



State of Louisiana

Department of Health and Hospitals

Engineering Services Permit Application

The following procedures shall be used when submitting plans and specifications for a permit to construct or modify public water systems, sewerage systems, public buildings, schools, institutions, jails/prisons, public swimming pools, and funeral homes by the Department of Health and Hospitals (DHH)/Office of Public Health (OPH). This does **not** include, however, projects involving the technology of individual home sewage disposal or other sewage systems at or below 3,000 gallons per day (gpd). The plans and specifications for all projects having a design average flow of 3,000 gallons per day or less, or an equivalent organic loading, must be submitted to the local parish health unit.

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 |

Louisiana Administrative Code Title 51 – Public Health State Sanitary Code (LAC 51) requires that, prior to the start of constructions, a permit be obtained from DHH for approval of plans and specifications of the above referenced facilities. This applies to new facilities as well as any modifications or extensions of existing facilities. Public water supplies are defined as those which have a minimum of 15 service connections or regularly serve an average of at least 25 persons daily at least 60 days out of the year.

The plans and specifications must be submitted to the Engineering Services Section of the Regional OPH Office in your area. A current map of OPH Regional offices, coverage areas, and engineering services contacts is available on our website at http://new.dhh.louisiana.gov/assets/oph/Center-EH/engineering/Engineering_Map.pdf.

Plans and specifications submitted to our office for a permit and approval shall include the following:

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. Plans **must** be signed, stamped, and dated by a registered professional engineer, licensed to practice in the State of Louisiana.

2. A completed Permit Application including all applicable design summary pages must be submitted. The permit application is not a review tool therefore any details relevant to the review should be included in plans and specifications.
3. When multiple permits are required for a project (i.e., water and sewer), no permit will be issued until complete plans and specifications meeting all requirements of the state sanitary code for all the permits required for the project have been received.
4. 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.
5. Submit plot plan identifying the lots and including adjacent property usage and ownership.
6. Submit layout drawings of the sewage collection and water distribution mains, showing all pump stations, manholes, clean-outs, hydrants, valves, pipe size and materials, sewage main depth, slopes and invert elevations, water main depths, etc., as well as the sewage treatment facility location and the water well location. Details that do not pertain to the sanitary features need not be included such as storm water drainage and street details.
7. Submit detailed drawings of sewage treatment, collection, and pumping facilities and water well, storage and treatment facilities with plan, profile, and end views, depicting dimensions, capacities, materials, and elevations referenced to the North American Vertical Datum of 1988 (NAVD88).
8. The approval of any plans and specifications which include a new source or multiple sources (i.e., water wells) will be contingent upon substantiation that the quality of water from the source post treatment is compliant with the National Primary Drinking Water Regulations. Chemical test results of all new sources must be reviewed and approved before the potential sources are placed into service providing water to consumers. The chemical parameters listed in the "[Guidance for Performing the Groundwater Source Chemical Testing](#)" document shall be collected by the water supply owner and analyzed by a DHH-OPH certified laboratory. The plans and specifications for new sources should specify this testing will be completed and submitted to DHH for review and approval prior to pumping treated water from any new source into the distribution system. For a list of certified laboratories and the groundwater source chemical testing guidance document, please visit the Safe Drinking Water Program Website at: <http://new.dhh.louisiana.gov/index.cfm/page/963>.
9. Louisiana R.S. 38:3097.3.C(4)(a) requires that advance notification of intent to drill a water well shall be submitted by the well owner to the Louisiana Department of Natural Resources (DNR) - Office of Conservation, Environmental Division at least 60 days prior to drilling the well. The purpose of this notification is to assist the Commissioner of Conservation in the management of the State's ground water resources. In addition, all new water wells are also required to be registered with LDNR within 30 days after completion pursuant to LAC 57:I et seq. LAC 43:VI.701.A. The advance notification and registration forms as well as other important information regarding these requirements can be obtained by contacting the Louisiana Office of Conservation, Environmental Division, P.O. Box 94275, Baton Rouge, LA 70804-9275 / Email:

gwater@la.gov / Phone: 225-342-8244 / Fax: 225-342-5529 or visit their website at <http://www.dnr.louisiana.gov/CONS/gwater>.

