V.1015.B.8.b.ii.(c) to have an accompanying closure report (**Section 4.3.3**). The subsequent notification and closure report are subject to full review and approval by the Waste Permits Division. The Waste Permits Division shall ensure that the closure performance standards and all other regulatory requirements have been met. The Waste Permits Division will inform the LQG if any issues are discovered during the review. The Waste Permits Division may require the LQG to submit additional information, perform additional demonstration efforts (**Section 4.2.1.2**), or petition for a sufficiency demonstration (**Section 8.0**). An approval letter will be sent to the LQG upon concurrence by the Waste Permits Division that all closure requirements have been met.

# **13.0 CLOSURES INITIATED PRIOR TO PROMULGATION OF RULE (LAC 33:V.1015.B.8.k)**

A LQG that initiated closure prior to July 20, 2020, shall either:

1. Comply with the notification requirements (**Sections 3.0 and 4.0**); or
2. Perform the following:
   1. Complete all closure activities and meet the closure performance standards by January 16, 2021, unless such deadline is extended in writing by the Waste Permits Division upon proper showing by the LQG that such extension is warranted; and
   2. Submit a Certification of No Hazardous Waste Activity form, available on the LDEQ’s website (<https://www.deq.louisiana.gov/page/hazardous-waste>), to the Waste Permits Division no later than 30 days after completion of all closure activities. (The LDEQ may conduct an inspection of the unit(s) in order to verify that the closure performance standards were met.)

For purposes of this section, “*initiation of closure*” shall consist of the LQG removing the final volume of HW from the unit(s) with the intent of no longer using the unit(s) for accumulation of HW.

A LQG shall meet the closure performance standards (**Section 6.0**) regardless of when closure was initiated.

# **ATTACHMENT 1**

# **LAC 33:V.1015.B.8**

# **(LQG CLOSURE REGULATIONS)**

**Following is the full text of the hazardous waste regulations regarding closure of a central accumulation area (*i.e.*, “unit”) by a large quantity generator (LQG):**

8. Closure. These regulations regarding closure are applicable to large quantity generators accumulating hazardous waste in a central accumulation area (i.e., container storage [e.g., drums, roll-off boxes, etc.], tank systems, drip pads, or containment buildings) at a facility. The closure requirements of this Paragraph do not apply to satellite accumulation areas. Except as allowed for by Subparagraph B.8.k of this Paragraph (i.e., Notification requirements for closures initiated prior to July 20, 2020), prior to closing a central accumulation area, or prior to closing the facility, the large quantity generator shall meet the following conditions.

a. Notification of Closure of a Central Accumulation Area. A large quantity generator shall perform one of the following when closing a central accumulation area.

i. The large quantity generator shall notify the Office of Environmental Services following the procedures in Subparagraph B.8.b of this Paragraph in order to meet the closure performance standards of Clause B.8.c.i of this Paragraph for container storage, tank systems, and containment buildings or Clause B.8.c.ii for drip pads. If the central accumulation area is subsequently reopened, the large quantity generator shall update the notice in the operating record.

ii. The large quantity generator shall place a notice in the operating record to document the closure of the central accumulation area within 30 days after closure of the unit. If the central accumulation area is subsequently reopened, the large quantity generator shall update the notice in the operating record. Information required as part of the notice in the operating record shall include:

(a). reason for closure;

(b). name and/or other unit designation;

(c). description of the type of waste accumulation (e.g., single roll-off box accumulating solids, tank system with secondary containment, etc.);

(d). basic design and construction information for any unit that is a tank system, containment building, or drip pad;

(e). basic design and construction information for secondary containment (e.g., long-term [i.e., fixed, immovable] or temporary, materials of construction, coating, etc.) (The information shall include whether there are any sumps or engineered swales serving as a receptacle for drainage in the secondary containment.);

(f). location within the facility (at a minimum, a general location relative to a fixed building or unit along with cardinal direction and distance; a map may be included; geographic coordinates are required for long-term [i.e., fixed, immovable] units);

(g). period of time of use;

(h). description of the hazardous waste and waste codes (waste profiles may be included);

