

IPSDC[®]

INTERNATIONAL **PRIVATE SEWAGE DISPOSAL** CODE[®]

A Member of the International Code Family[®]

2021

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2021 International Private Sewage Disposal Code®

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PREFACE

Introduction

The *International Private Sewage Disposal Code*® (IPSDC®) establishes minimum requirements for sewage disposal systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new sewage disposal designs. This 2021 edition is fully compatible with all of the International Codes® (I-Codes®) published by the International Code Council® (ICC®), including the *International Building Code*® (IBC®), *International Energy Conservation Code*® (IECC®), *International Existing Building Code*® (IEBC®), *International Fire Code*® (IFC®), *International Fuel Gas Code*® (IFGC®), *International Green Construction Code*® (IgCC®), *International Mechanical Code*® (IMC®), *International Plumbing Code*® (IPC®), *International Property Maintenance Code*® (IPMC®), *International Residential Code*® (IRC®), *International Swimming Pool and Spa Code*® (ISPSC®), *International Wildland-Urban Interface Code*® (IWUIC®), *International Zoning Code*® (IZC®) and *International Code Council Performance Code*® for Buildings and Facilities (ICCPC®).

The I-Codes, including IPSDC, are used in a variety of ways in both the public and private sectors. Most industry professionals are familiar with the I-Codes as the basis of laws and regulations in communities across the US and in other countries. However, the impact of the codes extends well beyond the regulatory arena, as they are used in a variety of nonregulatory settings, including:

- Voluntary compliance programs such as those promoting sustainability, energy efficiency and disaster resistance.
- The insurance industry, to estimate and manage risk, and as a tool in underwriting and rate decisions.
- Certification and credentialing of individuals involved in the fields of building design, construction and safety.
- Certification of building and construction-related products.
- US federal agencies, to guide construction in an array of government-owned properties.
- Facilities management.
- “Best practices” benchmarks for designers and builders, including those who are engaged in projects in jurisdictions that do not have a formal regulatory system or a governmental enforcement mechanism.
- College, university and professional school textbooks and curricula.
- Reference works related to building design and construction.

In addition to the codes themselves, the code development process brings together building professionals on a regular basis. It provides an international forum for discussion and deliberation about building design, construction methods, safety, performance requirements, technological advances and innovative products.

Development

This 2021 edition presents the code as originally issued, with changes reflected in the 1997 through 2018 editions and further changes approved by the ICC Code Development Process through 2019. A new edition such as this is promulgated every 3 years.

This code is founded on principles intended to establish provisions consistent with the scope of a sewage disposal code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

Maintenance

The IPSDC is kept up to date through the review of proposed changes submitted by code enforcement officials, industry representatives, design professionals and other interested parties. Proposed changes are carefully considered through an open code development process in which all interested and affected parties may participate.

The ICC Code Development Process reflects principles of openness, transparency, balance, due process and consensus, the principles embodied in OMB Circular A-119, which governs the federal government's use of private-sector standards. The ICC process is open to anyone; there is no cost to participate, and people can participate without travel cost through the ICC's cloud-based app, cdpAccess®. A broad cross section of interests are represented in the ICC Code Development Process. The codes, which are updated regularly, include safeguards that allow for emergency action when required for health and safety reasons.

In order to ensure that organizations with a direct and material interest in the codes have a voice in the process, the ICC has developed partnerships with key industry segments that support the ICC's important public safety mission. Some code development committee members were nominated by the following industry partners and approved by the ICC Board:

- American Society of Plumbing Engineers (ASPE)
- National Association of Home Builders (NAHB)
- Plumbing Heating and Cooling Contractors (PHCC)
- American Institute of Architects (AIA)

The code development committees evaluate and make recommendations regarding proposed changes to the codes. Their recommendations are then subject to public comment and council-wide votes. The ICC's governmental members—public safety officials who have no financial or business interest in the outcome—cast the final votes on proposed changes.

The contents of this work are subject to change through the code development cycles and by any governmental entity that enacts the code into law. For more information regarding the code development process, contact the Codes and Standards Development Department of the ICC.

While the I-Code development procedure is thorough and comprehensive, the ICC, its members and those participating in the development of the codes disclaim any liability resulting from the publication or use of the I-Codes, or from compliance or noncompliance with their provisions. The ICC does not have the power or authority to police or enforce compliance with the contents of this code.

Code Development Committee Responsibilities (Letter Designations in Front of Section Numbers)

In each code development cycle, code change proposals to this code are considered at the Committee Action Hearings by the International Plumbing Code Development Committee, whose action constitutes a recommendation to the voting membership for final action on the proposed change. Code change proposals to sections of the code that are preceded by a bracketed letter designation, such as [A], will be considered by a committee other than the Plumbing Code Development Committee. For example, proposed changes to Section [BS] 303.1 will be considered by the IBC—Structural Code Development Committee at the Committee Action Hearings in the 2022 (Group B) code development cycle.

The bracketed letter designations for committees responsible for portions of this code are as follows:

[A] = Administrative Code Development Committee

[BS] = IBC—Structural Code Development Committee

[P] = International Plumbing Code Development Committee

For the development of the 2024 edition of the I-Codes, there will be two groups of code development committees and they will meet in separate years, as shown in the following Code Development Hearings Table.

Code change proposals submitted for code sections that have a letter designation in front of them will be heard by the respective committee responsible for such code sections. Because different committees hold Committee Action Hearings in different years, proposals for this code will be heard by committees in both the 2021 (Group A) and 2022 (Group B) code development cycles.

Note that every section of Chapter 1 of this code is designated as the responsibility of the Administrative Code Development Committee, and that committee is part of the Group B portion of the code hearings. This committee will hold its code development hearings in 2022 to consider all code change proposals for Chapter 1 of this code and proposals for Chapter 1 of all I-Codes except the IECC, IRC and IgCC. Therefore, any proposals received for Chapter 1 of this code will be assigned to the Administrative Code Development Committee for consideration in 2022.

It is very important that anyone submitting code change proposals understands which code development committee is responsible for the section of the code that is the subject of the code change proposal. For further information on the Code Development Committee responsibilities, please visit the ICC website at www.iccsafe.org/current-code-development-cycle.

CODE DEVELOPMENT HEARINGS

Group A Codes (Heard in 2021, Code Change Proposals Deadline: January 11, 2021)	Group B Codes (Heard in 2022, Code Change Proposals Deadline: January 10, 2022)
International Building Code – Egress (Chapters 10, 11, Appendix E) – Fire Safety (Chapters 7, 8, 9, 14, 26) – General (Chapters 2–6, 12, 27–33, Appendices A, B, C, D, K, N)	Administrative Provisions (Chapter 1 of all codes except IECC, IRC and IgCC, IBC Appendix O, the appendices titled “Board of Appeals” for all codes except IECC, IRC, IgCC, ICCPC and IZC, administrative updates to currently referenced standards, and designated definitions)
International Fire Code	International Building Code – Structural (Chapters 15–25, Appendices F, G, H, I, J, L, M)
International Fuel Gas Code	International Existing Building Code
International Mechanical Code	International Energy Conservation Code—Commercial
International Plumbing Code	International Energy Conservation Code—Residential – IECC—Residential – IRC—Energy (Chapter 11)
International Property Maintenance Code	International Green Construction Code (Chapter 1)
International Private Sewage Disposal Code	International Residential Code – IRC—Building (Chapters 1–10, Appendices AE, AF, AH, AJ, AK, AL, AM, AO, AQ, AR, AS, AT, AU, AV, AW)
International Residential Code – IRC—Mechanical (Chapters 12–23) – IRC—Plumbing (Chapters 25–33, Appendices AG, AI, AN, AP)	
International Swimming Pool and Spa Code	
International Wildland-Urban Interface Code	
International Zoning Code	

Note: Proposed changes to the ICCPC will be heard by the code development committee noted in brackets [] in the text of the ICCPC.

