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 Landfarms



NOTE: A *Guidance* document has been prepared by the Louisiana Department of Environmental Quality (LDEQ) to assist the permit applicant in completing this Louisiana Solid Waste Permit Application for Type I/Type II Landfarms. The *Guidance* should be consulted and utilized prior to providing responses to the information required to be contained in this application.

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**.

Site geology and groundwater conditions at facilities shall be characterized by a **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

A. Facility Name	B. Age	Agency Interest (AI) Number C. SIC			C. SIC code			
D. Mailing Address		City State			State	Zip		
E. Type of Application: New application Renewal application Major Modification	rding the submi	tachment 1 proof of publication of the notice abmittal of the permit application for <u>new</u> , <u>renewal</u> , <u>fication</u> applications <u>only</u> .						
	mpoundment mpoundment							
I. Individual/Company - Name of Owner Permittee/Permit Holder							nit Holder	
J. Individual/Company - Name of Operator (if different from Owner) Permittee/Permit Holder							nit Holder	
K. Parent Company (if applicable)					Permi	ttee/Perr	mit Holder	
L. Ownership Status (if leased, attach a copy of lease Owned by Applicant Leased yrs. of N. Solid Waste Permit or Order to Upgrade Number O. Solid Waste Permit of Order to		corporation, partnership, or sole proprietors: regulated utility municipal government						
P. Total site acreage			state government federal government other, specify					
		osed remaining yrs.	life:	Q. Ac	reage to be i	ised for a	lisposal	
T. Provide a brief history of solid waste permitting actions for this landfill, including, but not limited to, permits, modifications, and closure activities.								
U. List the name of all units of the facility that are inc	luded	in the applicati	on.					
V. List of all environmental permits issued to this site	(inclu	de dates of issu	ance, pe	ermit n	umbers).			
W. List of all environmental permits for which the ap	plican	t has applied or	rintends	to app	ly for, relate	d to this	site.	

2. Facility Physical Location and Proc A. Nearest Town (in same parish as the facility)		B. Parish(es)
C. Geographic Location: Section Townsh	ip Range	
D. GPS coordinates		
Location	Latitude	Longitude
Centerpoint of the site	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
3. Local Zoning A. Facility Zoning Classification of the Facility a	t 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 in Attachment 3 ☐ Zoning aff ☐ Other	Fidavit Zoning confirmation (if	required by LAC 33:VII.513.B.2)
4. Confidentiality		
Is confidentiality being requested for any informa If "yes," list the sections for which confident that is separate from this application. In this application. Consult Guidance documents. Fee Information	identiality is requested below. Conj nformation for which confidentialit	
Has the required fee been paid in accordance with	n LAC 33:VII.1501?	No
6. LAC 33:I.1701 Requirements A. Does the applicant have federal or state enviate a similar nature to, the permit for which this partnerships, corporations, or other entities participate in the environmental management in the permit.) Yes No If "yes," list permits in Louisiana: Its states in which permits are held:	application is being submitted? (To who own a controlling interest of 5	his requirement applies to all individuals, 10% or more in your company, or who
B. Does the applicant owe any outstanding fees	or final penalties to the LDEQ?	Yes No
• If "yes", provide an explanation.	, i	

 C. 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. 									
7. Certification and Sign	atures								
certification of Resp submitted in the attached docum complete to the best of my know false information, including the	nent, and I her wledge, inform	reb nat	y certify und ion, and beli	ler p ef. I	enalty am av	of law that this vare that there a	inf	ormation is true,	accurate, and
Name				Tit	tle				
Company		Sı	uite, mail dro	pp, or division		Street or P.O. Box			
City		State			Zip		Business Phone		
Signature of responsible officia	l (as defined i	in L	AC 33:VII.1	15):				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 ((Op	ptional)			Email (option	al)	1	
Signature of preparer:		'				Date:			
CERTIFICATION OF ENGI described in the permit applicat knowledge, information, and be Name	ion were prep	are	d under my	supe	ervision VII.71	n and are true a			
Company		Sı	iite, mail dro	on or division			Street or P.O. Box		
			State	<u> </u>					
City			Siaie		Zip		Business Phone		
Signature of engineer:					Date:			Louisiana Reg and Seal:	istration Number

