

PAGE STREET HOUSING TAC ASSESSMENT

San José, California

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Prepared for:

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INTRODUCTION

This report is the toxic air contaminant (TAC) analysis for a proposed residential development located on a 0.7-acre site comprised of three adjacent parcels along Page Street, between W. San Carlos Street and Douglas Street, in City of San José. The analysis addresses the effect of TAC sources upon future residential uses of the site.

The project would demolish the existing five single-family residences and then construct a five-story, 82-unit apartment complex consisting of 81 affordable studio units and one three-bedroom manager's unit. Access to the site would be provided along Page Street. There would be 56 parking garage spaces and six surface parking spaces. Residential units would be on levels 2 through 5 above the ground floor parking level.

SETTING

The project is located in the Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all ambient air quality standards with the exception of ground-level ozone, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}).

Air Pollutants of Concern

High ozone levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x). These precursor pollutants react under certain meteorological conditions to form high ozone levels. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ozone levels. The highest ozone levels in the Bay Area occur in the eastern and southern inland valleys that are downwind of air pollutant sources. High ozone levels aggravate respiratory and cardiovascular diseases, reduced lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant of the Bay Area. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM₁₀) and fine particulate matter where particles have a diameter of 2.5 micrometers or less (PM_{2.5}). Elevated concentrations of PM₁₀ and PM_{2.5} are the result of both region-wide (or cumulative) emissions and localized emissions. High particulate matter levels aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a

freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State or federal programs.

CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB approved a new regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles.¹ The regulation requires affected vehicles to meet specific performance requirements between 2014 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023. These requirements are phased in over the compliance period and depend on the model year of the vehicle.

Regulatory Agencies

The Bay Area Air Quality Management District's (BAAQMD) is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD has recently published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.² *Attachment 1* includes detailed community risk modeling methodology.

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. For cancer risk assessments, children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Residential locations are assumed to include infants and small children.

¹ Available online: <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>. Accessed: November 21, 2014.

² Bay Area Air Quality Management District. 2017. *BAAQMD CEQA Air Quality Guidelines*. May.

San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City’s sensitive population to exposure of air pollution and toxic air contaminants or TACs. The following goals, policies, and actions are applicable to the proposed project:

Applicable Goals – Toxic Air Contaminants

Goal MS-11 Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Applicable Policies – Toxic Air Contaminants

MS-11.1 Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

MS-11.4 Encourage the installation of appropriate air filtration at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources.

MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

Actions – Toxic Air Contaminants

MS-11.7 Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

Significance Thresholds

The BAAQMD includes significance thresholds for exposure to TACs and fine particulate matter (PM_{2.5}) as part of its May 2017 CEQA Air Quality Guidelines. In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA. The BAAQMD’s adoption of significance thresholds contained in the 2011 *CEQA Air Quality Guidelines* was called into question by an order issued March 5, 2012, in California Building Industry Association (CBIA) v. BAAQMD (Alameda Superior Court Case No. RGI0548693). In December 2015, the Supreme Court determined that an analysis of the impacts of the environment on a project – known as “CEQA-in-reverse” – is only required under two limited circumstances: (1) when a statute provides an express legislative directive to consider such impacts; and (2) when a proposed project risks exacerbating environmental hazards or conditions that already exist (Cal. Supreme Court Case No. S213478). Because the Supreme Court’s holding concerns the effects of the environment on a project (as contrasted to the effects of a proposed project on the environment), and not the science behind the

thresholds, the significance thresholds contained in the BAAQMD CEQA Air Quality Guidelines, as well as the goals, policies, and actions of the San José Envision 2040 General Plan, are applied to this project. This report provides that project-specific analysis to assess any significant exposures from single or cumulative exposures that exceed thresholds in Table 1.

