

**THE CREAMERY
AIR QUALITY MITIGATION PLAN**

for submittal to the

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

prepared for:

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Introduction

The Creamery is a mixed-use development project consisting of residential, retail, and office space. It is planned as an urban fill-in project at the former Crystal Creamery site located between 10th and 11th Streets and C and E Streets on the north side of downtown Sacramento. The project will cover 8.31 acres in area, blending in with the existing trees and the neighborhood grid of streets, sidewalks, and bikeways. The development will consist of 217 housing units, split between multi-use loft buildings and single-family halfplexes and row houses, and approximately 110,500 square feet of commercial space for offices, retail, and artisan workshops.

The Creamery project is subject to review under the California Environmental Quality Act (CEQA), which requires the preparation of an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). Based on the various land uses within the development, the project will cause both direct and indirect air quality impacts during its construction and operational phases. This Air Quality Mitigation Plan (AQMP) addresses the operational air quality impacts of the development by evaluating pollution mitigation measures to be applied to the project from a list of measures recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD). These measures are necessary for the project to meet the CEQA requirements and regional air quality goals.

As a commenting agency, the SMAQMD must assess whether this project has significant air pollutant emissions impacts. If emissions impacts are significant, then under SMAQMD CEQA guidelines a mitigation plan must be prepared to address these significant impacts. The analysis contained in this AQMP assumes that the emissions impacts associated with The Creamery will be found to be significant. However, it will be shown that the development will provide adequate measures to offset the impacts, primarily of regional ozone precursor emissions.

Purpose of the Air Quality Mitigation Plan (AQMP)

CEQA requires that EIRs or MNDs identify and evaluate any significant environmental impacts of a proposed project, prior to the application of mitigation. The analysis of significant effects must include both direct project impacts and indirect impacts.¹ The analysis must then describe feasible measures that could minimize or reduce any significant adverse impacts to less-than-significant levels.² To assist in the evaluation of air quality impacts, the SMAQMD developed its *Guide to Air Quality Assessment in Sacramento County* (CEQA Guide), dated July 2004. The CEQA Guide outlines a methodology for calculating project emissions whereby a project is divided into separate construction and operational phases. For each phase, the CEQA Guide establishes

¹ CCR Title 14, Chapter 3, Section 15126.4(a)(1), Guidelines for Implementation of the California Environmental Quality Act.

² Ibid. Section 15126.2(a).

significance thresholds related to elevated regional ambient ozone concentrations.³ Project emissions are compared to these significance thresholds, and mitigation measures are required for projects with emissions exceeding these thresholds.

In the CEQA process, project operational emissions are calculated and impacts are reported in the draft EIR or MND. The CEQA Guide and review process requires preparation of an AQMP that addresses mitigation of a project's significant operational emissions impacts.

The Creamery project consists of redeveloping approximately 8.31 acres, spanning two neighborhood blocks, into a high-density, mixed residential/commercial use property containing 217 residential units, 36 retail/office/artisan loft spaces, and 78,000 square feet of customizable office space. Several vacant buildings currently located on the project site, remaining from the old Crystal Creamery facility, will be demolished before construction commences. Considering the proposed development, operational emissions will be predominantly indirect in nature, resulting from exhaust emissions related to commuter, worker, shopper, delivery, and municipal service vehicles. For the purposes of this AQMP, the project's operational impacts are assumed to exceed the SMAQMD significance thresholds for regional ozone precursor emissions. However, this exceedance is assumed to occur prior to the application of the mitigation measures described herein.

Recognizing that indirect emissions from land use development projects can significantly impact the region's air quality, the County of Sacramento adopted a land use review requirement (Policy AQ-15) for the Air Quality Element in the General Plan.⁴ Several of the incorporated areas within Sacramento County have also adopted air quality elements to their general plans, and the City of Sacramento has proposed to do so as part of its current General Plan Update.⁵ The SMAQMD's land use review policy requires that projects with significant operational air quality impacts (related to regional ozone) reduce direct and indirect emissions by a minimum of 15% by selecting and implementing mitigation measures from a list of SMAQMD recommendations. These recommendations are contained in the SMAQMD's *Recommended Guidance for Land Use Reductions*, Version 2.4, updated August 15, 2007 (Land Use Guide).⁶ The SMAQMD has further determined that this 15% reduction in emissions will satisfy the "all feasible measures" mitigation requirement under CEQA for operational impacts for all jurisdictions within Sacramento County.⁷

³ SMAQMD, Guide to Air Quality Assessment in Sacramento County, July 2004, Page 2-10.

