

Salt Lake Valley Health Department

Health Regulation

#11

**INDIVIDUAL WATER SYSTEMS
REGULATION**

Adopted by the Salt Lake Valley Board of Health

November 5, 1981

**And amended:
August 3, 2006**

**Under Authority of Section 26A-1-114
Utah Code Annotated, 1953, as amended**

1. PURPOSE AND APPLICABILITY.

- 1.1. The purpose of this regulation is to protect and promote the public health, safety, and welfare; and to prevent the spread of disease, the creation of nuisances, and water pollution by ensuring that residents of Salt Lake County have safe drinking water systems.
- 1.2. It shall be unlawful for any person not to comply with any rule or regulation promulgated by the Department, unless expressly waived by these rules and regulations.

2. DEFINITIONS

For the purposes of this regulation, the following terms, phrases, and words shall have the meanings herein expressed:

- 2.1. “Aquifer” shall mean a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of groundwater to wells or springs.
- 2.2. “Concentrated sources of pollution” shall mean sources that include, but are not limited to septic tanks, drain field systems, drain lines, ordinary sewer lines, solid waste management facilities, pit privies, hazardous waste disposal systems, and corrals.
- 2.3. “Deep well” shall mean a well that:
 - 2.3.1. has an effective geologic seal between the ground surface and the water bearing aquifer of sufficient thickness and continuity to give confidence of its uniformity throughout the region generally;
 - 2.3.2. has a grouted annular space between the drilled hole and the well casing at least two inches thick and extending a minimum of 100 feet below the surface or into an effective geologic seal to eliminate water of questionable quality from seeping alongside the casing into the water bearing aquifer; and
 - 2.3.3. has a well casing which extends to an elevation greater than the maximum flood water elevation but not less than 18 inches above the surrounding ground. Casings terminated in underground vaults may be permitted on a case-by-case basis if the vault is provided with a drain to daylight sized to handle in excess of the well flow.
- 2.4. “Department” shall mean the Salt Lake Valley Health Department.
- 2.5. “Director” shall mean the Director of the Salt Lake Valley Health Department or his or her designated representative.

- 2.6. "Individual water system" shall mean any drinking water system not subject to the rules of the State Department of Environmental Quality, Division of Drinking Water.
- 2.7. "Owner" shall mean any person who alone, jointly, or severally with others:
- 2.7.1. Has legal title to an individual water system or any premises with or without accompanying actual possession thereof; or
 - 2.7.2. Has charge, care, or control of an individual water system or any premises as legal or equitable owner, agent of the owner, lessee, or is executor, executrix, administrator, administratrix, trustee, or guardian of the estate of the owner.
- 2.8. "Person" shall mean any individual, public or private corporation and its officers, partnership, association, firm, trustee, executor of an estate, the State or its departments, institution, bureau, agency, municipal corporation, county, city, political subdivision, or any legal entity recognized by law.
- 2.9. "Pollution" shall mean such contamination, or other alteration of the physical, chemical, or biological properties of any waters of the state, or such discharge of any liquid, gaseous or solid substance into any waters of the state as will create a nuisance or render such waters harmful or detrimental or injurious to public health, safety, or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life.
- 2.10. "Shallow well" shall mean a well installed in an unprotected or unconfined aquifer or any well not defined as a deep well.
- 2.11. "Spring" shall mean a water source issuing from the ground that is fed by precipitation that travels from a higher elevation through natural soil.
- 2.12. "Well" shall mean any excavation that is drilled, cored, bored, washed, driven, dug, fitted, or otherwise constructed and the intended use of the excavation is to acquire ground water.

3. GENERAL PROVISIONS

3.1. Jurisdiction of the Department.

- 3.1.1. This regulation is promulgated by the Salt Lake Valley Board of Health as authorized by Section 26A-1-121(1), Utah Code Ann., 1953 as amended and Chapter 9.04, Salt Lake County Code of Ordinances.
- 3.1.2. The Department is empowered to enforce this regulation as authorized by Section 26A-1-114(1)(a), in all incorporated and unincorporated areas served by the

Department, Utah Code Ann., 1953 as amended and Chapter 9.04, Salt Lake County Code of Ordinances.

