

# Nassau County Soil and Water Conservation District

# IA OWTS Technology Acceptance Process for Participation in the S.E.P.T.I.C. Grant Program

#### May 2023 Finalized Version

Systems of a specific accepted technology must maintain effluent total nitrogen concentrations averaging between  $\leq$  19 – 30 mg/L (depending on the Acceptance Phase being requested). Manufacturers must submit a written request to have their technology accepted for use in Nassau County. This document is provided as a guide for those submissions, but Manufacturers should refer to <u>Guidance Memo #2: Guidelines for the Acceptance, Use, and Management of IA OWTS in Nassau County</u> for all applicable details.

Acceptance Phase	Minimum Required Dataset to Enter Acceptance Phase	Required Minimum # of Samples	Required Minimum Performance Verification Needed for Initial Acceptance	Eligible for Grant Funds
Experimental	third-party verification report	As specified in third-party report	Must submit a third-party evaluation report that demonstrates that the technology is technically capable of reducing TN concentrations to 30 mg/L or less.	Reduced funding with restrictions <sup>4</sup>
Piloting <sup>1</sup>	2 installations	12 consecutive <sup>3</sup>	NSF 245, equivalent, or third-party entity evaluation for systems installed in any US jurisdiction where the 12-month rolling average TN concentration results are between $\leq$ 19 and 30 mg/L AND a 50 percent actual reduction in TN concentration (see Memo #2 for details)	Yes, with restrictions <sup>5</sup>
Provisional <sup>1</sup>	12 installations	12 consecutive <sup>3</sup>	Average TN of 19 mg/L or less for systems installed in a jurisdiction where the technology is approved for nitrogen removal and the temperature conditions are comparable to, or colder than, those in Nassau County, NY.	Yes
General Use <sup>2</sup>	20 installations	12 consecutive <sup>3</sup>	Average TN concentration of 19 mg/L or less for systems installed in a jurisdiction where the technology is approved for nitrogen removal and the temperature conditions are comparable to, or colder than, those in Nassau County, NY.	Yes

### Table 1: IA OWTS Technology Acceptance Criteria to enter Nassau County's S.E.P.T.I.C. Grant Program

<sup>1</sup>The District honors Piloting and Provisional Approvals from Suffolk County Department of Health Services and State of Massachusetts, provided those technologies are averaging between 19 – 30 mg/L at the time of submission.

<sup>2</sup>The District honors General Approvals from Suffolk County Department of Health Services and State of Massachusetts, provided those technologies are averaging 19 mg/L or less at the time of submission.

<sup>3</sup>Consecutive samples may be submitted in monthly, bi-monthly, or quarterly intervals.

<sup>4</sup>Experimental Acceptance allows for the use of reduced grant funds if the Manufacturer/ Designer of the technology sign a statement agreeing to repair, replace, or modify the Experimental Technology, including to install an OWTS permitted under the County's Approved Alternative Technology List, if the District determines that the proposed Technology fails to perform as designed. The signed statement must clearly state who is responsible for the cost of repairing, replacing, or modifying the OWTS, and the method for ensuring funds to complete this work - whether through a bond or other form of financial security, posted by the Manufacturer or Design Professional, that is acceptable to the District. In addition, the Property Owner must attest and sign a statement that they understand that the Technology does not yet have any data on Long Island installations.

<sup>5</sup>Piloting Acceptance allows for Grant funded installations if the Property Owner attests to understanding the Technology does not yet have a statistical dataset of system performance on Long Island.