(i). documentation showing how the last stored hazardous waste was managed (e.g., copies of final manifests or written/signed notation if sent off-site for treatment or disposal; written/signed notation if transferred elsewhere on-site for treatment, storage, or disposal as may be authorized by LAC 33:V.Subpart 1);

(j). for a central accumulation area consisting of container storage, the following information to support a presumptive demonstration of closure in accordance with Clause B.8.d.i of this Paragraph:

(i). weekly inspection logs, summary, or other information (e.g., photographs, written documentation of spill clean ups, etc.) to demonstrate during the entirety of the accumulation period that:

[a]. there were no spills, leaks, or releases of hazardous waste or hazardous constituents onto the secondary containment or soil immediately surrounding and beneath the unit, or they were properly cleaned up and managed in order to meet the closure performance standards; and

[b]. for container storage with long-term (i.e., fixed, immovable) secondary containment, there were no visible signs of significant cracks, gaps, or deterioration of the secondary containment, or they were properly repaired in a timely manner. Any sumps or engineered swales serving as a receptacle for drainage in the secondary containment should be clearly mentioned;

(ii). for container storage with long-term (i.e., fixed, immovable) secondary containment, after removal of all waste a final inspection log/report and other information (e.g., photographs, etc.) to demonstrate that:

[a]. there was no significant staining or other signs of contamination from hazardous waste on the secondary containment, including sumps or engineered swales serving as a receptacle for drainage in the secondary containment; and

[b]. there were no visible signs of significant cracks, gaps, or deterioration for sumps or engineered swales serving as a receptacle for drainage;

(k). any information that might be needed in support of a sufficiency demonstration (see Subparagraph B.8.e of this Paragraph); and

(l). any other information that might be deemed relevant by the large quantity generator (e.g., documentation regarding additional activities necessary to meet the closure performance standards, photographs, manifests, etc.).

b. Notification of Closure of a Facility, or Optional Notification of Closure of a Central Accumulation Area. A large quantity generator shall provide the following notification for closure of the facility:

i. notify the Office of Environmental Services using the department’s Notification of Hazardous Waste Activity Form (HW-1) no later than 30 days prior to closing the facility, and include the following supplemental information in a cover letter:

(a). contact information for person responsible for closure;

(b). reason for closure;

(c). list of units being closed including names and/or other unit designations;

(d). for each unit, description of the type of waste accumulation (e.g., single roll-off box accumulating solids, tank system with secondary containment, etc.);

(e). basic design and construction information for any unit that is a tank system, containment building, or drip pad;

(f). for each unit, basic design and construction information for secondary containment (e.g., long-term [i.e., fixed, immovable] or temporary, materials of construction, coating, etc.) (The information shall include whether there are any sumps or engineered swales serving as a receptacle for drainage in the secondary containment.);

(g). for each unit, location within the facility (at a minimum, a general location relative to a fixed building or unit along with cardinal direction and distance; a map may be included; geographic coordinates are required for long-term [i.e., fixed, immovable] units);

(h). period of time of use for each unit;

(i). for each unit, description of the hazardous waste and waste codes (waste profiles may be included);

(j). for any unit being closed that is container storage, provide either:

(i). a statement that the unit will be closed in accordance with Clause B.8.d.i of this Paragraph (presumptive demonstration of closure); or

(ii). supplemental information required by Subclause B.8.b.i.(k) of this Paragraph below; and

(k). for any units being closed that are tank systems, containment buildings, drip pads, or container storage requiring additional demonstration efforts of closure under Clause B.8.d.ii of this Paragraph, provide the following:

(i). decontamination method(s) of aboveground components;

(ii). protocol/methods and list of constituents for confirmatory sampling and analysis of rinsate;

(iii). protocol/methods, list of constituents, and locations and depths for confirmatory sampling and analysis of soil (and groundwater, if deemed necessary) immediately surrounding and beneath the unit considering the following:

[a]. soil sampling shall consider random locations and specific locations under the containment including sumps, or engineered swales serving as a receptacle for drainage, and areas where there may have been visible signs of significant staining, cracks, gaps or other deterioration;

