**GUIDANCE**

**for Louisiana Solid Waste Permit Application for Type I/Type II Landfills**

**Scope**

The Louisiana Department of Environmental Quality (LDEQ) prepared this *Guidance* document to assist the permit applicant in completing the Louisiana Solid Waste Permit Application for Type I/Type II Landfills. It should be consulted and utilized prior to providing responses to the information required.

The Louisiana Solid Waste Permit Application provides information for the LDEQ Waste Permits Division (WPD) to use along with other information in making a decision on the permit application. The regulations can be found on the LDEQ website at: <http://www.deq.louisiana.gov/portal/Default.aspx?tabid=1674>.

**When to Submit an Application**

Applications for Type I/Type II Landfills are submitted primarily for one of the following reasons: (1) to obtain a permit for a new facility; (2) to modify an existing facility with an effective permit; (3) to obtain a permit for an existing facility operating without a permit but is now being made subject to the regulations; or (4) to renew a permit for an existing facility.

To avoid unnecessary delays, applications should be submitted as far in advance as possible before construction of the facility or modification. Some construction projects require prior approval of LDEQ Divisions other than the WPD. Permit application review times vary depending on the complexity of the application, the completeness of the application, and/or the current workload of the WPD. However, be advised that, **“No new permitted solid waste facilities shall be constructed or operated without approval issued by the administrative authority in accordance with these regulations.”** (LAC 33:VII.509.A.5, emphasis added)

**What Should be Submitted**

Submit five (5) paper copies of the application (including one original application) addressed to the attention of the current Assistant Secretary of the Office of Environmental Services (OES) or the current Administrator of the WPD at the following address:

Louisiana Department of Environmental Quality

Office of Environmental Services

Waste Permits Division

Post Office Box 4313

Baton Rouge, LA 70821-4313

**For applications to go on public review (generally new, renewal, and major modification applications), the applications should be submitted in a three ring binder or as loose pages, so that replacement pages can be inserted into the original submittal. All attachments shall be marked with appropriate tabs.**

**NOTE: If the facility is located in Calcasieu Parish or in two parishes, submit six (6) paper copies of the application**.

Attach a proof of payment for the waste permit application fee to the original application. Do **NOT** attach copies of this check to any documents submitted to LDEQ. See Section 5 for more details.

Keep a copy of the application and attachments for your records.

**Basis for Estimations**

All estimates used in responses to the application shall be supported by calculations and/or any supporting information and shall be submitted with the application.

**Acceptable Answers**

If certain questions or fields in the application are not applicable, indicate "none" or "not applicable" (N/A). Terms such as "not significant," "nil," "trace," etc. are not appropriate.

The applicant shall submit a completed application containing all relevant required information at the time the permit application is submitted. Submission of insufficient or undefined responses and/or information will result in the inability of the LDEQ to issue a permit based on an incomplete permit application. Failure to accurately complete the permit application may subject the application to suspension, notice of deficiency(ies) (NODs), and/or potential enforcement action.

If there are any questions about the required information to be submitted in the permit application, contact the WPD at (225) 219-3181.

**Professional Engineer Required**

In accordance with LAC 33:VII.711.B.1, facility plans, specifications, and operations represented and described in the permit application shall be prepared under the supervision of and certified by a professional engineer, licensed in the state of Louisiana.

**Common Definitions**

Terms used in the application and/or in this *Guidance* document shall have the same meanings as defined in the solid waste regulations in LAC 33:VII.115.

**Guidance for Completing the Permit Application**

The following instructions should be used in completing the permit application form. The numbers, letters, and headings provided in this *Guidance* correspond to the numbers, letters, and headings contained in the application form.

Do not write information in the top or left side margin of the application form as file folder bindings may cover the information.

Do not alter the permit application form in any way, except as directed by this *Guidance* and instructions included in the Louisiana Solid Waste Permit Application for Type I/Type II Landfills.

All chemical testing required for this application shall be in accordance with the Environmental Protection Agency (EPA) or other applicable standards approved by the administrative authority and must be conducted in accordance with the Louisiana Environmental Laboratory Accreditation Program (LELAP) requirements under LAC 33:I.Subpart 3.

All geotechnical testing required for this application shall follow the standards of the American Society for Testing and Materials (ASTM) and must be conducted in accordance with the LELAP requirements under LAC 33:I.Subpart 3.

1. **Facility and Permit Applicant Information (LAC 33:VII.519.B.1, 519.B.8.a, 519.G, and 1303.O)**
   1. *Facility name* – Enter the name of the facility.
   2. *Agency Interest (AI)* *number* – Enter the AI Number, if known. Otherwise, enter “unknown” into this field. AI number is a unique identifier assigned to each facility by LDEQ. Existing facilities in the state have AI numbers assigned to them. New facilities will be assigned an AI Number after LDEQ receives the application.
   3. *Standard Industrial Classification (SIC) code* – Enter the SIC code. If not known, the code can be looked up at: <http://www.osha.gov/pls/imis/sicsearch.html>
   4. *Mailing address, city, state, zip code –* Enter the mailing address of the facility.
   5. *Type of application* – Check the box indicating the application type for the requested permit. New applications should be requested when the facility plans to open a new landfill. Renewal applications should be requested when the facility is renewing an existing permit at the end of the permit term. Modifications should be requested when the facility wants to make a change to its existing permit.

Major modifications are any modification of the permit with the following criteria (LAC 33:VII.517.B.1):

* a change in the types (*e.g.,* commercial, industrial, or residential) of waste to be received at a facility (*e.g.,* where a facility is modified to accept industrial waste);
* an increase in the volume or rate of waste to be received at a facility (weekly tonnage and/or yearly tonnage);
* a physical expansion of the service area;
* an increase in the capacity of the facility (Attach Capacity Analysis; Section 22);
* an extension of the operating hours or days of operation;
* a change to the facility that may have an impact on traffic patterns (*e.g.,* new entrance);
* a reduction in the number of groundwater sampling parameters or the number of groundwater monitoring wells;
* a lateral or vertical expansion of the permitted area(s) for waste disposal, except for vertical expansion that would result in no net increase of in-place volume; or
* other changes that would make the permit less stringent.

**NOTE:** Major modifications require submittal of an Environmental Assessment Statement (IT Statement; Section 24).

* 1. *Proof of publication –* Attach in **Attachment 1** proof of publication of the notice regarding the submittal of the permit application for *new* and *renewal* applications, and *major modifications* that constitute a physical expansion. The notice shall be published in the official state journal, *The Advocate*, and the official journal of the parish in which the facility is located. Wording for the public notice is as follows (insert the appropriate information in the parenthesized sections):

Notice is hereby given that *(name of applicant)* does intend to submit to the Louisiana Department of Environmental Quality, Office of Environmental Services, Waste Permits Division, an application for a *(new or renewal)* solid waste permit to operate a *(type of solid waste facility)* in *(parish name)*, Range *(x)*, Township *(x)*, Section *(x)*, which is approximately *(identify the physical location of the site by direction and distance from the nearest town)*. Comments concerning the facility may be filed with the Secretary of the Louisiana Department of Environmental Quality at the following address: Office of Environmental Services, Waste Permits Division, Post Office Box 4313, Baton Rouge, LA 70821-4313.

* 1. *Type and purpose of operation –* Check the box indicating all facility types included in the permit. If more than one type applies, check each applicable box.
  2. *Operational status of site and facility –* Check the box indicating the operational status of the site and the facility. See LAC 33:VII.115 for specifics. For the facility status, if the facility is existing and permitted and the application is for an expansion, check the ‘existing’ box. If the facility is adding a new unit, check the ‘proposed’ box.
  3. *Full Legal Name of Applicant (prospective permit holder) Applying for the Permit* – Enter the name of the individual or company that is or will be the permit holder.
  4. *Full Legal Name of Operator* – If the Operator is different than the Applicant, enter the name of the individual or company that operates the facility or process unit, if this individual or company is different from the one listed in the *Full Legal Name of Applicant* field. If the Operator is the same as the Applicant, enter “N/A” in the blank.
  5. *Full Legal Name of Property Owner* – If the Property Owner is different than the Applicant, enter the name of the person who currently owns the land. If the Property Owner is the same as the Applicant, enter “N/A” in the blank.

*Address of Property Owner –* If the Property Owner is different than the Applicant, enter the address of the person who currently owns the land. If the Property Owner is the same as the Applicant, enter “N/A” in the blank.

* 1. *Property Ownership Status –* Check the box that best describes the ownership of the facility. If the facility is leased, list the number of years of the lease in the blank. Attach proof of ownership and, if applicable, a copy of the lease agreement (or document which evidences the permit holder's authority to occupy the property) in **Attachment 2**. Proof of ownership includes a recorded conveyance document such as cash sale, active donation, active exchange, etc. **NOTE:** For any confidentiality request, please see Section 4 for guidance and instructions.
  2. *Ownership –* Check the box that describes the type of entity that owns the facility.
  3. *Solid waste permit or Order to Upgrade number* – If this is an application for a renewal, a modification of an existing permit, or an application for a new permit for a facility that was issued an Order to Upgrade, enter the permit number, including the renewal number, (*e.g.,* P-0121, P-0432R1) or Order to Upgrade (OU) number (OU-0273) in the field. If this is a new facility and has no permit or order to upgrade number, enter “N/A” in the blank.
  4. *Solid waste facility number* – Enter the solid waste identification number (*e.g.,* GD-016-5483) in this field. If this is a new facility and has no solid waste facility number, enter “N/A” in the blank.
  5. *Total site acreage –* Provide the total acreage for the site. This includes the facility’s disposal area and all other land associated with the entire site.
  6. *Acreage to be used for disposal –* Provide the total acreage of the disposal area. If this application includes an expansion, the total current acreage for disposal and the proposed expansion disposal acreage should be added together for the total acreage used for disposal.
  7. *Anticipated proposed remaining life* – Provide the number of months/years that the facility is expected to accept waste. If this application is for an expansion, the remaining life for the existing permitted facility and the proposed expansion should be added together for the total remaining life of the facility.
  8. *Maximum capacity (existing plus proposed)* – Provide the maximum capacity in **both** cubic yards and wet tons. If this application is for an expansion, the capacity for the existing permitted facility and the proposed expansion should be added together for the total maximum capacity of the facility. For new facilities or existing facilities increasing capacity, follow LAC 33:VII.513.B.1.
  9. *History of solid waste permitting actions –* Provide a history of permitting actions for the facility from the point of the permit issuance or most recent renewal. Historical permitting actions include, dates of permit issuance, dates of modification approvals, a description of the approved modification, any parts of the facility that have been closed in accordance with the solid waste regulations, the dates of closure and post-closure activities, and exemptions under LAC 33:VII.307.
  10. *Units in the permit application* – List the names of all units (*e.g.,* cell 6, pond 2A) included in the permit application.
  11. *Environmental permits issued* – List, in chronological order, each environmental permit (*e.g.,* 404 permit, coastal use permit, etc.) issued to this site, its permit number, and date of issuance. Begin with the first permit issued and end with the most recent. The list should include permits from LDEQ and other agencies. This list should include only permits for this site. Permits for other sites that are owned by the same company or owner should be listed in Section 6.A.
  12. *Environmental permits applied for* – List, in chronological order, each environmental permit for which the applicant has applied or intends to apply, for this site.
  13. *Financial Structure* - The permit application should include a description of the financial structure of the operating unit including capital structure and principal ownership, and insurance coverage for personal injury and property damage.

1. **Physical Location and Process Description (LAC 33:VII.517.B.1, 519.B.1, and 519.G)**
   1. *Nearest town (in the same parish as the facility)* – Enter the closest town **in the same parish as the facility** (even if the facility is more commonly associated with a town in another parish).
   2. *Parish(es)* – Enter the parish(es) in which the facility is located.
   3. *Geographic location* – Enter in the spaces provided the Section, Township, and Range of the facility.
   4. *Global Positioning System (GPS) coordinates* – Enter in the spaces provided the Latitude and Longitude (in decimal degrees) of:

* the centerpoint of the facility,
* the centerpoint of each unit of the facility (also list the name of the unit), and
* the front gate of the site.

The GPS coordinates of the centerpoint of each unit (landfill, surface impoundment, etc.) and the front gate of the facility are useful site information. If more blanks are needed, attach additional units as a new attachment and add to the ‘Attachment Checklist’ at the end of the application.

* 1. *Physical location* – Provide the physical address and location description in the space provided. Ensure that the address provided is accurate and up-to-date. Provide driving directions if no physical address exists. These directions should originate from the nearest intersection of highways. An example of an acceptable set of driving directions is as follows: “From the intersection of US Hwy 165 & LA Hwy 10 in Oakdale, LA, travel E on Hwy 10 (Oakdale Road) for 2 miles. Turn S onto Kings Rd (Parish Road 1025). Travel approximately 3.5 miles to the facility, which will be on the left side of the road.”
  2. *Site operations* – Provide a brief description of how the site operates to accomplish its primary business function. For example, “The landfill is used to hold waste from the production of oils and lubricants from the ABC Inc – Baton Rouge Refinery. Material disposed of in the landfill is generally catalysts and/or desiccants; catalyst supports; process and/or construction wastes.” or “The landfill takes in municipal and commercial waste from the East Baton Rouge Parish.”
  3. *Modification/Changes* – Provide a brief summary of the facility modifications or changes proposed by the application. Also check the appropriate boxes. If any boxes are checked “yes,” an Environmental Assessment Statement shall be required. Additional documents may also be required depending on the boxes checked “yes.” If there are no modification or changes proposed, indicate this in the space provided.
  4. *Alternatives* – Provide a brief description of proposed alternatives allowed by the regulations. This section is only applicable for regulations that allow alternatives such as daily cover, liners, buffer zones, etc.

1. **Local Zoning (LAC 33:VII.519.B.1.m and 519.G)**
   1. *Zoning classification –* Provide the zoning classification of the land on which the facility sits at the time of the application submittal. If no zoning exists, provide a letter from the parish that states this.
   2. *Local zoning authority –* Provide the name of the local zoning authority authorized to zone land where the facility is located.
   3. *Local zoning authority contact, address, city, zip, and business phone –* Provide the contact information for the local zoning authority.
   4. *Documentation –* Attach documentation for zoning in **Attachment 3**. Zoning documentation should be current (recommended no older than 18 months) for new permit applications, renewal permit applications, and modifications that require an expansion of the site footprint. **NOTE**: There is a ***pre-application*** zoning requirement for new applications and major modifications proposing physical expansion(s) of the solid waste disposal area(s) for Type II and III facilities in accordance with LAC 33:VII.513.B.2. This pre-application requirement should be submitted under separate cover and prior to submission of the application.
2. **Confidentiality (LAC 33:I.Chapter 5 and VII:513.C.2.f)**

Check the box provided to indicate if confidentiality is requested for any information submitted. See LAC:33.I.Chapter 5 for a list of all information that cannot be held confidential. If confidentiality is requested, remove all sections of the permit application subject to the request and submit them separately from the rest of the permit application under a request for confidentiality in accordance with LAC 33:I.503 to the Office of the Secretary at the address below. Written justification to substantiate the confidentiality request shall accompany the request. Requests for confidentiality shall be sent directly to the following address:

Office of the Secretary

Louisiana Department of Environmental Quality

Post Office Box 4301  
Baton Rouge, LA 70821-4301

On the application form, provide the name(s) of the section(s) of the permit application that have been removed and submitted separately to the above address.

1. **Fee Information (LAC 33:VII.513.C.2.d and 1501)**

Check the box indicating the method of payment and provide the check, money order, or receipt number in the blank provided. Attach the check, money order, or copy of the receipt (if paid online) to the original application. Checks or money orders should be made payable to “Louisiana Department of Environmental Quality,” and attached to the completed application. Do **NOT** attach copies of this check to any documents submitted to LDEQ. Do **NOT** send cash. Check the box for the appropriate fee.

For questions regarding fees, call the LDEQ Customer Service Center at 225-219-LDEQ (5337) or Toll Free at 1-866-896-LDEQ (5337). To pay fees online, visit <http://business.deq.louisiana.gov/> or <http://www.deq.louisiana.gov/epay>.

1. **LAC 33:I.1701 Requirements (LAC VII:33.519.E)**

The LAC 33:I.1701 Requirements section shall be completed when applying for an initial permit, permit renewal, modification, or change of ownership. Answering the questions provided on the application is a sufficient response; the applicant does not need to attach a separate form to fulfill the 1701 Requirements.

