LOS ANGELES COMMUNITY COLLEGE DISTRICT

EAST LOS ANGELES COLLEGE

THIRD ADDENDUM TO THE 2009 FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE EAST LOS ANGELES COLLEGE FACILITIES MASTER PLAN (2019 UPDATE)

PROJECT INFORMATION

Project Title:	East Los Angeles College Facilities Master Plan (2019 Update)
Lead Agency Name and Address:	Los Angeles Community College District 770 Wilshire Boulevard Los Angeles, CA 90017
Contact Person(s):	Kreg Eacret, College Project Director East Los Angeles College 1200 W. Floral Drive Monterey Park, CA 91754 (714) 519-8216
Project Location:	East Los Angeles College 1301 Avenida Cesar Chavez Monterey Park, CA 91754 County of Los Angeles

INTRODUCTION

The California Environmental Quality Act (CEQA) requires environmental review of all projects to determine whether there may be a significant impact on the environment. This report is the Third Addendum to the 2009 Final Supplemental Environmental Impact Report (2009 Final SEIR) for the East Los Angeles College (ELAC) Facilities Master Plan (FMP) 2019 Update (Revised Project or 2019 FMP Update). An Addendum to a previously certified Final EIR is permitted if some changes or additions are necessary, but none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred. Therefore, the purpose of this Addendum is to demonstrate that the proposed 2019 FMP Update would not result in any new significant or substantially more severe environmental impacts beyond what has been addressed in the previous environmental documentation.

BACKGROUND

ELAC is part of the Los Angeles Community College District (LACCD), and ELAC's FMP has been updated several times over the years to meet the needs of students, the college, and the surrounding community. The FMP was first approved in 1998 (Project or 1998 FMP) and consisted of the addition of 433,149 square feet of space to the campus, including the modernization of three existing campus buildings and the addition of four new parking structures. The 1998 FMP also included plans for air conditioning, infrastructure upgrades, landscaping and security upgrades. Under the 1998 FMP, the service area for ELAC included nine communities covering an area of approximately 77 square miles, and student enrollment was projected to reach 25,000 students by 2015. The Final EIR for the 1998 FMP (1998 Final EIR) was certified by the LACCD Board of Trustees on February 20, 2002.

In 2004, LACCD approved an Addendum to the EIR to address an update to the Project (the 2004 FMP Update). The 2004 FMP Update consisted primarily of changes to the location of proposed buildings, the addition and removal of facilities not proposed under the 1998 FMP, and modifications to the proposed parking structures. Changes to the total net square footage of the proposed buildings were minimal.

In 2008, a Second Addendum to the 1998 Final EIR was prepared to evaluate the modernization and expansion of the existing Dr. Helen Miller Bailey Library, an improvement that was not included in the 1998 FMP or the 2004 FMP Update. Specifically, the existing library was to be expanded to 57,100 gross square feet (gsf), an increase of 11,700 gsf. In addition, proposed improvements to ELAC included the removal of the existing bridge that connected the library building to the Campus Center building and the addition of an elevator to Building F5 to provide access for the disabled to the second level.

In 2009, LACCD determined that ELAC's service area had increased from 77 square miles to 100 square miles and that enrollment was expected to exceed the planned 25,000 students to reach 27,000 by 2015. In response, LACCD prepared a 2009 FMP Update and certified the 2009 Final SEIR to the 1998 Final EIR. The 2009 FMP Update included the addition of approximately 126,093 gsf of new facilities, demolition of existing buildings not originally proposed for demolition, and the addition of three campus marquees. The 2009 FMP Update also changed the planned demolition of Buildings G8 and H8 to modernization to bring these existing buildings up to current code and life safety standards.

In 2013, an Addendum to the 2009 Final SEIR was prepared to adopt ELAC's 2012 FMP Update, which included the projects that carry forward the concepts of providing state-of-the-art learning environments, enhanced infrastructure, improved safety, and adequate convenient parking. The 2012 FMP Update did not include the addition of any new facilities or demolition work.

In 2015, a second Addendum to the 2009 Final SEIR was prepared for the 2015 FMP Update to address the demolition of Buildings G8 and H8, which was originally planned under the 1998 FMP and the 2004 FMP Update.

PROJECT LOCATION

ELAC is located at 1301 Avenida Cesar Chavez in the City of Monterey Park, approximately 5.5 miles east of Downtown Los Angeles. The campus is bounded by Avenida Cesar Chavez on the south, Floral Drive on the north, Collegian Avenue on the east, and Bleakwood Avenue on the west as shown in **Figure 1**. An aerial photograph depicting the campus facilities and the surrounding photographs is presented in **Figure 2**.



Source: TAHA, 2019.



East Los Angeles College 2019 Facilities Master Plan Update *FIGURE 1* REGIONAL LOCATION



Source: TAHA, 2019.



East Los Angeles College 2019 Facilities Master Plan Update

FIGURE 2 SURROUNDING LAND USES

PROPOSED PROJECT

The Revised Project or 2019 FMP Update consists of projects in planning and programming phases. The existing or previously approved facilities identified in the 2015 FMP are presented in **Figure 3**. **Figure 4** depicts the location of the projects proposed under the 2019 FMP Update. The projects proposed under the 2019 FMP Update are not intended to accommodate any additional student enrollment, faculty or staff, and would not result in increased student enrollment beyond what was presented in the 2009 Final SEIR. The projects under the 2019 FMP Update include:

- Maintenance and Operations Replacement building
- Nursing, Allied Health, and Public Service building
- Kinesiology, Wellness and Athletics Center building and adjacent athletic fields
- Central Plant Equipment Expansion
- G3 Auditorium Renovation
- B5 Weigart Stadium Renovation

As a result of the Maintenance and Operations (M&O) Replacement Project, the present M&O buildings, the Stadium Lot Storage, and the D7 bungalow would be demolished. The M&O site would be developed into a cohesive maintenance facility, while the other sites would be restored to the degree necessary for future construction projects.

The Nursing, Allied Health, and Public Service Building would be located on the H8 site. Secondary effects of this project include the demolition of the G9 Nursing building, the F9 Administration of Justice bungalows, the A4 bungalow, the A6 101-105 bungalows, as well as the C2-113 bungalow. This removes a number of bungalows throughout campus; however, the prominent effect resulting from this project is the vacating of the F9 and G9 sites. This resulting demolition scope would open a contiguous area for future development north of the North Road on campus and south of West Floral Drive.

The secondary effects of the Kinesiology, Wellness and Athletics Center (KWAC) would include the demolition of both the C1 and E9 gyms. The demolition of the E9 Gym would expand the space established by the Nursing, Allied Health, and Public Service Building on the terrace north of the North Road and south of West Floral Drive. The site restoration of the upper terrace would closely follow the Landscape Master Plan, taking cues from the building locations planned in the 2019 FMP Update.

The secondary effects of the KWAC would be the demolition of the majority of the C2 bungalows and the demolition of the C1 Gym. These effects would open a similarly large contiguous area north of Cesar Chavez and east of the baseball field. This area is planned for the creation of an athletic center incorporating the KWAC as well as surrounding outdoor athletic uses, complementing the stadium and baseball field, with a reconfigured softball and soccer/multipurpose fields and accompanying bleachers. The bleachers would provide 1,000 seats for the softball field and 1,500 seats for the soccer/multipurpose field. This project would allow for the concentration of athletic uses in this area of the campus, reinforcing the Campus Athletic District.

The Central Plant Equipment Expansion Project would resolve current service inadequacies and lack of redundancy, and serve known new loads, with redundancy, for new buildings and may require increasing the size of the plant by 3,200 square feet.



Source: STIR ARCHITECTURE, 2019; TAHA, 2019.



East Los Angeles College 2019 Facilities Master Plan Update FIGURE 3 EXISTING 2015 FMP

LOS ANGELES COMMUNITY COLLEGE DISTRICT



Source: STIR ARCHITECTURE, 2019; TAHA, 2019.



East Los Angeles College 2019 Facilities Master Plan Update FIGURE 4 PROPOSED 2019 FMP

LOS ANGELES COMMUNITY COLLEGE DISTRICT

The renovations to the G3 Auditorium and Weigart Stadium involve improving ramp access, seating and other Americans with Disabilities Act (ADA) related issues without any expansion of the structure or square footage. The G3 Auditorium building would also receive audio visual/information technology (AV/IT) upgrades.

Table 1 provides a comparison of the existing or previously approved facilities under the 2015 FMP Update to the proposed 2019 FMP Update in terms of gross square footage (gsf). As shown, implementation of the 2019 FMP Update would result in 667 gsf less than what was anticipated and approved under the 2015 FMP Update.