10. 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.
11. 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.
12. For a sewage treatment plant, a complete description of the effluent outfall pattern 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 4 above).
13. Elaborate on whether or not the proposed water well and water treatment facilities and sewage treatment and pumping facilities are located above the 100-year flood plain. If not, explain the protective measure to be used. Floodplain, Base Flood Elevation/100-Year Flood Elevation, and elevations of the proposed structures shall be shown on the plans.
14. The review of the plans and specifications are made, with some exceptions, in accordance with the "Recommended Standards for Wastewater Facilities", 1990 Edition, and the "Recommended Standards for Water Works", 2003 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)]. Design standards for water well construction is contained in the "Louisiana Water Well Rules, Regulations, and Standards", November, 1985 Edition (LAC 56:I), promulgated by the Louisiana Department of Transportation and Development, Water Resources Division. Additional Design Standards for water and sewerage facilities are given in Parts XII and XIII, respectively, of the State Sanitary Code. The state sanitary code is available at http://new.dhh.louisiana.gov/assets/opph/Center-EH/engineering/Sanitary_Code.pdf.
15. 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.

16. 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 and Response to Request for Preliminary Determination from DEQ or existing DEQ discharge permit shall be submitted along with this permit application 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.
17. 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
18. 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.
19. The Operator for Public Water Systems and 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.
20. For water system, wastewater system, and public pool projects only, once the project is complete, the last page titled "CERTIFICATION OF CONSTRUCTION" shall be completed, sealed and signed by the Engineer-of-Record 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.

Permit Application

(Complete All Applicable Pages)

| | | | |
|---|----|--------------------------|--|
| Project: | | | |
| Project Type: | | | |
| Estimated Project Cost: | \$ | | |
| Engineer: | | | |
| Telephone: | | | |
| Parish: | | Nearest Town: | |
| Population Served: | | | |
| New System? | | Existing System? | |
| <input type="checkbox"/> | | <input type="checkbox"/> | |
| <p>Project to be Owned and Operated By: (include name and address)</p> | | | |
| <p>Proposed Project Will Connect to: (name of water and/or sewer system)</p> | | | |

SEWER COLLECTION SYSTEM

| | | | | |
|---|---|--|--|---------------|
| Project: | | | | |
| Engineer: | | | | |
| 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? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | | Maintain 6' Minimum Horizontal Clearance? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | Maximum Distance Between Manholes: | | | |
| | Number of Surface Water Crossings/Encounters: | | | |
| | Other Comments: (Manhole Construction, Highway Crossing, etc.) | | | |
| Deflection Testing? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Hydrostatic Testing? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| NAME OF CERTIFIED OPERATOR: | | | | |

WATER WELL

1 of 2

| | | | | |
|--|---|--|--|----------|
| Project: | | | | |
| Engineer: | | | | |
| Date: | | | | |
| General Scope of Project: | | Site Fenced? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Site Location: (also complete the last section of this table) | | 50' Radius of Ownership? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Maximum # of Lots (or population): | | | | |
| <u>INTERNAL STRUCTURE</u> (sketch on separate sheet) | Outer Casing | Linear Feet: | | |
| | | Thickness: | | |
| | | Pounds/Foot: | | |
| | | Joint: | | |
| | | Type of Seal to Outer Casing: | | |
| | Inner Casing | Linear Feet: | | |
| | | Thickness: | | |
| | | Pounds/Foot: | | |
| | | Joint: | | |
| | Grouting | Depth of grout: | | |
| | | Thickness: | | |
| | | Method With a Setting Time of? | | |
| | Screen | Linear Feet: | | |
| Type: | | | | |
| <u>EXTERNAL STRUCTURE</u> (sketch on separate sheet) | Casing Head Seal? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Slab & Motor Foundation? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | Well Vent | Diameter: ($\frac{1}{2}$ " inch minimum) _____ inches | | |
| | | Down-Turned? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | | Terminates 24" above 10-year Flood Level or floor whichever is greater? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | | Twenty Four Mesh Screen? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | | Watertight Seal at Casing? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | Drawdown Gauge: Type (seal): | | | |
| | Pump | Type: | | Power: |
| | | Capacity (GPM): | @ | TDH (FT) |
| | Prime Mover: | | | |