Marginal Markings

Solid vertical lines in the margins within the body of the code indicate a technical change from the requirements of the 2018 edition. Deletion indicators in the form of an arrow (➡) are provided in the margin where an entire section, exception or table has been deleted or an item in a list of items or row of a table has been deleted.

A single asterisk [*] placed in the margin indicates that text or a table has been relocated within the code. A double asterisk [**] placed in the margin indicates that the text or table immediately following it has been relocated there from elsewhere in the code. The following table indicates such relocations in the 2021 edition of the IPSDC.

RELOCATIONS	
2021 LOCATION	2018 LOCATION
104.7	103.4
107.1	106.2.1
107.2	106.3.6
108	109
109	110
110.1	107.9
110.2	107.8
111	107
114	108

Coordination of the International Codes

The coordination of technical provisions is one of the strengths of the ICC family of model codes. The codes can be used as a complete set of complementary documents, which will provide users with full integration and coordination of technical provisions. Individual codes can also be used in subsets or as stand-alone documents. To make sure that each individual code is as complete as possible, some technical provisions that are relevant to more than one subject area are duplicated in some of the model codes. This allows users maximum flexibility in their application of the I-Codes.

Italicized Terms

Terms italicized in code text, other than document titles, are defined in Chapter 2. The terms selected to be italicized have definitions that the user should read carefully to better understand the code. Where italicized, the Chapter 2 definition applies. If not italicized, common-use definitions apply.

Adoption

The ICC maintains a copyright in all of its codes and standards. Maintaining copyright allows ICC to fund its mission through sales of books, in both print and electronic formats. The ICC welcomes adoption of its codes by jurisdictions that recognize and acknowledge the ICC's copyright in the code, and further acknowledge the substantial shared value of the public/private partnership for code development between jurisdictions and the ICC.

The ICC also recognizes the need for jurisdictions to make laws available to the public. All I-Codes and I-Standards, along with the laws of many jurisdictions, are available for free in a nondownloadable form on the ICC's website. Jurisdictions should contact the ICC at adoptions@iccsafe.org to learn how

to adopt and distribute laws based on the IPSDC in a manner that provides necessary access, while maintaining the ICC's copyright.

Section 101.1. Insert: **[NAME OF JURISDICTION]**

Section 106.4.2. Insert: **[APPROPRIATE SCHEDULE]**

Section 106.4.3. Insert: **[PERCENTAGES IN TWO LOCATIONS]**

Section 114.4. Insert: **[OFFENSE, DOLLAR AMOUNT, NUMBER OF DAYS]**

Section 405.2.5. Insert: **[DATE IN THREE LOCATIONS]**

Section 405.2.6. Insert: **[DATE IN TWO LOCATIONS]**

Effective Use of the International Private Sewage Disposal Code

The IPSDC is a model code that regulates minimum requirements for the installation of new or the alteration of existing private sewage disposal systems. Where a building cannot be served by a public sewer system, the building site must be provided with a system for treating the wastewater generated from the use of plumbing fixtures in the building. The IPSDC addresses site evaluations, materials, various soil absorption systems, holding tanks, cesspools and on-site wastewater treatment systems. The IPSDC provides a total approach for the on-site, safe disposal of the waste flow discharged to the plumbing fixtures in a building.

The IPSDC is a specification- (prescriptive-) oriented code with very few occurrences of performance-oriented text. The site soil must be evaluated in a prescribed manner to determine its ability to accept the waste flow. The chosen waste treatment method must be designed in a prescribed manner for the soil conditions at the building site, constructed using prescribed materials and installed according to prescribed dimensions. The IPSDC sets forth the minimum acceptable requirements for private sewage disposal systems in order to protect humans and the environment from insanitary conditions that would develop if waste flows were not rendered harmless.

ARRANGEMENT AND FORMAT OF THE 2021 IPSDC

The format of the IPSDC allows each chapter to be devoted to a particular subject with the exception of Chapter 3, which contains general subject matters that are not extensive enough to warrant their own independent chapter.

The following table shows how the IPSDC is divided. The ensuing chapter-by-chapter synopsis details the scope and intent of the provisions of the IPSDC.

CHAPTER TOPICS

Chapter	Topic
1	Scope and Administration
2	Definitions
3	General Regulations
4	Site Evaluation and Requirements
5	Materials
6	Soil Absorption Systems
7	Pressure Distribution Systems
8	Tanks
9	Mound Systems
10	Cesspools
11	Residential Wastewater Systems
12	Inspections
13	Nonliquid Saturated Treatment Systems
14	Referenced Standards
Appendix A	System Layout Illustrations
Appendix B	Pressure Distribution Systems
Appendix C	Board of Appeals

Chapter 1 Scope and Administration

This chapter contains provisions for the application, enforcement and administration of subsequent requirements of the code. In addition to establishing the scope of the code, Chapter 1 identifies which buildings and structures come under its purview. Chapter 1 is largely concerned with maintaining “due process of law” in enforcing the requirements contained in the body of this code. Only through careful observation of the administrative provisions can the code official reasonably expect to demonstrate that “equal protection under the law” has been provided.

Chapter 2 Definitions

All terms that are defined in the code are listed alphabetically in Chapter 2. While a defined term may be used in one chapter or another, the meaning provided in Chapter 2 is applicable throughout the code.

Where understanding of a term’s definition is especially key to or necessary for understanding of a particular code provision, the term is shown in italics. This is true only for those terms that have a

meaning that is unique to the code. In other words, the generally understood meaning of a term or phrase might not be sufficient or consistent with the meaning prescribed by the code; therefore, it is essential that the code-defined meaning be known.

Guidance regarding tense, gender and plurality of defined terms, as well as guidance regarding terms not defined in this code, is provided.

Chapter 3 General Regulations

The content of Chapter 3 is often referred to as “miscellaneous,” rather than general regulations. Chapter 3 received that label because it is the only chapter in the code where requirements do not interrelate. If a requirement cannot be located in another chapter, it can be found in this chapter. Specific requirements concerning flood hazard areas are in this chapter.

Chapter 4 Site Evaluation and Requirements

A private sewage disposal system has an effluent that cannot be directly discharged into waterways or open ponds. Soil of the right consistency and water content provides natural filtering and treatment of this discharge. Because soil conditions vary widely, even on the same building site, tests and inspections of the soils must be performed to evaluate the degree to which the soil can accept these liquids. The results of the tests provide necessary information to design an adequate private sewage disposal system. Chapter 4 provides the methods for evaluating the building site.

Chapter 5 Materials

Private sewage disposal systems depend on the strength, quality and chemical resistance of the components that make up the system. To that end, the purpose of Chapter 5 is to specify the minimum material and component standards to ensure that the private sewage disposal system will correctly perform for its intended life.

Chapter 6 Soil Absorption Systems

The design of soil absorption systems depends heavily on the result of the tests and evaluation of the site soil conditions required in Chapter 4. Where soil is less permeable, the area of the soil absorption must be large as compared to that required for soils that are highly permeable. The type of building that is being served by the private sewage disposal system also affects the size of the planned soil absorption area. Chapter 6 provides the methods for computing the required absorption area and details for the proper installation of the soil absorption systems.