8. Facility Contact Information/PersonnelSelect 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 wh	o is located	l at site							
Name						☐ Primary Contact			
Title			Company						
Suite, Mail Drop, or Division	on		Street or P.O. Box						
City	City				Zip				
Business Phone Cell Phone (Opti			tional)		E-mail (Optional)				
b. On-site contact regarding	ng waste pe	rmit							
Name						Primary Contact			
Title			Company						
Suite, Mail Drop, or Division	Street or P.O. Bo	ox							
City	City				Zip				
Business Phone	(Cell Phone (Op	tional)		E-mail (Optional)				
c. Person to whom written	correspon	dence should b	e directed		L				
Name						☐ Primary Contact			
Title			Company						
Suite, Mail Drop, or Division	on		Street or P.O. Box						
City			State		Zip				
Business Phone	(Cell Phone (Op	ptional) E-mail (Optiona						
d. Person to contact regard	ding Annua	al Maintenance	Fees a	ı □ b	c other (spe	cify below)			
Name						Primary Contact			
Title	Company								
Suite, Mail Drop, or Divisi	on		Street or P.O. Box						
City			State		Zip				
Business Phone	(Cell Phone (Op	tional)		E-mail (Optional)				

9. Waste Description and Service Areas **A.** Maximum quantities of waste disposed: Wet tons/week Wet tons/year On-Site Off-Site On-Site Off-Site Waste Type *If 'Other' is filled out, provide a brief* Residential description of the waste here: Industrial Commercial C&D Woodwaste Other **B.** Approximate percentage of waste received from onsite: offsite from generators within Louisiana: offsite from generators outside of Louisiana: **C.** Areas serviced by the facility: Only waste generated by the Claiborne Livingston St. Martin Madison Concordia St. Mary facility All parishes De Soto Morehouse St. Tammany Out-of-state East Baton Rouge ☐ Natchitoches ☐ Tangipahoa East Carroll Tensas Orleans ☐ Acadia East Feliciana Terrebonne Ouachita ☐ Plaquemines Allen Evangeline Union Ascension ☐ Pointe Coupee ☐ Vermilion Franklin ☐ Assumption Grant Rapides ☐ Vernon ☐ Avoyelles ☐ Iberia Red River ☐ Washington ☐ Beauregard | Iberville Richland ☐ Webster Bienville Jackson Sabine ☐ West Baton Rouge Bossier Jefferson Davis St. Bernard ☐ West Carroll ☐ Caddo Jefferson St. Charles West Feliciana Calcasieu La Salle St. Helena ☐ Winn ☐ Caldwell Lafayette St. James Cameron ☐ Lafourche St. John the Baptist Other St. Landry ☐ Catahoula Lincoln **D.** 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 or operation per week and hours per facility operating day (within a 24-hour period). ____days/week _____hrs/day List the hours of operation during **normal** operating hours: Sunday am to pm Monday _____ am to ____ pm Tuesday _____ am to _____ pm Wednesday ___ am to ____ pm Thursday am to Friday am to Saturday am to 10. Enforcement Actions Does the facility presently have any current requirements, conditions, or limitations that have been imposed upon the facility pursuant to any enforcement actions, settlement agreements, and consent decrees? Yes No If "yes," attach a list of all such enforcement actions, settlement agreements, and consent decrees 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 enforcement action, settlement agreement, and/or consent decree in Attachment 5. It is not necessary to submit a copy of the referenced action. If "no," has the facility been issued any enforcement actions and/or entered into any settlement agreements, and/or consent decrees within the last three (3) years? **Yes No** If "yes," attach a summary as described above in **Attachment 5**. 11. Location Area Information

A. *List the distance from the facility to the nearest airport.*

Airports

B. 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
C. For Type II facilities only, is the facility located within a 5-mile radius of any airport runway? Yes No
D. 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
E. 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.
F. Describe access to the facility.
Traffic and Land Use
G. 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.
H. Describe the existing land use within a three-mile radius of the facility.
I. Attach a <u>current</u> aerial photograph representative of current land use within a one-mile radius surrounding the facility in Attachment 9 .
Population
J. Describe the estimated population and the population density within a three-mile radius of the facility. (Provide the source of this information.)
Environmental Characteristics
K. Is the facility perimeter located within 1,000 feet of any of the following critical/sensitive environmental sites: 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 .
L. Attach documentation from the appropriate state and federal agencies substantiating the above areas in Attachment 11.
M. Has the facility received waste prior to October 9, 1993? Yes No
N. If wetlands are present on site, does the applicant have a 404 permit? Yes No N/A (NOTE: The wetland determination letter should be attached in Attachment 11 .)
• If "yes," attach a copy of the 404 permit in Attachment 12 .
 If "no," has the facility applied for a 404 permit? Yes No If "yes," attach a copy of the 404 application in Attachment 12.
Wells and Faults
O. Attach in Attachment 13 a scaled map showing the location of all known or recorded shot holes, seismic lines, and wells
within the facility and within 2,000 feet of the facility perimeter.
P. Attach a scaled map showing the location of all water wells within one mile of the facility perimeter in Attachment 14.
Q. Are there any known or recorded shot holes, seismic lines, and/or wells located within the facility? (Provide the source of this information.) \(\sum \text{Yes} \sum \sin \text{No} \)
• If "yes," provide a plan to prevent adverse effects on the environment from the shot holes, seismic lines, and/or wells located within the facility.
R. 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 .