WATER WELL

2 of 2

| | | |
|--|---|--|
| DISCHARGE PIPING | Discharge Piping Material: | |
| | Down-Turned Smooth-Nozzle Sample Tap? <input type="checkbox"/> Yes <input type="checkbox"/> No Check Valve? <input type="checkbox"/> Yes <input type="checkbox"/> No Shutoff Valve? <input type="checkbox"/> Yes <input type="checkbox"/> No Discharge Bypass? <input type="checkbox"/> Yes <input type="checkbox"/> No Pressure Gauge? <input type="checkbox"/> Yes <input type="checkbox"/> No Means of Measuring Flow? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| COMPLETION SPECIFICATIONS | Disinfection Method: (include chlorine dosage and retention time) | |
| | Drinking Water Analysis for New Water Sources | Chemical testing to be performed prior to being placed into service? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | | Bacteriological testing to be performed prior to being placed into service? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Abandoned Holes? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| NAME OF CERTIFIED OPERATOR: | | |
| LOCATIONAL INFORMATION | Coordinates: | |
| | Latitude | ° ' . "N |
| | Longitude | ° ' . "W |
| | OR | |
| Latitude | °N | |
| Longitude | °W | |
| Geographic Datum: NAD83 <input type="checkbox"/> WGS84 <input type="checkbox"/> NAD27 <input type="checkbox"/> | | |
| Collection Method: GPS <input type="checkbox"/> — DGPS/WAAS enabled? Yes <input type="checkbox"/> No <input type="checkbox"/> — Horizontal Accuracy? _____ meters Map <input type="checkbox"/> Specify: _____ Scale: _____ | | |

WATER SUPPLY BOOSTER STATION

| | | | | | |
|--|---------------------------|---|--|----------|---------|
| Project: | | | | | |
| Engineer: | | | | | |
| Site Location: | | | | | |
| Water is Transmitted From: | | To: | | | |
| CONSTRUCTION | Exterior Structure | Length: | Width: | | Height: |
| | | Floor Material: | | | |
| | | Material: | | | |
| | | Ventilation? <input type="checkbox"/> Yes <input type="checkbox"/> No | Floor Elevation (6" Above Finished Grade?) <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | Interior Structure | Lighting: | | | |
| | | Heating: | | | |
| | | Chlorination? <input type="checkbox"/> Yes <input type="checkbox"/> No | Type: | | |
| | | Floor Slope (3"/10'): | | | |
| | Pumping | Number: | | | |
| | | Type: | Power: | | |
| | | Capacity (GPM): | @ | TDH (FT) | |
| | Piping | Pipes to Pumps | Size: | | |
| | | | Type: | | |
| | | Pump Discharge Pipe | Size: | | |
| | | | Type: | | |
| Common Discharge Pipe | | Size: | | | |
| | Type: | | | | |
| Backflow Prevention? <input type="checkbox"/> Yes <input type="checkbox"/> No | Type: | | | | |
| GENERAL COMMENTS: | | | | | |

WATER SUPPLY FINISHED WATER STORAGE

1 of 2

| | | | |
|---|--|--|---|
| Project: | | | |
| Engineer: | | | |
| Date: | | Site Fenced? | |
| Site Location: | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Type of Storage Facility: | | | |
| <input type="checkbox"/> Treatment Plant Storage (i.e. clearwell) | | <input type="checkbox"/> Hydropneumatic Pressure Tank | |
| <input type="checkbox"/> Elevated Storage Tank | | <input type="checkbox"/> Ground Storage Tank | |
| SIZE | Diameter/Depth: | | |
| | Height and/or Length: | | |
| | Elevation: | | |
| | Shape: | | |
| | Capacity (gal): | | |
| | Material (type): | | |
| | Wall Thickness: | | |
| | Cover Thickness: | | |
| | Floor Thickness: | | |
| Base Construction: | | | |
| Corrosion Control: | | | |
| COATING | Interior: NSF Approved Yes <input type="checkbox"/> No <input type="checkbox"/> | | Cathodic Protection? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Size: | | |
| MANHOLE | Overlap 2"? | Water Tight? | Accessible? |
| | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| OVERFLOW PIPING <small>(n/a for pressure tanks)</small> | Turned Down 12"-24" Above Grade? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Screened? If Flapper, Screened Inside? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Splash Pad or Inlet Drainage Structure? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | Diameter ____ inches | | |
| VENTS <small>(n/a for pressure tanks)</small> | Turned Down 24" Above Roof or Sod? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Twenty Four Mesh Non-Corrodible Screen? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Diameter ____ inches | | |
| GENERAL | Bypass to Bring Out of Service? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Pressure Gauge? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Water Level Control Equipment? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Water Level Indicating Device? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Steel Structures Meet AWWA Standard? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Down-Turned Smooth-Nozzle Sample Tap? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |

WATER DISTRIBUTION SYSTEM

| | | | | |
|--|---|--|--|--|
| Project: | | | | |
| Engineer: | | | | |
| Date: | | | | |
| General Scope of Project: | | | | |
| PIPES | Material: (specify ASTM standard, dimension ratio-DR, AWWA Standard, and pressure class) | | NSF 61 & NSF 372 Listed? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | Size: (Min 3" water main. Min 6" water main for fire protection. Water mains proposed with less than 3" diameter require justification with hydraulic analysis and future water use considerations provided and will only be allowed in special circumstances) | | | |
| JOINTS & MATERIALS: | | | | |
| LAYOUT | Valve Spacing: | | | |
| | Means of Flushing Dead Ends? | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | Number of Surface Water Crossings/Encounters? | | | |
| | Location with Respect to Sewers: | Maintain 18" Minimum Vertical Clearance @ Crossings? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | | Maintain 6' Minimum Horizontal Clearance? | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Normal Operating Pressure: | | | | |
| Minimum System Pressure: | | | | |
| DISINFECTION METHOD (include chlorine dosage and Retention time): | | | | |
| Owned and Operated By: (include name and address) | | | | |
| NAME OF CERTIFIED OPERATOR: | | | | |
| ADDITIONAL COMMENTS: | | | | |

DISINFECTION

| | | |
|---|--|--|
| Project: | | |
| Engineer: | | |
| Date: | | |
| General Scope of Project: | | |
| Site Location: | | |
| TYPE OF DISINFECTION: | Chlorine: <input type="checkbox"/> Gas <input type="checkbox"/> Solution | Ammonia: <input type="checkbox"/> Anhydrous (gas) <input type="checkbox"/> Ammonium Sulfate (solution) <input type="checkbox"/> Ammonium Hydroxide (Aqua Ammonia) |
| | <input type="checkbox"/> Other (please explain): | |
| FEEDERS/PUMPS: | # of Feeders/Pumps (2 minimum): | |
| | Type: | |
| GENERAL: | Standby Equipment? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Stored in Areas Not in Direct Sunlight? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Vented to Outside? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Enough Space for 30 Days Storage? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| STORAGE OF CHLORINE GAS: | Chlorine Storage & Feed System Building Separated? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Doors Open Outward? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Shatter-Resistant Inspection Windows? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Fan/Light Switches Located Outside? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Air Inlet Near Ceiling? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Vent Fan Near Floor? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Cylinders Restrained in Position? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Weighing Scales? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| STORAGE OF AMMONIA GAS or AQUA AMMONIA: | Ammonia Storage & Feed System Building Separated? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Fan/Light Switches Located Outside? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Forced ventilation? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Shatter-Resistant Inspection Windows? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Leak Detection Systems in all Areas Through Which Ammonia is Piped? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

LIFT STATION (S)

| | | | | |
|--|--|---|----------|--|
| Project: | | | | |
| Engineer: | | | | |
| General Scope of Project: | | | | |
| PUMPS | # per Station: | | | |
| | Type: | | Power: | |
| | Capacity (GPM): | @ | TDH (FT) | |
| | Pump Line Sizes and Type | Suction Line: | | |
| | | Discharge Line (3" min. diameter <u>without</u> grinder pumps; 1 ¼" min. diameter <u>with</u> grinder pumps): | | |
| | | Common Line: | | |
| | Max. Solids Passage (2 ½" min.): | | | |
| Gate Valve on Suction? <input type="checkbox"/> Yes <input type="checkbox"/> No | Gate Valve and Check Valves on Discharge? <input type="checkbox"/> Yes <input type="checkbox"/> 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? <input type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/> Yes <input type="checkbox"/> No | Telemetry: <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| | Audible: <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |

EXTENDED AERATION SEWAGE TREATMENT FACILITY

1 of 3

| | | | | |
|--|--|--|--------------------|--|
| Project: | | | | Water Well within 100'? |
| Engineer: | | | | |
| General Scope of Project: | | | | |
| | | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 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? | <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| FINAL CLARIFIER | Surface Area: | | | |
| | Surface Loading: (extended aeration plants 1000 gpd/ft ² @ peak hourly flow max loading) | | | |
| | Volume: | | | |
| | Scum Baffle: | | | |
| | Skimmer Through: | | | |
| | Weir Length (ft): | | | |
| | Weir Loading: (at peak hourly flow Plant ≤ 1mgd has 20,000 gpd/ft max load Plant > 1mgd has 30,000 gpd/ft max load) | | | |
| NAME OF CERTIFIED OPERATOR: | | | | |

EXTENDED AERATION SEWAGE TREATMENT FACILITY

2 of 3

| | | | |
|-------------------------------|-----------------------------------|--|---|
| AIR SUPPLY | # of Blowers (2 minimum): | | |
| | 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: | | Splash Plate? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | 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 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? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Scum Baffles? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ADDITIONAL DETATILS | Power Supply (Dual)? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Backflow Prevention? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Washdown Facility? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Type: |
| | Facility Fenced? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Access Road? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| | Gates Locked? <input type="checkbox"/> Yes <input type="checkbox"/> No | | |
| Copy of DEQ Administrative Completeness Determination Letter and Response to Request for Preliminary Determination or Discharge Permit attached? | | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| ADDITIONAL COMMENTS | | | |
| LOCATIONAL INFORMATION | Coordinates: | | |
| | Latitude | ° ' . "N | |
| | Longitude | ° ' . "W | |
| | OR | | |
| | Latitude | . °N | |
| Longitude | . °W | | |
| Geographic Datum: | | NAD83 <input type="checkbox"/> WGS84 <input type="checkbox"/> NAD27 <input type="checkbox"/> | |
| Collection Method: | | GPS <input type="checkbox"/> — DGPS/WAAS enabled? Yes <input type="checkbox"/> No <input type="checkbox"/> | |
| | | — Horizontal Accuracy? _____ meters | |
| Map <input type="checkbox"/> Specify: _____ | | Scale: _____ | |

OXIDATION POND

1 of 2

| | | | | |
|--|---|------------------------------|--|--|
| Project: | | | | Water Well within 100'? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Engineer: | | | | |
| Site Location: | | | | |
| Industrial Waste: | <input type="checkbox"/> Yes <input type="checkbox"/> 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: <small>(provide complete path from outfall to first perennial non-intermittent waterway in the path of the projected outfall)</small> | | | | |
| | | | | |
| | | | | |
| | | | | |
| 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? <input type="checkbox"/> Yes <input type="checkbox"/> No | Scum Baffles? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| ADDITIONAL DETATILS | Washdown Facility? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Backflow Prevention? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| | Type: | | | |
| | Facility Fenced? <input type="checkbox"/> Yes <input type="checkbox"/> No | Gates Locked? <input type="checkbox"/> Yes <input type="checkbox"/> No | Access Road? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| Copy of DEQ Administrative Completeness Determination Letter or Discharge Permit attached? | | | <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| ADDITIONAL COMMENTS | | | | |
| LOCATIONAL INFORMATION | Coordinates: | | | |
| | Latitude | ° ' . "N | | |
| | Longitude | ° ' . "W | | |
| | OR | | | |
| | Latitude | . °N | | |
| Longitude | . °W | | | |
| Geographic Datum: NAD83 <input type="checkbox"/> WGS84 <input type="checkbox"/> NAD27 <input type="checkbox"/> | | | | |
| Collection Method: GPS <input type="checkbox"/> — DGPS/WAAS enabled? Yes <input type="checkbox"/> No <input type="checkbox"/> — Horizontal Accuracy? _____ meters Map <input type="checkbox"/> Specify: _____ Scale: _____ | | | | |

CERTIFICATION OF CONSTRUCTION

Date: _____

Project Name: _____

Permit Number: _____

I hereby certify that, to the best of my knowledge, construction for the above referenced project has been completed in accordance with the plans and specifications approved by your office in your letter dated _____. The facility is now ready for operation.

Sincerely,

Department of
HEALTH and
HOSPITALS

Engineer of Record (Seal & Signature)

Contractor