



## MAINE CDC DRINKING WATER PROGRAM

Department of Health & Human Services

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# Minimum Lot Size Waiver Request Policy

## PURPOSE:

Policy for processing [HHE-236: Application for Variance to the Minimum Lot Size Requirements](#) (12 MRSA § 4807-B, 4807-C)

**ORIGINATOR/OWNER:** SWW Staff / DECH SWW Manager

## DEFINITIONS/ACRONYMS:

- **ATU:** Advanced Treatment Unit
- **Department/DECH:** Maine DHHS-CDC Division of Environmental and Community Health
- **LPI:** Local Plumbing Inspector
- **GPD:** Gallons per day
- **SWW:** Subsurface Wastewater
- **BOD<sub>5</sub> and TSS:** Five-day Biological Oxygen Demand and Total Suspended Solids; factors in "wastewater strength" (See Chapter 243, Table 2, Chapter 241 Table 5B)

## RESPONSIBILITIES:

The DECH, Subsurface Wastewater Unit reviews minimum lot size waiver requests submitted on form [HHE-236](#)

## BACKGROUND:

This document incorporates into updated controlled documentation format, an earlier SWW document titled "Minimum Lot Size Waiver Request Protocol", kept in SWW records, dated February of 2000.

As far back as 1969, it was understood that "existing statutes relating to realty subdivisions do not adequately protect the buyer and do not provide the initial planning that may be necessary to prevent the subsequent developments of nuisances related to the private sewage disposal and the protection of the quality of the related private water supplies. This revision of the minimum lot size law is intended to clarify problems encountered in administering and enforcing the existing law. Such problems particularly relate to standards of approval of lots less than the 20,000 square foot minimum and interpretation and application of the "grandfather" clause. The proposed revision should provide greater guidance to those

who are subject to regulation. The revision also eliminates the requirement for 100 feet of frontage on a public road and permits a variance on the 100-foot frontage requirement on a public body of water.”

The preceding quotes PL 1969, Ch. 365. 12 MRS Pt. 6, Ch. 243, *An Act to amend the Minimum Lot Size Law*. This law, which was incorporated into [Chapter 243](#) in 2005, is intended to uphold standards in sanitation, and clarify administrative procedures. This goal is largely accomplished with adequate soils and first-time setback distances.

12 MRSA §4807-A states: "A lot of less than the size required may be used for subsurface wastewater disposal if approved in writing by the Department of Human Services. Approval shall be granted if the applicant demonstrates to the Department of Human Services that, based upon the amount and nature of wastes, construction of the subsurface disposal system, soil types and slopes, percolation rates, depth to bedrock and groundwater, density of any proposed development, and other relevant factors, the proposed subsurface waste disposal will not lower the water quality of or otherwise pose a threat to any lake, pond, stream, river or tidal waters, any underground water supply, or to the public health, safety and general welfare."

## REVIEW PROCEDURE:

An applicant may apply to the DECH SWW Unit for a Minimum Lot Size Waiver using the HHE-236 waiver form if:

1. The lot is **not** a single-family lot of record – any lot which, prior to January 1, 1970, was specifically described as an identifiable and separate lot. <sup>1</sup>
2. The lot is **not** or has not been a contiguous undeveloped lot in the same ownership on or after October 3, 1973. <sup>2</sup>
3. The lot is not smaller than 10,000 square feet for a single-family residence, or a proportion of this based on the design flow calculated in Ch. 243. The lot needs to be larger than 33.33 square feet per gpd per the design flow calculations of Ch. 243. <sup>3</sup>
4. The lot is not served by municipal or quasi-municipal sewer.<sup>4</sup>
5. The lot does not have any structure that was in existence or in place on or before October 3, 1973, which then disposed of wastes by means of subsurface wastewater disposal, and the size of the lot upon which such structure is located has not been reduced to a size or frontage less than 20,000 square feet or 100 feet of frontage.<sup>5,6</sup>

The Site Evaluator should fill out and submit the HHE-236 waiver form. Pursuant to Chapter 243, 1000.1, the HHE-236 may be submitted to the Local Plumbing Inspector for that municipality for review and approval if it meets the following conditions:

- The design meets the provisions of “first-time” criteria, requiring no variances.
- The system is not an engineered disposal system.