Chapter 7 Pressure Distribution Systems

Chapter 6 deals with gravity-type soil absorption systems or systems where the effluent is allowed to drain out of the distribution piping by gravity. Chapter 7 offers an alternative method of discharging the effluent into the ground by pressure means. As such, Chapter 7 provides the necessary details for designing the piping and pumping systems for pressure distribution systems.

Chapter 8 Tanks

Tanks are an integral part of any private sewage disposal system whether they serve as treatment (septic) tanks or merely just holding tanks for leveling the peaks in flow to the system. Where tanks are used for treatment, the dimensions, volume and location of internal features are very important to ensure that the solid wastes are kept within the tank so as to not clog the effluent distribution system. Where tanks are used for holding purposes, they must be sized large enough to accommodate the total of peak flows coming from a building. Chapter 8 provides the necessary requirements for tanks.

Chapter 9 Mound Systems

Mound systems are another method for applying the effluent from a private sewage disposal system to the soil. This type of system may be advantageous in some localities due to the existing soil conditions. Chapter 9 has specific requirements for soil and site evaluations for mound systems.

Chapter 10 Cesspools

Although prohibited from being installed as a permanent private sewage disposal system, cesspools may be necessary where permanent systems are under repair, or are being built. Chapter 10 provides the details for constructing a cesspool.

Chapter 11 Residential Wastewater Systems

Another method of private sewage disposal is a small wastewater treatment plant. Where permitted, these systems can discharge effluent directly to streams and rivers. Chapter 11 specifies the standard to which wastewater treatment plants must conform.

Chapter 12 Inspections

The best soil and site analysis along with the best design will be rendered useless if the system is not installed according to the plans for the system. Chapter 12 provides requirements for inspection of private sewage disposal systems.

Chapter 13 Nonliquid Saturated Treatment Systems

In some locations, water for the flushing of waste into and through a sanitary piping system is not available. For example, a toilet facility provided for a remote campground without running water would require such a system. Chapter 13 specifies the standard to which nonliquid saturated treatment systems must conform.

Chapter 14 Referenced Standards

Chapter 14 contains a comprehensive list of all standards that are referenced in the code. The standards are part of the code to the extent of the reference to the standard. Compliance with the referenced standard is necessary for compliance with this code. By providing specifically adopted standards, the construction and installation requirements necessary for compliance with the code can be readily determined. The basis for code compliance is, therefore, established and available on an equal basis to the code official, contractor, designer and owner.

Chapter 14 is organized in a manner that makes it easy to locate specific standards. It lists all of the referenced standards, alphabetically, by acronym of the promulgating agency of the standard. Each agency's standards are then listed in either alphabetical or numeric order based on the standard identification. The list also contains the title of the standard; the edition (date) of the standard referenced; any addenda included as part of the ICC adoption; and the section or sections of this code that reference the standard.

Appendix A System Layout Illustrations

Because each chapter of this code uses only words to describe requirements, illustrations can offer greater insight as to what the words mean. Appendix A has a number of illustrations referenced to specific sections of the code to help the reader gain a better understanding of the requirements of the code.

Appendix B Tables for Pressure Distribution Systems

The design of a pressure distribution system is accomplished by the use of several complex formulas found in Chapter 7. Because a user of the code may not have the necessary experience to manipulate the formulas, a tabular approach for designing pressure distribution systems is provided in Appendix B.

Appendix C Board of Appeals

Section 112 of Chapter 1 requires the establishment of a board of appeals to hear appeals regarding determinations made by the code official. Appendix C provides qualification standards for members of the board as well as operational procedures of such board.

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CHAPTER 1

SCOPE AND ADMINISTRATION

User note:

About this chapter: Chapter 1 establishes the limits of applicability of this code and describes how the code is to be applied and enforced. Chapter 1 is in two parts: Part 1—Scope and Application (Sections 101–102) and Part 2—Administration and Enforcement (Sections 103–115). Section 101 identifies which buildings and structures come under its purview and references other I-Codes as applicable. Standards and codes are scoped to the extent referenced (see Section 102.10).

This code is intended to be adopted as a legally enforceable document and it cannot be effective without adequate provisions for its administration and enforcement. The provisions of Chapter 1 establish the authority and duties of the code official appointed by the authority having jurisdiction and also establish the rights and privileges of the design professional, contractor and property owner.

User Note: This chapter was extensively reorganized for the 2021 edition. For clarity, the relocation marginal markings have not been included. For complete information, see the Relocations table in the Preface of this code.

PART 1—SCOPE AND APPLICATION

SECTION 101 SCOPE AND GENERAL REQUIREMENTS

[A] 101.1 Title. These regulations shall be known as the *Private Sewage Disposal Code* of [NAME OF JURISDICTION] hereinafter referred to as “this code.”

[A] 101.2 Scope. Septic tank and effluent absorption systems or other treatment tank and effluent disposal systems shall be permitted where a public sewer is not available to the property served. Unless specifically approved, the *private sewage disposal system* of each building shall be entirely separate from and independent of any other building. The use of a common system or a system on a parcel other than the parcel where the structure is located shall be subject to the full requirements of this code as for systems serving public buildings.

[A] 101.2.1 Appendices. Provisions in the appendices shall not apply unless specifically adopted.

[A] 101.3 Public sewer connection. Where public sewers become available to the premises served, the use of the *private sewage disposal system* shall be discontinued within that period of time required by law, but such period shall not exceed 1 year. The building sewer shall be disconnected from the *private sewage disposal system* and connected to the public sewer.

[A] 101.4 Abandoned systems. Abandoned *private sewage disposal systems* shall be plugged or capped in an approved manner. Abandoned treatment tanks and *seepage pits* shall have the contents pumped and discarded in an approved manner. The top or entire tank shall be removed and the remaining portion of the tank or excavation shall be filled immediately.

[A] 101.5 Failing system. When a *private sewage disposal system* fails or malfunctions, the system shall be corrected or use of the system shall be discontinued within that period of time required by the *code official*, but such period shall not exceed 1 year.

[A] 101.5.1 Failure. A failing *private sewage disposal system* shall be one causing or resulting in any of the following conditions:

1. The failure to accept sewage discharge and backup of sewage into the structure served by the *private sewage disposal system*.
2. The discharge of sewage to the surface of the ground or to a drain tile.
3. The discharge of sewage to any surface or ground water.
4. The introduction of sewage into saturation zones adversely affecting the operation of a *private sewage disposal system*.

[A] 101.6 Purpose. The purpose of this code is to establish minimum requirements to provide a reasonable level of safety health, property protection and general welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance or use of *private sewage disposal systems*.

[A] 101.7 Severability. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

SECTION 102 APPLICABILITY

[A] 102.1 General. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

[A] 102.2 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

[A] 102.3 Application of references. Reference to chapter section numbers, or to provisions not specifically identified

by number, shall be construed to refer to such chapter, section or provision of this code.

[A] 102.4 Existing installations. *Private sewage disposal systems* lawfully in existence at the time of the adoption of this code shall be permitted to have their use and maintenance continued if the use, maintenance or repair is in accordance with the original design and no hazard to life, health or property is created by the system.

[A] 102.5 Maintenance. *Private sewage disposal systems*, materials and appurtenances, both existing and new, and all parts thereof shall be maintained in proper operating condition in accordance with the original design in a safe and sanitary condition. Devices or safeguards that are required by this code shall be maintained in compliance with the edition of the code under which they were installed. The owner or the owner's authorized agent shall be responsible for maintenance of *private sewage disposal systems*. To determine compliance with this provision, the *code official* shall have the authority to require reinspection of any *private sewage disposal system*.