[b]. if there is confirmed soil contamination resulting from a release of hazardous waste or hazardous constituents from the central accumulation area, or if there is reason to believe that the groundwater may have been impacted by a release of hazardous waste or hazardous constituents from the central accumulation area, the large quantity generator shall conduct confirmatory groundwater sampling and analysis. The extent of any confirmatory groundwater sampling and analysis shall be based upon site-specific conditions, including but not limited to: depth to the water table; information regarding any suspected or known contamination in the environmental media; potential mobility of the constituents; site-specific conditions that may encourage constituent mobility; and the extent and effectiveness of any previous response actions; and

[c]. in lieu of confirmatory sampling and analysis of soil (and groundwater, if deemed necessary), the large quantity generator may state its intent to demonstrate that the closure performance standards for soil and groundwater have been met through the Risk Evaluation/Corrective Action Program (RECAP) and remedial activities (See Clause B.8.f.ii of this Paragraph for container storage, tank systems, and containment buildings and LAC 33:V.2809.B.2 for drip pads); and

ii. notify the Office of Environmental Services using the department’s Notification of Hazardous Waste Activity Form (HW-1) within 90 days after closing the facility that it has complied with the closure performance standards of Subparagraph B.8.c of this Paragraph. If the facility cannot meet the closure performance standards of Subparagraph B.8.c of this Paragraph, the facility shall notify the Office of Environmental Services using the department’s Notification of Hazardous Waste Activity Form (HW-1) that it will close as a landfill (i.e., close with waste in place) under 4501.B and D in the case of container storage, tank system or containment building unit(s). A facility with drip pads shall notify using the department’s Notification of Hazardous Waste Activity Form (HW-1) that it will close under the standards of LAC 33:V.2809.B. The following supplemental information shall be included in a cover letter with any notification submitted under this Clause:

(a). information included in the prior notification of closure as delineated in Subclauses B.8.b.i.(a)-(i) of this Paragraph;

(b). for any container storage being closed in accordance with Clause B.8.d.i of this Paragraph (presumptive demonstration of closure):

(i). a signed statement from the responsible official stating that the closure performance standards have been met through the presumptive demonstration of closure requirements of Clause B.8.d.i of this Paragraph; and

(ii). documentation for any sufficiency demonstrations approved under Subparagraph B.8.e of this Paragraph; and

(c). for any units being closed that are tank systems, containment buildings, or drip pads (or container storage requiring additional demonstration efforts of closure under Subclause B.8.d.ii of this Paragraph), a closure report submitted for approval including:

(i). brief overview of closure activities;

(ii). details of the closure activities including:

[a]. removal of final waste, contaminated debris, and contaminated soil;

[b]. decontamination procedures;

[c]. analytical results of the rinsate compared to potable water standards (i.e., the numerical closure performance standards, available on the department’s website); and

[d]. analytical results of the soil (and groundwater, if deemed necessary) compared to the numerical closure performance standards available in guidance on the department’s website as delineated below:

[i]. the numerical closure performance standards are the applicable limiting screening option standards as defined by the Risk Evaluation/Corrective Action Program (RECAP) in LAC 33:I.Chapter 13;

[ii]. for soil, the residential screening standard and industrial screening standard with conveyance notice may be used; and

[iii]. in lieu of conducting confirmatory soil sampling (and groundwater sampling, if deemed necessary) during closure, the large quantity generator may state that the closure performance standards for soil and groundwater will be met through RECAP and remedial activities (See Clause B.8.f.ii of this Paragraph for container storage, tank systems, and containment buildings and LAC 33:V.2809.B.2 for drip pads.);

(iii). supporting documentation including:

[a]. sampling and analysis protocol/methods, locations and depths, and borehole logs, as applicable;

[b]. analytical lab data reports; and

[c]. supporting documentation deemed relevant by the large quantity generator (e.g., photographs, manifests, description of any other actions relevant to the closure not otherwise mentioned, etc.);

(iv). documentation for any sufficiency demonstrations approved under Subparagraph B.8.e of this Paragraph; and

(v). a written statement signed by the responsible official stating that the closure performance standards have been met. (The Office of Environmental Services shall review and approve the closure report and notification to ensure that the closure performance standards have been met.)