Table 1 Community Risk Significance Thresholds

Health Risks and Hazards	Single Sources Within 1,000-foot Zone of Influence	Combined Sources (Cumulative from all sources within 1,000-foot zone of influence)
Excess Cancer Risk	>10.0 per one million	>100 per one million
Hazard Index	>1.0	>10.0
Incremental annual PM _{2.5}	>0.3 µg/m ³	>0.8 µg/m ³
Note: PM _{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.		

This TAC analysis was triggered by the project’s proximity to W. San Carlos Street (approximately 200 feet north) and Meridian Avenue (approximately 490 feet east). Other TAC or fine particulate matter (PM_{2.5}) emissions sources in the area include a diesel generator permitted by BAAQMD (approximately 860 feet southwest).

IMPACTS FROM TAC SOURCES

The community risk levels at the project site are reported below thresholds for all sources within the influence area of 1,000 feet (see Figure 1). Identified within this area were local roadways (W. San Carlos St. and Meridian Ave) and a stationary source of air pollutant and TAC emissions permitted by BAAQMD.

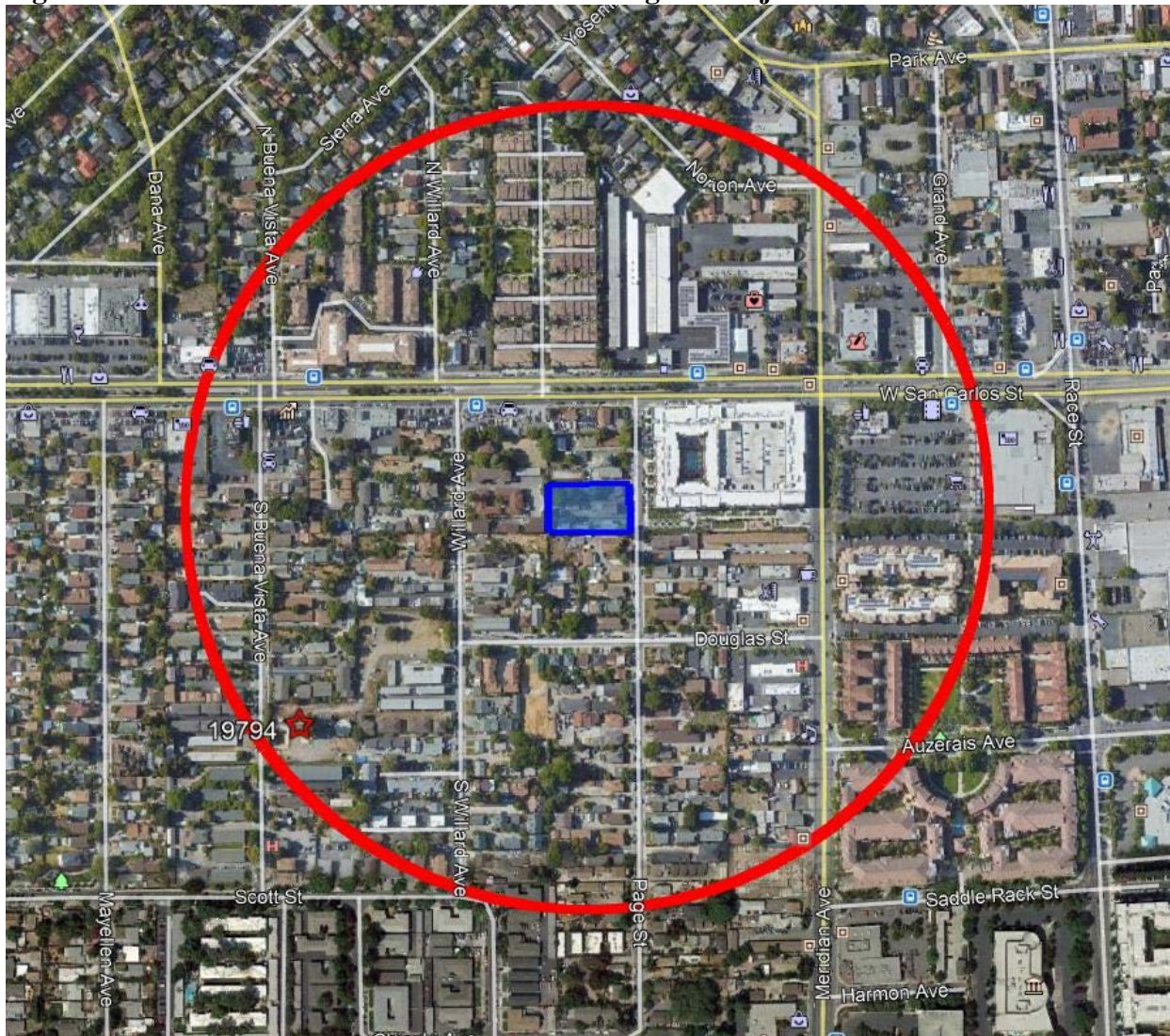
Local Roadways

For local roadways, BAAQMD has provided the *Roadway Screening Analysis Calculator* to assess whether roadways with traffic volumes of over 10,000 vehicles per day may have a potentially significant effect on a proposed project.

Two adjustments were made to the cancer risk predictions made by this calculator: (1) adjustment for latest vehicle emissions rates predicted using EMFAC2014 and (2) adjustment of cancer risk to reflect new Office of Environmental Health Hazard Assessment (OEHHA) guidance (see *Attachment 1*).

The calculator uses the older EMFAC2011 emission rates for the year 2014. Overall, emission rates decrease by the time the project would be constructed and occupied. The project would not be occupied prior to 2018. In addition, a new version of the emissions factor model, EMFAC2014 was made available since that tool was developed. This version predicts lower emission rates. An adjustment factor of 0.5 was developed by comparing emission rates of total organic gases (TOG) for running exhaust and running losses developed using EMFAC2011 for year 2014 and those from EMFAC2014 for year 2018.