[A] 102.6 Additions, alterations or repairs. Additions, alterations, renovations or repairs to any *private sewage disposal system* shall conform to that required for a new system without requiring the existing system to comply with all the requirements of this code. Additions, alterations or repairs shall not cause an existing system to become unsafe, insanitary or overloaded.

Minor additions, alterations, renovations and repairs to existing systems shall meet the provisions for new construction, unless such work is done in the same manner and arrangement as was in the existing system, is not hazardous and is approved.

[A] 102.7 Change in occupancy. It shall be unlawful to make any change in the occupancy of any structure that will subject the structure to any special provision of this code applicable to the new occupancy without approval of the *code official*. The *code official* shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public health, safety or welfare.

[A] 102.8 Historic buildings. The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures are judged by the *code official* to be safe and in the public interest of health, safety and welfare regarding any proposed construction, alteration, repair, enlargement, restoration, relocation or moving of buildings.

[A] 102.9 Moved buildings. Except as determined by Section 102.4, *private sewage disposal systems* that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new installations.

[A] 102.10 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 14 and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.10.1 and 102.10.2.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instructions shall apply.

[A] 102.10.1 Conflicts. Where conflicts occur between provisions of this code and the referenced standards, the provisions of this code shall apply.

[A] 102.10.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

[A] 102.11 Requirements not covered by code. Any requirements necessary for the proper operation of an existing or proposed *private sewage disposal system*, or for the public safety, health and general welfare, not specifically covered by this code, shall be determined by the *code official*.

PART 2—ADMINISTRATION AND ENFORCEMENT

SECTION 103 CODE COMPLIANCE AGENCY

[A] 103.1 Creation of agency. The [INSERT NAME OF DEPARTMENT] is hereby created and the official in charge thereof shall be known as the code official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

[A] 103.2 Appointment. The *code official* shall be appointed by the chief appointing authority of the jurisdiction.

[A] 103.3 Deputies. In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the *code official* shall have the authority to appoint a deputy *code official*, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the *code official*.

SECTION 104 DUTIES AND POWERS OF THE CODE OFFICIAL

[A] 104.1 General. The *code official* is hereby authorized and directed to enforce the provisions of this code. The *code official* shall have the authority to render interpretations of this code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code. Such policies and procedures

shall not have the effect of waiving requirements specifically provided for in this code.

[A] 104.2 Applications and permits. The *code official* shall receive applications, review *construction documents* and issue permits for the installation and alteration of *private sewage disposal systems*, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

[A] 104.3 Inspections. The *code official* shall make all of the required inspections, or shall accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The *code official* is authorized to engage such expert opinion as deemed necessary to report on unusual technical issues that arise, subject to the approval of the appointing authority.

[A] 104.4 Right of entry. Where it is necessary to make an inspection to enforce the provisions of this code, or where the *code official* has reasonable cause to believe that there exists in any building or on any premises any conditions or violations of this code that make the building or premises unsafe, insanitary, dangerous or hazardous, the *code official* shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed on the *code official* by this code. If such building or premises is occupied, the *code official* shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the *code official* shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the building or premises and request entry. If entry is refused, the *code official* has recourse to every remedy provided by law to secure entry.

Where the *code official* shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, the owner, owner's authorized agent or occupant or person having charge, care or control of any building or premises shall not fail or neglect, after proper request is made as herein provided, to promptly permit entry therein by the *code official* for the purpose of inspection and examination pursuant to this code.

[A] 104.5 Identification. The *code official* shall carry proper identification when inspecting structures or premises in the performance of duties under this code.

[A] 104.6 Notices and orders. The *code official* shall issue all necessary notices or orders to ensure compliance with this code.

[A] 104.7 Liability. The *code official*, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of any act or by reason of an act or omission in the discharge of official duties.

[A] 104.7.1 Legal defense. Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The *code official* or any subordinate shall not be liable for costs in any action, suit or proceeding that is instituted in pursuance of the provisions of this code.

[A] 104.8 Department records. The *code official* shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records shall be retained in the official records for the period required for retention of public records.

SECTION 105 APPROVAL

[A] 105.1 Modifications. Where there are practical difficulties involved in carrying out the provisions of this code, the *code official* shall have the authority to grant modifications for individual cases, upon application of the owner or owner's authorized agent, provided that the *code official* shall first find that special individual reason makes the strict letter of this code impractical, the modification is in conformity with the intent and purpose of this code and such modification does not lessen health and fire- and life-safety requirements. The details of action granting modifications shall be recorded and entered in the files of the Private Sewage Disposal Inspection Department.

[A] 105.2 Alternative materials, design and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the *code official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety. Where the alternative material, design or method of construction is not approved, the *code official* shall respond in writing, stating the reasons why the alternative was not approved.

[A] 105.2.1 Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this code, shall consist of valid research reports from approved sources.

[A] 105.3 Required testing. Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternate materials or methods, the *code official* shall

have the authority to require testing as evidence of compliance at no expense to the jurisdiction.

[A] 105.3.1 Test methods. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the *code official* shall approve the testing procedures.

[A] 105.3.2 Testing agency. Tests shall be performed by an approved agency.

[A] 105.3.3 Test reports. Reports of tests shall be retained by the *code official* for the period required for retention of public records.

[A] 105.4 Used material and equipment. Materials that are reused shall comply with the requirements of this code for new materials. Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested and placed in good and proper working condition and approved by the *code official*.

[A] 105.5 Approved materials and equipment. Materials, equipment and devices approved by the *code official* shall be constructed and installed in accordance with such approval.

SECTION 106 PERMITS

[A] 106.1 Where required. Work on a *private sewage disposal system* shall not commence until a permit for such work has been issued by the *code official*.

[A] 106.1.1 Annual permit. Instead of an individual construction permit for each alteration to an already approved system or equipment or appliance installation, the *code official* is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

[A] 106.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The *code official* shall have access to such records at all times or such records shall be filed with the *code official* as designated.

[A] 106.2 Application for permit. Each application for a permit, with the required fee, shall be filed with the *code official* on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The application shall contain a description of the type of system, the system location, the occupancy of all parts of the structure and all portions of the site or lot not covered by the structure, and such additional information as is required by the *code official*. The maximum number of bedrooms for residential occupancies shall be indicated.

[A] 106.2.1 Preliminary inspection. Before a permit is issued, the *code official* is authorized to inspect and evaluate the systems, equipment, buildings, devices, premises and spaces or areas to be used.

[A] 106.2.2 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the *code official* shall have the authority to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[A] 106.2.3 Previous approvals. This code shall not require changes in the *construction documents*, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

[A] 106.2.4 Soil data. Soil test reports shall be submitted indicating *soil boring* and percolation test data related to the undisturbed and finished grade elevations, vertical elevation reference point and horizontal reference point. Surface elevations shall be given for all *soil borings*. Soil reports shall bear the signature of a soil tester.

[A] 106.2.5 Site plan. A site plan shall be filed showing to scale the location of all septic tanks, holding tanks or other treatment tanks; building sewers; wells; water mains; water service; streams and lakes; *flood hazard areas*; dosing or pumping chambers; distribution boxes; effluent systems; dual disposal systems; replacement system areas; and the location of all buildings or structures. Separating distances and dimensions shall be shown, including any distance to adjoining property. A vertical elevation reference point and a horizontal reference point shall be indicated. For other than single-family dwellings, grade slope with contours shall be shown for the grade elevation of the entire area of the soil absorption system and the area on all sides for a distance of 25 feet (7620 mm).