TABLE 1: SUMMARY OF PROPOSED CHANGES		
	2015 FMP Update	2019 FMP Update
	Existing / Previously	
Facility	Approved GSF	Proposed GSF
NEW FACILITIES		
New Combined Nursing / Allied Health / Public Services Building		51,538
New Facilities, Maintenance, & Operations Building		37,800
New Kinesiology, Wellness and Athletic Center (KWAC)		119,538
Central Plant (New Equipment)	3,520	6,720
G3 Auditorium (renovation)	52,739	no change
	Total New GSF Proposed	212,076
REMOVED FOR NEW NURSING / ALLIED HEALTH / PUBLIC	SERVICES BUILDING	
Public Safety Building (No Longer Proposed)	47,344	-47,344
Nursing / Allied Health Building (No Longer Proposed)	57,822	
G9 Nursing Building (demo)	19,327	-19,327
F9-101 Bungalow (demo)	960	-960
F9-102 Bungalow (demo)	960	-960
F9-103 Bungalow (demo)	960	-960
F9-104 Bungalow (demo)	960	-960
F9-105 Bungalow (demo)	960	-960
F9-106 Bungalow (demo)	960	-960
F9-107 Bungalow (demo)	960	-960
F9-108 Bungalow (demo)	960	-960
F9-109 Bungalow (demo)	960	-960
F9-110 Bungalow (demo)	960	-960
F9-111 Bungalow (demo)	1,400	-1,400
F9-112 Bungalow (demo)	1,400	-1,400
F9-113 Bungalow (demo)	500	-500
A4 Bungalow (demo)	2,064	-2,064
A6-101 Bungalow (demo)	950	-950
A6-102 Bungalow (demo)	950	-950
A6-103 Bungalow (demo)	950	-950
A6-104 Bungalow (demo)	950	-950
A6-105 Bungalow (demo)	950	-950
C2-113 Bungalow (demo)	984	-984
	Subtotal Removed	-87,369
REMOVED FOR NEW FMO BUILDING		
K9A (demo)	5,040	-5,040
K9B (demo)	1,920	-1,920
H9 (demo)	9,906	-9,906
D7A (demo)	1,580	-1,580
Stadium Lot Storage (demo)	4,950	-4,950
M&O Storage Containers (17 total) (demo)	4,144	-4,144
	Subtotal Removed	-27,540

TABLE 1: SUMMARY OF PROPOSED CHANGES		
	2015 FMP Update	2019 FMP Update
Facility	Existing / Previously Approved GSF	Proposed GSF
REMOVED FOR NEW WELLNESS CENTER		
Men's Gymnasium C1 (demo)	37,892	-37,892
Women's Gymnasium E9 (demo)	32,753	-32,753
Bungalows C2 101-112, C2 121-130 (demo)	27,189	-27,189
	Subtotal Removed	-97,834
	Total New	212,076
	Total Removed	-212,743
		-
	TOTAL	-667
SOURCE: Stir Architecture, 2019.		

CONSTUCTION SCHEDULE

The expansion of the Central Plant is scheduled to begin in November 2021 and be completed in December 2022. Construction of the new Nursing, Allied Health, and Public Service and Administration of Justice Building is anticipated to begin in August 2022 and be completed in October 2023. The new Kinesiology, Wellness and Athletics Center (KWAC) is scheduled to begin construction in December 2022 and be completed in March 2025. Construction of the Maintenance and Operations Building is anticipated to begin in January 2023 and be completed in March 2025.

ENVIRONMENTAL REVIEW REQUIREMENTS

An Addendum to a previously certified Final EIR is permitted if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred. The CEQA Guidelines provide in Sections 15162 and 15164 that an Addendum to a previously certified EIR can be prepared for a project if the criteria and conditions summarized below are satisfied:

- 1. No Substantial Changes. There are no substantial changes proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- 2. No Substantial Changes in Circumstances. Substantial changes have not occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
- 3. No Substantial New Information. There is no new information of substantial importance which was not known or could not have been known at the time of the previous EIR that shows any of the following:
 - (A) The project will have one or more significant effects not discussed in the previous EIR;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

- (C) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternatives; or
- (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

SUBJECT AND FOCUS OF THE ADDENDUM

The subject and focus of this Third Addendum is to demonstrate that each of the above conditions is satisfied, and there have been no substantial changes to the FMP or change in circumstances that would require major revisions of the previous environmental documentation due to the involvement of new significant environmental effects as a result of the projects proposed under the 2019 FMP Update.

The following sections of this report demonstrate that the criteria and conditions identified above have been satisfied and that an Addendum to the 2009 Final SEIR is the appropriate environmental clearance documentation for the proposed 2019 FMP Update, and a Subsequent or Supplemental EIR is not necessary.

PREVIOUSLY DISCLOSED MASTER PLAN IMPACTS

The 1998 Final EIR disclosed that there would be a significant impact on air quality related to PM₁₀ from construction and a significant impact on noise related to intermittent disruptions during construction. The 1998 Final EIR concluded that, with application of mitigation as described in the Mitigation Monitoring and Reporting Program, no other significant environmental impacts would occur with respect to the construction and operation. The 2009 Final SEIR similarly concluded that the projects proposed under 2009 FMP Update would result in significant and unavoidable impacts related to air quality and noise during construction; however, the 2009 Final SEIR also concluded significant and unavoidable air quality operational impacts related to Regional NOx, and Localized PM_{2.5} and PM₁₀ would occur. In addition, the 2009 Final SEIR concluded that three light emitting diode (LED) campus marquee boards would result in a significant and unavoidable impact related to spill over lighting.

As demonstrated under the Discussion of Impacts heading below, the projects proposed under the 2019 FMP Update would not result in any new significant environmental impacts that have not already been disclosed and considered in the 1998 Final EIR, 2009 Final SEIR, and subsequent addenda.

DISCUSSION OF IMPACTS

Aesthetics and Lighting

1998 Final EIR and 2009 Final SEIR Conclusions. One of the primary concerns of the 1998 Final EIR and the 2009 Final SEIR was the potential impact of spillover lighting associated with the tennis courts, athletic fields, and stadium lighting on adjacent residential properties. Lighting for the new buildings would be used as accents to the new structures, as well as for security purposes. The previous EIRs concluded that lighting associated with the new buildings would not result in glare or glow to the surrounding community. These EIRs indicated that no significant and unavoidable impacts were anticipated with regard to aesthetics or lighting and that mitigation

measures related to spillover lighting (i.e., Mitigation Measures **L1** through **L3** in the 1998 Final EIR) would reduce potential impacts to less-than-significant levels. However, the 2009 Final SEIR concluded that three light emitting diode (LED) campus marquee boards would exceed the 400 foot-lamberts (fl) threshold established by the City of Monterey Park for illuminated signs within 100 feet of residential properties resulting in a significant and unavoidable impact.

The previous EIRs determined that the buildings proposed under the FMP would utilize building materials that are similar to existing structures on campus. In addition, proposed buildings were determined to be consistent with the scale and massing of existing buildings on campus and would primarily be located on the interior of the campus, such that any line-of-sight from the surrounding neighborhoods would not be significantly affected.

The general project area is a developed urban setting with no distinguishing scenic or public views. No scenic resources were found within or adjacent to the project site. No scenic highways exist, and no impact related to scenic highways and resources would occur with the implementation of the FMP.

2019 FMP Update. As shown in Table 1 above, the projects proposed under the 2019 FMP Update would result in 667 gsf less than what is currently existing or planned for under the 2015 FMP Update. In addition, the projects proposed under the 2019 FMP Update would be compatible with the surrounding buildings on campus, and no new structures would impact the line-of-sight from the surrounding neighborhood. The facilities proposed under the 2019 FMP Update would be designed to complement the materials, style, and character of the existing buildings on campus. The reconfigured softball and soccer/multipurpose fields would include lighting; however, Mitigation Measures L1 and L2 in the 1998 Final EIR require that all high-intensity light standards associated with the athletic fields be fitted with visors and glare control devices such that all light is focused on the fields. Spillover light and glare would be routinely monitored by ELAC and lights adjusted to ensure that ELAC's contribution to ambient light levels at residential property lines shall not exceed 1-foot candle. In addition, where appropriate, screening (i.e., trees, fencing, etc.) along the boundaries of the athletic fields would be used to diffuse light and glare. Screening would be of such height and density to intercept the line of sight between the light fixtures and adjacent residential properties. Therefore, no new impacts related to aesthetics and lighting beyond those previously disclosed would result from implementation of the projects proposed under the 2019 FMP Update.

Project Specific Mitigation Measures. None required beyond those identified in the 1998 Final EIR and 2009 Final SEIR.

Air Quality

1998 Final EIR and 2009 Final SEIR Conclusions. *Construction Emissions*. For constructionrelated impacts, the 1998 Final EIR disclosed that inhalable particulate matter (PM₁₀) emissions are expected to exceed South Coast Air Quality Management District (SCAQMD) thresholds during the grading/excavation phase of the construction period, resulting in a significant impact. PM₁₀ abatement measures were recommended consistent with SCAQMD Rule 403 to reduce PM₁₀ levels to the maximum extent feasible. However, even with implementation of Mitigation Measures **AQ1** through **AQ12** in the 1998 Final EIR, such impacts were not anticipated to be reduced to less-than-significant levels and, as such, were considered to be significant and unavoidable. The 1998 Final EIR did not find any other significant and unavoidable impacts related to air quality. The 2009 Final SEIR determined that regional volatile organic compound (VOC) and nitrogen oxides (NO_x) construction emissions and localized NO_x, PM_{2.5}, and PM₁₀ construction emissions would exceed SCAQMD thresholds and would result in significant impacts. With implementation of Mitigation Measures **AQ1** through **AQ12** in the Final EIR and Mitigation Measures **AQ13** through **AQ29** in the 2009 Final SEIR, regional NO_x construction emissions and localized NO_x, PM_{2.5} and PM₁₀ construction emissions would continue to exceed SCAQMD thresholds and result in significant and unavoidable impacts.

Operational Emissions. As discussed in the 1998 Final EIR, daily operations emissions associated with the implementation of the FMP would be generated by motor vehicles. An evaluation of criteria pollutants; carbon monoxide (CO), reactive organic gas (ROG), NO_x and PM₁₀, determined that operational emissions would not exceed the SCAQMD significance threshold. However, the 2009 Final SEIR, concluded that daily regional operational emissions would exceed the SCAQMD threshold for NO_x and localized operational emissions for PM_{2.5} and PM₁₀. With implementation of Mitigation Measures **AQ30** through **AQ33** in the 2009 Final SEIR, regional NO_x construction emissions and localized PM_{2.5} and PM₁₀ construction emissions would continue to exceed SCAQMD thresholds and result in significant and unavoidable impacts.

Toxic Air Contaminants (TACs). TACs were not addressed in the 1998 Final EIR. However, as discussed in the 2009 Final SEIR, the greatest potential for TAC emissions during construction would be diesel particulate emissions associated with heavy-duty equipment operations. Given the short-term construction schedule of FMP projects, implementation of the FMP would not result in a long-term (i.e., 70 years) source of TAC emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is a short-term exposure period (36 out of 840 months), project-related construction TAC emission would result in a less-than-significant impact.

In addition, demolition activity would potentially expose human receptors to airborne asbestos. All construction activities in the jurisdiction of the SCAQMD are required to comply with SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and clean-up procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings. Potential exposure to asbestos would result in a less-than-significant impact.

