

May 7, 2018

Mr. James Kozak
CVP PALM SPRINGS, LLC
12671 High Bluff Drive, Suite 150
San Diego, CA 92130

Subject: Vista Del Agua Specific Plan Air Quality and Greenhouse Gas Impact Study, City of Coachella – Supplemental Letter

Dear Mr. Kozak:

Introduction

RK ENGINEERING GROUP, INC. (RK) would like to provide this supplemental letter for the Vista Del Agua Development Specific Plan Air Quality and Greenhouse Gas Impact Study (Air Study). The latest version of the Air Study was completed by RK on September 1, 2016. The project site is located south of the I-10 Freeway and east of Tyler Street, in the City of Coachella, California. The project consists of a mixed-use specific plan development on 275 acres.

The purpose of this supplemental letter is to discuss changes to the California Emissions Estimator Model (CalEEMod) since the 2016 Air Study was prepared. This letter also provides updated historical records of ambient air quality data near the site.

Based upon this review of the latest air emissions factors and ambient air quality conditions near the project site, the previous 2016 Air Study adequately assess all potential project impacts and additional analysis is not recommended at this time.

CalEEMod

The September 2016 Air Study utilized CalEEMod version 2013.2.2, which was the latest available version at the time the study was published. The current available version of CalEEMod is version 2016.3.2

Changes that impact reported emissions values include updates to the California Air Resources Board (CARB) OFFROAD emissions calculation methodology, updated on-road

emissions factors from EMFAC2011 to EMFAC 2014, and building efficiency updates reflecting the 2013 Title 24, Part 6 standards.

Emission Factors (EMFAC)

CalEEMod version 2013.2.2 utilizes emissions factors from EMFAC2011, while the current CalEEMod version 2016.3.2 utilizes emissions factors from EMFAC2014.

EMFAC2014 represents CARB's currently adopted understanding of motor vehicle travel activities and their associated emission levels. The EMFAC emissions model is developed and used by CARB to assess emissions from on-road vehicles including cars, trucks, and buses in California, and to support CARB's regulatory and air quality planning efforts to meet the Federal Highway Administration's transportation planning requirements. The US EPA approves EMFAC for use in the State Implementation Plan and transportation conformity analyses.

The CARB maintains and continually updates emissions factors as policy and technology continue to be adopted and implemented. As a result of these policy and technology changes, mobile source emissions factors are generally found to have decreased from EMFAC2011 to EMFAC2014. Policy's such as the federal Corporate Average Fuel Economy (CAFE) standards and the California Clean Cars Standards continue to push for clean, more efficient cars and trucks.

Additionally, CARB's latest statewide truck and bus regulations, emissions requirements for heavy duty engines, tractor-trailer GHG regulation, diesel-fueled commercial motor vehicle idling rules, and the heavy-duty hybrid-electric vehicle certification procedures have all contributed to lower emissions factors over the past few years. Also, The Carl Moyer Program continues to accelerate the replacement of older, dirtier diesel engines with newer, cleaner technologies by providing funding for fleet replacements.

As a result of the continued policies to reduce air pollution, toxic air contaminants and greenhouse gases, statewide emissions factors for mobile vehicle sources, stationary sources and energy sources continue to generally be reduced. Therefore, the emissions estimates reported in 2016 Air Study are conservative and actual project emissions will be lower.

Title 24

Title 24 of the California Code of Regulations, known as the California Building Standards Code or Title 24, contains energy conservation standards applicable to all residential and non-residential buildings throughout California.

CalEEMod version 2013.2.2 utilized the 2008 Title 24 standards for building efficiency, energy usage, and lighting. The current CalEEMod 2016.3.2 version utilizes the 2013 Title 24 standards.

The 2013 Title 24 standards continue to improve upon building and energy efficiency and reduce greenhouse gas emissions. The following are some of the highlights of the 2013 standards:

Residential

- Insulated hot water pipes
- Improved window performance
- Whole house fans
- Solar ready roof design

Non-Residential

- High performance windows
- Efficient process equipment
- Advanced lighting controls
- Solar ready roof design
- Occupant Controlled Smart Thermostats
- Cool roof technologies

The 2013 Standards will use 25% less energy for lighting, heating, cooling, ventilation, and water heating than the 2008 Standards. Additionally, the Standards will save 200 million gallons of water per year (equal to more than 6.5 million wash loads) and avoid 170,500 tons of greenhouse gas emissions per year

Historical Air Quality Data

This letter provides updated air quality monitoring data for the area near the project site. The project site is located in the Coachella/Low Desert General Forecast Area and the Coachella Valley Air Monitoring Area. Table 1 summarizes the most recent three (3) year period, 2014 to 2016, of published monitoring data in the Coachella Valley. The data shows that ozone continues to exceed state and national standards, as well as PM₁₀ emissions continue to exceed state standards.

