



2121, LLC

Noise Source Assessment and Mitigation Plan

APNs: 308-131-012 & 308-131-020

Loleta, CA

December 2024

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A: Site Map



Objective

The purpose of this Noise Source Assessment and Mitigation Plan is to evaluate existing noise conditions, evaluate the potential impacts from the proposed project, and describe how the project will conform with the Performance Standard set forth in Section 55.4.12.6 – Performance Standard for Noise at Cultivation Sites in the Humboldt County Commercial Cannabis Land Use Ordinance (CCLUO). Evaluation of potential noise impacts included the establishment of onsite ambient and maximum noise levels, identification of proposed project noise sources, and the analysis of proposed project noise sources in relation to current onsite noise.

The results from this analysis represent a typical day of operations in late October, where activities include operation of commercial greenhouses equipped with large exhaust fans.

Proposed Project Overview

2121, LLC seeks approval for a Conditional Use Permit (CUP) and Coastal Development Permit for a new owner and operator. The proposed project involves 28,656 square feet of existing mixed-light cultivation within an existing greenhouse, and an additional 9,800 square feet of outdoor cultivation within existing hoop houses. The parcel had an existing approved cannabis cultivation operation (PLN-11065-CUP) for the conversion of a commercial flower farm to a commercial cannabis cultivation operation. 2121, LLC's proposal does not include an increase in cultivation size, water use, electrical use, or numbers of required employees.

Site Description and Sensitive Receptors

The project is located at 2121 Table Bluff Rd. Loleta, CA (APNs: 308-131-020 & 308-131-012). The subject parcels are approximately 19.6 and 6.5 acres in size.

The subject property is comprised of a 3,798 square foot (SF) single-family residence, four (4) 6,776 SF commercial cultivation greenhouses, seven (7) hoop house greenhouses with varying dimensions, (2) 1,364 SF buildings used for storage and cannabis processing, and a 1,491 SF storage shed. The remainder of the subject property is comprised of grass pastures that are utilized for cattle grazing.

Analysis of Existing Ambient Noise Levels

The *existing ambient noise level* is defined as the baseline of sound pressure experienced in an area prior to the proposed cannabis cultivation activities. Existing ambient noise levels included natural and human-induced noise.

Four (4) Monitoring Locations were chosen throughout the parcel to establish noise levels at property lines (closest to sensitive receptors such as neighboring houses) and habitat areas (closest to sensitive receptors such as wildlife), to the furthest extent possible. Table 1 below describes the Monitoring Locations in more detail and the locations can be seen on the site map attached in Attachment A.



Table 1: Monitoring Location Details

Monitoring Location	Lat/Long	Description & Notes	Impact Potential
#1	40.673288°, -124.237629°	Edge of residential/commercial cannabis operation development.	Adjacent parcel.
#2	40.672415°, -124.236460°	Adjacent to property boundary and Table Bluff Road.	Adjacent parcel.
#3	40.673649°, -124.237081°	Edge of residential/commercial cannabis operation development.	Adjacent parcel.
#4	40.673482°, -124.236318°	Edge of residential/commercial cannabis operation development.	Adjacent parcel.

The sound pressure level was measured in decibels using a type 2 digital sound meter which utilizes an A-weighted filter network (dB(A)). The digital sound meter was mounted to a tripod, allowing it to be positioned approximately 1 foot above the ground to minimize ground noise and maximize unobstructed sound readings. Decibel measurement readings were taken at 5-second intervals for 24 hours.

Collection of ambient noise level data at Monitoring Locations #1 and #2 initiated 3:15 PM October 28th, 2024, and concluded 3:19 PM October 29th, 2024. The days of data collection were temperate, sunny days with moderate wind velocities, with wind gusts of less than 7 miles per hour (mph).

Collection of ambient noise level data at Monitoring Locations #3 and #4 initiated 10:15 AM December 21st, 2024, and concluded 10:30 AM December 22nd, 2024. The days of data collection were temperate, overcast days with significant wind velocities, with wind gusts up to 15 mph.