iii. A large quantity generator may request additional time to close and meet the closure performance standards. The large quantity generator shall notify the Office of Environmental Services using the department’s Notification of Hazardous Waste Activity Form (HW-1) within 75 days after the date provided in Clause B.8.b.i of this Paragraph to request an extension and provide an explanation as to why the additional time is required.

c. Closure Performance Standards

i. Closure Performance Standards for Central Accumulation Areas that are Container Storage, Tank Systems, or Containment Buildings

(a). At closure, the large quantity generator shall close the central accumulation area or facility in a manner that:

(i). minimizes the need for further maintenance by controlling, minimizing, or eliminating, to the extent necessary to protect human health and the environment, the post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products to the ground or surface waters or to the atmosphere; and

(ii). removes or decontaminates all contaminated equipment, structures and soil and any remaining hazardous waste residues from the central accumulation area including containment system components (e.g., pads, liners, etc.), contaminated soils and subsoils, bases, and structures and equipment contaminated with waste, unless LAC 33:V.109.Hazardous Waste.5 applies.

(b). Any hazardous waste generated in the process of closing either the large quantity generator’s facility or unit(s) accumulating hazardous waste shall be managed in accordance with all applicable standards of LAC 33:V.Subpart 1, including removing any hazardous wastes contained in these units within 90 days of generating it and managing these wastes in a RCRA subtitle C hazardous waste permitted treatment, storage, and disposal facility, or interim status facility.

(c). If the large quantity generator demonstrates that either any contaminated soils and wastes cannot be practicably removed or decontaminated as required in Division B.8.c.i.(a).(ii) of this Paragraph, or that the remaining contaminant levels are not protective of human health and the environment as demonstrated by the confirmatory sampling and analytical results specified in Subdivision B.8.b.ii.(c).(ii).[d] of this Paragraph, or through the use of RECAP and remedial activities under Subparagraph B.8.f of this Paragraph or LAC 33:V.2809.B.2, then the central accumulation area is considered to be a landfill. The large quantity generator shall then close the central accumulation area and perform post-closure care in accordance with the closure and post-closure care requirements that apply to landfills (LAC 33:V.4501.B and D). In addition, for the purposes of closure, post-closure, and financial responsibility, such a central accumulation area is then considered to be a landfill, and the large quantity generator shall meet all of the requirements for landfills specified in LAC 33:V.Chapter 43.Subchapters F and G.

ii. Closure Performance Standards for Central Accumulation Areas that are Drip Pads. At closure, the large quantity generator shall comply with the closure requirements of Subparagraph B.8.b, Division B.8.c.i.(a).(i), and Subclause B.8.c.i.(b) of this Paragraph, and LAC 33:V.2809.A and B.

d. Special Provisions for Closing a Central Accumulation Area Consisting of Container Storage. This Subparagraph is applicable to closure for a central accumulation area consisting of container storage. The container storage may have temporary or long-term (i.e., fixed, immovable) secondary containment.

i. Presumptive Demonstration of Closure. A large quantity generator shall be considered to have performed due diligence in closing container storage (i.e., no additional closure efforts or verification shall be required) and met the closure performance standards of Clause B.8.c.i of this Paragraph provided the following conditions are met.

(a). All information has been placed in the operating record as required by Clause B.8.a.ii of this Paragraph.

(b). All containers were removed from the central accumulation area and were either sent off-site for treatment or disposal or were transferred elsewhere on-site for treatment, storage, or disposal authorized by LAC 33:V.Subpart 1.

(c). Weekly inspection logs, summary, or other information (e.g., photographs, written documentation of spill clean ups, etc.) in the operating record demonstrate during the entirety of the accumulation period that:

(i). there were no spills, leaks, or releases of hazardous waste or hazardous constituents onto the secondary containment or soil immediately surrounding and beneath the unit, or they were properly cleaned up and managed in order to meet the closure performance standards; and

(ii). for container storage with long-term (i.e., fixed, immovable) secondary containment, there were no visible signs of significant cracks, gaps, or deterioration of the secondary containment, or they were properly repaired in a timely manner. (Any sumps or engineered swales serving as a receptacle for drainage in the secondary containment should be clearly mentioned.)

