



# Memorandum

**Date:** February 23, 2023

**To:** SOUTHERN NEVADA DISTRICT BOARD OF HEALTH

**From:** Robert Fyda, PE, REHS, *Environmental Health Engineer/Supervisor* RF  
Daniel Burns, PE, REHS, *Environmental Health Engineering Manager* DCB  
Chris Saxton, MPH-EH, REHS, *Environmental Health Director* CS  
Fermin Leguen, MD, MPH, *District Health Officer* FL

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**Subject:** Variance request to allow the installation of a domestic irrigation well at 7737 Edna Ave, Las Vegas, NV that is not in compliance with SNHD ISDS Regulations

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## I. BACKGROUND:

Thomas Sangretoro, trustee of The Sangretoro Trust, ("Petitioner") is requesting a variance to obtain approval to install a domestic irrigation well that is not in compliance with Sections 9 and 11 of the *Southern Nevada District Board of Health Regulations Governing Individual Sewage Disposal Systems and Liquid Waste Management* ("SNHD ISDS Regulations"). The subject property is located at 7737 Edna Ave, Las Vegas, NV 89117 - Assessor's Parcel Number 163-10-301-004.

Petitioner requests a variance from Sections 9.1.3 of the SNHD ISDS Regulations which states that effluent disposal fields ("leach fields") shall not be located within one hundred feet (100') nor shall a deep absorption system be located within one hundred and fifty feet (150') of any well or watercourse.

Petitioner further requests a variance from Section 11.20.1 of the SNHD ISDS Regulations, which states that "A minimum area of one (1) acre is required for the installation of an individual sewage disposal system where the water supply is from a well serving only that property." The subject property is currently 0.51 acres which is less than the one (1) acre minimum needed to drill a well on a property with a septic system.

Petitioner states the following with regards to these requirements:

1. There must be circumstances or conditions which are unique to the petitioner, and do not generally affect other persons subject to the regulation:

*"Sanitary seal will be installed to a depth of 100ft or bedrock whichever is deeper."*

2. There must be circumstances or conditions which make compliance with the regulation unduly burdensome and cause a hardship to and abridge a substantial property right of the applicant, and the variance is necessary to render substantial justice to and preserve the property rights of the applicant. Please indicate in what manner compliance with the regulation would be burdensome or cause a hardship on your business or how the free use of your property may be affected (if economic factors are an issue, please include estimates regarding the costs that would be incurred by compliance):

*"Variance with respect to 9.1.3 allows for optimal location of well for installation and maintenance."*

3. Granting the variance will not be detrimental or pose a danger to the public health and safety. Please provide evidence that the variance request, if approved, will not adversely affect the safe and sanitary operation of the applicant(s) pool, spa, or food establishment:

*"There is no pool, spa or food establishment on the property."*

The Subject Property and four nearby properties have existing septic systems that could be caused to violate Section 9.1.3 of the SNHD ISDS Regulations if a well is installed on the Subject Property, depending on the well's location (see Attachment D):

PROPERTY ADDRESS	ASSESSOR'S PARCEL NUMBER (APN)
7737 Edna Ave (Subject Property)	163-10-301-004
7757 Edna Ave	163-10-301-005
2871 Elk Canyon Ct	163-10-212-007
2915 S Tioga Way	163-10-301-003
2935 S Tioga Way	163-10-301-002

An analysis of the surrounding area shows that there are zero recorded well logs and 482 permitted septic systems within a square mile of the subject property (400% over the NDEP density threshold). There is sewer line within 400 feet but it is not available for gravity connection according to the sewer agency (see Attachment E).

Petitioner has secured non-revocable water rights for one (1) acre-foot annually for quasi-municipal use, which is appropriate for the proposed use as irrigation for one single-family residential lot. The application is filed with the Division of Water Resources (NDWR) under permit #: 90794 and certificate: 3491 (see Attachment F).

## **II. RECOMMENDATION:**

Staff recommends that the proposed well be located at least 90 ft from all shallow and deep septic systems. Effluent from the nearby septic systems could cause potential contamination to the aquifer by using the well as a conduit, but the proposed extended sanitary seal and 90 ft reduced setback should provide adequate protection to the groundwater.