S. Are there any existing faults extending through the facility? (Provide the source of this information.) \square Yes \square No
• 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.
 T. 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? (Provide the source of this information.) Yes No 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
U. Is the facility located within a seismic impact zone? (Provide the source of this information.) Yes No
• 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
V. Is the facility located in an unstable area? (Provide the source of this information.) \[\sum \text{Yes} \] No
• 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; run-on/run-off systems.
Utilities
W. 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)
X. Attach a copy of the facility's emergency response plan AND approval of the plan from the State Fire Marshal in Attachment 20.
12. Facility Characteristics
A. 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.
B. 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.
C. 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.
 D. 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 landfarm 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.
 D. 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 landfarm 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

shall also include the facility's central control and record keeping system for tabulating this information. 13. Surface Hydrology **A.** Provide a description of the method(s) to be used to prevent surface drainage through the operating areas of the facility. B. Attach a description of the facility runoff collection system in Attachment 22. At a minimum, provide the design for runoff and containment areas, surface-runoff-diversion levees, canals, or devices to prevent drainage from the units of the facility. The proposed system shall be designed to collect and control at least the water volume resulting from a 24hour/25-year storm event and/or the peak discharge from a 25-year storm event. C. Describe how runoff from operating areas or areas that contain solid waste are managed such that this contaminated runoff is not allowed to mix with non-contaminated surface runoff. **D.** Describe the facility run-on control system. 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. E. Provide the rainfall amount from a 24-hour/25-year storm event. (Provide the source of this information.) **F.** Are there any aquifer recharge areas in the site or within 1,000 feet of the site perimeter? (Provide the source of this information.) Yes No • If "yes," attach a map of aquifer recharge areas and describe the measures planned to protect those areas from the adverse impact of operations at the facility in Attachment 23. (Provide the source of this information.) **G.** *Is the facility located in a 100-year flood plain?* Tes No (Provide the source of this information.) Attach a map of the 100-year flood plain with the facility location clearly identified on the map in Attachment 24. H. Describe how the facility plans to prevent restriction or reduction 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. I. 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. 14. Facility Plans and Specifications General ft **and** *Length at longest point?* **A.** What is the width at widest point? **B.** 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, and other pertinent features. Include detailed drawings as necessary. C. Attach in Attachment 26 representative cross-sectional drawings showing original and final grades, elevations, drainage, and other pertinent information. Include detailed drawings as necessary. **Levee Construction D.** 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.

G. 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

15. Facility Administrative Procedures

A. 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.)

- **B.** Provide an estimate of the minimum personnel, listed by general job classification, required to operate the facility.
- **C.** For Type II facilities only, 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).

16. Facility Operations and Implementation

- **A.** Attach a comprehensive operational plan describing the total operation in **Attachment 35**. The operational plan shall include types of waste and minimum equipment, waste-handling procedures, inclement weather procedures, contingency procedures, provisions for controlling vectors, scavenging control, air monitoring procedures, traffic control, support facilities, day-to-day activities, quality-assurance/quality-control plan, and inspections of incoming waste.
- **B.** Attach in **Attachment 20** 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.
- **C.** 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 1 as the date of standard permit issuance.

17. Facility Closure

Attach a closure plan in **Attachment 41**. The closure plan shall include the date of final closure, the method to be used and steps necessary for closing the facility, an itemized cost to close the facility by a third party, 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.

18. Facility Post-Closure

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; an itemized cost of conducting post-closure at the facility by third party; the method for conducting post-closure activities; the method for abandonment of monitoring 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.