⁴ County of Sacramento, Planning and Community Development Department, General and Advance Planning Section, *Air Quality Element of the Sacramento General Plan*, December 15, 1993, Revised May 2, 1997, Page 14, available at <http://www.planning.saccounty.net/general-plan/docs/pdf/GP-Elements/Air-Quality-Element.pdf>.

⁵ City of Sacramento, General Plan, Technical Background Report, June 2005, Section 6.5, available at http://www.sacgp.org/documents/Chapter6_EnvironmentalResources.pdf.

⁶ SMAQMD Recommended Guidance for Land Use Emission Reductions, 2007 Update, Version 2.4, updated on August 15, 2007.

⁷ SMAQMD Operational Air Quality Mitigation Protocol Fact Sheet, Version 3.2, July 7, 2008, available at <http://www.airquality.org/ceqa/OperationalMitigationProtocol.pdf>.

To assist in documenting, quantifying, and monitoring the mitigation measures selected by the project proponent, the SMAQMD has prescribed that the selected operational mitigation measures be explained in the context of the AQMP. The AQMP is a standalone document separate from any other documents or plans required by CEQA or other laws, ordinances, or regulations. During the environmental review process, and usually before certification of the DEIR or MND by the lead agency, the SMAQMD independently endorses the AQMP via a letter. The endorsed AQMP is then referenced in the DEIR or MND as an air quality mitigation measure, appended to the DEIR or MND, and at the discretion of the lead agency, may be referenced as a separate condition of approval.

Project Description

The project will be fully described in the CEQA document. The following serves as a summary of pertinent information contained in the CEQA document that is relevant to the AQMP.

The Creamery is a master-planned, transit-oriented, mixed-use development proposed for an 8.31-acre property on the northern side of downtown Sacramento. As shown in the map provided in Appendix A, the project area consists of the "North Block," a mixed-use area generally bounded by the old Southern Pacific Rail Yards to the north, 11th Street to the east, D Street on the south, and the KCRA television station property to the west; and the "South Block," a predominately residential area, bounded by D Street to the north, 11th Street to the east, E Street on the south, and 10th Street to the west. The area is currently zoned as industrial (M1), but is proposed to be rezoned as commercial (C-2)/residential (R-3A). It is also in close proximity to several other residential, commercial, and industrial use areas.

Key design features of The Creamery project include multi-story housing units to maximize living space while accommodating a higher density of people in the project area; ground floor parking in the residential buildings to greatly reduce the space required for open parking lots and urban heat island effects; office and retail space that will allow many residents to live and work in the same area, reducing vehicle trips; and effective integration of roads, walkways, and bikeways with existing city infrastructure. In addition, the project is less than one-eighth of a mile from Regional Transit's Alkali Flat/La Valentina light rail station and multiple bus routes, providing fast, easy, and efficient transportation into central downtown Sacramento and surrounding areas. The project also provides bicycle linkage to Class II bike lanes along E Street and Class III bike routes along 11th Street, with multiple other lanes and routes within one-half mile from the development. The residential units will have an average of 1070 square feet each, while the retail and artisan spaces will average about 900 square feet a piece. These work spaces, when combined with 78,000 square of office space between two three-story buildings, will provide for an estimated 450-500 jobs on-site, which will produce a jobs per household ratio close to, but slightly higher than, the ideal balance of 1.5.

Project plans are included in Appendix B.

Methodology

The SMAQMD Land Use Guide contains a list of potential emission mitigation measures approved by the SMAQMD and the methodologies for calculating emission mitigation credits. These measures are related to bicycle/pedestrian use, transit, parking, commercial and residential development design, building design, and commuting. Each measure has been assigned a land use type for which credit may be claimed, and a point value. The land use types include residential (R), commercial (C), and mixed-use (M). Each point, or fraction thereof, associated with a particular measure corresponds to an equal percentage of emission reductions. Residential and commercial projects may claim credit only for measures identified as “R” or “C,” respectively, while mixed-use residential and commercial projects may claim credit for any measure. Mixed-use projects claiming credit for a strictly commercial or residential measure must scale the credit claimed to that fraction of project that is commercial or residential.