(d). For container storage with long-term (i.e., fixed, immovable) secondary containment, after removal of all waste a final inspection log/report and other information (i.e., photographs, etc.) in the operating record demonstrate that:

(i). there was no significant staining or other signs of contamination from hazardous waste on the secondary containment, including sumps or engineered swales serving as a receptacle for drainage in the secondary containment; and

(ii). there were no visible signs of significant cracks, gaps or deterioration for sumps or engineered swales serving as a receptacle for drainage;

(e). additional demonstration efforts of closure as specified in Clause B.8.d.ii of this Paragraph below are not necessary; and

(f). a signed statement from the responsible official is submitted with the subsequent notification as required by Division B.8.b.ii.(b).(i) of this Paragraph stating the closure performance standards have been met through the presumptive demonstration of closure requirements of this Clause.

ii. Additional Demonstration Efforts of Closure for Container Storage

(a). It is the responsibility of the large quantity generator to be aware of the closure performance standards and to make a good faith effort to demonstrate that the closure performance standards have been met. Additional decontamination procedures and confirmatory sampling of the final rinsate and/or soil (and groundwater, if deemed necessary) shall be required if either:

(i). any of the conditions of Clause B.8.d.i of this Paragraph are not met; or

(ii). the potential future use of the area requires additional efforts to demonstrate that sufficient decontamination has been achieved (e.g., if a secondary containment area has a potential future use for storing food grade products, then decontamination procedures and confirmatory sampling of the final rinsate may be required to verify that it has been adequately decontaminated);

(b). Container storage requiring additional closure efforts shall meet the notification requirements of Subclause B.8.b.i.(k) of this Paragraph (i.e., prior notification) and Subclause B.8.b.ii.(c) of this Paragraph (i.e., closure report for subsequent notification), unless a sufficiency demonstration is approved by the Office of Environmental Services in accordance with Subparagraph B.8.e of this Paragraph. The Office of Environmental Services shall review and approve the closure report and notification to ensure that the closure performance standards have been met.

e. Sufficiency Demonstration of Closure

i. Prior to, or during closure, the large quantity generator may petition the Office of Environmental Services to meet the closure performance standards through alternate, reduced, or eliminated requirements for closure notifications in Subparagraphs B.8.a and b of this Paragraph. These requirements may include, but are not limited to, documentation, submittal information, decontamination procedures, confirmatory sampling and analysis on the rinsate, and confirmatory sampling and analysis on the soil (and groundwater, if deemed necessary) immediately surrounding and beneath the unit.

ii. A sufficiency demonstration shall not alleviate the large quantity generator’s requirement to meet the closure performance standards in Subparagraph B.8.c of this Paragraph, but rather the demonstration of how the closure performance standards have been met.

iii. A sufficiency demonstration will only be approved by the Office of Environmental Services if merited by the supporting information and site-specific conditions.

(a). The following is a partial list of factors the Office of Environmental Services may consider in approving the sufficiency demonstration: accumulation time period; quantity and nature of the hazardous waste; containment design and condition; proper operations and maintenance; any additional protections (e.g., leak detection, etc.); soil and groundwater classification; overall compliance history; existing or future corrective action measures include the central accumulation area and/or the facility (e.g., site-wide corrective action being implemented through an enforceable agreement with the large quantity generator, or an order of the department specifically includes the central accumulation area and/or the facility); and any other relevant information requested by the Office of Environmental Services.

(b). A few example scenarios for a sufficiency demonstration include, but are not limited to: decontamination might not be necessary for a tank system that accumulated diluted wastewater; confirmatory rinsate sampling might not be necessary for a tank system that will receive a hazardous waste permit to manage the same waste; and confirmatory soil (and groundwater, if deemed necessary) sampling might not be required for a tank system that was used for a one-time event.

iv. The Office of Environmental Services’ approval of a sufficiency demonstration may require additional or alternate closure efforts or verification from the large quantity generator depending on site-specific conditions.

v. Upon approval by the Office of Environmental Services, the petitioner shall incorporate the relevant information of the sufficiency demonstration into the closure notification requirements of Subparagraphs B.8.a and b of this Paragraph, as applicable. The large quantity generator shall maintain all documentation in support of the sufficiency demonstration.