1. *Other environmental permits* – Check the box indicating whether or not the applicant has any federal or state environmental permits identical to, or of a similar nature to, the permit for which the application is being made. This also includes all types of permits, including water, air, and hazardous waste permits. If “yes,” list the permits (other than the ones in Section 1) held in Louisiana after the first question. This includes all permits held by the company, owner, or who participate in the environmental management of the facility, but not specific to the site being permitted in this application. For example, ABC Co. owns two sites, one in Baton Rouge, and one in New Orleans. Each site has their own unique permits; the permits not listed in Section 1 would be listed here. If “yes,” also list the *states* in which other environmental permits are held in the second box.
2. *Outstanding fees or penalties* – Check the box indicating if the applicant owes any outstanding fees or final penalties to LDEQ. Outstanding fees do not include fees that have recently been invoiced and are not yet due. If “yes,” explain the reasons why the fee or penalty has not yet been paid in the space provided.
3. *Corporation or limited liability company* – Check the box indicating whether the company is a corporation or limited liability company (LLC). If “yes,” attach a copy of your company’s Certificate of Registration and/or a Certificate of Good Standing in **Attachment 4**. These certificates can be obtained from the Secretary of State for the State of Louisiana. See the Secretary of State’s website for more information: <http://www.sos.louisiana.gov/>.
4. **Certification and Signatures (LAC 33:VII.519.B.1.q, 519.B.3.a, and 711.B.1)**

*Certification of responsible official –* Enter the name, title, company, address, and phone number of the Responsible Official. The Responsible Official shall meet the requirements of LAC 33:VII.115. The Responsible Official shall sign and date signifying his/her agreement with the certification statement. This signature is required for all permit applications. If this signature is not provided, the permit application will not be considered administratively complete.

*Certification of application preparer –* Enter the name, title, company, address, phone number, and email address of the Application Preparer. The Application Preparer shall sign and date signifying his/her agreement with the certification statement. This signature is required for all permit applications. If this signature is not provided, the permit application will not be considered administratively complete.

*Certification of professional engineer –* A Louisiana Registered Professional Engineer shall certify the application per LAC 33:VII.711.B.1. The engineer's name, title, company, address, phone number, and Louisiana registration number shall be entered. The Professional Engineer shall sign and date signifying his/her agreement with the certification statement. The engineer’s seal shall also be prominently displayed on the page. If the signature and seal are not provided, the permit application will not be considered administratively complete.

**NOTE:** If this is a modification application and no changes have been made requiring an engineer’s services (*e.g.,* a change in the hours of operation), write ‘N/A’ in the ‘Name’ box and continue to the next section.

1. **Facility Contact Information/Personnel (LAC 33:VII.519.B.1.f-g and 519.G)**

List the names and contact information for each section. Select the primary contact for technical questions pertaining to the permit application by checking the box labeled “Primary Contact” next to the contact’s name. The same person can be listed for each section.

1. *Manager of facility who is located at the site* *–* List the on-site manager of the facility. If the facility is not manned by a full-time staff, list the contact information for a person who can be available to be on-site during inspections, emergency events, or other such instances.
2. *On-site contact regarding waste permit* – List the on-site solid waste (landfill) contact for the facility. If the facility is not manned by a full-time staff, list the contact information for a person who is able to speak for the facility about the waste permit (landfill).
3. *Person to whom written correspondence* *should be directed* – List the person to whom written correspondence generated during the solid waste permitting process can be forwarded. A copy of all written correspondence will be sent to the Responsible Official (listed in Section 7) as well, regardless.
4. *Person to contact regarding Annual Maintenance Fees* – List the person who can be contacted regarding annual solid waste permit maintenance fees (solid waste billing fees).

It is **NOT** required to list any personal contact information, such as personal email addresses or personal cellular phone numbers. This section is intended to convey work-related contact information to LDEQ. The applicant may choose to provide personal contact information if desired, but it is **NOT** required.

If the personnel mentioned in this section do not have an email address, note this in the appropriate blank. LDEQ strongly encourages applicants to include email addresses for the personnel mentioned in this section in order to facilitate a rapid line of communication during the permit application process. Failure to supply these email addresses may lead to longer application processing periods.

1. **Waste Description and Service Areas (LAC 33:VII.519.B.1.n-o, B.4.a.iii, and 519.G )**

**NOTE: Changes to the below sections may constitute a Major Modification.**

1. *Maximum quantities of waste disposed in the Type I/II landfill –* Fill out the table, indicating the maximum amount of waste disposed of (or predicted to be disposed of for new applicants) from each waste type. The quantities should be listed in both wet tons/week and wet tons/year. Wet tons per year shall not be greater than wet tons per week multiplied by 52. If an amount is listed for the waste type ‘Other,’ describe the waste.
2. *Regulated asbestos-containing material -* Check the appropriate box for whether or not the facility accepts Regulated Asbestos-Containing Material (RACM). If the facility does accept RACM, check the appropriate box for if it is friable or non-friable. Facilities that accept RACM and want to be identified as a Recognized Asbestos Landfill (RAL) shall submit an Asbestos Landfill Recognition Form (AAC-7 IS/OS) to the OES – Public Participation and Permits Support Division.
3. *Percentage of waste received –* List the approximate percentage of waste that is received (or predicted to be received for new applicants) from onsite, offsite from generators within Louisiana, and offsite from generators outside of Louisiana.
4. *Maximum quantities of waste processed or disposed in other units checked in Section 1.G –* Fill out the table, indicating the maximum amount of waste disposed or processed of (or estimated to be disposed of for new applicants) from each waste type of each permitted unit. The quantities should be listed in both wet tons/week and wet tons/year. For surface impoundments, include the estimated waste tonnages of solids that settle to the bottom of the impoundment.
5. *Service area –* Check the box that most appropriately describes the service area of the landfill. If only certain parishes are serviced, check the box for each parish served. If other locations, such as cities, are serviced, check the box for “other” and fill in the blank with the appropriate answer. If “other” is checked, provide an answer that lists the specific parishes, cities, etc. serviced. Do not provide an answer such as “all parishes within a 200-mile radius.” If this is the case, select each parish individually.
6. *Days and hours of operation –* Provide the **maximum** days of operation per week and the maximum hours the facility intends to operate per day (24-hr period). Provide the **normal** days of operation and hours the facility intends to operate. For example, the facility intends to operate 6 days/week, 50 hours/week; these hours should be listed as the normal days/hours of operation. However, due to a special project, the facility needs to operate 7 days/week, 75 hours/week; these hours should be listed as the maximum days/hours of operation.

List the hours of operation the facility intends to hold during normal operation (*e.g.,* Monday 8:00 am to 5:00 pm; Tuesday 8:00 am to 5:00 pm; Wednesday 8:00 am to 5:00 pm; Thursday 8:00 am to 5:00 pm; Friday 8:00 am to 5:00 pm; Saturday 8:00 am to 12:00 pm). Leave the hours blank if the facility does not intend to operate on that day. **NOTE:** a major modification is required if there is an extension of the operating hours or days of operation.

1. **Settlement Agreements, Consent Decrees, Cooperative Agreements, *etc*.(LAC 33:VII.519.G)**

The purpose of this section is to determine any requirements, conditions, or limitations that have been imposed upon the facility pursuant to any settlement agreements, consent decrees, etc. so that, if appropriate, they can be incorporated into the permit. Check “yes,” if the facility has been issued and/or entered into any such actions. Provide a summary of all actions in **Attachment 5**. The summary should include all federal and state settlement agreements, consent decrees, etc. issued to and/or entered into by this facility. Include the regulatory agency that issued and/or entered into the settlement agreement, consent decrees, etc. along with the dates of issuance or agreement. The issued date is the date of the signature or final signature (for settlements) of the appropriate official(s) at the issuing agency(ies) that signed the document.

1. **Location Area Information (LAC 33:VII.513.B.3-5, 519.B.1.r, and 709.A)**

**Airports**

1. *Nearest airport* – Give the distance to the nearest airport, even if this distance is greater than five (5) miles. Please note, according to La. R.S. 30:2040(1), no residential, commercial, or construction and demolition disposal facility may be permitted within 10,000 feet of the Acadiana Regional Airport operations area, if such a facility is not in compliance with local zoning ordinances.
2. *Disposal of putrescible waste* – Check the box that indicates if the facility disposes of putrescible waste. Putrescible waste is defined as waste that is “susceptible to rapid decomposition by bacteria, fungi, or oxidation, creating noxious odors” (LAC 33:VII.115.A).

If “yes,” check the box that indicates whether or not the facility is within 10,000 feet of a public-use airport used by turbojet aircraft and check the box that indicates whether or not the facility is within 5,000 feet of a public-use airport used by piston-type aircraft.

1. *Airports within five miles* – If the facility is a Type II landfill, check the box that indicates whether or not the facility is located within five miles of an airport runway.
2. *Airport and FAA notification* – If the answer is “yes” to any of Sections 11.B – 11.D, attach a copy of the notifications sent to the airport(s) within the affected area and the Federal Aviation Administration (FAA) in **Attachment 6**. Notifications should state if the landfill disposes of Type II and/or putrescible waste. Notifications for *new* facilities shall be no older than 12 months at the time of submittal of the permit application. Updated notifications shall be submitted with each permit renewal.

**Master Plan**

1. *Area master plan* – Attach an area master plan in **Attachment 7**. The area master plan should include location maps and/or engineering drawings. The maps shall, at a minimum, show the *current* site, road network, major drainage systems, drainage flow patterns, location of the closest population centers, the nearest public-use airport (if disposing of putrescible waste) within a five-mile radius, the location of the 100-year flood plain, and any other pertinent information. The maps or drawings should be legible and large enough to show the nearest town located in the same parish as the facility. Clearly display the name of each of these landmarks. Include all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Include a list of any references used to obtain the information.
2. *Facility access* – Provide a description of the access to the site. Access to the site shall be by all-weather roads capable of meeting the demands of the facility. Description should include how the facility will avoid congestion, sharp turns, obstructions, or other hazards conducive to accidents. Surface roadways shall be able to withstand the weight of transportation vehicles.

**Traffic and Land Use**

1. *Traffic flow letter* – For facilities receiving waste from offsite, attach in **Attachment 8** a letter from the Louisiana Department of Transportation and Development (LDOTD) or other appropriate agency(ies) regarding the impact on traffic flow. The letter should state that the facility will not have a significant negative impact on the traffic flow of area near the site and construction, maintenance, or proposed upgrading of the nearby roads is adequate to withstand the weight of the transportation vehicles. Documentation from the agency(ies) should be dated no more than 12 months from the date of application submission. It is recommended that a letter be submitted, if needed, to the appropriate agency(ies) at least 90 days prior to submittal of the solid waste application. **NOTE:** Updated documentation from the agency(ies) shall be submitted with each major modification that includes an increase in rate of waste intake.

1. *Land use within three miles* – Provide a description of the existing land use, since the most recent census, within three miles of the facility boundary. The land uses shall include, but are not limited to, residential; health-care facilities; schools; agricultural; industrial and manufacturing; other commercial; recreational; and undeveloped. An approximate percentage for each land use is acceptable. Provide the source used for this information (*e.g.,* U.S. Census Bureau).
2. *Aerial photograph* – Attach a *current* aerial photograph that is representative of the current land use in **Attachment 9**. The photo should include a one-mile radius surrounding the facility boundary, clearly marked, and of sufficient scale to depict all pertinent features. Include all pertinent symbols such as scale, north arrow, legend, and any other pertinent information. The photograph should be legible. A source for the information should be provided.

**Population**

1. *Population and population density* – Provide a description of the estimated population and population density within a three-mile radius of the facility boundary. A source for the information should be provided (*e.g.,* U.S. Census Bureau). The latest census figures should be used. If using a software program to determine this information, it should use the latest census figures and this should be stated in the application.

**Environmental Characteristics**

1. *Sensitive areas within 1,000 feet* – Check the box indicating if the facility is located within 1,000 feet of any of the following: swamps, marshes, wetlands, estuaries, wildlife-hatchery areas, habitats of endangered species, archaeological sites, historic sites, publicly-owned recreations areas, and any other similar critical environmental areas. Facilities can contact the following agencies to determine if their facility is located within 1,000 feet of any of these sensitive areas: the U.S. Army Corps of Engineers (USACE), the Louisiana Department of Wildlife & Fisheries (LDWF), the U.S. Fish and Wildlife Service, and the Louisiana Department of Culture, and Recreation & Tourism (LDCRT). If the answer is “yes,” attach a description of the measures that will be implemented to prevent impacts to these areas from landfill operations in **Attachment 10**. This description should also include a list of all the known areas within 1,000 feet of the facility.
2. *Sensitive areas documentation* – Attach the documentation received from the appropriate state and federal agencies to substantiate the information provided in Section 11.K in **Attachment 11**. Documentation from the agencies shall be dated no more than 12 months from the date of application submission for new facilities and major modifications with a horizontal expansion. Updated documentation from the agencies shall be submitted with each permit renewal. The letters for permit renewals shall be dated within the last five years. It is recommended that the letters be submitted, if needed, to the appropriate agency(ies) at least 90 days prior to submittal of the solid waste application.
3. *Start of waste acceptance* – Check the box that indicates when the facility began receiving waste in relation to October 9, 1993.
4. *Wetland determination* – If the wetland determination (attached in 11.L) from the USACE indicates there are wetlands present within 1,000 feet of the facility, check the box indicating whether the facility has an active 404 Permit from the USACE. If “yes,” attach a copy of the 404 permit or 404 application and proof of submittal in **Attachment 12**. If “no,” please provide an explanation of why the permit is not necessary.

**Wells and Faults**

1. *Map of shot holes, seismic lines, and oil and gas wells* – Attach in **Attachment 13** a scaled map that shows the location of all shot holes, seismic lines, and operating and/or abandoned oil and/or gas wells. This map should include operating and/or abandoned oil and/or gas wells within the facility and within 2,000 feet of the facility perimeter. This section requires a map with the borders of the facility marked and paralleling the borders at a distance of 2,000 feet with another boundary indicating the study area. It is important to note the facility is not the site, rather it is the area being permitted and this area can in turn have more than one unit. Therefore, the study area boundary is an area 2,000 feet in all directions from the facility boundaries to be permitted.

In addition, simply contacting a state agency for information on shot holes and seismic lines is not acceptable. Up-to-date information on shot holes and seismic lines should be obtained from The Seismic Exchange Inc (SEI) database and shall be utilized for the identification of seismic data within 2,000 feet of the facility perimeter. Up-to-date information on oil and gas wells shall be obtained from the Louisiana Department of Conservation and Energy (LDCE) Strategic Online Natural Resources Information System (SONRIS) database.

1. *Map of water wells* – Attach in **Attachment 14** a scaled map showing the location of all water wells (including facility water wells) within one mile of the facility perimeter. Water well details shall be included on a table in **Attachment 14**. Up-to-date information on water wells shall be obtained from the LDCE SONRIS database.
2. *Methods to prevent adverse effects from shot holes, seismic lines, and/or oil and/or gas wells* – Check the box indicating if there are anyshot holes, seismic lines, and/or oil and/or gas wells located within the facility. Provide the source for this information even if there are no known or recorded shot holes, seismic lines, and/or oil and gas wells located within the facility. If “yes,” provide a plan describing the methods that will be used to prevent adverse effects to the environment from the shot holes, seismic lines, and/or oil and/or gas wells located within the facility. *See the instructions for 11.O*.
3. *Map of nearby faults* – Attach in **Attachment 15** a scaled map showing the location of all recorded faults within the facility and within one mile of the facility perimeter. State or large regional scale maps shall not be the sole source for fault information as small faults may not be indicated on such maps. Professional literature should be investigated for more detailed work completed in the area of the subject site and federal and state agencies should be contacted for unpublished works. Information on faults may be obtained from available published information to include "Fault and Salt Map of South Louisiana; " 100K Map Series and other maps published by the Louisiana Geological Survey (LGS); publications by the Geological Society of America and the American Association of Petroleum Geologists; and oil and gas field maps available from the LDCE. Also s*ee: W.E. Wallace, published in 1966 by Gulf Coast Association of Geological Societies, Vol. 16.* The depths of faults associated with oil and gas fields or salt domes should be noted.
4. *Existing faults through the facility* – Check the box indicating if there are any existing faults extending through the facility. A source for the information should be provided even if there are no existing faults extending through the facility. If “yes,” refer to the map(s) provided in the response to 11.R and provide other geophysical map(s) or refer to the cross sections provided under 20.E. Attach a discussion of measures that will be taken to mitigate adverse effects in **Attachment 16**. Measures to protect those areas can include describing impermeable soils at the base of the unit, liners, and groundwater monitoring activities.
5. *Existing faults within 200 feet* – Check the box indicating if there are any existing faults within 200 feet of the facility that have had displacement in Holocene time. A source for the information should be provided even if there are no existing faults within 200 feet of the facility that have had displacement in Holocene time. The geophysical maps and site cross sections should be evaluated to determine the age of the faulting, along with other published sources of information. *See instructions for 11.R and 11.S*. If “yes,” attach in **Attachment 17** a demonstration that an alternate setback distance of 200 feet will prevent damage to the structural integrity of the unit and will be protective of human health and the environment.