Otherwise, the HHE-236 form should be submitted to the Department.

## **APPROVAL:**

A Minimum Lot Size Waiver may be approved if all of the following criteria are met:

1. The applicant has submitted a complete application, including
  - a. a signed and dated application form;
  - b. a completed HHE-200 form conforming to the Maine Subsurface Wastewater Disposal Rules in effect at the time of application;
  - c. a copy of the property's deed or other documentation showing right, title, or interest to the property; and
  - d. the appropriate review fee. In addition, if the lot is within the Portland Water District jurisdiction, a letter of no objection from them must be included.
2. The replacement disposal area has been considered.

A separate complete HHE-200 design is not required, but the applicants must consider the future disposal field that will replace the first-time disposal field that is being reviewed. The conclusions of this consideration should be included on the HHE-236 application and the options under replacement criteria must be considered. Replacing the field in the original field's footprint should not be the immediate solution, but may be chosen after adequate planning. This will require the addition of advanced treatment or advanced tertiary treatment at the time of replacement. Holding tanks are systems of last resort and will not be considered as replacement systems at this planning stage.

3. The parcel is larger than the design flow (as calculated in Ch. 243) times 33.33 square feet/gallon per day, or the applicant demonstrates that the groundwater at any of the boundaries will not be degraded below drinking water quality (see criteria below), and,
  - a. There is a public water supply available for subject and abutting properties, or
  - b. Any setback from the disposal field to a receptor noted in Table 9A ("Setback Distances for Replacement System, Limits of LPI Authority") that is not met will require advanced treatment at a minimum. Furthermore, any variance in separation that is shorter than the minimum design requirements in table 5F will require advanced tertiary treatment. Chapter 241, Section 14(I) concerning marginal and failing sites will be strictly enforced. Expectations concerning system maintenance follow.

**NOTE:** Except for single-family residences, which are assigned a design flow of 300 gpd regardless of size, all expansions must meet the provisions of Chapter 243.

## **SYSTEM MAINTENANCE:**

- 1) Systems that qualify as "marginal or failing sites" (Chapter 241, Section 14(I)) and require advanced treatment units (ATU) or advanced tertiary treatment units will require the submittal of evidence that all the required maintenance and inspections as recommended by the manufacturer have been completed and that proper functioning is confirmed (See Section 14 (I)(3)).

Records for the first two years of maintenance should be provided electronically by the property owner or their agent to the DECH SWW Unit. These records and subsequent maintenance records are to be stored on site and be available to the Department and the municipality upon request.

- 2) Systems that require advanced treatment units (ATU) or advanced tertiary treatment units that are not “marginal or failing sites” should submit of evidence that all the required maintenance and inspections as recommended by the manufacturer have been completed and that proper functioning is confirmed.

Records for the first two years of maintenance should be provided electronically by the property owner or their agent to the DECH SWW Unit. These records and subsequent maintenance records should be stored on site and be available to the Department and the municipality upon request. The ability to sample the effluent will preclude some models of ATU.

- 3) As part of the confirmation that an ATU is achieving its treatment goals, annual laboratory samples should be taken from the effluent of the aerobic unit and analyzed for TSS and BOD<sub>5</sub> at a certified laboratory so that the wastewater strength can be compared to manufacturer’s claims of performance and the requirements for disposal area reductions allowed in Table 5B. It is recommended that these samples be taken at similar times of the year to promote comparability between years. If the applicant is demonstrating that groundwater at any of the property boundaries is “not being degraded”, then additional laboratory analysis may be required.
- 4) A completed and recorded Pretreatment Maintenance Agreement (form HHE-300A) will be a condition of the approval.

#### **DEMONSTRATION THAT THE GROUNDWATER QUALITY IS NOT BEING DEGRADED:**

Degradation of groundwater needs to be defined by a set of indicator parameters. Groundwater modeling will be necessary to predict the concentration of the indicator parameters and indicator species before the disposal field is approved to be built. The hydraulic gradient must be based on actual concurrent groundwater observations. Confirmation sampling at some of the larger systems may be necessary to verify the models’ conclusions. This will be decided on a case-by-case basis and will consider sensitive receptors. The report concerning this evaluation shall be stamped by a Maine Licensed Geologist or a Maine Licensed Engineer.