Figure 1 Air Pollutant and TAC Sources Affecting the Project Site



The predicted cancer risk was then adjusted using a factor of 1.3744 to account for new OEHHHA guidance. This factor was provided by BAAQMD for use with their CEQA screening tools that are used to predict cancer risk.³

W. San Carlos Street

The average daily traffic (ADT) volume on W. San Carlos Street west of Meridian Avenue is estimated to be approximately 23,095 vehicles. This estimate was based on the peak-hour traffic volumes included in the project's traffic analysis for background plus project conditions. The AM and PM peak-hour volumes were averaged and then multiplied by 10 to estimate the ADT. Using the BAAQMD *Roadway Screening Analysis Calculator* for Santa Clara County for east-west directional roadways and at a distance of approximately 200 feet south of the roadway (note that closest receptors are on 2nd level above ground), estimated cancer risk from the roadway traffic

³ Correspondence with Alison Kirk, BAAQMD, November 23, 2015.

would be 3.61 per million and PM_{2.5} concentration would be 0.132 µg/m³. The chronic or acute Hazard Index (HI) for the roadway would be below 0.01.

Meridian Avenue

The ADT volume on Meridian Avenue south of W. San Carlos Street is estimated to be approximately 17,755 vehicles. This estimate was based on the peak-hour traffic volumes included in the project's traffic analysis for background plus project conditions. The AM and PM peak-hour volumes were averaged and then multiplied by 10 to estimate the ADT. Using the BAAQMD *Roadway Screening Analysis Calculator* for Santa Clara County for north-south directional roadways and at a distance of approximately 490 feet west of the roadway (note that closest receptors are on 2nd level above ground), estimated cancer risk from the roadway traffic would be 0.95 per million and PM_{2.5} concentration would be 0.028 µg/m³. The chronic or acute HI for the roadway would be below 0.01.

Stationary Sources

One permitted stationary source of air pollution near the project site was identified using BAAQMD's *Stationary Source Risk & Hazard Analysis Tool*. This mapping tool uses Google Earth and identified the location of one stationary source and its estimated risk and hazard impacts. There was one source identified with TAC emissions.

