

# **SEPTIC REPLACEMENT LOAN PROGRAM: PROGRAM MINIMUM STANDARDS**



MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY

**November 2024**

## **I. Background**

Throughout Michigan, failing septic systems are often identified as a potential source of pollution that contributes to both public health and environmental concerns. One of the barriers preventing the replacement of septic systems and installation of systems designed to protect our waters is a lack of funding options available to homeowners.

## **II. Introduction**

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) has received funding and contracted with a non-profit third-party lender, Michigan Saves Inc., to develop and implement a statewide loan program to replace failing and near-failing septic systems. The Septic Replacement Loan Program (SRLP) provides financing for the installation of residential Onsite Wastewater Treatment Systems (OWTS) and connections to existing available municipal sewer, that are protective of public health and the environment. To assure these protections, EGLE has developed a set of program minimum standards for OWTS constructed through the SRLP. The information below describes the program minimum standards.

## **III. Purpose**

The primary purpose of the SRLP is to provide loans to eligible homeowners to repair and replace existing septic systems that are at or near failure to protect public health and water quality. Systems and sewer connections supported by the SRLP shall be permitted in accordance with the program minimum standards outlined within this document.

## **IV. Contact Information**

For more information go to:

[Septic Replacement Loan Program](#)

Additional contacts:

Michigan Department of Environment, Great Lakes, and Energy

Anne Mitchell, Program Manager

517-914-4254

[EGLE-DWEHD-SRLP@Michigan.gov](mailto:EGLE-DWEHD-SRLP@Michigan.gov)

Michigan Saves, Inc.

Nishaat Killeen, Senior Project Manager

517-371-7431

[NKilleen@MichiganSaves.org](mailto:NKilleen@MichiganSaves.org)

Pat O'Boyle, Director of Business Development

517-410-5924

[POBoyle@MichiganSaves.org](mailto:POBoyle@MichiganSaves.org)

## V. Definitions\*

1. **Authorized Contractor:**

An entity or individual installing systems supported by the SRLP who has met all requirements outlined in (Section VII) and maintained registration with Michigan Saves, Inc. (MS).

2. **Failure:**

A system is considered to be failing when sewage backs up into the home or structure, discharges to the ground surface, contaminates surface water or drinking water supplies, any part of the system is bypassed, the system is the source of an illicit discharge, there is an absence of a septic tank and absorption system, or there is a structural failure of a septic tank or other associated appurtenances.

3. **Onsite Wastewater Treatment System (OWTS):**

A system of components and appurtenances used or intended for use by the owner of the system, or owner of the property, to collect, hold, and treat less than 10,000 gallons per day of sanitary sewage through discharge to a subsurface soil dispersal system. OWTS does not include discharges that are the subject of a valid permit issued by EGLE pursuant to the Natural Resources Environmental Protection Act (NREPA).

4. **Septic Tank:**

Septic tank means a watertight, covered receptacle for collection and treatment of sanitary sewage that does all of the following: receives the discharge of sanitary sewage via gravity flow, separates settleable and floating solids from the liquid, provides primary treatment and digests organic matter by anaerobic bacterial action, stores digested solids through a period of detention, allows clarified liquid effluent to discharge for additional treatment by components and appurtenances such as secondary treatment products and the soil dispersal system, and attenuates flows.

5. **Sewer Connection:**

A connection to an existing sewer main to provide connection to an existing, accessible, and available public sanitary sewer system operated by a local unit of government. "Available public sanitary sewer system" means a public sanitary sewer system located in a right of way, easement, highway, street, or public way which crosses, adjoins, or abuts upon the property and passing not more than 200 feet at the nearest point from a structure in which sanitary sewage originates. The public health code states that structures in which sanitary sewage originates lying within the limits of a city, village, or township shall be connected to an available public sanitary sewer in the city, village, or township if required by the city, village, or township. Sewer connection does not include connection to recent, new or proposed sewer extension projects or sewer installation projects that had or have other funding mechanisms. Sewer connection does not include reoccurring sewer utility use or service fees. Funding shall be limited to only those eligible expenses

that are deemed necessary and required for the completion of the sanitary sewer connection and existing septic tank abandonment.

\*The definitions outlined within this document are specific to the Septic Replacement Loan Program.