**Seismic Impact**

1. *Presence of seismic impact zones* – Check the box indicating if the facility is located within a seismic impact zone. Provide a source for this information, whether or not the facility is located within an impact zone. If “yes,” attach in **Attachment 18** a demonstration that the facility will be designed and operated to withstand stresses caused by the maximum ground motion on all structural components, including liners; leak-detection systems; leachate collection, treatment, and removal systems; final covers; and run-on/run-off systems. Seismic impact zones are defined as areas with a ten percent or greater probability that a maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth’s gravitational pull (g), will exceed 0.10 g in 250 years. Information on seismic impact zones should be obtained from the U.S. Geological Survey (USGS).

**Unstable Areas**

1. *Presence of unstable areas* – Check the box indicating whether the facility is located in an unstable area and provide the source of this information even if the facility is not located in an unstable area. If “yes,” attach in **Attachment 19** an evaluation to ensure that all structural components are evaluated and will continue to function as designed and required by the regulations in the event of differential settlement. When evaluating whether an area is unstable, the applicant shall consider, at a minimum, the following information:

* on-site or local soil conditions that may result in significant differential settling,
* on-site or local geologic or geomorphological features, and
* on-site or local human made features or events (both surface and subsurface).

**Utilities**

1. *Presence of utilities* – Attach in **Attachment 7** a map showing all pipelines, power lines, and rights-of-way. The map should be legible and the name of each of these landmarks shall be clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Include a list of any references used to obtain the information.

**Emergency Response**

1. *Emergency response plan and approval* – Attach a copy of the emergency response plan AND the approval letter from the State Fire Marshal’s Office in **Attachment 20**. This letter should state that the facility’s emergency response plan has been approved per LAC 33:VII.513.B.3-5 and 711.D.6. This information is **not** required for modifications. Renewal applications should submit an updated approval letter from the State Fire Marshal’s Office. Additionally, a copy of the emergency response plan should be submitted to the closest fire department, emergency medical services (EMS) agency, and hospital or clinic.
2. **Facility Characteristics (LAC 33:VII.709.B)**
3. *Map –* Attach a map in **Attachment 7** that shows, as applicable, property lines, original contours (shown at not greater than five foot intervals), buildings, units of the facility, drainage, ditches, and roads. The map should be legible and the name of each of these landmarks clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Include a list of any references used to obtain the information.
4. *Perimeter barriers –* Describe the perimeter barriers and other control measures that are used to prevent unauthorized ingress or egress except by willful entry. The description should include language of how each facility entry point will be manned, monitored, or locked continuously during operating hours and will be locked during non-operating hours, and signage to be posted listing the types of waste to be received. Additional information that could be included is fencing (such as chain linked or barbed wire fencing), berms, gates, times when the gates are open and manned, times when the gates are closed and/or locked, signage, and the location of the gate house.
5. *Buffer zone map –* Attach a map in **Attachment 7** showing the facility’s buffer zone. The buffer zone is required to be a minimum of 200 feet between the facility and the property line (The buffer zone shall not extend past the property boundary). The map should be legible and boundaries clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. If the buffer zone is less than 200 feet, a notarized affidavit must be obtained from each landowner having ownership interest in any property located less than 200 feet from the facility. If a church is within 300 feet of the facility property, see Section 12.D.
6. *Church buffer zone –* Check the box indicating if the facility existed prior to April 1, 2010. Existing facilities include both facilities holding a permit and facilities that were physically present prior to April 1, 2010. If the answer is “no,” then there shall be a buffer zone of at least 300 feet between the facility and the common property line with any structure currently used as a church. The structure used as a church must have been used as a church prior to the submittal of the permit application. This requirement does not apply to any landfill or disposal facility that existed prior to April 1, 2010; to any portion of such facility that is closed or has ceased operations; or to future expansions of the permitted disposal areas of any such facility. If the buffer zone is less than 300 feet from a structure used as a church and the facility did not exist prior to April 1, 2010, then a notarized affidavit must be obtained from the owner of a structure used as a church that is located less than 300 feet from the facility. A copy of the notarized affidavit(s) must be entered in the mortgage and conveyance records of the parish(es) in which the property is located.
7. *Buffer zone affidavits –* If buffer zone affidavits for the previous two sections are required, attach a copy of these in **Attachment 21**. If a buffer zone waiver or exemption has been obtained from LDEQ, attach a copy of the letter stating this in **Attachment 21**. A copy of the notarized affidavit(s) must be entered in the mortgage and conveyance records of the parish(es) in which the property is located. Include a copy of this submittal in **Attachment 21**.
8. *Device or method for tracking quantities, sources, and types of waste –* Describe the device(s) or method(s) used to determine the quantity of waste in wet-weight tonnage; the sources of waste, including in and out-of-state; if industrial, where it was generated; and the types of incoming waste (*e.g.,* commercial, residential, or infectious). Additionally, describe the facility’s central control and record keeping system used to tabulate this information. Quantities of waste may be estimated by a scale or a formula. If a formula is used, include this in the application. Include descriptions of visual inspections that occur and the purpose of these inspections (*e.g.,* to determine the type of incoming waste).
9. *Unauthorized waste –* Describe the device(s) or method(s) used to control and prevent entry of unauthorized wastes (*e.g.,* visual inspections, signage that states what waste(s) is(are) unacceptable). Unauthorized wastes include hazardous waste, TSCA-regulated PCB waste, or other solid waste not authorized by the permit. If the application is for a Type II landfill, include in the description procedures for random inspections of incoming waste loads. The frequency of the random inspections should be often enough to reasonably ensure exclusion of prohibited wastes. Describe the procedures used to determine the potential presence of unauthorized wastes (*e.g.,* visual inspections, examination of paperwork from hauler, testing) and how the waste is handled if deemed unacceptable (*e.g.,* sent back with transporter, stored in roll-off box until transportation to permitted facility).
10. *Landscaping -* All facilities, other than those that are located within the boundaries of a plant, industry, or business that generates the waste to be processed or disposed of, shall provide landscaping to improve the aesthetics of the facility. Examples include bushes, shrubs, etc.
11. **Surface Hydrology (LAC 33:VII.519.B.2 and 711.A)**
12. *Surface drainage –* Describe the methods or features, such as levees, ditches, canals, etc., that will be used to prevent surface drainage from flowing through the operating areas of the facility.
13. *Runoff collection system design –* Attach a description of the storm water runoff collection system for the facility in **Attachment 22***.* Provide the design calculations for surface-runoff-diversion levees, canals, or devices that are used to contain and prevent drainage from the units of the facility that have not received final cover. The proposed system shall be designed to collect and control at a minimum the water volume of runoff resulting from a 24-hour/25-year storm event and/or the peak discharge from a 25-year storm event as calculated in the response to Section 13.E. The design of the runoff collection system shall include a comparison of water flows to levee heights or ditch capacities.
14. *Runoff collection system operation –* In accordance with LAC 33:VII.711.A.5, storm water runoff from operating areas that contain solid waste and have not yet received interim compacted cover or final cover shall be considered contaminated and shall not be allowed to mix with uncontaminated surface runoff. Describe the methods or devices used to ensure runoff from these areas will be collected and treated and managed such that contaminated runoff is not allowed to mix with uncontaminated surface runoff. These methods usually involve the use of diversion berms to route water to the appropriate facilities.
15. *Run-on collection system –* A storm water run-on control system shall be installed to prevent run-on from entering operating areas during the peak discharge from a 24-hour/25-year storm event. Provide calculations and describe how the run-on diversion system will prevent run-on from the peak flow of a 25-year storm event and/or control the water volume resulting from a 24-hour/25-year storm event. These methods usually involve the use of temporary diversion berms to route water to the appropriate facilities.
16. *Rainfall amount –* Provide input data and calculations used to determine the peak discharge from the 25-year storm event and the water volume resulting from the 24-hour/25-year storm event. Also, provide the source of the background data including the storm intensity, duration, etc.
17. *Aquifer recharge –* Check the box indicating if there are any aquifer recharge areas in the site or within 1,000 feet of the perimeter. Provide a source for this information even if “no” is checked. Attach a map of aquifer recharge areas showing the location of site and any recharge areas. If “yes,” provide a description of the measures planned to protect these areas from adverse impacts due to the operation of the facility in **Attachment 23**. These measures shall include descriptions of the liner system and the groundwater monitoring system. Aquifer recharge zones shall be classified and mapped as high, moderate, low, or alluvial. This information should be obtained from “Recharge Potential of Louisiana Aquifers” **[[1]](#footnote-1)** (to Accompany State Recharge Potential Maps). These maps are only based on soil characteristics up to six (6) feet; so, if the excavation goes deeper than six (6) feet then the map may be inaccurate. Note that “soils on alluvial valleys…are mapped as alluvium and are generally fine grained, but are considered to have high recharge potential due to the hydraulic connection between alluvial aquifers and rivers.” **[[2]](#footnote-2)** More detailed site-specific investigations are needed to determine recharge potential at depths greater than 5 to 6 feet, including the use of soil survey information and maps of the LGS. The facility may be located in an area of moderate to high recharge potential, and may require design to protect the recharge areas from adverse impacts of operations at the facility. Measures to protect those areas can include a description of impermeable soils at the base of the unit, liners, and groundwater monitoring activities.
18. *100-year flood plain –* Check the box indicating whether the facility is located within the 100-year flood plain and provide the source of this information even if “no” is checked. Attach a map that clearly shows the location of the facility and the location of the flood plain in **Attachment 24**. The map should be legible and the name of each of these landmarks clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information.
19. *100-year base flood –* Describe how the flow of the 100-year base flood will be controlled so that it will not reduce or restrict the temporary water-storage capacity of the facility (flood plain) or cause waste to be carried off-site. This description shall state that the site shall be filled to bring site elevation above flood levels, or that perimeter levees or other measures will be provided to maintain adequate protection against a 100-year flood. In addition, be sure to provide the elevation of the 100-year flood, the elevation of the proposed levees, and ensure the proposed levee elevation will provide sufficient freeboard from the 100-year flood. Freeboard shall be estimated using wind and wave action models.
20. *Flooding –* Describe how the facility is designed such that flooding does not affect the integrity of the facility or result in the washout of solid waste. Provide a description of the use of levees, operational changes, etc. that may be used to protect the facility from washout of solid waste. This will also include backflow preventers in drainage piping.
21. **Facility Plans and Specifications (LAC 33:VII.519.B.3 and 711.B)**

**General**

1. *Design dimensions –* Provide the maximum final elevation and the maximum depth of excavation. Ensure all elevation references are provided in the same datum.
2. *Plan view design drawings –*Attach in **Attachment 25** a sufficient number of drawings to show the following in plan view:

* original contours of the site prior to development,
* proposed elevations of the base of units prior to the installation of any liners,
* slopes (as indicated by arrows),
* locations of proposed and existing levees,
* proposed final contours, and
* other pertinent information.

These drawings shall clearly show the facility and the appropriate excavation slopes or above grade slopes, the location of flood control structures (levees, ditches, etc.), and the location of permanent storm water run-on and runoff controls. The map should be legible and the name of each of these landmarks clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Include a list of any references used to obtain the information.

1. *Cross-sectional drawings –* Attach in **Attachment 26** a sufficient number of drawings to show the following in cross-section(s):

* original and final grades of the site,
* original and proposed elevations,
* drainage,
* proposed liner designs and locations,
* leachate collection system design, and
* other pertinent information.

These drawings shall clearly show the base excavation elevation of all the operational units, the excavation slopes and above grade slopes, the location and profile of flood control structures, and the location of permanent run-on and runoff controls. The map should be legible and the name of each of these landmarks clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Include a list of any references used to obtain the information.

**Liners**

1. *Description of liner system –* Attach in **Attachment 27** a description of the proposed liner system including calculations of anticipated leachate volumes, and rationales for the particular design. This description shall clearly indicate the types of materials proposed for the liner. It is advisable to propose materials that will meet minimum requirements and not to denote specific name brand materials.

If the applicant is requesting an alternate liner system, provide any supporting documentation and calculations used to demonstrate the proposed alternate liner offers equivalent or superior groundwater protection as compared to the standard liner required in LAC 33:VII.711.B.5.c.ii. This demonstration normally includes an evaluation using the Hydrological Evaluation of Landfill Performance (HELP) Model and a discussion on the advantages of using the alternate materials.

In addition to the above, either demonstration shall address the requirements in LAC 33:VII.711.B.5.b. Liner designs shall also address shear, settlement, and consolidation movement of the waste materials.

1. *Quality assurance/quality control plan –* Attach in **Attachment 28** a quality assurance/quality control (QA/QC) plan prepared under the supervision of and certified by a professional engineer, licensed in the state of Louisiana that ensures the soil and synthetic liners are designed, constructed, installed, and maintained properly. At a minimum, the QA/QC plan shall include:

* minimum test frequencies and methods for soil borrow material,
* soil placement methods and compaction testing,
* minimum test frequencies for soil permeability and moisture/density testing,
* method to determine total in-place soil thickness,
* geomembrane manufacturers QA/QC testing and minimum requirements,
* proposed geomembrane installation observations,
* frequency for trial seam testing,
* frequency for geomembrane destructive and nondestructive seam testing,
* geomembrane repair observations,
* observations to determine classification of the leachate drainage soil layer,
* leachate collection layer permeability testing frequency,
* method to determine total leachate collection system thickness, and
* other testing and observations required.

**Leachate Collection, Control, Treatment, and Removal**

1. *Leachate collection system –* Attachin **Attachment 29** a description of the leachate collection system, which shall include the calculations of anticipated leachate volumes, and rationales for particular designs of such systems. At a minimum, the description must indicate the proposed system meets the management standards in LAC 33:VII.711.B.4.a-e and the performance standards of LAC 33:VII.711.B.4.f.

If the applicant seeks approval for an alternate leachate collection and removal system design, provide a description demonstrating how the alternate system would offer equivalent or greater groundwater protection than the protection provided in the performance standards contained in LAC 33:VII.711.B.4.f. Provide any supporting background materials, calculations, etc.

Alternate leachate collection and removal system designs may be approved by the administrative authority if the applicant can demonstrate that the alternate leachate collection and removal system would offer equivalent or greater groundwater protection than the protection provided in the performance standards contained in LAC 33:VII.711.B.4.f. The demonstration shall: indicate the specific types of waste to be disposed, include all other relevant site-specific factors, and be performed using modeling methods acceptable to LDEQ and commonly used to evaluate water flow.

In either case, it is important to note that the slope on the leachate lines shall be designed such that the leachate lines maintain positive drainage when evaluated at post-settlement conditions. This evaluation shall be based on a settlement analysis conducted with site specific geotechnical data at a time when the maximum settlement is expected.

**Levee Construction**

1. *Levee construction –* Attach in **Attachment 30** a description of the methods and measures used to ensure the levees are constructed and maintained in a manner to protect the facility against a 100-year flood. At a minimum, levees shall be engineered to minimize wind and water erosion, have a grass cover or other protective cover to preserve structural integrity, and provide adequate protection against a 100-year flood.

The minimum elevation of the levee shall provide adequate freeboard for the 100-year flood and designed utilizing standard engineering principles and practices. Freeboard may be estimated using wind and wave action models.

**Cover Requirements**

1. *Daily cover –* Attach an estimate of the approximate dimensions of daily fill and a description of the materials to be used for daily cover in **Attachment 31**. The approximate dimension of daily fill shall be the estimated maximum area of the working face. At a minimum, daily cover shall consist of silty or sandy clays applied to a minimum of six inches thick at the end of each operating day and shall meet the requirements of LAC 33:VII.711.B.2.a, f, and g.

