



State of Louisiana

Department of Health and Hospitals
Office of Public Health

SF-22
(Rev. 09/13/10)

PROCEDURES FOR SUBMITTING PLANS AND SPECIFICATIONS FOR REVIEW AND APPROVAL OF COMMERCIAL SEWERAGE FACILITIES 3000 GPD AND LESS

The following procedures shall be used when submitting plans and specifications for sewerage facilities for review and approval by the DHH/Office of Public Health. This does not include, however, projects involving systems greater than 3,000 gallons per day (gpd). For projects such as those, the Engineering Services Section of the Regional Office in your area should be contacted.

The State Sanitary Code requires that, prior to the start of constructions, approval by the Department of Health and Hospitals (DHH) be obtained for plans and specifications of all sewerage facilities. This applies to new facilities as well as any significant modifications or extensions.

The plans and specifications for all projects having a design average flow of greater than 3,000 gallons per day, or an equivalent organic loading, must be submitted to the regional office. For smaller projects, the plans and specifications must be submitted to local parish health unit in your area.

Following are some common maximum project sizes to be handled by the local parish health units:

3,000	gallons per day design average flow (sewage)
15	residential users
75	office or factory workers (no food handling or showers)
5	trailer sites
5	two bedroom apartments

In order to expedite our handling of your projects, the following suggestions are offered regarding plans and specifications which you submit for approval to the Department of Health and Hospitals:

1. A single set of detailed plans and specifications should be submitted at least 60 days prior to the time the approval, comments, or recommendations are desired by the owner.
2. A detailed design summary package for all sewerage facilities must be submitted. The applicable design summary forms, which are attached, should be used.

3. Submit a vicinity map showing the project location, the sewage treatment facility location, discharge point, and receiving stream. Include a tracing of the outfall to the first perennial (non-intermittent) waterway in the path of the projected outfall.
4. Submit plot plan identifying the lots and including adjacent property usage and ownership.
5. Submit layout drawings showing all pump stations, manholes, clean-outs, pipe, etc., as well as the sewage treatment facility location. Details that do not pertain to the sanitary features need not be included, such as electrical, storm water drainage, and street details.
6. Submit detailed drawings of sewage treatment, collection, and pumping facilities with plan, profile, and end views, depicting dimensions, capacities, materials, and elevations referenced to the North American Vertical Datum of 1988 (NAVD88).
7. Where lots are sold, evidence must be submitted showing that the facilities will be maintained in perpetuity. Ownership by a governmental body is one way to do this. As a prerequisite to our approval of privately owned facilities, the owner must be set up to own, operate, and maintain the facilities rather than the developing company. In addition to this agency's approval, state law requires a profit type utility serving more than ten customers to register with the Louisiana Public Service Commission.
8. For extensions to an existing system, information pertaining to the existing system should be submitted. Please include present population served, design capacity of present system, capacity of lift stations, etc. The ability of the existing system to absorb the extra loading should be documented. Also, if the extension is outside the boundaries of a municipality or district, a letter of acceptance from that authority should be included.
9. For a sewage treatment plant, a complete description of the effluent outfall path shall be submitted. Depictions, detailed descriptions and definitions of all servitudes or rights-of-way encountered for the entire outfall path shall be provided. Written verification/authorization from the legal entity(ies) associated with said servitudes indicating no objection to the discharge of treated sewer effluent into said servitudes shall be submitted. Written verification/authorization from the local governing body indicating no objection to the proposed point of discharge and outfall path shall be submitted. If the treated effluent will encounter a Louisiana Department of Transportation and Development (LDOTD) right-of-way, a letter of no objection from LDOTD for the discharge of treated sewer effluent into the LDOTD right-of-way shall be provided. It is important that the plant not discharge across privately owned property without benefit of easement before reaching a perennial stream (See Item 3 above).
10. The review of the plans and specifications are made, with some exceptions, in accordance with the "Recommended Standards for Wastewater Facilities", 1990 Edition promulgated by the Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers [available from the Health Education Services – P.O. Box 7126 – Albany, NY 12224 (www.hes.org)]. Additional Design Standards for sewerage facilities are given in Part XIII of the State Sanitary Code. The state sanitary code is available at <http://www.dhh.louisiana.gov/offices/?ID=242>.

