SOUTHERN NEVADA HEALTH DISTRICT
SAFE DRINKING WATER AND INDIVIDUAL SEWAGE DISPOSAL SYSTEM REGULATIONS

WHEREAS, the Southern Nevada Health District (SNHD) has been established by the County of Clark and the cities of Las Vegas, North Las Vegas, Henderson, Mesquite, and Boulder City as the public health authority for those entities, and pursuant to Nevada Revised Statutes (NRS) Chapter 439 has jurisdiction over all public health matters in the health district;

WHEREAS, the Southern Nevada District Board of Health (Board) is the governing body of the SNHD, and is authorized to adopt regulations to regulate sanitation and sanitary practices in the interests of the public health, to prevent and control nuisances, to provide for the sanitary protection of water supplies, and to protect and promote the public health and safety generally in the geographical area subject to the jurisdiction of the SNHD, and is specifically authorized to adopt regulations to control the use of residential individual sewage disposal systems within its jurisdiction pursuant to NRS 444.650;

WHEREAS, the Board finds that sewage disposal and liquid waste management impacts the public health, and that it is necessary to adopt Southern Nevada Health District Regulations Governing Individual Sewage Disposal Systems and Liquid Waste Management to regulate the planning, design, construction, operation, and maintenance of individual sewage disposal systems and other sewage treatment systems, and liquid waste management;

WHEREAS, the Board further finds that the most satisfactory method of sewage disposal is by connection to a public sewer system, and that where such systems exist, every effort should be made to secure sewer extensions;

WHEREAS, the Board further finds that where connection to a public sewerage is not feasible, particularly where many residences are to be served, consideration should be given to the construction of a community sewerage system and treatment plant;

WHEREAS, the Board further finds that ensuring access to safe drinking water for people who use private wells furthers a legitimate public purpose;

WHEREAS, the Board further finds that the creation of a program to provide financial assistance to persons to connect to a community sewerage system furthers a legitimate public purpose; and

WHEREAS, the Board having considered and taken into account the geological, hydrological, and topographical characteristics within the area of its jurisdiction, believes that the following Regulations are designed to protect and promote the public health and safety, and the environment, within the context of individual sewage disposal systems and liquid waste management; it does therefore publish, promulgate, and order compliance with the substantive and procedural requirements set forth within Clark County, Nevada.

Table of Contents

Chapter 1 - General Provisions

1-1 Scope

These Regulations establish definitions; set standards for the location, design, construction, installation, operation, and maintenance of INDIVIDUAL SEWAGE DISPOSAL SYSTEMS (ISDS); set standards for liquid waste management and the operation of LIQUID WASTE HAULERS; and provide for the issuance, modification, transfer, and revocation of ISDS and LIQUID WASTE HAULER permits.

1-2 Intent

The purpose of these Regulations is to protect and promote the public health, safety, and environment through preventative measures and timely correction of public health and environmental issues relating to ISDS and liquid waste management.

1-3 Responsibilities

(A) Every owner of real property is jointly and individually responsible for:
  (1) Storing, treating, and disposing of WASTEWATER generated on that property;
  (2) Connecting all plumbing fixtures on that property that discharge WASTEWATER to an approved ISDS, COMMUNITY SEWERAGE SYSTEM, HOLDING TANK, or other treatment system approved by the HEALTH AUTHORITY in accordance with these Regulations;
  (3) Obtaining necessary permits and approvals for installation, repair, alteration, and operation of an ISDS; and
  (4) Decommissioning of unused of ISDS.

(B) Each engineer, contractor, installer, excavator, plumber, supplier, and every other PERSON, who designs, constructs, installs, alters, expands, repairs, abandons, sells, or supplies any ISDS or part thereof, is jointly and individually responsible for compliance with each provision of these Regulations that is relevant to that service or product.

(C) The issuance of permits, certificates, reports, or notices must not be construed to represent a guarantee or warranty of the operation or effectiveness of an ISDS. Such certificates signify that an ISDS is or has been designed and installed in compliance or noncompliance with the provisions of these Regulations.

1-4 Documents Incorporated by Reference

The following provisions and publications are hereby adopted by reference:

(A) *SNHD ISDS Design Manual*, in the form most recently published by SNHD.

(B) *Uniform Design and Construction Standards for Potable Water Systems (UDACS)*, in the form most recently published by the Las Vegas Valley Water District, the city of Henderson, the city of North Las Vegas, and the city of Boulder City.

(C) The *Uniform Plumbing Code*, in the form most recently published by the International Association of Plumbing and Mechanical Officials.

(D) The *International Building Code,* in the form most recently published by the International Code Council (ICC), and Southern Nevada Amendments to the *International Building Code*.

(E) Standards 40, 41, 46, and 245 of NSF International, in the form most recently published by NSF International.

(F) *Design Manual: On-site Wastewater Treatment and Disposal Systems*, document number EPA 625/1-80-012, published by the United States Environmental Protection Agency, October 1980.

(G) *Onsite Wastewater Treatment Systems Manual*, document number EPA 625/R-00/008, published by the United States Environmental Protection Agency, February 2002.
(H) *Field Book for Describing and Sampling Soils*, in the form most recently published by the Natural Resources Conservation Service, United States Department of Agriculture.
(I) *ASTM D5879/D5879M Standard Practice for Surface Site Characterization for On-Site Septic Systems*, in the form most recently published by ASTM International.
(J) *ASTM D5921 Standard Practice for Subsurface Site Characterization of Test Pits for On-Site Septic Systems*, in the form most recently published by ASTM International.

1-5 Interpretation

If more than one interpretation exists for a provision of these Regulations, the more restrictive interpretation must be followed. Reference to any specific chapter, section, subsection, or provision must be construed to be a reference to these Regulations, unless explicitly stated otherwise. Paragraph headings are intended for convenience of identification only, and not as an aid to interpretation.

1-6 Severability

If any of the provisions of these Regulations, inclusive, or any application thereof to any person, thing or circumstance is held invalid, it is intended that such invalidity not affect the remaining provisions, or their application, that can be given effect without the invalid provision or application.

1-7 Definitions

The following definitions will apply in the interpretation and application of these Regulations:

ALTERNATIVE TREATMENT SYSTEM means a system, or a receptacle other than a SEPTIC TANK, that is designed and constructed to: receive the discharge of SEWAGE from a building sewer; partially or completely treat such SEWAGE; and discharge EFFLUENT for final disposal.

AS-BUILT means a drawing documenting the final location, size, and type of all major ISDS components.

BIOCHEMICAL OXYGEN DEMAND (BOD) means the difference between the initial dissolved oxygen in a sample and the dissolved oxygen in a duplicate sample after a stated period, usually over a period of five (5) days.

COMMERCIAL FACILITY means any structure or building, mobile home park, or any portion thereof, other than a residential single-family dwelling or residential accessory structure, as defined by the local building department, and includes, without limitation, short-term rental properties and any other structures or buildings that the HEALTH AUTHORITY determines to be used primarily for a commercial use.

COMMUNITY SEWERAGE SYSTEM means a system owned or operated, or both, by a public entity such as a general improvement district, sanitation district, city, county, or state government.

DISTRIBUTION BOX means a watertight structure, which receives SEWAGE from a SEPTIC TANK and distributes such SEWAGE in theoretically equal portions to pipelines leading to the disposal area.

DISTRIBUTION LINE means a pipe, series of connected leaching chambers, or an equivalent alternative method or technology used for dispersion of SEPTIC TANK EFFLUENT into SOIL ABSORPTION SYSTEMS.

DOMESTIC WASTEWATER means liquid and waterborne waste derived from ordinary living processes, free from INDUSTRIAL WASTE, normally discharged from or similar to those discharged from plumbing fixtures, appliances, and other devices dedicated to, but not limited to, sanitary, bath, laundry, dishwashing, garbage disposal, water conditioning, and cleaning purposes.

EFFLUENT means partially or completely treated SEWAGE that flows out of a SEPTIC TANK or an ALTERNATIVE TREATMENT SYSTEM.

FIXTURE UNIT is a design factor equal to 25 gallons per day (GPD).

FLOW EQUALIZER means an adjustable plastic insert installed in the outlet pipes of a DISTRIBUTION BOX to equalize EFFLUENT distribution to each outlet.

GEOTEXTILE FABRIC means a permeable fabric which, when used in association with sand, can separate, filter, reinforce, protect, or drain.

HEALTH AUTHORITY means the officers and agents of the Southern Nevada District Board of Health.

HIGH STRENGTH WASTEWATER means WASTEWATER that contains concentrations of BOD, TSS, or O&G that exceed the standards for DOMESTIC WASTEWATER.

HOLDING TANK means a watertight, covered receptacle that is designed and constructed to receive the discharge of SEWAGE from a building sewer and temporarily store that SEWAGE until the SEWAGE is removed by a LIQUID WASTE HAULER.

INDIVIDUAL SEWAGE DISPOSAL SYSTEM (ISDS) means a single system for the treatment and disposal of DOMESTIC WASTEWATER by means of a SEPTIC TANK or ALTERNATIVE TREATMENT SYSTEM and a SOIL ABSORPTION SYSTEM.

INDUSTRIAL WASTE means any liquid, gaseous, radioactive, or solid waste substance, or a combination thereof resulting from any process of industry, manufacturing, trade, or business, or from the development or recovery of any natural resources.

INFILTRATIVE SURFACE means the interface where EFFLUENT moves from DISTRIBUTION LINES into treatment media or native soil.

INFLUENT means untreated, partially treated, or completely treated SEWAGE flowing into a SEPTIC TANK, HOLDING TANK, or other treatment or disposal unit.

LIMITING CONDITION means any subsurface layer or material that will severely limit the capability of the soil to treat or absorb SEWAGE, including, but not limited to, WATER TABLES, fractured or fissured bedrock, excessively permeable material, and relatively impermeable material.

LIQUID WASTE HAULER means any PERSON engaged in the operation of removing and disposing of the solid and liquid contents of SEPTIC TANKS, HOLDING TANKS, grease traps, grease interceptors, nonsewered toilets, or other SEWAGE treatment or disposal units.

LONG-TERM ACCEPTANCE RATE (LTAR) means a design parameter that expresses the rate at which EFFLUENT enters the INFILTRATIVE SURFACE of a SOIL ABSORPTION SYSTEM at equilibrium.

NITROGEN REMOVAL SYSTEM means a system that receives SEWAGE and, through biological denitrification, chemical reduction, or ion exchange, reduces the TOTAL NITROGEN level of the EFFLUENT.

PARCEL MAP means division of land for transfer or development into four or fewer parcels including, under certain circumstances, a map that creates a single legal parcel for development.

PERSON means an individual, firm, partnership, association, corporation, company, governmental entity, club, or organization of any kind.

POTABLE WATER means water that is satisfactory for drinking, culinary, and other domestic purposes and which meets the applicable requirements of the HEALTH AUTHORITY relating to potable water.

PUBLIC HEALTH HAZARD means a condition whereby there are sufficient types and amounts of biological, chemical, or physical agents relating to SEWAGE which are likely to cause human illness, disorders, or disability.

PUBLIC WATER SYSTEM has the meaning ascribed to it in NRS 445A.235.

SEPTIC TANK means a watertight, covered receptacle designed and constructed to receive the discharge of SEWAGE from a building sewer, to separate solids from the liquid, to anaerobically digest organic matter, and to store digested solids through a period of detention and to allow the clarified liquids to discharge for final disposal.

SEWAGE means wastewater containing fecal matter that exceeds the adopted performance standards for bacteria in the final effluent of a wastewater-treatment train.

SOIL ABSORPTION SYSTEM means a system that utilizes the soil for subsequent absorption of treated sewage, such as an absorption trench, seepage bed, or a seepage pit. Synonymous with “leach field.”

TOTAL NITROGEN (TN) means the sum of the total Kjeldahl nitrogen (TKN), nitrite (NO_2), and nitrate (NO_3) in a sample, expressed as mg/L as nitrogen.

WASTEWATER means wastewater associated with dwellings, business establishments, institutions, and other structures or places used for human habitation, employment, or congregation.

WATERCOURSE means any channel through which water flows, or any stream of water such as a river, a brook or an underground stream.

WATER TABLE means the level in saturated soil at which the hydraulic pressure is zero.

Chapter 2 – ISDS Permits

2-1 ISDS Construction Permits

2-1.01 General Provisions

(A) A PERSON must not construct, alter, repair, replace, or expand an ISDS without a valid ISDS Construction Permit issued by the HEALTH AUTHORITY, except for emergency repairs that meet the following conditions:
  (1) The repairs are necessary to prevent an imminent public health hazard;
  (2) The repairs are limited to restoring the ISDS to its original state; and
  (3) The property owner or the property owner's representative notifies the HEALTH AUTHORITY within 48 hours of commencing repair activities.

(B) The following activities do not require an ISDS Construction Permit:
  (1) Adding a riser to a SEPTIC TANK lid;
  (2) Cleaning or replacing subcomponents such as switches, valves, pumps, or filters;
  (3) Inspecting or pumping a SEPTIC TANK; or
  (4) Locating a SEPTIC TANK for inspection or pumping.

