Guide for Completing a System Evaluation Form

for Existing Onsite Wastewater Treatment Systems / Nonconventional Onsite Wastewater Treatment Systems

ENVIRONMENTAL HEALTH



The purpose of this document is to provide guidance on how to properly complete the **System Evaluation Form**. All information on the form shall be submitted to and verified by Environmental Health (EH).

A system evaluation is required for the existing septic systems that have been in service for more than 15 years and for existing septic systems without evidence of prior approval with the project proposals listed below:

- Septic tank replacement
- New addition/expansion to the existing building/structure
- Home expansion of 10% or less

The system evaluation form needs to be completed by a licensed contractor (Class-A, C-36, C-42).

The information on the form will be used by EH to determine if the existing onsite wastewater treatment system needs to be upgraded or modified and/or if a new system installation is required.

While the System Evaluation Form is not mandatory, all information requested on this form must be included in the final report of the results of the evaluation.

All fields on the form must be completed or marked **N/A** if not applicable. Incomplete forms will not be accepted.

DEFINITIONS:

<u>Cesspool</u> - an excavation with permeable sides and/or bottom that receives sewage, wastewater, or drainage and is designated to retain organic matter or solids but permits liquids to seep through the bottom or sides. A <u>cesspool</u> functions as the sole component, in which wastewater flows directly into a cesspool without first flowing into a septic tank. (Not an approved septic system for the new constructions and for the projects that require current septic system modifications).

<u>Seepage Pit</u> - an excavation with permeable sides and/or bottom that receives sewage, wastewater, or drainage after a period of retention in a septic tank where organic matter and solids settle.

<u>Bedroom or Bedroom Equivalent</u> - a room designed to afford privacy, which does not lead into other rooms and is equipped with window(s) on its exterior walls; OR any room that is designed in such a manner that could function and potentially be used as a bedroom is considered a bedroom equivalent. Rooms identified as sleeping rooms, dens, studios, sewing rooms, game rooms, libraries, theater rooms, lofts, study rooms, offices, lounges, gyms, or any room with an area of 70 square feet or greater in size shall be a bedroom or bedroom equivalent regardless of whether the room is equipped with a door or not.

<u>Failing Septic System</u> - Los Angeles County Code, Title 11, Health and Safety defines a failing system as a system that is no longer able to safely treat or discharge wastewater, which may present a health risk to humans or adversely impact the environment. Factors that evidence a failing septic system include, but are not limited to:

- A backup of sewage into the home which is caused by a septic tank or dispersal system malfunction other than a plumbing line blockage.
- A discharge of sewage or effluent to the ground surface.
- A system that requires pumping at a frequency of more than two (2) times in a six (6) month period to provide adequate dispersal of sewage.
- A structural failure that causes sewage or effluent to discharge in another location other than intended or allows groundwater to infiltrate the system.
- A system affects or will likely affect groundwater or surface water to a degree that makes the water unfit for drinking or other domestic uses or causes a human health hazard or other public nuisance conditions; or
- An inability to use the septic system as intended. For example, a NOWTS that is not properly treating wastewater and therefore is functioning improperly. (LACC, Title 11, 11.38.042).

SITE INFORMATION

- Is public sewer available within 200 ft. of the building or proposed?
 - YES Approval shall not be issued. Must connect to public sewer when the current system fails
 or needs an upgrade. Refer a client to Public Works.
 - NO Move forward with the review.
- Does this system have a Waste Discharge Permit (WDR) from the Los Angeles or Lahontan Regional Water Quality Control?
 - YES Projects producing industrial wastewater of any quantity, or systems producing domestic quality wastewater greater than 10,000 gallons per day are required to obtain WDR permits from the local Regional Water Quality Control Board (Water Board) before any Departmental OWTS/NOWTS plan review.
 - O NO Move forward with the review.
- Is this system within 600 ft. of an Impaired Water Body with current Total Maximum Daily Loads (TMDLs)?
 - **YES** Need NOWTS.
 - **NO** Move forward with the review.
- Reason for Evaluation
 - This section MUST be completed and match the scope of work on the application under the description.
- To convert cesspool to seepage pit and add a septic tank without any other modification requires a floor plan and evaluation of the cesspool. No feasibility report is required. A new application needs to be submitted.

PROPERTY OWNER INFORMATION

Property owner name and contact information.

CONTRACTOR / TECHNICIAN INFORMATION

 Verify contractor name and license and if the company services Los Angeles County at https://www.cslb.ca.gov/.

OVERALL SYSTEM EVALUATION

Is the current system approved?