The 2009 Final SEIR specifically addressed the math and science complex, which includes teaching laboratories with hazardous chemicals and fume hoods. Chemical use associated with teaching is typically low intensity with associated low emission rates. Laboratories and fume hoods would be permitted under the appropriate agencies (e.g., SCAQMD) and would include necessary control measures (e.g., scrubbers). Buildings proposed under the FMP would also result in minimal emissions from the use of consumer products (e.g., aerosol sprays). It was expected that the proposed project would not release substantial amounts of TACs, and no significant impact on human health would occur.

Greenhouse Gas (GHG) Emissions. GHG emissions were not addressed in the 1998 Final EIR. However, as discussed in the 2009 Final SEIR, the proposed project would comply with strategies that could be implemented by lead agencies to reduce GHG emissions, which include increasing building energy efficiency and reducing hydrofluorocarbon (HFC) use in air conditioning systems. As determined in the 2009 Final SEIR, implementation of the FMP would not result in an East Los Angeles College Facilities Master Plan Third Addendum to 2009 Final SEIR

unplanned level of development and did not represent a substantial new source of GHG emissions. In addition, the new buildings would all be constructed to achieve, at a minimum, the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) certification, resulting in increased energy efficiency and a reduction in associated GHG emissions compared to standard development. Consequently, impacts related to GHG emissions were determined to be less than significant.

2019 FMP Update. *Construction Emissions*. According to the LACCD Monthly Pre-Construction Summary Schedule (August 2019), implementation of the 2019 FMP Update could result in several different construction activities occurring simultaneously throughout the campus. It is anticipated that the greatest magnitude of activity intensity would be expected between 2022 to 2023, when the activities shown in **Table 2** would be undertaken.

TABLE 2: CONSTRUCTION PHASING		
Construction Activity Element	Start	Completion
Transportation & Accessibility Improvements	04/2021	02/2023
Equipment Expansion for Central Plant	05/2021	12/2022
Stormwater Infrastructure – Northeast	12/2021	02/2023
Nursing, Allied Health, & Public Services Building	08/2022	10/2023
G9 Building Demolition	08/2022	10/2023
C2/F9/A6 Bungalow Demolition & Removal	08/2022	10/2023
Kinesiology, Wellness, & Athletics Center	12/2022	03/2025
SOURCE: LACCD, 2019.		

Based on the information presented above, the maximum activity intensity would likely occur between late 2022 through early 2023. To characterize maximum daily criteria air pollutant emissions from the various construction elements involved in the 2019 FMP Update, a representative combination of activities was selected, and the resulting emissions were quantified using the California Emissions Estimator Model (CaIEEMod). The emissions analysis accounted for the following activities shown in **Table 3**.

TABLE 3: CONSTRUCTION ASSUMPTIONS							
Example Activity	Number of Equipment	Number of Daily Workers	Number of Daily Truck Loads				
Demolition of Bungalow/G9 Structures	6	15	40				
Grading/Excavation of Site	6	15	40				
Trenching of Central Plant Pipelines	4	10	0				
Construction of New Buildings	8	20	20				
Total	24	60	80				
SOURCE: TAHA, 2019.							

The activity combination presented above represents a conservative estimate of reasonably expected daily construction intensity. CalEEMod was used to estimate daily ozone precursor and criteria pollutant emissions that would be generated by emissions sources including off-road equipment exhaust, fugitive dust from ground disturbance and truck loading, and worker and haul truck exhaust and road dust. Based on the equipment inventory and guidance from the SCAQMD. As stated in the 2009 Final SEIR, all construction equipment would be required to meet Tier 3 emissions standards, and all construction activities would incorporate provisions and best

management practices outlined in SCAQMD Rule 403 to comply with fugitive dust control measures. **Table 4** presents the maximum daily emissions of ozone precursors and criteria pollutants that would be generated by these concurrent activities.

TABLE 4: ESTIMATED 2019 FMP UPDATE CONSTRUCTION EMISSIONS – MITIGATED						
		Maximum Daily Emissions (Pounds Per Day)				
	VOC	NOx	СО	SOx	PM ₁₀	PM _{2.5}
2019 FMP UPDATE – MAXIMUM DAILY	ACTIVITY					
On-Site Emissions	2.6	53.0	69.1	0.1	12.8	5.3
Off-Site Emissions	2.1	47.7	16.2	0.1	4.5	1.3
Total	4.6	100.7	85.3	0.2	17.3	6.6
REGIONAL ANALYSIS						
Maximum Daily Emissions	4.6	100.7	85.3	0.2	17.3	6.6
Regional Significance Threshold	75	100	550	150	150	55
Exceed Threshold?	No	Yes	No	No	No	No
LOCALIZED ANALYSIS						
Maximum Localized Emissions	2.6	53.0	69.1	0.1	12.8	5.3
Localized Significance Threshold	-	121	1,031	-	7	5
Exceed Threshold?	-	No	No	-	Yes	Yes
LST values presented are for a 2-acre site in SRA 11 with sensitive receptors within 25-meter proximity. SOURCE : TAHA, 2019.						

Maximum daily emissions of NO_x would exceed the applicable SCAQMD regional threshold and maximum daily emissions of PM₁₀ and PM_{2.5} would exceed the applicable SCAQMD localized threshold. However, because daily regional CO, sulfur oxides (SO_x), PM_{2.5}, and PM₁₀ construction emissions and localized CO and NO_x construction emissions were estimated to be substantially below the SCAQMD thresholds-and because all previously identified mitigation would be incorporated-the increase in pollutant emissions associated with construction would not increase the severity to the extent that new significant impacts would be introduced. Even with implementation of Mitigation Measures AQ1 through AQ12 in the 1998 Final EIR and Mitigation Measures AQ13 through AQ29 in the 2009 Final SEIR, regional NO_x construction emissions and localized NO_x, PM_{2.5} and PM₁₀ construction emissions would continue to exceed SCAQMD thresholds and result in significant and unavoidable impacts. Nonetheless, no new significant impacts would occur. In addition, the significant impacts identified in this analysis would not be more severe than the impacts identified in the 2009 Final SEIR. When comparing the significant emissions shown above in Table 4 to the significant emissions shown in Table 4.2-12 of the 2009 Final SEIR, regional NO_X emissions are 63.3 pounds per day less for the 2019 FMP Update than the 2009 Final SEIR. PM₁₀ and PM_{2.5} localized emissions are 7.2 and 2.7 pounds per day less, respectively, for the 2019 FMP Update than the 2009 Final SEIR.

Operational Emissions. The operational analysis in the 2009 Final SEIR assessed regional and localized emissions. Regional emissions were assessed for mobile, area, stationary sources. Mobile and area source emissions are dependent on vehicle trips and square feet of development. The projects proposed under the 2019 FMP Update would not accommodate any additional student enrollment, or faculty or staff and would not result in increased enrollment beyond what was presented in the 2009 Final SEIR. There is no potential for additional vehicle trips and associated mobile source emission. The 2019 FMP Update would result in less total development that what was previously approved for the Master Plan. There would be no potential for additional area source emissions beyond what was disclosed in the 2009 Final SEIR.

The only source of additional operational emissions would be related to the new equipment for the existing Central Plant. The existing capacity of 1,960 tons will not be sufficient to support the future build outs within the campus. Based on the load analysis of the campus, shown on, a future demand load of 2,887 tons will be required. This is a 927-ton deficit. The 2019 FMP Update includes an additional 2,000 tons of capacity increase with new chillers and cooling towers with low temperature charging capability to be added complete with additional 12 three-tank ice thermal storage tanks. The new equipment would require SCAQMD permits. The SCAQMD Facility Information Detail (FIND) Database includes emissions from all permitted equipment at ELAC with 2017 being the latest year of published data. A very conservative analysis was completed that doubles the permitted emissions from ELAC. It is important to note that the emissions from the FIND database are based on actual equipment permits. The emission estimates in the 2009 Final SEIR were based on advanced planning documents thereby leading the discrepancy on estimated and actual emissions. Table 5 shows that implementation of the 2019 FMP Update would not generate new significant emissions. Nonetheless, similar to the 2009 Final SEIR, the 2019 FMP Update would result in a significant impact related to NO_x emissions. The impact would not be more severe than previously disclosed because, as shown in **Table 5**, maximum daily NO_x emissions associated with the 2019 FMP Update would be less than what was estimated in the 2009 Final SEIR.

TABLE 5: DAILY REGIONAL OPERATIONAL EMISSIONS						
			Pounds p	er Day		
Scenario and Source	VOC	NOx	CO	SOx	PM 10	PM _{2.5}
2009 FINAL SEIR						
Stationary	5	33	73	<1	8	10
Mobile	25	38	293	<1	14	73
Area	2	2	3	<1	<1	<1
Total	32	73	369	<1	22	83
2019 FMP Update						
Stationary	7	15	12	<1	<1	1
Mobile	25	38	293	<1	14	73
Area	2	2	3	<1	<1	<1
Total	34	55	308	<1	14	74
2019 FMP Update vs. 2009 Final SEIR	2	-18	-61	<1	-8	-9
SCAQMD Threshold	55	55	550	150	55	150
SOURCE: LACCD, 2009 Draft SEIR, March 4, 2010; SCAQMD, Facility Information Detail Database, Facility ID 13854.						

The localized emissions analysis included an assessment of CO hot-spots and Central Plant emissions. The 2019 FMP Update would not generate additional vehicle trips, and there is no potential for a new CO hot-spot. Using the same methodology described above for assessing regional emissions, **Table 6** shows that implementation of the 2019 FMP Update would not generate new significant emissions. Similar to the 2009 Final SEIR, the 2019 FMP Update would result in a localized PM_{10} impact. It is not anticipated that the 2019 FMP Update would result in a localized $PM_{2.5}$ impact. The impact would not be more severe than previously disclosed because, as shown in **Table 6**, maximum daily PM_{10} emissions associated with the 2019 FMP Update would be less than what was estimated in the 2009 Final SEIR.

