INTER DEPARTMENTAL MEMO
Community Development Department

DATE: February 24, 2025

TO: Chair Caldwell and Planning Commissioners

FROM: Raffi Boloyan, Community Development Director

RE: **Addendum #1 to Staff Report - Additional Public Correspondence Received after Production of Staff Report**

In an attempt to complete the staff report earlier than normal and provide the public and Commission ample time to review, the staff report was sent to production on Monday 2/24 at noon. Therefore, there will be additional correspondence received after the staff report was reproduced through the night of the Commission meeting on Wed 3/5 that was not attached and referenced in the staff report.

Staff has received one such letter, a follow letter from Buchalter dated 2/24/25 which provides a follow up to their November 12, 2024 letter as well as the applicant's 2/5 response to that letter

See attached. This letter clarifies the intent of their November 12th letter, reiterates their concern to assure accurate baseline documentation and provides their additional analysis on noise, air quality and land use planning. It concludes that Campbells is encouraged by the recent changes to the site plan and encourages further consideration of mitigation measures and disclosure requirements. Staff does note that the City has already included a condition of approval, requiring a disclosure process for all the residential uses, to be built into the CC&R's and lease agreement

Any additional written comments will be assembled and distributed by follow up memo on Friday 2/28 and then again on Tuesday 3/4 at 5pm

Any written comments received after Tuesday 3/4 at 5pm, will be emailed to the Commission and a copy placed on your dias

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February 24, 2025

VIA E-MAIL (RBOLOYAN@CITYOFDIXONCA.GOV)

Raffi Boloyan, Director,
Community Development Department
City of Dixon
600 East A St.
Dixon, CA 95620

Re: The Campus Final Environmental Impact Report (SCH# 2023080739)

Dear Mr. Boylan:

This office continues to represent Campbell Soup Supply Company LLC ("Campbell"). This presents further comment on The Campus/Dixon Draft Environmental Impact Report (SCH # 2023080739) ("DEIR") as well as the recently posted final format of that DEIR ("FEIR") prepared for The Campus/Dixon 257 Project ("Project") in the City of Dixon ("City"). We understand that FEIR will be presented for a recommendation to the City of Dixon Planning Commission at a special meeting on March 5, 2025. Representatives of Campbell will be on hand at that meeting to answer any questions concerning this letter and its comments to date.

1. Introduction.

Campbell submits this letter to supplement its November 12, 2024, comments on the DEIR. As with its preliminary letter, Campbell presents this pursuant to its ongoing right to provide such comments up to the final public hearing.[1] (See, e.g., *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1200 [CEQA comments to be considered up to final project hearing].) More importantly, Campbell intends for these comments to facilitate the chief legislative goal of the California Environmental Quality Act (Pub. Resources Code, § 21000, et seq.) ("CEQA"): to assure informed decision-making, public disclosure and to secure the "foremost principle under CEQA," which is that the statute "'be interpreted in such manner as to afford the fullest possible protection to the environment within

[1] We reference our initial comment letter dated November 12, 2024, and incorporate that letter by this reference.

the reasonable scope of the statutory language.'" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 390, quoting *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.) CEQA guarantees a right to continued public comments until the final decision on the Project. (Pub. Resources Code, § 21177.) Campbell continues to reserve its rights under all relevant law.

2. Campbell's Primary CEQA Concern Is to Assure an Accurate Baseline, Not to Assess "Speculative" Outcomes or an Inverted Analysis.

On February 5, 2025, the Applicant and Project Proponent, Dixon Venture LLC, ("Applicant") presented a comment letter that, in part, suggests that Campbell's concerns improperly call for an analysis of the ***environment*** on the ***Project***, as opposed to the impacts of the ***Project*** on the ***environment***. (See, e.g., *S. Orange County Wastewater Authority v. City of Dana Point* (2011) 196 Cal.App.4th 1604, 1617.) It is not Campbell's goal to invert the analysis of the FEIR, however. To the contrary, Campbell's goal is to ensure an ***accurate baseline*** from which the analysis of the FEIR is measured. If the baseline is not properly informed, the analysis conducted from that baseline will be similarly deficient. As the California Supreme Court observed:

> Without a determination and description of the existing physical conditions on the property at the start of the environmental review process, the EIR cannot provide a meaningful assessment of the environmental impacts of the proposed project. (Pub. Resources Code, §§ 21100, subd. (a), 21060.5; [citation].) "Before the impacts of a project can be assessed and mitigation measures considered, an EIR must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined."

(*Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 119, quoting *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952; CEQA Guidelines, §§ 15125, subd. (a), 15126.2, subd. (a).)

The Applicant's assumptions concerning the purpose and objectives of Campbell's comments gives rise to additional, misplaced contentions that Campbell is calling for "speculative" analysis of impacts on "indeterminate future residents." In fact, there is nothing speculative about the current existing environmental baseline; the problem is that the DEIR's analysis of that environmental baseline did not account for conditions during peak tomato processing season. As noted, if an EIR starts off with the wrong assumptions regarding existing

conditions, its subsequent conclusions about potentially significant impacts will necessarily be defective: (See, e.g., *Galante Vineyards v. Monterey Peninsula Water Management Dist.* (1997) 60 Cal.App.4th 1109, 1122 ["Due to the inadequate description of the environmental setting for the project, a proper analysis of project impacts was impossible."].)

Because lead agency (the City) did not present a complete assessment of the environmental baseline in the DEIR, Campbell was required to assume those burdens onto itself. Accordingly, Campbell commissioned a study of the noise, odors and other air quality impacts of its tomato processing operations ***during the processing season***, including during nighttime operational hours, when ambient noise thresholds -- and resultant noise level standards -- are at their most heightened. That analysis depicts noise level contours and proposals for buffers for sensitive receptors. (See Air Quality and Noise Buffer Assessment (Ascent Environmental, Feb. 2025) ("Buffer Report").) The Buffer Report also presents an analysis of air quality effects during the processing season, with similar contours reflecting emissions contours. The Buffer Report observes the following:

A. Air Quality.

The Buffer Report analyzes air emission contours based on assessments of facility-specific emissions data during peak tomato processing season (July to October) for the operation of four boilers, one backup generator and a variety of storage tanks. The farthest reaching of potential air quality impact corridors is for potentially offensive odors, which may arise from such sources as on-site wastewater treatment facilities and cooling towers. As the Buffer Report observes:

> YSAQMD recommends a 1-mile buffer distance between sensitive land uses and odor-generating land uses, such as wastewater treatment facilities, landfills/composting, manufacturing operation, painting/coating operations, refineries, ***food processing facilities***, batch plants, and asphalt plants.

(Buffer Report, p. 4, emphasis added.) Indeed, all three air quality districts nearest to the site recommend the same one-mile buffer:

> Regarding odors, the three air districts (YSAQMD, SMAQMD, BAAQMD) closest to the facility all recommend a 1-mile buffer between odor sources (such as the facility and sensitive uses). Public records were reviewed and there are no known odor complaints from the current facility; however, this is likely explained due to the limited number of nearby residences.

(*Id.*, p. 6.) The Buffer Report recognizes that, while there is a measure of speculation regarding the degree of impact on future receptors, it stands to reason that an increase in sensitive receptors would give rise to more complaints:

> Due to the subjective nature of odors, it is speculative to attempt to estimate the likelihood of the number of complaints that could arise in the future; however, understanding that the more people that are located in close proximity to an odor source, the more likely it is for an odor complaint to arise, it can be concluded that because more people would be located within recommended buffer distances (i.e., one mile), there would be an increased likelihood for the new population to be sensitive to odors from the facility.
>
> ***
>
> Based on the literature reviewed, no specific buffer distance other than the 1-mile buffer can be recommended, which would not be a practical recommendation in this case. It can be concluded that increasing the population adjacent to the operating facility does correlate with the potential to result in an increase in odor complaints compared to now.

(*Ibid.*) It is understood that a one-mile buffer would not allow siting of any of the residential, sensitive receptors envisioned by the Project. That said, it is necessary to address the universal recommendation of the Districts with respect to the recommended distances from odor sources to sensitive receptors. This issue is further important to Campbell's ongoing compliance with air quality permits and related odor control obligations. Regarding toxic air contaminants, a minimum air quality buffer of ***820 feet*** from emission sources to sensitive receptors is recommended. (*Id.*, at p. 7.) This buffer is informed by a number of factors, including, the fact that the air quality prioritization procedure of the California Air Pollution Control Officers Association is inherently conservative.

B. Noise.

Based on measurements taken during the peak tomato processing season (July to October) and accounting for nighttime operations during low-threshold ambient noise thresholds, a buffer of ***930 feet*** from the property line of the facility is recommended.

While there were no substantive revisions to the DEIR's air quality analysis, the FEIR revised its noise assessment in apparent response to Campbell's earlier concerns about the lack

of proper readings during processing season. For example, FEIR Figure 3.12-5, depicts greater noise impacts than the Figure 3.12-5 in the DEIR. Specifically, DEIR Fig. 3.12-5 depicts small noise contours not exceeding 55 dBA and notes that the noise level on the home facades along Pedrick Road would be between 36 and 42 dBA. The revised FEIR, Fig. 3.12-5 depicts much greater noise contours of 70 dBA with a diameter of more than 2,000 feet, from the center of the Campbell plant. The homes closest to the Campbell site -- though now separated by a detention basin -- now have modeled anticipated noise exposure levels of 69-69 dBA.

Notably, the FEIR does not appear to feature raw source data, sound modeling parameters, data collection locations, duration of measurements, timeframes of data collection or other explanation of the revisions to the FEIR's noise impacts analysis. On that note, only data collected during the peak processing season is relevant to any evaluation of baseline noise conditions, as that is when processing operations are at their most active. Important issues such as whether modeled noise levels accurately represented the 24-hour operational activity of noise-generating activities and whether noise sources were modeled at appropriate elevations with respect to nearby buildings, were not described or documented appropriately. Both day/night operational activity and noise source parameters are primary factors in evaluating noise response during the more sensitive nighttime and are factors that influence the noise contour distances. Without accurately accounting for these, noise exposure could be underestimated.

The Buffer Report, by contrast, provides two diagrams depicting noise level contours. One diagram depicts the noise contours under acceptable nighttime standards, with the other depicting acceptable daytime standards. (Buffer Report, pp. 19-20.) These maps still depict larger contours than the FEIR study. The Buffer Report depicts the closest dwelling units -- factoring the relocated detention basin -- have daytime noise levels of 70-75 dBA. (*Id.*, p. 20.) The nighttime noise levels for the closest units is greater than 65 dBA. (*Id.*, p. 19.) The Buffer Report identifies an ideal buffer distance of 2,547 feet based on the City's nighttime noise standards for stationary sources. (*Id.*, p. 21.) However, acknowledging that a buffer of this size is impractical for irregular noise generating activities, the report recommends a 930-foot buffer to achieve a ten-dBA interior noise level reduction. (*Id.*, pp. 21-22.) Using this revised noise standard, the closest dwelling units would experience noise levels of 65 dBA. (*Id.*, p. 23.)

3. Campbell's Comments Are Not Limited to CEQA; They Are Intended to Assure Smart Land Use Planning.

It is notable that the Applicant's extensive critique of Campbell's comments is limited only to CEQA issues, and scrutinizes Campbell's concerns under CEQA's narrow and well delineated standards for assessing the legal adequacy of an EIR. While CEQA provides one lens to view the ramifications of the City's Project, assessing the merits of Campbell's comments

must not be so limited. Campbell's primary objective is simply to insure well informed City planning.

To that end, the Project proposal to facilitate development of 144 acres with low, medium and high density residential housing (up to 1,041 units) on historical, prime farmland[2] must be undertaken with full disclosure and understanding of the existing land uses that will be neighboring future Project residents. Even apart from the CEQA ramifications of such a decision, this is an issue of ***smart planning***.

It is a foundational principle of land use law that a local government's general plan is intended to facilitate and mandate such smart planning. (See, e.g., *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 540 [general plan is the "'constitution' for future development … ."].) In this case, the City's own General Plan recognizes the inherent incompatibility of residential and agricultural/industrial uses and requires adequate transitions or "buffers" from one use to the next. (See, e.g., City of Dixon General Plan (2024), Policy LCC-1.2 ["Maintain designated urban-agricultural buffers within City jurisdiction to minimize conflicts with adjoining agricultural uses."]; LCC-5.4 requires the City to plan for similar compatible uses to "minimize conflicts" with other uses (e.g. residential uses); LCC-5.7 ["Require industrial and commercial development to incorporate buffering and context-responsive transitions to minimize impacts on adjacent less intensive uses, particularly residential uses."].) These General Plan policies cannot be honored without a robust and accurate assessment of how the existing uses will affect future residents. (See, e.g., Environmental Assessment Factors and Categories eGuide (HUD Exchange, Department of Housing and Urban Development, hudexchange.infor/programs/enviormental-review.environmental-assessment/guide/land-development/, accessed July 2024 [identifying the incompatibility of residential and industrial uses].)

Well informed, smart planning by the City is critical not only to the wellbeing of future citizens of Dixon; it also is critical to Campbell's ongoing operations at a processing plant that has been integral to the regional economy. Robust stakeholder participation in a process that is fully informed must guide not just the City's actions, but Campbell's ongoing permit compliance, its commitment to best practices and its overarching goal of being a good corporate citizen and neighbor.

[2] The Applicant notes that the farmland areas within the City and adjacent County are not currently zoned agricultural, as if to defuse Campbell's concern that incursion of residential uses threatens existing agricultural uses in the region. The point is minimally relevant, since the primary concern is the potential of proximity of potentially clashing land uses and the effect of such uses on the tomato processing plant and the growers whose agricultural activities rely on Campbell's ongoing operations.

4. Conclusion.

In closing, Campbell has been encouraged by recent discussions with the Applicant and the revisions to the Project site plan to create a larger buffer between the Campbell's facility and future residential uses. Campbell encourages further consideration of these issues as this matter progresses through hearings. Aside from critical zoning buffers, Campbell further encourages proper consideration and implementation of mitigation measures, disclosure requirements and protective covenants in future project-level entitlement actions, such as tentative maps, development agreements and other discretionary approvals. Campbell requests the ability to have a seat at the table to provide comment and input on such measures as they arise.

Finally, Campbell is mindful of the dates and sequencing of its comment letters to the City. Any delay in presenting this data results solely from Campbell's need to identify and engage a qualified consultant and have that consultant conduct appropriate field measurements and then quantify and present the data. In the normal course, this work is the legal responsibility of the City as lead agency pursuant to its obligations under CEQA. Given the stakes at issue, the report was necessary and it is Campbell's hope that the City and Applicant will understand the timing of its presentation.

If you have any questions about this letter, please do not hesitate to contact the undersigned.

Sincerely,

BUCHALTER
A Professional Corporation

Michael W. Shonafelt

MWS

cc:

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Air Quality and Noise Buffer Assessment

Campbell's Soup Company, Inc. – Technical Assessment Distance Buffer, Dixon, CA Project
830 Pedrick Road, Dixon, CA 96161

Prepared for:

Buchalter
1000 Wilshire Blvd, Ste 1500
Los Angeles, CA 90017-1730

February 2025

Air Quality and Noise Buffer Assessment

Campbell's Soup Company, Inc.
830 Pedrick Road, Dixon, CA 96161

Prepared for:

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February 2025

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TABLE OF CONTENTS

Figures

LIST OF ABBREVIATIONS

Air Toxics "Hot Spots" Act	Air Toxics "Hot Spots" Information and Assessment Act of 1987 (also referred to as AB 2588)
BAAQMD	Bay Area Air Quality Management District
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CNEL	community noise equivalent level
dB	decibel
dBA	A-weighted decibel
facility	Campbell Soup Supply Facility
FICAN	Federal Interagency Committee on Aviation Noise
Hz	hertz
L_{dn}	day-night average sound level
L_{eq}	equivalent continuous sound level
L_{max}	maximum sound level
LT	long-term
PM	particulate matter
SEL	sound equivalent level
SMAQMD	Sacramento Metropolitan Air Quality Management District
TAC	toxic air contaminant
YSAQMD	Yolo-Solano Air Quality Management District

1 AIR QUALITY BUFFER ASSESSMENT

Currently, a Campbell Soup Facility (facility) is located at 8380 Pedrick Road, in Solano County, shown in Figure 1, below. The existing facility includes on-site tomato processing, a delivery area and sorting/weighing station, and an employee parking lot. The facility operates 24 hours per day during the tomato harvest season and processes approximately 500,000 tons of tomatoes from area farms each season. Operations include cleaning, preparation, concentration, and packaging systems for distribution. The stationary pollutant sources are four boilers, one backup generator, two wastewater pumps, and one cooling tower. The permit-exempt units include one cooling tower and eight liquid storage tanks.