The following parameters need to be accounted for:

- **Total Coliform/E. coli** (Fecal Coliform). The groundwater modeling should include the fate and transport of coliform bacteria. Initial concentrations of bacteria should be based on the highest concentration of the range of concentrations published by the EPA or similar source, factoring in any additional treatment. A three-log removal of bacteria at the property boundary is required. For those sites requiring sampling, IDEXX Colilert, or Colilert-18 (SM 9223B) in non-potable water may be used for Total coliform and E. coli. Specific E. coli methods for wastewater are also acceptable. Fecal Coliform methods may substitute for total Coliform and E. Coli.

- **Viruses and Protists.** If groundwater modeling indicates that a 3-log removal of viruses and protist will not occur at a property boundary, then some form of treatment (e.g. Ultra-Violet) will be necessary.
- **Nitrogen.** Nitrogen a good indicator of the likelihood of other contaminants, such as semi-volatile and volatile organic contaminants, to be retarded to a greater degree due to its conservative nature during groundwater transport. Acceptable nitrate models include those accepted by the Maine Department of Environmental Protection for Site Location of Development Act reviews. Nitrate levels should not exceed 10 parts per million at the property boundary.

## **FRONTAGE ON A WATER BODY**

The Minimum Lot Size rule requires that a lot holding a single-family residence have at least 100 feet of water frontage. For non-single-family residential sites, the required frontage is in proportion to 100 feet per 300 gpd (See Ch. 243, 1000.1.1.1). Applications indicating less than 50 feet per 300 gpd will be denied. The owner of a lot that has at least 100 feet of frontage per 300 gpd may divide this property as long as either of the two resulting properties have adequate water frontage, or the second parcel has no frontage and the two resulting lots are of a size where a waiver is permissible according to this waiver request policy.

## **Local Ordinances**

This policy should not be construed to preempt local ordinances. Local ordinances are allowed to be more stringent than this policy and Ch. 241, Section 4(C) should be applied to this rule.

## **APPENDIX A; Chapter 241, Section 14(I) for reference**

## **DEPARTMENT REVIEWS OF VARIANCE REQUESTS:**

1. For the purpose of this rule, marginal or failing sites must include locations with proposed systems that require a Department variance to first time criteria and:
  - a. Cannot meet the minimum depth to limiting factor(s) requirements for “Condition E” in Table 5E; or
  - b. Cannot meet the design requirements found in Table 5F in the rules except those for “Soil Profile 10” and “Condition A1” in Table 5E; or
  - c. Cannot meet applicable setbacks to drinking water wells as required in this rule; or
  - d. Cannot meet applicable setbacks to protected natural resources as required by this rule; or
  - e. Cannot meet applicable setbacks to property lines from disposal areas, as required by this rule; or
  - f. Cannot meet applicable slope requirements, as required by this rule.
2. For review of variance requests, the Department requires a complete application from the LPI that includes all of the following elements:
  - a. A completed and signed Subsurface Wastewater Disposal System Application (HHE-200);

- b. A completed and signed Variance Request (HHE-204);
- c. Written confirmation from the LPI that all applicable local and state Shoreland Zoning requirements are met;
- d. A statement from the site evaluator verifying that the proposed design and system location is required by site conditions and that no more compliant location with reduced variance requirements can be reasonably identified and developed; and
- e. A description from the site evaluator of the site limitations and the design elements included to overcome those limitations.

**3. Approval of variances for marginal or failing sites requires:**

- a. Department verification that no reasonable alternative exists; and
- b. For variance requests relating to system discharges (i.e. the location of disposal field):
  - i. An advanced treatment system approved by the Department is included in the design; and
  - ii. No system components are located within the Shoreland Zone disturbance free buffer as described in Section 13 of this Rule; and
  - iii. No disturbance during construction of the Shoreland Zone disturbance free buffer as described in Section 13 of this Rule is proposed or required: and
  - iv. The Department, after evaluating the proposed design, determines that no unreasonable risks to public health or the environment shall result.

**Note:** Minimum permitting conditions of “Not Allowed” in Table 5F for Soil Profile 10 as described in Table 5D and for “Soil Condition A1” as described in Table 5E continue to be not allowed. Variances for these conditions will not be considered.