- 3.2. It shall be unlawful for any person not to comply with any regulation promulgated by the Department unless granted an express variance by the Salt Lake Valley Board of Health.
- 3.3. Compliance with this regulation does not constitute a defense if charged with any environmental crime or violation of any local, state, or federal law.
- 3.4. Legal action taken by the Department under this Regulation does not preclude prosecution for any environmental crime that may have been committed or violation of any other local, state, or federal law.
- 3.5. Nothing in this regulation affects or modifies in any way the obligations or liability of any person under any other regulation or provision thereof issued by the Department, any ordinance issued by Salt Lake County or any municipality located within Salt Lake County, or any state or federally issued law, including common law. However, Departmental regulations supersede other existing local and county standards, regulations and ordinances pertaining to similar subject matter that are inconsistent.
- 3.6. Verbal or contractual obligations shall not diminish or remove the owner's or other responsible person's obligation to comply with this regulation.
- 3.7. **Severance.** If any section, subsection, sentence, clause, or phrase of this regulation is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this regulation.

4. SUBSTANTIVE PROVISIONS

- 4.1. **Approved Drinking Water Supply Required.** No person shall occupy, lease for occupancy, or permit the occupancy of any building or structure within Salt Lake County:
 - 4.1.1. Unless the building or structure is connected to a public water system; or
 - 4.1.2. Unless the building or structure is connected to an individual water system approved by the Director that provides water that meets standards of quantity, pressure, and quality as stated herein.
- 4.2. **Quantity, Pressure, and Quality Standards.**
 - 4.2.1. **Quantity.** In order for an individual water supply to be approved, the individual system owner shall have the necessary water rights and the system shall have the physical ability to supply a minimum of 400 gallons (800 gallons if landscaping is to be watered) per day per household 365 days a year. For seasonally used

recreational housing, the system shall meet the same requirements during the time period the housing is occupied. Seasonally used recreational housing shall not be occupied when the above requirements cannot be met.

4.2.2. **Pressure.** Individual water systems shall provide a minimum of 20 pounds per square inch of pressure at all times.

4.2.3. **Quality.** Individual water systems shall provide water which has contaminant levels below the maximum levels listed below (further sampling and analysis may be recommended based on specific environmental circumstances):

(i) **Inorganic Contaminant Levels.** Water shall be tested for the following contaminants within one year prior to approval:

Contaminant:	Maximum Contaminant Level (MCL):
1. Antimony	0.006 mg/L
2. Arsenic	0.05 mg/L
3. Barium	2 mg/L
4. Beryllium	0.004 mg/L
5. Cadmium	0.005 mg/L
6. Chromium	0.1 mg/L
7. Mercury	0.002 mg/L
8. Nickel	(See note 1 below)
9. Nitrate	10 mg/L (as Nitrogen) (See note 4 below)
10. Selenium	0.05 mg/L
11. Sodium	(See note 1 below)
12. Sulfate	1000 mg/L (See note 2 below)
13. Thallium	0.002 mg/L
14. Total Dissolved Solids	2000 mg/L (See note 3 below)

NOTES:

1. No maximum contaminant level has been established for nickel and sodium. However, these contaminants shall be monitored and reported.
2. If the sulfate level is greater than 200 mg/L, the owner shall satisfactorily demonstrate to the Department that no better quality water is available. The Department should not allow the use of water having a sulfate level greater than 1000 mg/L; however, a variance may be given under certain circumstances.
3. If TDS is greater than 1000 mg/L, the supplier shall satisfactorily demonstrate to the Department that no better water is available. The Department should not allow the use of water having a TDS level greater than 2000 mg/L; however, a variance may be given under certain circumstances.
4. In the case of water systems which exceed the MCL for nitrate, the Department may allow, on a case-by-case basis, a nitrate

level not to exceed 20 mg/L if the supplier can adequately demonstrate that such water will not be available to children under 6 months of age.