- Check for prior approval.
- For unincorporated Los Angeles County and cities contracted with the Department of Public Works, go to GIS-NET to find records under the Building Permits Viewer (DPW) at http://rpags.hosted.lac.com/Html5Viewer/index.html?viewer=GISNET.GIS- NET.
- For cities not contracted with the Department of Public Works, contact the local Building and Safety Department.

• Number of Bedrooms / Bedroom Equivalents

 Make sure the septic tank and dispersal system can accommodate the addition of bedrooms and bedroom equivalents.

Evidence of Leaking Plumbing Fixtures?

- O YES Proof of repair/replacement shall be provided.
- NO Move forward with a review.

100% Future Expansion Area – Designated and Tested?

- YES Ensure the feasibility report is submitted.
- O NO Ensure the proposed project does not require 100% future.
- Setback Measurement Verify all setbacks meet plumbing code requirements.
- NOWTS System and Annual Maintenance Information Does this system have an active maintenance contract?
 - Check records for the maintenance contract.

TANK EVALUATION - A separate tank evaluation form must be completed for each tank

Number of Chambers

- Single The water and solids go into the single tank; the anaerobic bacteria start to eat the solids. The waste then turns into a sludge that rests on the bottom of the chamber.
- O **Dual** Any solids left in the water, which should be very minimal and small, will settle down into the bottom of the second chamber.
- Evidence of failure, further investigation needed.

Evidence of Tank Overflow

- YES Further investigation needed.
- o **NO** Move forward with a review.

Appearance of Influent / BOD

- Light High Strength Wastewater (HSW) Facilities with mostly toilet flushing.
- Medium HSW Facilities that have commercial kitchens have elevated BOD, TSS.
- High HSW Industrial facilities with very high loads of BOD, TSS.

Effluent Filter Installed?

o It is designed to prevent solids in the septic tank from exiting into the dispersal system.

TANK EVALUATION – TANK MEASUREMENTS

Internal Tank Measurements

Capacity of the tank can be calculated using the internal dimensions.

PUMP / PUMP STATION

Pump Station Compartment

- Simplex pump has a single liquid cylinder.
- O Duplex pump is common in lift stations. It has two pumps.

ALARM | TELEMETRY SYSTEM (applies to NOWTS only)

Alarm Notification

- All three (telemetry, visual and audible) shall be present and in good repair.
- Owner can propose an alternative phone connection
- **Evaluation of System Components** If a component is in poor condition, it needs to be repaired. Proof of all repairs and replacements.

DISPERSAL SYSTEM TYPE AND DIMENSIONS

• Hydraulic Performance Test Performed for Leach Line and Seepage Pit

 A hydraulic load test mimics the normal operating conditions of a home's septic system and absorption area. The entire process is similar to a percolation test. The hydraulic load test is used to verify that a septic system's absorption area can efficiently receive and filter a specified volume of liquid.

Leach Lines | Leach Field | Seepage Pits

All measurements must be completed for the present dispersal system.

LOCATION OF DISPERSAL SYSTEM AND STATUS

Methods Used for Location Determination Must be Provided

- Dispersal System Evaluation Does this Dispersal System need repairs?
 - YES Ensure there is proof of receipt or pictures.
 - **NO** Move forward.

Does this Dispersal System need replacement?

- YES Need to submit an application.
- O NO Move forward with the review.

• Evidence of Surface Breakout

- YES Further investigation needed.
- NO Move forward with the review.

Evidence of Stormwater Ponding

- O YES Further investigation needed.
- **NO** Move forward with the review.

Distribution Box

O Distribution box should have equal distribution to the dispersal system.

• Evidence of Saturated Soil Over the Leach Field or Leach Lines

- YES Leach Field / Leach Line may be failing. Need further investigation.
- NO Move forward with the review.

Evidence of Overflow from Seepage Pit

- YES Failed system, Further investigation needed.
- NO Move forward with the review.

Evidence of Staining on the Interior of Seepage Pit Walls

- O **YES** Sign of failing seepage pit. Need further investigation.
- NO Move forward with the review.

Evidence of Standing Water in Seepage Pit

- YES Seepage Pit not percolating. Depending on how much water standing, needs further investigation.
- **NO** Move forward.

ONSITE WASTEWATER TREATMENT SYSTEM PLOT PLAN

Plot Plan Should Be Provided for All System Evaluations.

OVERALL SYSTEM EVALUATION | CERTIFICATION SYSTEM

- Evaluator Must Circle Pass or Fail for the overall OWTS / NOWTS.
- Evaluation Must Be Signed and Dated by the Qualified Professional.

If you have any questions or require additional information, please contact the **Land Use Program** at (626) 430-5380, or via email at dlanduse@ph.lacounty.gov, or visit:

http://www.publichealth.lacounty.gov/eh/business/onsite-wastewater-treatment-system.htm.