TABLE 6: DAILY LOCALIZED OPERATIONAL EMISSIONS						
			Pounds p	er Day		
Scenario and Source	VOC	NOx	СО	SOx	PM _{2.5}	PM 10
2009 FINAL SEIR						
Central Plant	5	33	73	<1	8	10
2019 FMP UPDATE						
Central Plant	7	15	12	<1	<1	1
2019 FMP Update vs. 2019 Final SEIR	2	-18	-61	<1	-8	-9
SCAQMD Threshold /a/	/b/	83	673	/b/	1	1
/a/ Assumed a one-acre project site and a 25-meter (82-foot) receptor distance. /b/ SCAQMD has not developed localized significance methodology for VOC or SO _x . SOURCE: LACCD. 2009 Draft SEIR. March 4, 2010; SCAOMD. Facility Information Detail Database. Facility ID 13854.						

Toxic Air Contaminants. The proposed demolition and construction activities would result in similar impacts as identified in the 2009 Final SEIR regarding short-term exposure to diesel particulate emissions. Exposures would be short-term and intermittent and would not result in a significant impact. Demolition activity would potentially expose human receptors to airborne asbestos. All construction activities in the jurisdiction of the SCAQMD are required to comply with SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 1403 specifies work practice requirements to limit asbestos emissions from building demolition activities, including the removal and associated disturbance of asbestos-containing materials (ACM). The requirements for demolition activities include asbestos surveying, notification, ACM removal procedures and time schedules, ACM handling and cleanup procedures, and storage, disposal, and landfilling requirements for asbestos-containing waste materials. All operators are required to maintain records, including waste shipment records, and are required to use appropriate warning labels, signs, and markings. There would be no increase in the severity of previously identified impacts regarding TACs, and no new impacts would result from construction activities.

The 2009 Final SEIR did not assess TAC emissions generated by Central Plant equipment. All new equipment would be permitted by the SCAQMD, which requires the application of Best Available Control Technology. The permits for the stationary source equipment at the Central Plant will require a health risk assessment prepared to SCAQMD standards. This will ensure that equipment at the Central Plant would not generate significant permanent TAC emissions.

Greenhouse Gas (GHG) Emissions. Construction and operational activities would generate GHG emissions. LACCD has developed a sustainability Program to reduce climate change impacts. The sustainability program includes the following elements:

- Leadership in Energy and Environment Design (LEED) certification for buildings funded with at least 50 percent bond dollars;
- Retrofitting buildings with energy saving elements for maximum efficiency;
- Installing innovative features including low-flush toilets and waterless urinals, which reduce water consumption and wastewater;
- Installing artificial turf to reduce their dependence on water to maintain the fields;
- Using innovative landscaping designs such as drought-tolerant and native plants to reduce water consumption to levels appropriate for the arid Southern California climate;
- Spearheading efforts to encourage vendors/companies into producing sustainable products;

- Using newly-established environmentally-friendly techniques, such as mixing fly-ash with concrete, during the construction process; and
- A Renewable Energy Plan that includes the installation of enough photovoltaic (solar) panels, wind turbines and geo-thermal energy on site at each of its nine colleges to produce enough electricity to meet all electricity needs.

Regarding construction emissions, the 2009 Final SEIR estimated that construction activity would generate 1,990 tons (1,805 metric tons) over a 36-month construction period. The emissions were related to 470,530 gsf (126,093 gsf of new facilities and 344,437 gsf of modernizations). The 2019 FMP Update includes 208,876 gsf of new facilities. The SCAQMD recommends amortizing construction emissions over 30 years and added to annual operational emissions to account for global warming potential. The 1,805 metric tons amortized over 30 years result in 60.2 metric tons per year. It is anticipated that the 2019 FMP Update would double construction emissions to approximately 120 metric tons per year based on the level of development.

Regarding operational activities, GHG emissions are dependent on vehicle trips and square feet of development. The projects proposed under the 2019 FMP Update would not accommodate any additional student enrollment, or faculty or staff and would not result in increased enrollment beyond what was presented in the 2009 Final SEIR. There is no potential for additional vehicle trips and associated mobile source emission. The 2019 FMP Update would result in less total development than what was previously approved for the Master Plan. There would be no potential for additional GHG emissions beyond what was disclosed in the 2009 Final SEIR. The only source of additional operational emissions would be related to the new equipment for the existing Central Plant. The Central Plant expansion would fully accommodate campus cooling demand. The Central Plant is currently connected to approximately 950,000 square feet of building space and new construction would include 208,876 square feet. Campus changes associated the 2019 FMP Update would remove approximately 38,000 square feet of building space from the Central Plant. The Central Plant would go from serving approximately 950,000 square feet to serving approximately 1,120,876. This approximate 8 percent increase land use service would not significantly increase the 29,296 tons per year of GHG emissions disclosed in the 2009 Final SEIR, which concluded that GHG emissions would not interfere with regional and State GHG reduction goals. In addition, as described above, the LACCD has developed a robust sustainability Program to reduce climate change impacts. Similar to the 2009 Final SEIR, the 2019 FMP Update would not result in a GHG impact.

Project Specific Mitigation Measures. None required beyond those identified in the 1998 Final EIR and the 2009 Final SEIR.

Cultural Resources

1998 Final EIR and 2009 Final SEIR Conclusions. A record search of the ELAC campus, conducted by the South Central Coastal Information Center as part of the 1998 Final EIR found that no historical or prehistoric archaeological sites were located within a one-half-mile radius of the campus. No State or National historic places or points of interest were located within the area, and a search conducted by the California Native American Heritage Commission failed to indicate the presence of any Native American cultural resources in the immediate project area. In addition, no buildings of historic value were identified during the architectural field survey conducted as part of the 2009 Final SEIR. The 2009 Final SEIR revalidated that there were no buildings on campus that were eligible for the California Register or Native American resources in the immediate project area that may be encountered during ground-disturbing activities. Accordingly, the 1998 Final EIR and the 2009 Final SEIR concluded that the updates to the FMP would not result in a significant impact related to cultural resources.

2019 FMP Update. Because there are no known historic cultural, or Native American resources on-site, the projects proposed under the 2019 FMP Update are not anticipated to disturb or impact any cultural resources. Furthermore, the ELAC campus has been previously disturbed, and it is unlikely that the projects proposed under the 2019 FMP, which would not require major excavation, would potentially disturb any unknown archaeological resources. Therefore, no new impacts related to cultural resources would result from the implementation of the projects proposed under the 2019 FMP.

Project Specific Mitigation Measures. None required.

Geology and Seismicity

1998 Final EIR and 2009 Final SEIR Conclusions. Geology and seismicity were not addressed in the 2009 Final SEIR. However, the 1998 Final EIR identified the potential for groundshaking to be high because the ELAC campus is situated above the Elysian Park Thrust Fault. It was concluded that the potential effects of groundshaking would be reduced to less-than-significant levels by designing all new buildings according to current seismic building and development code requirements. The 1998 Final EIR also found that landsliding could occur due to seismic groundshaking because there is a state-designated landslide zone on-site, However, the 1998 Final EIR concluded that implementation of Mitigation Measure **GS1**, which requires a detailed subsurface engineering geologic/geotechnical investigation prior to completing design plans for the proposed projects, would reduce impacts to less-than-significant levels.

2019 FMP Update. The projects proposed under the 2019 FMP Update would be subject to current building and grading requirements (e.g., State seismic building and code requirements). In addition, Mitigation Measure **GS1** in the 1998 Final EIR requires that a subsurface geotechnical investigation be conducted and recommendations to ensure seismic safety and avoid geotechnical hazards be identified prior to completing final design plans for the projects proposed under the 2019 FMP Update. With the implementation of this mitigation measure, no new significant impacts related to geology and seismicity beyond those previously disclosed would result from implementation of the projects proposed under the 2019 FMP Update.

Project Specific Mitigation Measures. None required beyond that identified in the 1998 Final EIR.

Hazards and Hazardous Materials

1998 Final EIR and 2009 Final SEIR Conclusions. Hazards and hazardous materials were not addressed in the 2009 Final SEIR. However, the 1998 Final EIR identified the demolition and/or renovation of any structures with asbestos-containing materials (ACM) or lead-based paint (LBP) to have the potential to release these substances into the atmosphere and cause a significant impact if these substances are not properly stabilized or removed prior to demolition. Implementation of Mitigation Measures **HW1** through **HW4** in the 1998 Final EIR to ensure the safe removal of such materials before demolition would reduce impacts associated with hazardous materials to less-than-significant levels.

The 1998 Final EIR concluded that campus operations would not be expected to pose any significant risks related to the accidental release of hazardous materials due to implementation of the FMP since all potentially hazardous materials would be stored, handled, and disposed of in accordance with all applicable federal, State, and local regulations. Accordingly, operational impacts related to hazards and hazardous materials were found to be less than significant.

2019 FMP Update. The proposed demolition and renovation of buildings constructed prior to the ban on the use of ACM in 1989 and LBP in 1978 have the potential to release ACM and LBP into the atmosphere and cause a significant impact if these materials are not properly removed prior to disturbance. To ensure the safe removal of any hazardous materials prior to demolition and renovation activities Mitigation Measures **HW1** through **HW4** identified in the 1998 Final EIR would be applied to the projects proposed under the 2019 FMP. In addition, any hazardous materials used during the construction and operation of the projects proposed under the 2019 FMP. Update would be handled in accordance with all applicable federal, State, and local regulations. Therefore, with the implementation of the mitigation measures identified in the 1998 Final EIR, no new significant impacts related to hazards and hazardous materials beyond those previously disclosed would result from implementation of the projects proposed under the 2019 FMP Update.

Project Specific Mitigation Measures. None required beyond that identified in the 1998 Final EIR.

Land Use and Planning

1998 Final EIR and 2009 Final SEIR Conclusions. The 1998 Final EIR and the 2009 Final SEIR concluded that the proposed facilities and improvements to the ELAC campus were consistent with existing uses on campus and would not conflict with regional (i.e., Southern California Association of Governments' policies) and local zoning (i.e., R-1 – single-family residential, which conditionally permits institutional uses) and land use plans (i.e., City of Monterey Park General Plan). The previous EIRs determined that the FMP would increase the functional use of the campus and would result in a land use that is compatible with the surrounding residences and community scale commercial development. Therefore, implementation of the FMP would result in no impact to land use compatibility or consistency.