A rezoning proposal is under review by the City of Dixon that would result in residential zoning and land use designations, and, therefore, the potential placement of new residential uses adjacent to the west of the facility. The facility is currently in compliance with all air emissions permits, rules, and regulations as an industrial operation with the nearest residence over 1,000 feet away, but the proposed development would put residences with sensitive receptors much closer to the property boundary. To inform good planning decisions, this study investigates a potential appropriate buffer distance between the facility and anticipated nearby sensitive receptors that could be developed in the future, that would be protective of health risk exposure from air pollutant emissions. The study determines an appropriate buffer distance using a two-pronged approach: (1) a literature review of published best practices and recommendations and (2) a health risk screening assessment. In addition, publicly available emissions and records data (e.g., odor complaints) were also reviewed.

Source: Adapted by Ascent in 2025.

Figure 1 Project Vicinity

1.1 STATE GUIDANCE AND CRITERIA

1.1.1 California Air Resources Board

The California Air Resources Board (CARB) developed the *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook), which provides recommendations related to considering existing sensitive uses when siting new toxic air contaminant (TAC)-emitting facilities or concerning TAC-emitting sources when siting sensitive receptors in proximity to existing TAC sources. The guidance presented by CARB has been used to guide and inform land use policy decisions and to develop screening-level distance buffers to evaluate potential exposure to TAC sources. The Handbook provides recommended buffer distances between sensitive receptors and various TAC sources, including roadways/highways, distribution centers, rail yards, ports, refineries, chrome platers, dry cleaners, and gas dispensing facilities. Although the guidance is not regulatory or intended for use during site-specific TAC assessment, it can be used as an initial step in conducting a review for potential TAC exposure to inform further analysis. CARB-recommended buffer distances for various TAC sources are summarized below, in Table 1 (CARB 2005).

Table 1 CARB's Recommended Buffer Distance for Various Emission Source Categories

Source Category	Advisory Recommendations
Freeways and high-traffic roads	Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
Distribution centers	Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week). Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail yards	Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within 1 mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or CARB on the status of pending analyses of health risks.
Refineries	Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation.
Chrome platers	Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry cleaners using perchloroethylene	Avoid siting new sensitive land uses within 300 feet of any dry-cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. Do not site new sensitive land uses in the same building with perchloroethylene dry cleaning operations.
Gasoline-dispensing facilities	Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas-dispensing facilities.

Note: CARB = California Air Resources Board.

Source: CARB 2005.

1.1.2 Tanner Air Toxics Act (Assembly Bill 1807)

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (also referred to as AB 2588) (Air Toxics "Hot Spots" Act) is a California law that established a statewide program to address public concerns about toxic air contaminants. The act requires facilities that emit toxic substances to report emissions data, conduct health risk assessments, notify the public of potential health risks, and implement risk reduction plans. The act applies to facilities that manufacture, formulate, use, or release listed toxic substances or any substance that reacts to form a listed substance. It also applies to facilities that release total organic gases, particulates, or oxides of nitrogen or sulfur in

specified amounts. The Air Toxics "Hot Spots" Act requires air districts to prioritize and then categorize facilities to prepare health risk assessments. The California Air Pollution Control Officers Association (CAPCOA) has developed prioritization guidelines to assist in conducting these facility prioritization assessments, which includes procedures for calculating a facility's prioritization score based on emissions, potency, dispersion, and receptor proximity (CAPCOA 2016). Facilities subject to this act are regulated at the local/regional level through the local air district.

1.2 LOCAL GUIDANCE AND CRITERIA

1.2.1 Yolo-Solano Air Quality Management District

TOXIC AIR CONTAMINANTS

The Yolo-Solano Air Quality Management District (YSAQMD), the air district with jurisdiction over the facility, has adopted screening assessment criteria for TAC exposure based on CARB guidance. According to this guidance, YSAQMD considers sensitive receptors located beyond the CARB-recommended distances from any source category identified in the Handbook (Table 1) to not be exposed to elevated risk. In situations where housing and other facilities accommodating sensitive receptors in new development projects are located within the buffer distances recommended by CARB, YSAQMD recommends that lead agencies conduct further analysis to estimate health risk exposure.

YSAQMD has also prepared an annual report in accordance with the Air Toxics "Hot Spots" Act. The air district uses the same priorities and categories as in the CAPCOA guidelines and categorizes the facility as an "Intermediate Risk Facility" subject to complete a toxics survey every four years. However, because all data used in the modeling were not publicly available, this study conducts a prioritization assessment for the facility, using site-specific emissions data, as summarized in more detail below.

ODORS

Offensive odors are another source of concern when incompatible land uses are in proximity to each other. Odor impacts on residential areas and other sensitive receptors warrant close scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas. Screening of potential odor impacts should be conducted for the following two situations:

- projects that would potentially generate odorous emissions and are proposed to locate near existing sensitive receptors or other land uses where people may congregate and
- residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

YSAQMD recommends a one-mile buffer distance between sensitive land uses and odor-generating land uses, such as wastewater treatment facilities, landfills/composting, manufacturing operation, painting/coating operations, refineries, food processing facilities, batch plants, and asphalt plants

1.2.2 Sacramento Metropolitan Air Quality Management District

TOXIC AIR CONTAMINANTS

The Sacramento Metropolitan Air Quality Management District (SMAQMD) has not published specific guidelines detailing buffer distances between stationary sources of air pollution and sensitive receptors.

ODORS

SMAQMD recommended odor screening distances table lists suggested buffer distances for various odor-generating facilities. For food processing facilities, SMAQMD's recommended odor screening distance is 1 mile (SMAQMD 2009).

1.2.3 Bay Area Air Quality Management District

TOXIC AIR CONTAMINANTS

The Bay Area Air Quality Management District (BAAQMD) has developed various guidance documents intended to assist lead agencies conducting CEQA analyses and practitioners conducting the technical analyses. One such guidance document is the Recommended Methods for Screening and Modeling Local Risks and Hazards (BAAQMD 2012). This document provides detailed guidance on how to screen projects for potential risk and hazards impacts and, if necessary, how to conduct site-specific HRA modeling. Of note, specific guidance in this document recommends that if new sensitive receptors are located beyond 1,000 feet of all roadways or major sources, no further toxics analysis is recommended.

In addition to the above-referenced document, the BAAQMD published their CEQA Thresholds and Guidelines Update (2022 CEQA Guidelines), which includes guidance for lead agencies conducting CEQA review, including the threshold of significance for project-generated toxic impacts and cumulative toxic exposure (BAAQMD 2022). Specific guidance relating to conducting cumulative risk exposure assessment recommends using the BAAQMD's Stationary Source Screening Map to identify all TAC sources within a 1,000-foot distance of the study area.

ODORS

BAAQMD has developed a list of recommended odor-screening distances for specific odor-generating facilities. Projects that would site a new odor source farther than the applicable screening distance from an existing receptor may have a sufficient buffer to avoid a potentially significant impact. The odor screening distance for a food processing facility is 1 mile (BAAQMD 2022).

1.2.4 City of Dixon

The City of Dixon set air quality goals to protect the public from existing sources of nuisance odors and air pollution in its General Plan, Air Quality and Energy Element:

AQ GOAL 4. Windbreak establishments are encouraged to reduce the impact of wind-carried pollutants on residence. However, the city does not have specific buffer guidelines for siting new development near odor emission sources.

- Policy 4-2: Use landscaping to screen pollutants particularly near large sources of dust (vacant land or agricultural uses), along transportation corridors (railroad, I-80, and SR 113) or to mask odors (agricultural, commercial or industrial operations).

1.3 BUFFER ANALYSIS

1.3.1 Literature Review Synthesis

Based on the literature review conducted of State (i.e., CARB) and local air district guidance (i.e., YSAQMD, SMAQMD, BAAQMD), the following buffer distances can be recommended.

While CARB does not identify food processing facilities in their Handbook, they identify high-volume distribution centers (i.e., 100 trucks per day or more) and recommend a 1,000-foot buffer for sensitive land uses. Because the

facility operation involves 220 truck trips per day during tomato harvesting and processing season, the facility could generate emissions similar to a distribution center; thus, the 1,000-ft buffer distance per CARB would be reasonable for the facility. YSAQMD, the air district with jurisdiction over the facility, references the Handbook in their CEQA guide; thus, consistent with the above finding, a 1000-ft buffer distance would likely be acceptable for YSAQMD.

SMAQMD does not provide TAC screening distance for stationary emissions sources. BAAQMD uses a 1,000-ft screening distance in their 2022 CEQA Guidelines for cumulative risk exposure analysis and their 2016 Recommended Methods for Screening and Modeling Local Risks and Hazard document for determining when site-specific evaluations should be conducted.

Regarding odors, the three air districts (YSAQMD, SMAQMD, BAAQMD) closest to the facility all recommend a one-mile buffer between odor sources (such as the facility and sensitive uses). Public records were reviewed and there are no known odor complaints from the current facility; however, this is likely explained due to the limited number of nearby residences. In the future, if development were approved near the facility, new residential uses would be well within 1 mile of the facility. The nearest residence to the facility now is a home approximately 1,245 feet south of the facility.

Due to the subjective nature of odors, it is speculative to attempt to estimate the likelihood of the number of complaints that could arise in the future; however, understanding that the more people that are located in close proximity to an odor source, the more likely it is for an odor complaint to arise, it can be concluded that because more people would be located within recommended buffer distances (i.e., one mile), there would be an increased likelihood for the new population to be sensitive to odors from the facility.

In summary, the literature reviewed recommends that a 1,000-ft buffer would be adequate to protect sensitive receptors from emissions associated with the facility. Based on the literature reviewed, no specific buffer distance other than the one-mile buffer can be recommended, which would not be a practical recommendation in this case. It can be concluded that increasing the population adjacent to the operating facility does correlate with the potential to result in an increase in odor complaints compared to now.

1.4 SCREENING TAC ASSESSMENT

CAPCOA has developed the Facility Prioritization Guidelines to assist facilities and regulators in prioritizing facilities for further review (CAPCOA 2016). The procedures incorporate health risk assessment methodologies from the Office of Environmental Health Hazard Assessment (OEHHA 2015) and consist of a multistep process that involves calculating a score based on emissions, potency, receptor proximity, and potential dispersion, and then categorizing facilities as high, intermediate, or low priority based on these scores. These procedures help identify facilities that may require further health risk assessment and are subject to ongoing revisions to incorporate new scientific data and methodologies. The primary inputs used to conduct this assessment include:

- Emissions: The amount of toxic substances emitted by the facility.
- Potency or Toxicity: The inherent ability of a substance to cause harm. For carcinogens, this is represented by a unit risk factor. For non-carcinogens, it is represented by a reference exposure level.
- Receptor Proximity: The distance between the facility and potential receptors (e.g., residences, schools, hospitals).

Some air districts, including San Joaquin Valley Air Pollution District (SJVAPCD), have developed calculators allowing users to input facility data to generate prioritization scores. Further, individual air districts establish their prioritization score threshold. In YSAQMD, the following criteria are used to prioritize facilities:

- Low Priority: score less than 1
- Intermediate Priority: score between 1 and 10
- High Priority: score of 10 or higher

The SJVAPCD Prioritization Calculator was used to evaluate the facility's potential impact distances. Facility-specific emissions data was available for the operation of four boilers, one backup generator, two diesel storage tanks, a

Peraclean storage drum, and two cleaner storage tanks (Trinity 2021). The annual and hourly emissions of TACs from

all stationary sources were entered into the prioritization calculator. The emission units were considered to operate 2,880 hours per year (24 hours a day, 7 days a week for a 4-month tomato processing season). Outputs from the calculator generate facility scores for cancer, chronic, and acute risks at increasing distances from the source. Table 2 displays the result scores resulting from the facility's stationary source emissions. See Appendix A for detailed model inputs and outputs.

Table 2 Prioritization Scores Based on the Facility Emissions in 2021

Receptor Proximity (feet)	Cancer Score	Chronic Score	Acute Score	Max Score
0< R<328	36.8	7.6	16.8	36.8
328≤R<820	9.2	1.9	4.2	9.2
820≤R<1,640	1.5	0.3	0.7	1.5
1,640≤R<3,281	0.4	0.1	0.2	0.4
3,281≤R<4,921	0.1	0.0	0.1	0.1
4,921≤R<6,562	0.1	0.0	0.0	0.1
6,562<R	0.0	0.0	0.0	0.0

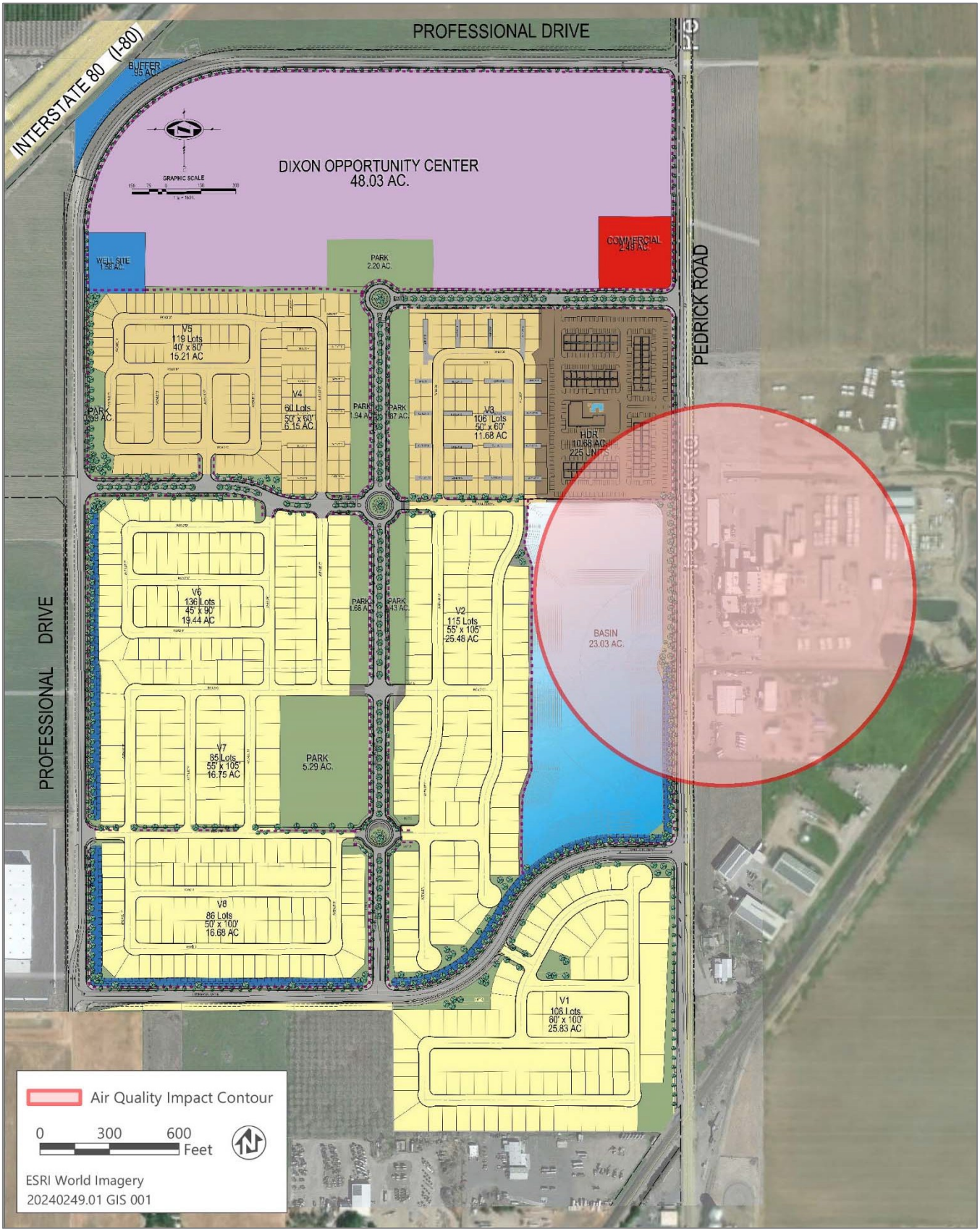
Notes: R is the distance between the source and the receptor.