19. Financial Responsibility

A. Provide the name and address of the person or con	npany who curr	rently	owns the land.	
Name		Comp	oany	
Suite, Mail Drop, or Division	Street or P.O.	Box		
City	State		Zip	Business Phone
B. Provide the name and address of the person or con	L npany who will	own	the land if the star	ndard permit is granted.
Name		Comp	vany	
Suite, Mail Drop, or Division	Street or P.O.	Box		
City	State		Zip	Business Phone
C. Provide the name of the agency or other public be corporation, its published annual report (attach is stockholders, general partners, and/or officers. If the	n Attachment	43), o	r if otherwise, the	names of the principal owners,

D. <i>Is this an existing facility?</i> Yes No	
• If "yes," list the current financial mechanism for this facility.	
• If "no," provide a statement of acknowledgement that financial assurance with	ill be obtained in accordance with LAC
33:VII.1303.A.2. prior to accepting waste at the facility.	

20. Geology

A. Does the facility have natural soils of low permeability for the area occupied by the solid waste units, including 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 provi	de a
conduit to such aquifers.)	

- If "yes," attach a demonstration in Attachment 44.
- If "no," attach a design for surfacing natural soils that do not meet this requirement in Attachment 44.
- **B.** Attach boring logs for each borehole, monitoring well, and piezometer in **Attachment 45**. Boring requirements shall follow the LDEQ's and Louisiana Department of Transportation and Development (LDOTD)'s Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook and LDOTD's Water Well Rules, Regulations, and Standards in LAC 56. 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.

- **C.** Attach a plan-view map in **Attachment 46**, which shall include existing topographic contours and locations of all borings, monitoring wells, and piezometers with respect to the facility.
- **D.** 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.
- E. 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; excavation depths; screen intervals of all existing and plugged and abandoned monitoring wells and piezometers; groundwater levels; 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.
- **F.** Attach in **Attachment 49** structure maps and contour maps depicting the areal extent, depths, and thickness of all permeable zones, confining units, and faults to a depth of at least 30 feet below the lowest point of excavation.
- **G.** Attach in **Attachment 50** potentiometric maps depicting groundwater flow directions using a 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). 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.
- **H.** 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.

21. Groundwater Monitoring

- **A.** Provide a description and designation of each zone that will be monitored.
- **B.** 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.

C. Attach the table provided in the 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.
D. <i>Is the facility new?</i> ☐ 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 after each quarterly sampling event and prior to waste acceptance.
• If "no," does the facility have an existing groundwater monitoring system? Yes No
• If "yes," attach all background data and at least four years of detection monitoring data from monitoring wells in place at the time of the permit application in Attachment 54 .
 If "no," 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.
E. What phase of groundwater monitoring is the facility currently implementing?
☐ Detection Monitoring
Assessment Monitoring
Corrective Action
Attach in Attachment 55 any plan associated with the above phases.
F. Attach a Groundwater Sampling and Analysis Plan (SAP) in Attachment 55. The SAP shall include a description of the 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: Please be advised that if the facility is in assessment monitoring or corrective action, statistical evaluation methods should not be provided.
22. Additional Information

Attach any additional information needed to support the application. These should be included as additional attachments. Fill in the blanks on the last page of the checklist as needed.

23. Environmental Assessment Statement (EAS or IT Question Responses)

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.

- **A.** Demonstrate that the potential and real adverse environmental effects of the facility have been avoided to the maximum extent possible.
- **B.** Provide a cost-benefit analysis demonstrating that the social and economic benefits of the facility outweigh the environmental-impact costs.
- **C.** Discuss and describe possible alternative projects that would offer more protection to the environment without unduly curtailing nonenvironmental benefits.
- **D.** Discuss possible alternative sites that would offer more protection to the environment without unduly curtailing nonenvironmental benefits.
- **E.** 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 letter 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
1	Proof of publication of notice to submit a solid waste permit application			
2	Copy of lease			
3	Zoning documentation			
4	Certificate of Registration and/or Certificate of Good Standing from the Secretary of State			
5	Summary of enforcement actions			
6	Airport or FAA notifications			
7	Master plan to include: scaled map of location of pipelines, power lines, and right-of-ways; 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 and 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			
27	Description of liner system			

	ENT LIST AND CHECKLIST		2 01 2	
Attachment	Item Description	Yes	No	N/A
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			
37	Plan for disposal and testing of ash			
38	Description of testing and uses for fuel or compost			
39	Description of marketing procedures			
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			
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)			
58				
59				