Plant 19794, which is a nearby emergency generator with a diesel engine operated by San Jose Water Company, is located at 420 Buena Vista Avenue. Based on inspection of aerial views, this source is estimated to be approximately 860 feet from the nearest residential locations at the site. BAAQMD provided emissions data for this facility, as part of a Stationary Source Information Form (SSIF) request.⁴ The screening cancer risk, HI, and PM_{2.5} concentration, provided by BAAQMD, were adjusted for the 860-foot distance using BAAQMD's *Diesel BUG Distance Multiplier*. Note that BAAQMD indicated that these screening levels were adjusted for the 2015-recommended OEHHA. The estimated adjusted cancer risk from this stationary source would be 3.04 per million and adjusted PM_{2.5} concentration would be below 0.01 µg/m³. The adjusted chronic or acute HI for the stationary source would be below 0.01.

Combined Community Risk Impacts to Sensitive Receptors

The cumulative effects of the sources within 1,000 feet of the project site were also addressed by summing the contributions of each upon the site. This includes emissions from W. San Carlos Street, Meridian Avenue, and a nearby emergency generator with diesel engine. Figure 1 shows the sources affecting the project site. Results of this assessment are summarized in Table 2.

⁴ Email from Arena Flores of BAAQMD to James Reyff of Illingworth Rodkin, Inc., dated April 18, 2018.

Table 2 Community Risk Thresholds for Sources within 1,000 feet of Project

Source	Cancer Risk (per million)*	PM_{2.5} Concentration (µg/m³)	Acute and Chronic Hazard (HI)
Local Roadways – W. San Carlos St at 200 ft (2 nd -story exposure), 23,095 ADT	3.61	0.132	<0.01
Local Roadways – Meridian Ave at 490 ft (2 nd -story exposure), 17,755 ADT	0.95	0.028	<0.01
Plant 19794, San Jose Water Company diesel generator at 420 Buena Vista Ave – 860 ft	3.04	<0.01	<0.01
Total**	<7.6	<0.17	<0.03
<i>BAAQMD Thresholds – Single Source (Maximum)</i>	<i>10.0</i>	<i>0.3</i>	<i>1.0</i>
<i>Cumulative Source</i>	<i>100</i>	<i>0.8</i>	<i>10.0</i>
<i>Significant?</i>	<i>No</i>	<i>No</i>	<i>No</i>

*Cancer risk adjusted for 2015 OEHHA methods.

**Cumulative risk would be less than total since this table reports maximum impacts, which would not all occur at one location.

Attachment 1: Screening Risk Assessment

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

- **County:** Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.
- **Roadway Direction:** Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.
- **Side of the Roadway:** Identify on which side of the roadway the project is located.
- **Distance from Roadway:** Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.
- **Annual Average Daily Traffic (ADT):** Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>.

Notes and References listed below the Search Boxes

Search Parameters

County

Roadway Direction

Side of the Roadway

Distance from Roadway feet

Annual Average Daily Traffic (ADT)

Results

Santa Clara County

EAST-WEST DIRECTIONAL ROADWAY

PM2.5 annual average

0.132 ($\mu\text{g}/\text{m}^3$)

Cancer Risk

5.26 (per million)

W San Carlos Street

Cumulative plus project volumes from traffic report
Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Adjusted for 2015 OEHH
and EMFAC2014 for 2018

3.61

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggregate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehicles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 Cal3qhc air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHH toxicity values adopted in 2013.

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

- County: Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.
- Roadway Direction: Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.
- Side of the Roadway: Identify on which side of the roadway the project is located.
- Distance from Roadway: Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.
- Annual Average Daily Traffic (ADT): Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>.