The proposed well is designed for irrigation use only and will not serve as the drinking water source for the residence. This irrigation use will relieve some pressure off the Las Vegas Valley Water District's water resource - Colorado River Water.

Staff has found the following information regarding the variance request:

- The proposed well will be the only one within a square mile in a high septic density area.
- The proposed well sanitary seal will exceed typical domestic well installation standards.
- The risk for contamination is elevated due to the high septic density but can be mitigated through geology and well construction – sanitary seal depth and a reduced well setback.
- The geological profile in the area indicates that there may be multiple limiting layers that can prevent contamination of the aquifer.
- Well water is an unregulated water source with no monitoring or oversight. The proposed well water will be used strictly for irrigation and not for human consumption which reduces risks to the residents.
- The proposed well may provide a positive water resource impact by decreasing the consumptive use of LVVWD water for irrigation.

Based on the above findings, staff recommends APPROVAL of the variance due to the proposed risk mitigation measures, proposed use, and water resource impact. If the Board of Health approves the variance, staff recommends approval with the following conditions outlined in Section III.

### III. CONDITIONS:

If approved, staff recommends the following conditions:

1. Petitioners and their successor(s) in interest shall abide by all local governmental regulations requiring connection to community sewage systems. Use of the ISDS shall be discontinued and the structure it serves shall be connected to any community sewage system constructed in the future to within four hundred feet (400') of the property line when connection can be made by gravity flow and the owner(s) are notified and legally required to do so.
2. Petitioners and their successor(s) will abide by the operation and maintenance requirements of the most current SNHD regulations governing individual sewage disposal systems.
3. The applicant shall maintain a minimum 90 ft setback to all nearby septic systems. An exhibit prepared by a licensed Nevada Professional Land Surveyor is to be submitted to SNHD showing the distance from the well location to all neighboring septic systems prior to construction.
4. Petitioner and their successor(s) will abide by the rules and regulations of the Nevada Division of Water Resources (NDWR) and Las Vegas Valley Water District (LVVWD) in order to ensure their water supplies are in good standing.
5. The applicant shall install a sanitary seal on the well to the depth of 100' OR to a limiting layer, whichever is deeper. The installation of the sanitary seal shall be verified by a third-party NV Qualified Groundwater Scientist, as defined in NAC 444.609, or a NV Professional Engineer with documentation submitted to SNHD after installation documenting the findings including the final depth of the sanitary seal and location of limiting layers in the well profile.

6. Any septic systems that are impacted by this variance request will have a copy of this variance on file and shall be considered complaint under this approved variance.
7. Conversion of the existing septic system or well for commercial use will result in the variance becoming null and void.
8. The applicant will need to apply for a Backflow By Permit with the LVVWD and have the backflow prevention assembly installed, tested, and accepted by LVVWD as a condition of service.
9. Petitioner and their successor(s) must provide a copy of the variance to potential buyers as part of the disclosure process per NRS 113.

Attachments:

- A. Variance Candidate Application
- B. Justification Letter
- C. Proposed Site Plan
- D. SNHD Aerial Analysis showing Regulatory Required Setbacks
- E. Sewer Inquiry Response from Clark County Water Reclamation
- F. Water Rights Application
- G. Site Investigation Photos submitted by the Petitioners
- H. Public Notice

Attachment A: Variance Candidate Application (Page 1 of 3)



**VARIANCE CANDIDATE WORKSHEET**

**PART I:**

**ESTABLISHMENT INFORMATION**

Name of Facility/ Establishment: \_\_\_\_\_  
Health Permit Number: \_\_\_\_\_ Date of Inquiry: \_\_\_\_\_  
Name of Operator/ Agent: \_\_\_\_\_  
Address of Operator/ Agent: \_\_\_\_\_  
Contact Information of Operator/ Agent:  
Office Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_  
Fax Number: \_\_\_\_\_ Email Address: \_\_\_\_\_  
If corporation, the name/title of individual to sign for Variance document:  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**OWNER INFORMATION**

Name of Property Owner: Thomas Sangretoro (Sangretoro Trust)  
Address of Property Owner: 7737 Edna Ave, Las Vegas, NV 89117  
Contact Information of Property Owner: 7737 Edna Ave, Las Vegas, NV 89117  
Office Phone: 702-931-2829 Cell Phone: \_\_\_\_\_  
Fax Number: \_\_\_\_\_ Email Address: thomas.sangretoro@gmail.com