Source: Modeled by Ascent in 2024

Based on the results of the screening analysis shown above in Table 2, if receptors were located within 328 feet of the facility, the risk would be considered high priority; if receptors were between 328 and 820 feet, the risk would be considered intermediate priority; and if receptors were located beyond 1,640 feet, the risk would be considered low priority.

1.5 RECOMMENDED AIR QUALITY BUFFER DISTANCE

It is understood that the CAPCOA prioritization procedure is inherently conservative in how facilities are evaluated, using worst-case dispersion factors, meteorological data, and cancer potency values; thus, in practice, when site-specific HRAs are prepared, the resultant risk is generally lower than what the prioritization calculation estimated. Provided that the literature recommends a 1000-ft buffer distance and the cutoff distance for intermediate risk (which is based on the YSAQMD's Prioritization Threshold of 10, in line with YSAQMD's CEQA Risk Threshold of 10 chances in on million), in combination with the understanding that risk is likely over estimated in this assessment, the cutoff distance between intermediate and high risk, of 820 feet is the recommended buffer distance to protect future sensitive receptors from elevated risk from the facility. Note that this is still less than the one-mile buffer recommended by YSAQMD between sensitive land uses and odor-generating land uses and may result in complaints from future residents. Figure 2 below depicts the recommended buffer distance to project future sensitive land uses from the facilities operations.



Source: Adapted by Ascent in 2025.

Figure 2 Air Quality Impact Contour

2 NOISE BUFFER ASSESSMENT

In addition to air quality considerations, a recommended buffer distance was also evaluated to protect future residential uses from noise exposure associated with facility operation. The basis of this assessment was the City of Dixon's exterior noise standards and available guidance from other federal and State agencies. The facility is currently in compliance with applicable noise standards and guidance as an industrial use located in an industrial district. However, the proposed development would alter the adjoining land use with the potential to apply much more stringent noise standards.

2.1 ACOUSTIC FUNDAMENTALS

Before discussing the noise setting for the project, background information about sound, noise, vibration, and common noise descriptors is needed to provide context and a better understanding of the technical terms referenced throughout this study.

Noise is defined as loud, unexpected, annoying, or unwanted sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions (e.g., physical barriers, ground absorption) or atmospheric factors (e.g., wind, cloud cover) affecting the propagation path to the receiver determine the sound level and characteristics of the noise perceived by the receiver.

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of hertz. Humans generally have an audible frequency range between 20 Hz and 20,000 Hz. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range This range of sound is commonly referred to as an A-weighted decibel (dBA), which is the unit of sound used in this study to evaluate noise against applicable standards.

2.1.1 Common Noise Descriptors

Noise in our daily environment fluctuates over time. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used throughout this study.

- **Equivalent continuous sound level (L_{eq}):** L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013a: 2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period.
- **Percentile-exceeded sound level (L_X):** L_X represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10 percent of the time, and L_{90} is the sound level exceeded 90 percent of the time) (Caltrans 2013a: 2-16).
- **Maximum sound level (L_{max}):** L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013a: 2-48; FTA 2018: 207–208).
- **Day-night level (L_{dn}):** L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-decibels (dB) "penalty" applied to sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m. (Caltrans 2013a: 2-48; FTA 2018: 214).
- **Sound equivalent level (SEL):** SEL is the cumulative noise exposure from a single noise event, normalized to 1 second. SEL contains the same overall sound energy as the actual varying sound energy during the event. It is the primary metric for the measurement of transit vehicle noise emissions and is an intermediate metric in the

measurement and calculation of both $L_{eq(t)}$ and L_{dn}. (FTA 2018: 214).

2.1.2 Human Response to Changes in Noise Levels

Due to the logarithmic nature of how sound levels are combined, the doubling of sound energy results in a 3 dB increase in the sound level. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different from what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear can discern 1 dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the midfrequency (1,000–8,000 Hz) range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 Hz and perceives higher and lower frequency sounds of the same magnitude with less intensity (Caltrans 2013a: 2-18). In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Furthermore, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness (Caltrans 2013a: 2-10). Therefore, a doubling of sound energy (e.g., doubling the traffic volume on a highway) that would result in a 3 dB increase in sound would generally be perceived as barely detectable.

2.2 EXISTING NOISE-SENSITIVE LAND USES

Noise-sensitive land uses are generally considered to include uses where noise exposure could result in health-related risks to individuals and places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels and because of the potential for nighttime noise to result in sleep disruption. Additional land uses, such as schools, transient lodging, historic sites, cemeteries, and places of worship, are also generally considered sensitive to increases in noise levels.

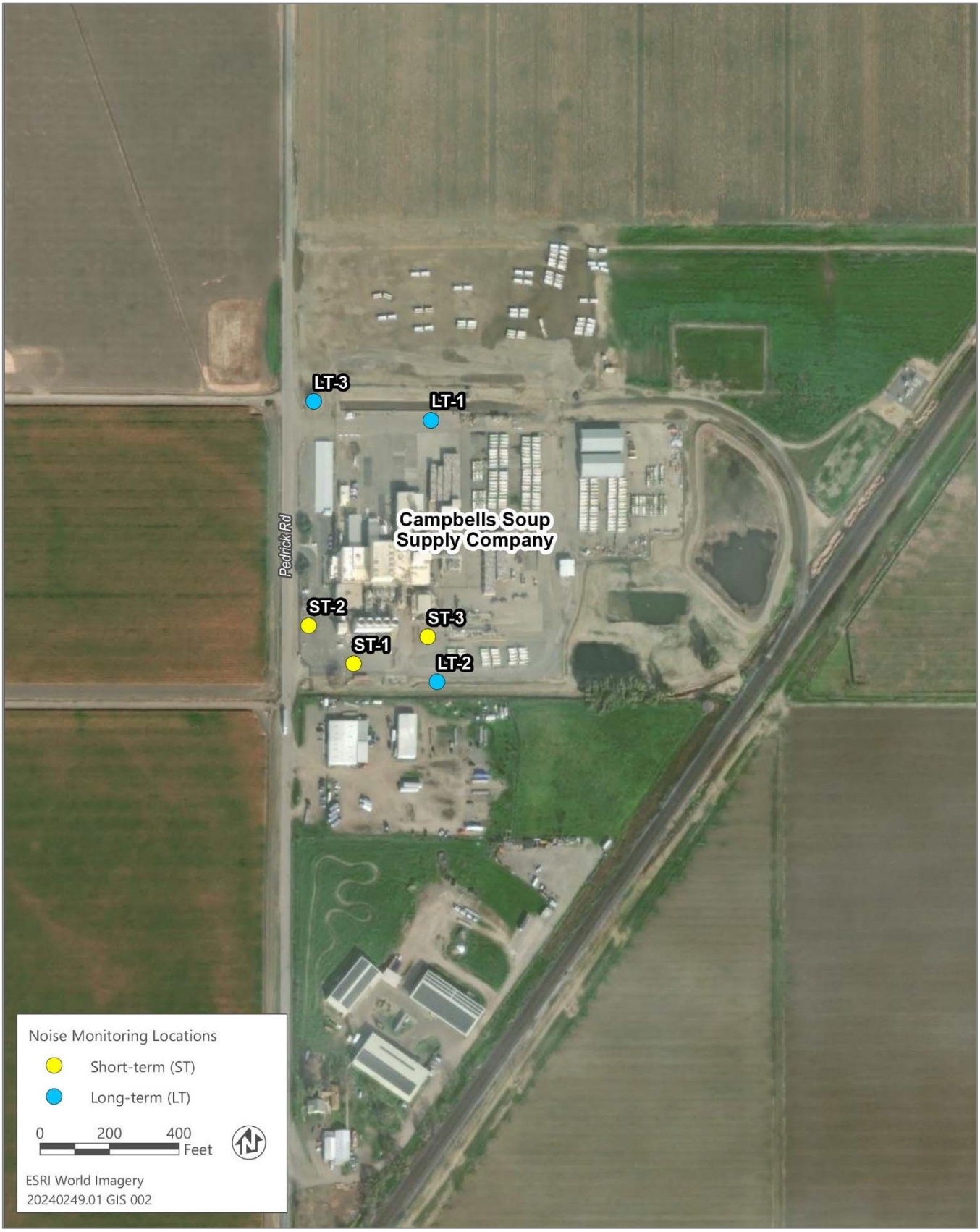
The existing facility is located at 8380 Pedrick Road in Dixon, California, and is surrounded entirely by vacant agriculture land, with few single-family homes dispersed throughout the area; however, all existing homes are beyond 1,000 feet from the facility.

2.2.1 Existing Noise Sources and Ambient Levels

The sound levels in most communities fluctuate depending on the activity of nearby and distant noise sources, time of the day, and season of the year, with major roads and highways typically the primary sources of ambient noise. The road closest to the project site includes Pedrick Road directly bordering the subject property. The Union Pacific Railroad (UPRR), consisting of freight and passenger rail, is located east of the project site. Noise levels generated by the facility vary throughout the year, with maximum operating activities and associated noise occurring during the July to October production season. During off-season months, on-site equipment and associated tomato-hauling operations do not operate.

Ambient noise surveys were conducted during both the nonproduction period of the year and peak production times to establish existing noise levels. During the nonproduction season—November to June—an ambient noise survey that quantified the noise levels from existing noise sources was taken during preparation of the Campus EIR (Saxelby Acoustics 2024). In addition, noise levels during the peak production season of July to October were established using three long-term (LT) (24-hour) and four short-term (ST) (less than 1 hour) measurements, conducted using a Larson Davis Laboratories LxT Type 1 and two Piccolo II Type 2 precision integrating sound level meters on Thursday, October 17 through October 18, 2024. Ambient noise levels of the existing noise environment during non-tomato growing season were established using two subsequent 24-hour long-term measurements from the Campus EIR, denoted at LT-2. The meters were calibrated before use with a Larson Davis Laboratories Model CAL200 acoustical calibrator to ensure measurement accuracy. Noise measurements were used to quantify individual noise sources on the project site; LT-1 was placed on the southern boundary of the project site within line of sight of mechanical blower equipment; LT-2 was placed on the northern boundary adjacent to driving lanes and within line of sight of adjacent mechanical equipment; LT-3 was placed adjacent to Pedrick Road to quantify noise levels at the project site

boundary. The measurement equipment meets all pertinent specifications of the American National Standards Institute. The locations of the noise monitoring sites are shown in Figure 3. Results from LT measurements are summarized in Table 3, and results from the ST measurements are summarized in Table 4.



Source: Adapted by Ascent in 2024.

Figure 3 Noise Measurement Locations

Table 3 Long-Term Noise Measurement Summary

Long-Term			L_{dn}	Daytime (7:00 a.m. to 10:00 p.m.) Average Over Measurement			Nighttime (10:00 p.m. to 7:00 a.m.) Average Over Measurement		
				L_{eq}	L_{max}	L_{50}	L_{eq}	L_{max}	L_{50}
LT-1	October 18, 2024	12:00 a.m. to 12:00 p.m.	82	75	87	74	75	84	75
LT-2[1]	November 29, 2023	12:00 a.m. to 12:00 p.m.	70	67	84	60	63	80	54
	November 30, 2023		69	67	84	58	62	81	54
LT-3	October 18, 2024	12:00 a.m. to 12:00 p.m.	90	83	90	82	83	90	83
LT-4	October 18, 2024	12:00 a.m. to 12:00 p.m.	73	67	79	65	67	78	66

Notes: LT=long-term; L_{dn} = day-night level; L_{eq} = equivalent continuous sound level; L_{max} = maximum noise level; L_{50} = sound level exceeded 50 percent of the time.

[1] Data obtained from the Campus EIR.

Refer to Figure 3 for ambient noise level measurement locations.

See Appendix A for detailed noise measurement data.

Source: Data provided by Ascent in 2024 and Saxelby Acoustics in 2023.

Table 4 Short-Term Noise Measurement Summary

Measurements		L_{eq}	L_{max}	L_{50}
ST-1 (15-minute)	9:44 a.m. to 9:59 a.m.	74.7	79.2	74.6
ST-2 (8-minute)	10:05 a.m. to 10:14 a.m.	77.0	93.0	72.7
ST-3 (15-minute)	10:18 a.m. to 10:33 a.m.	85.2	87.2	85.2
ST-4 (15-minute)	10:38 a.m. to 10:53 a.m.	74.2	78.6	74.1

Notes: ST= short-term; L_{eq} = equivalent continuous sound level; L_{max} = maximum noise level; L50 = sound level exceeded 50 percent of the time.

Refer to Figure 2 for ambient noise level measurement locations.

See Appendix A for detailed noise measurement data.

Source: Data provided by Ascent in 2024.

3 REGULATORY CONTEXT

3.1 FEDERAL

3.1.1 Federal Interagency Committee on Noise

A single event is an individual distinct loud activity, such as a blasting event, an aircraft overflight, a train or truck passage, or any other brief and discrete noise-generating activity. Noise exposure quantified in terms of 24-hour-averaged descriptors, such as L_{dn} or community noise equivalent level (CNEL), can mask the potential for annoyance or sleep disturbance associated with individual loud events due to the averaging process.

Extensive studies have been conducted regarding the effects of single-event noise on sleep disturbance, with the SEL metric commonly used for such assessments. SEL represents the entire sound energy of a given single event normalized into a 1-second period regardless of event duration. As a result, the single-number SEL metric contains information pertaining to both event duration and intensity. Another descriptor utilized to assess single-event noise is the maximum, or L_{max}, noise level associated with the event. A problem with utilizing L_{max} to assess single events is that the duration of the event is not considered. Due to the wide variation in test subjects' reactions to noises of various levels (some test subjects were awakened by indoor SEL values of 50 dB, whereas others slept through indoor SEL values exceeding 80 dB), no definitive consensus has been reached with respect to a universal criterion to apply to environmental noise assessments. The Federal Interagency Committee on Aviation Noise (FICAN) has provided

estimates of the percentage of people expected to be awakened when exposed to specific SEL inside a home (FICAN 1997). According to the FICAN study, an estimated 5 to 10 percent of the population is affected when interior SEL noise levels are between 65 and 81 dB, and few sleep awakenings (less than 5 percent) are predicted if the interior SEL is less than 65 db.

3.1.2 State

California Building Code Sound Transmission Standards

Noise within habitable units that is attributable to external sources is regulated by the California Building Standards codified in California Code of Regulations (CCR), Title 24, Part 2, Section 1207. These standards are enforceable at the time of construction or during occupancy and apply to habitable units with common interior walls, partitions, and ceilings or those adjacent to public areas such as halls, corridors, stairways, and service areas. Under these standards, the interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metrics used to measure these levels can be L_{dn} or CNEL, consistent with the local general plan. Under California Public Resources Code Section 25402.1(g), all cities and counties in the state are required to enforce the adopted California Building Code, including these standards for noise in interior environments.