2019 FMP Update. The projects proposed under the 2019 FMP Update would result in 667 gsf less than what is currently existing or planned for. However, the proposed changes to the FMP would not create a new use that does not already exist on the campus and, as such, would be consistent with all regional and local zoning and land use plans. The projects proposed under the 2019 FMP are compatible with the surrounding land uses, and no new significant impacts related to land use and planning result from implementation of the projects proposed under the 2019 FMP Update.

Project Specific Mitigation Measures. None required.

Noise

1998 Final EIR and 2009 Final SEIR Conclusions. The 1998 Final EIR and the 2009 Final SEIR concluded that noise limit thresholds would likely be exceeded due to construction activities. Mitigation Measures **N1** through **N12** in the 1998 Final EIR and Mitigation Measures **N15** through **N20** in the 2009 Final SEIR were recommended to reduce construction noise impacts to the maximum extent feasible. However, a significant and unavoidable impact due to intermittent disruptions during construction was identified.

For operational impacts, changes in traffic-related noise were concluded to be less than three decibels. This level of change is not discernible to the human ear. Therefore, no significant impacts due to traffic-related noise were anticipated.

The modernization of Weingart Stadium was anticipated to have the greatest operational impact on noise levels in the project vicinity due to proposed increase in attendees from 20,400 to 30,000 under worst-case conditions. The 1998 Final EIR concluded that noise increases of greater than 3 decibels (dBA) were likely at nearby sensitive receptors. However, Mitigation Measures **N13** and **N14** would prevent excessive noise from impacting sensitive receptor locations during overnight hours (between 10:00 p.m. and 7:00 a.m.).

The 2009 Final SEIR identified the operation of the central plant facility to have a potential operational impact on noise levels generated by the cooling towers and the microturbines, which could generate a composite noise level in exceedance of the 5-dBA significance threshold. However, Mitigation Measure **N21** in the 2009 Final SEIR was identified to ensure that noise levels generated by the Central Plant Facility would not exceed the 5-dBA significance threshold.

The 2009 Final SEIR also included a detailed noise assessment related to recreational uses. This included proposed tennis courts, football and soccer fields located in the southwestern portion of the campus near to the Child Development Center. It was disclosed that activities could occur until 10:00 p.m. The closest off-site sensitive receptors were identified as single-family residences 175 feet south of the tennis courts, football and soccer fields. The impact analysis concluded that the increase in permanent noise levels would be less than 1 dBA, which would not exceed the 5-dBA significance threshold.

2019 FMP Update. Construction of the Revised Project would result in temporary increases in ambient noise levels in the project area on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. As stated in the 2009 Final EIR, construction activities typically generate a reference noise level of 89 dBA at 50 feet. The locations of the 2019 FMP Update components make the residences located on Floral Drive and the Robert Hill Lane Elementary School as the most likely off-site noise-sensitive land use to potentially be impacted by the proposed Revised Project. The 2009 Final EIR construction noise analysis assessed construction activities at a distance of 65 feet from the residences on Floral Drive and 120 feet from Robert Hill Lane Elementary School. These land uses were determined to be significantly impacted by construction activities. Construction activities for the Central Plant Facility, M&O Buildings, and the KWAC (e.g., equipment, trucks, and staging area) would occur at approximately these same distances to the receptors.

As shown in **Table 7**, unmitigated and mitigated noise levels would exceed the standard from the 2009 Final EIR, which was a 5 dBA increase in existing noise levels. Mitigation Measures **N1** through **N12** and **N15** through **N20** identified in the 1998 Final EIR and the 2009 Final SEIR would be applied to the proposed demolition and construction of the replacement building to reduce noise levels during construction activities. With the implementation of these mitigation measures, no new significant impacts related to construction noise beyond those previously disclosed would result from implementation of the projects proposed under the 2019 FMP Update. Due to the similar locations of construction activities when comparing the 2019 FMP Update to the 2009 Final SEIR, it is anticipated that the construction noise levels would be very similar and significant impacts would not be substantially more severe.

TABLE 7: CONSTRUCTION NOISE					
Sensitive Receptor	Distance (Feet)	Maximum Construction Noise Level (dBA)	Existing Ambient (dBA)	New Ambient (dBA)	Impact?
Residences on Floral Dr.	65	86.7	63.4	86.7	23.3
Robert Hill Lane Elementary School	120	58.6	66.2	81.5	15.3
SOURCE: LACCD, 2009 Draft SEIR, March 4, 201	0.		•		·

Permanent noise generated by campus activities is primarily a function of enrollment and the number of people on and around campus. The projects proposed under the 2019 FMP Update would not accommodate any additional student enrollment, or faculty or staff and would not result in increased enrollment beyond what was presented in the 2009 Final SEIR. It is not anticipated that the 2019 FMP Update components would generate additional traffic noise or significantly change existing campus noise levels generated by staff and student activities.

The Central Plant equipment expansion would be a new source of mechanical noise. An Acoustical Analysis Report was prepared by Newson Brown Acoustics LLC on April 30, 2019, and is included in **Appendix A**. This report presents an analysis of potential noise impacts to residential uses located on Floral Drive from the cooling tower, chillers, ice thermal storage, and ancillary equipment. The Acoustical Analysis Report states that the cooling tower would be located approximately 110 feet from the property line on the north side of Floral Drive, which corresponds to the 50 feet distance from the Central Plant boundary specified in the 2009 Final SEIR. Noise at 110 feet from the cooling tower would be approximately 7 dBA lower than the noise at the 50 feet reference distance, i.e., 50 dBA with both the water silencers and super low sound fans. As such, noise due to the proposed cooling tower with the water silencers and super low sound fans would be substantially lower than the 56 dBA limit in the 2009 Final SEIR. However, given that measured noise level at this location due to the existing Central Plant equipment already exceeds the 56 dBA limit in the 2009 Final SEIR, the composite noise due to the existing Central Plant and the new cooling tower would also exceed the maximum noise limit.

The proposed cooling tower location would be approximately 135 feet from the rear yards of the nearest residential property on the northerly side of Floral Drive. Noise at 135 feet from the cooling tower would be approximately 9 dBA lower than the noise at the 50 feet reference distance (i.e., 48 dBA with both the water silencers and super low sound fans). Thus, noise due to the new cooling tower, in the absence of the contributions of noise due to the existing Central Plant equipment would comply with the 50 dBA nighttime noise limit in the City Municipal Code.

Noise due to the proposed new cooling tower alone (when furnished with water silencers and the super low sound fan), in the absence of noise due to the existing Central Plant equipment, would be in substantial compliance with applicable noise standards. However, based on daytime measurements, noise due to the existing Central Plant Facility equipment already exceeds the standards. The new chillers, pumps, heat exchangers, and other ancillary equipment would be installed inside a new Central Plant, which will be located westerly of the existing Central Plant and cooling towers. The envelope of the new building would be designed to contain noise from this equipment, primarily the chillers. Solid concrete, masonry block, or other comparatively heavy solid construction, with appropriate sound attenuators at ventilation openings, would be acoustically acceptable. This is standard building construction for LACCD building and specific mitigation is not necessary.

The secondary effects of the KWAC would be the demolition of the majority of the C2 bungalows and the demolition of the C1 Gym. These effects would open a similarly large contiguous area

north of Cesar Chavez and east of the baseball field. This area is planned for the creation of an athletic center incorporating the KWAC as well as surrounding outdoor athletic uses, complementing the stadium and baseball field, with a reconfigured softball and soccer/multipurpose fields and accompanying bleachers. The 2009 Final SEIR assessed similar athletic field noise (i.e., tennis courts, football and soccer fields) in similar locations concluding a lessthan-significant impact. Bleachers and amplified sound would be a new noise source. However, the complex would be elevated above (approximately 10-15 feet) and front on Cesar Chavez, a busy commercial thoroughfare. The adjacent existing baseball field has an amplified announcer/public address system as does the adjacent existing Weingart Stadium. The existing Baseball field also fronts on Bleakwood (residential). Weingart Stadium sits below and fronts on Floral, a busy thoroughfare with multi-family residential elevated above (approximately 15-20 feet). Importantly, softball field bleachers would be north facing, which is directed away from the residences and Robert Hill Lane Elementary School. Soccer/multi-purpose field bleachers would be more central to the project site and partially screened by existing and future facilities. New reconfigured softball and soccer/multipurpose fields noise (i.e., bleachers and public address systems) would be incrementally audible off the project site but generally limited to game days. The incremental increase in noise would likely temporarily exceed 5 dBA, although the daily change in noise levels would be less than the 5-dBA significance threshold. The incremental activity would not substantially change permanent noise levels. It is not anticipated that permanent noise would change by 5-dBA or more and the impact would be less-than-significant.

Construction activity would potentially generate substantial vibration levels. Heavy equipment (e.g., a large bulldozer) typically generates vibration levels of 0.089 inches per second at a distance of 25 feet. The closest off-site structure to construction activity would be the Floral Drive residences located 65 feet from the nearest construction activity. These structures would experience vibration levels of 0.021 inches per second. This would be less than the building damage threshold of 0.3 inches per second.

Project Specific Mitigation Measures. None required beyond those identified in the 1998 Final EIR and the 2009 Final SEIR.

Public Services

1998 Final EIR and 2009 Final SEIR Conclusions. Public services were not addressed in the 2009 Final SEIR. The 1998 Final EIR concluded that no potential significant impacts related to fire protection were anticipated. The increase in enrollment due to improvements under the FMP was anticipated to result in a significant impact on campus security provided by the Los Angeles County Sheriff's Department. The implementation of Mitigation Measures **PS1** and **PS2** to improve security on the ELAC campus was determined to be sufficient to reduce this potential impact to a less-than-significant level.