**PROPERTY INFORMATION**

Property Address: 7737 Edna Ave, Las Vegas, NV 89117  
Assessor's Parcel Number (APN): 163-10-301-004  
Describe location within larger facility (i.e. hotel/casino/resort, etc.):  
NA  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Describe Variance Issue (s): (Include sections of the Regulation or Nevada Administrative Code that applies to the request for a variance)

Requesting variance for the following code sections:  
9.1.3 Effluent disposal fields shall not be located within one hundred feet (100') nor shall a deep absorption system be located within one hundred and fifty feet (150') of any well or watercourse  
9.1.4 Wells should be above the elevation of the septic system, as determined from the contour elevations  
11.20.1 A minimum area of one (1) acre (43,560 square feet), including public streets and alleys, or other right-of-way or easements, or any portion thereof...where the water supply is from a well serving only that property

Attachment A: Variance Candidate Application (Page 2 of 3)

**PART II:**

Nevada Administrative Code 439.240 states in general that certain conditions or circumstances must be shown to exist in order for a Board of Health to approve a request for a Variance from adopted public health regulations. A variance application letter (as noted below in PART III) MUST specifically address each of the following issues:

1. There must be circumstances or conditions which are unique to the applicant, and do not generally affect other persons subject to the regulation. Please indicate how your request is unique to your situation and is, therefore, not likely to affect other persons subject to the regulations:

Sanitary seal will be installed to a depth of 100ft or bedrock whichever is deeper

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2. There must be circumstances or conditions which make compliance with the regulation unduly burdensome and cause a hardship to and abridge a substantial property right of the applicant, and the variance is necessary to render substantial justice to and preserve the property rights of the applicant. Please indicate in what manner compliance with the regulation would be burdensome or cause a hardship on your business or how the free use of your property may be affected (if economic factors are an issue, please include estimates regarding the costs that would incurred by compliance):

Variance with respect to 9.1.3 allows for optimal location of well for installation and maintenance

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3. Granting the variance will not be detrimental or pose a danger to the public health and safety. Please provide evidence that the variance request, if approved, will not adversely affect the safe and sanitary operation of the applicant(s) pool, spa, or food establishment:

There is no pool, spa or food establishment on the property

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Attachment A: Variance Candidate Application (Page 3 of 3)

**NAC 439.240 Approval by State Board of Health. (NRS 439.150, 439.190, 439.200)**

1. The State Board of Health will grant a variance from a regulation only if it finds from the evidence presented at the hearing that:
    - (a) There are circumstances or conditions which:
      - (1) Are unique to the applicant;
      - (2) Do not generally affect other persons subject to the regulation;
      - (3) Make compliance with the regulation unduly burdensome; and
      - (4) Cause a hardship to and abridge a substantial property right of the applicant; and
    - (b) Granting the variance:
      - (1) Is necessary to render substantial justice to the applicant and enable the applicant to preserve and enjoy his or her property right; and
      - (2) Will not be detrimental or pose a danger to public health and safety.
  2. Whenever an applicant for a variance alleges that he or she suffers or will suffer economic hardship by complying with the regulation, the applicant must submit evidence demonstrating the costs of compliance with the regulation. The Board will consider the evidence and determine whether those costs are unreasonable.
- [Bd. of Health, Variances Reg. §§ 2.7-2.8, eff. 10-16-80; A 2-5-82; 1-19-84]

**PART III:**

**A Variance Application Letter**, which includes all information provided by the applicant on his worksheet, must be submitted in writing to the Environmental Health Division (EHD) Director no later than 40 days before the monthly Board of Health Meeting. **The Application letter must be on the owner's letterhead signed by the Owner/Corporate Officer specifically listing which part(s) of the Regulation the proposed Variance covers with this completed Worksheet as an attachment. The written Application Letter must take particular care in providing statements and evidence of circumstances or conditions and reasons why the District Board of Health should grant the Variance as listed in NAC 439.240 as shown at the top of this page. ALL information you have provided in PART I and II of this Worksheet must be included in the body of the letter.** The evidence required may include 8 1/2" x 11" or 11" x 17" detailed drawings and/or photographs.