If the applicant seeks approval for an alternative daily cover, provide a description of the materials to be utilized and provide any supporting data, documentation, and calculations demonstrating the alternative daily cover meets or exceeds the performance standards of LAC 33:VII.711.B.2.a. Some commonly requested forms of alternative daily cover include tarps, hydromulch, and contaminated soil. Also refer to the *Daily, Interim, and Alternative Cover Guidance for Landfills* available on the LDEQ website. When requesting any alternative daily cover, provide an operational plan to describe the procedures used to deploy the cover. The administrative authority may waive the requirements for daily cover for **Type I Landfills only**, if the applicant can demonstrate that the nature of the waste is such that daily cover is not necessary. If seeking a waiver from daily cover requirements, describe why daily cover is not necessary (consider odor, vector, fire hazards, aesthetics, etc.).Provide a daily cover log example in **Attachment 31** used to meet requirements of 711.B.2.h

1. *Interim and interim compacted cover –* Attach in **Attachment 32** a description of the materials proposed to be used as interim and interim compacted cover. At a minimum, interim cover shall consist of silty clays applied at a minimum of 1‑foot thick and interim compacted cover shall consist of silty clays applied at a minimum of 2-feet thick and compacted. Interim cover or interim compacted cover shall be applied on all operating areas of a facility that will not receive solid waste for a period 60 days or longer and shall be applied within 48 hours of the last receipt of solid waste in the operating area or as soon as weather permits. Any delay in the application/completion of interim cover due to weather shall not exceed seven calendar days unless a written extension is issued by the Office of Environmental Compliance. Provide an erosion control plan to ensure the cover is maintained and performs as intended.

If the applicant seeks approval for an alternative interim or interim compacted cover, describe the materials to be utilized and provide any supporting data, documentation, and calculations demonstrating the alternative cover meets the performance standards of LAC 33:VII.711.B.2.a. In addition, provide an operational plan to describe the procedures to deploy the alternative cover. Include this operational plan in **Attachment 35**. Provide an interim and interim compacted cover log example in **Attachment 32** used to meet requirements of 711.B.2.h

1. *Soil balance calculations –* Provide in **Attachment 33**calculations estimating the volume of material required for daily, interim, and final cover for the life of the facility. Specify if soil is sourced on-site or off-site. If soils are available on-site, provide the quantities (in cubic yards). If soils are sourced off-site, specify the location of the borrow source (include distance from landfill).

**Gas Collection/Treatment or Removal System**

1. *Gas collection in accordance with 40 CFR Part 60 Subpart XXX or 40 CFR Part 62 Subpart OOO –* Check the box to indicate whether the facility has or will install a gas collection/treatment or removal system in accordance with 40 CFR Part 60 Subpart XXX or 40 CFR Part 62 Subpart OOO. If “no,” check the box to indicate whether a gas collection/treatment or removal system is needed to limit methane gas to the lower-explosive limit at the facility boundary or 25 percent of the lower-explosive limit in facility buildings.
2. *Gas collection/treatment or removal system design –* Provide a description of the facility’s gas collection/treatment or removal system. If the gas collection/treatment or removal system is not permitted under 40 CFR Part 60 Subpart XXX or 40 CFR Part 62 Subpart OOO, then the description should be conceptual since it is understood these systems require continuous maintenance and/or the possibility of adding or removing gas collection wells or other features to ensure peak performance. In addition, provide an air monitoring plan that incorporates the standards and reporting requirements in LAC 33:VII.711.D.3. The monitoring plan shall include details describing the use of above ground and below grade monitoring to ensure gas concentrations do not exceed the limits in LAC 33:VII.711.D.3.a.ii.

**Slope Stability Analysis**

1. *Slope Stability Analysis –* Attach in **Attachment 34** a slope stability analysis conducted by a professional engineer, licensed in the state of Louisiana with expertise in geotechnical engineering, when evaluating excavations deeper than 10 feet, proposed final slopes, and critical intermediate conditions. Soil data shall be obtained from a geotechnical analysis of onsite soils. Address the requirements of LAC 33:VII.711.B.7.a-h. Provide the source for all data.

Stability analysis shall be required for any modification that includes a vertical and/or lateral expansion and for any increase of steepness of the landfill slopes.

1. **Facility Administrative Procedures (LAC 33:VII.519.B.4 and 711.C)**
2. *Recordkeeping system –* Describe the system used to keep records. Include the types of records to be kept and a description of how records are used by management to control operations. The list of records should include, but may not be limited to, the records of transporters transporting waste in accordance with LAC 33:VII.711.C.2.b and the following:

* copies of the applicable Louisiana solid waste rules and regulations;
* the permit;
* the permit application;
* permit modifications;
* certified field notes for construction;
* operator training programs;
* daily log;
* quality-assurance/quality-control records;
* inspections by the permit holder or operator, including, but not limited to, inspections to detect incoming hazardous waste loads;
* operator certificates from the Board of Certification and Training for Solid Waste Disposal System Operators, if applicable;
* records demonstrating that liners, leachate-control systems, and leak-detection and cover systems are constructed or installed in accordance with appropriate quality assurance procedures;
* records on the leachate head, volume(s), and results of the leachate sampling;
* monitoring, testing, or analytical data;
* any other applicable or required data deemed necessary by the administrative authority;
* records on groundwater sampling results;
* post-closure monitoring reports;
* copies of all documents received from and submitted to the department;
* records on leachate pump tests; and
* records of action(s) taken under LAC 33:VII.711.D.2.i.

1. *Personnel –* Provide an estimate of the minimum personnel required to operate the facility at maximum operation. The personnel should be listed by general job classification (*e.g.,* operators, mechanics, security, etc.). If job title acronyms are used, please spell out what they abbreviate.
2. *Certified facility operators –* If the facility is a Type II landfill, list the numbers and levels of **certified** facility operators. The number is determined by the Louisiana Solid Waste Operator Certification and Training Program Board (La. R.S. 37:3151 et seq. and LAC 46:Part XXIII).
3. **Facility Operations and Implementation (LAC 33:VII.519.B.5, 709.D, and 711.D)**
4. *Operational plan –* Attach a comprehensive operational plan that describes the total operation of the facility in **Attachment 35**. This operational plan shall include types of waste accepted by the facility, minimum equipment to be provided, waste acceptance and handling procedures, waste segregation and salvaging procedures, leachate collection system monitoring, drainage system maintenance, inclement weather procedures, contingency procedures, provisions for controlling vectors, scavenging control, air monitoring procedures, traffic control, cover procedures, and unit closure.

This plan shall describe the total operation of the facility from entry and acceptance of waste to final closure of the facility and shall:

* provide a list of the types of waste to be accepted by the facility along with any acceptance criteria, waste acceptance and handling procedures, etc. The waste acceptance and handling procedures shall include a discussion of pre-acceptance testing, comparison of the waste material when received at the gate to the waste description provided for pre-acceptance, and any special handling procedures for disposal;
* provide waste characterization laboratory reports;
* provide the minimum equipment to meet the operational needs of the facility. List the generic types of equipment and do not list specific brands;
* discuss any planned waste segregation and the location of the storage areas of these materials and the maximum time these materials will be stored until removed;
* provide the methods that will be used to ensure the leachate collection/treatment system is functioning as designed;
* provide the methods to ensure the on-site drainage system is maintained and serving its intended function;
* discuss the method and operational changes that will be used during wet-weather, paying particular attention to maintenance of access roads and water management;
* discuss procedures for air monitoring including the action limits and remedial steps in the case of an exceedance;
* provide a discussion of the planned use for daily, interim, interim compacted, and final cover;
* provide the planned sequence of closure for each unit through closure of the entire facility; and
* provide operations and maintenance of the leachate collection system. Also refer to the *Guidance for Operation and Maintenance of Landfill Leachate Pumps* available on the LDEQ website.

1. *Special Wastes –* If the facility is receiving special waste, such as industrial waste, domestic-sewage sludge, incinerator ash, asbestos-containing waste, non-hazardous petroleum-contaminated media and debris generated from underground storage tanks (UST) corrective action or any other special waste determined by the administrative authority, then provide in **Attachment 35** the quality assurance/quality-control (QA/QC) plan which shall contain the following:

* necessary methodologies;
* analytical personnel;
* pre-acceptance and delivery restrictions;
* handling procedures; and
* appropriate responsibilities of the generator, transporter, and disposer.

1. *Contingency plan –* Include in **Attachment 35** a plan that includes procedures, equipment, and contingency plans for protecting employees and the public from accidents, fires, explosions, or any other event that may cause harm. The plan should include provisions for emergency response and care, including the proximity to the nearest hospital, fire, and emergency services. Include a list of any training programs that are implemented at the site. If the emergency response plan required by LAC 33:VII.513.B.3-5 includes the requirements above and was included in **Attachment 20**, please note this in **Attachment 35**.
2. *Implementation plan –* Attach an implementation plan in **Attachment 40**. For all facilities (even those not proposing new construction), the implementation plan shall include:

* future construction of infrastructure, operations of the current facility, closure, post closure, and other relevant milestones,
* details on cell/unit implementation to be constructed in phases, and
* a plan for closing and upgrading existing operating areas if proposing expansion of a facility (*e.g.,* additional monitoring wells).

All time frames shall be specified in days, with day one being the date of standard permit issuance.

1. **Facility Closure (LAC 33:VII.519.B.6, 711.E, and 1303.A.3)**
2. *Closure plan –* Attacha closure plan in **Attachment 41** that includes the following:

* the estimated date of final closure;
* date of final receipt of waste, if waste is no longer being received;
* the methods to be used and steps necessary for closing the facility;
* a description of final cover, along with the methods and procedures used to install the final cover;
* an estimate of the largest area of the facility ever requiring final cover at any time during the active life;
* an estimate of the maximum inventory of solid waste ever on site over the active life of the facility;
* a schedule for completing all activities necessary for closure;
* a sequence of final closure of each unit of the facility; and
* a copy of the document that will be filed upon closure of the facility with the official parish record keeper.

Ensure the closure plan addresses all of the requirements in LAC 33:VII.711.E.

The date of final closure shall be estimated based on the anticipated volume of waste expected over the life of the facility.

The description of the final cover shall list each of the components proposed to be used in constructing the cover. In addition, provide a QA/QC plan for each of the components. Most times this QA/QC plan is identical to the QA/QC plan for liner installation. If this is the case, then state this in the response. If the applicant is requesting an alternate final cover, provide any supporting documentation, calculations, and background materials used to demonstrate that the proposed final cover provides performance equivalent to or better than the final cover requirement in LAC 33:VII.711.E.3.a.ii and iv.

Provide the maximum area requiring final cover at any given time. **NOTE:** The closure costs shall be based on closing the maximum area all at once. The facility shall never have an area without final cover greater than the proposed maximum area.

Provide a schedule for completing all closure activities with time frames specified in days.

1. *Final contours drawing –* Attach a drawing that shows the proposed final contours of the facility in **Attachment 41**. The maximum elevation of the facility should be clearly marked on the figure. Include a cross-section of the proposed final cover. The map should be legible and the name of each of these landmarks clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information.
2. *Itemized Closure Cost* – Within the closure plan in **Attachment 41**, include an itemized cost estimate to close the facility. A guidance for closure costs is included on the Department’s website. The closure costs shall be based on the estimated cost of hiring a third party to close the facility at the point in the facility’s operating life when the extent and manner of its operation would make closure the most expensive.

If the soil balance calculation (response to Section 14.J) indicates sufficient soil does not exist on site to close the facility, the closure costs shall be estimated using soil from off-site sources.

**NOTE:** The closure costs shall be based on closing the maximum area all at once.

1. **Facility Post-Closure (LAC 33:VII.519.B.7, 711.F, and 1303.A.3)**
2. *Post-Closure plan –* Attach a post-closure plan in **Attachment 42** that includes the following:

* the methods to be used to maintain the integrity and effectiveness of the final cover;
* methods to prevent run-on and runoff from eroding or otherwise damaging the final cover;
* procedures for maintaining and operating the leachate collection/treatment system, the gas collection/treatment or removal system, and the groundwater monitoring system; and
* annual reports submissions to the OES on the integrity of the final cap.

1. *Itemized Post-Closure Cost* – Within the post-closure plan in **Attachment 42**, include an itemized cost estimate to conduct post-closure activities. A guidance for post-closure costs is included on the Department’s website. The closure costs shall be based on the estimated cost of hiring a third party to conduct post-closure activities. The post-closure cost estimate shall also include, at a minimum, estimates to abandon the leachate collection system and the gas collection/treatment or removal system, to close the leachate treatment system, costs for maintaining and sampling the groundwater monitoring wells for 30 years, and the cost for plugging and abandoning the groundwater monitoring wells at the completion of the post-closure care period.
2. **Financial Responsibility (LAC 33:VII.519.B.8 and Chapter 13)**
3. *Land owner information –* Provide the name and address of the person or company who currently owns the land.
4. *Land owner information if permit granted –* Provide the name and address of the person or company who currently owns the land. If this is the same person or company listed in Section 19.A list ‘same as above’ under the ‘Name’ entry.
5. *Permit requestor –* Provide the name of the agency or public body requesting the permit. If the agency is a public corporation, attach its published annual report in **Attachment 43**. If neither of these descriptions fit, give the names of the principal owners, stockholders, and/or general partners. If this information is available online, referencing a website link is acceptable.
6. *Financial assurance –* Check the box that indicates if you are an existing facility. If “yes,” list the financial mechanism currently used for closure and/or post-closure costs (this includes local government tests). Also list the Electronic Database Management System (EDMS) Document ID Number for the current financial assurance mechanism. If the financial mechanism is a partially funded trust (*i.e.*, with a pay-in period established in accordance with LAC 33:VII.1303.A.3.d), please list the number of years remaining in the pay-in period. If “no,” then provide a statement acknowledging that financial assurance will be obtained in accordance with LAC 33:VII.1303.A.2. For new facilities, financial assurance shall be obtained by the permit holder 60 days prior to the initial receipt of solid waste. If financial assurance needs to be updated, send updated financial assurance under separate cover to the attention of the current Assistant Secretary of the OES at the following address:

Louisiana Department of Environmental Quality

Office of Environmental Services

Waste Permits Division

602 North 5th Street

Baton Rouge, LA 70802

1. **Geology (LAC 33:VII.801, 803, and 805)**
2. *Natural low permeable soils –* Check the box that indicates whether or not the facility has natural soils of low permeability for the solid waste facility in question. If “yes,” include documentation in **Attachment 44**. The demonstration shall include permeability data obtained from geotechnical samples. If “no,” attach a plan to prevent any penetration of surface spills into groundwater aquifers underlying the area in **Attachment 44**. The plan shall include a description of the liner system and the groundwater monitoring system at the facility. Available sources include boring logs which may be developed from a visual classification of drill cuttings. Boreholes may be drilled with hand augers where practical. The borings shall be characterized by a geologist, or a professional engineer licensed in the state of Louisiana with expertise in geotechnical engineering and hydrogeology. Information on soil permeability shall be obtained from geotechnical tests conducted on soil samples from the borings per LAC 33:VII.519.B.3.b. Additional information, if necessary, should be obtained from the U.S. Department of Agriculture, Natural Resources Conservation Service Soil Surveys and maps from the LGS. The LDEQ may approve other forms of geological investigation on a case-by-case basis and provided that any holes, excavations, test pits, etc. are logged by a qualified individual and properly plugged and abandoned.
3. *Boring logs* – Include in **Attachment 45** the completed boring logs used to characterize the subsurface soils and groundwater conditions at the facility, and used to install monitoring wells and piezometers at the facility. The subsurface soils and groundwater conditions at the facility shall be characterized by a geologist, or a professional engineer licensed in the state of Louisiana with expertise in geotechnical engineering and hydrogeology. Boring logs should be completed to the ASTM and the Unified Soil Classification System (USCS) standards. All boring logs should be completed with scales, symbols, ground surface elevations, and accurate descriptions, including first water encountered. All boring logs shall be complete and legible. Boring logs for all soil borings, CPT borings, test pits, monitoring wells, and/or piezometers installed at the site shall be provided.
4. *Plan-view map*– Include in **Attachment 46** a scaled plan-view map that shows existing topographic contours and locations of all borings, monitoring wells, and piezometers with respect to the facility. This includes all existing and plugged and abandoned borings, piezometers, and monitoring wells. The map shall include all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Existing contours should be based on the applicable USGS 7.5 minute quadrangle map and/or a registered professional land surveyor’s elevation map. All maps or copies should be legible.
5. *Regional geologic cross-sections* **–** Include regional geologic cross-sections from available published information in **Attachment 47**. The cross-sections should depict the stratigraphy to a depth of at least 200 feet below the ground surface. Reference published sources that are available from the USGS, the LGS, or other applicable references. The location of the facility shall be shown on the cross-section.
6. *Geologic cross-sections* **–** Attach in **Attachment 48** site specific geologic cross-sections developed from borings performed at the site and completed boring logs for the site subsurface geologic investigation. The cross-sections should be along the perimeter of the facility and along each transect (line of borings). A cross-section location map shall be provided showing all transect lines. Each cross-section shall include:

* lithologic and boring log data for all borings, existing and plugged and abandoned monitoring wells, and piezometers;
* locations and depths of borings, monitoring wells, and piezometers;
* proposed and actual landfill and impoundment excavation depths;
* screen intervals of all existing and plugged and abandoned monitoring wells and piezometers;
* groundwater levels;
* ground surface elevations;
* other applicable features such as faults, slurry walls, groundwater dewatering systems; and
* identification of individual stratigraphic units including the uppermost water-bearing permeable zone(s), uppermost aquifer, and lower confining units.