As summarized above, the project is mixed-use residential and commercial. The Creamery project will therefore be claiming credit for measures relating to all three land use types, with appropriate scaling for non-mixed-use measures. The scaling was done by calculating a simple percentage of the whole, based on building area, for each land-use type. The resulting percentages are shown in Table 1, and are later applied to the relevant mitigation measures in Table 7.

	Area	% of Total Building Area
Residential (R)	232,400 SF	68%
Commercial/Retail/Artisan Lofts (C)	110,458 SF	32%
Total Building Area	342,858 SF	100%
Land +/- 8.31 acres	361,942 SF	
Proposed Floor-to-Area Ratio (FAR)	0.95	

Mitigation Measures

The following headings contain the operational mitigation measures that have been selected from the SMAQMD Land Use Guide and the non-scaled point value (percent reduction) associated with each measure. A concise explanation of how the project will incorporate and enforce the selected measure follows each heading.

M1 – Non-Residential Projects Provide Plentiful Short-term and Long-term Bicycle Parking Facilities to Meet Peak Season Maximum Demand (0.625 Points)

The availability of bicycle parking is a key factor in encouraging both employees and patrons of non-residential establishments to travel by bicycle. For this measure, the

SMAQMD Land Use Guide requires a minimum ratio of one bike rack space per 20 vehicle spaces to be installed as short-term bicycle parking facilities. Long-term bicycle parking facilities should be provided at a minimum ratio of one long-term bicycle storage space per 20 employee parking spaces.

Short-term parking facilities are to be located adjacent to destination(s) and within 50 feet of all primary entrances. The racks will be a non-enclosed design that allows for the use of high-security U-shaped locks to lock the frame and one wheel to the rack. Long-term parking facilities will consist of one of the following: a bicycle locker, a locked room with short-term bicycle parking facilities and access limited to bicyclists only, or a standard rack in a location that is staffed or monitored by video surveillance during standard operating hours.

The bicycle parking facilities for this project will be located at several convenient locations adjacent to the plaza and park areas, as well as near entrances to the office buildings and artisan lofts. The current project design includes 171 shared parking spaces for residential guests and all non-residential uses, with 160 spaces intended for people working in the office buildings, retail spaces, and artisan lofts; therefore, a minimum of nine (9) short-term and an additional eight (8) long-term parking facilities are required to be installed (Tables 2 and 3). Additionally, each loft building will have a bicycle storage room (Class I) in the garage, which, at ground level, will provide easy access to and from all facilities within the development.

Table 2 Total Bicycle Parking	
Total Number of Parking Spaces	Calculation for The Creamery
171 Spaces	171 Spaces / 20 = 8.55
Total Bicycle Parking Provided	9

Table 3 Long-Term Bicycle Parking	
Building	Number of Employee Parking Spaces
Office 1	68 spaces
Office 2	68 spaces
Commercial/Retail	12 spaces
Artisan Lofts	12 spaces
Total Employee Parking Spaces	160 spaces
Total Long Term Bicycle Parking Facilities	8 facilities

M4 – Entire Project is Located Within ½-Mile of an Existing Class I or Class II Bike Lane and Project Includes an Internal Network that Connects the Project Uses to the Existing Offsite Facility (0.625 Points)

The project includes frontage along 10th and 11th Streets and along D and E Streets, with existing Class II bikeway lanes on E Street. Additional Class II bikeway lanes are also accessible within one-half mile of the development to the northeast and east on C Street and on 13th Street, respectively. A “City of Sacramento Bikeways” map is included in Appendix C, showing the existing bikeways.

Internal to the project area are paths and walkways, including a wide, raised, delineated, mid-block crossing between the North Block and the South Block portions of the development, connecting all project uses and on-site bicycle parking facilities to established neighborhood roads, sidewalks, and bikeways.

M5 – The Project Provides a Pedestrian Access Network that Internally Links All Uses and Connects to All Existing or Planned External Streets and Pedestrian Facilities Contiguous with the Project Site (1.0 Points)

The project will meet the criteria of this measure by providing a complete network of internal sidewalks connecting all internal uses and existing external streets. As shown in Appendix A, broad, open pedestrian access to The Creamery development is gained along 11th Street and D Street for both blocks, with multiple other street access corridors between most street-facing buildings. The project contains ample internal pedestrian paths and open plaza and park areas that will connect all land uses to each other. The office buildings, residential lofts, and sing-family halfplexes will have multiple access doors, thus affording pedestrian access from the street, the parking lots/driveways, and central plaza or park areas in the respective blocks.