(C) An ISDS Construction Permit will become invalid if the proposed construction, alteration, repair, replacement, or expansion of the ISDS is not started within twelve (12) months of the date of issuance.

(D) If an ISDS Construction Permit has expired or become invalid, installation must not be commenced or completed until a new ISDS Construction Permit is obtained.

(E) An ISDS Construction Permit will be denied if:
  (1) The HEALTH AUTHORITY determines that the proposed ISDS will not comply with these Regulations;
  (2) A COMMUNITY SEWERAGE SYSTEM is available within four hundred feet (400') of the nearest property line, can be accessed by a gravity flow line, and is accessible per the sewer authority of jurisdiction; or
  (3) The proposed ISDS will be located within a Nitrogen Restricted Area, as designated by the Nevada Division of Environmental Protection (NDEP) pursuant to NAC 445A.9606.

(F) A Commercial ISDS Construction Permit is required for the construction, alteration, repair, replacement, or expansion of an ISDS that serves or will serve a COMMERCIAL FACILITY.

2-1.02 Residential ISDS Construction Permits

(A) The property owner or the property owner's representative must apply to the HEALTH AUTHORITY for a Residential ISDS Construction Permit in a manner or form approved by the HEALTH AUTHORITY.

(B) A Residential ISDS Construction Permit application may require any or all the following information, without limitation:
  (1) The recorded deed for the property on which the ISDS construction, alteration, repair, replacement, or expansion is proposed;
  (2) A full-size parcel map or subdivision map as recorded with the Clark County Recorder's Office, or a map or plat prepared and stamped by a professional land surveyor;
  (3) Proof of an approved potable water source that meets applicable federal, state, and local standards for water quality and quantity;
    (a) which must be demonstrated by:

i. A written water commitment from a PUBLIC WATER SYSTEM that is also a public utility as defined by NRS 704.020(2)(a) stating that the property will be served with water; or
ii. A well driller's report and approval by the Nevada Division of Water Resources.

(b) If the property will be served by a domestic well, a well permitted by the Nevada Division of Water Resources (NDWR), or other water source that is not a PUBLIC WATER SYSTEM, the applicant must test the water source for evidence of contamination.
i. Samples must be collected directly from the well or other source, before the water enters any distribution, filtration, or treatment system.
ii. The water must be tested for the analytes typically included in a routine domestic water panel, or as otherwise required by the HEALTH AUTHORITY.
iii. Testing must be performed by a laboratory that is certified by NDEP to test for the analytes specified.

(4) An inquiry response from all COMMUNITY SEWERAGE SYSTEMS with nearby sewer infrastructure stating whether the property meets the criteria to connect to the sewer system;
(5) A complete Site Evaluation in accordance with **Chapter 4** of these Regulations;
(6) A nitrogen evaluation in accordance with **Chapter 8** of these Regulations.
(7) A floor plan showing all plumbing fixtures;
(8) A plot and grading plan, which must include, without limitation:
(a) The title and date of the plan;
(b) A map of the area in which the ISDS will be located that shows the location of the roads and streets;
(c) The dimensions of the lot on which the ISDS will be located;
(d) The direction of north clearly indicated;
(e) The scale to which the plan is drawn, which must be a standard engineering or architectural scale (e.g., 1 inch = 30 feet);
(f) Each component of the ISDS, which must be properly marked and located at specified distances, in feet;
(g) The capacity of the SEPTIC TANK or other storage or treatment unit;
(h) The treatment area of the SOIL ABSORPTION SYSTEM;
(i) The location and depth of each proposed or actual well, including the depth of casing and surface grout seal;
(j) The location of each percolation test hole, excavated pit, or boring test hole;
(k) The location of the water supply lines, building sewer lines, and other underground utilities;
(l) The location of all buildings, paved areas, driveways, trees, patios, pools, block walls, retaining walls, and other structures;
(m) The location and distance to wells and ISDS on surrounding lots. If the lots are vacant, the plot plan must so indicate;
(n) The distance within five hundred feet (500') to any WATERCOURSE, including, without limitation, any pond, lagoon, or stream. If there are no WATERCOURSES, the plot plan must so indicate; and
(o) The distance to public and private sewer lines. If there are none, the plot plan must so indicate; and

(9) Any other information requested by the HEALTH AUTHORITY.

(C) The HEALTH AUTHORITY may waive certain application requirements for a Residential ISDS Construction Permit if:
  (1) The property owner or property owner's representative petitions the HEALTH AUTHORITY in writing stating, without limitation:
    (a) The specific requirements from which a waiver is requested; and
    (b) Justification for the waiver;
  (2) The property is served by an existing ISDS;
  (3) The existing ISDS has a valid permit;
  (4) The application is for a repair, alteration, or expansion of the existing ISDS; and
  (5) The HEALTH AUTHORITY determines that the information is not necessary to process the application.

2-1.03 Commercial ISDS Construction Permits

(A) The issuance of a Commercial ISDS Construction Permit from the HEALTH AUTHORITY will be in conformance with the most current Memorandum of Agreement signed with NDEP.

(B) The property owner or the property owner's representative must apply to the HEALTH AUTHORITY for a Commercial ISDS Construction Permit in a manner or form approved by the HEALTH AUTHORITY.

(C) In addition to all items specified in **Subsection 2-1.02(B)**, inclusive, the Commercial ISDS Construction Permit application must include, without limitation:
  (1) Approval for the proposed use from the Nevada Division of Water Resources if the property is served by a well;
  (2) A statement regarding the relationship of the property to the 100-year flood plain, signed and sealed by a State of Nevada registered professional engineer;
  (3) If the COMMERCIAL FACILITY will discharge anything other than DOMESTIC WASTEWATER to the ISDS:
    (a) Information related to WASTEWATER characteristics and strength;
    (b) Design computations for interceptors;
    (c) Any other information required under **Section 5-1**; and
    (d) Any other information requested by the HEALTH AUTHORITY.

(D) In addition to all items specified in **Subsection 2-1.02(B)(7)**, inclusive, the plot and grading plan for a Commercial ISDS must include, without limitation:
  (1) Finished grade contour elevations;
  (2) Invert elevations for all plumbing relating to the ISDS;
  (3) A permanent barrier to prevent vehicular access and/or traffic over the ISDS, unless the proposed tank is traffic-rated;
    (a) A tank will be considered traffic-rated if it meets the AASHTO H-20 design loading criteria or a more restrictive standard.
    (b) If a traffic-rated SEPTIC TANK is proposed, the SEPTIC TANK detail must be submitted.
  (4) Parking lots, including bumpers; and
  (5) A seal and signature from a State of Nevada registered professional engineer.

(E) COMMERCIAL FACILITIES that are subject to other regulations adopted or enforced by the HEALTH AUTHORITY may be required to obtain additional approval from the HEALTH AUTHORITY before issuance of a Commercial ISDS Construction Permit.

(F) All computations related to the design of the ISDS must be available for review by the HEALTH AUTHORITY upon request.

2-1.04 ISDS Inspection Requirements

(A) Any activity that requires an ISDS Construction Permit in accordance with **Subsection 2-1.01** must be inspected and approved by the HEALTH AUTHORITY before any system components are covered or placed into service, unless the HEALTH AUTHORITY explicitly waives the inspection requirement.

(B) All inspections required under this Subsection must be performed by the HEALTH AUTHORITY unless:

(1) The HEALTH AUTHORITY explicitly delegates its right to inspect to a third-party; and

(2) The third-party inspector is certified in accordance with **Subsection 2-4.01**.

(C) The HEALTH AUTHORITY may require multiple inspections, including, without limitation:

(1) Inspection of the site before excavation has begun;

(2) Inspection of the excavation before the ISDS components are installed to ensure proper location and depth of the excavation;

(3) Inspection of final grading and landscaping to ensure that the ISDS is not subject to stormwater erosion or ponding, root intrusion, or vehicular traffic; and

(4) Inspection of ALTERNATIVE TREATMENT SYSTEMS, as applicable.

(D) The HEALTH AUTHORITY will approve the construction, installation, modification, alteration, extension, and/or repair of an ISDS only if the ISDS conforms with:

(1) The design submitted as part of the ISDS Construction Permit application and approved by the HEALTH AUTHORITY;

(2) All conditions associated with the ISDS Construction Permit;

(3) The design and construction requirements of **Chapter 5**; and

(4) All other applicable provisions of these Regulations.

(E) The property owner and the installer of the ISDS are responsible for meeting all inspection requirements, including, without limitation:

(1) Ensuring that the inspector can access all components of the ISDS;

(2) Clearly marking all property boundaries;

(3) If a DISTRIBUTION BOX is utilized, providing the inspector with access to an adequate supply of water to verify that the EFFLUENT will be distributed evenly through the outlet pipes;

(4) If requested by the HEALTH AUTHORITY, demonstrating that the SEPTIC TANK is watertight according to a procedure specified by the manufacturer, the most current edition of the ASTM C1227 Standard, or an equivalent standard approved by the HEALTH AUTHORITY;

(5) Providing to the inspector, if requested, any specific equipment that is required to install or inspect the ISDS; and

(6) Ensuring that the construction area, including any excavations, equipment, and/or ISDS components, does not present an unreasonable safety hazard.

(F) The HEALTH AUTHORITY may require the ISDS to be installed by a State of Nevada licensed contractor and/or may require the installer to demonstrate knowledge and understanding of these Regulations prior to the inspection.

(G) If an ISDS inspection is not approved, a reinspection and the associated fee will be required, unless explicitly waived by the HEALTH AUTHORITY.

2-2 ISDS Operating Permits

2-2.01 General Provisions

(A) An ISDS Operating Permit issued under these Regulations is a temporary, revocable permit to operate the ISDS, and it is the responsibility of the owner of the property served by the ISDS to maintain the ISDS and comply with all applicable provisions of these Regulations.

(B) A PERSON must not use or operate an ISDS or occupy a structure served by an ISDS without a valid ISDS Operating Permit issued by the HEALTH AUTHORITY.

(C) The HEALTH AUTHORITY may impose additional conditions on a Residential ISDS Operating Permit if it determines that the property or structure served by the ISDS is associated with a commercial use, including without limitation, short term rental properties.

2-2.02 Issuance

(A) All existing ISDS, with or without valid permits, will be issued an ISDS Operating Permit on the effective date of these Regulations.

(B) The HEALTH AUTHORITY will issue an ISDS Operating Permit to newly constructed, altered, or expanded ISDS that meet the following conditions:

(1) Approved inspection in accordance with **Section 2-1.04**, including fulfillment of all conditions of approval, if applicable;

(2) Photo documentation of the final grading and landscaping;

(3) An AS-BUILT drawing of the ISDS if it was not installed in accordance with the original plot plan;

(4) Documentation demonstrating that existing ISDS have been decommissioned in accordance with **Chapter 9**, if applicable;

(5) Payment of all fees; and

(6) Any additional conditions imposed by the HEALTH AUTHORITY.

2-2.03 Duration and Renewal

(A) The ISDS Operating Permit continues in effect until its expiration date or until it is revoked by the HEALTH AUTHORITY.

(B) The ISDS Operating Permit expires five years after the date of issuance or upon property transfer, whichever occurs first.

(C) The HEALTH AUTHORITY will renew an expired ISDS Operating Permit for an additional five years unless the permit has been revoked in accordance with **Subsection 2-2.05**.

(D) If the HEALTH AUTHORITY determines that an ISDS Operating Permit should not be renewed, it must:

(1) Provide written notification to the property owner and all occupants; and

(2) Allow the property owner a reasonable period, not to exceed five (5) years, to replace the ISDS or connect to a COMMUNITY SEWERAGE SYSTEM.

2-2.04 Modifications

(A) The property owner or the property owner's representative must apply to the HEALTH AUTHORITY for permission to modify an ISDS Operating Permit in a manner or form approved by the HEALTH AUTHORITY.

(B) Approval to modify an ISDS Operating Permit must be obtained from the HEALTH AUTHORITY in the following circumstances, without limitation:

(1) Construction of a new building, with or without plumbing;

(2) Remodel of an existing building, with or without plumbing;

(3) Construction of an underground pool or spa;

(4) Change in use type or characteristics;
(5) Variances, zoning changes, waivers of development standards, use permits, design reviews, or other deviation from applicable development or building codes or standards;
(6) Division of land on which an ISDS is located; or
(7) Any other activity that may affect the operation or longevity of the ISDS.

(C) An application to modify an ISDS Operating Permit may require any or all of the following information, without limitation:
(1) A plot and grading plan in accordance with **Subsection 2-2.01(B)(7)**, inclusive;
(2) A floor plan showing all plumbing fixtures or other documentation approved by the HEALTH AUTHORITY to adequately and accurately represent the existing and proposed flows to the ISDS;
(3) Approval from the Nevada Division of Water Resources (NDWR) if the property on which the ISDS is located is served by a well permitted by NDWR and the proposed modification may increase the water use of the property;
(4) Proof of water rights if the property on which the ISDS is located is served by a domestic well and the proposed modification or use is anything other than a domestic use;
(5) Proof of application to become a permitted PUBLIC WATER SYSTEM if the property on which the ISDS is located is served by a water system that the HEALTH AUTHORITY determines may be subject to regulation under the Safe Drinking Water Act (SDWA); and
(6) Any associated land use applications and supporting documentation.