TABLE 1
Air Quality Monitoring Summary

Air Pollutant Location	Averaging Time	Item	2014	2015	2016
Carbon Monoxide from Coachella Valley 1 Station	1 Hour	Max 1-Hour (ppm)	2.0	2.0	3.1
		Days > State Standard (20 ppm)	0	0	0
		Days > National Standard (35 ppm)	0	0	0
	8 Hour	Max 8 Hour (ppm)	0.9	0.7	1.5
		Days > State Standard (9 ppm)	0	0	0
		Days > National Standard (9 ppm)	0	0	0
Ozone from Coachella Valley 1 Station	1 Hour	Max 1-Hour (ppm)	0.108	0.102	0.103
		Days > State Standard (0.09 ppm)	9	3	6
	8 Hour	Max 8 Hour (ppm)	0.093	0.092	0.092
		Days > State Standard (0.07 ppm)	61	51	48
		Days > National Standard (0.07 ppm) ¹	35	47	46
Coarse Particles (PM10) from Coachella Valley 1 Station	24 Hour	Max 24-Hour ($\mu\text{g}/\text{m}^3$)	57.0	115.0	113.0
		Days > State Standard ($50 \mu\text{g}/\text{m}^3$)	2	5	6
		Days > National Standard ($150 \mu\text{g}/\text{m}^3$)	0	0	0
	Annual	Annual Average ($\mu\text{g}/\text{m}^3$)	22.2	18.8	20.8
		Exceeded > State Standard ($20 \mu\text{g}/\text{m}^3$)	YES	NO	YES
Fine Particulates (PM2.5) from Coachella Valley 1 Station	24 Hour	Max 24-Hour ($\mu\text{g}/\text{m}^3$)	15.5	22.7	14.71
		Days > National Standard ($35 \mu\text{g}/\text{m}^3$)	0	0	0
	Annual	Annual Average ($\mu\text{g}/\text{m}^3$)	6.42	5.76	5.53
		Exceeded > State Standard ($12 \mu\text{g}/\text{m}^3$)	NO	NO	NO
		Exceeded > National Standard ($12 \mu\text{g}/\text{m}^3$)	NO	NO	NO
Nitrogen Dioxide from Coachella Valley 1 Station	1 Hour	Max 1-Hour (ppm)	0.046	0.042	0.043
		Days > State Standard (0.18 ppm)	0	0	0
	Annual	Annual Average (ppm)	0.007	0.006	0.006
		Exceeded > State Standard (0.030 ppm)	NO	NO	NO
		Exceeded > National Standard (0.053 ppm)	NO	NO	NO

TABLE 1
Air Quality Monitoring Summary

Air Pollutant Location	Averaging Time	Item	2014	2015	2016
Sulfur Dioxide from Coachella Valley 1 Station	1 Hour	Max 1 Hour (ppm)	--	--	--
		Days > State Standard (0.04 ppm)	--	--	--
		Days > National Standard (0.14 ppm)	--	--	--
	Annual	Annual Average (ppm)	--	--	--
		Exceeded > National Standard (0.030 ppm)	--	--	--

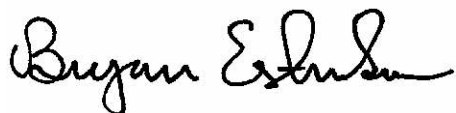
1. The 2014 O₃ national 8-hour standard is 0.07 ppm

Conclusions

Based upon this review of the latest air emissions factors and ambient air quality conditions near the project site, the previous 2016 Air Study adequately assess all potential project impacts and additional analysis is not recommended at this time.

RK Engineering Group, Inc. is pleased to assist CVP PALM SPRINGS and THE CITY OF COACHELLA with the Vista Del Agua Air Quality and Greenhouse Gas Impact Study. If you have any questions regarding this letter, or would like further review, please do not hesitate to call us at (949) 474-0809.

Sincerely,
 RK ENGINEERING GROUP, INC.



Bryan Estrada, AICP, PTP
 Senior Associate