3.1.3 Local

CITY OF DIXON GENERAL PLAN

The City of Dixon provides Community Noise Compatibility standards which are used for evaluating existing noise level exposure of proposed development sites. Applicable to this assessment includes the compatibility standards for low-density residential and multi-family residential uses. Compatibility standards are characterized into "Normally Acceptable," "Conditionally Acceptable," "Normally Unacceptable," and "Clearly Unacceptable." See Table 5 below for standards.

Table 5 City of Dixon Community Noise Compatibility Matrix

Land Use Category	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Residential (low-density single family, duplex, mobile home)	< 60 dBA	55-70 dBA	70-75 dBA	>75 dBA
Residential (Multi-family)	< 65 dBA	60-70 dBA	70-75 dBA	>75 dBA

[1] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any building involved are of normal conventional construction, without any special noise insulation requirement. Outdoor areas are suitable for normal outdoor activities for this land use.

[2] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air-conditioning, will normally suffice.

[3] Normally Unacceptable: New construction or development should generally be discouraged. If new construction of development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

[4] Clearly Unacceptable: New construction or development should generally not be undertaken.

Considerations in determination of noise–compatible land use:

A. Normalized Noise Exposure Information Desired

Where sufficient data exists, evaluate land use suitability with respect to a "normalized" value of CNEL or L_{dn}. Normalized values are obtained by adding or subtracting the constants described in Table I to the measured or calculated value of CNEL or L_{dn}.

B. Noise Source Characteristics

The land use–noise compatibility recommendations should be viewed in relation to the specific source of the noise. For example, aircraft and railroad noise is normally made up of higher single noise events than auto traffic but occurs less frequently. Therefore, different sources yielding the same composite noise exposure do not necessarily create the same noise environment. The State Aeronautics Act uses 65 dB CNEL as the criterion that airports must eventually meet to protect existing residential communities from

unacceptable exposure to aircraft noise. In order to facilitate the purposes of the act, one of which is to encourage land uses compatible with the 65 dB CNEL criterion wherever possible and in order to facilitate the ability of airports to comply with the act, residential uses located in community noise exposure areas greater than 65 dB should be discouraged and considered to be located within normally unacceptable areas.

C. Suitable Interior Environments:

One objective of locating residential units relative to a known noise source is to maintain a suitable interior noise environment at no greater than 45 dB CNEL or L_{dn}. This requirement, coupled with the measured or calculated noise reduction performance of the type of structure under consideration should govern the minimum acceptable distance to a noise source.

D. Acceptable Outdoor Environments:

Another consideration, which in some communities is an overriding factor, is the desire for an acceptable outdoor noise environment. When this is the case, more restrictive standards for land use compatibility, typically below the maximum considered "normally acceptable" for that land use category, may be appropriate.

Notes: The CNEL and L_{dn} are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day was averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 pm and 10:00 pm and a 10-decibel penalty on noise between 10:00 pm and 7:00 am the next day. The L_{dn} includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

Source: City of Dixon General Plan 2021

CITY OF DIXON MUNICIPAL CODE

Section 18.17.110, "Noise," of the City of Dixon Municipal Code includes the following applicable noise standards.

Section 18.17.110.A: Noise Limits. Unless excepted pursuant to subsection C of this section, Noise Limit Exceptions, no land use shall generate sound exceeding the maximum levels identified in Table 18.17.110.A: Noise Limits [presented in this report as Table 6] or as amended pursuant to the correction factors in Table 18.17.110.B, Noise Limit Correction Factors [presented as Table 6].

Table 6 Noise Limits

Zoning District		Maximum Sound Pressure Level in Decibels
Residential districts	RL	55 dB
	RM	60 dB
Commercial and mixed-use districts		70 dB
Industrial districts		75 dB

Notes: RL = residential low-density; RM = residential multi-family; dB = decibels.

Source: City of Dixon Municipal Code 18.17.110.

B. Noise Limit Correction Factors. The following correction factors shall be applied to the maximum sound pressure levels in Table 18.17.110.A: Noise Limits [presented in Table 7]:

Table 7 Noise Limits Correction Factors

Time and Operations of Type of Noise	Correction in Maximum Permitted Decibels
Emission only between 7 a.m. and 10 p.m.	Plus 5
Noise of unusual impulsive character such as hammering or drill pressing	Minus 5
Noise of unusual periodic character such as hammering or screeching	Minus 5

Source: City of Dixon Municipal Code 18.17.110.

C. Noise Limit Exceptions. The following sounds may exceed the maximum sound pressure levels established in Table 18.17.110.A: Noise Limits [presented in Table 6]:

1. Time signals produced by places of employment or worship and school recess signals providing no one sound exceeds five (5) seconds in duration and no one series of sounds exceeds twenty-four (24) seconds in duration;
2. Sounds from transportation equipment used exclusively in the movement of goods and people to and from a given premises, temporary construction or demolition work; and
3. Sounds made in the interests of public safety.

4 CRITERIA FOR ESTABLISHING BUFFER DISTANCE

To establish appropriate buffer distances, a combination of allowable noise levels from the City of Dixon Municipal Code and General Plan and sleep disturbance recommendations from FICAN were applied, as summarized below.

Short-Term Hourly Noise that Exceeds City of Dixon's Stationary Noise Standards

- Single-family homes: 60 dBA L_{eq} daytime (7:00 a.m. to 10:00 p.m.) adjusted with noise correction factors and 55 dBA L_{eq} nighttime (10:00 p.m. to 7:00 a.m.)
- Multifamily homes: 65 dBA L_{eq} daytime (7:00 a.m. to 10:00 p.m.) adjusted with noise correction factors and 60 dBA L_{eq} nighttime (10:00 p.m. to 7:00 a.m.)

Long-Term 24-Hour Community Noise that Exceeds City of Dixon's Unacceptable Levels

- Single-family and multifamily homes: 70 dBA L_{dn}

Nighttime Sleep Disturbance Criteria

- FICAN's recommended sleep disturbance noise standard for indoor noise levels of where people sleep of 65 dB SEL or exterior noise levels of 85 dB SEL during nighttime (10:00 p.m. to 7:00 a.m.) hours

5 BUFFER ASSESSMENT

Operational noise levels were modeled using SoundPLAN noise modeling software. Operational noise levels were estimated using project-specific information, where available, and default values in SoundPLAN based on the project's location, topography, ground effects, and noise data collected during the ambient noise survey, described above. Noise levels were modeled based on project-specific noise sources, such as mechanical equipment and truck circulation. Notably, regarding noise in general, noise levels are presented with an associated reference distance from the source. This accounts for the fact that noise perception decreases as the distance between a receiver and a source increases.

Operation of the facility includes several stationary noise sources, including on-site mechanical equipment and noise from truck circulation. The facility operates 24 hours a day 7 days a week during the tomato growing season: July to October. For the purposes of this analysis, existing operational noise sources are assumed to operate simultaneously, and as such, noise levels generated by the facility are logarithmically added from each source, to generate noise contours associated with the facility.

The facility uses several pieces of machinery within its operation, such as mechanical blowers, boilers, flash coolers, and other processing equipment. To quantify the noise levels generated by these sources, noise measurements were taken in areas surrounding the project site within the line of sight of operating mechanical equipment. The most substantial noise-generating mechanical equipment was observed to be the mechanical blowers and boilers located at the southern portion of the factory. It should be noted that the existing boilers are equipped with safety release valves that could infrequently produce high noise levels at adjacent sensitive land uses.

The facility operations include transporting tomatoes to and from the project site using heavy trucks. Heavy truck lanes are located at the northern and southern portions of the project site, connected to Pedrick Road. Trucks loaded with harvested tomatoes arrive at the project site through the southern driving lanes and exit the facility through the

northern driving lane without any loads. Truck circulation on the project site is expected to occur anytime during a 24-hour day.

5.1 HOURLY AVERAGE NOISE STANDARDS

The City of Dixon categorizes noise standards by time of occurrence—such as daytime hours from 7:00 a.m. to 10:00 p.m. and nighttime hours from 10:00 p.m. to 7:00 a.m.—and low-density residential and multifamily land uses. East of the facility, land could contain a mix of low-density and multifamily residential uses. Noise was evaluated using the various noise standards/metrics and considering the future proposed site plan, adjacent to the facility, as described in detail below.

5.1.1 Daytime Noise Standards (L_{eq})

The facility is expected to be operational during any daytime hour during the tomato growing season (i.e., 24 hours per day). The City of Dixon established a residential noise standard of 55 dBA L_{eq} for low-density residential and 60 dBA L_{eq} for multifamily residential land uses, as shown in Table 6. However, a noise correction factor is applied to applicable noise standards for noise emissions during the hours of 7:00 a.m. to 10:00 p.m. of plus 5 dB. Daytime hours are considered less sensitive than nighttime hours, and the 5 dB increase to the applicable noise standard should be applied to reflect this.

Therefore, a 60 dBA L_{eq} daytime noise standard for low-density residential and a 65 dBA L_{eq} daytime noise standard for multifamily residential shall apply at adjacent land uses. The facility daytime operations are expected to be compatible with sensitive low-density land uses at a distance 1,550 feet or greater and multifamily land uses at a distance of 930 feet or greater. The 60 dBA L_{eq} and the 65 dBA L_{eq} noise contour is shown below in Figure 4.

5.1.2 Nighttime Noise Standards (L_{eq})

The facility is expected to be operational during any nighttime hour during the tomato growing season (i.e., 24 hours per day). The City of Dixon establishes a residential noise standard of 55 dBA L_{eq} for low-density residential and 60 dBA L_{eq} multifamily residential land uses, as shown in Table 6. Therefore, a 55 dBA L_{eq} nighttime noise standard for low-density residential and a 60 dBA L_{eq} nighttime noise standard for multifamily residential shall apply at adjacent land uses. The facility's nighttime operations are expected to be compatible with sensitive low-density land uses at a distance of 2,547 feet or greater and multifamily land uses at a distance of 1,550 feet or greater. The 55 dBA L_{eq} and 60 dBA L_{eq} noise contour are shown below in Figure 4.

5.2 24-HOUR NOISE COMPATIBILITY STANDARDS

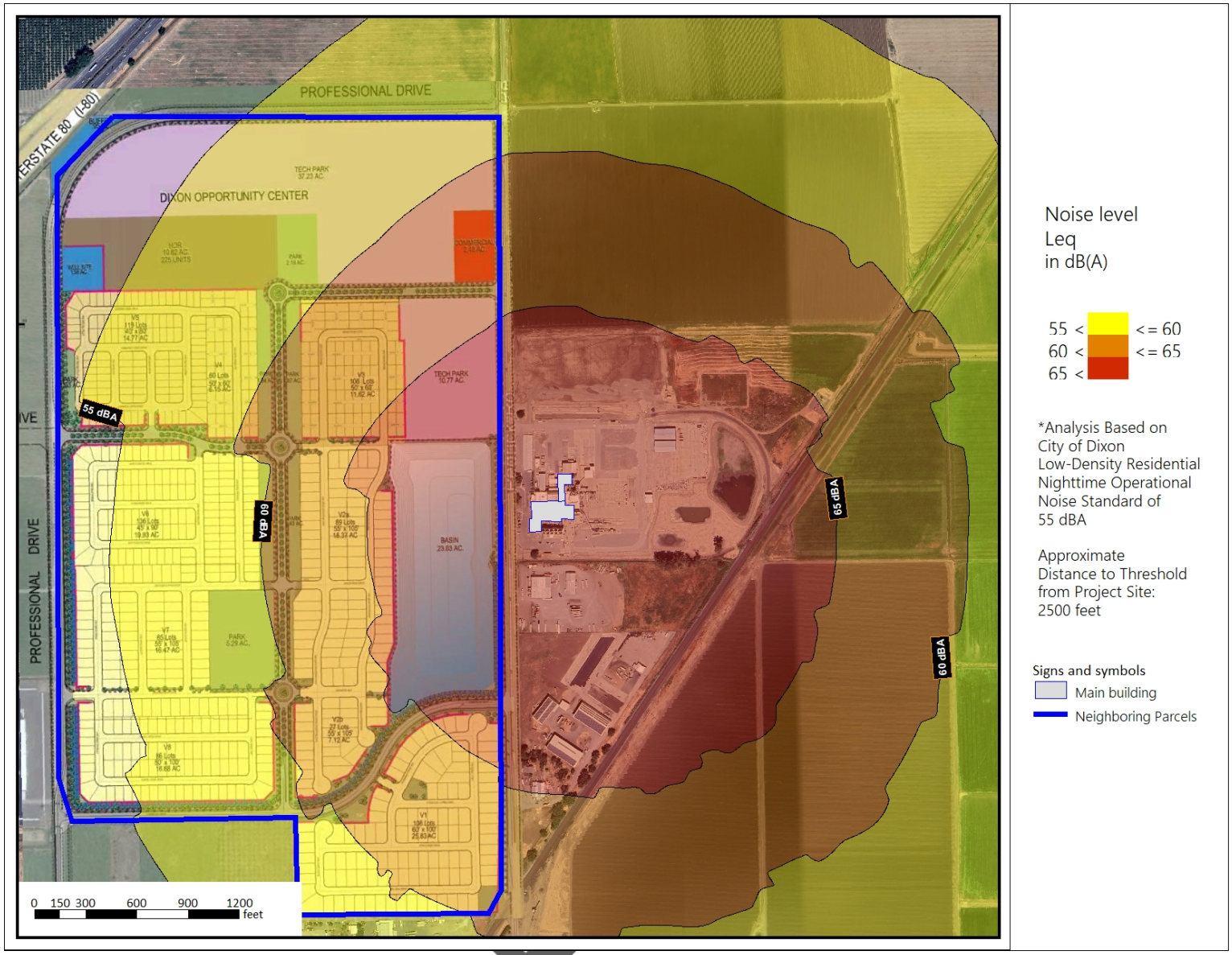
The City of Dixon provides Community Noise Compatibility standards which are used for evaluating existing noise level exposure of proposed development sites. Applicable to this assessment includes the compatibility standards for low-density residential and multi-family residential uses. Compatibility standards are characterized into "Normally Acceptable," "Conditionally Acceptable," "Normally Unacceptable," and "Clearly Unacceptable." The compatibility of low-density and multifamily land uses (i.e., 70 dBA L_{dn}) within 1,065 feet of the facility would be considered "normally unacceptable." Sensitive land uses within this distance would require additional noise reduction requirements to reduce interior noise levels to acceptable levels. The 70 dBA CNEL noise contour is shown below in Figure 5.