The Variance process is outlined in Nevada Administrative Code (NAC) 439.200 through 439.260 with the exception that an application fee is payable to SOUTHERN NEVADA HEALTH DISTRICT (SNHD).

**This section to be completed by SNHD staff ONLY**

Next closing date is: \_\_\_\_\_ for the \_\_\_\_\_ BOH Meeting.

Referred by: \_\_\_\_\_  
(Print Name of REHS)

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Print Name of REHS if not by supervisor)

Received by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Owner/Operator/Agent)

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_  
(Signature of SNHD Manager)

## Attachment B: Justification Letter

To the Environment Health Division Director:

Thank you for your consideration of this variance request for the installation of a permitted well at 7737 Edna Ave, Las Vegas NV 89117.

I'm requesting a variance with respect to the following code sections:

9.1.3 Effluent disposal fields shall not be located within one hundred feet (100') nor shall a deep absorption system be located within one hundred and fifty feet (150') of any well or watercourse.

9.1.4 Wells should be above the elevation of the septic system, as determined from the contour elevations.

11.20.1 A minimum area of one (1) acre (43,560 square feet), including public streets and alleys, or other right-of-way or easements, or any portion thereof abutting on, running through or within a building site, is required for the installation of an individual sewage disposal system where the water supply is from a well serving only that property.

The well is being installed so that non-potable water can be used to irrigate fruit trees (trees that produce food that feed my family). In my mind, this non-potable water is better environmentally as the water district (LVVWD) goes through great lengths and invests significant funds and energy to ensure that municipal potable water is fit for human consumption. This valuable potable water produced by the district is not required by the fruit trees and also has chemicals (to make the water potable) which do some minor level of harm to the trees. It is also my view that utilization of the well water for careful irrigation will actually improve the quality of the underground water, as the water not purified by the trees' root systems will go through several hundred feet of purification as the water moves through the ground back to the aquifer.

From a financial perspective, following the approval of the permit for the well installation by the Nevada Division of Water Resources, I invested approximately \$40,000 (to date) for well drilling, water rights, legal fees etc. If the well is not installed, I will only be able to recover part of that investment

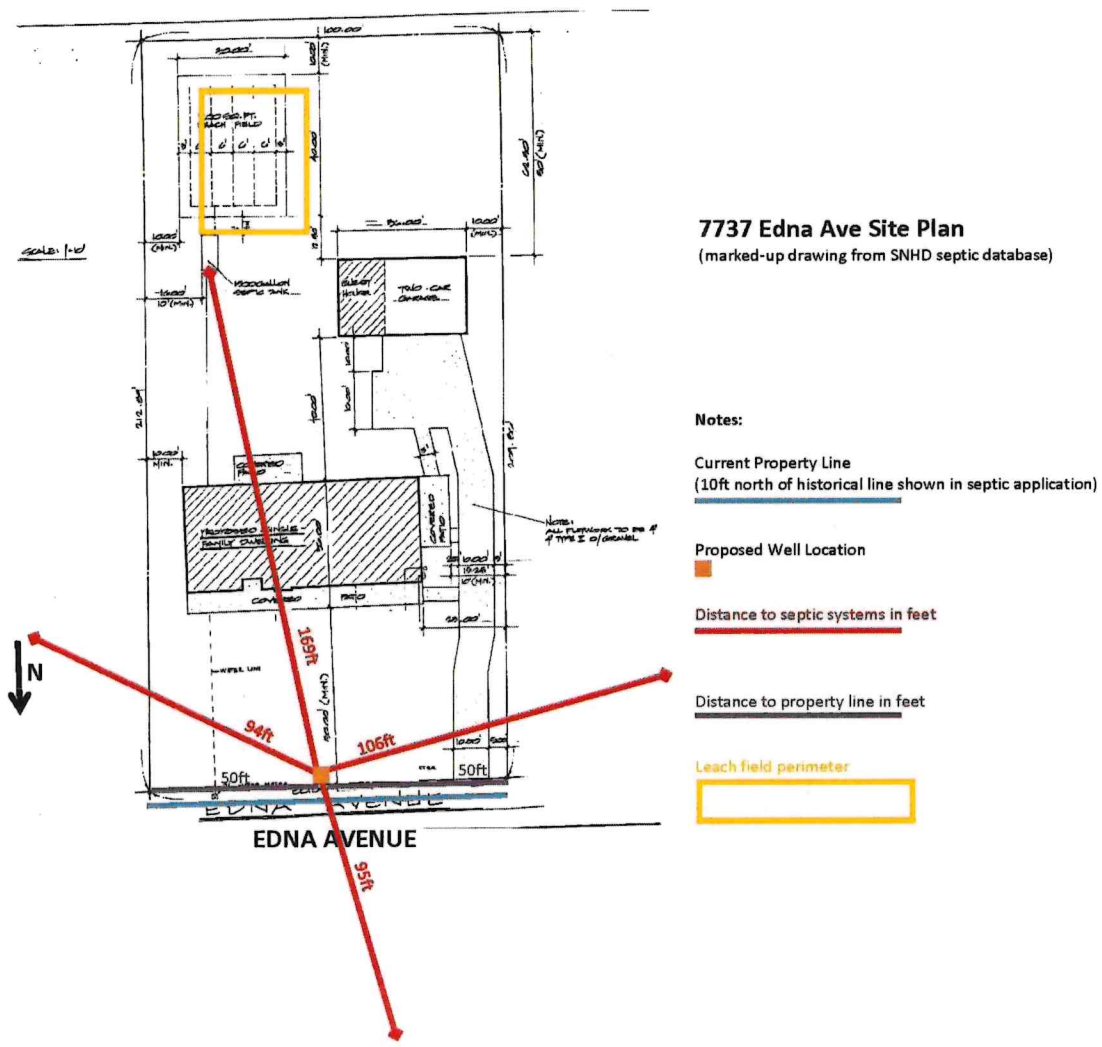
In summary, I believe this well will both free up potable water to be utilized by humans in Las Vegas and improve the quality of the water that is in the aquifer. Many thanks for your time and please let me know if you need any additional information.