(D) The HEALTH AUTHORITY may deny an application to modify an ISDS Operating Permit if the existing ISDS is in violation of any provision of these Regulations or any other applicable federal, state, or local law, regulation, ordinance, or code.

2-2.05 Revocation

(A) The HEALTH AUTHORITY may modify, revoke, suspend, cancel, or refuse to renew an ISDS Operating Permit for any of the following reasons, without limitation:
(1) If a condition or malfunction occurs in the ISDS, or in the operation of the ISDS, that creates a PUBLIC HEALTH HAZARD by inadequately treating SEWAGE or by creating a potential for direct or indirect contact between SEWAGE and the public, including, without limitation:
(a) SEWAGE on the ground surface;
(b) A backup of SEWAGE into a structure that is caused by the slow soil absorption of EFFLUENT;
(c) SEWAGE leaking from a SEPTIC TANK or other treatment tank, dosing tank, HOLDING TANK, or collection system; or
(d) EFFLUENT contaminating the ground water or surface water.
(2) Alteration, expansion, repair, or replacement of the ISDS without prior approval from the HEALTH AUTHORITY, excepting activities listed in **Subsection 2-1.01(B)**;
(3) Construction of a new building or structure with or without plumbing or the remodel of an existing structure without prior approval from the HEALTH AUTHORITY;
(4) Sale, transfer, contract for deed, or any other conveyance of land upon which an ISDS is located without prior approval from the HEALTH AUTHORITY, unless exempt under **Subsection 2-4(A)(2)**;
(5) Persistent failure to perform required inspections, maintenance, or testing; or

(6) Nonpayment of fees and/or fines.

(B) A decision by the HEALTH AUTHORITY to modify, revoke, suspend, cancel, or refuse to renew an ISDS Operating Permit may be appealed in accordance with the procedures outlined in **Chapter 12**.

2-3 ISDS Maintenance Requirements

(A) Any PERSON owning or controlling property upon which an ISDS is installed must be responsible for the operation and maintenance of the ISDS.

(B) The SEPTIC TANK must be pumped by a LIQUID WASTE HAULER approved by the HEALTH AUTHORITY within six (6) months before the sale, transfer, contract for deed, or any other conveyance of land upon which the ISDS is located, or at least once every ten (10) years.

(C) Upon request from the HEALTH AUTHORITY, the property owner must provide a receipt or other documentation demonstrating that the SEPTIC TANK has been pumped within the required period.

(D) A PERSON must not cause, perform, or contribute to any action, activity, or condition that may tend to damage the ISDS or reduce its hydraulic or treatment capacity, including, without limitation:

(1) Introduction of flows to the ISDS that are not DOMESTIC WASTEWATER, including, but not limited to:

(a) Pool or spa discharges;
(b) Water softener backwash;
(c) Nonbiodegradable solids (e.g., “flushable” wet wipes);
(d) Flammable, poisonous, or explosive liquids, solids, or gases;
(e) Oils or grease; or
(f) Any other liquid, solid, or gas that would or could cause damage to the ISDS.

(2) Disposal of recreational vehicle (RV) waste into the ISDS;

(3) Discharge of rainwater or other large volumes of water into the ISDS;

(4) Excessive irrigation over the ISDS or allowing water to accumulate above the SOIL ABSORPTION SYSTEM;

(5) Construction of a building or structure on or within eight feet (8’) of the ISDS;

(6) Driving or parking vehicles or heavy equipment on the SEPTIC TANK unless the tank meets the AASHTO H-20 design loading criteria;

(7) Driving or parking vehicles or heavy equipment on the SOIL ABSORPTION SYSTEM under any circumstances; or

(8) Placement of an impermeable material over the SOIL ABSORPTION SYSTEM that may restrict subsoil reaeration.

2-4 ISDS Property Transfer Requirements

(A) Within six (6) months before the sale, transfer, contract for deed, or any other conveyance of land upon which an ISDS is located, the following requirements must be met:

(1) The property owner or the property owner’s representative must notify the HEALTH AUTHORITY of the intent to transfer the property in a manner or form approved by the HEALTH AUTHORITY;

(2) The HEALTH AUTHORITY or a third-party inspector approved by the HEALTH AUTHORITY must perform a Property Transfer Inspection, unless one of the following exemptions applies:

(a) The ISDS has a valid Certificate of Compliance dated within three (3) years of the date of sale;
(b) The sale or transfer of property is exempt from real property taxes imposed by NRS 375.020, 375.023, and 375.026; or
(c) The property owner or the property owner's representative presents a signed disclosure statement and supporting documentation to the HEALTH AUTHORITY indicating that:
(i) No ISDS exists on the property or all ISDS on the property have been decommissioned in compliance with **Chapter 9**;
(ii) An ISDS is not required on the property; and
(iii) The property is connected to a COMMUNITY SEWERAGE SYSTEM; and

(3) The property owner or the property owner's representative must provide to the HEALTH AUTHORITY and to the PERSON to whom the property is transferred:
(a) The completed Report of Inspection;
(b) Results of well water quality testing in accordance with **Subsection 2-4(F)**, if applicable; and
(c) Documents relating to permitting, installation, operation, and maintenance of the ISDS.

(B) The owner of a property that is exempt from a Property Transfer Inspection pursuant to **Subsection 2-4(A)(2)** must fulfill the other requirements of this Section.
(C) The Property Transfer Inspection must be performed by an inspector certified by the HEALTH AUTHORITY in accordance with **Subsection 2-4.01** of these Regulations.
(D) The Property Transfer Inspection must be performed in accordance with the procedures described in **Subsection 2-4.02** of these Regulations.
(E) If the property has a NITROGEN REMOVAL SYSTEM, the new property owner must provide the HEALTH AUTHORITY with an updated maintenance contract within thirty (30) days from the close of escrow.
(F) If the property is served by a domestic well, a well permitted by the Nevada Division of Water Resources (NDWR), or other water source that is not a PUBLIC WATER SYSTEM, the property owner or the property owner's representative must test the water source for evidence of contamination by an ISDS.
(1) Samples must be collected directly from the well or other source, before the water enters any distribution, filtration, or treatment system.
(2) At a minimum, the water must be tested for total coliform bacteria and nitrate-N.
(3) Testing must be performed by a laboratory that is certified by NDEP to test for the analytes specified.

(G) The ISDS Operating Permit will be automatically transferred to the new property owner upon completion of the sale, transfer, contract for deed, or other conveyance of land.
(H) Failure to comply with the requirements of this Section does not impair the validity of the deed but may result in revocation of the ISDS Operating Permit and/or assessment of fines in accordance with **Chapter 12**.

2-4.01 Inspector Qualifications

(A) A PERSON must apply for and obtain a Certificate of Training from the HEALTH AUTHORITY before performing any inspections under this Section.
(B) The HEALTH AUTHORITY may grant a Certificate of Training to an applicant who:
(1) Possesses working knowledge of ISDS and the inspection process;

(2) Holds a certificate of training from a course recognized by the HEALTH AUTHORITY as sufficiently covering the information specified in **Subsection 2-4.02**; and
(3) Holds a license or certification in one of the following categories:
(a) A Nevada professional engineer licensed according to NRS 625;
(b) A Nevada environmental health specialist licensed according to NRS 625A;
(c) A PERSON certified by the National Association of Wastewater Technicians (NAWT) or an equivalent program approved by the HEALTH AUTHORITY;
(d) An individual employee of a LIQUID WASTE HAULER permitted under **Chapter 10**;
(e) A licensed contractor in one of the following categories:
(i) Classification C-27: Individual Sewerage; or
(ii) Subclassification A-15: Sewers, Drains, and Pipes.
(f) An inspector of structures certified in accordance with NAC 645D;
(g) A wastewater treatment plant operator certified according to NAC 445A.283-293; or
(h) A PERSON qualifying under another category or criteria designated by the HEALTH AUTHORITY.

(C) The HEALTH AUTHORITY may revoke a Certificate of Training from any third-party inspector certified under this Subsection who:
(1) No longer meets one of the qualification requirements defined in **Subsection 2-4.01(B)**;
(2) Consistently fails to comply with the inspection criteria defined in **Subsection 2-4.02**; or
(3) Intentionally violates a provision of these Regulations, or any other applicable federal, state, or local law, regulation, ordinance, or code.

2-4.02 Inspection Criteria

(A) The inspector must complete and sign a Report of Inspection on a form approved by the HEALTH AUTHORITY and provide it to the buyer, seller, and HEALTH AUTHORITY within thirty (30) days of the Property Transfer Inspection.
(B) The Report of Inspection must:
(1) Indicate the date the inspection was performed;
(2) Address the physical and operational condition of the ISDS and describe observed deficiencies and repairs completed, if any;
(3) Address and describe any observed noncompliance with the provisions of **Section 2-3** or any other provision of these Regulations; and
(4) For each SEPTIC TANK, HOLDING TANK, or other SEWAGE treatment or disposal unit on the property, indicate one of the following:
(a) That it was pumped by a permitted LIQUID WASTE HAULER in accordance with **Chapter 10**; or
(b) That pumping was not performed for one of the following reasons:
(i) The ISDS Operating Permit was issued and the ISDS was put into service within three (3) years before the Property Transfer Inspection;
(ii) Pumping or servicing was not necessary at the time of the inspection based on the SEPTIC TANK manufacturer's written operation and maintenance instructions; or
(iii) No accumulation of floating or settled waste was present in the SEPTIC TANK or SEWAGE treatment container.

(C) Items that do not comply with the following criteria and/or conditions must be reported to the HEALTH AUTHORITY and corrected along with necessary permits and inspections within 90 days of the sale, transfer, contract for deed, or other conveyance of land:
    (1) The SEPTIC TANK must be structurally sound and in good working order and provided with safe and secure lids;
    (2) All internal devices and appurtenances such as tees, EFFLUENT screens, and baffles that were originally provided with the SEPTIC TANK or added later must be intact and in working order;
    (3) Alarms, control devices, and all other components necessary for the operation of the ISDS are present and in good working order;
    (4) A SOIL ABSORPTION SYSTEM, or other means of subsurface wastewater treatment, must be present and not in a state of failure; and
    (5) There are no unapproved wastewater discharges to or from the ISDS or from any structure.

(D) If the ISDS poses a PUBLIC HEALTH HAZARD, the property owner must take adequate measures as soon as practicable to abate the hazard.

Chapter 3 – Commercial Holding Tank Permits

(A) A PERSON must not construct, install, or use a HOLDING TANK without a valid HOLDING TANK Permit issued by the HEALTH AUTHORITY.

(B) The issuance of a HOLDING TANK Permit from the HEALTH AUTHORITY will be in conformance with the most current Memorandum of Agreement signed with NDEP.

(C) A HOLDING TANK may not be used to service a residence, recreational vehicle, or any other structure having sleeping accommodations, except:
    (1) On a construction site to serve a contractor's job shack or night watchman's trailer; and
    (2) In emergency situations if it is necessary to prevent a potential PUBLIC HEALTH HAZARD.

(D) HOLDING TANK Permits will be approved to receive and store DOMESTIC WASTEWATER only.

3-1 Holding Tank Permit Applications

(A) The property owner or the property owner's representative must apply to the HEALTH AUTHORITY for a HOLDING TANK Permit in a manner or form approved by the HEALTH AUTHORITY.

(B) A HOLDING TANK Permit application must include, without limitation:
    (1) The recorded deed for the property on which the HOLDING TANK is proposed;
    (2) A full-size parcel map or subdivision map as recorded with the Clark County Recorder's Office;
    (3) A letter from the applicant stating the reason for the request and the anticipated duration of use;
    (4) Proof of an approved water source, which must be demonstrated by:
        (a) A written water commitment from a PUBLIC WATER SYSTEM stating that the property will be served with water;
        (b) A well driller's report and approval by the Nevada Division of Water Resources; or
        (c) A contract with a supplier of water that meets the requirements of NAC 445A.67275 to 445A.6731 and is approved by the HEALTH AUTHORITY.

(5) An inquiry response from all COMMUNITY SEWERAGE SYSTEMS with nearby sewer infrastructure setting forth whether the property fits the criteria to connect to the sewage system.
(6) A plot plan, which must include, without limitation:
    (a) A map of the area in which the HOLDING will be located that shows the location of the roads and streets;
    (b) The dimensions of the lot on which the ISDS will be located;
    (c) The direction of north clearly indicated;
    (d) The scale to which the plan is drawn (e.g., 1 inch = 30 feet);
    (e) The proposed location of the HOLDING TANK on the property;
    (f) The capacity of the HOLDING TANK; and
    (g) The location of the structure that will be served by the HOLDING TANK; and
(7) Any other information requested by the HEALTH AUTHORITY.