5.3 SLEEP DISTURBANCE

In addition to the evaluation of short-term hourly and long-term 24-hour noise standards, the potential for sleep disturbance was also evaluated due to the 24-hour operational schedule of the facility. Specifically, this assessment

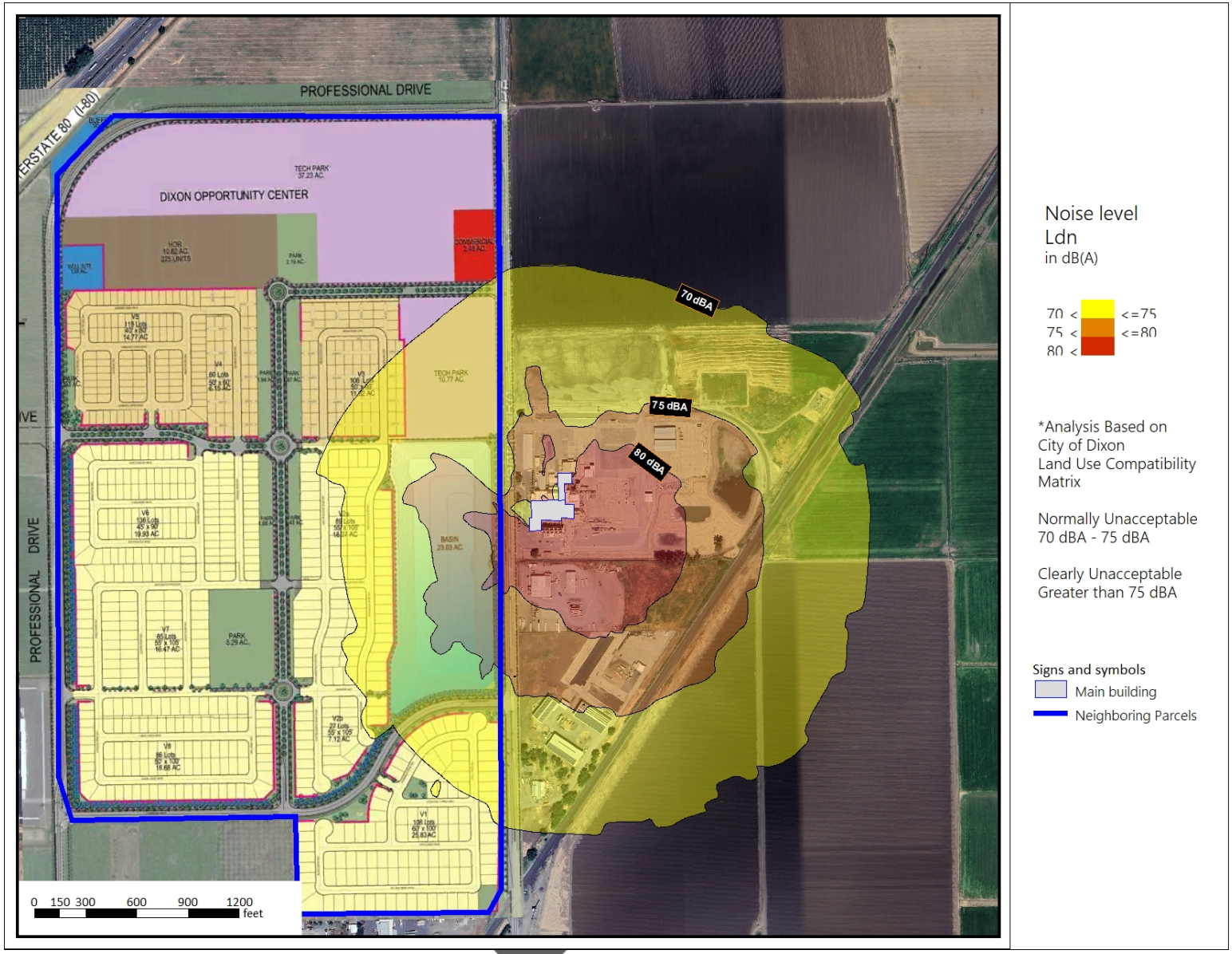
was applied to the boiler safety valve noise source, which generates an instantaneous intermittent whistle sound (likened to a large tea kettle).

As discussed above, FICAN has provided estimates of the percentage of people expected to be awakened when exposed to specific SEL inside a home (FICAN 1997). According to the FICAN study, an estimated 5 to 10 percent of the population is affected when interior SEL noise levels are between 65 and 81 dB, and few sleep awakenings (less than 5 percent) are predicted if the interior SEL is less than 65 dB. Assuming a 20 dB noise level reduction from modern building construction, an exterior noise standard of 85 dB SEL was applied at a buildings' exterior. Land uses within 700 feet of the facility would comply with the FICAN sleep disturbance standard of 85 dB SEL. Because the 85 dBA SEL contour is less than the aforementioned contours, achieving the L_{eq} or 24-hour CNEL standards would also achieve this standard, and no contour was developed.



Source: Prepared by Ascent in 2025.

Figure 4 City of Dixon Stationary (L_{eq}) Noise Standard Contours



Source: Prepared by Ascent in 2025.

Figure 5 City of Dixon Land Use Compatibility Standard (Ldn) Contours

5.3.1 Summary

Project operation during tomato growing season would result in stationary noise sources, including on-site mechanical equipment and truck circulation. As described above, it is expected that the facility will be operational during any hour of the day during the tomato growing season: July to October. Sensitive receptors within the distances described in Table 8 would be exposed to noise levels that exceed the applicable City of Dixon and FICAN noise standards.

Table 8 Facility Buffer Distances for Various Noise Standards

Noise Source	Threshold Applied[1]	Approximate Distance Where Standard is Exceeded (feet)[4]
Campbell Soup factory	70 dBA L_{dn}[2]	1,065
	High-density daytime: 65 dBA L_{eq}[3]	930
	High-density nighttime: 60 dBA L_{eq}[3]	1,550
	Low-density daytime: 60 dBA L_{eq}[3]	1,550
	Low-density nighttime: 55 dBA L_{eq}[3]	2,547
Boiler safety valves	85 dBA SEL	700

Notes: L_{dn} = day-night level; L_{eq} = average noise level over a period of time; SEL = sound exposure level; dBA = A-weighted decibels.

[1] Potential Future receptors located at adjacent sensitive land use west of the project site.

[2] Threshold based on medium-density noise standard, according to the City of Dixon Municipal Code.

[3] As measured from adjacent parcel boundary.

Source: Data modeled by Ascent in 2024.

5.4 RECOMMENDED BUFFER DISTANCE

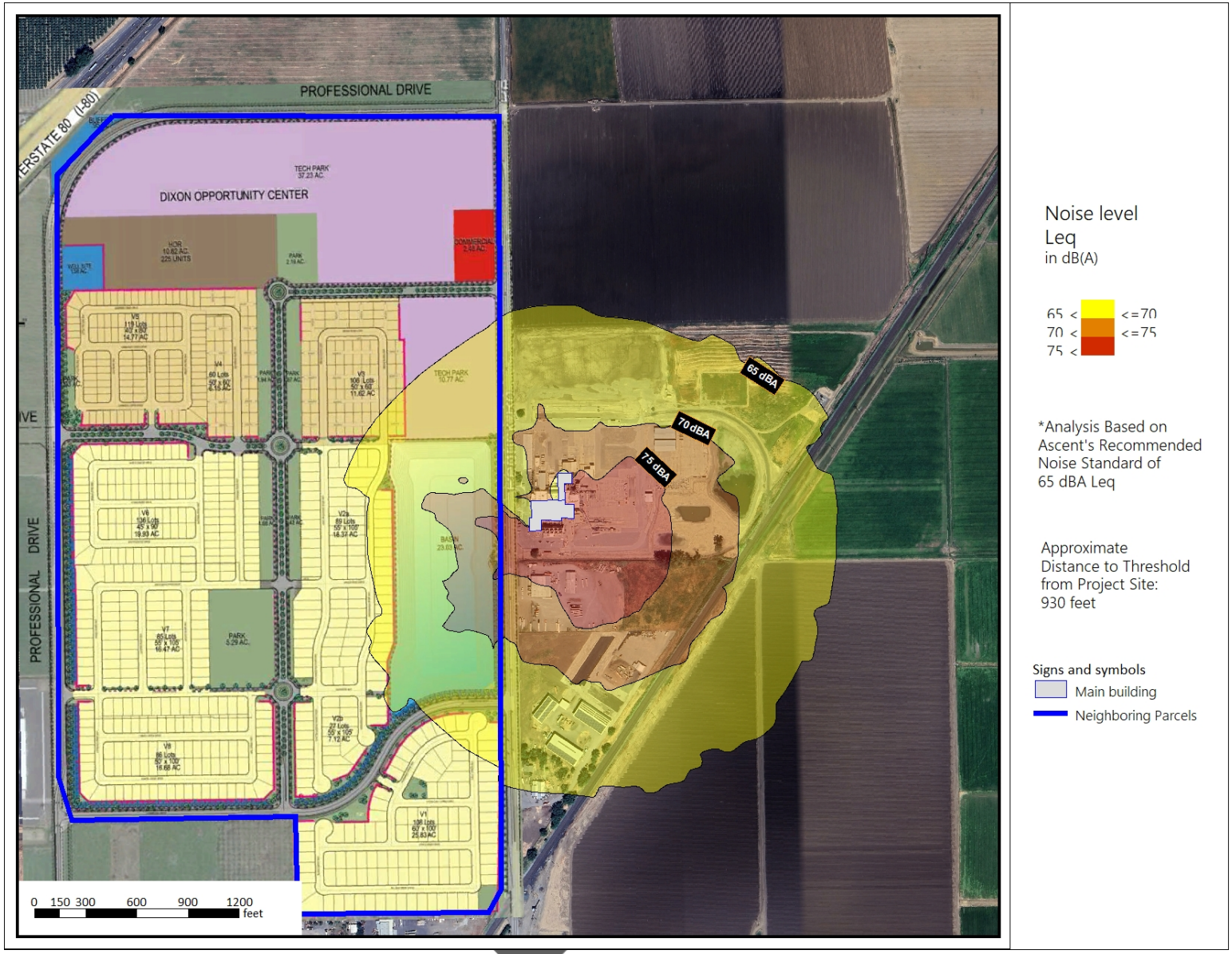
A 2,547-foot buffer distance from the project site is based on complying with the low-density residential land uses nighttime noise standard for stationary sources (i.e., 55 dBA L_{eq}). At this distance, not accounting for any future noise reductions from the first row of structures between the facility and subsequent rows of structures, all daytime and nighttime noise standards would not be exceeded at any future resident, with no additional measures (e.g., exterior sound barriers, improved building design) required. Therefore, the distance to the most stringent nighttime standard of 2,547 ft, could be considered a minimum buffer distance.

In practice, however, a buffer distance of 2,547 feet would not be a practical application of the City of Dixon low-density nighttime standard of 55 dBA L_{eq} because 1) the facility would not operate 24 hours per day all year round, 2) as development occurs, the first row of structures (closest to the facility) would provide some sound dampening, reducing the contour distance at subsequent homes, further away, and 3) noise exposure at future residents can be reduced through certain design considerations (explained below). Thus, it's reasonable to adjust the buffer to minimize noise exposure.

As described above, in the footnotes to Table 5 (Suitable Interior Environments), when locating residential units relative to a known noise source, maintaining a suitable interior noise environment that considers the exterior to interior reductions afforded by the building design, is an acceptable consideration in determining noise exposure. Further, the current California Building Code (2022 California Building Code Appendix Ak) establishes a sound transmission class (STC) rating of 45 for wall and floor-ceiling assemblies and an interior noise standard of 45 dBA.

Considering this, standard new residential structures would be expected to achieve anywhere from 20 to 45 dBA exterior-to-interior noise reduction. Applying the 20 dBA reduction (which is more commonly applied and easily achievable), exterior noise levels of 65 dBA L_{eq} would effectively be reduced to 45 dBA L_{eq} inside new structures. Therefore, Ascent recommends the application of a 65 dBA L_{eq} exterior noise level standard for determining

compatibility with new residential uses. Using a recommended exterior noise level standard of 65 dBA L_{eq}, sensitive land uses are expected not to be exposed to excessive noise levels within a distance of 930 feet from the property line of the facility. In addition, at this buffer distance, further measures can be considered to achieve the nighttime standard of 55 dBA L_{eq}, as solid concrete masonry sound barriers can readily achieve 10-dBA reduction (assuming they block the line-of-sight between the noise source and the receiver) (FHWA 2006), or improved building insulation (e.g., triple-pane windows) can achieve suitable interior noise levels. Figure 6 summarizes the extent of the noise contours in reference to Ascent's recommended noise standard of 65 dBA L_{eq}. The noise buffer distance is slightly greater than the air quality buffer distance (i.e., 930 feet compared to 820 feet); thus, it represents a more protective buffer that would suffice for protection from both air toxics and noise.



Source: Prepared by Ascent in 2025.

Figure 6 Noise Contours in Reference to the Recommended Noise Standard

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Appendix A

- TAC Prioritization Calculator
- Noise Measurement Data

Name

Prioritization Calculator

Applicability	Use to provide a Prioritization score based on the emission potency method. Entries required in yellow areas, output in gray areas.
Author or updater	Matthew Cegielski — *Last Update* December 1, 2022
Facility:	Campbell Soup Supply Company
ID#:	
Project #:	
Unit and Process#	1-0 p1
Operating Hours hr/yr	2,880.00

Receptor Proximity and Proximity Factors		Cancer Score	Chronic Score	Acute Score	Max Score
0< R<100	**1.000**	36.8	7.6	16.8	36.8
100≤R<250	**0.250**	9.2	1.9	4.2	9.2
250≤R<500	**0.040**	1.5	0.3	0.7	1.5
500≤R<1000	**0.011**	0.4	0.1	0.2	0.4
1000≤R<1500	**0.003**	0.1	0.0	0.1	0.1
1500≤R<2000	**0.002**	0.1	0.0	0.0	0.1
2000<R	**0.001**	0.0	0.0	0.0	0.0

Receptor proximity is in meters. Priortization scores are calculated by multiplying the total scores summed below by the proximity factors. Record the Max score for your receptor distance. If the substance list for the unit is longer than the number of rows here or if there are multiple processes use additional worksheets and sum the totals of the Max Scores.

Use the substance dropdown list in the CAS# Finder to locate CAS# of substances.

Substance	CAS# Finder
Wood preservatives (containing arsenic and chromate)	1206

1-0 p1

Enter the unit's CAS# of the substances emitted and their amounts.

Prioritzation score for each substance generated below. Totals on last row.

Substance	CAS#	MW Correction	Annual Emissions (lbs/yr)	Maximum Hourly (lbs/hr)	Corrected Annual Emissions (lbs/yr)	Corrected Maximum Hourly (lbs/hr)	Average Hourly (lbs/hr)	Cancer	Chronic	Acute
2-Methyl naphthalene	91576	1.0000	3.48E-03	2.89E-06	3.48E-03	2.89E-06	1.21E-06	0.00E+00	0.00E+00	0.00E+00
3-Methylcholanthrene	56495	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7,12-Dimethylbenz[a]anthracene	57976	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acenaphthene	83329	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acenaphthylene	208968	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Anthracene	120127	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benz[a]anthracene	56553	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	71432	1.0000	3.05E-01	2.53E-04	3.05E-01	2.53E-04	1.06E-04	6.81E-02	5.30E-03	1.41E-02
Benzo[a]pyrene	50328	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo[b]fluoranthene	205992	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo[g,h,i]perylene	191242	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo[k]fluoranthene	207089	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chrysene	218019	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Dibenz[a,h]anthracene	53703	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Dichlorobenzenes (mixed isomers)	25321226	1.0000	1.70E-01	1.45E-04	1.70E-01	1.45E-04	5.90E-05	0.00E+00	0.00E+00	0.00E+00
Fluoranthene	206440	1.0000	4.35E-04	3.62E-07	4.35E-04	3.62E-07	1.51E-07	0.00E+00	0.00E+00	0.00E+00
Fluorene	86737	1.0000	4.06E-04	3.38E-07	4.06E-04	3.38E-07	1.41E-07	0.00E+00	0.00E+00	0.00E+00
Formaldehyde	50000	1.0000	1.09E+01	9.04E-03	1.09E+01	9.04E-03	3.78E-03	5.03E-01	6.30E-02	2.47E-01
Hexane	110543	1.0000	2.61E+02	2.20E-01	2.61E+02	2.20E-01	9.07E-02	0.00E+00	1.94E-03	0.00E+00
Indeno[1,2,3-cd]pyrene	193395	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Naphthalene	91203	1.0000	9.00E-02	7.36E-05	9.00E-02	7.36E-05	3.13E-05	2.36E-02	5.21E-04	0.00E+00
Phenanthrene	85018	1.0000	2.47E-03	2.05E-06	2.47E-03	2.05E-06	8.58E-07	0.00E+00	0.00E+00	0.00E+00
Pyrene	129000	1.0000	7.25E-04	6.03E-07	7.25E-04	6.03E-07	2.52E-07	0.00E+00	0.00E+00	0.00E+00
Toluene	108883	1.0000	4.90E-01	4.10E-04	4.90E-01	4.10E-04	1.70E-04	0.00E+00	6.08E-05	1.23E-04
Arsenic	7440382	1.0000	3.00E-02	2.41E-05	3.00E-02	2.41E-05	1.04E-05	7.62E-01	1.04E-01	1.81E-01
Barium	7440393	1.0000	6.40E-01	5.31E-04	6.40E-01	5.31E-04	2.22E-04	0.00E+00	0.00E+00	0.00E+00
Beryllium	7440417	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	7440439	1.0000	1.60E-01	1.33E-04	1.60E-01	1.33E-04	5.56E-05	5.17E+00	4.17E-01	0.00E+00
Chromium	7440473	1.0000	2.00E-01	1.69E-04	2.00E-01	1.69E-04	6.94E-05	0.00E+00	0.00E+00	0.00E+00
Cobalt	7440484	1.0000	1.00E-02	1.01E-05	1.00E-02	1.01E-05	3.47E-06	5.93E-01	0.00E+00	0.00E+00
Copper	7440508	1.0000	1.20E-01	1.03E-04	1.20E-01	1.03E-04	4.17E-05	0.00E+00	0.00E+00	1.55E-03