After the measurements were taken, the data was analyzed to determine the existing ambient noise levels in decibels (dB). Table 2 displays the monitoring results and includes the monitoring locations, the monitoring duration, the average decibel reading throughout the monitoring duration, and the maximum measured decibel reading recorded.

Table 2: Onsite Noise Analysis Results

Monitoring Location	Monitoring Duration	Average Decibel Reading / 'Ambient Noise Level' (dB)	Max Noise Level Measured (dB)
#1	24 hr.	37.9	59.3
#2	24 hr.	43.0	74.4
#3	24 hr.	37.3	61.9
#4	24 hr.	39.4	68.7

The existing ambient noise levels range from approximately 37.3 dB to 43.0 dB, with an average of 39.4 dB. Maximum noise levels ranged from approximately 59.3 dB to 74.4 dB.



Noise Sources Associated with Proposed Project

The site is currently developed with a single-family residence, four commercial greenhouses, six hoop-house greenhouses and several small storage buildings. All existing infrastructure, excluding the single-family residence, is proposed to be utilized for cannabis cultivation. The project does not propose additional structures or other activities that have the potential to significantly increase the measured ambient noise levels.

The commercial greenhouses are equipped with approximate 42" exhaust fans, which are the major contributors to the increase of ambient noise levels. The 42" exhaust fans were operating during the noise monitoring from approximately 10 am-4 pm on 10/29/2024. It is anticipated that the measured ambient noise sources will not increase with the proposed cultivation activities in similar weather conditions.

Other noise sources associated with the project include employee activity, light county road traffic, and onsite processing. However, these activities are not anticipated to produce any additional noise relative to the existing ambient noise levels.

Anticipated Noise Levels and Proposed Noise Attenuation Measures

The 4 large commercial greenhouses are each equipped with 2 existing intake and 2 existing exhaust fans (approximate 42"). The smaller hoop house each are equipped with 1 existing intake and 1 existing exhaust fan (approximate 36") which are considered to be the major contributors to the increase of ambient noise levels. The exhaust fans were operating during a portion of the noise monitoring from approximately 10 am-4 pm on 10/29/2024. It is anticipated that the existing conditions and measured ambient noise sources will not increase with the proposed cultivation activities.

Table 3 outlines the monitoring results and includes the monitoring locations, the monitoring duration, the average decibel reading throughout the monitoring duration, and the maximum measured decibel reading recorded. It is anticipated that these measured ambient noise levels represent a typical day of commercial cannabis cultivation activities associated with the proposed project.

Table 3: Measured Ambient Noise Levels.

Monitoring Location	Average Decibel Reading / 'Ambient Noise Level' (dB)
#1	37.9
#2	43.0
#3	37.3
#4	39.4

Furthermore, all noisy cannabis-related activities will be conducted within enclosed structure, which will muffle the projected sound pressure of proposed activities. Noise from the proposed cultivation activities is not anticipated to result in any increase in sound level above existing ambient noise levels. Furthermore, the noise levels at both Monitoring Locations are anticipated to be less than 50 dB.



Monitoring

Monitoring of noise levels will continue on a regular basis following the proposed activities. If the noise levels are measured to be higher than the anticipated levels, further measures will be implemented to reduce the noise output from the project's activity.

In order to ensure that cultivation activities comply with the Performance Standards, future noise monitoring will be conducted at the same monitoring locations to ensure no disturbance is occurring to habitat or to neighboring residences.

Conclusion

The existing ambient noise levels range from approximately 37.3 dB to 43.0 dB, with an average of 39.4 dB. Maximum noise levels ranged from approximately 59.3 dB to 74.4 dB. It is anticipated that these measured ambient noise levels represent a typical day of commercial cannabis cultivation activities associated with the proposed project.

Noise from the proposed cultivation activities is not anticipated to result in any increase in sound level above existing ambient noise levels. Furthermore, the noise levels at both Monitoring Locations are anticipated to average less than 50 dB.



Attachment A: Site Map





Monitoring Location #1

Monitoring Location #3

Monitoring Location #4

Monitoring Location #2

Google Earth

Image © 2024 Airbus

1000 ft