- (ii) **Bacteriologic Contaminant Levels.** Three samples shall be taken on separate days and analyzed for total coliform. The levels shall be less than 1 coliform per 100 milliliters for each sample.

4.3. **Plan Approval for Individual Systems.**

4.3.1. The information that shall be required to be submitted to the Department for approval of an individual drinking water source shall include, but shall not be limited to the following:

- (i) The results of the aforementioned inorganic contaminant analysis;
- (ii) The results of the three aforementioned total coliform analysis;
- (iii) A water rights certificate;
- (iv) If the source is a well, a copy of the well driller's report or if the source is a spring, drawings showing the construction details and documentation of the spring's flow rate; and
- (v) A topographic map of the property showing the proposed site of the water source and all concentrated sources of pollution within the protection zone distance for that source; and
- (vi) Documentation of how protection areas for the water source will be maintained.

4.4. **General Requirements for Approved Wells.** All wells shall be constructed and maintained according to the following requirements:

4.4.1. The well driller and drilling procedure shall meet the requirements of the Utah State Division of Water Rights.

4.4.2. After drilling is completed, the well shall be pumped free of all mud and sand and then disinfected by the introduction of sufficient chlorine solution into the well to produce a chlorine residual of at least 50 mg/L. After the chlorine solution has remained in the well for at least 24 hours, it shall be pumped out and the well water tested as described in the section on water quality above.

4.4.3. Alternative methods of disinfection may be approved by the Department.

4.5. **Protection Zones.** To ensure that protection is available for well water from concentrated sources of chemical or biological pollution, minimum allowable separation

distances between the water and pollution source(s) are given in, subsections 4.6 and 4.7 of this regulation. In addition, the water supplier shall either own the protection zone and may not locate or permit concentrated sources of pollution within it; or, if the water supplier does not own the land in question, he or she shall then obtain a land use agreement with owner(s) of the land by which the land owner agrees not to locate or permit concentrated sources of pollution within the protection zone. In all cases, said restrictions(s) shall be binding on all heirs, successors, and assigns.

4.6. Approved Deep Wells.

- 4.6.1. A deep well shall be isolated from concentrated sources of pollution for a distance of at least 100 feet, except as allowed by subpart 4.7.1 (i).
- 4.6.2. The Director, at his discretion, may permit specially constructed sewer lines to be located within the protection zone no less than ten feet from the well head.

4.7. Approved Shallow Wells.

- 4.7.1. Except as allowed by part 4.7.2, a shallow well shall be isolated from concentrated pollution sources as follows:
 - (i) On all lands equal to or above the operating water level in the well the protection zone shall extend at least 1,500 feet from the well head.
 - (ii) On all lands below the operating water level in the well protection zone shall extend at least 100 feet beyond the point of intersection of the operating water level elevation with the ground surface, or 1,500 feet, whichever is less.
 - (iii) If necessary to protect the quality of the well water the Director may require that a shallow well(s) be fenced in a manner similar to fencing required around spring areas.
- 4.7.2. At the discretion of the Director, a specially constructed sewer(s) may be permitted to be located no less than 300 feet from a shallow well on all lands equal to in elevation or above the operating water level in the well. The specially constructed sewer(s) may be permitted to be no less than 30 feet downhill beyond the point of intersection of the operating water level elevation with the ground surface.
- 4.7.3. **Protection Zone for Spring Areas.**
 - (i) All land at elevations equal to or higher than and within 1,500 feet horizontal to the spring source shall be protected against concentrated sources of pollution.

- (ii) All land at an elevation lower than and within 100 feet horizontal to the spring source shall be protected against concentrated sources of pollution, except as allowed by subpart 4.7.3 (iv).
- (iii) To ensure that protection is available, the water supplier shall do one of the following, and the restriction shall be binding on all heirs, successors, and assigns:
 - a. Own the protection zone and agree not to locate or permit a concentrated source(s) of pollution within it; or
 - b. If the water supplier does not own the land in question, achieve a land use agreement with the owner(s) of the land by which the land owner(s) agrees to not locate or permit a concentrated source of pollution within the protection zone.
- (iv) If approved by the Director, a specially constructed sewer may be permitted no less than 300 feet from a spring on all lands equal to or above the spring source elevation. On lands below the spring source elevation a specially constructed sewer(s) may be permitted to no less than 30 feet from the spring.