Lead	7439921	1.0000	7.00E-02	6.03E-05	7.00E-02	6.03E-05	2.43E-05	6.47E-03	0.00E+00	0.00E+00	
Manganese	7439965	1.0000	6.00E-02	4.58E-05	6.00E-02	4.58E-05	2.08E-05	0.00E+00	3.47E-02	0.00E+00	
Mercury	7439976	1.0000	4.00E-02	3.14E-05	4.00E-02	3.14E-05	1.39E-05	0.00E+00	6.94E-02	7.85E-02	
Nickel	7440020	1.0000	3.00E-01	2.53E-04	3.00E-01	2.53E-04	1.04E-04	6.01E-01	1.12E+00	1.90E+00	
Selenium	7782492	1.0000	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Vanadium (fume or dust)	7440622	1.0000	3.30E-01	2.77E-04	3.30E-01	2.77E-04	1.15E-04	0.00E+00	0.00E+00	1.39E-02	
Zinc	7440666	1.0000	4.21E+00	3.50E-03	4.21E+00	3.50E-03	1.46E-03	0.00E+00	0.00E+00	0.00E+00	
2-Methyl naphthalene	91576	1.0000	3.51E-03	2.89E-06	3.51E-03	2.89E-06	1.22E-06	0.00E+00	0.00E+00	0.00E+00	
3-Methylcholanthrene	56495	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	1.28E-02	0.00E+00	0.00E+00	
7,12-Dimethylbenz[a]anthracene	57976	1.0000	2.34E-03	1.93E-06	2.34E-03	1.93E-06	8.13E-07	1.28E+00	0.00E+00	0.00E+00	
Acenaphthene	83329	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	0.00E+00	0.00E+00	0.00E+00	
Acenaphthylene	208968	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	0.00E+00	0.00E+00	0.00E+00	
Anthracene	120127	1.0000	3.51E-04	2.89E-07	3.51E-04	2.89E-07	1.22E-07	0.00E+00	0.00E+00	0.00E+00	
Benz[a]anthracene	56553	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	2.23E-04	0.00E+00	0.00E+00	
Benzene	71432	1.0000	3.10E-01	2.53E-04	3.10E-01	2.53E-04	1.08E-04	6.92E-02	5.38E-03	1.41E-02	
Benzo[a]pyrene	50328	1.0000	1.75E-04	1.45E-07	1.75E-04	1.45E-07	6.08E-08	1.48E-03	0.00E+00	0.00E+00	
Benzo[b]fluoranthene	205992	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	2.23E-04	0.00E+00	0.00E+00	
Benzo[g,h,i]perylene	191242	1.0000	1.75E-04	1.45E-07	1.75E-04	1.45E-07	6.08E-08	0.00E+00	0.00E+00	0.00E+00	
Benzo[k]fluoranthene	207089	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	2.23E-04	0.00E+00	0.00E+00	
Chrysene	218019	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	2.23E-05	0.00E+00	0.00E+00	
Dibenz[a,h]anthracene	53703	1.0000	1.75E-04	1.45E-07	1.75E-04	1.45E-07	6.08E-08	1.62E-03	0.00E+00	0.00E+00	
Dichlorobenzenes (mixed isomers)	25321226	1.0000	1.80E-01	1.45E-04	1.80E-01	1.45E-04	6.25E-05	0.00E+00	0.00E+00	0.00E+00	
Fluoranthene	206440	1.0000	4.38E-04	3.62E-07	4.38E-04	3.62E-07	1.52E-07	0.00E+00	0.00E+00	0.00E+00	
Fluorene	86737	1.0000	4.09E-04	3.38E-07	4.09E-04	3.38E-07	1.42E-07	0.00E+00	0.00E+00	0.00E+00	
Formaldehyde	50000	1.0000	1.10E+01	9.04E-03	1.10E+01	9.04E-03	3.81E-03	5.06E-01	6.34E-02	2.47E-01	
Hexane	110543	1.0000	2.63E+02	2.20E-01	2.63E+02	2.20E-01	9.13E-02	0.00E+00	1.96E-03	0.00E+00	
Indeno[1,2,3-cd]pyrene	193395	1.0000	2.63E-04	2.17E-07	2.63E-04	2.17E-07	9.13E-08	2.23E-04	0.00E+00	0.00E+00	
Naphthalene	91203	1.0000	8.91E-02	7.36E-05	8.91E-02	7.36E-05	3.09E-05	2.33E-02	5.16E-04	0.00E+00	
Phenanthrene	85018	1.0000	2.48E-03	2.05E-06	2.48E-03	2.05E-06	8.61E-07	0.00E+00	0.00E+00	0.00E+00	
Pyrene	129000	1.0000	7.31E-04	6.03E-07	7.31E-04	6.03E-07	2.54E-07	0.00E+00	0.00E+00	0.00E+00	
Toluene	108883	1.0000	5.00E-01	4.10E-04	5.00E-01	4.10E-04	1.74E-04	0.00E+00	6.20E-05	1.23E-04	
Arsenic	7440382	1.0000	3.00E-02	2.41E-05	3.00E-02	2.41E-05	1.04E-05	7.62E-01	1.04E-01	1.81E-01	
Barium	7440393	1.0000	6.40E-01	5.31E-04	6.40E-01	5.31E-04	2.22E-04	0.00E+00	0.00E+00	0.00E+00	
Beryllium	7440417	1.0000	1.75E-03	1.45E-06	1.75E-03	1.45E-06	6.08E-07	3.23E-02	1.30E-02	0.00E+00	
Cadmium	7440439	1.0000	1.60E-01	1.33E-04	1.60E-01	1.33E-04	5.56E-05	5.17E+00	4.17E-01	0.00E+00	
Chromium	7440473	1.0000	2.00E-01	1.69E-04	2.00E-01	1.69E-04	6.94E-05	0.00E+00	0.00E+00	0.00E+00	
Cobalt	7440484	1.0000	1.00E-02	1.01E-05	1.00E-02	1.01E-05	3.47E-06	5.93E-01	0.00E+00	0.00E+00	
Copper	7440508	1.0000	1.20E-01	1.03E-04	1.20E-01	1.03E-04	4.17E-05	0.00E+00	0.00E+00	1.55E-03	
Manganese	7439965	1.0000	6.00E-02	4.58E-05	6.00E-02	4.58E-05	2.08E-05	0.00E+00	3.47E-02	0.00E+00	
Mercury	7439976	1.0000	4.00E-02	3.14E-05	4.00E-02	3.14E-05	1.39E-05	0.00E+00	6.94E-02	7.85E-02	
Nickel	7440020	1.0000	3.10E-01	2.53E-04	3.10E-01	2.53E-04	1.08E-04	6.21E-01	1.15E+00	1.90E+00	
Selenium	7782492	1.0000	3.51E-03	2.89E-06	3.51E-03	2.89E-06	1.22E-06	0.00E+00	9.14E-06	0.00E+00	
Vanadium (fume or dust)	7440622	1.0000	3.40E-01	2.77E-04	3.40E-01	2.77E-04	1.18E-04	0.00E+00	0.00E+00	1.39E-02	
Zinc	7440666	1.0000	4.24E+00	3.50E-03	4.24E+00	3.50E-03	1.47E-03	0.00E+00	0.00E+00	0.00E+00	
2-Methyl naphthalene	91576	1.0000	7.34E-03	4.71E-06	7.34E-03	4.71E-06	2.55E-06	0.00E+00	0.00E+00	0.00E+00	
3-Methylcholanthrene	56495	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	2.67E-02	0.00E+00	0.00E+00	
7,12-Dimethylbenz[a]anthracene	57976	1.0000	4.90E-03	3.14E-06	4.90E-03	3.14E-06	1.70E-06	2.68E+00	0.00E+00	0.00E+00	
Acenaphthene	83329	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	0.00E+00	0.00E+00	0.00E+00	
Acenaphthylene	208968	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	0.00E+00	0.00E+00	0.00E+00	
Anthracene	120127	1.0000	7.34E-04	4.71E-07	7.34E-04	4.71E-07	2.55E-07	0.00E+00	0.00E+00	0.00E+00	
Benz[a]anthracene	56553	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	4.67E-04	0.00E+00	0.00E+00	
Benzene	71432	1.0000	6.40E-01	4.12E-04	6.40E-01	4.12E-04	2.22E-04	1.43E-01	1.11E-02	2.29E-02	
Benzo[a]pyrene	50328	1.0000	3.67E-04	2.35E-07	3.67E-04	2.35E-07	1.27E-07	3.11E-03	0.00E+00	0.00E+00	
Benzo[b]fluoranthene	205992	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	4.67E-04	0.00E+00	0.00E+00	

Benzo[g,h,i]perylene	191242	1.0000	3.67E-04	2.35E-07	3.67E-04	2.35E-07	1.27E-07	0.00E+00	0.00E+00	0.00E+00	
Benzo[k]fluoranthene	207089	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	4.67E-04	0.00E+00	0.00E+00	
Chrysene	218019	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	4.67E-05	0.00E+00	0.00E+00	
Dibenz[a,h]anthracene	53703	1.0000	3.67E-04	2.35E-07	3.67E-04	2.35E-07	1.27E-07	3.39E-03	0.00E+00	0.00E+00	
Dichlorobenzenes (mixed isomers)	25321226	1.0000	3.70E-01	2.35E-04	3.70E-01	2.35E-04	1.28E-04	0.00E+00	0.00E+00	0.00E+00	
Fluoranthene	206440	1.0000	9.18E-04	5.88E-07	9.18E-04	5.88E-07	3.19E-07	0.00E+00	0.00E+00	0.00E+00	
Fluorene	86737	1.0000	8.57E-04	5.49E-07	8.57E-04	5.49E-07	2.98E-07	0.00E+00	0.00E+00	0.00E+00	
Formaldehyde	50000	1.0000	2.30E+01	1.00E-02	2.30E+01	1.00E-02	7.97E-03	1.06E+00	1.33E-01	2.73E-01	
Hexane	110543	1.0000	5.51E+02	3.50E-01	5.51E+02	3.50E-01	1.91E-01	0.00E+00	4.10E-03	0.00E+00	
Indeno[1,2,3-cd]pyrene	193395	1.0000	5.51E-04	3.53E-07	5.51E-04	3.53E-07	1.91E-07	4.67E-04	0.00E+00	0.00E+00	
Naphthalene	91203	1.0000	1.90E-01	1.20E-04	1.90E-01	1.20E-04	6.60E-05	4.97E-02	1.10E-03	0.00E+00	
Phenanthrene	85018	1.0000	5.20E-03	3.33E-06	5.20E-03	3.33E-06	1.81E-06	0.00E+00	0.00E+00	0.00E+00	
Pyrene	129000	1.0000	1.53E-03	9.80E-07	1.53E-03	9.80E-07	5.31E-07	0.00E+00	0.00E+00	0.00E+00	
Toluene	108883	1.0000	1.04E+00	6.67E-04	1.04E+00	6.67E-04	3.61E-04	0.00E+00	1.29E-04	2.00E-04	
Arsenic	7440382	1.0000	6.00E-02	3.92E-05	6.00E-02	3.92E-05	2.08E-05	1.52E+00	2.08E-01	2.94E-01	
Barium	7440393	1.0000	1.35E+00	8.63E-04	1.35E+00	8.63E-04	4.69E-04	0.00E+00	0.00E+00	0.00E+00	
Beryllium	7440417	1.0000	3.67E-03	2.35E-06	3.67E-03	2.35E-06	1.27E-06	6.78E-02	2.73E-02	0.00E+00	
Cadmium	7440439	1.0000	3.40E-01	2.16E-04	3.40E-01	2.16E-04	1.18E-04	1.10E+01	8.85E-01	0.00E+00	
Chromium	7440473	1.0000	4.30E-01	2.75E-04	4.30E-01	2.75E-04	1.49E-04	0.00E+00	0.00E+00	0.00E+00	
Cobalt	7440484	1.0000	3.00E-02	1.65E-05	3.00E-02	1.65E-05	1.04E-05	1.78E+00	0.00E+00	0.00E+00	
Copper	7440508	1.0000	2.60E-01	1.67E-04	2.60E-01	1.67E-04	9.03E-05	0.00E+00	0.00E+00	2.51E-03	
Manganese	7439965	1.0000	1.20E-01	7.45E-05	1.20E-01	7.45E-05	4.17E-05	0.00E+00	6.94E-02	0.00E+00	
Mercury	7439976	1.0000	8.00E-02	5.10E-05	8.00E-02	5.10E-05	2.78E-05	0.00E+00	1.39E-01	1.28E-01	
Nickel	7440020	1.0000	6.40E-01	4.12E-04	6.40E-01	4.12E-04	2.22E-04	1.28E+00	2.38E+00	3.09E+00	
Selenium	7782492	1.0000	7.34E-03	4.71E-06	7.34E-03	4.71E-06	2.55E-06	0.00E+00	1.91E-05	0.00E+00	
Vanadium (fume or dust)	7440622	1.0000	7.00E-01	4.51E-04	7.00E-01	4.51E-04	2.43E-04	0.00E+00	0.00E+00	2.26E-02	
Zinc	7440666	1.0000	8.87E+00	5.69E-03	8.87E+00	5.69E-03	3.08E-03	0.00E+00	0.00E+00	0.00E+00	
2-Methyl naphthalene	91576	1.0000	1.27E-04	7.88E-08	1.27E-04	7.88E-08	4.41E-08	0.00E+00	0.00E+00	0.00E+00	
3-Methylcholanthrene	56495	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	4.60E-04	0.00E+00	0.00E+00	
7,12-Dimethylbenz[a]anthracene	57976	1.0000	8.44E-05	5.25E-08	8.44E-05	5.25E-08	2.93E-08	4.61E-02	0.00E+00	0.00E+00	
Acenaphthene	83329	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	0.00E+00	0.00E+00	0.00E+00	
Acenaphthylene	208968	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	0.00E+00	0.00E+00	0.00E+00	
Anthracene	120127	1.0000	1.27E-05	7.88E-09	1.27E-05	7.88E-09	4.41E-09	0.00E+00	0.00E+00	0.00E+00	
Benz[a]anthracene	56553	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	8.04E-06	0.00E+00	0.00E+00	
Benzene	71432	1.0000	1.00E-02	6.89E-06	1.00E-02	6.89E-06	3.47E-06	2.23E-03	1.74E-04	3.83E-04	
Benzo[a]pyrene	50328	1.0000	6.33E-06	3.94E-09	6.33E-06	3.94E-09	2.20E-09	5.36E-05	0.00E+00	0.00E+00	
Benzo[b]fluoranthene	205992	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	8.04E-06	0.00E+00	0.00E+00	
Benzo[g,h,i]perylene	191242	1.0000	6.33E-06	3.94E-09	6.33E-06	3.94E-09	2.20E-09	0.00E+00	0.00E+00	0.00E+00	
Benzo[k]fluoranthene	207089	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	8.04E-06	0.00E+00	0.00E+00	
Chrysene	218019	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	8.04E-07	0.00E+00	0.00E+00	
Dibenz[a,h]anthracene	53703	1.0000	6.33E-06	3.94E-09	6.33E-06	3.94E-09	2.20E-09	5.85E-05	0.00E+00	0.00E+00	
Dichlorobenzenes (mixed isomers)	25321226	1.0000	6.33E-03	3.94E-06	6.33E-03	3.94E-06	2.20E-06	0.00E+00	0.00E+00	0.00E+00	
Fluoranthene	206440	1.0000	1.58E-05	9.84E-09	1.58E-05	9.84E-09	5.49E-09	0.00E+00	0.00E+00	0.00E+00	
Fluorene	86737	1.0000	1.48E-05	9.19E-09	1.48E-05	9.19E-09	5.14E-09	0.00E+00	0.00E+00	0.00E+00	
Formaldehyde	50000	1.0000	4.00E-01	2.46E-04	4.00E-01	2.46E-04	1.39E-04	1.85E-02	2.31E-03	6.71E-03	
Hexane	110543	1.0000	9.49E+00	5.91E-03	9.49E+00	5.91E-03	3.30E-03	0.00E+00	7.06E-05	0.00E+00	
Indeno[1,2,3-cd]pyrene	193395	1.0000	9.49E-06	5.91E-09	9.49E-06	5.91E-09	3.30E-09	8.04E-06	0.00E+00	0.00E+00	
Naphthalene	91203	1.0000	3.22E-03	2.00E-06	3.22E-03	2.00E-06	1.12E-06	8.43E-04	1.86E-05	0.00E+00	
Phenanthrene	85018	1.0000	8.97E-05	5.58E-08	8.97E-05	5.58E-08	3.11E-08	0.00E+00	0.00E+00	0.00E+00	
Pyrene	129000	1.0000	2.64E-05	1.64E-08	2.64E-05	1.64E-08	9.17E-09	0.00E+00	0.00E+00	0.00E+00	
Toluene	108883	1.0000	2.00E-02	1.12E-05	2.00E-02	1.12E-05	6.94E-06	0.00E+00	2.48E-06	3.36E-06	
Arsenic	7440382	1.0000	1.05E-03	6.56E-07	1.05E-03	6.56E-07	3.65E-07	2.67E-02	3.65E-03	4.92E-03	
Barium	7440393	1.0000	2.00E-02	1.44E-05	2.00E-02	1.44E-05	6.94E-06	0.00E+00	0.00E+00	0.00E+00	
Beryllium	7440417	1.0000	6.33E-05	3.94E-08	6.33E-05	3.94E-08	2.20E-08	1.17E-03	4.71E-04	0.00E+00	