As noted above in Section 20.B, boring logs should be completed to the ASTM and the USCS standards. All boring logs should be completed with scales, symbols, and accurate descriptions. The lithologic descriptions and level of detail on the cross-sections should correspond to the lithologic descriptions and level of detail on the boring logs. All cross-sections shall be complete and legible.

1. *Permeable zones and confining units* ***–*** Inlcude in **Attachment 49** structure maps and contour maps depicting the areal extent, depths, and thickness of all permeable zones and confining units to a depth of at least 30 feet below the lowest point of excavation. The structure and isopach maps should be developed from all borings performed at the site from the site subsurface geologic investigation and published literature for fault information. As noted above in Section 20.B, boring logs should be completed to the ASTM and the USCS standards. All boring logs should be completed with scales, symbols, and accurate descriptions. Any localized faulting noted by “slicken sides” on boring logs should be included. The maps should have a horizontal and vertical scale.
2. *Groundwater flow* **–** Include in **Attachment 50** potentiometric maps depicting groundwater flow directions using all monitoring wells and piezometers (a minimum of three piezometers or monitoring wells) in each water-bearing zone. This should include zones that comprise the uppermost aquifer and uppermost water-bearing permeable zone(s). For horizontal flow, provide a scaled potentiometric groundwater flow map(s) based on the current or planned monitoring well configuration containing at least one upgradient and two downgradient monitoring wells for each zone monitored. Vertical groundwater flow should be depicted using flow net diagrams and charts comparing groundwater levels measured in different zones using nested wells and piezometers.
3. *Potentiometric surface map* **–** Include at least the four most recent, scaled, quarterly potentiometric surface maps for each saturated permeable zone in **Attachment 50**. The maps should be to a depth of at least 30 feet below the lowest point of excavation. The location of the facility, monitoring wells, and piezometers should be included along with the corresponding water level elevation measurements. The scaled potentiometric groundwater flow maps for each permeable zone monitored based on the current or planned monitoring well configuration should contain at least one upgradient and two downgradient monitoring wells per zone monitored. Groundwater potentiometric maps shall be provided for each water-bearing zone monitored. For existing facilities, the four most recent potentiometric maps shall be provided.
4. **Groundwater Monitoring** **(LAC 33:VII.519.B.10, 801, 803, and 805)**
5. *Monitoring zones* **–** Based on boring logs, plan view maps, and geologic cross-sections required in Sections 20.B, 20.C, and 20.E respectively; provide a description and designation for each zone that will be monitored. In addition, a description of the confining zones beneath the permeable zones shall also be provided.
6. *Maps of groundwater monitoring zone* **–** Inlcude in **Attachment 51** large scale, legible maps of the unit(s) being monitored showing the locations of the existing and proposed monitoring wells and the point of compliance (drawn through all downgradient wells). The map should be legible and the name of each of these landmarks clearly labeled. Define all pertinent map symbols such as scale, north arrow, legend, and any other pertinent information. Provide a point of compliance map for each monitored zone.

The *relevant point of compliance* (POC) is the vertical surface that is located no more than 150 meters downgradient from the unit being monitored and extends down into the uppermost aquifer underlying the facility and any other permeable zones being monitored. The relevant point of compliance shall be on property owned or controlled by the permit holder and shall be selected based on at least the following factors: hydrological characteristics of the facility and the surrounding land; volume and physical and chemical characteristics of the leachate; quantity, quality, and direction of flow of groundwater; proximity and withdrawal rate of the groundwater users; availability of alternative drinking water supplies; existing quality of the groundwater, including other sources of contamination and their cumulative impacts on the groundwater, and whether the groundwater is currently used or reasonably expected to be used for drinking water; and public health, safety, and welfare effects.

**NOTE:** that if mounding and/or recharge is indicated by the incorporation of the permitted facility water surface elevations into the potentiometric maps, the relevant POC shall encircle the permitted facility. The POC wells should be placed as close to the monitored unit(s) as possible. The POC shall be depicted on a separate map for each zone monitored.

Also, be advised that the gradient positions of the monitoring wells, and hence the POC, may change during groundwater monitoring activities based on changes or reversals in groundwater flow directions.

1. *Table of well construction details* **–** Include in **Attachment 52** the table provided as **Appendix A** at the end of this guidance. The table shall include pertinent well construction details for each monitoring well. Include the coordinates, designation of each well as either upgradient or downgradient, the unit(s) being monitored, elevation (in National Geodetic Vertical Datum or NGVD) of a reference point for measuring water levels, elevation of the ground surface (in NGVD), drilled depth (in feet), depth to which the well is cased (in feet), the depth to the top and bottom of the bentonite seal (in feet), the depth to the top and bottom of the screen (in feet), the slot size, the casing size, and the type of grout. Also, provide as-built diagrams (cross-sections) of each well in the table. Piezometers and monitoring wells shall be constructed, and well-completion diagrams submitted, in accordance with the applicable well construction standards in LAC 33:VII.805.A.3.
2. *New Facility* – If the facility is a new facility, include in **Attachment 53** a plan to install monitoring wells as outlined in the paragraph above. Monitoring wells shall be sampled quarterly for the first year and semi-annually thereafter. Groundwater data shall be submitted within 90 days after each sampling event. The plan should include monitoring well locations, depths, drilling method(s), installation, development, and registration requirements. Well construction shall be in accordance with the Water Well Rules, Regulations, and Standards, as adopted by the Guidance Manual for Environmental Borehole and Monitoring Systems as prepared by LDENR and LDEQ dated November, 2021. Include well-completion diagrams for each well showing all pertinent features, such as the elevation of the reference point for measuring groundwater levels, screen interval, and ground surface. If features change from the approved plans, then a permit-modification request shall be submitted in accordance with LAC 33:VII.517.

If the facility is not a new facility, include all background monitoring data and at least four years of monitoring data from monitoring wells in place at the time of the permit application in **Attachment 54**. The detection monitoring data should be from monitoring wells in place at the time of the permit application. .

Be advised if the facility plans to install additional monitoring wells, a monitoring well installation plan shall be provided in **Attachment 53**. New monitoring wells shall be sampled quarterly for one year and groundwater data shall be submitted within 90 days after each quarterly sampling event.

1. *Groundwater monitoring program* – Check the box indicating the groundwater program the facility is currently implementing. (**NOTE:** multiple programs may be implemented at the facility and more than one box may be checked.)
2. *Groundwater Sampling and Analysis Plan* **–** Attach a Groundwater SAP in **Attachment 55**. The SAP should be a standalone document and shall include a well location map, a table with all monitoring well information, and detection monitoring parameters selected according to the requirements of LAC 33:VII.805.C.7.

**The SAP shall include the following:**

* groundwater and permitting history;
* a description of the permeable zones being monitored;
* sample collection, preservation, and shipment procedures;
* chain of custody control;
* quality assurance/quality control methods;
* selection of parameters to be sampled in tabular format (based on waste characterization provided in **Attachment 35**);
* a table of well construction details;
* map of the locations of monitoring wells and piezometers;
* potentiometric maps showing gradient positions of the monitoring wells and piezometers (**NOTE:** the gradient positions of the monitoring wells may change during groundwater monitoring activities based on changes or reversals in groundwater flow directions.);
* analytical methods including practical quantitation limits;
* statistical evaluation methods (if applicable);
* groundwater protection standards (if applicable);
* reporting requirements; and
* any other pertinent information.

For a new facility or an existing facility in detection monitoring without a groundwater monitoring system, the statistical evaluation methods of the SAP shall include the statistical method (prediction, tolerance, etc.), the statistical program (interwell or intrawell), a statement that the SAP incorporates all groundwater sampling requirements of LAC 33.VII.805.B and should specifically address LAC 33.VII.805.B.2 and B.3. The statistical section should state that the analytical results will be evaluated by statistical methods that incorporate LAC 33.VII.805.B.2.e, LAC 33.VII.805.B.5, and LAC 33.VII.805.B.6 upon completion of the initial sampling event.  It should also be made clear in the SAP that an initial sampling event pursuant to LAC 33.VII.805.C.2.c will be performed and the samples analyzed for the parameters listed in the approved SAP.  The initial sampling event shall consist of a minimum of four consecutive quarters; however, if the facility wants to collect more samples for statistical analysis purposes, these samples should be collected during the initial sampling event.

For an existing facility in detection monitoring with a groundwater monitoring system and existing statistical analysis plan, the statistical analysis plan shall be referenced in the SAP.  If this facility does not have an existing statistical analysis plan and has enough historical data to develop statistical methods, the statistical evaluation methods shall be presented in the SAP.

Be advised that the facility shall demonstrate that the appropriate statistical procedure(s) is(are) being used; therefore, please reference any published documentation that the facility will use to choose its statistical procedure(s).  Common references include “Statistical Methods for Groundwater Monitoring”**[[3]](#footnote-3)** and “Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities.”**[[4]](#footnote-4)**

For an existing facility in assessment monitoring or corrective action, a statistical analysis plan should not be provided, instead, a RECAP evaluation and development of groundwater protection standards should be provided.

1. **Capacity Evaluation (LAC 33:VII.513.B.1)**

Provide a copy of the capacity evaluation submitted to the LDEQ and the LDEQ’s response in **Attachment 56**.

The prospective applicant shall conduct a capacity evaluation regarding the need for the type of facility to be requested in the location proposed. This capacity evaluation shall consider existing capacity within the proposed service area of the facility. The prospective applicant shall forward the results of the evaluation to the administrative authority for review.

**With the following exceptions:**

* Applicants who are Type I only and who also do not propose to accept waste from off-site, other than off-site waste from affiliated persons, such as the applicant or any person controlling, controlled by, or under common control with, the applicant
* Applicants for renewal or major modification of an existing permit are exempt from the requirements of a capacity evaluation, provided that the application does not include changes that would constitute a physical expansion of the area(s) in which solid waste are disposed beyond the facility’s boundaries as set forth in the facility’s existing permit.
* Applicants for closure permits, applicants seeking authorization under a general permit, and minor modifications.
* Applicants whose types are I-A only or II-A only, or both I and I-A or both I-A and II-A.

**Capacity analysis may include, but is not limited to:**

* Current capacity within the service area
  + Existing landfill air space of all facilities within the service area
  + Waste acceptance rates
  + Demonstrate that additional capacity is needed to safely and efficiently manage solid waste resulting from a declared emergency originating from an in-state emergency.
    - Site layout can handle increased truck traffic during declared emergencies
    - Adequate air space to handle waste volumes from declared emergencies
    - Equipment on site to handle declared emergencies
* Distance to population centers

1. **Additional Information (LAC 33:VII.519.G)**

Attach any additional information that is needed to support the application. This may include maps, drawings, and other supplemental information. Some examples include, but are not limited to, areas for isolating nonputrescible waste or incinerator ash, borrow area locations, and locations of leachate tanks or leachate treatment ponds. Include these attachments after the required attachments. Fill in the checklist provided with the application with the attachment title(s).

1. **Environmental Assessment Statement (EAS or IT Question Responses, LAC 33:VII.519.B.9)**

This section is required for the following:

* All new permit applications
* Any submittal with a major modification

Answer each of the five questions provided. Use complete sentences. Provide full and complete answers to each question below and attach in **Attachment 57**. A copy of Louisiana Revised Statutes 30:2018 (La. R.S. 30:2018), which require answers for these questions to be provided, can be found at the following web address:

<http://www.deq.louisiana.gov/portal/Portals/0/planning/regs/eqa.pdf>.

1. Demonstrate that the potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible.
2. Provide a cost-benefit analysis demonstrating that the social and economic benefits of the facility outweigh the environmental impact costs.
3. Discuss and describe possible alternative projects that would offer more protection to the environment without unduly curtailing non-environmental benefits.
4. Discuss possible alternative sites that would offer more protection to the environment without unduly curtailing non-environmental benefits.
5. Discuss and describe the mitigating measures which would offer more protection to the environment than the facility, as proposed, without unduly curtailing non-environmental benefits.

**Attachment List and Checklist**

This list includes all attachments needed for the permit application. Check the box after the attachment title indicating if it is included or not. Do **NOT** renumber the attachments. If an attachment is not applicable, check the box for “N/A,” leave that attachment empty and move on to the next one. If additional attachments are needed, fill in the title(s) on the last page or the additional page provided at the end of this guidance. **Not all attachments may be used for each application.**

**ATTACHMENT LIST AND CHECKLIST Additional Page**

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| **Attachment** | **Item Description** | **Yes** | **No** | **N/A** |
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1. **Appendix A**

**Well Construction Table**

Add rows as necessary. The rows with information below are examples and should be deleted when completing the form. In the ‘Gradient’ column, only ‘Up’ or ‘Down’ should be entered.