3-2 Permanent Commercial Holding Tank Permits

(A) A property is eligible for a Permanent HOLDING TANK Permit if:
    (1) The property cannot be approved for an ISDS Construction Permit;
    (2) A COMMUNITY SEWERAGE SYSTEM is not available or expected to be available within five (5) years after the date of application for the HOLDING TANK Permit;
    (3) The HOLDING TANK is:
        (a) Intended to serve a county, state, or national park, or an occasional-use facility, including, without limitation, a county fair or rodeo; or
        (b) Under the control of a city or other legal entity authorized to construct, operate, and maintain a COMMUNITY SEWERAGE SYSTEM;
    (4) The projected daily SEWAGE flow is not more than 500 gallons, unless otherwise allowed by the HEALTH AUTHORITY;
    (5) The horizontal separations defined in **Table 5-9** can be met; and
    (6) Only DOMESTIC WASTEWATER will be discharged into the HOLDING TANK.
(B) In addition to all items specified in **Subsection 3-1(B)**, inclusive, the Permanent HOLDING TANK Permit application must include, without limitation:
    (1) A plot plan, drawn to an engineer or architect's scale showing the proposed location of the holding tank (along with the tank capacity), modular/trailer or temporary structure, water meter, water lines (s), sewer line (s) with invert elevations, and parking area; and
    (2) A floor plan showing all plumbing fixtures.
(C) A Permanent HOLDING TANK must:
    (1) Have a minimum liquid capacity of 2,000 gallons;
    (2) Be in conformance with the most current edition of the ASTM C913 Standard or an equivalent standard approved by the HEALTH AUTHORITY;
    (3) Be equipped with an audible and visual alarm to indicate when tank is the 75% full or incorporate another method that is at least as protective of public health and is approved by the HEALTH AUTHORITY;
    (4) Have no overflow vent at an elevation lower than the overflow level of the lowest fixture served; and
    (5) Be designed for anti-buoyancy if test-hole examination or other observations indicate that seasonally high groundwater may float the tank when empty.

3-3 Temporary Portable Holding Tank Permits

(A) Portable HOLDING TANKS may be temporarily placed at the site of limited-duration events, including, without limitation, construction projects, if the following requirements are met:
  (1) The HOLDING TANK must be owned and serviced by a LIQUID WASTE HAULER who has been issued a permit under **Chapter 10** of these Regulations;
  (2) The HOLDING TANK must be used and maintained in a sanitary manner to prevent a PUBLIC HEALTH HAZARD or nuisance; and
  (3) The tank must not be buried, unless approved by the HEALTH AUTHORITY.

(B) For the purposes of this Subsection, a limited-duration event does not include temporary mass gatherings, as defined by NAC 444.5478.

(C) A Temporary HOLDING TANK must:
  (1) Have a liquid capacity of no more than 1,000 gallons unless approved by the HEALTH AUTHORITY;
  (2) Be watertight and have no overflow vent lower than the overflow level of the lowest fixture served;
  (3) Be structurally sound and made of durable, noncorrosive materials;
  (4) Be designed and constructed to provide a secure, watertight connection with the sewer pipe for any building to which the tank is connected; and
  (5) Be marked with the name and phone number of the LIQUID WASTE HAULER that has been issued a permit under **Chapter 10** of these Regulations and who is responsible for maintaining the HOLDING TANK.

Chapter 4 – Site Evaluation

4-1 General Requirements

(A) A complete Site Evaluation must be performed on each parcel of land on which an ISDS is proposed to determine the suitability of a location to support an ISDS and to provide a sound basis to select the most appropriate ISDS design for the location and proposed use.

(B) A report meeting the Site Evaluation criteria defined in **Section 4-2** must be submitted to the HEALTH AUTHORITY as part of an ISDS Construction Permit application.

4-2 Site Evaluation Criteria

(A) The Site Evaluation must include the following components:
  (1) Surface characterization; and
  (2) Subsurface investigation consisting of at least one soil boring, pit, or trench:
    (a) For each proposed SOIL ABSORPTION SYSTEM;
    (b) Drilled or dug on the same parcel as, but no more than 100’ from, the proposed SOIL ABSORPTION SYSTEM; and
    (c) Drilled or dug to a depth of at least four feet (4’) below the bottom of the proposed SOIL ABSORPTION SYSTEM.

(B) The Site Evaluation must be performed in accordance with one of the following codes or standards:
  (1) The most recent edition of the *International Building Code*, including the Southern Nevada Amendments;
  (2) The most recent versions of *ASTM D5879/D5879M Standard Practice for Surface Site Characterization for On-Site Septic Systems* and *ASTM D5921 Standard Practice for Subsurface Site Characterization of Test Pits for On-Site Septic Systems*; or

(3) An alternative method that meets all requirements of this Section and is approved by the HEALTH AUTHORITY.

(C) The Site Evaluation must be performed by a qualified PERSON from one of the following categories:
  (1) A professional engineer registered in Nevada pursuant to NRS 625 and NAC 625;
  (2) A geologist registered in Nevada pursuant to NRS 514;
  (3) A Certified Professional Soil Scientist certified by the American Society of Agronomy;
  (4) A PERSON with a certificate of training from a course recognized by the HEALTH AUTHORITY as sufficiently covering the information contained within one or more of the codes or standards specified in **Subsection 4-2(B)**; or
  (5) A PERSON who qualifies under another category designated by the HEALTH AUTHORITY.

(D) The surface characterization must:
  (1) Describe the surface slope and surface drainage characteristics at the proposed location of the ISDS;
  (2) Identify areas of poor drainage such as depressions, and areas of complex slope patterns where slopes are dissected by gullies and ravines;
  (3) Identify whether the property is in the 100-year flood hazard zone, as indicated on the applicable flood insurance rate map; and
  (4) Identify man-made or engineered fill material deposits.

(E) The subsurface characterization must:
  (1) Include a general texture and structure analysis to identify the classification of the soil;
  (2) Include a gravel analysis to determine the percentage of gravel by volume and the size of the gravel;
  (3) Identify the clay minerology of the clay-sized fraction to determine the degree to which the soil swells when wetted; and
  (4) Assess the degree of caliche cementation if caliche soils are encountered.

(F) Percolation tests may be considered in the determination of the required SOIL ABSORPTION SYSTEM area if:
  (1) The percolation tests were performed in accordance with current scientific and engineering knowledge and best practices; and
  (2) The following information is provided:
    (a) Description of the method used;
    (b) Detailed results.

(G) The Site Evaluation Report must indicate whether any of the following LIMITING CONDITIONS were encountered, and if so, must indicate the depth at which they were encountered:
  (1) A condition that may cause or contribute to the surfacing of SEWAGE, including but not limited to:
    (a) An impermeable soil or rock layer;
    (b) A zone of saturation that substantially limits downward percolation from the SOIL ABSORPTION SYSTEM;
    (c) Soil with expansive clay soils that become extremely firm when moist and very sticky or plastic when wet (exhibiting firm or extremely firm consistence); or
    (d) Soil with more than 50 percent rock fragments.
  (2) A condition that may promote the accelerated downward movement of insufficiently treated SEWAGE, including but not limited to:
    (a) Fractures or joints in rock that are open, continuous, or interconnected;
    (b) Karst voids or channels; or
    (c) Highly permeable materials such as deposits of cobbles or boulders; or

(3) The seasonal high-water table occurs within four feet (4') of the bottom of the proposed SOIL ABSORPTION SYSTEM, as revealed by:
    (a) Encountering groundwater within soil trenches or borings;
    (b) The presence of depleted redox features of a chroma of 2 or less and a value or 4 or more; or
    (c) As evidenced by well records or hydrologic reports.

4-3 Determination of Site Suitability

(A) The HEALTH AUTHORITY will not issue an ISDS Construction Permit unless it determines that the SOIL ABSORPTION SYSTEM can be installed to meet the minimum performance requirements defined in **Section 5-1**.

4-3.01 Unsuitable Sites

(B) A site is unsuitable for construction of an ISDS:
    (1) If any of the LIMITING CONDITIONS defined in **Subsection 4-2(F)** are encountered;
    (2) If the surface slope in the area of the proposed ISDS is greater than 25%;
    (3) In areas of poor drainage such as depressions, and areas of complex slope patterns where slopes are dissected by gullies and ravines;
    (4) In areas within the 100-year flood hazard zone, as indicated on the applicable flood insurance rate map; and
    (5) In areas with engineered or man-made fill.

(C) The HEALTH AUTHORITY may require any or all the following, without limitation, to ensure that the proposed ISDS can be expected to function satisfactorily on an unsuitable site:
    (1) Additional site characterization;
    (2) Written documentation, including engineering, hydrogeologic, geologic, or soil studies;
    (3) Addition and/or substitution of suitable natural or engineered fill material;
    (4) Installation of an ALTERNATIVE TREATMENT SYSTEM; or
    (5) Additional oversight of installation.

(D) Engineered fill may be used only if the following conditions are met:
    (1) The soil conditions in the area of the proposed SOIL ABSORPTION SYSTEM are suitable for SEWAGE disposal purposes;
    (2) The surrounding naturally occurring soil can adequately absorb or disperse the expected volume of EFFLUENT without overflow, breakout, or detrimental effect on ground or surface water; and
    (3) The fill material meets the standards specified by the most recent edition of the SNHD ISDS Design Manual.

4-3.02 Lot Size Requirements

(A) The minimum lot size required for the construction or operation of an ISDS is:
    (1) One (1) acre if the water supply is from a well serving only that property.
    (2) One-half (0.5) acre if the property is served by a well permitted by NDWR or a PUBLIC WATER SYSTEM and was recorded with the Clark County Recorder's Office after the effective date of these Regulations.
    (3) One-quarter (0.25) acre if the property is served by a well permitted by NDWR or a PUBLIC WATER SYSTEM and was recorded with the Clark County Recorder's Office on or before the effective date of these Regulations.

(B) For the purposes of this Subsection, the lot size includes public streets, alleys, and other right-of-way or easements, or any portion thereof abutting on, running though, or within a parcel.

4-3.03 Other Site Restrictions

(A) An ISDS must be constructed and remain on the same parcel as any structure it serves.
(B) An ISDS must not be constructed in an easement unless the easement is expressly for that purpose.

Chapter 5 – ISDS Design and Construction Requirements

5-1 Performance Requirements

(A) All ISDS must be designed, constructed, operated, and maintained in accordance with current scientific and engineering knowledge and best practices.
(B) An ISDS that is designed, constructed, operated, and maintained according to the prescriptive standards defined in this Chapter is presumed to meet the performance requirements of this Subsection, unless the HEALTH AUTHORITY determines that the ISDS will not adequately protect public health due to circumstances unique to the site or the intended use of the ISDS.
(C) The HEALTH AUTHORITY may approve deviations from the prescriptive requirements of this Chapter if:
    (1) The property owner or property owner's representative petitions the HEALTH AUTHORITY in writing stating, without limitation:
        (a) The specific requirement from which a deviation is requested;
        (b) Justification for the deviation; and
        (c) Any mitigating measures to be implemented;
    (2) The substantiating data indicate that the ISDS will meet the performance requirements of this Subsection; and
    (3) The ISDS is designed, signed, and sealed by a State of Nevada registered professional engineer, with all calculations and assumptions provided.

5-1.01 Influent and Effluent Standards

(A) HIGH STRENGTH WASTEWATER is WASTEWATER that contains any constituent in excess of the maximum concentrations listed for DOMESTIC WASTEWATER in the following table:

Table 5-1
Wastewater Characteristics and Treatment Standards

Wastewater Constituent	Maximum Concentration (mg/L)			
	High Strength Wastewater	Septic Tank Effluent	Advanced Treatment I	Advanced Treatment II
Total Suspended Solids (TSS)	> 200	80	30	10
Biochemical Oxygen Demand (BOD_5)	> 300	180	-	-
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	-	-	25	10

Oil and Grease (O&G)	> 50	25	-	-
Total Nitrogen	-	40	> 50% Reduction	20

(B) HIGH STRENGTH WASTEWATER, including, without limitation, WASTEWATER from food preparation, laundry service, or auto washing, must be pretreated to produce EFFLUENT that has a strength no greater than the maximum concentrations listed for pretreated EFFLUENT in **Table 5-1** before discharge into a SEPTIC TANK, HOLDING TANK, or other storage or treatment unit.

(C) Pretreatment devices are required in the following circumstances, without limitation:

(1) Food establishments must provide a grease interceptor that is designed, constructed, installed, and maintained in accordance with the most current edition of the *Southern Nevada Health District Regulations Governing the Sanitation and Safety of Food Establishments* and with the requirements of the most current edition of the *Uniform Plumbing Code*.

(2) Laundromats must provide a lint interceptor that is designed, constructed, installed, and maintained in accordance with the requirements of the most current edition of the *Uniform Plumbing Code*.

(3) Auto washes, garages, and any COMMERCIAL FACILITY with air conditioning condensate waste lines and evaporative cooler overflow lines must provide a sand-oil interceptor that is designed, constructed, installed, and maintained in accordance with the most current edition of the *Southern Nevada Health District Solid Waste Management Authority Regulations* and with the requirements of the most current edition of the *Uniform Plumbing Code*.

(D) An interceptor or separator that is required pursuant to this Subsection must be:

(1) Accessible for service and maintenance; and

(2) Maintained by periodic removal of accumulated grease, scum, oil, or other floating substances and solids deposited in the interceptor or separator.