2019 FMP Update. The projects proposed under the under the 2019 FMP Update would result in 667 gsf less than what is currently existing or planned for under the 2015 FMP Update and would not result in increased enrollment beyond what was presented in the 2009 Final SEIR. As such, the 2019 FMP Update would not place additional demands on fire protection and campus security services and would not result in any new impacts beyond those previously disclosed. While no new significant impacts would result from the 2019 FMP Update, the mitigation measures identified in the 1998 Final EIR would be applied to the proposed Revised Project to continue the improvement of safety and security on the ELAC campus.

Project Specific Mitigation Measures. None required beyond those identified in the 1998 Final EIR.

Transportation and Traffic

1998 Final EIR and 2009 Final SEIR Conclusions. The 1998 Final EIR concluded that three of the 12 study intersections would be significantly impacted by the proposed FMP. These three intersections were Bleakwood Avenue at Floral Drive, Bleakwood Avenue at Avenida Cesar Chavez, and Collegian Avenue at Floral Drive. However, with implementation of Mitigation Measures **T1** through **T3**, impacts associated with the proposed project at these intersections would be reduced to less-than-significant levels.

The 2009 Final SEIR concluded that two of the 12 study intersections would be significantly impacted by the 2009 FMP Update. These two intersections were Ford Boulevard/I-710 northbound on-ramp at Floral Drive and Bleakwood Avenue at Floral Drive. Similar to the previous EIR, with implementation of Mitigation Measures **T9** and **T10**, impacts at these intersections would be reduced to less-than-significant levels.

2019 FMP Update. The projects proposed under the under the 2019 FMP Update would result in 667 gsf less than what is currently existing or planned for and would not result in increased enrollment beyond what was presented in the 2009 Final SEIR. As such, the 2019 FMP Update would not change the number of trips previously estimated for the 2009 FMP Update, and no new traffic impacts beyond those previously disclosed would result from implementation of the projects proposed under the under the 2019 FMP Update.

Project Specific Mitigation Measures. None required beyond those identified in the 2009 Final SEIR.

Utilities and Service Systems

1998 Final EIR and 2009 Final SEIR Conclusions. Utilities and service systems were not addressed in the 2009 Final SEIR. However, the 1998 Final EIR determined that due to a projected increase in student enrollment, water usage was anticipated to increase by 125,000 gallons per day. The 1998 Final EIR identified that there was sufficient capacity in the existing water pipe system to accommodate the additional water usage and construction of a new system would not be necessary. Nonetheless, in an effort to comply with regional efforts to conserve water, the 1998 Final EIR recommended Mitigation Measures **U1** and **U2** to ensure that water resources were conserved to the greatest extent feasible.

The campus improvements under the 1998 FMP were estimated to result in an increase in average wastewater flow of approximately 70,075 gallons per day. Based on a conversation with the County Sanitation Districts of Los Angeles County, it was determined that there was sufficient capacity to accommodate the additional wastewater flow. Similarly, the 1998 FMP was anticipated to generate an additional 0.5 tons of solid waste per day. Mitigation Measures **U3** and **U4** were recommended to help ensure that conservation measures are observed to limit the amount of future solid waste to the extent feasible.

2019 FMP Update. The projects proposed under the 2019 FMP Update demolition would not result in increased enrollment beyond what was presented in the 2009 Final SEIR. As such, the 2019 FMP Update would not place additional burden or demands on utilities and service systems. Therefore, the proposed Revised Project would not result in any new impacts beyond those previously disclosed. Although no significant impacts would result, the mitigation measures identified in the 1998 Final EIR would be applied to the projects proposed under the 2019 FMP to continue to encourage water conservation and recycling.

Project Specific Mitigation Measures. None required beyond those identified in the 1998 Final EIR.

EFFECTS DETERMINED NOT TO BE SIGNIFICANT

In the preparation of the 1998 Final EIR and 2009 Final SEIR, certain CEQA topic areas were not discussed because these effects were considered not significant or not expected to occur. These topic areas included the following:

- Agricultural Resources
- Biological Resources
- Flood Hazard/Hydrology
- Mineral Resources
- Population, Employment, and Housing
- Recreation
- Schools

Similarly, the projects proposed as part of the 2019 FMP would not result in the need to address these topic areas. The physical and environmental circumstances under which the proposed 2019 FMP Update would be implemented have not substantially changed since the preparation of the 1998 Final EIR and the 2009 Final SEIR. Therefore, these impacts would remain less-than-significant, and, as such, are not addressed in this Third Addendum to the 2009 Final SEIR.

CONCLUSION

Based on the findings and information contained in the 1998 Final EIR and 2009 Final SEIR, and the CEQA statute and State CEQA Guidelines Sections 15162, 15164, and 15168, the projects proposed as part of the 2019 FMP Update would not result in any additional effects on any environmental resources. As modified by this Third Addendum to the 2009 Final SEIR, the potential environmental effects of the proposed 2019 FMP Update have been adequately addressed in the 1998 Final EIR and 2009 Final SEIR, and none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a subsequent EIR have occurred. No circulation of this Addendum for public review is required by CEQA or the Guidelines per Section 15164(c)).

APPENDIX A

Central Plant Expansion Acoustical Analysis Report



East Los Angeles College Central Plant Expansion 1301 Avenida Cesar Chavez

Monterey Park, CA

Acoustical Analysis Report

Prepared By:

after las

Joseph W. Celano, P.E. email: joe@newsonacoustics.com

Prepared For:

IMEG Corp. 300 N. Lake Avenue, 14th Floor Pasadena, CA 91101

30 April 2019

2001 Wilshire Boulevard, Suite 301, Santa Monica, CA 90403, USA t: 310.829.6343 www.newsonacoustics.com f: 310.829.9112 East Los Angeles College Central Plant Expansion 30 April 2019 Page 1

1.0 INTRODUCTION

East Los Angeles College proposes to install approximately 2000 tons of additional chilled water cooling capacity to the existing Central Utility Plant (CUP) which is located on W. Floral Drive, on the northerly portion of the Campus. Existing residential uses are located directly opposite the CUP on the northerly side of W. Floral Dr. The proposed project will consist of a new CUP building housing chillers, pumps, heat exchangers, etc.; a new cooling tower to be located between the new CUP building and the existing cooling towers; and additional ice storage tanks to be located easterly of the existing ice storage tanks.

Figure 1, below, shows an aerial photograph of the project site, the approximate locations of the proposed new equipment, and the approximate locations of the noise measurement positions used during our acoustical survey at the site.



Figure 1 - Project Vicinity Map Showing Noise Measurement Positions (not to scale)

This report presents an analysis of potential noise impacts of the proposed project on existing residential uses located northerly of the site, and describes conceptual noise mitigation measures sufficient to reduce the noise impacts to conform to the noise limits contained in the City of Monterrey Park Municipal Code.

2.0 STANDARDS

The Monterey Park Municipal Code contains limits on allowable noise levels which can result on a property due to a noise source operating on another property. For noise impacting Residential uses, the limits are the higher of the actual measured median ambient noise levels or the prescriptive limits shown in paragraph 9.53.040 Noise standards. These prescriptive limits are 55 dBA during daytime hours 7 a.m. - 10 p.m. and 50 dBA during nighttime hours 10 p.m. - 7 a.m. The Code also states that if the receiver is located in a different noise zone than the noise source, the noise limits of lower zone shall apply.

Noise mitigation measure N21 in the March 2010 *East Los Angeles College Facilities Master Plan Update Draft Supplemental Environmental Impact Report*, states "The proposed central plant shall include noise control design features that reduce the total composite noise level generated at the central plant facility to

East Los Angeles College Central Plant Expansion 30 April 2019 Page 2

a maximum of 56 dBA at 50 feet." The EIR requires that if the noise would exceed the 56 dBA noise level, noise mitigation measures shall be implemented to reduce the noise.

3.0 NOISE MEASUREMENTS

Acoustical measurements were conducted between approximately 11:30 a.m. and 2:30 p.m. on 17 April 2019 in the vicinity of the project site in order to quantify the existing ambient noise environment.

- Measurement position 1 was located, for reference, within the existing CUP yard, 50 ft. northerly of the westerly most existing cooling tower.
- Measurement position 2 was located on the northerly side of Floral Rd. adjacent to the retaining wall at the foot of the slope up to the existing residential uses, approximately 115 ft. from the existing cooling tower, and approximately 50 ft. from the northerly border of the existing CUP. This location corresponds to the 50 ft. distance specified in the March 2010 EIR.

Measurements were taken utilizing a Bruel & Kjaer (B&K) type 2270 Precision Sound Analyzer (certification January 2019). The measurement microphone was supported approximately 13 ft. above the ground, and was fitted with a B&K foam windscreen. Immediately prior to the measurements, the analyzer was calibrated utilizing a B&K type 4231 acoustic calibrator (certification March 2019).

3.1 Noise due to Existing CUP Equipment

Noise at measurement position 1, which was located within the confines of the existing CUP, at a distance of 50 ft. from the existing cooling tower, due to the composite of the noise from the existing cooling towers and noise from the electrical sub-station transformer, was approximately 67 dBA, during lulls between motor vehicles passing on Floral Drive.

Background noise at measurement position 2, on the northerly side of Floral Dr., due to the composite of the existing cooling towers and sub-station, at a distance of approximately 50 ft. from the northerly boundary of the CUP was approximately 60 dBA, during lulls between motor vehicles passing on Floral Drive in front of the measurement position. This noise is higher than the 56 dBA limit in the 2010 EIR for the existing CUP.

3.2 Ambient Noise at Neighboring Property Line

Ambient noise at measurement position 2, due to the substation alone with the cooling towers off, was approximately 57 dBA, again during lulls between motor vehicles passing on Floral Drive in front of the measurement position.

4.0 NOISE DUE TO PROPOSED CUP EQUIPMENT

4.1 Cooling Tower

The new cooling tower will be the primary source of outdoor noise associated with the proposed central plant expansion. The manufacturer's data for the 'basis of design' cooling tower (Evapco type USS 214-4L48), furnished with "Super Low Sound Fans", quotes maximum noise levels of 65 dBA at 50 ft. from the air inlets and 64 dBA at 50 ft. from the top. Furnishing the tower with "Water Silencers" in addition to the "Super Low Sound Fans" would reduce the noise levels to 57 dBA at 50 ft. from the air inlets and 60 dBA at 50 ft. from the top.