- c. For system discharges (i.e. the location of disposal field) proposed within the required Shoreland Zone protective buffer of 100 feet from Major Water Bodies/Courses or 50 feet for Minor Water Bodies/Courses:
  - i. Advanced tertiary treatment is included in the design, and
  - ii. A maintenance contract between the property owner and the system provider that ensures the advanced tertiary treatment system is inspected and serviced, as recommended by the manufacturer is included with the application; and
  - iii. A copy of the manufacturers recommendations for maintenance and inspections is provided to the Department with the application; and
  - iv. No system components are located within the Shoreland Zone disturbance free buffer as described in Section 13 of this rule; and
  - v. No disturbance of soil or vegetation in the Shoreland Zone disturbance free buffer as described in Section 13 of this rule is proposed or required: and
  - vi. The Department, after evaluating the proposed design, determines that there are no unreasonable risks to public health or the environment.

**Note:** For proposed systems that require Advanced Tertiary Treatment located in the Shoreland Zone or Wellhead Protection Area of the source of a public water supply the Department may require submittal of evidence that all required maintenance and inspections as recommended by the manufacturer have been completed and confirmation from the servicing technician/company that the system is functioning properly.

4. It is incumbent upon the site evaluator to demonstrate to the satisfaction of the Department that native soils can:
  - a. Handle the hydraulic load anticipated; and
  - b. When advanced treatment systems are utilized (not advanced tertiary treatment systems), the native soils can provide any necessary treatment required to ensure proper functioning of the system and protect public health and the environment.
5. A lack of information required for the Department to make an informed decision may result in denial of the variance application. The Department must have the information required to evaluate the surficial geologic and hydrologic conditions on the subject property. If the required information is not available within existing State agency resources, then the applicant must provide it to the Department at their expense. Providing data and information in no way guarantees Department approval.
6. More stringent local requirements than this rule will always prevail.
7. In no instances will the Department approve a variance for a marginal or failing site for a system that requires disturbing the Shoreland Zoning disturbance free buffer required by State or local Shoreland Zoning ordinances. The Department will not approve any variances that further encroach or disturb existing disposal system components located inside the disturbance free buffer.
8. A variance granted by the Department in no way compels local approval. The LPI makes the final determination.
9. The lot must comply with the Maine Minimum Lot Size Law and relevant regulations, see Minimum Lot Size Rules (10-144 CMR Ch. 243) and 12 MRS § 4807.
10. The Department may consult with other state agencies, public water systems, municipal officials and other entities that may help the Department make appropriate and informed determinations.

#### **FOOTNOTES:**

1. From Chapter 243, 1000.4
2. From Chapter 243, 1000.4
3. This stipulation has been Department policy since 2000. There are numerous town and city ordinances that impose an absolute minimum lot size of 10,000 square feet in locations served by municipal water and sewer. As a practical matter, fitting a disposal field, a residence, and a well on 10,000 square feet using first-time criteria is very difficult.
4. See Title 38, Ch.11, Subchapt.3 §1160

5. Any expansion in wastewater flow since October 3, 1973 removes this exempted status.
6. Structures other than single-family residences require different design flows according to Ch. 243 1001.1.2.

#### ASSOCIATED DOCUMENTS:

- [Minimum Lot Size Rules: 10-144 CMR Ch. 243](#)
- [Maine Subsurface Wastewater Disposal Rules, 10-144, Chapter 241](#)  
Sections 7-B; 8-C&E; 14(A)(D)(H)(I)
- [HHE-236: Application for Variance to the Minimum Lot Size Requirements](#)

#### REVISION LOG

| Section | Page(s) | Revision | Date      | Description of Change                                                                                                                     | Approved by          |
|---------|---------|----------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
|         |         | Original | 10/4/2021 | "Minimum Lot Size Waiver Protocol" from 2/2000 recorded in current controlled documentation.                                              | Nathan Saunders P.E. |
|         |         | A        | 8/20/2026 | Revised policy to fit the statute and incorporated findings from processing waivers 2021-2025 as well as experience outside the SWW unit. | Alexander Pugh, LG   |
|         |         |          |           |                                                                                                                                           |                      |