[A] 106.3 Permit issuance. The application, *construction documents* and other data filed by an applicant for permit shall be reviewed by the *code official*. If the *code official* finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and that the fees specified in Section 106.4 have been paid, a permit shall be issued to the applicant. A *private sewage disposal system* permit shall not be transferable.

[A] 106.3.1 Approved construction documents. When the *code official* issues the permit where *construction documents* are required, the *construction documents* shall be endorsed in writing and stamped "APPROVED." Such approved *construction documents* shall not be changed, modified or altered without authorization from the *code official*. Work shall be done in accordance with the approved *construction documents*.

The *code official* shall have the authority to issue a permit for the construction of a part of a *private sewage disposal system* before the *construction documents* for the whole system have been submitted or approved, provided adequate information and detailed statements have been

filed complying with all pertinent requirements of this code. The holder of such permit shall proceed at his or her own risk without assurance that the permit for the entire system will be granted.

[A] 106.3.2 Validity. The issuance of a permit or approval of *construction documents* shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of other ordinances of the jurisdiction. No permit presuming to give authority to violate or cancel the provisions of this code shall be valid.

The issuance of a permit based on *construction documents* and other data shall not prevent the *code official* from thereafter requiring the correction of errors in said *construction documents* and other data or from preventing building operations being carried on thereunder when in violation of this code or of other ordinances of the jurisdiction.

[A] 106.3.3 Expiration. Every permit issued by the *code official* under the provisions of this code shall expire by limitation and become null and void if the work authorized by such permit is not commenced within 180 days from the date of the permit, or if the work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days. Before such work can be recommenced, a new permit shall first be obtained and the fee therefor shall be one-half the amount required for a new permit for such work, provided that no changes have been or will be made in the original *construction documents* for such work, and provided further that such suspension or abandonment has not exceeded 1 year.

[A] 106.3.4 Extensions. Any permittee holding an unexpired permit shall have the right to apply for an extension of the time within which the permittee will commence work under that permit where work cannot be commenced within the time required by this section for good and satisfactory reasons. The *code official* shall extend the time for action by the permittee for a period not exceeding 180 days if there is reasonable cause. No permit shall be extended more than once. The fee for an extension shall be one-half the amount required for a new permit for such work.

[A] 106.3.5 Suspension or revocation of permit. The *code official* shall have the authority to suspend or revoke a permit issued under the provisions of this code whenever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

[A] 106.3.6 Posting of permit. The permit or a copy shall be kept on the site of the work until the completion of the project.

[A] 106.4 Fees. A permit shall not be issued until the fees prescribed in Section 106.4.2 have been paid, and an amendment to a permit shall not be released until the additional fee, if any, due to an increase of the *private sewage disposal system*, has been paid.

[A] 106.4.1 Work commencing before permit issuance. Any person who commences any work on a *private sewage disposal system* before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the required permit fees.

[A] 106.4.2 Fee schedule. The fees for all private sewage disposal work shall be as indicated in the following schedule:

[JURISDICTION TO INSERT APPROPRIATE SCHEDULE].

[A] 106.4.3 Fee refunds. The *code official* shall authorize the refunding of fees as follows:

1. The full amount of any fee paid hereunder that was erroneously paid or collected.
2. Not more than **[SPECIFY PERCENTAGE]** percent of the permit fee paid where no work has been done under a permit issued in accordance with this code.
3. Not more than **[SPECIFY PERCENTAGE]** percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The *code official* shall not authorize the refunding of any fee paid except upon written application filed by the original permittee no later than 180 days after the date of fee payment.

SECTION 107 CONSTRUCTION DOCUMENTS

[A] 107.1 Construction documents. An application for a permit shall be accompanied by not less than two copies of *construction documents* drawn to scale, or in a digital format where allowed by the building official, with sufficient clarity and detail dimensions showing the nature and character of the work to be performed. Specifications shall include pumps and controls, dose volume, elevation differences (vertical lift), pipe friction loss, pump performance curve, pump model and pump manufacturer. The *code official* is permitted to waive the requirements for filing *construction documents* where the work involved is of a minor nature. Where the quality of the materials is essential for conformity to this code, specific information shall be given to establish such quality, and this code shall not be cited, or the term “legal” or its equivalent used as a substitute for specific information.

[A] 107.2 Retention of construction documents. One set of approved *construction documents* shall be retained by the *code official* for a period of not less than 180 days from date of completion of the permitted work, or as required by state or local laws. One set of approved *construction documents* shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress.

SECTION 108 NOTICE OF APPROVAL

[A] 108.1 Approval. After the prescribed inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the *code official*.

[A] 108.1.1 Revocation. The *code official* is authorized to, in writing, suspend or revoke a notice of approval issued under the provisions of this code wherever the notice is issued in error, on the basis of incorrect information supplied, or where it is determined that the building or structure, premise or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

SECTION 109 TEMPORARY EQUIPMENT, SYSTEMS AND USES

[A] 109.1 General. The *code official* is authorized to issue a permit for temporary uses, equipment, or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The *code official* is authorized to grant extensions for demonstrated cause.

[A] 109.2 Conformance. Temporary uses, equipment and systems shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary requirements of this code as necessary to ensure the health, safety and general welfare.

[A] 109.3 Temporary utilities. The *code official* is authorized to give permission to temporarily supply utilities, sources of energy, fuel, power, water systems or sewer systems before an installation has been fully completed and the final approval has been issued. The part covered by the temporary approval shall comply with the requirements specified for temporary lighting, heat or power in this code.

[A] 109.4 Termination of approval. The *code official* is authorized to terminate such permit for temporary uses, equipment or system and to order the same to be discontinued.

SECTION 110 SERVICE UTILITIES

[A] 110.1 Connection of service utilities. No person shall make connections from a utility, source of energy, fuel or power to any building or system that is regulated by this code for which a permit is required until authorized by the *code official*.

[A] 110.2 Temporary connection. The *code official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, water system or sewer system for the purpose of testing systems or for use under a temporary approval.

[A] 110.3 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards in case of emergency where necessary to eliminate an

immediate hazard to life or property or where such utility connection has been made without the approval required by Section 110.1 or 110.2. The *code official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, the owner's authorized agent or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SECTION 111 INSPECTIONS

[A] 111.1 Required inspections. After issuing a permit, the *code official* shall conduct inspections from time to time during and upon completion of the work for which a permit has been issued. A record of all such examinations and inspections and of all violations of this code shall be maintained by the *code official*.

[A] 111.1.1 Concealed work. It shall be the duty of the permit applicant to cause the work to remain visible and able to be accessed for inspection purposes. Neither the *code official* nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

[A] 111.1.2 Other inspections. The *code official* is authorized to make or require other inspections to ascertain compliance with the provisions of this code and other laws that are enforced by the department.

[A] 111.1.3 Approved inspection agencies. The *code official* shall accept reports of approved inspection agencies provided that such agencies satisfy the requirements as to qualifications and reliability.

[A] 111.2 Special inspections. Special inspections of alternative engineered design *private sewage disposal systems* shall be conducted in accordance with Sections 111.2.1 and 111.2.2.