DMS = Degrees Minutes Seconds, NGVD = National Geodetic Vertical Datum, BGS = Below Ground Surface.

| **Well Id** | **Name of Unit Monitored** | **Latitude**  **(DMS)** | **Longitude**  **(DMS)** | **Installation**  **Date** | **Zone Monitored** | **Gradient** | **Top of Casing Elevation**  **(ft NGVD)** | | **Ground Surface Elevation (ft NGVD)** | **Top of Bentonite**  **Seal**  **(ft BGS)** | **Bottom of Bentonite Seal**  **(ft BGS)** | **Top of Screen Depth**  **(ft BGS)** | **Bottom of Screen Depth**  **(ft BGS)** | **Well Depth**  **(ft BGS)** | **Well Diameter**  **(ft)** | **Slot Size** | **Casing Size** | **Type of Grout** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MW-2 | ASB | 30 15 15 | 90 17 20 | 11/15/2010 | Stratum II | Up | 28.25 | 25.25 | |  |  | 19 | 24 | 30 | 0.25 |  |  |  |
| MW-3 | New Landfill |  |  |  |  | Down |  |  | |  |  |  |  |  |  |  |  |  |
| MW-4 |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |
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| Department of Environmental Quality  Office of Environmental Services  Waste Permits Division  P.O. Box 4313  Baton Rouge, LA 70821-4313  (225) 219-3181 | | **LOUISIANA**  **Solid Waste Permit Application**  **Type I / Type II Landfills** | | | | | | | deq_sublogo | | | |
| **NOTE: The Louisiana Department of Environmental Quality (LDEQ) prepared a *Guidance* document to assist the permit applicant in completing this Louisiana Solid Waste Permit Application for Type I/Type II Landfills. Consult and utilize the *Guidance* prior to providing responses to the information required.**  **ALL** facility plans, specifications, and operations represented and described in this application shall be prepared under the supervision of and certified by a **professional engineer licensed in the State of Louisiana**.  Submit five (5) paper copies of the application (including one original application) addressed to the attention of the current Assistant Secretary of the Office of Environmental Services or the current Administrator of the Waste Permits Division at the address listed above. For applications to go on public review (generally new, renewal, and major modification applications), the applications should be submitted in a three ring binder or as loose pages, so that replacement pages can be inserted into the original submittal. All attachments shall be marked with appropriate tabs. **NOTE:** If the facility is located in **Calcasieu Parish** or in **two parishes**, submit six (6) paper copies of the application.  Site geology and groundwater conditions at facilities shall be characterized by a **professional geologist** or a **professional engineer licensed in the State of Louisiana** with **expertise** in geotechnical engineering and hydrogeology. | | | | | | | | | | | | |
| **PLEASE TYPE OR PRINT**  **1. Facility and Permit Applicant Information (LAC 33:VII.519.B.1, 519.B.8.a, 519.G and 1303.O)** | | | | | | | | | | | | |
| 1. *Facility Name* | | | | | | 1. *Agency Interest (AI) Number* | | | | | | 1. *SIC code* |
| 1. *Mailing Address* | | | | *City* | | | | *State* | | *Zip* | | |
| 1. Type of Application:   New application  Renewal application  Major Modification  Minor Modification | | | | 1. Attach in **Attachment 1** proof of publication of the notice regarding the submittal of the permit application for *new* and *renewal* applications, and *major modifications* that constitute a physical expansion. | | | | | | | | |
| 1. Type of Operation (check each applicable box) | | | | | | | | | 1. Operational Status of: | | | |
| Type I industrial  Type II residential/commercial  Type III C&D and woodwaste | landfill  surface impoundment  IA processing  landfill  surface impoundment  IIA processing  landfill  separation & processing | | | | | | | | Site:  Existing  Proposed | | | Facility:  Existing  Proposed |
| 1. *Full Legal Name of Applicant (prospective permit holder) Applying for the Permit* | | | | | | | | | | | | |
| 1. *Full Legal Name of Operator (if different from Applicant)* | | | | | | | | | | | | |
| 1. *Full Legal Name of Property Owner (if different from Applicant)* | | | | | | | | | | | | |
| *Address of Property Owner (if different from Applicant)* | | | | | *City* | | | | *State* | | *Zip* | |
| 1. Property Ownership Status (attach proof of ownership and a copy of lease (if applicable) in **Attachment 2**)   Owned by Applicant  Leased       yrs. of lease | | | | | | 1. Ownership (Check the appropriate box.)   corporation, partnership, or sole proprietorship  regulated utility  municipal government  state government  federal government  other, specify | | | | | | |
| 1. *Solid Waste Permit or Order to Upgrade Number* | | | 1. *Solid Waste Facility Number* | | |
| 1. *Total site acreage* | | | | | |
| 1. *Acreage to be used for disposal* | | 1. *Anticipated proposed remaining life:*         mos.       yrs. | | | | | 1. *Maximum Capacity (existing plus proposed):*         yds3 **and**       wet tons | | | | | |
| 1. *Provide a brief history of solid waste permitting actions for this landfill, including, but not limited to, permits, modifications, closure activities, and exemptions under LAC 33:VII.307.* | | | | | | | | | | | | |
| 1. *List the name of all units of the facility that are included in the application.* | | | | | | | | | | | | |
| 1. *List of all environmental permits issued to this site (include dates of issuance, permit numbers).* | | | | | | | | | | | | |
| 1. *List of all environmental permits for which the applicant has applied or intends to apply for, related to this site.* | | | | | | | | | | | | |
| 1. *Provide a description of the financial structure of the operating unit including capital structure, principal ownership, and insurance coverage for personal injury and property damage.* | | | | | | | | | | | | |

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| **2. Facility Physical Location and Process Description (LAC 33:VII.517.B.1, 519.B.1, and 519.G)** | |
| **A.** *Nearest Town (in same parish as the facility)* | **B.** *Parish(es)* |
| **C.** *Geographic Location: Section*       *Township*       *Range* | |
| **D.** *GPS Coordinates*   |  |  |  | | --- | --- | --- | | **Location** | **Latitude** | **Longitude** | | ***Centerpoint of the facility*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Centerpoint of unit*** | decimal degrees | decimal degrees | | ***Front gate of the site*** | decimal degrees | decimal degrees | | |
| **E.** *Physical Location (identify by street number, by intersection of roads, or by mileage and direction from an intersection.)* | |
| **F.** *Provide a brief description of the site operations.* | |
| **G.** *Provide a description of the modifications/changes proposed in this application and check the appropriate boxes.*    *Check the appropriate boxes. Any of the boxes checked “yes” constitute a major modification:*  Will waste acceptance rates increase? Yes No Will capacity increase? Yes No  Is a new waste type being added? Yes No Will the service area expand? Yes No  Will operating hours or days increase? Yes No  Will there be a lateral or vertical expansion of the permitted area(s) for waste disposal,  except for a vertical expansion that would result in no net increase of in-place volume? Yes No  Will there be a decrease in groundwater monitoring parameters or wells? Yes No  Will there be any changes that will make the permit less stringent? Yes No | |
| **H.** Does this application include any alternatives allowed by the regulations? Yes No  *(Ex: alternative final cover, liner, etc.)* *If “yes,” provide a brief description of the alternative(s).* | |

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| **3. Local Zoning (LAC 33:VII.519.B.1.m and 519.G)** | | | |
| **A.** *Facility Zoning Classification at Time of Application Submittal* | | **B.** *Local Zoning Authority* | |
| **C.** *Local Zoning Authority Contact* | *Address (Including Suite, Mail Drop, or Division)* | | |
| *City* | *Zip* | | *Business Phone* |
| **D.** Attach zoning documentation in **Attachment 3.** | | | |

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| **4. Confidentiality (LAC 33:I.Chapter 5 and VII:513.C.2.f)** |
| Is confidentiality being requested for any information contained in the application? Yes No   * *If “yes,” list the sections for which confidentiality is requested below. Confidentiality requests require a submittal that is separate from this application. Information for which confidentiality is requested should not be submitted with this application. Consult Guidance document for instructions.* |

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| **5. Fee Information (LAC 33:VII.513.C.2.d and 1501)** |
| Has the required application fee been paid in accordance with LAC 33:VII.1501?  Yes  No |

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| **6. LAC 33:I.1701 Requirements (LAC VII:33.519.E)** |
| 1. Does the applicant have federal or state environmental permits (**other** than the ones listed in Section 1) identical to, or of a similar nature to, the permit for which this application is being submitted? (This requirement applies to all individuals, partnerships, corporations, or other entities who own a controlling interest of 50% or more in your company, or who participate in the environmental management of the facility for an entity applying for the permit or an ownership interest in the permit.)   Yes No   * *If “yes,” list permits in Louisiana*:      * *If “yes,” list other states in which permits are held*: |
| 1. Does the applicant owe any outstanding fees or final penalties to the LDEQ? Yes No  * *If “yes,” provide an explanation*. |
| 1. Is the applicant a corporation or limited liability company? Yes No  * If “yes,” attach a copy of the Certificate of Registration and/or Certificate of Good Standing from the Secretary of State. Attach the appropriate certificate(s) in **Attachment 4**. |

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| **7. Certification and Signatures (LAC 33:VII.519.B.1.q, 519.B.3.a, and 711.B.1)** | | | | | | | | | | | | | | |
| **CERTIFICATION OF RESPONSIBLE OFFICIAL:** “I have personally examined and am familiar with the information submitted in the attached document, and I hereby certify under penalty of law that this information is true, accurate, and complete to the best of my knowledge, information, and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.” | | | | | | | | | | | | | | |
| *Name* | | | | | *Title* | | | | | | | | | |
| *Company* | | *Suite, mail drop, or division* | | | | | | | | *Street or P.O. Box* | | | | |
| *City* | | | *State* | | | | | *Zip* | | *Business Phone* | | | | |
| *Signature of responsible official (as defined in LAC 33:VII.115):* | | | | | | | | | | | | *Date*: | | |
| **CERTIFICATION OF APPLICATION PREPARER:** "I certify under penalty of law that I have personally examined and I am familiar with the information submitted in this permit application and that the facility as described in this permit application meets the requirements of LAC 33:VII.Subpart 1. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment." | | | | | | | | | | | | | | |
| *Name* | | | | | | *Title* | | | | | | | | |
| *Company* | | | | | | *Suite, mail drop, or division* | | | | | | | | |
| *Street or P.O. Box* | | | | *City* | | | | | | | | | *State* | *Zip* |
| *Business phone* | *Cell Phone (Optional)* | | | | | | | | *Email (optional)* | | | | | |
| *Signature of preparer:* | | | | | | | | | | | *Date:* | | | |
| **CERTIFICATION OF ENGINEER:** "I certify that the facility plans, specifications, and operations represented and described in the permit application were prepared under my supervision and are true and accurate to the best of my knowledge, information, and belief in accordance with LAC 33:VII.711.B.1."  **NOTE:** If this is a modification application and no changes have been made requiring an engineer’s services (e.g., a change in the hours of operation), write ‘N/A’ in the ‘Name’ box and continue to the next section. | | | | | | | | | | | | | | |
| *Name* | | | | | *Title* | | | | | | | | | |
| *Company* | | *Suite, mail drop, or division* | | | | | | | | *Street or P.O. Box* | | | | |
| *City* | | | *State* | | | | | *Zip* | | *Business Phone* | | | | |
| *Signature of engineer:* | | | | | | | *Date*: | | | | *Louisiana Registration Number and Seal:* | | | |

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| **8. Facility Contact Information/Personnel (LAC 33:VII.519.B.1.f-g and 519.G)**  Select the primary contact by checking the box after the person whom will be the primary contact for questions regarding this application. Only one primary contact should be selected. | | | | |
| **A. Manager of Facility who is located at site** | | | | |
| *Name* | | | | Primary Contact | |
| *Title* | | *Company* | | | |
| *Suite, Mail Drop, or Division* | | *Street or P.O. Box* | | | |
| *City* | | *State* | *Zip* | | |
| *Business Phone* | *Cell Phone (Optional)* | | *E-mail* | | |
| **B. On-site contact regarding waste permit** | | | | | |
| *Name* | | | | Primary Contact | |
| *Title* | | *Company* | | | |
| *Suite, Mail Drop, or Division* | | *Street or P.O. Box* | | | |
| *City* | | *State* | *Zip* | | |
| *Business Phone* | *Cell Phone (Optional)* | | *E-mail* | | |
| **C. Person to whom written correspondence should be directed** | | | | | |
| *Name* | | | | Primary Contact | |
| *Title* | | *Company* | | | |
| *Suite, Mail Drop, or Division* | | *Street or P.O. Box* | | | |
| *City* | | *State* | *Zip* | | |
| *Business Phone* | *Cell Phone (Optional)* | | *E-mail* | | |
| **D. Person to contact regarding Annual Maintenance Fees** | | | | | |
| *Name* | | | | Primary Contact | |
| *Title* | | *Company* | | | |
| *Suite, Mail Drop, or Division* | | *Street or P.O. Box* | | | |
| *City* | | *State* | *Zip* | | |
| *Business Phone* | *Cell Phone (Optional)* | | *E-mail* | | |

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| **9.** **Waste Description and Service Areas (LAC 33:VII.519.B.1.n, o, B.4.a.iii, and 519.G)** | | | | |
| 1. Maximum quantities of waste disposed in the **Type I/II landfill**:  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Waste Type** | **Wet tons/week** | | **Wet tons/year** | | | **On-Site** | **Off-Site** | **On-Site** | **Off-Site** | | Residential |  |  |  |  | | Industrial |  |  |  |  | | Commercial |  |  |  |  | | C&D |  |  |  |  | | Woodwaste |  |  |  |  | | Other |  |  |  |  |   *If ‘Other’ is filled out, provide a brief description of the waste here*: | | | | |
| 1. Does the facility accept any Regulated Asbestos-Containing Material (RACM)? Yes No  * If “yes,” what type of RACM?  Friable Asbestos  Non-friable Asbestos | | | | |
| 1. *Approximate percentage of waste received from* | | *onsite*:       %  *offsite from generators within Louisiana:*      %  *offsite from generators outside of Louisiana*:      % | | |
| 1. Maximum quantities of waste processed or disposed in **other units checked in section 1.G**:  |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Unit Name** | **Wet tons/week** | | **Wet tons/year** | | | **On-Site** | **Off-Site** | **On-Site** | **Off-Site** | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  | |  |  |  |  |  |   *Provide a brief description of the waste here*: | | | | |
| 1. Service Area of the facility:   Only waste generated by the facility  All parishes  Out-of-state    Acadia  Allen  Ascension  Assumption  Avoyelles  Beauregard  Bienville  Bossier  Caddo  Calcasieu  Caldwell  Cameron  Catahoula | Claiborne  Concordia  De Soto  East Baton Rouge  East Carroll  East Feliciana  Evangeline  Franklin  Grant  Iberia  Iberville  Jackson  Jefferson Davis  Jefferson  La Salle  Lafayette  Lafourche  Lincoln | | Livingston  Madison  Morehouse  Natchitoches  Orleans  Ouachita  Plaquemines  Pointe Coupee  Rapides  Red River  Richland  Sabine  St. Bernard  St. Charles  St. Helena  St. James  St. John the Baptist  St. Landry | St. Martin  St. Mary  St. Tammany  Tangipahoa  Tensas  Terrebonne  Union  Vermilion  Vernon  Washington  Webster  West Baton Rouge  West Carroll  West Feliciana  Winn  Other |
| 1. Provide *the* ***maximum*** *days of operation per week and hours per facility operating day (maximum hours of operation within a 24-hour period)*.       days/week       hrs/day   *Provide the* ***normal*** *days of operation per week and hours per facility operating day (within a 24-hour period)*.        days/week       hrs/day   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *If not operating 24-hours per day and seven days per week, list the hours of operation during* ***normal*** *operating hours:* | | | | | | | | | | Monday | am to | pm | Tuesday | am to | pm | Wednesday | am to | pm | | Thursday  Sunday | am to        am to | pm        pm | Friday | am to | pm | Saturday | am to | pm | | | | | |

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| **10. Settlement Agreements, Consent Decrees, Cooperative Agreements, etc. (LAC 33:VII.519.G)** |
| Does the facility presently have any requirements, conditions, or limitations that have been imposed upon the facility pursuant to any settlement agreements, consent decrees, etc*.*? **Yes No**   * If “yes,” attach a list of all such settlement agreements, consent decrees, etc*.* from the federal government or LDEQ issued to the facility and/or entered into between the federal government and/or LDEQ. For each action, list the type of action, its tracking number, and the date that the action was issued. Summarize the conditions imposed by the settlement agreement, consent decree, etc*.* in **Attachment 5**. It is not necessary to submit a copy of the referenced action. |