11. The Louisiana Department of Environmental Quality (DEQ) is responsible for determining the water quality requirements in the State for all wastewater discharges as well as for the issuance of wastewater discharge permits. State law requires that a discharge permit be obtained from the Department of Environmental Quality, Office of Environmental Services, Water & Waste Permits Division, P. O. Box 4313, Baton Rouge, LA 70821-4313 (Phone # 225-219-3181) prior to discharge of any wastewater. You may also be required to obtain a federal permit for the wastewater discharge, about which DEQ can advise you.
12. Federal mandate for DEQ to establish Total Maximum Daily Loads (TMDLs) for all water bodies in our state have resulted in lower limits being established for wastewater dischargers to specific receiving streams based on what organic loads the receiving stream may already have and other stream specific data. A copy of your Administrative Completeness Determination letter from DEQ or existing DEQ discharge permit shall be submitted along with this design summary package for all permits involving a wastewater treatment facility. Regarding this you should contact DEQ Water Permits Division, PO Box 4313 Baton Rouge, LA 70821-4313 whose phone number is 225-219-3181.
13. If the project involves work or structures in the waters of the State including adjacent wetlands, a permit from the U. S. Army Corps of Engineers may be required. Examples, of this are water intake structures, pipeline stream crossings, and sewage plant out fall structures. Regarding this, you should contact the New Orleans District Corps of Engineers, Department of the Army, P. O. Box 60267, New Orleans, LA 70160. Attention: LMNOD-SP. Or the Vicksburg District Corps of Engineers, Department of the Army, 4155 Clay Street, Vicksburg, MS 39183-3435. Attention: CEMVK-OD-F
14. If the project would have an impact on any surface water body that has been designated as a Scenic River, then a permit may be required from the Louisiana Department of Wildlife and Fisheries. Regarding this you should contact the Ecological Study Section, Louisiana Department of Wildlife and Fisheries, P. O. Box 14526, Baton Rouge, LA 70898.
15. The Operator for Community Sewer Treatment and Collection Systems shall hold a current and valid Professional Certification (s) of the required category as set forth in R.S. 40:1141-1151. Additionally, an Operator shall demonstrate that when not present at the facility, he or she is capable of responding to that location within one (1) hour of being notified that his presence is needed. For more information regarding Operator Certification, please call the Department of Health and Hospital's Office of Public Health Operator Certification Unit at (225) 342-7508.
16. Once the project is completed, the last page titled "CERTIFICATION OF CONSTRUCTION" shall be completed, and signed by the contractor then submitted to the office from which the permit was issued. Your permit is not considered final until this step has been completed.

**DESIGN SUMMARY PACKAGE
COMMERCIAL SEWERAGE FACILITIES
3000 GPD and LESS**
(Fill Out Applicable Sheets)

Project:			
Contractor:			
Telephone:			
Parish:		Nearest Town:	
Population Served:			
New System? ☐ Yes ☐ No		Existing System? ☐ Yes ☐ No	
Project to be Owned and Operated By: (include name and address)			
Proposed Project Will Tie-in to:	Sewer:		

SEWER COLLECTION SYSTEM

Project:					
Contractor:					
General Scope of Project:					
GRAVITY PIPING	Material (specify ASTM standard and standard dimension ratio-SDR)				
	Size (8 inch minimum diameter)				
	Joints and Materials of Fitting:				
FORCE MAINS	Material (specify ASTM standard and standard dimension ration-SDR)				
	Size (3 inch minimum diameter <u>without</u> grinder pumps; 1 ¼ minimum diameter <u>with</u> grinder pumps)				
	Joints and Materials of Fitting:				
LAYOUT	Slope of Gravity Mains	____%Min.	____%Max.	____%Majority	
	Location with Respect to Water Lines:	Maintain 18" Minimum Vertical Clearance @ Crossings? ☐ Yes ☐ No			
		Maintain 6' Minimum Horizontal Clearance? ☐ Yes ☐ No			
	Maximum Distance Between Manholes:				
	Number of Surface Water Crossings/Encounters:				
	Other Comments: (Manhole Construction, Highway Crossing, etc.)				
Deflection Testing? ☐ Yes ☐ No		Hydrostatic Testing? ☐ Yes ☐ No			
NAME OF CERTIFIED OPERATOR:					