Additionally, the sidewalks along D Street will be a minimum of five feet in width, with the north-facing frontage of the South Block exceeding this dimension to allow more open interaction between the halfplex patio spaces and the street. All sidewalks will be separated from the traffic lanes by a vertical curb.

M6 – Site Design and Building Placement Minimize Barriers to Pedestrian Access and Interconnectivity. Physical Barriers such as Walls, Berms, Landscaping, and Slopes Between Residential and Non-Residential Uses that Impede Bicycle or Pedestrian Circulation are Eliminated (1.0 Points)

The project design does not include walls, berms, landscaping, or slopes that could impede bicycle or pedestrian flow between land uses. Rather, as outlined in the site plan, connectivity between all planned uses will be maximized by the pedestrian facilities shown in Appendix B.

The internal and external connectivity afforded by The Creamery project plan will provide easy pedestrian-oriented access to all project areas and surrounding neighborhood amenities and transit. Broad plazas, walkways, and crosswalks will guide the pedestrian traffic through the development and between the blocks. Additionally, walls are not a part of the project; therefore, pedestrian flow will not be inhibited between facilities.

M7 – Bus or Streetcar Service Provides Headways of One Hour or Less for Stops Within ¼-Mile; Project Provides Safe and Convenient Bicycle/Pedestrian Access to Transit Stop(s) and Provides Essential Transit Stop Improvements (i.e., Shelters, Route Information, Benches, and Lighting) (1.0 Points)

The project lies within a 1/8-mile radius of Sacramento Regional Transit's Alkali Flat/La Valentina light rail station, which provides light rail service to Downtown Sacramento, Watt/I-80, Meadowview, and Amtrak's Sacramento Valley Station. Light Rail passengers are also able to transfer to trains headed eastward toward the City of Folsom. Light Rail headways are 15 minutes throughout the day, with additional early morning and night service. In addition, Regional Transit's bus routes 34, 29, and 33 all have stops within ¼-mile of the project area, providing a mix of 30-minute weekday, hourly weekend, and peak weekday service to areas in and around downtown Sacramento.

M9 – Project Design Includes Pedestrian/Bicycle Safety and Traffic Calming Measures in Excess of Jurisdiction Requirements. Roadways are Designed to Reduce Motor Vehicle Speeds and Encourage Pedestrian and Bicycle Trips by Featuring Traffic Calming Measures (1.0 Points)

Several traffic calming measures will be implemented as part of the project including wide sidewalks along D Street (the longest frontage of the project), vertical curbs, intersections that only meet at right angles, and a wide, raised, delineated, mid-block crossing connecting the North and South Blocks. Furthermore, currently marked crosswalks within the existing neighborhood street grid will be retained.

All streets within the project area will have on-street parking that is parallel to the curb, except for the North Block along D and 11th Streets and the South Block frontage along 11th Street, which will be converted into angled parking, further reducing traffic speeds through the center and along the eastern portions of the development.

In addition to the above mentioned traffic calming measures, roadways within the developed property will be narrow, all turns will be at right angles, and driveways into and out of the first floor parking garages will be shared. All of these features will slow vehicles traveling within the development. Also, the alley through the South Block will be one way, limiting vehicle use, and the paving will consist of mixed material to create a softened appearance and deter non-resident use.

Due to the extensive list of traffic calming measures listed above, the full emission reduction credit is being taken for this mitigation measure.

M11 – Provide Minimum Amount of Parking (6.0 Points)

Parking for this project will consist of two parts: residential garages and shared “flex” parking in lots within the North Block. The project proposes no more than 445 spaces and they will be allotted in the following manner. For the three North Block residential loft buildings, a maximum of one parking space per unit (159 total) will be provided in the ground floor garages. One additional space will be provided for the live-in, care-taker unit next to the artisan lofts. In the South Block, each residence will have a tandem-style two-car garage, providing 114 parking spaces, but there will be no additional parking for guests within the development. For the offices, retail spaces, and artisan lofts located in the North Block, as well as residential guests, 171 shared parking spaces will be provided on-site. Of the 171 shared spaces, 11 will be for guest parking (one for every 15 units), 136 will be for the office buildings, 12 will be for the retail spaces, and the remaining 12 spaces will be for the artisan lofts. All “flex” parking spaces are depicted in Appendix A.

