

Response to Comments – Proposed Noise Pollution Control Regulation #21

Comment 1: Lack of Defined Standards

Section 4.1 states that “Noise measurement locations at the receiving property(s) will be selected in accordance with the Noise Sampling Plan.” Section 2.23 defines the Noise Sampling Plan (NSP) as “a formal, Department-approved strategy that identifies representative noise measurement locations on a receiving property.”

The regulation does not provide objective criteria for creating the Noise Sampling Plan, leaving the process open to subjective interpretation. Allowing the Department to select measurement locations far from the noise source—such as inside the home or requiring residents to carry a sound meter for 24 hours (in our case)—risks excusing violations and grants excessive discretion. This undermines property owners’ rights to fully use and enjoy their property without exposure to harmful noise. The entire property should be protected by the regulation, and the Department should not have the authority to determine which locations to measure.

Response: The purpose of this Regulation is to establish uniform standards for assessing and controlling noise pollution in Salt Lake County to protect the health, safety, and welfare of residents (see Section 1.1). The Noise Sampling Plan (NSP) provides an objective and standardized method for determining where and how measurements are taken. The plan’s intent is to ensure noise readings accurately reflect typical human exposure (areas where occupants are reasonably expected to work, rest, or socialize) as defined in Section 2.29 (“Receiving Property”).

The selection of sampling locations is guided by criteria that prioritize representative living or working spaces, such as patios, bedrooms, or common living areas. Measurements from incidental or not representative locations (e.g., rooftops, or on top of walls and fences) are not considered representative because they do not accurately indicate human exposure to noise within regular use areas. This approach prevents misleading or biased results and aligns with best practices in environmental noise assessment (ANSI S12.9, IEC 61672). It ensures enforcement actions are defensible, consistent, and equitable across all property types.

Comment 2: Unfair Definition of “Receiving Property”

Section 2.29 states “a receiving property is a location(s) where occupants are reasonably expected to work, rest, or socialize and that is intended for regular daily living activities rather than incidental use.” Property owners should have the right to fully use and enjoy their entire property—yards, garages, gardens, or any other areas—without interference from excessive noise. Noise does not differentiate between ‘primary’ and ‘incidental’ areas and excluding portions of a property leaves residents exposed to harmful impacts. Regulations should protect all parts of a property to ensure consistent, fair enforcement and

prevent the Department from exercising unchecked discretion. Section 2.29 should explicitly state that all areas of a property are protected from noise impacts, regardless of intended use.

Response: The definition of “Receiving Property” (Section 2.29) is designed to align enforcement with measurable health impacts rather than incidental or peripheral noise exposure. The regulation’s intent is to protect occupants from sustained or disruptive noise that affects health and daily activities, specifically in spaces where individuals live, sleep, work, or gather. These are the environments where prolonged noise exposure can contribute to measurable physiological effects such as sleep disturbance or hearing strain.

While the Department recognizes that property owners have stewardship of their entire property, the Noise Sampling Plan ensures measurements are taken in areas most representative of human exposure patterns. This prevents enforcement decisions from being influenced by transient or irregular noise readings that may occur in locations not typically used for sustained human activity. This definition therefore supports both fair enforcement and public health objectives while maintaining consistency with national noise assessment standards.

Comment 3: Application of Margin of Error – Potential for Bias

Section 4.1 Section 4.1 of the regulation also states: “In determining whether a violation exists, the Department will take into account the margin of error specified by the manufacturer of the measuring device.” The regulation does not clarify how the margin of error should be applied. To ensure fairness, both positive and negative adjustments must be considered. Applying it in only one direction creates bias, favoring one party over another. As an example of our case, the noise from our neighbor’s pool measured 61.8 dBA (over a two-minute period), exceeding the 60 dBA limit, but the Health Department applied a ± 2.3 dBA margin only in the subtractive direction, reducing it to 59.5 dBA and dismissing the violation. If the positive margin error is considered, the value rises to 64.1 dBA - way above 60 dBA limit. This selective approach raises concerns about fairness and consistent enforcement.

Response: All measurement instruments used by the Environmental Health Division are professionally calibrated and certified in accordance with ANSI S1.4 and IEC 61672 standards to ensure precision and consistency. Manufacturers specify a \pm margin of error to reflect potential variance in readings due to instrument sensitivity and environmental conditions.

The Department’s enforcement approach applies this margin in a conservative and uniform manner by subtracting the manufacturer-specified margin of error from the observed reading. This ensures that only sound levels definitively above the regulatory threshold result in enforcement and follows established public health enforcement practices that emphasize fairness by allowing reasonable consideration of “measurement uncertainty”, ensuring enforcement actions are defensible and legally sustainable.

This method avoids over-enforcement due to natural instrument variability, maintains fairness, and upholds the integrity of the regulatory process. For transparency, the Department will document the equipment's make, model, calibration date, and manufacturer-stated margin of error in each Noise Sampling Plan and investigation report.