4.7.4. **Spring Development.** The development of a spring(s) for drinking water purposes shall comply with the following requirements:

- (i) The spring collection device, whether it be collection tile, infiltration boxes, or tunnels shall be covered with a minimum of ten feet of relatively impervious soil cover, except as allowed by subpart 4.7.4 (ii). Such cover shall extend a minimum of fifteen feet in all directions horizontally from the spring collection device.
- (ii) If it is impossible to achieve the ten feet of relatively impervious soil cover, the Director may approve the use of an impermeable liner that is acceptable for contact with drinking water, provided that:
 - a. The liner is of sufficient thickness and installed in such a manner as to ensure its integrity for the service life of the spring source;
 - b. A minimum of two feet of relatively impervious soil cover is placed over the impermeable liner; and
 - c. The soil and liner cover are extended a minimum of fifteen feet in all directions horizontally from the collection devices.
- (iii) Each spring collection area shall be provided with at least one junction box to permit spring inspection and testing.

- (iv) All junction boxes or collection boxes or both shall comply with Department requirements concerning access manholes, air vents, and overflow piping. All lids for spring boxes shall be of the shoebox type, gasketed and the chamber adequately vented.
- (v) The spring collection area shall be surrounded by a fence located a minimum of fifty feet from all collection devices on land at an elevation equal to or higher than the collection device and fifteen feet from all collection devices on land at an elevation lower than the collection device. The elevation datum to be used is the surface elevation at the point of collection. The fence shall be at least stock tight. In remote areas where no grazing or public access is possible, the fencing requirement may be waived by the Director. In populated areas a six foot high fence with three strands of barbed wire may be required.
- (vi) All vegetation that has a deep root system shall be removed within the fenced area.
- (vii) A diversion channel capable of diverting all anticipated surface water runoff away from the spring area shall be constructed and located immediately inside the fenced area, unless another location is approved in writing by the Director.
- (viii) A permanent flow measuring device shall be installed. Flow measurement devices, such as critical depth meters or weirs, shall be properly housed and otherwise protected.
- (ix) The spring shall be developed as thoroughly as possible to minimize the possibility of excess spring water ponding within the collection area. If the ponding of spring water is unavoidable, the excess shall be collected by shallow piping or french drain and routed beyond the immediate collection area.

5. RESERVED

6. INSPECTIONS & INVESTIGATIONS

6.1. To ensure compliance, the Department has the authority to perform inspections, investigations, reviews, and other actions as necessary.

6.2. Authority for Department to Enter Premises.

6.2.1. **Regulated Commercial Premises.** Upon presenting proper identification, authorized representatives of the Department may enter upon the premises of properties regulated by the Department to perform routine inspections to ensure

compliance with rules, standards, regulations, and ordinances adopted by the Department, the Departments of Health & Environmental Quality, county or municipal governing bodies, or the division of Occupational and Professional Licensing.

6.2.2. **Unregulated Commercial Premises.** The Department may enter upon the premises of unregulated commercial properties upon the consent of the owner or otherwise responsible party or upon a warrant issued by a court.

6.2.3. **Private Dwellings.** Inspections of private dwellings are made by consent of owner or otherwise responsible party or upon a warrant issued by a court.

6.2.4. **Consent by License or Permit:** The Department may require licensees or permittees to consent to access for inspections as part of their license or permit. Failure to allow access for inspections as set out in the license or permit may result in the suspension or revocation of the license or permit.

6.3. The owner or other responsible person may request information gathered by the Department during an investigation, inspection or review as authorized by the Government Records Access and Management Act, §§ 63-2-101 to 63-2-1001 Utah Code Ann., 1953 as amended.