LIFT STATION (S)

Project:			
Contractor:			
General Scope of Project:			
PUMPS	# per Station:		
	Type:		Power:
	Capacity (GPM):	@	TDH (FT)
	Pump Line Sizes and Type	Suction Line:	
		Discharge Line (3 inch min. diameter <u>without</u> grinder pumps; 1 ¼ inch min. diameter <u>with</u> grinder pumps):	
		Common Line:	
	Max. Solids Passage (in Inches):		
	Gate Valve on Suction? ☐ Yes ☐ No	Gate Valve and Check Valves on Discharge? ☐ Yes ☐ No	
WET WELL	Detention/Design flow (in minutes – 30 min maximum):		
	Pump Cycle Time:		
	Volume (low water to lead pump on):		
	Material:		
	Diameter:		
	Bottom Elevation:		
	Invert of Influent:		
	Floor Slope:		
	Access Cover Diameter:		
Vented and Screened? ☐ Yes ☐ No			
FORCE MAIN	Size (3 inch min. diameter <u>without</u> grinder pumps; 1 ¼ inch diameter <u>with</u> grinder pumps):		
	Material (specify standard and standard dimension ratio-SDR):		
	Velocity (in fps – 2 fps minimum):		
Lift Station Cover Construction:			
Alarm Systems:	Visual: ☐ Yes ☐ No	Telemetry: ☐ Yes ☐ No	
	Audible: ☐ Yes ☐ No		

EXTENDED AERATION SEWAGE TREATMENT FACILITY

1 of 3

Project:				Water Well within 100'? ☐ Yes ☐ No
Contractor:				
General Scope of Project:				
Design Average Flow:				
BOD ₅ Loading (in lbs of BOD ₅ per day):				
Max. # of Lots or Population at Maximum Capacity:				
Initial # of Lots (or population):				
Industrial Waste:				
Design Effluent Limits:	BOD ₅ :	TSS:	NH ₃ N:	
RECEIVING STREAM: (provide complete path from outfall to first perennial non- intermittent waterway in the path of the projected outfall.)				
Plant Manufacturer:				
Plant Model #:				
Materials of Construction:				
AERATION TANK	Volume:			
	Retention Time (24 Hour Min):			
	BOD ₅ Loading: (lb per 1000 CF, 12.5 max.)			
	Screen or Communitor?	☐ Yes ☐ No		
FINAL CLARIFIER	Surface Area:			
	Surface Loading: (gpd/ft ² @ peak hourly flow)			
	Volume:			
	Scum Baffle:			
	Skimmer Through:			
	Weir Loading: (gpd/ft @ peak hourly flow)			
NAME OF CERTIFIED OPERATOR:				

EXTENDED AERATION SEWAGE TREATMENT FACILITY

2 of 3

AIR SUPPLY	# of Blowers:			
	Capacity of Each (SCFM):			
SLUDGE RETURN	Method:			
	Maximum Flow (GPM):			
	Maximum Percent (% of DAF):			
SLUDGE DRYING BEDS	Number of Beds:			
	Area of Each Bed:			
	Total Area:			
	Area per Capita:			
	Gravel Layer Depth:			
	Sizes:			
	Sand Depth:			
	Under-drain Size:			
	Freeboard Above Sand:			
	Effluent To:			
SLUDGE LAGOONS	Number of Lagoons:			
	Maximum Depth:			
	Free Board:			
	Volume of Each Lagoon:			
	Volume of Each Lagoon per Capita:			
	Pump:			
	Piping Material:		Size:	
	Effluent To:			
OTHER SLUDGE DISPOSAL METHODS Explain:				