## **VI. General Provisions**

1. This is a personal loan for individuals owning a residential dwelling. Loan applications may be filed for OWTS that serve a single-family home occupied as a dwelling or an OWTS to serve an attached two-family home, often called a duplex, owned by one individual. Loan applications are filed online through the MS website.
2. Eligible costs for septic replacement projects supported by the SRLP include but are not limited to evaluation of the system, design, pumping costs, installation costs including parts and labor, and connections to municipal sewer only where an existing OWTS has been determined to be failing and an existing sewer connection is available and accessible.
3. Sites with a documented failing, near-failing, non-existent septic system, or similarly inadequate system will be eligible for replacement or sewer connection under the SRLP. Near failing is considered in situations where failure can be anticipated within a short period of time. Eligibility of “malfunctioning” or similarly “inadequate” would be limited to circumstances where there is clear risk to water quality or public health.
4. Only local health department (LHD) documentation will be acceptable documentation of failure, near-failing, non-existent septic system, malfunctioning, or similarly inadequate system. Utilizing the local health department-completed Failed System Data Collection – Residential form (Attachment 1, form EQP1728) could meet this documentation requirement.
  - I. Reports or documentation created by other persons, other than LHD staff, are required to be verified by the LHD for final determination.

## **VII. Michigan Saves Authorized Contractors**

All contractors installing systems supported by the SRLP must be authorized by MS.

1. To become a MS Authorized Contractor the following requirements must be met:
  - I. Registered and in good standing with State of Michigan Corporations Division
  - II. Maintain minimum levels of insurance as specified by MS
  - III. Registered/Certified by LHD or sewer authority where applicable
  - IV. No history of disciplinary action by LHD or sewer authority
  - V. Attendance at MS training events

- VI. Read and agree to terms and conditions of the Michigan Saves Contractor Agreement and Implementation Guide
2. MS Authorized Contractors will be responsible for uploading all required documentation into the MS database including but not limited to:
    - I. Construction LHD permit issued by LHD or sewer authority
    - II. Permit supporting documents and attachments
    - III. Failed System Data Collection – Residential form (Attachment 1, form EQP1728)
    - IV. Septic Tank Pumping Record form (Attachment 2, form EQP1731)
    - V. Affirmation that the installed system met all of the program minimum standards
    - VI. LHD or sewer authority final inspection documentation, including documentation of septic tank abandonment
    - VII. Certificate of Completion (COC)
  3. MS Authorized Contractors must disclose any land use restrictions as may be filed with the Register of Deeds Office and/or EGLE pursuant to Part 201 or Part 213, NREPA.
  4. MS Authorized Contractors must acknowledge that other potential requirements to obtain state or locally issued permits or approvals from EGLE have been met. As associated with:
    - I. Wetlands
    - II. High-risk dune erosion
    - III. Sediment and erosion control
    - IV. Flood plains
    - V. Local building code (as associated with OWTS construction in a Michigan regulated flood plain).
  5. MS Authorized Contractors are required to assess internal plumbing for leaking fixtures and non-sewage connections to the sewage system. Leaking toilets, sinks, etc. must be repaired prior to OWTS installation. All sources of sanitary sewage, including greywater, must be discharged to the OWTS.
  6. A COC will be required for all OWTS, and sewer connections installed through the SRLP. The COC must be reviewed and signed by both the MS Authorized Contractor and homeowner. The MS Authorized Contractor is responsible for uploading the completed COC into the MS database.

## VIII. Septic Tanks, Secondary Treatment Tanks, and Pumping Chambers

All septic tanks, secondary treatment tanks, and pumping chambers being installed, pumped, or evaluated through the SRLP must comply with the following standards:

1. For the purposes of this program, the pumping of septic tanks, secondary treatment tanks, and/or pumping chambers shall only be performed by a licensed septage waste hauler.
2. All existing septic tanks, secondary treatment tanks, and pumping chambers must be assessed for watertightness and structural integrity. A completed Septic Tank Pumping Record form (Attachment 2, form EQP1731) must be submitted by the MS Authorized Contractor if an existing tank(s) is being re-used or as prescribed below (Section VIII).
3. Septic tank pumping is required if sludge and scum accumulations exceed 30 percent (30%) of the tank volume or are encroaching on the inlet and outlet baffle entrances. When pumping is needed, assessment for watertightness and structural condition is to occur as part of pumping. The effluent level in relation to the outlet invert will be observed prior to beginning pumping. Indicators of infiltration or exfiltration will also be noted. A completed Septic Tank Pumping Record form (Attachment 2, form EQP1731) must be submitted by the MS Authorized Contractor when pumping is needed.
4. Septic tanks, secondary treatment tanks, and pump chambers must be equipped with a watertight riser to grade and a secured secondary safety component. Existing tanks approved to be reused, must be upgraded with a watertight riser to grade and a secured secondary safety component. To view a Technical Advisory Council Advisory, visit the following link:  
[MOWRA.org/TACAdvisoryTankRiserandLidAssemblies](http://MOWRA.org/TACAdvisoryTankRiserandLidAssemblies).