[A] 111.2.1 Periodic inspection. The *registered design professional* or designated inspector shall periodically inspect and observe the alternative engineered design to determine that the installation is in accordance with the approved plans. Discrepancies shall be brought to the immediate attention of the *private sewage disposal system* contractor for correction. Records shall be kept of all inspections.

[A] 111.2.2 Written report. The *registered design professional* shall submit a final report in writing to the *code official* upon completion of the installation, certifying that the alternative engineered design conforms to the approved *construction documents*. A notice of approval for the *private sewage disposal system* shall not be issued until a written certification has been submitted.

[A] 111.3 Contractor's responsibilities. It shall be the duty of every contractor who enters into contracts for the installation or repair of *private sewage disposal systems* for which a

permit is required to comply with adopted state and local rules and regulations concerning licensing.

[A] 111.3.1 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the *code official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that is required by this code.

[A] 111.4 Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *code official*. The *code official*, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this code. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *code official*.

[A] 111.5 Evaluation and follow-up inspection services. Prior to the approval of a prefabricated construction assembly having concealed work and the issuance of a permit, the *code official* shall require the submittal of an evaluation report on each prefabricated construction assembly, indicating the complete details of the *private sewage disposal system*, including a description of the system and its components, the basis on which the system is being evaluated, test results and similar information and other data as necessary for the *code official* to determine conformance to this code.

[A] 111.5.1 Evaluation service. The *code official* shall designate the evaluation service of an approved agency as the evaluation agency, and review such agency's evaluation report for adequacy and conformance to this code.

[A] 111.5.2 Follow-up inspection. Except where ready access is provided to *private sewage disposal systems*, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the *code official* shall conduct the in-plant inspections as frequently as necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the *code official* with the follow-up inspection manual and a report of inspections on request, and the installation shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.

[A] 111.5.3 Test and inspection records. Required test and inspection records shall be available to the *code official* at all times during the fabrication of the installation and the erection of the building; or such records as the *code official* designates shall be filed.

[A] 111.6 Testing. Installations shall be tested as required in this code and in accordance with Sections 111.6.1 through 111.6.3. Tests shall be made by the permit holder and observed by the *code official*.

[A] 111.6.1 New, altered, extended or repaired installations. New installations and parts of existing installations that have been altered, extended, renovated

or repaired shall be tested as prescribed herein to disclose leaks and defects.

[A] 111.6.2 Apparatus, instruments, material and labor for tests. Apparatus, instruments, material and labor required for testing an installation or part thereof shall be furnished by the permit holder.

[A] 111.6.3 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this code. The work or installation shall then be resubmitted to the *code official* for inspection and testing.

SECTION 112 MEANS OF APPEAL

[A] 112.1 General. In order to hear and decide appeals of orders, decisions or determinations made by the *code official* relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the *code official*.

112.2 Limitations on authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equivalent or better form of construction is proposed. The board shall not have authority to waive requirements of this code or interpret the administration of this code.

[A] 112.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of the jurisdiction.

[A] 112.4 Administration. The *code official* shall take immediate action in accordance with the decision of the board.

SECTION 113 BOARD OF APPEALS

113.1 Membership of board. The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years, one for 4 years, one for 3 years, one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

SECTION 114 VIOLATIONS

[A] 114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, alter, repair, remove, demolish or use any *private sewage disposal system*, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

[A] 114.2 Notice of violation. The *code official* shall serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of private sewage disposal work in violation of the provisions of this code; in violation of a detailed statement or the approved *construction documents* thereunder or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

[A] 114.3 Prosecution of violation. If the notice of violation is not complied with promptly, the *code official* shall request the legal counsel of the jurisdiction to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the unlawful system in violation of the provisions of this code or of the order or direction made pursuant thereto.

[A] 114.4 Violation penalties. Any person who shall violate a provision of this code or fail to comply with any of the requirements thereof or who shall erect, install, alter or repair private sewage disposal work in violation of the approved *construction documents* or directive of the *code official*, or of a permit or certificate issued under the provisions of this code, shall be guilty of a **[SPECIFY OFFENSE]**, punishable by a fine of not more than **[AMOUNT]** dollars or by imprisonment not exceeding **[NUMBER OF DAYS]**, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

[A] 114.5 Abatement of violation. The imposition of the penalties herein prescribed shall not preclude the legal officer of the jurisdiction from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; to prevent illegal occupancy of a building, structure or premises or to stop an illegal act, conduct, business or use of the *private sewage disposal system* on or about any premises.

[A] 114.6 Unsafe systems. Any *private sewage disposal system* regulated by this code that is unsafe or constitutes a health hazard, insanitary condition or is otherwise dangerous to human life is hereby declared unsafe. Any use of *private sewage disposal systems* regulated by this code constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, disaster, damage or abandonment is hereby declared an unsafe use. Any such unsafe equipment is hereby declared to be a public nuisance and shall be abated by repair, rehabilitation, demolition or removal.

[A] 114.6.1 Authority to condemn equipment. Where the *code official* determines that any *private sewage disposal system*, or portion thereof, regulated by this code has become hazardous to life, health or property or has become insanitary, the *code official* shall order in writing that such system be either removed or restored to a safe or sanitary condition. A time limit for compliance with such order shall be specified in the written notice. A defective *private sewage disposal system* shall not be used or maintained after receiving such notice. Where such system is

to be disconnected, written notice as prescribed in Section 114.2 shall be given. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

[A] 114.6.2 Authority to disconnect service utilities. The *code official* shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by the technical codes in case of emergency, where necessary, to eliminate an immediate danger to life or property. Where possible, the owner, the owners's authorized agent and occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnecting, the owner or occupant of the building, structure or service systems shall be notified in writing as soon as is practical thereafter.

SECTION 115 STOP WORK ORDER

[A] 115.1 Authority. Where the *code official* finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the *code official* is authorized to issue a stop work order.

[A] 115.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property, the owner's authorized agent or the person performing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work is authorized to resume.

[A] 115.3 Emergencies. Where an emergency exists, the *code official* shall not be required to give a written notice prior to stopping the work.

[A] 115.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to fines established by the authority having jurisdiction.

CHAPTER 2

DEFINITIONS

User note:

About this chapter: Codes, by their very nature, are technical documents. Every word, term and punctuation mark can add to or change the meaning of a technical requirement. It is necessary to maintain a consensus on the specific meaning of each term contained in the code. Chapter 2 performs this function by stating clearly what specific terms mean for the purpose of the code.

SECTION 201 GENERAL

201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings indicated in this chapter.

201.2 Interchangeability. Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *International Building Code* or the *International Plumbing Code*, such terms shall have meanings ascribed to them as in those codes.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

SECTION 202 GENERAL DEFINITIONS

AGGREGATE. Graded hard rock that has been washed with water under pressure over a screen during or after grading to remove fine material and with a hardness value of 3 or greater on Mohs' Scale of Hardness. Aggregate that will scratch a copper penny without leaving any residual rock material on the coin has a hardness value of 3 or greater on Mohs' Scale of Hardness.

[P] AIR BREAK (Drainage System). A piping arrangement in which a drain from a fixture, appliance or device discharges indirectly into another fixture, receptacle or interceptor at a point below the flood level rim and above the trap seal.

ALLUVIUM. Soil deposited by floodwaters.

BEDROCK. The rock that underlies soil material or is located at the earth's surface. Bedrock is encountered when the weathered in-place consolidated material, larger than 0.08 inch (2 mm) in size, is more than 50 percent by volume.

CESSPOOL. A covered excavation in the ground receiving sewage or other organic wastes from a drainage system that is designed to retain the organic matter and solids, permitting the liquids to seep into the soil cavities.