7. **ENFORCEMENT MECHANISMS.** If the Department has investigated or inspected any property or facility and believes the property owner or other responsible party is in violation of this regulation or the Department has other reasonable grounds to believe that there has been a violation of any part of this regulation or that the property owner or otherwise responsible party is not in compliance with this regulation, the Department may take civil enforcement action as authorized by statute, rule, ordinance, and regulation and may also refer the matter for criminal prosecution. Civil enforcement may involve court or administrative actions, injunctive actions, and closures and may involve cost recovery, penalties, and other remedies. Civil and criminal actions may be brought simultaneously. A person does not need to be first adjudged liable in a civil matter before facing criminal charges.

7.1. **Criminal Enforcement Actions.** The Department may recommend criminal prosecution for environmental violations either alone or in conjunction with civil enforcement. Criminal prosecutions for environmental violations of state or federal law may be filed by the District Attorney, Utah Attorney General, United States Department of Justice, or other enforcement entity. Factors that the Department may consider in recommending criminal enforcement include the following factors and any other relevant factors.

7.1.1. The nature and seriousness of the offense including the immediacy of the threat of danger to the life or safety of another or the harm or threatened harm to human health or environment;

- 7.1.2. The degree to which the violation was designed to provide economic gain or cost avoidance or it involved a pattern of conduct or a common attitude of illegal conduct;
- 7.1.3. The degree to which the offender is a known violator and has avoided prior actions by the department;
- 7.1.4. The degree to which prosecution might deter future violations;
- 7.1.5. The person's actual culpability in connection with the offense including the presence in connection with the offense including the presence of criminal intent;
- 7.1.6. The person's willingness to cooperate in the investigation including whether the violator has attempted to conceal evidence or prosecution of others;
- 7.1.7. The appropriateness of referring the case to other agencies having prosecutorial interest; and
- 7.1.8. Possibilities of civil remedies which would be more appropriate than initiating the criminal justice process.

7.2. Civil Enforcement Actions.

- 7.2.1. The Department may request that the District Attorney bring an action to restrain or enjoin actions in violation of public health, environmental laws, and other laws or abate conditions in violation of such laws.

7.3. Administrative Actions.

- 7.3.1. The Department may, at its discretion, issue a Notice of Violation & Order of Compliance (NOV).
- 7.3.2. **Service of NOV.** The Department may provide notice to the owner of the property or otherwise responsible person by sending the NOV via first class mail to the last known address of the owner of the property or other responsible person. If notice is returned undeliverable, the owner of the property or other responsible person may be personally served or be given notice by other methods reasonably calculated to give actual notice to the owner or other responsible party.
- 7.3.3. **Contents of NOV.** The NOV shall:
 - (i) Describe the property and the persons believed to be in violation;
 - (ii) Describe the violation;

- (iii) Describe remedial action that will comply with the provisions of this regulation;
- (iv) Set a reasonable time for the performance of any required remedial action(s);
- (v) Describe the procedure to contest the NOV and the time limits for such a contest; and
- (vi) Notify the owner or other responsible person that if no written contest is filed within the time required, the NOV will become final and unappealable to any administrative entity or court.

7.3.4. **Challenging an NOV.** As detailed in the SLVHD's Adjudicative Hearing Procedures, a party aggrieved by an NOV may request a departmental conference, departmental hearing, or departmental appeal in writing within ten (10) days of the date of the NOV.

7.3.5. **Departmental Conference, Settlement Agreements, and Stipulations & Orders.**

- (i) After issuance of the NOV, the alleged violator has the option to request and attend a Departmental Conference to discuss the NOV and settlement with the Department and its legal counsel. No hearing officer will be present. The process of requesting a Departmental Conference is more fully described in the SLVHD's Adjudicative Hearing Procedures.
- (ii) If the parties agree to a settlement, the Department will prepare, in conjunction with the District Attorney's Office, a binding Settlement Agreement or Stipulation & Consent Order which may require the payment of penalties and the costs of investigation. Parties may also agree to a settlement at any time subsequent to the Departmental Conference. After signing a Settlement Agreement or Stipulation & Consent Decree, the parties waive all rights to further department and court hearings or appeals. Settlement Agreements or Stipulation & Consent orders may be enforced in state courts.