## IX. Program Minimum Standards for OWTS funded by SRLP

OWTS supported through the loan program need to meet the site suitability and design standards of one of the following categories:

**Category 1 (C1):** Site evaluation completed by the LHD has determined:

- I. There is a minimum of 18 inches (18") of non-mottled, naturally occurring soil, including six inches (6") of non-mottled soil below the topsoil horizon, and

Provided the following conditions are met based on the Category of systems as follows:

**Option A (C10A):** Dispersal system utilizing non-uniform/gravity distribution network and separated by no less than 48 inches (48") to seasonal high-

water table, water table, greater than 50 percent (50%) rock material, or bedrock.

Or

**Option B (C1OB):** Dispersal system utilizing pressure distribution network and separated by no less than 36 inches (36") to seasonal high-water table, water table, greater than 50 percent (50%) rock material, or bedrock.

- II. When/if elevated above natural ground surface, a minimum 3:1 slope/tapers from the dispersal stone or media is required to inhibit toe slope seepage during wettest time of the year.

**Category 2 (C2):** Performance based systems may be considered when the LHD site evaluation has determined:

- III. There is less than 18 inches (18") of non-mottled, naturally occurring soil, and

Provided the following conditions are met based on the Category of systems as follows:

**Class A (C2CA): Nonproprietary Technology (public domain)**

This class includes a wastewater treatment or distribution technology, method, or material not subject to a patent or trademark. These technologies provide a means to, or significantly contribute to, attainment of treatment. Nonproprietary technology may involve a qualified consultant in private practice to prepare a design. Pressurized mound systems would be an example of nonproprietary technology.

All conditions to be met:

- i. Dispersal system utilizes pressure distribution and is separated by no less than 48 inches (48") to seasonal high-water table, water table, greater than 50 percent (50%) rock material, or bedrock.
- ii. When elevated above natural ground surface, a minimum 4:1 slope/tapers from the dispersal stone or media is required to inhibit toe slope seepage during wettest time of the year.
- iii. Preferred dispersal system length to width ratio is not less than 2:1.

**Class B (C2CB): Proprietary Treatment Technology**

Includes a treatment product held under patent or trademark which significantly contributes to the treatment performance and attainment of effluent quality standards as defined by the National Safety Foundation (NSF) Standard 40 certification. All conditions to be met:

- i. System design and management plans in accordance with EGLE approved manufacturer's design manual are prepared by a qualified consultant in private practice for LHD review (Attachments 3 and 4).
- ii. The LHD permit requires that the performance based system will be perpetually operated, maintained, and inspected as appropriate for the useful life of the system and requires report submission documenting results of such at least every three (3) years for permit compliance. This requirement shall be filed or recorded in the land records of the subject property prior to final approval by the LHD.
- iii. Wastewater treatment systems incorporating treatment equipment certified per NSF Standard 40, with effluent treatment to 30 mg/L BOD, 30 mg/L TSS are supported provided the dispersal system is designed with 24-inch (24") separation between the infiltrative surface and the limiting layer (seasonal high water table, water table, greater than 50 percent (50%) rock material, or bedrock).
- iv. A minimum 4:1 slope/taper is required from the dispersal stone or media to inhibit toe slope seepage during wettest time of the year.
- v. Preferred dispersal system length to width ratio is not less than 2:1.
- vi. Preferred dispersal system utilizes pressure distribution.
- vii. EGLE consultation available with request from LHD during plan review and prior to local construction permit issuance.