EXTENDED AERATION SEWAGE TREATMENT FACILITY

3 of 3

CHLORINATION	Number:			
	Gas or Hypo:			
	Capacity (lb per 24 hrs):			
	Test Kit:			
	Location:			
	Ventilation:			
CHLORINE CONTACT TANK	Inside Dimensions	Length:		
		Width:		
		Operating Depth:		
	Capacity (gal):			
	Retention Time: (15 minute min. @ peak hourly flow or maximum rate of pumping)			
Baffles? ☐ Yes ☐ No		Scum Baffle? ☐ Yes ☐ No		
ADDITIONAL DETATILS	Power Supply (Dual)? ☐ Yes ☐ No		Washdown Facility? ☐ Yes ☐ No	
	Facility Fenced? ☐ Yes ☐ No		Backflow Prevention? ☐ Yes ☐ No	
			Type:	
	Gates Locked? ☐ Yes ☐ No		Access Road? ☐ Yes ☐ No	
Copy of DEQ Administrative Completeness Determination Letter or Discharge Permit attached? ☐ Yes ☐ No				
ADDITIONAL COMMENTS				
LOCATIONAL INFORMATION		Coordinates:		
		Latitude 00°00'00.0"N		
		Longitude 00°00'00.0"W		
		OR		
		Latitude 00. 00000°N		
Longitude 00. 00000°W				
		Geographic Datum:		
		NAD83 ☐ WGS84 ☐ NAD27 ☐		
		Collection Method:		
		GPS ☐ — DGPS/WAAS enabled? Yes ☐ No ☐		
		— Horizontal Accuracy? _____ meters		
		Map ☐ Specify: _____		
		Scale: _____		

OXIDATION POND

1 of 2

Project:				Water Well within 100'?
Contractor:				
Site Location:				
				☐ Yes ☐ No
Industrial Waste: ☐ Yes ☐ No (If yes, list quantity and strength)				
Design Average Capacity (lb BOD ₅ per day):				
Max # of Lots (or Population at Maximum Capacity):				
Initial # of Lots (or Population):				
Receiving Stream: (provide complete path from outfall to first perennial non-intermittent waterway in the path of the projected outfall)				
1 ST CELL	Influent Line	Material:		
		Size:		
		Depth of Discharge:		
		Location:		
	Levee	Interior Slope:		
		Exterior Slope:		
		Freeboard:		
		Crown Width		
	Water Surface Area Provided:			
	Operating Depth:			
2 ND & 3 RD CELLS	Crossover Lines	Material:		
		Size:		
		Depth Liquid Drawn From:		
		Location:		
		Water Surface Area Provided:		
		Operating Depth:		
	Effluent Line	Material:		
		Size:		
		Depth Liquid Drawn From:		
		Variable Depth:		

OXIDATION POND

2 of 2

CHLORINE CONTACT CHAMBER	Inside Dimensions	Length:	
		Width:	
		Operating Depth:	
	Capacity (gal):		
	Retention Time: (15 minute minimum @ peak hourly flow or maximum rate of pumping)		
	Over-and-Under or End-Around Baffles? ☐ Yes ☐ No	Scum Baffles? ☐ Yes ☐ No	
Copy of DEQ Administrative Completeness Determination Letter or Discharge Permit attached?			☐ Yes ☐ No
ADDITIONAL COMMENTS			
LOCATIONAL INFORMATION	Coordinates:		
	Latitude 00°00'00.0"N		
	Longitude 00°00'00.0"W		
	OR		
	Latitude 00. 00000°N		
	Longitude 00. 00000°W		
	Geographic Datum:		
	NAD83 ☐ WGS84 ☐ NAD27 ☐		
	Collection Method:		
	GPS ☐ — DGPS/WAAS enabled? Yes ☐ No ☐ — Horizontal Accuracy? _____ meters Map ☐ Specify: _____ Scale: _____		

CERTIFICATION OF CONSTRUCTION

Date: _____

Project Name: _____

Permit Number: _____

I hereby certify that the design, construction, and installation for the above referenced project have been completed in accordance with the plans and specifications approved by your office in your letter dated _____. I also hereby certify that the facility meets the requirements of the “Recommended Standards for Wastewater Facilities” (1990 Edition) and the Louisiana Administrative Code Title 51.

The facility is now ready for operation.

Sincerely,

Contractor