7.3.6. **Hearings & Appeals.** Parties by an NOV may also request a Departmental Hearing or a Departmental Appeal. A hearing officer is present at these proceedings and makes a written determination. The methods of challenging an NOV are more fully described in the SLVHD's Adjudicative Hearing Procedures. Departmental Hearing Orders and Departmental Appeal Orders may be appealed to the entities and within the time limits set out in the SLVHD's Adjudicatory Hearing Procedures.

- 7.3.7. **Failing to respond to an NOV.** If a party fails to respond to an NOV within the required time, the NOV becomes a final order unappealable to any administrative entity or court. The Department may then enforce the order in state court.

7.4. **Additional Administrative Enforcement Authority.**

- 7.4.1. The Department may declare unsanitary conditions a nuisance and cause every nuisance affecting the public health to be abated.
- 7.4.2. Any variances allowed by the Department to the requirements of this regulation shall be only by written approval of the Board.
- 7.4.3. **Exercise of Physical Control.** The Department may establish, maintain, and exercise physical control over property and over individuals as the Department finds necessary for the protection of the public health including but not limited to closing theaters, schools, and other public or private places and prohibit public gatherings. The order shall be effective immediately. Any person to whom the order is directed shall comply immediately but may petition the Director for a hearing in accordance with the Salt Lake Valley Health Department's Adjudicative Hearing Procedures. After the hearing and depending upon the findings as to whether the person has complied with the provisions of this regulation, the Director shall continue the order in effect or modify or revoke it.
- 7.4.4. **Emergency Enforcement.** If the Director finds that an emergency exists that requires immediate action to protect the public health, he or she may without notice or hearing issue an order declaring the existence of an emergency and requiring that action be taken as he deems necessary to meet the emergency. The order shall be effective immediately. Any person to whom the order is directed shall comply and abate the nuisance immediately; but may petition the Director for a hearing in accordance with the Salt Lake Valley Health Department's Adjudicative Hearing Procedures. After the hearing and depending upon the findings as to whether the person has complied with the provisions of this regulation, the Director shall continue the order in effect or modify or revoke it. If circumstances warrant because of the seriousness of the hazard, the Department may act to correct or abate the emergency without issuance of an order or directive or without waiting for the expiration of compliance time previously given in an order.

8. **CRIMINAL, CIVIL & ADMINISTRATIVE PENALTIES**

8.1. **Criminal Penalties.**

- 8.1.1. Any person who is found guilty by a court of violating any of the provisions of this regulation, either by failing to do the acts required herein or by doing a prohibited act, is guilty of a class B misdemeanor, pursuant to Section 26A-1-123, Utah Code Annotated, 1953, as amended.

8.1.2. Each day such violation is committed or permitted to continue shall constitute a separate violation.

8.1.3. Each similar subsequent violation occurring within two years of the initial violation may constitute a class A misdemeanor.

8.2. Civil & Administrative Penalties.

8.2.1. Penalties may be included in a Settlement Agreement or Stipulation & Consent Order. Penalties may also be imposed by the Hearing Officer. Penalties may be assessed according to the following factors:

- (i) The violator's history of compliance or non-compliance;
- (ii) The violator's economic benefit of non-compliance;
- (iii) The documented costs associated with environmental or health damage;
- (iv) The violator's degree of willfulness or negligence; and
- (v) The violator's good faith efforts to comply and cooperate.

8.2.2. The Director may multiply the penalty by the number of days the violation occurred

8.3. Recovery of Investigation & Abatement Costs

8.3.1. The Department may recover its inspection, investigative and abatement expenses and costs from owners or other responsible person.

8.3.2. The Department may record a judgment lien on a violator's property to recover its expenses and costs.

9. EFFECTIVE DATE.

9.1. This regulation shall become effective upon its enactment by the Salt Lake Valley Board of Health.

APPROVED AND ADOPTED this _____ day of _____, 2006.

SALT LAKE VALLEY BOARD OF HEALTH

By: _____
William S. Kidder, D.D.S.

ATTEST:

By: _____
GARY L. EDWARDS, M.S.
Executive Director
Salt Lake Valley Health Department