Sincerely,

Thomas Sangretoro



Attachment C: Proposed Site Plan



Attachment D: SNHD Aerial Analysis showing Regulatory Required Setbacks



Red Circles represent the setback required by SNHD ISDS Regulations  
Yellow squares are the estimated leach field locations  
White circle is the estimated proposed well location

Attachment E: Sewer Inquiry Response from Clark County Water Reclamation



November 16, 2022

Mr. Robert Fyda, P.E.  
Southern Nevada Health District  
PO Box 3902  
Las Vegas, NV 89127

RE: LETTER OF INQUIRY ON APN 163-10-301-004

Dear Mr. Fyda:

This is in response to an inquiry requested by Southern Nevada Health District regarding availability of the public sewer to provide sewer service to the above property. The subject property is within the jurisdiction of Clark County Water Reclamation District (CCWRD). The District has found that a public sewer line is:

- available within four hundred feet (400') of the nearest property line.
- not available within four hundred feet (400') of the nearest property line.
- available within four hundred feet (400') of the nearest property line, but no gravity connection available.

Thank you for the opportunity to comment on the above subject property. Please do not hesitate to contact us or refer the applicant to us if there are any questions regarding this matter.

Sincerely,

A handwritten signature in cursive script that reads "Leslie Long".

Leslie Long, P.E.  
Development Services Manager

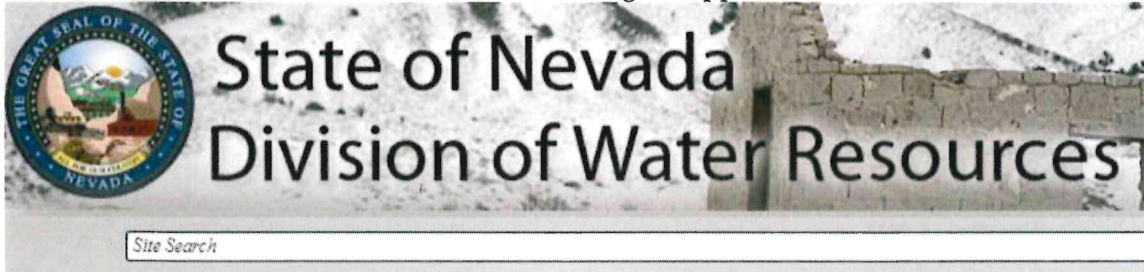
LL:jb

cc: Dan Isler  
septics@snhd.org

BOARD OF TRUSTEES  
Tick Segerblom, *Chair* · Justin Jones, *Vice Chair*  
James B. Gibson · Marilyn Kirkpatrick · William McCurdy II · Ross Miller · Michael Naft  
Thomas A. Minwegen, *General Manager*