Because this project is a Planned Unit Development (PUD) in the Sacramento city core urban area, it is not subject to city parking requirements. However, for evaluation purposes, Sections 17.64 and 17.178 of the City Zoning Code will be used as guidelines for determining the minimum number of parking spaces. Section 17.64 contains general parking requirements applicable to all projects, and Section 17.178 contains Transit Overlay Zone requirements. The Transit Overlay Requirements may be applied within Residential Mixed Use (RMX) and Commercial (C-2) zones for projects within a ½-mile radius of a light rail station; therefore, they can be applied to this project.

From these sections of the City Zoning Code, both the jurisdictional minimum parking requirements for the project were calculated, as shown in Table 4. Due to the shared, “flex” parking arrangement, parking will be provided at a reduced level from what would otherwise be required.

The trip reduction factor associated with this measure was determined by utilizing the Institute of Transportation Engineers (ITE) parking generation manual.⁸ The reduction in trips was computed, as shown below, as the ratio of the difference of the reduced parking recommended by code for this project and ITE peak parking demand to the ITE peak parking demand for the land uses, multiplied by 50%.

$$\text{Percent Trip Reduction} = 50\% \times [(\text{Minimum parking allowed by the code} - \text{ITE peak parking demand}) / (\text{ITE peak parking demand})]$$

⁸ Institute of Transportation Engineers (ITE), *Parking Generation*, (3rd Edition). ISBN: 0-935403-79-5 January, 2004.

Table 4 Parking Space Calculations		
Vehicle Parking	Totals	Applicable Code Section
Residential spaces allowed: <i>(1 space / unit + 1 guest space / 15 spaces)</i>		17.178(F)(1)
North Block Residents: (160 units / 1)	160 spaces	17.178(F)(1)
North Block Guests: (160 units / 15)	11 spaces	17.178(F)(1)
South Block Residents : (57 units / 1)	57 spaces	17.178(F)(1)
South Block Guests : (57 units / 15)	4 spaces	17.178(F)(1)
Total residential allowed:	232 spaces	
Office/Commercial/Retail spaces required:		
Office: (88,980 SF / 450)	198 spaces	17.64.020.2
Artisan Lofts: (12,993 SF / 450)	29 spaces	17.64.020.2
Retail: (19,613 SF) <i>Lots 5,200 SF or greater: 1 space per 400 SF for the first 9,600 SF of total gross floor area. One space per 250 gross SF for the area in excess of 9,600 SF of total gross floor area</i>	First 9,600 SF: 24 spaces	17.64.020.2
	Remaining 10,013 SF: 26 spaces	
Total minimum required:	277 spaces	
Total minimum required:	232 + 277 = 509 spaces	
Total spaces provided:	445 spaces	
Total parking reduction	64 spaces	

The project's ITE peak parking demand is shown in Table 5. The parking demand for the residential units is a fixed 1.00 space per unit, regardless of the month of year or the day of the week. The parking demand for the office buildings and artisan lofts is based on them being in an "urban" location, while the parking demand for the retail units is based on the weighted-average demand factors for Monday-Thursday and Friday, during the year and in December alone.

Credit for this measure is calculated according to the following equation:

$$\text{Percent Reduction} = 50\% * (509 \text{ spaces} - 492 \text{ spaces}) / 492 \text{ spaces} = 1.72\%$$

A calculated reduction of 1.72% for this measure is claimed, out of the maximum credit of 6%.

<p align="center">Table 5 Project Peak Parking Demand Calculation</p>		
Land Use	ITE Peak Parking Demand Guideline	Peak Parking Spaces
Residential (217 units)	1.00 space per unit	217
Office (78,000 SF)	2.40 spaces per 1,000 SF	188
Artisan Lofts (12,993 SF)	2.40 spaces per 1,000 SF	32
Retail (19,613 SF)	2.78 spaces per 1,000 SF	55
Total		492

M13 – Provide a Parking Lot Design That Includes Clearly Marked and Shaded Pedestrian Pathways Between Transit Facilities and Building Entrances (0.5 points)

The pedestrian network connecting the North and South Blocks, all parking areas, and the plazas/park to the building entrances and neighborhood sidewalks, bikeways, and transit facilities will be clearly marked, as shown in Appendix B. All residential buildings, halfplexes, and row houses will be accessible from multiple sides, with the D Street loft building, the two office buildings, and all South Block residences having direct building access from the sidewalk. Existing trees along all city streets, newly planted trees within the development, and awnings over the walkways around the buildings will provide shading for pedestrians passing along and through the development.