## **IX. Additional Standards**

Systems supported by the SRLP need to meet the following standards:

1. Systems supported through the loan program should include an assessment of the dispersal system sizing, design, and construction criteria for consistency with best practices and/or soil loading rates as referenced in:
  - I. Pressure Mound Systems, Technical Guidance for Site Suitability, Design, Construction, and Operation and Maintenance (June 2003)
  - II. Draft Criteria for Onsite Wastewater Treatment (January 2013)
  - III. Michigan Criteria for Subsurface Sewage Disposal (April 1994)
2. The following are examples of systems/projects not supported through the loan program:
  - I. Drywells
  - II. Cesspools/Seepage pit configuration/type disposal systems
  - III. Lagoons
  - IV. Holding tanks



- V. Services aimed at system restoration including but not limited to flushing, system aeration, and biomatt disruption
  - VI. Systems for new construction homes
  - VII. Systems installed with less than 48 inches (48") of vertical isolation to seasonal high-water table that don't meet Category 1 or Category 2 standards
  - VIII. Expansion of municipal sewer. The loan program shall not be used to include connections of structures as part of a recent, new, or proposed sanitary sewer extension or sewer installation project, as these projects had or have other funding mechanisms. Those homeowners that failed to connect when other funding mechanisms were available for connection as part of a sewer extension or installation project, shall not be eligible for the program.
  - IX. Replacement or repair of existing municipal sewer connections
  - X. Sewer connections for sites without a documented failing, near failing, nonexistent, or similarly inadequate OWTS.
3. The proposed OWTS shall maintain 100 feet (100') of horizontal isolation distance from the closest edge of the dispersal system to surface water bodies. When a LHD site evaluation has determined that 100 feet (100') of horizontal isolation distance to surface water cannot be achieved due to insufficient replacement area, systems shall maintain the maximum horizontal isolation distance from surface water that the subject site provides.
  4. When necessary, an elevation benchmark shall be created by a qualified consultant in private practice or LHD staff. A benchmark serves as a reference point for the critical design elevations. Benchmarks help to assure that vertical isolation to the seasonal high water table is maintained.
  5. When existing system or components must be removed, proper [abandonment or removal](#) of septic tanks and soil dispersal areas is necessary. Technical guidance is available by visiting the [EGLE Onsite Wastewater Management](#) webpage (Michigan.gov/EGLE/About/Organization/Drinking-Water-and-Environmental-Health/Onsite-Wastewater-Management).
  6. Homeowners of systems constructed through the loan program are responsible for the proper use and maintenance of the OWTS. SRLP participants are encouraged to follow the information accessible through the U.S. Environmental Protection Agency (U.S. EPA) Septic Systems (Decentralized/Onsite Systems) webpage [SepticSmart | US EPA](#) (EPA.gov/Septic/SepticSmart).

## **X. Other Applicable Standards**

1. The septic tank(s), soil dispersal system and/or other components and appurtenances must meet or exceed the requirements of the LHDs legally adopted regulations and associated design standards. Written variances relevant to the local requirements only may be granted by the LHD.

2. When applicable, follow water supply system isolation distances, as per LHD regulations, Michigan Well Construction Administrative Code pursuant to Part 127, Act 368 of 1978, and Act 399 of 1976, the Safe Drinking Water Act.

## Attachments

- Attachment 1: Failed System Data Collection – Residential form (EQP1728)
- Attachment 2: Septic Tank Pumping Record form (EQP1731)
- Attachment 3: EGLE Manufacturers Design Manual Request for Submission
- Attachment 4: List of EGLE Validated Manufacturers Design Manuals
- Attachment 5: LHD SRLP Permit Addendum (in progress)

## References

MCSSD “Water that rests or flows on the ground surface”

Part 31, NREPA, Sec 3112a (9)(c) "Surface water" means all of the following, but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control:

- (i) The Great Lakes and their connecting waters
- (ii) Inland lakes
- (iii) Rivers
- (iv) Streams
- (v) Impoundments
- (vi) Open drains
- (vii) Other surface bodies of water

Part 22 Rules R 323.2203 Definitions; R to W (g) "Surface water" means all waters of the state excluding groundwater but does not include drainage ways and ponds used solely for wastewater conveyance, treatment, or control.

---

If you need this information in an alternate format, contact [EGLE-Accessibility@Michigan.gov](mailto:EGLE-Accessibility@Michigan.gov) or call 800-662-9278.

EGLE does not discriminate on the basis of race, sex, religion, age, national origin, color, marital status, disability, political beliefs, height, weight, genetic information, or sexual orientation in the administration of any of its programs or activities, and prohibits intimidation and retaliation, as required by applicable laws and regulations. Questions or concerns should be directed to the Nondiscrimination Compliance Coordinator at [EGLE-NondiscriminationCC@Michigan.gov](mailto:EGLE-NondiscriminationCC@Michigan.gov) or 517-249-0906.

This form and its contents are subject to the Freedom of Information Act and may be released to the public.