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| **11. Location Area Information (LAC 33:VII.513.B.3-5, 519.B.1.r, and 709.A)** |
| **Airports** |
| 1. *List the distance from the facility to the nearest airport.* |
| 1. Does the facility dispose of putrescible waste? Yes  No  * If “yes,” is the facility within: * 10,000 ft of the end of the runway for any public-use airport used by turbojet aircraft?  Yes  No * 5,000 ft of the end of the runway for any public-use airport used by only piston-type aircraft?  Yes  No |
| 1. For Type II facilities only, is the facility located within a 5-mile radius of any airport runway?  Yes  No |
| 1. If “yes” to 11.B or 11.C, attach copies of the notifications to the affected airport(s) and the Federal Aviation Administration (FAA) in **Attachment 6**. |
| **Master Plan** |
| 1. Attach in **Attachment 7** an area master plan, which shall show the current facility, the road network, major drainage systems, drainage flow patterns, location of closest population centers, nearest public use airport (if disposing of putrescible waste) within a 5-mile radius, the location of the 100-year flood plain, and other pertinent information. |
| 1. *Describe access to the facility.* |
| **Traffic and Land Use** |
| 1. For facilities receiving waste from offsite, attach in **Attachment 8** a copy of a letter from the appropriate agency or agencies stating that the facility will not have a significant negative impact on the traffic flow of area roadways and that the construction, maintenance, or proposed upgrading of such roads is adequate to withstand the weight of the vehicles. |
| 1. *Describe the existing land use within three miles of the facility boundary.* |
| 1. Attach a current aerial photograph representative of current land use within a one-mile radius surrounding the facility boundary in **Attachment 9**. |
| **Population** |
| 1. *Describe the estimated population and the population density within a three-mile radius of the facility boundary. (Provide the source of this information.)* |
| **Environmental Characteristics** |
| 1. Is the facility perimeter located within 1,000 feet of any of the following critical/sensitive environmental sites: swamps, marshes, wetlands, estuaries, wildlife-hatchery areas, habitats of endangered species, archaeological sites, historic sites, publicly-owned recreation areas, and similar critical environmental areas?  Yes  No  * If “yes,” describe the measures the applicant will implement to prevent any impacts to areas from landfill operations and list all known areas within 1,000 feet in **Attachment 10**. |
| 1. Attach documentation from the appropriate state and federal agencies substantiating the above areas in **Attachment 11**. |
| 1. Has the facility received waste prior to **October 9, 1993**?  Yes  No |
| 1. Does the proposed activity require an active 404 permit?  Yes  No   (**NOTE:** The wetland determination letter should be attached in **Attachment 11**.)   * *If “yes,” attach a copy of the 404 permit or the 404 application in* ***Attachment 12****.* * *If “no,” please explain.* |
| **Wells and Faults** |
| 1. Attach in **Attachment 13** a scaled map showing the location of all known or recorded shot holes, seismic lines, and oil and gas wells within the facility and within 2,000 feet of the facility perimeter. |
| 1. Attach a scaled map showing the location of all water wells within one mile of the facility perimeter, including facility-owned wells, in **Attachment 14**. |
| 1. Are there any known or recorded shot holes, seismic lines, and/or oil and gas wells located within the facility?   Yes  No  *(Provide the source of this information even if there are no known or recorded shot holes, seismic lines, and/or oil and gas wells located within the facility.)*     * *If “yes,” provide a plan to prevent adverse effects on the environment from the shot holes, seismic lines, and/or oil and gas wells located within the facility.* |
| 1. Attach a scaled map showing the location of all recorded faults within the facility and within one mile of the facility perimeter in **Attachment 15**. |
| 1. Are there any existing faults extending through the facility?  Yes  No   *(Provide the source of this information even if there are no existing faults extending through the facility.)*     * *If “yes,” attach in* ***Attachment 16*** *geophysical mapping or stratigraphic correlation of boring logs verifying their presence and provide a discussion of measures that will be taken to mitigate adverse effects on the facility and the environment.* |
| 1. For units that have not received waste prior to **October 9, 1993**, are there any existing faults within 200 feet of the facility that have had displacement in Holocene time?  Yes  No   *(Provide the source of this information even if there are no existing faults within 200 feet of the facility that have had displacement in Holocene time.)*     * If “yes,” attach a demonstration that an alternate setback distance of 200 feet will prevent damage to the structural integrity of the unit and will be protective of human health and the environment in **Attachment 17**. |
| **Seismic Impact** |
| 1. Is the facility located within a seismic impact zone?  Yes  No   *(Provide the source of this information even if* *the facility is not located within a seismic impact zone.)*     * If “yes,” attach in **Attachment 18** a demonstration that the facility will be designed and operated so that it can withstand the stresses caused by the maximum ground motion on all structural components, including liners, leak-detection systems, leachate collection, treatment, and removal systems; final covers; and run-on/run-off systems. |
| **Unstable Areas** |
| 1. Is the facility located in an unstable area?  Yes  No   *(Provide the source of this information even if the facility is not located in an unstable area.)*     * If “yes,” attach in **Attachment 19** a demonstration that the facility will be designed to ensure the integrity of all structural components, including liners, leak-detection systems, leachate collection, treatment, and removal systems; final covers; and run-on/run-off systems. |
| **Utilities** |
| 1. Attach a scaled map showing the location of all pipelines, power lines, and rights-of-way within the site in **Attachment 7**. |
| **Emergency Response** (NOT required for modifications) |
| 1. Attach a copy of the facility’s emergency response plan AND approval of the plan from the State Fire Marshal in **Attachment 20**. |

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| **12. Facility Characteristics (LAC 33:VII.709.B)** |
| 1. Attach in **Attachment 7** drawing(s) including, as applicable, property lines, original contours (shown at not greater than five foot intervals), buildings, units of the facility, drainage, ditches, and roads. |
| 1. *Provide a description of the perimeter barriers and other control measures used to prevent unauthorized ingress or egress except by willful entry. At a minimum, each facility entry point shall be continuously manned, monitored, or locked during operating hours; each facility entry point shall be locked during non-operating hours; and facilities that receive waste from off-site sources shall post readable signs that list the types of waste that can be received at the facility.* |
| 1. Attach in **Attachment 7** a figure demonstrating that there is an adequate buffer zone at the site. At a minimum, the buffer zone should be 200 feet between the facility and the property line. |
| 1. Did the units of the facility exist prior to **April 1, 2010**?  Yes  No  * If “no” and the adjacent property contains a structure currently being used as a church prior to the submittal of a permit application, then no less than 300 feet shall be provided between the facility and the common property line. This requirement shall not apply to any landfill or disposal facility existing prior to **April 1, 2010**; to any portion of such facility that has been closed or that has ceased operations; or to future expansions of the permitted disposal area of any such facility. |
| 1. If a reduction in the buffer zone requirements is requested, attach in **Attachment 21** copies of notarized affidavits from all landowners having an ownership interest in property located less than 200 feet from the facility (or 300 feet for a church). Additionally, attach copies of approved buffer waivers in **Attachment 21**. |
| 1. *Provide a description of the device or method used to determine wet weight tonnage, sources (in-state or out-of-state and, if industrial waste, where it was generated), and types of incoming waste (commercial, residential, infectious, etc.). This description shall also include the facility’s central control and record keeping system for tabulating this information.* |
| 1. *Provide a description of the device or method used to control entry of the waste and to prevent entry of unauthorized deliverables (examples, hazardous waste, TSCA-regulated PCB waste, or unauthorized solid waste). This description shall also include the facility’s central control and record keeping system for tabulating this information.*   ***NOTE:*** *For a Type II Landfill, the description shall include random inspections of incoming waste loads at a frequency to reasonably ensure exclusion of prohibited wastes.* |
| 1. *Provide a description of the landscaping used to improve the aesthetics of the facility. Facilities that are located within the boundaries of a plant, industry, or business that generates waste to be processed or disposed do not need to construct landscaping.* |

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| **13. Surface Hydrology (LAC 33:VII.519.B.2 and 711.A)** |
| 1. *Provide a description of the method(s) to be used to prevent surface drainage through the operating areas of the facility.* |
| 1. Attach a description of the facility runoff collection system in **Attachment 22**. At a minimum, provide the calculations used to design the surface-runoff-diversion levees, canals, or devices to prevent drainage from the units of the facility that have not received final cover. The proposed system shall be designed to collect and control at least the water volume resulting from a 24-hour/25-year storm event and/or the peak discharge from a 25-year storm event. |
| 1. *Describe how runoff from operating areas or areas that contain solid waste and have not yet received interim compacted cover or final cover are managed such that this contaminated runoff is not allowed to mix with non-contaminated surface runoff.* |
| 1. Provide calculations and describe the facility run-on control system in **Attachment 22**. At a minimum, a run-on control system shall be installed to prevent run-on during the peak discharge from a 25-year storm event and/or to collect and control at least the water volume resulting from a 24-hour/25-year storm event. |
| 1. *Provide the rainfall amount from a 24-hour/25-year storm event. (Provide the source of this information.)* |
| 1. Are there any aquifer recharge areas in the site or within 1,000 feet of the site perimeter? *(Provide the source of this information in Attachment 23 even if “No” is checked.)*  Yes  No  * Attach a map of aquifer recharge areasin **Attachment 23**.   *If “yes,” describe the measures planned to protect those areas from the adverse impact of operations at the facility in* ***Attachment 23****.* |
| 1. Is the facility located in a 100-year flood plain?  Yes  No *(Provide the source of this information even if “No” is checked.)*   Attach a map of the 100-year flood plain with the facility location clearly identified on the map in **Attachment 24**. |
| 1. *Describe how the facility plans to prevent restriction of the flow of the 100-year base flood or reduction of the temporary water-storage capacity of the flood plain. At a minimum the site shall be filled to bring site elevation above flood levels, or perimeter levees or other measures must be provided to maintain adequate protection against a 100-year flood*. |
| 1. *Describe how the facility is designed to ensure that the flooding does not affect the integrity of the facility or result in the washout of solid waste.* |

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| **14. Facility Plans and Specifications (LAC 33:VII.519.B.3 and 711.B)** |
| **General** |
| 1. *What is the proposed maximum final elevation?*       ft National Geodetic Vertical Datum (NGVD)   *Lowest elevation of the base of the unit prior to liner installation?*       ft NGVD |
| 1. Attach in **Attachment 25** plan-view drawings showing original contours, proposed elevations of the base of units prior to installation of the liner system, proposed final contours, slopes, levees, run-on/runoff control structures, and other pertinent features. Include detailed drawings as necessary. |
| 1. Attach in **Attachment 26** representative cross-sectional drawings showing original and final grades, elevations, drainage, the location and type of liner, leachate collection system, levees, run-on/runoff control structures, and other pertinent information. Include detailed drawings as necessary. |
| **Liners** |
| 1. Attach in **Attachment 27** a description of the liner system, which shall include verification the liner(s) is/are designed and operated in accordance with LAC 33:VII.711.B.5.a-d and rationales for particular designs of such systems.  If the applicant seeks approval for an alternate liner system, describe how the alternate system would offer equivalent or greater groundwater protection at the site as compared to the composite liner design as outlined in LAC 33:VII.711.B.5.c.ii. |
| 1. Attach in **Attachment 28** a quality assurance/quality control plan for excavation and liner construction and maintenance that ensures liners are designed, constructed, installed, and maintained properly. |
| **Leachate Collection, Control, Treatment, and Removal** |
| 1. Attach in **Attachment 29** a description of the leachate collection system, which shall include calculations of anticipated leachate volumes and rationales for particular designs of such systems.  At a minimum, the description must indicate the system meets the design and performance standards of LAC 33:VII.711.B.4.  If the applicant seeks approval for an alternate leachate collection and removal system design, describe how the alternate system would offer equivalent or greater groundwater protection than the protection provided in the performance standards contained in LAC 33:VII.711.B.4.f. |
| **Levee Construction** |
| 1. Attach in **Attachment 30** a description of the levee system, which shall include the type, source, and volume of material required for levee construction. In order to protect the facility against a 100-year flood, the levee shall be engineered to minimize wind and water erosion, have a grass cover or other protective cover to preserve structural integrity, and provide adequate freeboard protection against a 100-year flood. |
| **Cover Requirements** |
| 1. Attach a description of the daily fill and cover in **Attachment 31**. The description shall include the approximate dimensions of daily fill and cover. At a minimum, daily cover shall consist of silty or sandy clays applied to a minimum of six inches thick for daily cover at the end of each operating day. If the applicant seeks approval for alternative daily cover, describe the alternative daily cover to be utilized. At a minimum, the description for the alternative daily cover must indicate it meets the performance standards provided in LAC 33:VII.711.B.2.a. The administrative authority may waive the requirements for daily cover for **Type I Landfills only**, if the applicant can demonstrate that the nature of the waste is such that daily cover is not necessary. If seeking a waiver from daily cover requirements, describe why daily cover is not necessary (consider odor, vector, fire hazards, aesthetics, etc.). Also, attach the approval letter for alternative cover in this attachment. Provide a daily cover log example in **Attachment 31** used to meet requirements of 711.B.2.h. |
| 1. Attach a description of the interim and interim compacted cover in **Attachment 32**. The description shall include the following: interim cover consisting of silty clays applied at a minimum of 1-foot thick and/or interim compacted cover consisting of silty clays applied at a minimum of 2-feet thick and compacted; application of interim cover or interim compacted cover on all operating areas of a facility that will not receive solid waste for a period 60 days or longer; application of interim cover or interim compacted cover within 48 hours of the last receipt of solid waste in the operating area; and an erosion control plan. Provide an interim and interim compacted cover log example in **Attachment 32** used to meet requirements of 711.B.2.h. |
| 1. Attach calculations indicating the volume of material required for daily, interim, and final cover in **Attachment 33**. Specify if soil is sourced on-site or off-site. If soils are available on-site, provide the quantities (in cubic yards). If soils are sourced off-site, specify the location of the borrow source (include distance from landfill). |
| **Gas Collection/Treatment or Removal System** |
| 1. Does the facility have a gas collection/treatment or removal system installed or to be installed in accordance with 40 CFR Part 60 Subpart XXX or 40 CFR Part 62 Subpart OOO?  Yes  No  * If “no,” does the facility need to install a gas collection/treatment or removal system to limit methane gas to the lower-explosive limit at the facility boundary or 25 percent of the lower explosive limit in facility buildings?  Yes  No |
| 1. *Describe the facility’s gas collection/treatment or removal system, which shall include a description of the sampling protocol, chain of custody, and test methods to be used, or explain why a gas collection/treatment or removal system is not required.* |
| **Slope Stability Analysis** |
| 1. Attach in **Attachment 34** a slope stability analysis. This analysis shall evaluate the slopes of cell excavations deeper than 10 feet, proposed final elevations, and critical intermediate conditions. Address the requirements of LAC 33:VII.711.B.7.a-h. |

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| **15. Facility Administrative Procedures (LAC 33:VII.519.B.4 and 711.C)** |
| 1. *Describe the recordkeeping system, including the types of records to be kept and the use of records by management to control operations as required. This description will include the annual report*. (*Refer to Guidance document for details.)* |
| 1. *Provide an estimate of the minimum personnel, listed by general job classification, required to operate the facility.* |
| 1. *Provide the number and levels of certified facility operators determined and certified by the Louisiana Solid Waste Operator Certification and Training Program Board (R.S. 37:3151 et seq. and LAC 46:Part XXIII)*. |

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| **16. Facility Operations and Implementation (LAC 33:VII.519.B.5, 709.D, and 711.D)** |
| 1. Attach a comprehensive operational plan describing in specific detail how the waste will be managed during all phases of disposal operations in **Attachment 35**. (Refer to 519.B.5.a, 711.D.2, and the Guidance Document for details.) |
| 1. Does the facility receive special waste such as industrial waste, domestic-sewage sludge, incinerator ash, asbestos-containing waste, or non-hazardous petroleum-contaminated media and debris generated from underground storage tanks (UST) corrective action?  Yes  No  * If “yes,” include a quality-assurance/quality-control (QA/QC) plan within the operational plan in **Attachment 35**. |
| 1. Include in **Attachment 35** a plan outlining procedures, equipment, and contingency plans for protecting employees and the general public from accidents, fires, explosions, etc., and provisions for emergency response and care, should an accident occur. |
| 1. Attach an implementation plan in **Attachment 40**. The implementation plan shall include construction schedules for existing facilities including the beginning and ending time frames and time frames for the installation of all major features; details on phase implementation for any proposed facility to be constructed in phases; and a plan for closing and upgrading existing operating areas if proposing expansion of a facility or construction of a replacement facility. All time frames shall be specified in days, with day one as the date of standard permit issuance. |

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| **17. Facility Closure (LAC 33:VII.519.B.6, 711.E, and 1303.A.3)** |
| 1. Attach a closure plan in **Attachment 41**. The closure plan shall include the date of the planned closure, the method to be used and steps necessary for closing the facility, a description of final cover, the methods and procedures used to install the final cover, an estimate of the largest area of the facility ever requiring a final cover at any time during the active life, an estimate of the maximum inventory of solid waste ever on site over the active life of the facility, a schedule for completing all activities necessary for closure, a sequence of final closure of each unit of the facility, and a copy of the document that will be filed upon closure of the facility with the official parish record keeper. |
| 1. Attach a drawing showing final contours of the facility in **Attachment 41**. |
| 1. Provide in **Attachment 41** an itemized closure cost of the facility, based on the estimated cost of hiring a third party to close the facility at the point in the facility’s operating life when the extent and manner of its operation would make closure the most expensive. (Guidance for closure costs is included on the Department website.) |

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| **18. Facility Post-Closure (LAC 33:VII.519.B.7, 711.F, and 1303.A.3)** |
| 1. Attach a post-closure plan in **Attachment 42**. The post-closure plan shall include a discussion of the long-term use of the facility after closure; the method for conducting post-closure activities; the method for abandonment of monitoring systems, leachate collection systems, gas collection systems, etc.; the measures planned to ensure public safety; and a description of the planned uses of the facility during post-closure. |
| 1. Provide in **Attachment 42** an itemized cost estimate of conducting post-closure of the facility, based on the estimated cost of hiring a third party to conduct post-closure activities in accordance with the closure plan. (Guidance for closure costs is included on the Department website.) |