M14 – Parking Facilities Are Not Adjacent to Street Frontage (1.5 points)

The project plan includes a total of 445 parking spaces, with the majority (273) of the spaces located in the first-level parking garage beneath the loft buildings, the halfplexes, and row houses. The remaining 171 shared, or “flex”, parking spaces for the office buildings, retail shops, artisan lofts, and residential guests are along the driveway winding through the North Block of the development and will generally be hidden from street view, as shown in Appendix A. Only a small portion of the parking spaces (49) on the southern and eastern sides of the North Block will be visible to vehicles passing the development on D and 11th Streets, even with a proposed four foot tall brick wall between the east-side parking lot and 11th Street that will limit the lot’s visibility from the street; therefore, 396 of the 445 parking spaces, or 89%, of the spaces will not be adjacent to street frontages.

Credit for this measure is being claimed at 1.34 trip reduction points, or 89% of the total possible, for the majority of the parking facilities being located in garages and away from the roads. Measure 15 is also being implemented for this project, further supporting credit of more than 1.0 point for this measure.

M15 – Project Provides High Density Office or Mixed-Use Proximate to Transit (2.0 Points)

The developed portion of the project area will consist of 217 residential units, two office buildings, 18 retail spaces, and 18 artisan lofts, covering an area of 180,722, square feet, as can be seen in Appendix A. Each of the buildings, except the artisan lofts, will consist of multiple floors, resulting in a higher density of usable floor space equal to 342,858 square feet. The ratio of these two areas produces a floor-to-area (FAR) of 1.90.

The project area is 1/8-mile from Sacramento Regional Transit's Alkali Flat/La Valentina light rail station on 12th Street, as well as multiple bus routes, and there is direct access to existing sidewalks and bike lanes connecting the development to the nearby mass transit facilities.

Based on the table provided for this measure by the SMAQMD⁹, the location of the development within 1/4-mile of the exiting transit station, which has a headway frequency of 15 minutes, and a FAR of 1.90, 1.5 credits are being taken for this measure.

M16 – Project is Oriented Toward Existing Transit, Bicycle, or Pedestrian Corridor; Setback Distance is Minimized (0.5 Points)

The project meets the requirements of this measure by orienting retail stores on the ground floor of the D Street Lofts, the office buildings, all halfplexes, and more than half of the row houses along the street frontages of D and E Streets and 10th and 11th Streets with near-zero setbacks. In this way, bicycles and pedestrians may enter directly from the sidewalks or via any parking areas. Additional entrances to each building will also be available from the plazas and parks in the center area of each block, as well as from the driveways/alleys adjacent to the buildings, which will all connect to existing streets, sidewalks, and bikeways.

M18 – Project Provides High-Density Residential Development (12.0 Points)

The proximity of this project area to Sacramento Regional Transit's Alkali Flat/La Valentina light rail station on 12th Street and multiple bus routes, and the inclusion of three, multi-story, apartment style buildings and numerous, closely spaced halfplexes and row houses, provides for a high-density residential development. These factors, combined with direct access to existing sidewalks and bike lanes connecting the development to the nearby mass transit facilities, will lead to reduced vehicle trips and emissions.

⁹ SMAQMD Recommended Guidance for Land-Use Emission Reductions, 2007 Update, Version 2.4, updated on August 15, 2007, p. 18.

The residential portion of the development will consist of 217 dwellings and the buildings will cover an area of 3.1 acres, out of the gross 8.31 acres for the entire development, as can be seen in Appendix A. These values result in a dwelling units/acre (du/acre) of 70.0. Based on the table provided for this measure by the SMAQMD¹⁰, the location of the development within ¼-mile of the exiting transit station, which has a headway frequency of 15 minutes, and a du/acre of 50+, full credit for the residential portion of the project is being claimed.