Cadmium	7440439	1.0000	5.80E-03	3.61E-06	5.80E-03	3.61E-06	2.01E-06	1.88E-01	1.51E-02	0.00E+00	
Chromium	7440473	1.0000	7.38E-03	4.59E-06	7.38E-03	4.59E-06	2.56E-06	0.00E+00	0.00E+00	0.00E+00	
Cobalt	7440484	1.0000	4.43E-04	2.76E-07	4.43E-04	2.76E-07	1.54E-07	2.63E-02	0.00E+00	0.00E+00	
Copper	7440508	1.0000	4.48E-03	2.79E-06	4.48E-03	2.79E-06	1.56E-06	0.00E+00	0.00E+00	4.19E-05	
Manganese	7439965	1.0000	2.00E-03	1.25E-06	2.00E-03	1.25E-06	6.94E-07	0.00E+00	1.16E-03	0.00E+00	
Mercury	7439976	1.0000	1.37E-03	8.53E-07	1.37E-03	8.53E-07	4.76E-07	0.00E+00	2.38E-03	2.13E-03	
Nickel	7440020	1.0000	1.00E-02	6.89E-06	1.00E-02	6.89E-06	3.47E-06	2.00E-02	3.72E-02	5.17E-02	
Selenium	7782492	1.0000	1.27E-04	7.88E-08	1.27E-04	7.88E-08	4.41E-08	0.00E+00	3.31E-07	0.00E+00	
Vanadium (fume or dust)	7440622	1.0000	1.00E-02	7.55E-06	1.00E-02	7.55E-06	3.47E-06	0.00E+00	0.00E+00	3.78E-04	
Zinc	7440666	1.0000	1.50E-01	9.52E-05	1.50E-01	9.52E-05	5.21E-05	0.00E+00	0.00E+00	0.00E+00	
1,1,2,2-Tetrachloroethane	79345	1.0000	8.90E-04	6.45E-05	8.90E-04	6.45E-05	3.09E-07	3.97E-04	0.00E+00	0.00E+00	
1,1,2-Trichloroethane	79005	1.0000	7.07E-04	5.12E-05	7.07E-04	5.12E-05	2.45E-07	8.71E-05	0.00E+00	0.00E+00	
1,1-Dichloroethane	75343	1.0000	5.25E-04	3.80E-05	5.25E-04	3.80E-05	1.82E-07	6.47E-06	0.00E+00	0.00E+00	
1,2,4-Trimethylbenze	95636	1.0000	3.18E-04	2.30E-05	3.18E-04	2.30E-05	1.10E-07	0.00E+00	0.00E+00	0.00E+00	
Ethylene dichloride {EDC}	107062	1.0000	5.25E-04	3.80E-05	5.25E-04	3.80E-05	1.82E-07	8.49E-05	6.84E-08	0.00E+00	
1,3-Butadiene	106990	1.0000	5.94E-03	4.30E-04	5.94E-03	4.30E-04	2.06E-06	7.78E-03	1.55E-04	9.77E-04	
1,3-Dichloropropene	542756	1.0000	5.87E-04	4.25E-05	5.87E-04	4.25E-05	2.04E-07	0.00E+00	0.00E+00	0.00E+00	
2-Methyl naphthalene	91576	1.0000	7.38E-04	5.35E-05	7.38E-04	5.35E-05	2.56E-07	0.00E+00	0.00E+00	0.00E+00	
2,2,4-Trimethylpentane	540841	1.0000	5.56E-03	4.03E-04	5.56E-03	4.03E-04	1.93E-06	0.00E+00	0.00E+00	0.00E+00	
Acenaphthene	83329	1.0000	2.78E-05	2.01E-06	2.78E-05	2.01E-06	9.65E-09	0.00E+00	0.00E+00	0.00E+00	
Acenaphthylene	208968	1.0000	1.23E-04	8.91E-06	1.23E-04	8.91E-06	4.27E-08	0.00E+00	0.00E+00	0.00E+00	
Acetaldehyde	75070	1.0000	1.90E-01	1.00E-02	1.90E-01	1.00E-02	6.60E-05	3.95E-03	7.07E-05	3.19E-02	
Acrolein	107028	1.0000	1.10E-01	8.28E-03	1.10E-01	8.28E-03	3.82E-05	0.00E+00	1.64E-02	4.97E+00	
Benzene	71432	1.0000	1.00E-02	7.09E-04	1.00E-02	7.09E-04	3.47E-06	2.23E-03	1.74E-04	3.94E-02	
Benzo[b]fluoranthene	205992	1.0000	3.69E-06	2.68E-07	3.69E-06	2.68E-07	1.28E-09	3.13E-06	0.00E+00	0.00E+00	
Benzo[e]pyrene	192972	1.0000	9.23E-06	6.69E-07	9.23E-06	6.69E-07	3.20E-09	0.00E+00	0.00E+00	0.00E+00	
Benzo[g,h,i]perylene	191242	1.0000	9.21E-06	6.67E-07	9.21E-06	6.67E-07	3.20E-09	0.00E+00	0.00E+00	0.00E+00	
Biphenyl	92524	1.0000	4.71E-03	3.42E-04	4.71E-03	3.42E-04	1.64E-06	0.00E+00	0.00E+00	0.00E+00	
Carbon tetrachloride	56235	1.0000	8.16E-04	5.91E-05	8.16E-04	5.91E-05	2.83E-07	2.64E-04	1.06E-06	4.67E-05	
Chlorobenzene	108907	1.0000	6.76E-04	4.90E-05	6.76E-04	4.90E-05	2.35E-07	0.00E+00	3.52E-08	0.00E+00	
Ethyl chloride {Chloroethane}	75003	1.0000	4.16E-05	3.01E-06	4.16E-05	3.01E-06	1.44E-08	0.00E+00	7.22E-11	0.00E+00	
Chloroform	67663	1.0000	6.34E-04	4.59E-05	6.34E-04	4.59E-05	2.20E-07	2.59E-05	1.10E-07	4.59E-04	
Chrysene	218019	1.0000	1.54E-05	1.12E-06	1.54E-05	1.12E-06	5.35E-09	1.30E-06	0.00E+00	0.00E+00	
Ethyl benzene	100414	1.0000	8.83E-04	6.40E-05	8.83E-04	6.40E-05	3.07E-07	1.70E-05	2.30E-08	0.00E+00	
Ethylene dibromide {EDB}	106934	1.0000	9.85E-04	7.14E-05	9.85E-04	7.14E-05	3.42E-07	5.38E-04	6.41E-05	0.00E+00	
Fluoranthene	206440	1.0000	2.47E-05	1.79E-06	2.47E-05	1.79E-06	8.58E-09	0.00E+00	0.00E+00	0.00E+00	
Fluorene	86737	1.0000	1.26E-04	9.14E-06	1.26E-04	9.14E-06	4.38E-08	0.00E+00	0.00E+00	0.00E+00	
Formaldehyde	50000	1.0000	1.17E+00	9.00E-02	1.17E+00	9.00E-02	4.06E-04	5.41E-02	6.77E-03	2.45E+00	
Methanol	67561	1.0000	6.00E-02	4.03E-03	6.00E-02	4.03E-03	2.08E-05	0.00E+00	7.81E-07	2.16E-04	
Methylene chloride {Dichloromethane}	75092	1.0000	4.45E-04	3.22E-05	4.45E-04	3.22E-05	1.55E-07	3.43E-06	5.79E-08	3.45E-06	
Hexane	110543	1.0000	2.00E-02	1.79E-03	2.00E-02	1.79E-03	6.94E-06	0.00E+00	1.49E-07	0.00E+00	
Naphthalene	91203	1.0000	1.65E-03	1.20E-04	1.65E-03	1.20E-04	5.73E-07	4.32E-04	9.55E-06	0.00E+00	
PAHs, total, w/o individ. components reported [Treated as B(a)P for HRA]	1151	1.0000	5.98E-04	4.34E-05	5.98E-04	4.34E-05	2.08E-07	5.07E-03	0.00E+00	0.00E+00	
Phenanthrene	85018	1.0000	2.31E-04	1.68E-05	2.31E-04	1.68E-05	8.02E-08	0.00E+00	0.00E+00	0.00E+00	
Phenol	108952	1.0000	5.34E-04	3.87E-05	5.34E-04	3.87E-05	1.85E-07	0.00E+00	1.39E-07	1.00E-05	
Pyrene	129000	1.0000	3.02E-05	2.19E-06	3.02E-05	2.19E-06	1.05E-08	0.00E+00	0.00E+00	0.00E+00	
Styrene	100425	1.0000	5.25E-04	3.80E-05	5.25E-04	3.80E-05	1.82E-07	0.00E+00	3.04E-08	2.71E-06	
Toluene	108883	1.0000	1.00E-02	6.58E-04	1.00E-02	6.58E-04	3.47E-06	0.00E+00	1.24E-06	1.97E-04	
Vinyl chloride	75014	1.0000	3.31E-04	2.40E-05	3.31E-04	2.40E-05	1.15E-07	1.99E-04	0.00E+00	2.00E-07	
Xylene	1330207	1.0000	4.09E-03	2.97E-04	4.09E-03	2.97E-04	1.42E-06	0.00E+00	3.04E-07	2.03E-05	
Hexane	110543	1.0000	1.22E-04	5.35E-08	1.22E-04	5.35E-08	4.24E-08	0.00E+00	9.08E-10	0.00E+00	
Benzene	71432	1.0000	6.10E-04	2.70E-07	6.10E-04	2.70E-07	2.12E-07	1.36E-04	1.06E-05	1.50E-05	
Toluene	108883	1.0000	7.19E-03	3.24E-06	7.19E-03	3.24E-06	2.50E-06	0.00E+00	8.92E-07	9.72E-07	

Ethyl benzene	**100414**	**1.0000**	9.58E-04	4.41E-07	9.58E-04	4.41E-07	3.33E-07	1.84E-05	2.49E-08	0.00E+00
Xylene	**1330207**	**1.0000**	1.87E-02	8.62E-06	1.87E-02	8.62E-06	6.49E-06	0.00E+00	1.39E-06	5.88E-07
1,2,4-Trimethylbenze	**95636**	**1.0000**	1.55E-02	7.33E-06	1.55E-02	7.33E-06	5.38E-06	0.00E+00	0.00E+00	0.00E+00
Hexane	**110543**	**1.0000**	1.22E-04	5.35E-08	1.22E-04	5.35E-08	4.24E-08	0.00E+00	9.08E-10	0.00E+00
Benzene	**71432**	**1.0000**	6.10E-04	2.70E-07	6.10E-04	2.70E-07	2.12E-07	1.36E-04	1.06E-05	1.50E-05
Toluene	**108883**	**1.0000**	7.19E-03	3.24E-06	7.19E-03	3.24E-06	2.50E-06	0.00E+00	8.92E-07	9.72E-07
Ethyl benzene	**100414**	**1.0000**	9.58E-04	4.41E-07	9.58E-04	4.41E-07	3.33E-07	1.84E-05	2.49E-08	0.00E+00
Xylene	**1330207**	**1.0000**	1.87E-02	8.62E-06	1.87E-02	8.62E-06	6.49E-06	0.00E+00	1.39E-06	5.88E-07
1,2,4-Trimethylbenze	**95636**	**1.0000**	1.55E-02	7.33E-06	1.55E-02	7.33E-06	5.38E-06	0.00E+00	0.00E+00	0.00E+00
Sodium hydroxide	**1310732**	**1.0000**	1.57E+00	1.04E-03	1.57E+00	1.04E-03	5.45E-04	0.00E+00	0.00E+00	1.95E-01
Sodium hydroxide	**1310732**	**1.0000**	8.00E-02	1.05E-04	8.00E-02	1.05E-04	2.78E-05	0.00E+00	0.00E+00	1.97E-02
Sodium hydroxide	**1310732**	**1.0000**	1.40E-01	1.89E-04	1.40E-01	1.89E-04	4.86E-05	0.00E+00	0.00E+00	3.54E-02
Peracetic acid	**79210**	**1.0000**	4.94E-03	5.83E-06	4.94E-03	5.83E-06	1.72E-06	0.00E+00	0.00E+00	0.00E+00
Sodium hydroxide	**1310732**	**1.0000**	1.39E+00	8.19E-04	1.39E+00	8.19E-04	4.83E-04	0.00E+00	0.00E+00	1.54E-01
Sodium hydroxide	**1310732**	**1.0000**	8.30E-01	5.24E-04	8.30E-01	5.24E-04	2.88E-04	0.00E+00	0.00E+00	9.83E-02
							Totals	**3.68E+01**	**7.62E+00**	**1.68E+01**