CLEAR-WATER WASTES. Cooling water and condensate drainage from refrigeration compressors and air-conditioning equipment, water used for equipment chilling purposes, liquid having no impurities or where impurities have been reduced below a minimum concentration considered harmful, and cooled condensate from steam-heating systems or other equipment.

[A] CODE OFFICIAL. The officer or other designated authority charged with administration and enforcement of this code or a duly authorized representative.

COLLUVIUM. Soil transported under the influence of gravity.

COLOR. The moist color of the soil based on Munsell soil color charts.

[A] CONSTRUCTION DOCUMENTS. All the written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of the project necessary for obtaining a building permit. The construction drawings shall be drawn to an appropriate scale.

CONVENTIONAL SOIL ABSORPTION SYSTEM. A system employing gravity flow from the septic or other treatment tank and applying effluent to the soil through the use of a *seepage trench*, bed or pit.

[BS] DESIGN FLOOD ELEVATION. The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the *design flood elevation* shall be the elevation of the highest existing grade of the *building's* perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where a depth number is not specified on the map, the depth number shall be taken as being equal to 2 feet (610 mm).

DETAILED SOIL MAP. A map prepared by or for a state or federal agency participating in the National Cooperative Soil Survey showing soil series, type and phases at a scale of not more than 2,000 feet to the inch (24 m/mm) and which includes related explanatory information.

DOSING SOIL ABSORPTION SYSTEM. A system employing a pump or automatic siphon to elevate or distribute effluent to the soil through the use of a *seepage trench* or bed.

EFFLUENT. Liquid discharged from a septic or other treatment tank.

DEFINITIONS

[BS] FLOOD HAZARD AREA. The greater of the following two areas:

1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any given year.
2. The area designated as a flood hazard area on a community's flood hazard map or as otherwise legally designated.

HIGH GROUND WATER. Soil saturation zones, including perched water tables, shallow regional ground water tables or aquifers, or zones seasonally, periodically or permanently saturated.

HOLDING TANK. An approved water-tight receptacle for collecting and holding sewage.

HORIZONTAL REFERENCE POINT. A stationary, easily identifiable point to which horizontal dimensions are related.

LEGAL DESCRIPTION. An accurate metes and bounds description, a lot and block number in a recorded subdivision, a recorded assessor's plat or a public land survey description to the nearest 40 acres (16 ha).

MANHOLE. An opening of sufficient size to permit a person to gain access to a sewer or any portion of a *private sewage disposal system*.

MOBILE UNIT. A structure of vehicular, portable design, built on a chassis and designed to be moved from one site to another and to be used with or without a permanent foundation.

MOBILE UNIT PARK. Any plot or plots of ground owned by a person, state or local government upon which two or more units, occupied for dwelling or sleeping purposes regardless of mobile unit ownership, are located and whether or not a charge is made for such accommodation.

[P] NUISANCE. Public nuisance as known in common law or equity jurisprudence; whatever is dangerous to human life or detrimental to health; whatever building, structure or premises is not sufficiently ventilated, sewered, drained, cleaned or lighted, in reference to its intended use; and whatever renders the air, human food, drink or water supply unwholesome.

PAN. A soil horizon cemented with any one of a number of cementing agents such as iron, organic matter, silica, calcium, carbonate, gypsum or a combination of chemicals. Pans will resist penetration from a knife blade and are slowly permeable horizons or are impermeable.

PERCOLATION TEST. The method of testing absorption qualities of the soil (see Section 404).

PERMEABILITY. The ease with which liquids move through the soil. One of the soil qualities listed in soil survey reports.

PRESSURE DISTRIBUTION SYSTEM. A soil absorption system using a pump or automatic siphon and smaller diameter distribution piping with small-diameter perforations to introduce effluent into the soil.

PRIVATE SEWAGE DISPOSAL SYSTEM. A sewage treatment and disposal system serving a single structure with a septic tank and soil absorption field located on the same parcel as the structure. This term also means an alternative sewage disposal system, including a substitute for the septic tank or soil absorption field, a holding tank, a system serving more than one structure or a system located on a different parcel than the structure. A private sewage disposal system is permitted to be owned by the property owner or a special purpose district.

PRIVY. A structure, not connected to a plumbing system, that is used by persons for the deposition of human body waste.

[A] REGISTERED DESIGN PROFESSIONAL. An individual who is registered or licensed to practice their respective design profession, as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

SEEPAGE BED. An excavated area more than 5 feet (1524 mm) wide that contains a bedding of aggregate and has more than one distribution line.

SEEPAGE PIT. An underground receptacle constructed to permit disposal of effluent or clear wastes by soil absorption through its floor and walls.

SEEPAGE TRENCH. An area excavated 1 foot to 5 feet (305 mm to 1524 mm) wide containing a bedding of aggregate and a single distribution line.

SEPTAGE. All sludge, scum, liquid and any other material removed from a private sewage treatment and disposal system.

SEPTIC TANK. A tank that receives and partially treats sewage through processes of sedimentation, flotation and bacterial action to separate solids from the liquid in the sewage, and which discharges the liquid to a soil absorption system.

SOIL. The unconsolidated material over bedrock, 0.08 inch (2 mm) and smaller.

SOIL BORING. An observation pit dug by hand or backhoe, a hole dug by augering or a soil core taken intact and undisturbed with a probe.

SOIL MOTTLES. Spots, streaks or contrasting soil colors usually caused by soil saturation for one period of a normal year, with a color value of 4 or more and a chroma of 2 or less. Gray-colored mottles are called low chroma; reddish-brown, red- and yellow-colored mottles are called high chroma.

SOIL SATURATION. The state in which all pores in a soil are filled with water. Water will flow from saturated soil into a bore hole.

VENT CAP. An approved appurtenance used for covering the vent terminal of an effluent disposal system to avoid closure by mischief or debris and still permit circulation of air within the system.

VERTICAL ELEVATION REFERENCE POINT. An easily identifiable stationary point or object of constant elevation for establishing the relative elevation of percolation tests, *soil borings* and other locations.

WATERCOURSE. A stream usually flowing in a particular direction, though it need not flow continually and is sometimes dry. A *watercourse* flows in a definite channel, with a bed, sides or banks, and usually discharges itself into some other stream or body of water. It must be something more than mere surface drainage over the entire face of a tract of land, occasioned by unusual freshets or other extraordinary cause. It does not include the water flowing in the hollows or ravines in land, which is the mere surface water from rains or melting snows, and is discharged through them from a higher to a lower level, but which at other times are destitute of water. Such hollows or ravines are not, in legal contemplation, *watercourses*.

WORKMANSHIP. Work of such character that will fully secure the results sought in all the sections of this code as intended for the health, safety and welfare protection of all individuals.

CHAPTER 3

GENERAL REGULATIONS

User note:

About this chapter: Chapter 3 covers general regulations for private sewage disposal installations. As many of these requirements would need to be repeated in Chapters 3 through 13, placing such requirements in only one location eliminates code development coordination issues associated with the same requirement in multiple locations. These general requirements can be superseded by more specific requirements for certain applications in Chapters 3 through 13.

SECTION 301 GENERAL

301.1 Scope. The provisions of this chapter shall govern the general regulations of *private sewage disposal systems*, including specific limitations and *flood hazard areas*.

SECTION 302 SPECIFIC LIMITATIONS

302.1 Domestic waste. Waste and sewage derived from ordinary living uses shall enter the septic or treatment tank unless otherwise specifically exempted by the *code official* or this code.