f. The use of Risk Evaluation/Corrective Action Program (RECAP) and remedial activities for the closure of container storage, tank systems, and containment buildings.

i. If there is suspected or confirmed contamination in the environmental media (i.e., soil or groundwater) immediately surrounding and beneath the unit as demonstrated by the confirmatory sampling and analytical results specified in Subdivision B.8.b.ii.(c).(ii).[d] of this Paragraph or by other evidence, risk evaluation and/or remedial activities may be conducted by the large quantity generator in order to demonstrate that the closure performance standards have been met.

ii. The risk evaluation and/or remedial activities may be conducted, either in addition to, or instead of, the confirmatory sampling and analysis required by Subdivision B.8.b.ii.(c).(ii).[d] of this Paragraph.

iii. The risk evaluation and/or remedial activities shall be:

(a). in accordance with RECAP as referenced in LAC 33:I.Chapter 13 (Risk Evaluation/Corrective Action Program);

(b). under the direction of the Office of Environmental Assessment; and

(c). subject to all cost recovery provisions of the department.

iv. A site investigation work plan shall be submitted to the Office of Environmental Assessment in accordance with Appendix B of RECAP.

v. The risk evaluation must demonstrate that the closure is protective of human health and the environment and that post-closure care is not necessary in order for Subclause B.8.c.i.(c) of this Paragraph (i.e., closure as a landfill) not to apply.

g. Contamination from Other Sources. The Office of Environmental Services may conditionally approve the closure of a central accumulation area whereby the large quantity generator agrees to address contamination remaining in the environmental media (i.e., soil or groundwater) through additional remedial activities under the direction of the Office of Environmental Assessment. The large quantity generator must successfully demonstrate that either:

i. the contamination is from a source other than hazardous waste managed in the unit; or

ii. the contamination caused by the hazardous waste managed in the unit is comingled with contamination caused by another source.

h. Notification of Newly-Identified Release. Any newly identified release of hazardous waste to the environment must be reported either to the Louisiana State Police, Department of Public Safety in accordance with LAC 33:V.105.J.1 (Emergency Conditions) or SPOC in accordance with LAC 33:V.105.J.2 (Nonemergency Conditions).

i. Closure Inspections. The department may inspect the central accumulation area before, during, or after the closure activities have been completed.

j. Closure Guidance. The large quantity generator should review all guidance that may be issued by the department and posted on its website including, but not limited to, guidance on confirmatory sampling for aboveground structures and environmental media. The purpose of such guidance is to ensure best management practices, promote consistency, and produce technically defensible closures. Any such guidance issued by the department is not regulation and shall not substitute for the requirements of Subparagraph B.8 of this Paragraph. Thus, any guidance does not impose any new requirements. The department shall retain discretion to use approaches on a case-by-case basis that differ from such guidance where appropriate. The department will base decisions regarding closure activities required by Subparagraph B.8 of this Paragraph in accordance with the Act and regulations as applied to the specific facts of the closure. Whether or not the recommendations in any guidance are appropriate in a given situation will depend on site-specific circumstances.

k. Notification Requirements for Closures Initiated Prior to July 20, 2020.

i. For purposes of this Subparagraph, initiation of closure shall consist of removing the final volume of hazardous waste from the central accumulation area(s) with the intent of no longer using the unit(s) for accumulation of hazardous waste.

ii. A large quantity generator shall meet the closure performance standards of Subparagraph B.8.c of this Paragraph regardless of when closure was initiated.

iii. A large quantity generator that initiated closure prior to July 20, 2020 shall either:

(a). comply with the notification requirements of Subparagraphs B.8.a and b of this Paragraph; or

(b). perform the following:

(i). complete all closure activities and meet the closure performance standards within 180 days of July 20, 2020, unless such deadline is extended in writing by the Office of Environmental Services upon proper showing by the large quantity generator that such extension is warranted; and

(ii). submit a Certification of No Hazardous Waste Activity form, available on the department’s website, to the Office of Environmental Services no later than 30 days after completion of all closure activities. (The department may conduct an inspection of the central accumulation area(s) in order to verify that the closure performance standards were met.)

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