Table 6 Residential Density Calculation	
Project Buildings and Open Spaces	Floor Area (sq. ft.)
D Sreet Lofts (R)	25,823
Rail Yard Lofts (R)	27,088
Mills Lofts (R)	24,845
Office 1	15,917
Office 2	15,908
Artisan Lofts	12,993
Halfplexes (R)	19,096
Row houses (R)	38,530
Staff Res. Loft (R)	522
North Block space	139,121
South Block space	42,099
Total	361,942
Residential Total	135,904
Residential Total (acres)	135,904 ft² / 43,560 ft² = 3.1
Dwellings	217
Du/Acre	70.0

M19 – Multiple and Direct Street Routing (Grid Style) (1.0 Point)

This measure only applies to projects with an internal connectivity factor (CF) greater than 0.80 and an average of ¼-mile or less between external connections along the project perimeter. This project will be built on two city blocks, which have a perimeter less than 1,350 feet, or <¼-mile, that are integrated into the city’s existing gridded network of streets. The development will make use of five intersections and will not have any cul-de-sacs, resulting in a CF > 0.80 based on the following calculation:

$$CF = \# \text{ of intersections} / (\# \text{ of intersection} + \# \text{ of cul-de-sacs}) = 5 / (5+0) = 1.0$$

¹⁰ Ibid, p. 20.

Additionally, both the North Block and the South Block have multiple driveways, pedestrian pathways, and sidewalks connecting all of the developments internal facilities to external roads at multiple locations on each street frontage.

M23 – Suburban Mixed-Use: Have at Least Three of the Following on Site and/or Offsite Within ¼ Mile: Residential Development, Retail Development, Park, Open Space, or Office (3.0 Points)

Credit for this measure is contingent on there being at least three distinct land-use types existing within the project or within ¼-mile of the project. The project itself contains all five of the listed land uses, namely the office buildings, the residential units, the retail/commercial spaces, open space between the buildings in the North Block, and a park in the center of the South Block, satisfying the requirement. Furthermore, two other parks and numerous other developed land-use types exist within ¼-mile of the project area.

M25 – Project Does not Feature Fireplaces or Wood Burning Stoves (1.0 Point)

Fireplaces and wood burning stoves will not be available in any of the buildings, whether the unit is residential, retail, or commercial; therefore, full credit for the residential portion of the development is being taken. Natural gas inserts may be considered in the design of the residential halfplexes and row houses, but these are allowed without affecting the credits claimed here.

M31 – Non-Roof Surfaces (1.0 Point)

A majority of the total parking spaces for this project are associated with the residential units in the loft buildings, the halfplexes, and the row houses and all of them are located on the ground level and in garages of the respective buildings. The percentage of under-cover parking spaces can be calculated based on the following equation:

$$[\text{Lofts (159) + Halfplexes (44) + Row houses (70)}] / \text{Total Parking (445)} = 61\%$$

Therefore, the project will meet the criteria of this measure by placing a minimum of 50% of parking spaces under cover (defined as underground, under deck, under roof, or under a building).

Conclusion

According to the credit assigned by the SMAQMD Land Use Guide, application of the above mitigation measures to the proposed project will reduce the project's operational NOx emissions by 24.65%. These reductions, summarized in Table 7, significantly

exceed the SMAQMD's 15% minimum to satisfy the "all feasible measures" requirement under CEQA for significant operational impacts.

Table 7				
Summary Mitigation Measures for The Creamery				
Measure	Development Type ^a	Point Value	Scaling Factor ^b	Credit Given for Measure
1	C, M	0.625	M = 1.0	0.625
4	R, C, M	0.625	M = 1.0	0.625
5	R, C, M	1.0	M = 1.0	1.0
6	R, C, M	1.0	M = 1.0	1.0
7	R, C, M	1.0	M = 1.0	1.0
9	R, C, M	1.0	M = 1.0	1.0
11	R, C, M	6.0	M = 1.0	1.72
13	R, C, M	0.5	M = 1.0	0.5
14	R, C, M	1.5	M = 1.0	1.34
15	R, C, M	2.0	M = 1.0	1.5
16	R, C, M	0.5	M = 1.0	0.5
18	R	12.0	R = 0.68	8.16
19	R, C, M	1.0	M = 1.0	1.0
23	R, C, M	3.0	M = 1.0	3.0
25	R	1.0	R = 0.68	0.68
31	R, C, M	1.0	M = 1.0	1.0
Total				24.65

^a As indicated on the SMAQMD list of recommended measures.

^b R = residential, C = commercial, M = mixed use developments.