(E) Removal of accumulated grease, scum, oil, or other floating substances and solids deposited in an interceptor or separator must be performed by a permitted LIQUID WASTE HAULER in accordance with **Chapter 10** of these Regulations.

5-1.02 Alternative Treatment Systems

(A) Public domain technology ALTERNATIVE TREATMENT SYSTEMS must be:

(1) Designed and stamped by a State of Nevada registered professional engineer; and

(2) Designed, installed, operated, and maintained according to a standard created by a nationally or internationally recognized organization.

(B) Proprietary ALTERNATIVE TREATMENT SYSTEMS must be:

(1) Designed, installed, operated, and maintained according to the manufacturer's instructions;

(2) Approved by the HEALTH AUTHORITY in accordance with **Chapter 7** of these Regulations; and

(3) Certified or approved for use by the National Sanitation Foundation (NSF) under NSF/ANSI Standard 40 or an equivalent standard approved by the HEALTH AUTHORITY.

5-2 Design Flow Determination

5-2.01 Residential Design Flow Determination

(A) For a Residential ISDS, the design flow may be based on the number of bedrooms or the total number of plumbing fixture units served by the ISDS, in accordance with the following table:

Table 5-2 Single-Family Residential Design Flows

Bedrooms	Fixture Units	Design Flow[1] (GPD)
1	1-7	150
2	8-14	300
3	15-21	450
4	22-28	600
5	29-35	750
6	36-42	900
7	43-49	1050
≥ 8	≥ 50	> 1200[2]

[1] If the number of bedrooms and the fixture unit count correspond with different design flows, the larger design flow must be used.

[2] Each additional bedroom represents an additional 150 GPD and each additional fixture unit represents an additional 25 GPD.

(B) If fixture units are used as the basis for determining the design flow for a Residential ISDS, the number of fixture units must be determined in accordance with the following table:

Table 5-3 Residential Fixture Units

Type of Fixture	Fixture Units
Bathroom Sink (Lavatory)	1
Bathtub	2
Bidet	1
Clothes Washer	2
Floor Drain	2
Laundry Tub	1
Shower	2
Toilet (Water Closet)	2
Vegetable Sink, Wet Bar, and Other Sinks	1

5-2.02 Commercial Design Flow Determination

(A) Design flows and organic loads from a COMMERCIAL FACILITY must be determined by a professional engineer or an alternative approved by the HEALTH AUTHORITY.

(B) For a Commercial ISDS, the design flow may be based on the total number of plumbing fixture units served by the ISDS, in accordance with **Table 5-4**, or as a function of the proposed use and size of the facility, in accordance with **Table 5-5**.

(C) If fixture units are used as the basis for determining the design flow for a Commercial ISDS, the number of fixture units must be determined in accordance with the following table:

Table 5-4 Commercial Fixture Units

Type of Fixture	Private Use	Public Use
Bar Sink	1	2

Bathtub	2	4
Bidet	2	2
Dental Units or Cuspidors	-	1
Drinking Fountains	1	2
Floor Drain	2	2
Interceptors of grease, oil, solids, etc.	3	3
Interceptors of sand, auto wash, etc.	-	6
Laundry tub	1	2
Clothes washer	2	4
Receptors (floor sinks) indirect waste receptors for refrigerators, coffee urns, water stations, etc.	1	1
Receptors indirect waste receptors for commercial sinks, dishwashers, air washers	-	3
Shower (each head)	2	4
Sinks, commercial or industrial, schools, etc (including dishwashers, wash-up sinks, and wash fountains, 2" min waste)	-	4
Sinks, flushing rim, clinic	-	10
Sinks, and/or dishwashers (residential, 2" min waste)	2	
Sinks, service	3	3
Trailer park trap	6	6

(D) If the type and size of the COMMERCIAL FACILITY is used as the basis for determining the design flow for a Commercial ISDS, the design flow and organic load may be determined in accordance with the following table:

Table 5-5 Commercial Establishments

Type of Establishment	Unit	Design Flow (gallons/day/unit)	BOD_5 (lbs/day/unit)
Apartment	Room	75	0.20
Bar	Seat	15	0.02
	Customer	3	
	Employee	13	
Barber or Beauty Shop	Chair	100	0.70
Bowling Alley	Lane	5	0.03
Cafeteria	Customer	3	
	Employee	9	

Campground		Campsite	50	0.12
	Day Camp	Person	20	
	Seasonal	Person	35	
	With toilets only	Person	15	
	With central toilet and shower facilities	Person	50	
Church		Seat	3	0.01
			4	0.02/meal served
			5	0.01
Facilities with Short-Term Visitors (Including auditoriums, ballparks, stadiums, and theaters)		Seat	5	0.02
Hotels and Motels		Room	75	0.15
Industrial Building (Domestic Waste Only)		Employee (8-hour shift)	20	0.05
With Shower			35	0.08
Institution (General) *Nursing Home* *Rest Home*		Resident	75 125 125	0.20
Kennel		Animal	30	0.20
Laundry (Self-Service)		Machine	400	0.75
Mobile Home Park		Space	300	0.80
Office		Employee (8-hour shift)	15	0.06
Dental		Chair	500	
Doctor		Doctor	250	0.80
Public Park		Toilet	36	0.04
		Urinal	10	0.01
		Shower	100	0.10
Restaurant		Seat	50	0.06/meal
Restaurant (Open 24-hours)		Seat	75	0.07/meal
Restaurant (Drive-in)		Car Space	50	0.02/meal
Restaurant with Bar		Seat	80	0.08/meal
Retail Stores and Shops		Employee	20	
With Public Restroom		ft^2 of retail space	0.1	0.01
School *Staff* *Elementary School* *Middle and High School* *Cafeteria* *Gym and Showers*		 Employee Student Student Student Student	 20 15 20 +3 +5	
Service Station		Toilet	250	0.50
Swimming Pools and Spas		Person	10	0.06
Travel Trailer Park		Unit	100	0.24
		Unit	50	0.12

Unit with Individual Water and Sewage Hookup			

(E) If a COMMERCIAL FACILITY is not identified in **Table 5-5**, or if the proposed design flow and/or organic load is not calculated in accordance with **Table 5-4** and/or **Table 5-5**:
  (1) The design flow and/or organic load may be determined using the following information, which are listed in order of decreasing preference:
    (a) Flow data from the facility that will be served by the proposed ISDS;
    (b) Flow data from similar facilities within the jurisdiction of the HEALTH AUTHORITY;
    (c) Flow data from similar facilities in other jurisdictions; or
    (d) Occupancy or operation patterns from the facility that will be served by the proposed ISDS.
  (2) The HEALTH AUTHORITY must approve the alternative method of determining the design flow and/or organic load.

5-3 Building Sewer Line

(A) The sewer line connecting a building to the SEPTIC TANK, including cleanouts and fittings, must be installed in accordance with:
  (1) The most current edition of the *Uniform Plumbing Code*;
  (2) The most recent edition of the *International Building Code*, including the Southern Nevada Amendments; and
  (3) All applicable requirements of the local building department.

(B) A sewer line that runs underneath a driveway or any other area that is subject to vehicular traffic must be Schedule 80 polyvinyl chloride (PVC) or equivalent, or other pipe approved by the HEALTH AUTHORITY.

(C) A cleanout must be installed between each building drain and each sewer line that leads to an ISDS.
  (1) The cleanout must be located within three feet (3') of the building, or as close as practical if the design engineer determines that it cannot be placed within three feet (3') of the structure.
  (2) At least one additional cleanout must be placed for every 100' of sewer line, and at least one additional cleanout must be placed for each aggregate change in the direction of the sewer line in excess of 90 degrees.

5-4 Septic Tank Design and Construction

(A) All SEPTIC TANKS and their manufacturers must be approved by the HEALTH AUTHORITY before installation.

(B) All SEPTIC TANKS must be:
  (1) Structurally sound, capable of bearing all anticipated live and dead load conditions exerted on a buried tank, including, without limitation:
    (a) Tank empty and full; and
    (b) Tank installed above and below the water table.
  (2) Watertight to the outlet hole;
  (3) Sized to provide a minimum hydraulic retention time of 48 hours based on the design flow;
  (4) Constructed, installed, operated, and maintained in accordance with:

(a) The manufacturer's recommendations; and
(b) The most recent edition of the *Uniform Plumbing Code*, or an equivalent standard approved by the HEALTH AUTHORITY.

(C) The HEALTH AUTHORITY may require an EFFLUENT filter to be installed in the outlet tee of the SEPTIC TANK.

(D) The SEPTIC TANK must contain two compartments in which the first compartment comprises at least half, but no more than two-thirds, of the required volume, except if the SEPTIC TANK is part of a series installation in accordance with **Subsection 5-4(H)**.

(E) The top of the SEPTIC TANK must be no more than four feet (4') below finished grade unless otherwise recommended by the manufacturer.

(F) The minimum size of the SEPTIC TANK is determined according to the following table:

Table 5-6 Septic Tank Sizing

Design Flow (gal/day)	Minimum Liquid Capacity (gal)
< 450	1000
451 – 600	1200
601 – 750	1500
751 – 1000	2000
1001 – 1200	2500

(G) For design flows exceeding 1200 GPD, the minimum liquid capacity of the SEPTIC TANK must be increased by 250 gallons for each additional 150 GPD design flow or portion thereof.

(H) All SEPTIC TANKS constructed, installed, replaced, or repaired after the effective date of these Regulations must be equipped with access risers so that they are easily identifiable and accessible from the ground surface.
(1) Access risers must be equipped with lids that are:
(a) Watertight;
(b) Brought to or above the surface; and
(c) Have a secure closing mechanism to prevent unauthorized access, such as a lock, special headed bolts or screws, or weight of at least 59 pounds.
(2) Access openings must be accessible to LIQUID WASTE HAULER vehicles.
(3) All exposed access openings must be guarded.
(4) Covers, risers, and lids must be capable of bearing the expected live and dead loads.

(I) Two SEPTIC TANKS may be installed in series if the following criteria are met:
(1) Both tanks consist of a single compartment;
(2) Both tanks were constructed by the same manufacturer;
(3) The primary tank is sized to provide a minimum hydraulic retention time of 24 hours based on the design flow;
(4) The tanks are separated by no more than three feet (3') and connected by a level four-inch (4") nominal size solid Schedule 40 polyvinyl chloride (PVC), polyethylene (PE), acrylonitrile-butadiene-styrene (ABS), or equivalent, or other pipe approved by the HEALTH AUTHORITY;
(5) Inlet and outlet tees are installed in each tank; and
(6) An EFFLUENT filter that is certified or approved for use under NSF/ANSI Standard 46 must be installed in the outlet tee of the primary tank.

5-5 Effluent Distribution

(A) EFFLUENT must be distributed evenly to all DISTRIBUTION LINES.

(B) EFFLUENT distribution by gravity flow must be accomplished using a piping manifold or DISTRIBUTION BOX.

(C) EFFLUENT may be distributed by a pressure distribution system if:

(1) A gravity flow system is unsuitable, inadequate, unfeasible, or cost prohibitive because of site limitations or other conditions;

(2) If needed to optimally distribute SEWAGE; or

(3) If required as part of an ALTERNATIVE TREATMENT SYSTEM.

(D) Pressure distribution systems must be constructed, installed, operated, and maintained in accordance with the most recent edition of the SNHD ISDS Design Manual.

(E) The DISTRIBUTION BOX, piping manifold, or other EFFLUENT distribution device must be separated from the SEPTIC TANK and SOIL ABSORPTION SYSTEM by a minimum of two feet (2') of undisturbed soil.

(F) A DISTRIBUTION BOX must be used for EFFLUENT distribution if:

(1) The SOIL ABSORPTION FIELD is composed of more than two DISTRIBUTION LINES; or

(2) The ISDS utilizes a split SOIL ABSORPTION FIELD.

(G) A piping manifold may be used for EFFLUENT distribution only if a DISTRIBUTION BOX is not required.

5-5.01 Specific Requirements for Piping Manifolds

(A) The piping manifold must be constructed of a minimum of three-inch (3") nominal size solid Schedule 40 polyvinyl chloride (PVC), polyethylene (PE), acrylonitrile-butadiene-styrene (ABS), or equivalent, or other pipe approved by the HEALTH AUTHORITY.

(B) The piping manifold must be level and steady and all joints must be watertight.

(C) The EFFLUENT line from the SEPTIC TANK must bisect the piping manifold using a bidirectional straight tee fitting only.

5-5.02 Specific Requirements for Distribution Boxes

(A) Each DISTRIBUTION BOX must be:

(1) Constructed of corrosion-resistant concrete or SEWAGE-compatible plastic;

(2) Installed, operated, and maintained in accordance with the manufacturer's recommendations; and

(3) Level, steady, and watertight and must be installed on a cast-in-place or pre-cast concrete pad that extends three inches (3") beyond its edge.

(B) Each DISTRIBUTION LINE must be connected separately to the DISTRIBUTION BOX.

(C) The DISTRIBUTION BOX must have a single inlet set at least one inch (1") above the outlets.