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| **19. Financial Responsibility (LAC 33:VII.519.B.8 and Chapter 13)** | | | | |
| 1. Provide the name and address of the person or company who currently owns the land. | | | | |
| *Name* | | *Company* | | |
| *Suite, Mail Drop, or Division* | *Street or P.O. Box* | | | |
| *City* | *State* | | *Zip* | *Business Phone* |
| 1. Provide the name and address of the person or company who will own the land if the standard permit is granted. | | | | |
| *Name* | | *Company* | | |
| *Suite, Mail Drop, or Division* | *Street or P.O. Box* | | | |
| *City* | *State* | | *Zip* | *Business Phone* |
| 1. *Provide the name of the agency or other public body that is requesting the standard permit, or if the agency is a public corporation, its published annual report (attach in* ***Attachment 43****), or if otherwise, the names of the principal owners, stockholders, general partners, and/or officers. If this information is available online, referencing a website link is acceptable*. | | | | |
| 1. Is this an existing facility? Yes No  * *If “yes,” list the current financial mechanism and the EDMS Document ID Number for this facility.*     *If the financial mechanism is a partially funded trust, please list the number of years remaining in the pay-in period.*   * *If “no,” provide a statement of acknowledgement that financial assurance will be obtained in accordance with LAC 33:VII.1303.A.2 prior to accepting waste at the facility.* | | | | |

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| **20. Geology (LAC 33:VII.801, 803, and 805)** |
| 1. Does the facility have natural soils of low permeability for the area occupied by the solid waste units, vehicle parking, and turnaround areas? (These soils shall provide a barrier to prevent any penetration of surface spills into groundwater aquifers underlying the area or to an underlying sand or other permeable stratum that would provide a conduit to such aquifers.)  Yes  No  * If “yes,” include documentation in **Attachment 44**. * If “no,” attach a plan to prevent any penetration of surface spills into groundwater aquifers underlying the area in **Attachment 44**. |
| 1. Attach boring logs for each borehole, monitoring well, and piezometer in **Attachment 45**. Boring requirements shall follow the Guidance Manual for Environmental Borehole and Monitoring Systems as prepared by LDENR and LDEQ dated November, 2021. Boring logs shall include the ground surface elevation with respect to NGVD, lithology and the intervals that were cored continuously, and the depth of first encountered groundwater.   **NOTE:** The facilities shall comply with the following boring requirements: geotechnical borehole spacing shall be no greater than 450 feet, the elevation (NGVD) of the lowest point of excavation shall be provided, boring depth shall extend to at least 30 feet below the lowest point of excavation with continuous sampling, and at least 10% of the borings (minimum of three) shall extend to 100 feet below grade to characterize the shallow geology. |
| 1. Attach a plan-view map in **Attachment 46**, which shall include existing topographic contours and locations of all existing and plugged and abandoned borings, monitoring wells, and/or piezometers with respect to the facility. |
| 1. Attach in **Attachment 47** regional geologic cross-sections from available published information that depicts the stratigraphy to a depth of at least 200 feet below the ground surface. The areal extent, thickness, and depth to the upper surface, and any interconnection of aquifers, from all available information shall be provided for all recognized aquifers that have their upper surface within 200 feet of the ground surface. Provide directions and rates of groundwater flow for all recognized aquifers that have their upper surface within 200 feet of the ground surface. |
| 1. Attach geologic cross-sections along the perimeter of the facility and along each transect (line of borings) in **Attachment 48**. Each cross-section shall include lithologic and boring log data for all borings; existing and plugged and abandoned monitoring wells and piezometers; locations and depths of borings, monitoring wells, and piezometers; proposed and/or actual excavation depths; screen intervals of all existing and plugged and abandoned monitoring wells and piezometers; groundwater levels; ground surface elevations; other applicable features such as faults, slurry walls, groundwater dewatering systems; and identification of individual stratigraphic units including the uppermost aquifer, uppermost water-bearing permeable zone(s), and lower confining units. |
| 1. Include in **Attachment 49** structure maps and contour maps depictingthe areal extent, depths, and thickness of all permeable zones and confining units to a depth of at least 30 feet below the lowest point of excavation. |
| 1. Attach in **Attachment 50** potentiometric maps depictinggroundwater flow directions using all monitoring wells and piezometers (minimum of three piezometers or monitoring wells) in each water-bearing zone, including zones that comprise the uppermost aquifer and uppermost water-bearing permeable zone(s). |
| 1. Attach at least four scaled quarterly potentiometric surface maps for each saturated permeable zone to a depth of at least 30 feet below the lowest point of excavation in **Attachment 50**. Include the location of the facility, monitoring well and piezometer locations, and corresponding water level elevation measurements. For existing facilities, the four most recent potentiometric maps shall be provided. |

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| **21. Groundwater Monitoring (LAC 33:VII.519.B.10, 801, 803, and 805)** |
| 1. *Provide a description and designation of each monitoring zone as well as the confining zone separating the permeable zones.* |
| 1. Attach in **Attachment 51** a map for each groundwater monitoring zone that depicts the locations of all monitoring wells, including proposed monitoring wells, and each zone’s relevant point of compliance. Designate each monitoring well as either background/upgradient or downgradient. An adequate number of monitoring wells shall be located hydraulically upgradient of the facility to yield samples that represent background groundwater quality. Additionally, an adequate number of monitoring wells shall be located hydraulically downgradient from the facility to yield samples that are representative of the groundwater passing the relevant point of compliance. The downgradient wells shall be screened in the same zone as the upgradient wells. Spacing between downgradient wells shall not exceed 800 feet. The point of compliance shall be a line drawn through all downgradient wells. Provide a point of compliance map for each zone monitored. |
| 1. Attach a completed copy of the “Table of Well Construction Details” provided in **Appendix A** of the Type I-II Landfill Permit Application Guidance that lists pertinent well construction details for each monitoring well in **Attachment 52**. Include the coordinates, designation of each well as either upgradient or downgradient, the unit(s) being monitored, elevation (NGVD) of a reference point for measuring water levels, elevation of the ground surface (NGVD), drilled depth (in feet), depth to which the well is cased (in feet), the depth to the top and bottom of the bentonite seal (in feet), the depth to the top and bottom of the screen (in feet), the slot size, the casing size, and the type of grout, and as-built diagrams (cross-sections) of each well providing the aforementioned well construction details. Piezometers and monitoring wells shall be constructed, and well-completion diagrams submitted, in accordance with the applicable well construction standards in LAC 33:VII.805.A.3. |
| 1. Is the facility new?  Yes  No  * If “yes,” attach a plan to install monitoring wells in **Attachment 53**. Monitoring wells shall be sampled quarterly for one year, and groundwater data shall be submitted within 90 days after each quarterly sampling event and prior to waste acceptance. * If “no,” attach all background monitoring data and at least four years of monitoring data from monitoring wells in place at the time of the permit application in **Attachment 54**. * Be advised if the facility plans to install additional monitoring wells, a monitoring well installation plan shall be provided in **Attachment 53**. New monitoring wells shall be sampled quarterly for one year, and groundwater data shall be submitted within 90 days after each quarterly sampling event. |
| 1. *What groundwater program is the facility currently implementing?*   Detection Monitoring Assessment Monitoring Corrective Action  *(****NOTE****: multiple programs may be implemented at the facility and more than one box may be checked.)* |
| 1. Attach a Groundwater Sampling and Analysis Plan (SAP) in **Attachment 55**. The SAP shall include a description of the groundwater program(s); permeable zones being monitored; the locations of monitoring wells and piezometers; potentiometric maps showing gradient positions of the monitoring wells and piezometers; selection and justification of parameters to be sampled; sample collection, preservation, and shipment procedures; chain of custody control; analytical methods including practical quantitation limits; quality assurance/quality control methods; statistical evaluation methods (if applicable); reporting requirements; and any other pertinent information.   **NOTE:** See guidance document for a list of additional information to be included in the SAP. |

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| **22. Capacity Evaluation (LAC 33:VII.513.B.1)** |
| Provide a copy of the capacity evaluation that was conducted and submitted to the department regarding the need for the type of facility to be requested in the location proposed, with the following exceptions**:**   * Applicants who are Type I only and who also do not propose to accept waste from off-site, other than off-site waste from affiliated persons, such as the applicant or any person controlling, controlled by, or under common control with, the applicant. * Applicants for renewal or major modification of an existing permit are exempt from the requirements of a capacity evaluation, provided that the application does not include changes that would constitute a physical expansion of the area(s) in which solid waste are disposed beyond the facility’s boundaries as set forth in the facility’s existing permit. * Applicants for closure permits, applicants seeking authorization under a general permit, and minor modifications. * Applicants whose types are I-A only or II-A only, or both I and I-A or both I-A and II-A.   Does the facility require a capacity evaluation?  Yes  No  Attach a copy of the capacity evaluation and LDEQ’s response in **Attachment 56**. |

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| **23. Additional Information (LAC 33:VII.519.G)** |
| Attach any additional information needed to support the application. Any additional information should be included as additional attachments. Fill in the blanks on the last page of the checklist as needed. |

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| **24. Environmental Assessment Statement (EAS or IT Question Responses, LAC 33:VII.519.B.9)** |
| Attach a discussion of the following questions in **Attachment 57**. Consult the Guidance document for details of what each statement discussion should include.  **NOTE:** Applications for **renewal** of an existing permit are **not** required to submit answers to these questions, unless said renewal or extension encompasses changes that would constitute a major modification.  Applications for a **minor modification** of an existing permit are **not** required to submit answers to these questions. |
| 1. Demonstrate that the potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible. |
| 1. Provide a cost-benefit analysis demonstrating that the social and economic benefits of the facility outweigh the environmental-impact costs. |
| 1. Discuss and describe possible alternative projects that would offer more protection to the environment without unduly curtailing nonenvironmental benefits. |
| 1. Discuss possible alternative sites that would offer more protection to the environment without unduly curtailing nonenvironmental benefits. |
| 1. Discuss and describe the mitigating measures which would offer more protection to the environment than the facility, as proposed, without unduly curtailing nonenvironmental benefits. |

**SOLID WASTE PERMIT APPLICATION ATTACHMENT LIST AND CHECKLIST Page 1 of 2**

Instructions: Complete this checklist and submit it with the completed solid waste permit application. Each line should have a “yes,” “no,” or “N/A” checked. If one of the attachments is marked as “N/A,” subsequent attachments should still be labeled with the corresponding attachment number listed in the first columns. If additional attachments are needed, fill in the title(s) on the last page or the additional page provided in the guidance. **Not all attachments will be used for this application.**

| **Attachment** | **Item Description** | **Yes** | **No** | **N/A** |
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| 1 | Proof of publication of notice to submit a solid waste permit application |  |  |  |
| 2 | Proof of ownership and Copy of lease (if applicable) |  |  |  |
| 3 | Zoning documentation |  |  |  |
| 4 | Certificate of Registration and/or Certificate of Good Standing from the Secretary of State |  |  |  |
| 5 | Settlement Agreements, Consent Decrees, Cooperative Agreements, etc. |  |  |  |
| 6 | Airport or FAA notifications |  |  |  |
| 7 | Master plan to include: scaled map of location of pipelines, power lines, and rights-of-way; figure(s) showing property lines, original contours, buildings, units of the facility, drainage, ditches, and roads; **and** figure of buffer zone |  |  |  |
| 8 | Traffic flow letter |  |  |  |
| 9 | Aerial photograph of land use within one-mile radius |  |  |  |
| 10 | Description of measures used to isolate landfill operations from all environmentally sensitive sites within 1,000 feet **and** a list of all known areas within 1,000 feet |  |  |  |
| 11 | Letters from state and federal agencies regarding environmentally sensitive sites |  |  |  |
| 12 | Copy of US Army Corps of Engineers 404 permit or copy of (and proof of submittal) US Army Corps of Engineers 404 permit application |  |  |  |
| 13 | Scaled map showing location of shot holes, seismic lines, and wells within 2,000 feet |  |  |  |
| 14 | Scaled map of all water wells within one mile |  |  |  |
| 15 | Scaled map of all recorded faults within one mile |  |  |  |
| 16 | Geophysical mapping or stratigraphic correlation of boring logs **and** discussion of measures to be taken to mitigate adverse effects |  |  |  |
| 17 | Demonstration of alternate setback distance |  |  |  |
| 18 | Demonstration of ability to withstand stresses caused by maximum ground motion |  |  |  |
| 19 | Demonstration of integrity of structural components |  |  |  |
| 20 | Copy of Emergency Response Plan**,** State Fire Marshal’s approval of plan, **and/or** Contingency plan (if different than Emergency Response Plan) |  |  |  |
| 21 | Copies of notarized affidavits from landowners less than 200 (or 300) feet from the facility |  |  |  |
| 22 | Description of facility runoff collection system |  |  |  |
| 23 | Map of aquifer recharges areas **and** description of the measures planned to protect them |  |  |  |
| 24 | Map of 100-year floodplain |  |  |  |
| 25 | Plan-view drawings showing original contours, proposed elevations, proposed final contours, slopes, levees, and other pertinent features |  |  |  |
| 26 | Cross-sectional drawings showing original contours, elevations, drainage, location and type of liner, leachate collections system, and other pertinent features |  |  |  |

**SOLID WASTE PERMIT APPLICATION ATTACHMENT LIST AND CHECKLIST Page 2 of 2**

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| **Attachment** | **Item Description** | **Yes** | **No** | **N/A** |
| 27 | Description of liner system |  |  |  |
| 28 | Quality assurance/quality control plan for liners |  |  |  |
| 29 | Description of leachate collection system |  |  |  |
| 30 | Description of levee system |  |  |  |
| 31 | Description of daily fill and cover |  |  |  |
| 32 | Description of interim and interim compacted cover |  |  |  |
| 33 | Calculations for volume of material for daily, interim, and final cover |  |  |  |
| 34 | Slope stability analysis |  |  |  |
| 35 | Comprehensive operation plan |  |  |  |
| 36 | Description of method to handle process waters (see LAC 33:VII.519.B.5.c.i) |  |  |  |
| 37 | Plan for disposal and testing of ash (see LAC 33:VII.519.B.5.c.ii) |  |  |  |
| 38 | Description of testing and uses for fuel or compost (see LAC 33:VII.519.B.5.d) |  |  |  |
| 39 | Description of marketing procedures (see LAC 33:VII.519.B.5.e) |  |  |  |
| 40 | Implementation plan |  |  |  |
| 41 | Closure plan **and** drawing of final contours (if applicable) |  |  |  |
| 42 | Post-closure plan |  |  |  |
| 43 | Annual report for public corporation |  |  |  |
| 44 | Demonstration of natural soil permeability **or** Design for surfacing natural soils |  |  |  |
| 45 | Boring logs for boreholes, monitoring wells, and piezometers |  |  |  |
| 46 | Plan-view map of existing topographic contours and locations of all borings, monitoring wells, and piezometers |  |  |  |
| 47 | Regional geologic cross-sections depicting stratigraphy to a depth of at least 200 feet below ground surface |  |  |  |
| 48 | Geologic cross-sections along perimeter of the facility and along each transect |  |  |  |
| 49 | Structure and contour maps showing areal extent, depths, and thickness |  |  |  |
| 50 | Scaled quarterly potentiometric surface maps, groundwater flow direction, and well-completion diagrams |  |  |  |
| 51 | Maps of groundwater monitoring zones |  |  |  |
| 52 | Table of well construction details (*use the copy* *provided in* ***Appendix A*** *of the Type I-II Landfill Permit Application Guidance)* |  |  |  |
| 53 | Plan for installation of monitoring wells |  |  |  |
| 54 | Background data and monitoring data from past four years |  |  |  |
| 55 | Detection Monitoring Sampling and Analysis Plan (SAP), Assessment Monitoring SAP, and/or Corrective Action Plan |  |  |  |
| 56 | Capacity Evaluation |  |  |  |
| 57 | Environmental Assessment Statement (IT Questions) |  |  |  |

1. Published by the LGS in September 1989 [↑](#footnote-ref-1)
2. “Recharge Potential of Louisiana Aquifers” published by LGS in 1989 [↑](#footnote-ref-2)
3. by Robert D. Gibbons, published in 1994. [↑](#footnote-ref-3)
4. by U.S. EPA, published in 2009. [↑](#footnote-ref-4)