Notes and References listed below the Search Boxes

Search Parameters

County

Roadway Direction

Side of the Roadway

Distance from Roadway feet

Annual Average Daily Traffic (ADT)

Results

Santa Clara County

NORTH-SOUTH DIRECTIONAL ROADWAY

PM2.5 annual average

0.028 (µg/m³)

Cancer Risk

1.39 (per million)

Meridian Ave

Cumulative plus project volumes from traffic report
Data for Santa Clara County based on meteorological data collected from San Jose Airport in 1997

Adjusted for 2015 OEHH
and EMFAC2014 for 2018

0.95

(per million)

Note that EMFAC2014 predicts DSL PM2.5 aggregate rates in 2018 that are 46% of EMFAC2011 for 2014. TOG gasoline rates are 56% of EMFAC2011 year 2014 rates. This is for light- and medium-duty vehicles traveling at 30 mph for Bay Area

Notes and References:

1. Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
2. Roadways were modeled using CALINE4 Cal3qhc air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box.
3. Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHH toxicity values adopted in 2013.

**Bay Area Air Quality Management District
Risk & Hazard Stationary Source Inquiry Form**

This form is required when users request stationary source data from BAAQMD. This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

For guidance on conducting a risk & hazard screening, including for roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart

Table A: Requestor Contact Information	
Contact Name:	James Reyff
Affiliation:	Illingworth & Rodkin
Phone:	(707) 794-0400
Email:	reyff@illingworthrodkin.com
Date of Request	4/18/2018
Project Name:	Page St Housing
Address:	329 Page St
City:	San Jose
County:	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.):	Residential
Project size (# of units, or building square feet):	82 Units
Comments:	

For Air District assistance, the following steps must be completed:

Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map. Download and install the free program Google Earth, <http://www.google.com/earth/download/ge/>, and then download the county specific Google Earth stationary source application files from the District's website, <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration. Find the project site in Google Earth by inputting the site's address in the Google Earth search box. Using the Google Earth ruler function, measure the distance in feet between the project's fenceline and the stationary source's fenceline for all the sources that are within 1,000 feet of the project's fenceline. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm that the source is within 1,000 feet of the project. Please report any mapping errors to the District (District contact information in Step 9). If the stationary source is within 1,000 feet of the project's fenceline and the stationary source's information table does not list the cancer risk, hazard index, and PM2.5 concentration, and instead says to "Contact District Staff", list the stationary source information in Table B Section 1 below. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further. Email this completed form to District staff (Step 9). District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks. **Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request. Submit forms, maps, and questions to Alison Kirk at 415-749-5169, or akirk@baaqmd.gov .**

Table B Section 1: Requestor fills out these columns based on Google Earth data				Table B Section 2: BAAQMD returns form with additional information in these columns as needed								
Distance from Receptor (feet)	Receptor	Plant # or Gas Dispensary #	Facility Name	Street Address	2014 Screening Level Cancer Risk (1)	2014 Screening Level Hazard Index (1)	2014 Screening Level PM2.5 (1)	Adjusted Risk	Adjusted HI	Adjusted PM		
860	Page St Housing	19794	San Jose Water Co.	420 Buena Vista Ave	60.881923497	0.093823	0.077261	3.044	0.005	0.004		

Footnotes:

- These Cancer Risk, Hazard Index, and PM2.5 columns represent the rows in the Google Earth Plant Information Table that say "Contact District Staff" (Map A above). BAAQMD will return this form to you with this screening level information entered in these columns.
- Each plant may have multiple permits and sources.
- Fuel codes: 98 = diesel, 189 = Natural Gas.
- Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
- If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.
- The date that the HRSA was completed.
- Engineer who completed the HRSA. For District purposes only.
- All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
- The HRSA "Chronic Health" number represents the Hazard Index.
- Further information about common sources:
 - Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
 - The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or less. To be conservative, requestor should assume the cancer risk is 1 in a million and the hazard index is 0.003 for these sources.
 - BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010. Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
 - Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the number of years perc use will continue after the project's residents or other sensitive receptors (such as students, patients, etc) take occupancy.
 - Gas stations can be adjusted using BAAQMD's Gas Station Distance Multiplier worksheet.
 - Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
 - This spray booth is considered to be insignificant.

Date last updated:
3/12/12