(D) The outlet inverts must be set at the same level and four inches (4") to six inches (6") above the bottom of the DISTRIBUTION BOX.

(E) FLOW EQUALIZERS must be installed in each outlet of the DISTRIBUTION BOX.

5-6 Soil Absorption Systems

(A) SOIL ABSORPTION SYSTEMS must be designed, constructed, operated, and maintained to achieve adequate hydraulic performance and provide adequate treatment of EFFLUENT.

5-6.01 Soil Absorption System Sizing

(A) The required area of the SOIL ABSORPTION SYSTEM will be calculated based on the LONG-TERM ACCEPTANCE RATE (LTAR) of the soil at the site of the proposed ISDS.

(B) The LTAR will be determined based on the limiting hydraulic and organic loading rates that will result in adequate biological and chemical treatment of pollutants.

(C) The LTAR for DOMESTIC WASTEWATER will be determined in accordance with the following table**:**

Table 5-7
Long-Term Application Rates for Domestic Wastewater Application to Soil Absorption Systems

Soil Texture	Soil Structure		Approximate Corresponding Percolation Rate (min/in)	LTAR (gal/day/ft^2)		
	Shape	Grade		Septic Tank	Advanced Treatment Level I	Advanced Treatment Level II
Gravel Coarse Sand	Single Grain	Structureless	< 1	Unsuitable; Intermittent Sand Layer Required		
Sand	Single Grain	Structureless	1 – 5	1.0	1.4	1.55
Loamy Coarse Sand Loamy Sand Fine Sand Very Fine Sand	Single Grain	Structureless	6 – 15	1.0	1.4	1.55
Coarse Sandy Loam Sandy Loam	Massive	Structureless	16 – 30	0.6	0.8	0.9
	Platy	Weak		0.5	0.8	0.9
	Prismatic, Blocky, Granular	Weak		0.7	0.8	0.9
		Moderate, Strong		1.0 (0.75)	1.0	1.1
Fine Sandy Loam Very Fine Sandy Loam Loam	Massive	Structureless	16 – 30	0.5	0.8	0.9
	Prismatic, Blocky, Granular	Weak		0.6	0.8	0.9
		Moderate, Strong		0.8	1.0	1.1
Silt Loam	Massive	Structureless	31 – 60	0.2 (0.35)		
	Prismatic, Blocky, Granular	Weak		0.6 (0.5)		
		Moderate, Strong		0.8 (0.5)		
Silt Sandy Clay Loam Clay Loam Silty Clay Loam	Prismatic, Blocky, Granular	Weak, Moderate, Strong	61 – 75	0.4 (0.3)	(0.45)	(0.55)
Sandy Clay Silty Clay Clay	N/A	N/A	76 – 120	0.3 (0.2)	0.4 (0.3)	0.4 (0.3)
Bedrock Hardpan (Caliche)	N/A	N/A	> 120	Unsuitable; (0.1)		

Fragipan Duripan						

(D) The soil texture and structure will be determined from the Site Evaluation required pursuant to **Chapter 4**.
(E) The LTAR will be based on the most hydraulically limiting naturally occurring soil horizon to a depth of four feet (4') below the bottom of the SOIL ABSORPTION SYSTEM.
(F) The minimum area of the SOIL ABSORPTION SYSTEM is calculated using the following equation:

$$A = \left(\frac{Q}{LTAR}\right)(F), \text{ where:}$$

(1) "A" is the minimum required absorption area;
(2) "Q" is the design flow, which is determined from **Table 5-1**, **Table 5-2**, and/or **Table 5-3**;
(3) "LTAR" is the LONG-TERM ACCEPTANCE RATE, which is determined using **Table 5-7**; and
(4) "F" is a size adjustment factor, which is determined from **Table 5-8**.

Table 5-8 Size Adjustment Factors (F)

Distribution Media	Configuration	Distribution Method	
		Gravity	Pressure Dosed
Rock or Gravel	Trench	1.0	0.8
	Bed	1.2	1.0
Chambers and Other Gravelless Media	Trench	0.7	0.7
	Bed	0.84	0.84

(G) The LTAR must not be determined solely based upon the results of percolation testing.
(H) The HEALTH AUTHORITY may allow for a reduced area of the SOIL ABSORPTION SYSTEM if the ISDS includes an ADVANCED TREATMENT SYSTEM.

5-6.02 Soil Absorption System Construction and Installation

(A) Pipes used for distribution of EFFLUENT must be constructed of a minimum of three-inch (3") nominal size perforated Schedule 40 polyvinyl chloride (PVC), polyethylene (PE), acrylonitrile-butadiene-styrene (ABS), or equivalent, or other pipe approved by the HEALTH AUTHORITY.
(B) The SEPTIC TANK and SOIL ABSORPTION SYSTEM must be separated by a minimum of five feet (5') of undisturbed soil.
(C) Each DISTRIBUTION LINE must be of equal length and must not exceed one hundred feet (100').
(D) The INFILTRATIVE SURFACE and all DISTRIBUTION LINES must be level, with a maximum slope of two inches per hundred feet (0.16%).
(E) Each DISTRIBUTION LINE must be covered by a minimum of one foot (1') and a maximum of three feet (3') of native backfill.
(F) The INFILTRATIVE SURFACE must be no more than four feet (4') below grade unless:
  (1) The SOIL ABSORPTION SYSTEM is adequately aerated by the addition of vents or some other mechanism approved by the HEALTH AUTHORITY; or
  (2) The ISDS includes an ADVANCED TREATMENT SYSTEM that meets the standards of **Section 5-1**.

(G) Leaching chambers and other gravelless technologies approved for use by the HEALTH AUTHORITY must be installed according to the manufacturer's recommendations.

(H) SOIL ABSORPTION SYSTEMS must be backfilled and compacted in a manner that:

(1) Does not impair the intended function and performance of the soil, distribution media, and/or DISTRIBUTION LINES;

(2) Allows for the establishment of vegetative cover;

(3) Minimizes settlement; and

(4) Diverts surface runoff away from the SOIL ABSORPTION SYSTEM.

(I) The finished grade over the SOIL ABSORPTION SYSTEM must be landscaped to:

(1) Provide adequate drainage;

(2) Prevent root intrusion;

(3) Protect against erosion; and

(4) Prevent the ponding of water.

5-7 ISDS Location and Separation Requirements

(A) Unless otherwise authorized under this Section, an ISDS must meet the horizontal separation requirements listed in the following table:

Table 5-9 Horizontal Separation Requirements

Feature	Horizontal Separation		Comments
	Septic Tank	Leach Field	
Property Line	10'	10'	
Building or Load-Bearing Structure	5'	5'	Includes porches, decks, steps (covered or uncovered), breezeways, roofed patios, carports, covered walks, retaining walls, and similar structures and appurtenances.
Private Water Supply Well	100'	100'	Includes any well that does not qualify as a PUBLIC WATER SYSTEM, including wells not used for drinking water (e.g., irrigation wells). Includes wells that have not been properly plugged in accordance with NAC 534.358-438.
Public Water System Well	150'	150'	
Drainage Channel	25'	25'	
Rock Outcrop	25'	25'	
Slopes > 25%	25'	25'	
Streams or Watercourses	100'	100'	Includes lakes, reservoirs, rivers, streams (perennial or intermittent), and canals.
Public Water Line	10'	25'	Includes mains and laterals.
Onsite Water Line	10'	10'	

Swimming Pool	10’	10’	Measured from the edge of the water surface.
Block Wall	3’	3’	
Driveway	1’	1’	

(B) The HEALTH AUTHORITY may approve a deviation from the prescriptive horizontal separation distances listed in **Table 5-9** if:
  (1) The property owner or property owner’s representative petitions the HEALTH AUTHORITY in writing stating, without limitation:
    (a) The specific features from which a reduced separation is requested;
    (b) Justification for requesting the reduced separation;
    (c) Any mitigating measures to be implemented; and
  (2) The substantiating data indicate that the ISDS will meet the following performance requirements:
    (a) EFLLUENT will not contaminate groundwater or surface water;
    (b) EFLLUENT will not pond around the footings of any structure; and
    (c) WASTEWATER will not reenter the structure.

Chapter 6 –Division and Use of Land

6-1 Parcel Maps

(A) The HEALTH AUTHORITY will review and provide written comments on all PARCEL MAP applications that meet any of the following criteria:
  (1) An ISDS is located on the existing parcel (the “Parent Parcel”);
  (2) The proposed parcels (the “Child Parcels”) will be less than one (1) acre and meet the criteria to install an ISDS; or
  (3) The proposed Child Parcels meet the criteria to install an ISDS and may require NITROGEN REMOVAL SYSTEMS or another ALTERNATIVE TREATMENT SYSTEM.

(B) The property owner must meet the following conditions of approval before recording the PARCEL MAP with the Clark County Recorder’s Office:
  (1) If an ISDS is located on the existing parcel:
    (a) All existing ISDS must be shown on the PARCEL MAP, with each component of the ISDS and all separation distances clearly and accurately marked;
    (b) Each ISDS that will no longer be used must be removed or abandoned in accordance with **Chapter 9**; and
    (c) The applicable review fee must be paid to the HEALTH AUTHORITY.
  (2) If the proposed parcels meet the criteria to install an ISDS:
    (a) The PARCEL MAP must include a certificate by the Southern Nevada District Board of Health indicating:
      (i) That the PARCEL MAP is approved concerning SEWAGE disposal; and
      (ii) Any conditions of approval required by the HEALTH AUTHORITY, including, but not limited to, the requirement to install a NITROGEN REMOVAL SYSTEM or another ALTERNATIVE TREATMENT SYSTEM.
    (b) Each of the proposed parcels must be supplied with water adequate for the zoned use; and
    (c) The applicable review fee must be paid to the HEALTH AUTHORITY.

(C) For a second or subsequent PARCEL MAP of a single parcel or a contiguous tract of land under the same ownership, or ownership by a partnership or corporation of which an individual is a principal or officer, or ownership by PERSONS of first degree of consanguinity:
    (1) The HEALTH AUTHORITY may require each of the proposed parcels to connect to a COMMUNITY SEWERAGE SYSTEM if the distance from the nearest suitable point of connection to any lot line of the original parcel is less than one hundred feet (100') multiplied by the total number of lots created from the PARCEL MAPS; or
    (2) The HEALTH AUTHORITY may require each proposed parcel to install a NITROGEN REMOVAL SYSTEM if any one of the proposed parcels individually would exceed the maximum ISDS density or otherwise trigger the requirement.

(D) Any subdivision of land that violates or that will cause a violation of these Regulations is prohibited.

6-2 Land Use Applications

(A) The HEALTH AUTHORITY will review all land use applications, including but not limited to variances, zoning changes, waivers of development standards, use permits, and design reviews.

(B) If an ISDS is located on a property that associated with or subject to a land use application:
    (1) The property owner or the property owner's representative must apply to the HEALTH AUTHORITY for permission to modify the ISDS Operating Permit in accordance with **Section 2-2.04**; or
    (2) If the proposed use does not allow for continued use of the ISDS, or if the property will no longer be suitable for use of an ISDS, the property owner or the property owner's representative must:
        (a) Provide notice to the HEALTH AUTHORITY of the intent to remove or abandon the ISDS;
        (b) Remove or abandon the ISDS in accordance with **Chapter 9**; and
        (c) Provide the HEALTH AUTHORITY with proof of connection to a COMMUNITY SEWERAGE SYSTEM.

Chapter 7 – Product and Technology Review

7-1 When Required

(A) Products in the following categories, without limitation, must be reviewed and accepted by the HEALTH AUTHORITY before they can be used in Clark County:
    (1) Proprietary treatment products (e.g., NITROGEN REMOVAL SYSTEMS);
    (2) Propriety distribution products (e.g., chambers); and
    (3) SEPTIC TANKS.

7-2 Product Review Applications

(A) Any PERSON desiring to install or distribute proprietary ISDS products in Clark County must apply to the HEALTH AUTHORITY in a manner or form approved by the HEALTH AUTHORITY.

(B) The Product Review Application must include, without limitation:
    (1) The name, mailing address, and street address of the manufacturer;
    (2) The name, phone number, and email address of an individual who is vested with the authority to represent the manufacturer in the acceptance process;

(3) Product category (e.g., proprietary treatment product, proprietary distribution product, septic tank);
(4) Product name, including the specific brand and model;
(5) A description of the functions of the product, along with any known limitations on the use of the product;
(6) Product description and technical information, including:
    (a) Dimensioned drawings;
    (b) Materials and characteristics;
    (c) Component design specifications; and
    (d) Volumes, design capacity, and flow assumptions and calculations;
(7) Siting and installation requirements;
(8) Product performance information;
(9) Detailed description, procedure, and schedule of routine service and maintenance;
(10) A report describing in detail the test procedures and data confirming the performance and properties of the product claimed by the manufacturer;
(11) Copies of the manufacturer's literature, including:
    (a) Sales and promotion; and
    (b) Design and installation, operation and maintenance, and owner instructions; and
(12) Identification of information subject to protection from disclosure and trade secrets, if any.