The preliminary site layout for the proposed Central Plant Expansion would locate the new cooling tower westerly of the existing cooling towers, approximately 60 ft. southerly of the northerly boundary of the CUP. Noise at 60 ft. from the cooling tower inlet would be approximately 1 dBA lower than the noise at the 50 ft. reference distance, i.e., 56 dBA with the water silencers and super low sound fans.

4.2 CUP Indoor Equipment

The new chillers, pumps, heat exchangers, and other ancillary equipment will be installed inside a new CUP building, which will be located westerly of the existing CUP building and cooling towers. The envelope of the new building will be designed and specified to contain noise from this equipment, primarily

East Los Angeles College Central Plant Expansion 30 April 2019 Page 3

the chillers. Conceptually, solid concrete, masonry block, or other comparatively heavy solid construction, with appropriate sound attenuators at ventilation openings, would be acoustically acceptable. Specific construction requirements will be determined during the project design phase to ensure that noise emissions from the building would conform to applicable Code requirements.

4.3 Ice Thermal Storage

The outdoor portion of the ice thermal storage system consists of insulated storage tanks, which do not radiate noise. As such, no noise mitigation measures would be necessary for the ice storage tanks.

5.0 ANALYSIS

5.1 Potential Off-Site Noise Impacts

The proposed cooling tower location would be located approximately 110 ft. from the property line on the northerly side of Floral Dr., which corresponds to the 50 ft. distance from the CUP boundary specified in the EIR. Noise at 110 ft. from the cooling tower would be approximately 7 dBA lower than the noise at the 50 ft. reference distance, i.e., 50 dBA with both the water silencers and super low sound fans. As such, noise due to the proposed new cooling tower with the water silencers and super low sound fans would be substantially lower than the 56 dBA limit in the EIR. However, given that measured noise level at this location due to the existing CUP equipment already exceeds the 56 dBA limit in the EIR, the composite noise due to the existing CUP and the new cooling tower would also exceed the maximum noise limit in the EIR.

The proposed cooling tower location would be approximately 135 ft. from the rear yards of the nearest residential property on the northerly side of Floral Dr. Noise at 135 ft. from the cooling tower would be approximately 9 dBA lower than the noise at the 50 ft. reference distance, i.e., 48 dBA with both the water silencers and super low sound fans. Thus noise due to the new cooling tower, in the absence of the contributions of noise due to the existing CUP equipment would comply with the 50 dBA nighttime noise limit in the City Municipal Code.

5.1 Noise Mitigation

Noise due to the proposed new cooling tower alone (when furnished with water silencers and the super low sound fan), in the absence of noise due to the existing CUP equipment, would be in substantial compliance with both the Code and EIR noise limits. However, based on our daytime measurements, noise due to the existing CUP equipment already exceeds both of these limits.

As discussed in Section 4.2, above, the noise mitigation measures for the indoor equipment will be specified during the project design phase. Conceptually, a concrete or masonry building, with suitable sound attenuators at ventilation openings, would be sufficient to limit noise due to the indoor equipment to comply with the noise limits in both the Code and the EIR.

As discussed in Section 4.3, above, no noise mitigation would be necessary at the ice storage tanks.

6.0 CONCLUSIONS

With incorporation of the noise mitigation measures discussed above, noise due the new equipment for the proposed CUP expansion would substantially comply with the noise limits in the City Code and the 2010 EIR.

Measured noise levels due to the existing CUP equipment already exceed the noise limits in both the Code and the EIR. Therefore, unless these existing non-conforming noise levels have been approved, supplementary noise mitigation measures may be needed at the existing CUP equipment to comply with the noise limits in the Code and the EIR.



Cooling Tower Technical Data Sheet



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 **(805)** 551-9818

> Hot Water

> > In

Cooled Water Out

Lauren@vertisys.net

Hot Saturated Discharge Air

Project Details

Project Name : ELAC CUP Location: TBD

Date: 3/26/2019 **Customer:** Contact: **Contact Email:**

(1) USS 214-4L48

Product Description

The original Advanced Technology cooling tower provides an induced-draft, axial fan solution for a wide array of outdoor cooling capacities.

Selection Criteria	Total	Each Unit	Required Capacity	
Flow: Fluid: Entering Fluid Temp: Leaving Fluid Temp: Entering Wet Bulb:	6,000.0 GPM Water 95.0°F 85.0°F 74.0°F	6,000.0 GPM Water 95.0°F 85.0°F 74.0°F	30,000.00 MBH 2,000.00 Tons	Cool Dr Enterin Air

Unit Selected

One(1) EVAPCO USS 214-4L48 at 102.8% capacity (30,840.00 MBH)

Product Line is CTI/ECC Certified. Design conditions are outside the scope of CTI Standard 201 RS.

Physical Data Per Unit

Overall Dimensions (WxLxH):	13'-11 1/4" x 47'-8 1/2" x 20'-7 1/8"		
Operating Weight:	71,100 lbs		
Shipping Weight:	39,400 lbs		
Heaviest Section:	13,980 lbs		
*weights and dimensions could vary depending on options selected			

Fan Motor Data per Unit

Number of Fans:	2
# of Fan Motors:	2
Nameplate Power (460/3/60):	25.00 HP Per Motor
Total Connected Nameplate Power:	50.00 HP

Additional Details Per Unit

Air Flow: 323,100 0	FM Inlet Pressure Evaporated W	Drop: ater Rate:	3.1 psi 48.00 GPM	
Accessories				
(1) 5-Probe Electronic Water Level Control Package	(1) External Service Platform with Ladder	(1) Safety Cage	2	
(1) Safety Cage Extension	(1) Flume Plate	(1) Ladder Exte	ension; 3 Feet	

(1) 304 Welded Stainless Steel Cold Water Basin

(1) Vibration Switch

(2) Louver Access Door

(1) IBC Standard Structural Design

(1) Motor Davit with Base

- (1) Super Low Sound Fan (2) Fan Motor: Inverter Capable, Premium
- Efficient

(1) 304 Stainless Steel Upper

(1) Water Silencers

IBC Design Capability

IBC Standard Structural Design 1.0 Importance Factor Specified Seismic(Sps): up to 1.34 g, z/h = 0Wind Load(P): up to 119 psf

Drift

Eliminator

(2) Fan Motor: Space Heaters (1) Sump Sweeper Piping (High Flow Eductors)

- (1) EVAPAK Fill
- (1) 1.0 Importance Factor Specified



Spectrum Version: 2.2019.301.1

Full Speed Complete Sound Data



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 (805) 551-9818 Lauren@vertisys.net

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar Sound Power Levels (PWL) in dB RE 10-12 Watt

 Model
 USS 214-4L48

 Motor
 25.00 HP

 # Motors
 2

Speed Full Speed

2 Cell Data

					S	ound Press	ure Level (d	В)				
	Er	nd	Moto	r Side	Орр	End	Орр М	tr. Side	Тс	ор		Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft		Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)		Level (db)
63 HZ	70	64	71	65	70	64	71	65	73	57		96
125 HZ	67	60	68	61	67	60	68	61	74	61	1	92
250 HZ	63	53	64	54	63	53	64	54	67	58		87
500 HZ	64	52	67	52	64	52	67	52	65	54		85
1 KHZ	65	50	64	52	65	50	64	52	64	53		84
2 KHZ	63	48	64	50	63	48	64	50	63	52		82
4 KHZ	63	46	63	46	63	46	63	46	63	52		80
8 KHZ	64	46	66	45	64	46	66	45	65	53		80
Calc dBA	71	56	72	57	71	56	72	57	71	60		90

Sound option(s) selected:

1.

Super Low Sound Fan, Water Silencers

Remarks:

Sound Pressure Levels are according to CTI Standard ATC-128

- 2. Sound Power Levels are calculated according to the Small Units Section 8
- 3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
- 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration

66% Speed Complete Sound Data



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 (805) 551-9818 Lauren@vertisys.net

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar Sound Power Levels (PWL) in dB RE 10-12 Watt

Model USS 214-4L48 Motor 25.00 HP # Motors 2 Speed 2/3 Speed

2 Cell Data

					S	ound Pressi	ure Level (d	В)				
	Er	nd	Moto	r Side	Орр	End	Орр М	tr. Side	Тс	ор		Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft]	Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)		Level (db)
63 HZ	62	56	63	57	62	56	63	57	64	50	1	88
125 HZ	59	52	61	54	59	52	61	54	65	53	1	85
250 HZ	60	51	61	52	60	51	61	52	62	51	I	83
500 HZ	63	51	66	51	63	51	66	51	61	52		83
1 KHZ	64	49	64	52	64	49	64	52	62	52		83
2 KHZ	63	48	64	50	63	48	64	50	62	51		82
4 KHZ	63	45	63	46	63	45	63	46	63	52		80
8 KHZ	64	46	66	45	64	46	66	45	65	53		80
Calc dBA	70	55	71	57	70	55	71	57	70	59		89

Sound option(s) selected:

1.

Super Low Sound Fan, Water Silencers

Remarks:

Sound Pressure Levels are according to CTI Standard ATC-128

- 2. Sound Power Levels are calculated according to the Small Units Section 8
- 3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
- 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration

50% Speed Complete Sound Data



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 (805) 551-9818 Lauren@vertisys.net

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar Sound Power Levels (PWL) in dB RE 10-12 Watt

 Model
 USS 214-4L48

 Motor
 25.00 HP

 # Motors
 2

Speed 50% Speed

2 Cell Data

					S	ound Pressi	ure Level (d	В)				
	Er	nd	Moto	r Side	Орр	End	Opp M	tr. Side	Тс	ор		Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft		Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)		Level (db)
63 HZ	57	52	58	53	57	52	58	53	59	48		84
125 HZ	56	49	58	51	56	49	58	51	60	50	1	82
250 HZ	59	51	60	51	59	51	60	51	61	48		83
500 HZ	63	51	66	51	63	51	66	51	60	52		83
1 KHZ	64	49	63	52	64	49	63	52	62	52		83
2 KHZ	63	48	64	50	63	48	64	50	62	51		82
4 KHZ	63	45	63	46	63	45	63	46	63	52		80
8 KHZ	64	46	66	45	64	46	66	45	65	53		80
Calc dBA	70	55	71	57	70	55	71	57	69	59		89

Sound option(s) selected:

1.