5857 East Flamingo Road · Las Vegas, Nevada 89122 · (702) 668-8888 · (800) 782-4324  
cleanwaterteam.com

Attachment F: Water Rights Application



**Permit Information**

[New Search](#)

App/Permit: [90794](#)  
 Status: PERMIT  
 Certificate: None

- General
- Maps and Due Dates
- Place of Use
- Abrogations/Protests/Rulings
- Ownership and Title

**General**

**Basin:** LAS VEGAS VALLEY - 212  
**Sub Basin:**  
**Basin Status:** DESIGNATED (PUID)  
**Region:** COLORADO RIVER BASIN      **County:** CLARK  
**Resource Specialist:** [Ken Haffey](#)      **Site Name:** 212 S21 E60 10CBBA1

**Previous Applications(Base Rights)**

Change of App No	POD	POU	MOU
<a href="#">11914</a>	Y	Y	

**Source:** UNDERGROUND      **Source Description:**  
**Project Name:**      **Decree Name:**  
**Use:** QUASI-MUNICIPAL  
**Period Start:** 0101      **Period End:** 1231

**Point of Diversion Information**

**Qtr-Qtr:**      **Qtr:**      **Section:**      **Township:**      **Range:**  
 NW      SW      10      21S      60E

**Duty-Balance:** 1 AFA      **Div Balance:** 0.001381  
**Acre-Feet Storage:** 0      **Well Logs:**

**Remarks:**

App/Permit: [90794](#)  
 Status: PERMIT  
 Certificate: None

- General
- Maps and Due Dates
- Place of Use
- Abrogations/Protests/Rulings
- Ownership and Title

**Current Ownership Information**

*(NOTE: Owner names shown here are standardized for retrieval purposes only. Verify legal names before submitting any new documentation.)*

Owner	Type	Div Rate	Duty	Acres	Change By	APN	County	Description
SANGRETORO TRUST	B	0.001	1	0		163-10-301-004	CLARK	

Attachment G: Site Investigation Photos submitted by the Petitioners



Elevation of the leach field area.

Attachment H: Public Notice



**PUBLIC NOTICE**

The Southern Nevada District Board of Health will conduct a PUBLIC HEARING on Thursday, February 23, 2023 at 9:00 AM during its regular monthly meeting in the Red Rock Conference Room at the Southern Nevada Health District at 280 S. Decatur Blvd., Las Vegas, Nevada, to approve or deny a variance request filed by Thomas Sangretoro, trustee of The Thomas Sangretoro Trust, ("Petitioner"), to allow installation of a well on the property located at 7737 Edna Ave., Las Vegas, NV 89117, APN 163-10-301-004.

The variance is requested to allow the Petitioners to install a domestic irrigation well at 7737 Edna Ave., Las Vegas, NV that is not in compliance with SNHD ISDS Regulations. The proposed well is located on an undersized lot and the Petitioners are requesting a reduced setback of 90', where a 100' or 150' is typically required, from a well to a septic system.

All interested persons may appear at the hearing and state their positions. All written and oral submissions will be considered by the Southern Nevada District Board of Health. Written comments must be forwarded by February 22, 2023, to:

Robert Fyda, P.E., REHS  
Environmental Health Engineer/Supervisor  
Southern Nevada Health District  
P.O. Box 3902  
Las Vegas, Nevada 89127  
fyda@snhd.org

The variance application is available for review at the Southern Nevada Health District, 280 S. Decatur Blvd., Las Vegas, Nevada 89107. Please contact Mallory Jett-Edwards at (702) 759-0660 to schedule an appointment to review the application during normal business hours of 8:00 AM to 4:30 PM.

- S -  
\_\_\_\_\_  
Chris Saxton, MPH-EH, REHS  
Environmental Health Director

February 8, 2023  
Date