#### Table 2: Performance Verification Criteria for IA OWTS Technologies Enrolled in Nassau County's S.E.P.T.I.C. Grant Program

Acceptance Phase	Maximum # of Systems Allowed to be Installed	Required Treatment Threshold	Minimum Sampling Frequency During Acceptance Phase	Maintenance and Reporting Requirements
Experimental	Up to 5	Average TN of 19 mg/L or less	Monthly Sampling 12 months rolling average	Yes
Piloting	Up to 12	Average TN of 19 mg/L or less	Monthly Sampling 12 months rolling average	Yes
Provisional	No Limit	Average TN of 19 mg/L or less	Bi-Monthly (every 60 days) Consecutive Sampling for 24 months Rolling average of a minimum of 12 samples for the first 20 residential systems need to be monitored	Yes
General Use	No Limit	Average TN of 19 mg/L or less	Sampling must be done within 36 months from date of installation, and every 36 months thereafter	Yes

#### All submissions for IA OWTS Technology Acceptance for Nassau County shall include the following information:

- A. Applicant Information
  - a. Company Name
  - b. Address
  - c. Website
  - d. Contact Person Name
  - e. Contact Person Email
  - f. Contact Person Phone
- B. Technology Information
  - a. Trade name and/or model number(s).
  - b. Description of the treatment theory behind the proposed technology.
  - c. Summary of treatment train and the function of each component (include an accompanying schematic(s)).
  - d. State what contaminants the technology removes.
  - e. Statement of the claim of effluent concentration and/or percent pollutant reduction.
- C. State the Acceptance Phase you are applying for
  - a. Experimental
  - b. Piloting
  - c. Provisional
  - d. General Use
- D. Performance Data and Justification
  - a. NSF 245 or Equivalent (Upload Copy)
  - b. Approvals in MA or Suffolk County (Upload Approval Letters)
    - i. Experimental

- ii. Piloting
- iii. Provisional
- iv. General Use
- c. What jurisdictions have approved the technology
  - i. Approval letters
  - ii. Approval conditions & restrictions
  - iii. Jurisdiction contact person
- d. Number of Systems Sampled
  - i. How many of these were on Long Island?
- e. Number of Samples per System
- f. Number of Systems Sampled on Long Island?
- g. Frequency Sampled
  - i. Monthly
  - ii. Every 60 Days
  - iii. Quarterly
- h. Performance Results
  - i. Average TN in mg/L
  - ii. Average BOD in mg/L
  - iii. Average TSS in mg/L
- Upload sampling data available (data table, lab, and analysis reports) and be sure to include:
  - i. Location ID
  - ii. Technology & Model Number
  - iii. Credentials of third-party entities performing the tests and data analyses

### **Guidance Document Requirements:**

Once the Technology is Accepted for Use in Nassau, manufacturers must submit a Guidance Document to the District containing relevant design, installation, inspection, and maintenance requirements a recommended Guidance Document format is outlined in Table 3. below:

Section	Section Title	Recommended Details to be Included Uploaded Document
Cover Pag	e	
А	Introduction and Applicant Information	
В	Local Distributor Information	Company name, address, website, contact person name, phone number, and email
С	Table of Contents	Section titles, corresponding page numbers, list of figures, tables, and attachments
D	Definitions	Key terms to ensure there is consistency throughout the document, especially with component terminology
E	Technology Overview	Type of system, treatment process, treatment train configuration, timed-dosed vs gravity, table containing model numbers and the NSF-rated daily treatment capacity (with the number of bedrooms indicated, calculated at 110 gallons per bedroom per day per NYS DOH Appendix 75-A
F	Technology Summary	Illustration and narrative detailing key components of the technology (i.e. oxic and nitrification zones, anoxic and denitrification zones, organic processing in the train, how effluent moves from one component to other, surge flow management)
G	Design Criteria	Engineering drawings and schematics for each model indicated in Section D above. Site construction and precaution notes, sample site plan design drawings for Long Island. Designer training requirements
н	Installation Criteria	Installation manual and training documents
1	Inspection and Maintenance	what occurs, who performs tasks, frequency. Sample copy of standard 3-year product warranty. Sample copy of O&M Agreement with typical costs. Estimated repair and replacement costs for system components. Sample copy of service form. Service Provider training requirements, and a list of approved maintenance providers for the technology
J	Appendix	Any relevant documents such as research studies, manuals, and training materials.

## Table 3: Recommended Guidance Document Format