(C) Products within a single series or model line sharing distinct similarities in design, materials, capacities, configuration, and claiming the same level of treatment may be accepted under a single application.

(D) Manufacturers must have readily accessible and current information for designers, regulators, product owners, and other interested parties about their product including:
(1) Product manuals;
(2) Design instructions;
(3) Installation instructions;
(4) Operation and maintenance instructions; and
(5) A list of representatives and manufacturer-certified service providers in Clark County, if any. If none exist, information on how service on the product will be provided in Clark County.

Chapter 8 – Nitrogen Removal Systems

8-1 When Required

(A) Before issuing any ISDS Construction Permit or approving any PARCEL MAP, the HEALTH AUTHORITY will evaluate the actual and potential nitrate contamination of groundwater using one of the following methods:
(1) The NDEP Septic Density Model, as defined in **Subsection 8-2.01**; or
(2) Another method developed, adopted, or approved by the HEALTH AUTHORITY in accordance with **Subsection 8-2.02**.

(B) A NITROGEN REMOVAL SYSTEM will be required for any new ISDS Construction Permit if:
(1) The HEALTH AUTHORITY determines pursuant to this Chapter that the proposed ISDS poses an actual or potential risk of nitrate contamination of groundwater;
(2) The property was created by a PARCEL MAP, and the PARCEL MAP contains text stating that a NITROGEN REMOVAL SYSTEM will be required;

(3) The property is part of a subdivision, and the subdivision final map contains text stating that a NITROGEN REMOVAL SYSTEM will be required;
(4) The proposed ISDS is within a Nitrogen Management Area, as designated by NDEP pursuant to NAC 445A.9606; or
(5) The proposed ISDS is within a Nitrogen Restricted Area, as designated by NDEP pursuant to NAC 445A.9606.

8-2 Methods for Evaluating Risk of Nitrate Contamination of Groundwater

8-2.01 NDEP Septic Density Model

(A) The HEALTH AUTHORITY will implement the NDEP Septic Density Model as follows:
(1) The HEALTH AUTHORITY will determine the number of existing ISDS within one (1) square mile of the centroid of the property on which the proposed ISDS will be constructed.
(2) The proposed ISDS presumptively poses an actual or potential risk of nitrate contamination of groundwater if the density calculated in **Subsection 8-2.01(A)(1)** exceeds the maximum density permitted by the NDEP Septic Density Model for the groundwater basin to which the property belongs.
(B) If an ISDS is proposed in an area where the density of ISDS exceeds the maximum density permitted by the NDEP Septic Density Model by a factor of 3 or more, the HEALTH AUTHORITY may require any NITROGEN REMOVAL SYSTEMS to meet the more stringent performance requirements of **Subsection 8-3(D)**.

8-2.02 Alternative Nitrogen Evaluation Methods

(A) If the HEALTH AUTHORITY determines that the NDEP Septic Density Policy is no longer an adequate or appropriate method for evaluating the actual or potential nitrate contamination of groundwater, it may adopt or develop a method to replace or supplement the NDEP Septic Density Policy.
(B) When adopting or developing a method to supplement or replace the NDEP Septic Density Policy, the HEALTH AUTHORITY will consider the following:
(1) Population of the area;
(2) The degree to which the area is unsewered;
(3) Gross areal nitrogen loading, calculated as the amount of nitrogen discharged into the subsurface by use of ISDS, divided by the land area under consideration;
(4) Population growth rate of the area;
(5) Existing contamination of groundwater by nitrogen species;
(6) Existing and potential impact to groundwater by sources of nitrogen other than ISDS;
(7) Characteristics of the vadose zone and aquifer;
(8) Location, number, and areal extent of existing and potential sources of nitrogen;
(9) Location and characteristics of existing and potential drinking water supplies; and
(10) Any other information relevant to determining the severity of actual or potential nitrogen impact on the aquifer.
(C) If the HEALTH AUTHORITY proposes the adoption of an alternative or supplemental method for evaluating the actual and potential nitrate contamination of groundwater:
(1) The HEALTH AUTHORITY will prepare a report that:
(a) Describes the proposed method, including, without limitation:
(i) How it was developed;

(ii) How it will be implemented; and
(iii) Who it will affect; and

(b) Addresses the items specified in **Subsection 8-2.02(B)**.

(2) The HEALTH AUTHORITY will conduct a public hearing.

(a) 30 days' notice will be given to interested parties in the affected area.

(b) Interested parties may make oral comments during the public hearing or submit written comments to the HEALTH AUTHORITY.

(c) The HEALTH AUTHORITY will evaluate the comments and supporting information and either adopt, modify, or withdraw the proposal.

8-3 Design and Performance Requirements

(A) All NITROGEN REMOVAL SYSTEMS must be certified or approved for use by:

(1) The National Sanitation Foundation (NSF) under NSF/ANSI Standard 245;

(2) Another nationally or internationally recognized testing organization; or

(3) NDEP or the State of Nevada Department of Health and Human Services.

(B) All NITROGEN REMOVAL SYSTEMS must be reviewed and approved by the HEALTH AUTHORITY in accordance with **Chapter 7** of these Regulations.

(C) All NITROGEN REMOVAL SYSTEMS must be able to produce EFFLUENT with an average TOTAL NITROGEN concentration that is less than 50% of the average TOTAL NITROGEN concentration of the INFLUENT.

(D) If a proposed ISDS will be located in an area designated by NDEP as a Nitrogen Restricted Area pursuant to NAC 445A.9606, it must use a NITROGEN REMOVAL SYSTEM that can produce EFFLUENT with a TOTAL NITROGEN concentration of less than 20 mg/L under normal operating conditions.

8-4 Operation and Maintenance Requirements

(A) All NITROGEN REMOVAL SYSTEMS must be installed, operated, and maintained in accordance with the manufacturer's recommendations and these Regulations.

(B) All NITROGEN REMOVAL SYSTEMS are subject to the operation and maintenance requirements of **Section 2-5** in addition to the requirements of this Chapter.

(C) In addition to the reasons specified in **Subsection 2-2.05(A)**, the HEALTH AUTHORITY may revoke the ISDS Operating Permit associated with a NITROGEN REMOVAL SYSTEM if:

(1) Test results are not provided to the HEALTH AUTHORITY as required by **Subsection 8-4.02**;

(2) Test results consistently fail to meet the required standards; or

(3) The NITROGEN REMOVAL SYSTEM is not being serviced by an approved Service Provider in accordance with the requirements of **Subsection 8-4.01**.

8-4.01 Service Providers

(A) The operation and maintenance requirements of this Chapter must be met by an approved Service Provider in one of the following categories:

(1) A third-party Service Provider approved by the HEALTH AUTHORITY; or

(2) The property owner, if the property owner has been certified by the manufacturer of the NITROGEN REMOVAL SYSTEM and has obtained prior approval from the HEALTH AUTHORITY.

(B) All property owners who do not meet the requirements of **Subsection 8-4.01(A)(2)** must maintain a contract with a Service Provider approved by the HEALTH AUTHORITY for the life of the system.
    (1) A new property owner must provide the HEALTH AUTHORITY with an updated maintenance contract within thirty (30) days from the close of escrow.
    (2) The property owner must provide the HEALTH AUTHORITY with an updated maintenance contract within thirty (30) days of contracting with a new Service Provider.
(C) The Service Provider must provide an annual report to the HEALTH AUTHORITY on a form approved by the HEALTH AUTHORITY. The report must include the following information, without limitation:
    (1) A description of maintenance activities performed;
    (2) A description of any recommended, necessary, and/or completed repairs; and
    (3) Unmodified test results from the testing laboratory, in accordance with **Subsection 8-4.02**.
(D) The HEALTH AUTHORITY may rescind its approval of any Service Provider that fails to adhere to these Regulations.
    (1) If the Service Provider is also the property owner, the HEALTH AUTHORITY may also revoke the associated ISDS Operating Permit.
    (2) A decision by the HEALTH AUTHORITY to deny or rescind approval of a Service Provider or to revoke an ISDS Operating Permit may be appealed in accordance with the procedures outlined in **Chapter 12**.

8-4.02 Testing Requirements

(A) The EFFLUENT must be tested for TOTAL NITROGEN, Kjeldahl nitrogen, and nitrate, expressed as mg/L as nitrogen.
(B) The Service Provider must collect samples in a manner and from a location specified by the manufacturer of the NITROGEN REMOVAL SYSTEM.
    (1) If the manufacturer does not specify a sampling location, the sample must be collected immediately after the NITROGEN REMOVAL SYSTEM, before the EFFLUENT is discharged to the SOIL ABSORPTION SYSTEM.
    (2) If the manufacturer does not specify a sampling procedure, the sample must be collected in accordance with generally accepted wastewater sampling practices.
(C) Testing required under this Section must be performed by a laboratory that is certified by NDEP to test for the analytes specified in **Subsection 8-4.02(A)**.
(D) The HEALTH AUTHORITY may require and/or conduct additional sampling and testing of the EFFLUENT and/or sampling and testing of the INFLUENT to evaluate the TOTAL NITROGEN reduction achieved by the system if:
    (1) The NITROGEN REMOVAL SYSTEM is required to produce EFFLUENT with a TOTAL NITROGEN concentration of 20 mg/L or less and consistently fails to meet this requirement; or
    (2) The NITROGEN REMOVAL SYSTEM consistently produces EFFLUENT with a TOTAL NITROGEN concentration that is not substantially different from concentrations typically found in DOMESTIC WASTEWATER INFLUENT.
(E) Unless otherwise recommended by the manufacturer or required by the HEALTH AUTHORITY, the NITROGEN REMOVAL SYSTEM must be tested:
    (1) Quarterly during the first year of operation, beginning ninety (90) days after an approved final inspection or date of occupancy, whichever occurs later; and

(2) Every twelve (12) months thereafter for as long as the system is required to be operational.

(F) If a NITROGEN REMOVAL SYSTEM becomes dormant or out of use for an extended period (e.g., more than one year), the property owner may apply for a temporary waiver of the testing requirements of this Subsection.

(1) The HEALTH AUTHORITY will only consider waiver requests submitted in writing with supporting documentation.

(2) The waiver will be granted only for the period in which the NITROGEN REMOVAL SYSTEM is not in use.

(3) The property owner may be required to complete the startup procedure recommended by the manufacturer when the NITROGEN REMOVAL SYSTEM is returned to service.

Chapter 9 – Decommissioning of ISDS

9-1 When Required

(A) An ISDS is decommissioned when it has been removed and disposed of or abandoned in place in accordance with this Chapter.

(B) An ISDS must be decommissioned in the following circumstances:

(1) The ISDS has failed;

(2) The ISDS will be or has been replaced;

(3) The ISDS is permanently disconnected from the structure served and has not been approved for subsequent use by another structure;

(4) The ISDS is no longer in use because the property will be or has been connected to a COMMUNITY SEWERAGE SYSTEM or for another reason; or

(5) The HEALTH AUTHORITY issues an order requiring removal or abandonment of the ISDS.

(C) An ISDS may be abandoned except in the following circumstances:

(1) Any part of an ISDS that is within eight feet (8') of an existing or proposed structure must be removed; and

(2) Any part of a SOIL ABSORPTION SYSTEM that is within three feet (3') of a replacement SOIL ABSORPTION SYSTEM must be removed.

9-2 Removal and Abandonment Requirements

(A) All ISDS must be decommissioned according to the following procedure:

(1) The property owner or the property owner's representative must notify the HEALTH AUTHORITY of the intent to remove or abandon the ISDS;

(2) The SEPTIC TANK must be pumped by a LIQUID WASTE HAULER permitted by the HEALTH AUTHORITY;

(3) Pipes or plumbing attached to SEPTIC TANK must be disconnected or sealed;

(4) Electrical connections must be disconnected; and

(5) The ISDS must be abandoned in accordance with **Subsection 9-2(C)** or removed in accordance with **Subsection 9-2(C)**, as appropriate.

(B) An ISDS that will be abandoned must meet the following requirements in addition to the requirements of **Subsection 9-2(A)**:

(1) The lid of the SEPTIC TANK must be collapsed, the bottom ruptured, and the void leveled to the surrounding grade with sand, gravel, compacted soil, or other suitable inert material and completely covered with soil or material similar to that at the surface in the immediate area; and

(2) The property owner or the property owner's representative must provide documentation to the HEALTH AUTHORITY stating that the SOIL ABSORPTION SYSTEM is abandoned in place;

(C) An ISDS that will be removed must meet the following requirements in addition to the requirements of **Subsection 9-2(A)**:

(1) The SEPTIC TANK must be removed to a disposal facility approved by the HEALTH AUTHORITY; and

(2) The SOIL ABSORPTION SYSTEM, including any stained or contaminated soil, or a minimum of two feet (2') of soil surrounding the SOIL ABSORPTION FIELD, must be removed to a disposal facility approved by the HEALTH AUTHORITY.

9-3 Required Documentation

(A) The property owner or the property owner's representative must provide the HEALTH AUTHORITY with documentation demonstrating compliance with this Chapter, including, but not limited to:

(1) Receipts from the LIQUID WASTE HAULER and the disposal facility;

(2) Photo documentation showing that the SEPTIC TANK lid has been collapsed, the bottom ruptured, and the void leveled to the surrounding grade; and

(3) A written statement that the SOIL ABSORPTION SYSTEM has been abandoned in place.