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

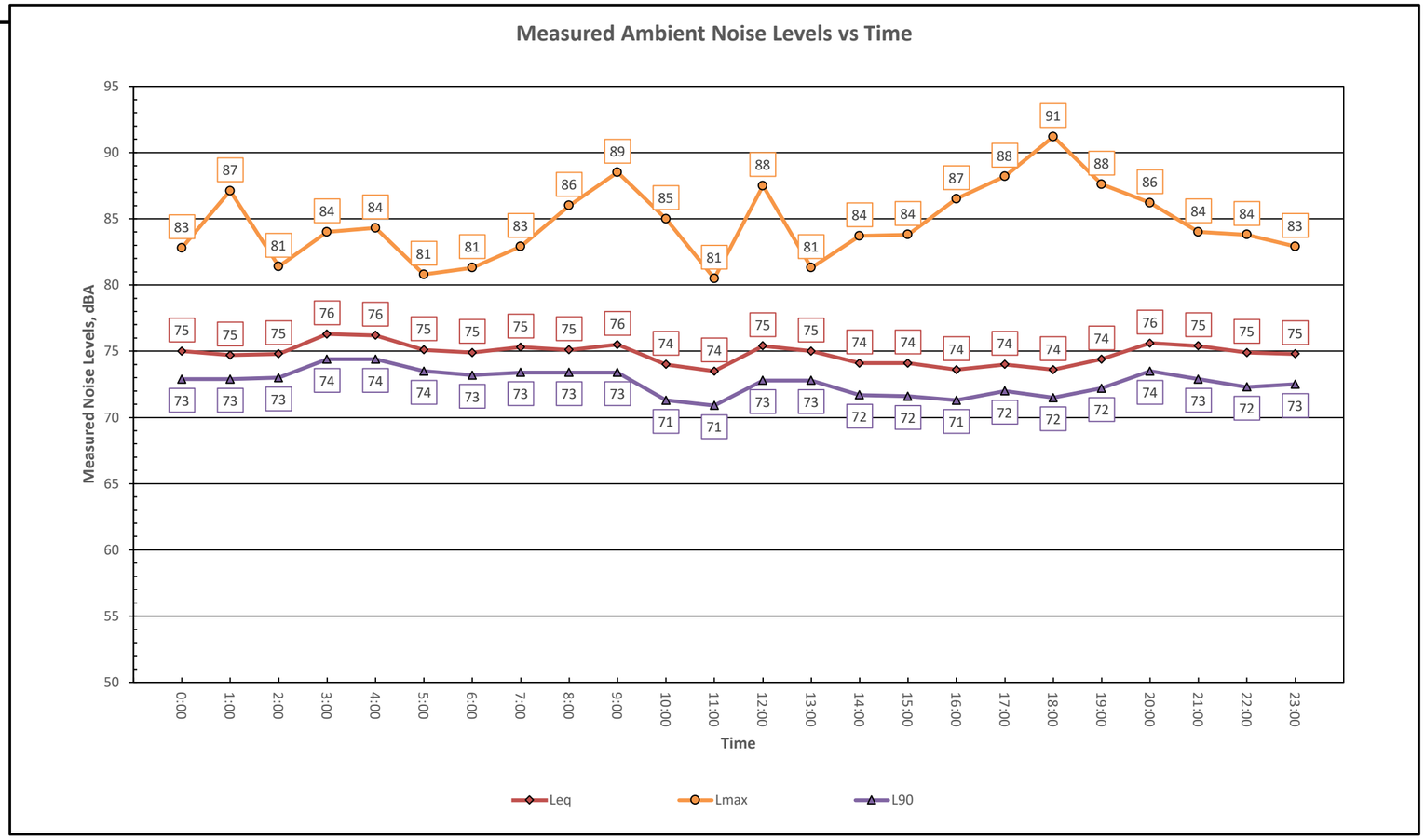
Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Measurement Site:	North of the Campbell Canning Factory
Measurement Date:	10/18/2024
Project Name:	Campbell Buffer Analysis
Coordinates	38°28'35"N 121°48'08"W
Site	LT-1

Time	Measured Level, dBA			
	Leq	Lmax	L50	L90
0:00	75	83	75	73
1:00	75	87	74	73
2:00	75	81	75	73
3:00	76	84	76	74
4:00	76	84	76	74
5:00	75	81	75	74
6:00	75	81	75	73
7:00	75	83	75	73
8:00	75	86	75	73
9:00	76	89	75	73
10:00	74	85	73	71
11:00	74	81	73	71
12:00	75	88	75	73
13:00	75	81	75	73
14:00	74	84	74	72
15:00	74	84	74	72
16:00	74	87	73	71
17:00	74	88	74	72
18:00	74	91	73	72
19:00	74	88	74	72
20:00	76	86	75	74
21:00	75	84	75	73
22:00	75	84	74	72
23:00	75	83	74	73

Metrics	Leq	Lmax	L50	L90
Day Average	75	87	74	74
Night Average	75	84	75	73



Ldn	82
Day %	11%
Night %	89%

Notes:
Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.
Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.
Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2009 (November). 2009 Technical Noise Supplement. Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

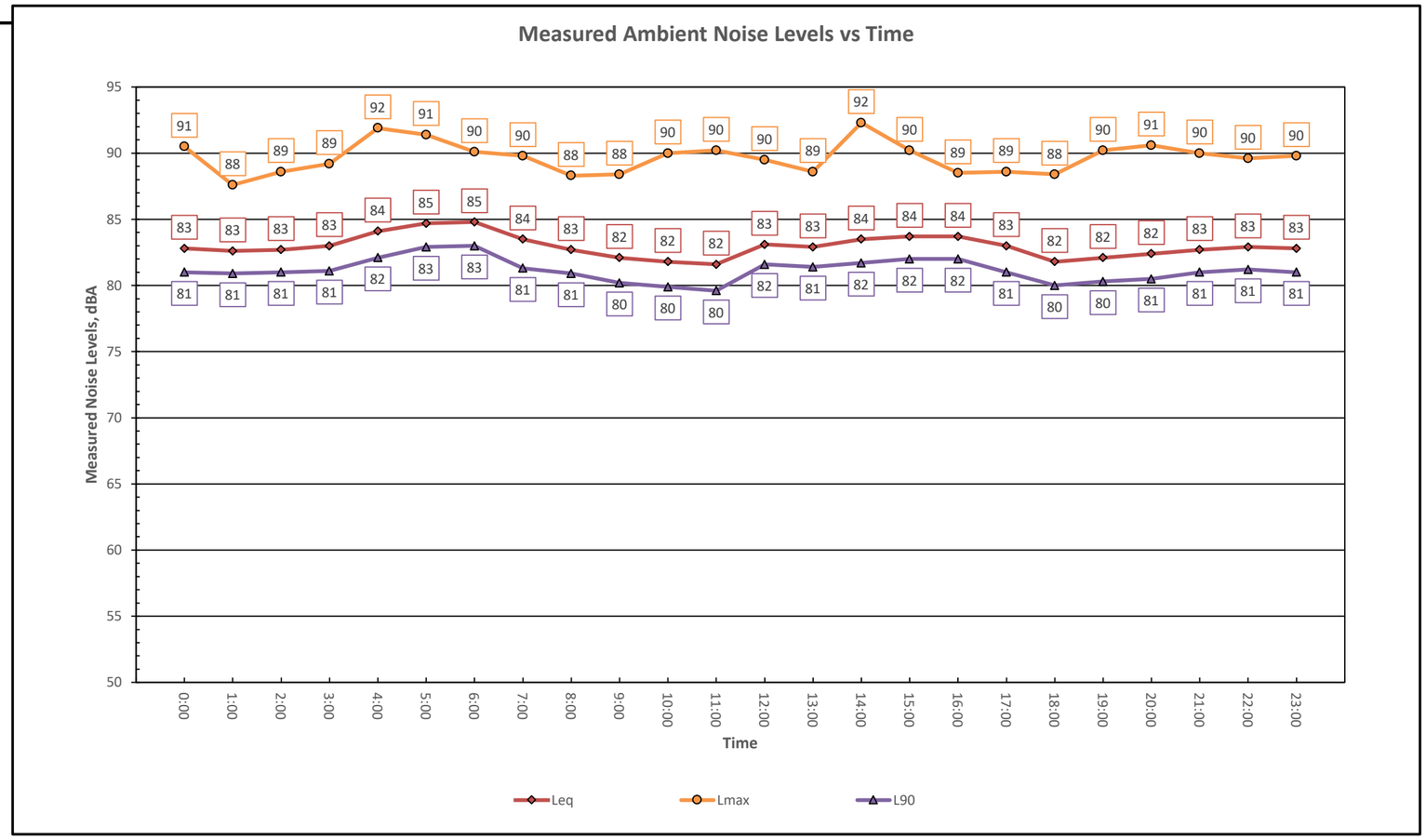
Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Measurement Site:	South of the Campbell Canning Factory
Measurement Date:	10/18/2024
Project Name:	Campbell Buffer Analysis
Coordinates	38°28'28"N 121°48'08"W
Site	LT-2

Time	Measured Level, dBA			
	Leq	Lmax	L50	L90
0:00	83	91	83	81
1:00	83	88	82	81
2:00	83	89	82	81
3:00	83	89	83	81
4:00	84	92	84	82
5:00	85	91	84	83
6:00	85	90	85	83
7:00	84	90	83	81
8:00	83	88	82	81
9:00	82	88	82	80
10:00	82	90	82	80
11:00	82	90	81	80
12:00	83	90	83	82
13:00	83	89	83	81
14:00	84	92	83	82
15:00	84	90	83	82
16:00	84	89	84	82
17:00	83	89	83	81
18:00	82	88	82	80
19:00	82	90	82	80
20:00	82	91	82	81
21:00	83	90	82	81
22:00	83	90	83	81
23:00	83	90	83	81

Metrics	Leq	Lmax	L50	L90
Day Average	83	90	82	82
Night Average	83	90	83	82



Ldn	90
Day %	11%
Night %	89%

Notes:
Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.
Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.
Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2009 (November). 2009 Technical Noise Supplement. Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.

Long-Term Noise Measurement Summary

KEY: Orange cells are for input.

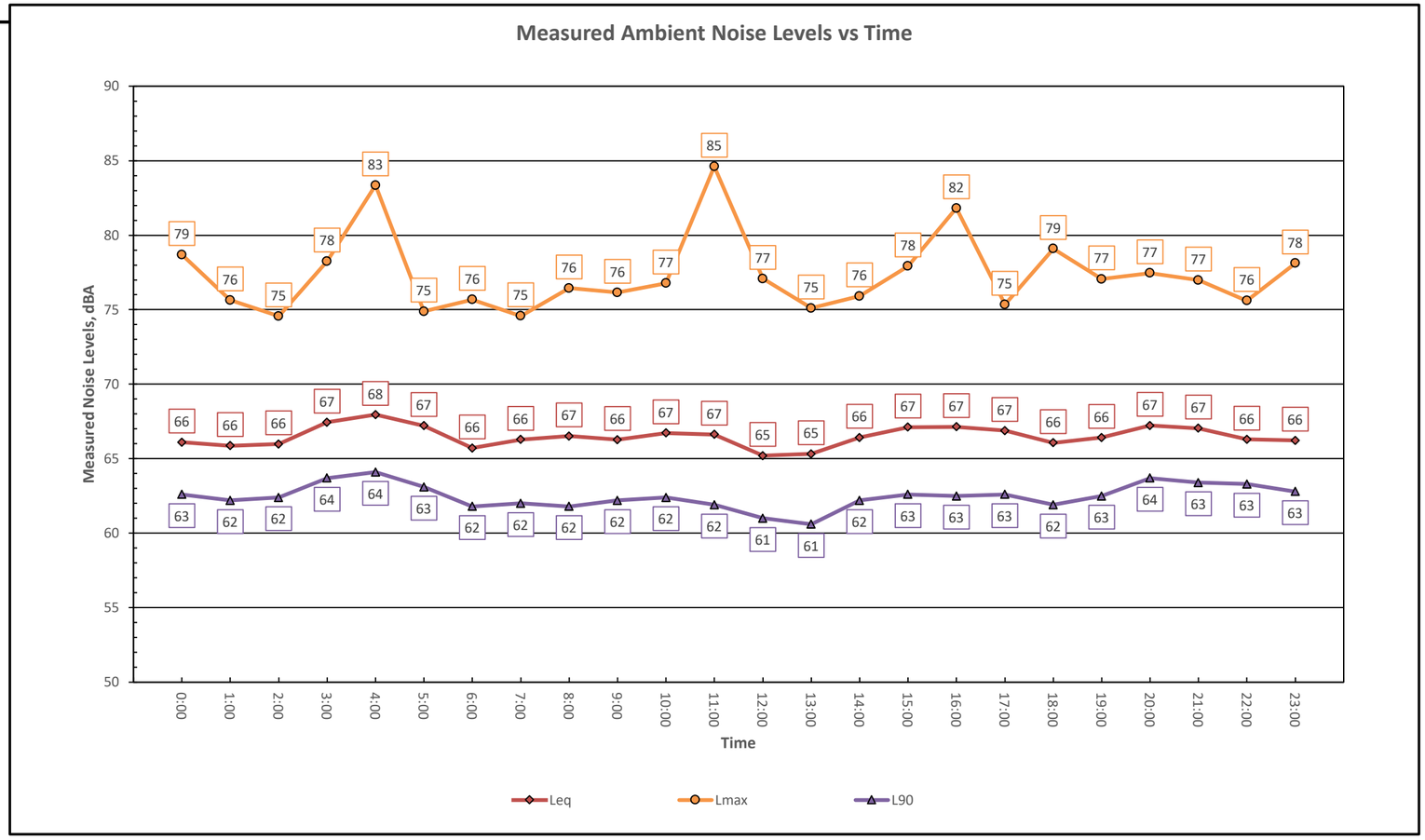
Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Measurement Site:	Adjacent to Pedrick Road, North of Campbell Factory
Measurement Date:	10/18/2024
Project Name:	Campbell Buffer Analysis
Coordinates	38°28'36"N 121°48'13"W
Site	LT-3

Time	Measured Level, dBA			
	Leq	Lmax	L50	L90
0:00	66	79	65	63
1:00	66	76	65	62
2:00	66	75	65	62
3:00	67	78	67	64
4:00	68	83	67	64
5:00	67	75	67	63
6:00	66	76	65	62
7:00	66	75	65	62
8:00	67	76	65	62
9:00	66	76	65	62
10:00	67	77	66	62
11:00	67	85	65	62
12:00	65	77	64	61
13:00	65	75	64	61
14:00	66	76	66	62
15:00	67	78	66	63
16:00	67	82	66	63
17:00	67	75	66	63
18:00	66	79	65	62
19:00	66	77	66	63
20:00	67	77	67	64
21:00	67	77	66	63
22:00	66	76	66	63
23:00	66	78	65	63

Metrics	Leq	Lmax	L50	L90
Day Average	67	79	65	65
Night Average	67	78	66	63



Ldn	73
Day %	14%
Night %	86%

Notes:
Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.
Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.
Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2009 (November). 2009 Technical Noise Supplement. Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.

Short-Term Noise Measurements Summary

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

Measurement Date: 10/18/2024
Project Name: Campbell Buffer Analysis

Metrics	Start Time	Run Time	Leq	Lmax	L50	L90
ST-1	9:45:45 AM	15 Minutes	74.7	79.2	74.6	74.3
ST-2	10:05:58 AM	8 Minutes	77.0	93.0	72.7	72.0
ST-3	10:18:16 AM	15 Minutes	85.2	87.2	85.2	84.4
ST-4	10:38:50 AM	15 Minutes	74.2	78.6	74.1	73.2

Notes:
Computation of the CNEL based on 1-hour Leq measurements for each hour of a day are based on equation 2-27 on pg. 2-57 of Caltrans 2009.
Computation of the Ldn based on 1-hour Leq measurements for each hour of a day are based on equation 2-26 on pg. 2-56 of Caltrans 2009.
Log factors for the Ldn and CNEL penalties are provided in Table 2-12 on pg. 2-52 of Caltrans 2009.
Source:
California Department of Transportation (Caltrans), Division of Environmental Analysis. 2009 (November). 2009 Technical Noise Supplement. Sacramento, CA. Available: <http://www.dot.ca.gov/hq/env/noise/>. Accessed September 24, 2010.