302.2 Cesspools and privies. Privies shall be prohibited. Cesspools shall be prohibited, except where approved by the *code official*. Where approved, cesspools shall be designed and installed in accordance with Chapter 10.

302.3 Industrial wastes. The *code official* shall approve the method of treatment and disposal of all waste products from manufacturing or industrial operations, including combined industrial and domestic waste.

302.4 Detrimental or dangerous waste. Material such as ashes, cinders or rags; flammable, poisonous or explosive liquids or gases; oil, grease or other insoluble material that is capable of obstructing, damaging or overloading the *private sewage disposal system*, or is capable of interfering with the normal operation of the *private sewage disposal system*, shall not be deposited, by any means, into such systems. The *code official* shall approve the method of treatment and disposal.

302.5 Clear water. The discharge of surface, rain or other clear water into a *private sewage disposal system* shall be prohibited.

302.6 Water softener and iron filter backwash. Water softener or iron filter discharge shall be indirectly connected by means of an air gap to the *private sewage disposal system* or discharge onto the ground surface, provided that a *nuisance* is not created.

302.7 Food waste disposals. Where a food waste disposal connects to a *private sewage disposal system*, the system shall be designed to accommodate the solids loading from the disposal unit.

SECTION 303 FLOOD HAZARD AREAS

[BS] 303.1 General. Soil absorption systems shall be located outside of *flood hazard areas*.

Exception: Where suitable soil absorption sites outside of the *flood hazard area* are not available, the soil absorption site is permitted to be located within the *flood hazard area*. The soil absorption site shall be located to minimize the effects of inundation under conditions of the design flood.

[BS] 303.2 Tanks. In *flood hazard areas*, tanks shall be anchored to counter buoyant forces during condition of the design flood. The vent termination and service manhole of the tank shall be not less than 2 feet (610 mm) above the *design flood elevation* or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tanks during conditions of the design flood.

[BS] 303.3 Mound systems. Mound systems shall be prohibited in *flood hazard areas*.

SECTION 304 ALTERNATIVE ENGINEERED DESIGN

304.1 Alternative engineered design. The design, documentation, inspection, testing and approval of an alternative engineered design *private sewage disposal system* shall comply with Sections 304.1.1 through 304.6.

304.1.1 Design criteria. An alternative engineered design shall conform to the intent of the provisions of this code and shall provide an equivalent level of quality, strength, effectiveness, fire resistance, durability and safety. Material, equipment or components shall be designed and installed in accordance with the manufacturer's instructions.

304.2 Submittal. The *registered design professional* shall indicate on the permit application that the *private sewage disposal system* is an alternative engineered design. The permit and permanent permit records shall indicate that an alternative engineered design was part of the approved installation.

304.3 Technical data. The *registered design professional* shall submit sufficient technical data to substantiate the proposed alternative engineered design and to prove that the performance meets the intent of this code.

GENERAL REGULATIONS

304.4 Construction documents. The *registered design professional* shall submit to the *code official* two complete sets of signed and sealed *construction documents* for the alternative engineered design.

304.5 Design approval. Where the *code official* determines that the alternative engineered design conforms to the intent of this code, the *private sewage disposal system* shall be approved. If the alternative engineered design is not approved, the *code official* shall notify the *registered design professional* in writing, stating the reasons therefor.

304.6 Inspection and test. The alternative engineered design shall be inspected in accordance with the requirements of Section 111.

CHAPTER 4

SITE EVALUATION AND REQUIREMENTS

User note:

About this chapter: Disposal systems covered in this code rely on the subsurface soil's abilities to accept the nonpotable water that is discharged by the treatment methods described in the code. Chapter 4 provides the methods for the evaluation of the soil in the planned disposal area.

SECTION 401 GENERAL

401.1 Scope. The provisions of this chapter shall govern the evaluation of and requirements for *private sewage disposal system* sites.

401.2 Site evaluation. Site evaluation shall include soil conditions, properties and permeability, depth to zones of soil saturation, depth to bedrock, slope, landscape position, all setback requirements and the presence of *flood hazard areas*. Soil test data shall relate to the undisturbed elevations, and a vertical elevation reference point or benchmark shall be established. Evaluation data shall be reported on approved forms. Reports shall be filed within 30 days of the completion of testing for all sites investigated.

401.3 Replacement system area. On each parcel of land being initially developed, sufficient area of suitable soils based on the soil tests and system location and site requirements of this code for one replacement system shall be established. Where bore hole test data in the replacement system area are equivalent to data in the proposed system area, the percolation test is not required.

401.3.1 Nonconforming site conditions. Where site conditions do not permit replacement systems in accordance with this code and an alternative system is used, the alternative system shall be approved in accordance with Section 105.

401.3.2 Undisturbed site. The replacement system shall not be disturbed to the extent that the site area is no longer suitable. The replacement system area shall not be used for construction of buildings, parking lots or parking areas, below-ground swimming pools or any other use that will adversely affect the replacement area.

SECTION 402 SLOPE

402.1 General. A *conventional soil absorption system* shall not be located on land with a slope greater than 20 percent. A *conventional soil absorption system* shall be located not less than 20 feet (6096 mm) from the crown of land with a slope greater than 20 percent, except where the top of the aggregate of a system is at or below the bottom of an adjacent roadside ditch. Where a more restrictive land slope is to be observed for a soil absorption system, other than a *conventional soil absorption system*, the more restrictive land slope specified in the design sections of this code shall apply.

SECTION 403 SOIL BORINGS AND EVALUATION

403.1 Soil borings and profile descriptions. *Soil borings* shall be conducted on all sites, regardless of the type of private sewage system planned to serve the parcel. Borings shall extend not less than 3 feet (914 mm) below the bottom of the proposed system. Borings shall be of sufficient size and extent to determine the soil characteristics important to an on-site liquid waste disposal system. Borehole data shall be used to determine the suitability of soils at the site with respect to zones of seasonal or permanent soil saturation and the depth to bedrock. Borings shall be conducted prior to percolation tests to determine whether the soils are suitable to warrant such tests and, if suitable, at what depth percolation tests shall be conducted. The use of power augers for *soil borings* is prohibited. *Soil borings* shall be conducted and reported in accordance with Sections 403.1.1 through 403.1.5. Where it is not practical to have borings made with a backhoe, such borings shall be augered or dug by hand.

403.1.1 Number. There shall be not less than three borings per soil absorption site. Where necessary, more *soil borings* shall be made for an accurate evaluation of a site. Borings shall be constructed to a depth of not less than 3 feet (914 mm) below the proposed depth of the system.

Exception: On new parcels, the requirement of six borings (three for initial area and three for replacement area) shall be reduced to five where the initial and replacement system areas are contiguous and one boring is made on each outer corner of the contiguous area and the fifth boring is made between the system areas [see Appendix A, Figure A101.1(1)].

403.1.2 Location. Each borehole shall be accurately located and referenced to the vertical elevation and horizontal reference points. Reports of boring location shall either be drawn to scale or have the horizontal dimensions clearly indicated between the borings and the horizontal reference point.

403.1.3 Soil description. Soil profile descriptions shall be written for all borings. The thickness in inches (mm) of the different soil horizons observed shall be indicated. Horizons shall be differentiated on the basis of color, texture, *soil mottles* or bedrock. Depths shall be measured from the ground surface.

403.1.4 Soil mottles. Seasonal or periodic soil saturation zones shall be estimated at the highest level of soil