(B) If the property is being connected to a COMMUNITY SEWERAGE SYSTEM, a receipt from the COMMUNITY SEWERAGE SYSTEM showing that the fees for sewer connection have been paid must be submitted to the HEALTH AUTHORITY.

Chapter 10 Liquid Waste Haulers

10-1 Permit Requirements

(A) A PERSON must not engage in the operation of removing and disposing of the solid and liquid contents of SEPTIC TANKS, HOLDING TANKS, grease traps, grease interceptors, portable toilets, or other SEWAGE treatment or disposal units unless the PERSON has obtained an annual LIQUID WASTE HAULER permit from the HEALTH AUTHORITY.

(B) Liquid wastes must be maintained in a sanitary manner to prevent a PUBLIC HEALTH HAZARD or nuisance and to prevent the release of a pollutant into the waters of the State.

10-1.01 Permit Applications

(A) A PERSON who applies for a LIQUID WASTE HAULER permit must apply to the HEALTH AUTHORITY in a manner or form approved by the HEALTH AUTHORITY.

(B) The application for a permit to operate as a LIQUID WASTE HAULER must contain the following information:

(1) The type of waste to be hauled by each vehicle;

(2) The location of all discharge points and the type of waste discharged at each location;

(3) A copy of the state registration of each vehicle;

(4) The license number, vehicle identification number, make, model, year, and color of each vehicle if not included in the registration documentation;

(5) The capacity of each vehicle;

(6) A description of each tank which is not physically affixed to a vehicle, including the information specified under **Subsection 10-1.01(B)(4)**;

(7) A copy of a business license:
    (a) From the State of Nevada; and
    (b) From the appropriate jurisdiction within Clark County if the primary location of the business is within Clark County.
(8) A statement signed by the owner of the LIQUID WASTE HAULER or the owner's representative that all waste material collected will be disposed of in accordance with these Regulations and that such waste will not be discharged to a waterway, sewer, or deposited on land without prior approval of the HEALTH AUTHORITY; and
(9) Any other information requested by the HEALTH AUTHORITY.

(B) The HEALTH AUTHORITY may require an inspection of the vehicles and tanks used for activities defined within this Chapter, as well as any related storage or maintenance facilities, to ensure that they comply with the requirements of this Chapter.

(C) The HEALTH AUTHORITY may deny an application for a LIQUID WASTE HAULER permit if the applicant has:
(1) Engaged in the operation of removing and disposing of solid and liquid contents of SEPTIC TANKS, HOLDING TANKS, grease traps, grease interceptors or other SEWAGE treatment or disposal units before obtaining a permit from the HEALTH AUTHORITY; or
(2) Failed to comply with the provisions of this Chapter.

10-1.02 Permit Renewal and Modification

(A) A permit to operate as a LIQUID WASTE HAULER is valid for one (1) year after the date of issuance.

(B) To renew a permit, the LIQUID WASTE HAULER must submit a completed application for renewal to the HEALTH AUTHORITY within 30 days before the date on which the permit expires.

(C) A LIQUID WASTE HAULER must request approval from the HEALTH AUTHORITY in a manner or form approved by the HEALTH AUTHORITY before doing any of the following, without limitation:
(1) Using a vehicle which is not listed on the application;
(2) Changing the type of waste to be hauled for any individual truck; or
(3) Changing a point of discharge.

10-2 Operating Requirements

(A) Every vehicle used for activities defined within this Chapter must be:
(1) Legibly labeled on both sides with the name, address, and phone number of the LIQUID WASTE HAULER and the permit number of the vehicle;
(2) Equipped with a watertight tank or body except when hauling solid inedible kitchen grease; and
(3) Maintained in a clean and sanitary condition.

(B) All portable receptacles used for transporting liquid or septage wastes must be watertight, equipped with tight-fitting lids, and must be cleaned after each use.

(C) All pumps and hose lines must be maintained to prevent leakage.

(D) All pumping equipment must be fitted with automatic shutoff valves.

(E) Liquid wastes from sand-oil-water separators must not be blended with other liquid wastes.

10-3 Disposal Site

(A) A LIQUID WASTE HAULER must obtain prior approval in writing from the HEALTH AUTHORITY for every destination to which it plans to discharge waste material collected.

(B) A LIQUID WASTE HAULER must not discharge waste material to any site that has not been approved by the HEALTH AUTHORITY.

10-4 Recordkeeping Requirements

(A) A LIQUID WASTE HAULER must keep a record of each removal and disposal of waste by the LIQUID WASTE HAULER. The record must include:
  (1) The type of waste that was removed;
  (2) The number of the license plate of the vehicle that removed the waste;
  (3) The date, time, and location of the removal of the waste;
  (4) The date, time, and location of the disposal of the waste; and
  (5) A receipt from the waste disposal site or other written proof of proper disposal.

(B) The LIQUID WASTE HAULER must keep a record of each cleaning by the LIQUID WASTE HAULER of the interior of the portable receptacle or the tank of a vehicle that is used to remove or dispose of solid or liquid waste. The record must include:
  (1) The name of the employee who cleaned the portable receptacle or tank; and
  (2) The date, time and location of the cleaning of the portable receptacle or tank.

(C) The LIQUID WASTE HAULER must, in each vehicle used by the LIQUID WASTE HAULER to remove or dispose of solid or liquid waste, keep daily records of:
  (1) The removal and disposal of solid or liquid waste by the vehicle; and
  (2) The interior cleaning of the portable receptacle or the tank of the vehicle.

(D) A LIQUID WASTE HAULER that transports or receives recyclable waste must submit a recycling survey to the HEALTH AUTHORITY in accordance with the most current edition of the *Southern Nevada Health District Solid Waste Management Authority Regulations.*

(E) The LIQUID WASTE HAULER must retain the records required by this Section for at least three (3) years after the date on which the solid or liquid waste was removed and disposed of or on which the interior of the portable receptacle or the tank was cleaned, as appropriate.

(F) The LIQUID WASTE HAULER must make the records required by this Section available to the HEALTH AUTHORITY upon request.

10-5 Suspension or Revocation of Permits

(A) The HEALTH AUTHORITY may suspend, revoke, or refuse to renew a permit issued under this Chapter if the LIQUID WASTE HAULER:
  (1) Violates any provision of these Regulations;
  (2) Violates any of the terms of the permit;
  (3) Violates any provision of Clark County Water Reclamation District Service Rules; or
  (4) Violates any federal, state, county, or local law, regulation, code, or ordinance relating to activities defined within this Chapter.

(B) A decision by the HEALTH AUTHORITY to suspend, revoke, or refuse to renew a permit may be appealed in accordance with the procedures outlined in **Chapter 12**.

(C) A LIQUID WASTE HAULER that operates without a valid permit issued under this Chapter may be subject to the enforcement provisions of **Chapter 12**.

Chapter 11 Variances

11-1 Variance Criteria

(A) Any PERSON who, because of unique circumstances, is unduly burdened by a provision of these Regulations and thereby suffers a hardship and the abridgment of a substantial property right may apply for a variance from these Regulations.

(B) Variances from these Regulations will be granted in accordance with NRS 439.200(3).

(C) Except as otherwise provided in this Chapter, all variances from these Regulations must follow the rules and procedures of NAC 439.200-280, inclusive.

(D) The applicant must comply with all other provisions of these Regulations and other applicable laws and regulations.

11-2 Variance Applications

(A) A PERSON seeking a variance from any provision of these Regulations must apply to the HEALTH AUTHORITY in a manner or form approved by the HEALTH AUTHORITY.

(B) The variance application must include:

(1) The applicant's name and mailing address;
(2) Evidence of an ownership interest in the affected property vested in the applicant;
(3) The street address (if any) and legal description of the affected property;
(4) The specific provision(s) of the Regulations for which variance is requested;
(5) A brief statement from the applicant regarding the reasons for the variance;
(6) Any documentation to support granting the variance; and
(7) Any other information as may be required by the HEALTH AUTHORITY to enable it to process the application.

(C) The variance application must be accompanied by a nonrefundable filing fee in the amount specified in the current SNHD Environmental Health Permit Fee Schedule.

11-3 Hearing

(A) The Board will conduct a hearing on the variance application in accordance with the procedures set forth in NAC 439.260.

(B) HEALTH AUTHORITY staff will comment on the application and provide the Board with its recommendation regarding the same.

(C) Staff will not recommend variance approval for ISDS on lots where a COMMUNITY SEWERAGE SYSTEM is available within four hundred feet (400') of the nearest property line, can be accessed by a gravity flow line, and is accessible per the sewer authority of jurisdiction.

(D) In reaching a decision on an application, the Board will consider the relative interests of first, the public; second, other property owners likely to be affected; third, the applicant; in that order.

(E) The Board will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:

(1) There are circumstances or conditions which:

(a) Are unique to the applicant;
(b) Do not generally affect other PERSONS subject to the regulation;
(c) Make compliance with the regulation unduly burdensome; and
(d) Cause a hardship to and abridge a substantial property right of the applicant; and

(2) Granting the variance:

(a) Is necessary to render substantial justice to the applicant and enable the applicant to preserve and enjoy his or her property right; and
(b) Will not be detrimental or pose a danger to public health and safety.

11-4 The Order

(A) Within 14 days after the final decision of the Board, a formal written Variance Order must be signed by the Chairman, Vice Chairman, or acting Chairman stating the decision of the Board, and personally delivered or mailed to the applicant at the address provided on the application.
(B) The Variance Order must:
    (1) Describe the subject property;
    (2) Identify the specific sections of these Regulations from which the variance was sought;
    (3) State the decision of the Board and the findings of fact upon which it was based; and
    (4) Set forth any conditions imposed by the Board for the granting of the variance.
(C) A copy of the Variance Order must be recorded in the office of the Clark County Recorder.
(D) The Variance Order will become invalid if:
    (1) The proposed construction, alteration, repair, replacement, or expansion of the ISDS is not started within twelve (12) months of the date on which the Variance Order is recorded with the Clark County Recorder, unless the property owner or the property owner's representative makes a written request for an extension within the twelve-month period and the request is granted by the Board;
    (2) A COMMUNITY SEWERAGE SYSTEM becomes available within four hundred feet (400') of the nearest property line, can be accessed by a gravity flow line, and is accessible per the sewer authority of jurisdiction, and legal notice is given to the then record owner of the property requiring connection with such COMMUNITY SEWERAGE SYSTEM; or
    (3) The property owner fails to comply with any of the conditions of the variance, the conditions of the permit, any provision of these Regulations, or any other applicable federal, state, or local law, regulation, ordinance, or code.

Chapter 12 Enforcement and Penalties

(A) The HEALTH AUTHORITY may modify, revoke, suspend, cancel, or refuse to renew any permit issued under these Regulations if the permit holder fails to comply with the conditions of the permit, any provision of these Regulations, or any other applicable federal, state, or local law, regulation, ordinance, or code.
    (1) The HEALTH AUTHORITY must provide written notice to the property owner or other responsible party of any decision to modify, revoke, suspend, cancel, or refusal to renew a permit.
    (2) A written notice issued by the HEALTH AUTHORITY pursuant to this Chapter must include:
        (a) A citation of the statutory and regulatory authority for the disciplinary action;
        (b) The facts on which the disciplinary action is based [NAC 439.345];
        (c) A description of any circumstances that the HEALTH AUTHORITY considered in taking the disciplinary action;
        (d) Instructions for responding to the notice, including, without limitation:
            (i) A statement of the right to any internal informal procedures for appeal;
            (ii) The right to a hearing;
            (iii) The period during which a hearing must be requested and the consequences of waiving a hearing; and
            (iv) The effective date of the disciplinary action.

(3) The property owner or other responsible party may appeal a decision to modify, revoke, suspend, cancel, or refusal to renew a permit by submitting a written request for a hearing within 30 days of service of the written notice.

(B) The HEALTH AUTORITY may issue a written order to any PERSON who:
  (1) Poses substantial hazards to public health or the environment;
  (2) Fails to comply with any provision of these Regulations or a permit issued by the HEALTH AUTHORITY pursuant to these Regulations;
  (3) Interferes with the HEALTH AUTHORITY in the performance of its duties;
  (4) Submits fraudulent information to the HEALTH AUTHORITY; or
  (5) Knowingly submits misleading or inaccurate information to the HEALTH AUTHORITY.

(C) An order issued by the HEALTH AUTHORITY pursuant to this Chapter must:
  (1) State the nature of the violation and describe the attendant facts;
  (2) Specify the provision alleged to be violated;
  (3) Prescribe the necessary corrective action to be taken;
  (4) Provide a reasonable amount of time for completing the required corrective action; and
  (5) State the potential penalty if the corrective action is not completed.

(D) Any compliance order is final and is not subject to review unless the PERSON against whom the order is issued submits a written request for a hearing within 30 days of service of the order.

(E) Fines – Probably not possible

Chapter 13 Sewer Conversion Program

For further consideration.