Super Low Sound Fan, Water Silencers

Remarks:

Sound Pressure Levels are according to CTI Standard ATC-128

- 2. Sound Power Levels are calculated according to the Small Units Section 8
- 3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
- 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 (805) 551-9818 Lauren@vertisys.net

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar Sound Power Levels (PWL) in dB RE 10-12 Watt

 Model
 USS 214-4L48

 Motor
 25.00 HP

 # Motors
 2

Speed Full Speed

1 Cell Data

					S	ound Press	ure Level (d	В)				
	Er	nd	Moto	r Side	Орр	End	Орр М	tr. Side	Тс	ор		Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft]	Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)		Level (db)
63 HZ	69	62	69	62	69	62	69	62	71	54	1	94
125 HZ	66	58	66	58	66	58	66	58	72	58	1	90
250 HZ	62	51	62	51	62	51	62	51	65	55	I	84
500 HZ	63	50	65	49	63	50	65	49	63	51		82
1 KHZ	64	48	62	49	64	48	62	49	62	50		81
2 KHZ	62	46	62	47	62	46	62	47	61	49		79
4 KHZ	62	44	61	43	62	44	61	43	61	49		77
8 KHZ	63	44	64	42	63	44	64	42	63	50		78
Calc dBA	70	54	70	54	70	54	70	54	69	57		87

Sound option(s) selected:

1.

Super Low Sound Fan, Water Silencers

Remarks:

Sound Pressure Levels are according to CTI Standard ATC-128

- 2. Sound Power Levels are calculated according to the Small Units Section 8
- 3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
- 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration

66% Speed Single Cell Sound Data



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 (805) 551-9818 Lauren@vertisys.net

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar Sound Power Levels (PWL) in dB RE 10-12 Watt

Model USS 214-4L48 Motor 25.00 HP # Motors 2 Speed 2/3 Speed

1 Cell Data

					S	ound Pressi	ure Level (d	В)				
	Er	nd	Moto	r Side	Орр	End	Орр М	tr. Side	Тс	ор		Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft]	Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)		Level (db)
63 HZ	61	54	61	54	61	54	61	54	62	47	ľ	86
125 HZ	58	50	59	51	58	50	59	51	63	50	Î	82
250 HZ	59	49	59	49	59	49	59	49	60	48	I	81
500 HZ	62	49	64	48	62	49	64	48	59	49	I	81
1 KHZ	63	47	62	49	63	47	62	49	60	49		80
2 KHZ	62	46	62	47	62	46	62	47	60	48		79
4 KHZ	62	43	61	43	62	43	61	43	61	49		77
8 KHZ	63	44	64	42	63	44	64	42	63	50		78
Calc dBA	69	53	69	54	69	53	69	54	68	56		86

Sound option(s) selected:

1.

Super Low Sound Fan, Water Silencers

Remarks:

Sound Pressure Levels are according to CTI Standard ATC-128

- 2. Sound Power Levels are calculated according to the Small Units Section 8
- 3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
- 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration

50% Speed Single Cell Sound Data



Lauren Moscarello 12774 Florence Avenue

Santa Fe Springs, California 90670 (805) 551-9818 Lauren@vertisys.net

Sound Pressure Levels (SPL) in dB RE 0.0002 Microbar Sound Power Levels (PWL) in dB RE 10-12 Watt

Model USS 214-4L48 Motor 25.00 HP # Motors 2

Speed 50% Speed

1 Cell Data

					S	ound Pressi	ure Level (d	B)			
	Er	nd	Moto	r Side	Орр	End	Орр М	tr. Side	Тс	р	Sound
	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	5.0 ft	50.0 ft	Power
Band	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	(1.5m)	(15.2m)	Level (db)
63 HZ	56	50	56	50	56	50	56	50	57	45	81
125 HZ	55	47	56	48	55	47	56	48	58	47	80
250 HZ	58	49	58	48	58	49	58	48	59	45	80
500 HZ	62	49	64	48	62	49	64	48	58	49	81
1 KHZ	63	47	61	49	63	47	61	49	60	49	80
2 KHZ	62	46	62	47	62	46	62	47	60	48	79
4 KHZ	62	43	61	43	62	43	61	43	61	49	77
8 KHZ	63	44	64	42	63	44	64	42	63	50	78
Calc dBA	69	53	69	54	69	53	69	54	67	56	86

Sound option(s) selected:

1.

Super Low Sound Fan, Water Silencers

Remarks:

Sound Pressure Levels are according to CTI Standard ATC-128

- 2. Sound Power Levels are calculated according to the Small Units Section 8
- 3. Sound from free-field conditions over a reflecting plane with +/-2 db(A) tolerance
- 4. Noise levels can increase with variable frequency drives depending on the drive manufacturer and the drive configuration



Baltimore Aircoil Company Cooling Tower Selection Report

8.9.3 NAPG02

ELACC

ELACC

California

United States

May 16, 2019

October 31, 2011

Version: Product data correct as of:

Project Name: Selection Name: Project State/Province: Project Country: Date:

Model Information

Product Line: PG S3000 (2007-2009) 3333C-JM Model: Number of Units: 1 Fan Type: Low Sound Fan (1) 7.50 = 7.50 HP/Unit Fan Motor: Total Standard Fan Power: Full Speed, 7.50 BHP/Unit Intake Option: None Internal Option: None Discharge Option: **Discharge Sound Attenuation**

Design Conditions		
Flow Rate:	748.00	USGPM
Hot Water Temp.:	95.00	°F
Cold Water Temp.:	83.00	°F
Wet Dulle Terrer .	70.00	° –

Wet Bulb Temp.:	72.00	°F
Tower Pumping Head:	4.32	psi
Reserve Capability:	5.14	%

Thermal performance at design conditions and standard total fan motor power is certified by the Cooling Technology Institute (CTI).

Engineering Data, per Unit

Unit Length:	08' 05.75"
Unit Width:	18' 00.50"
Unit Height:	10' 07.62"
Air Flow:	62,940 CFM
Approximate Shipping Weight:	7,860 pounds
Heaviest Section:	7,860 pounds
Approximate Operating Weight:	15,990 pounds



Note: These unit weights and dimensions do not account for any options/accessories. Please contact your local BAC sales representative for weights and dimensions of units with options/accessories.

Warning

1. CTI Certification was maintained on this model during its production.



Baltimore Aircoil Company Cooling Tower Selection Report

Version: Product data correct as of:

Project Name: Selection Name: Project State/Province: Project Country: Date: 8.9.3 NAPG02 October 31, 2011 ELACC

vince: California United States May 16, 2019

Model & Fan Motor

 Product Line:
 PG \$3000 (2007-2009)

 Model:
 3333C-JM

 Number of Units:
 1

 Fan Motor:
 (1) 7.50 = 7.50 HP/Unit

 Total Standard Fan Power:
 Full Speed, 7.50 BHP/Unit

Model Accessories

Intake Option: Internal Option: Discharge Option: Fan Type: None None Discharge Sound Attenuation Low Sound Fan

Design Conditions @ Standard Total Fan Motor Power per Unit (7.50 HP)

 Thermal performance at design conditions and standard total fan motor power is certified by the Cooling Technology Institute (CTI).

 Flow Rate:
 748.00
 USGPM

 Hot Water Temp.:
 95.00
 °F

 Cold Water Temp.:
 83.00
 °F

 Wet Bulb Temp.:
 72.00
 °F

Predicted Performance Fan Motor Alternative = Full Speed, 7.50 BHP Flow Rate = 748.00 USGPM (100.00% of Design)



	Applies to	Applies to
Warning	Design	Off Design
	Conditions	Conditions
1. One or more selection parameters outside of CTI Certification limits.	No	Yes



Baltimore Aircoil Company Cooling Tower Selection Report

Version Product data correct as of:

October 31, 2011 Project Name:

Selection Name: Project State/Province: Project Country: Date:

ELACC ELACC California **United States** May 16, 2019

8.9.3 NAPG02

Model Information

Product Line: PG S3000 (2007-2009) Intake Option: None Model: 3333C-JM Internal Option: None **Discharge Option: Discharge Sound Attenuation** Number of Units: 1 Fan Type: Low Sound Fan Fan Motor: (1) 7.50 = 7.50 HP/Unit Total Standard Fan Power: Full Speed, 7.50 BHP/Unit

Octave band and A-weighted sound pressure levels (Lp) are expressed in decibels (dB) reference 0.0002 microbar. Sound power levels (Lw) are expressed in decibels (dB) reference one picowatt. Octave band 1 has a center frequency of 63 Hertz.

Air Inlet			
Octave Distance			
Band	5 ft.	50 ft.	
1	74	59	
2	76	58	
3	74	60	
4	69	56	
5	63	52	
6	58	45	
7	54	40	
8	51	37	
A-wgtd	71	58	

End			
Sound Pressure (dB)			
Octave	Distance		
Band	5 ft.	50 ft.	
1	66	59	
2	67	54	
3	65	56	
4	59	50	
5	54	46	
6	48	38	
7	42	34	
8	40	31	
A-wgtd	61	52	



Sound Power (dB)		
Octave	Center Frequency	
Band	(Hertz)	Lw
1	63	90
2	125	89
3	250	90
4	500	86
5	1000	82
6	2000	75
7	4000	71
8	8000	67

Тор			
Sound Pressure (dB)			
Octave	Distance		
Band	5 ft.	50 ft.	
1	68	53	
2	68	57	
3	66	52	
4	62	51	
5	59	49	
6	54	45	
7	49	41	
8	48	36	
A-watd	64	54	

End			
Sound Pressure (dB)			
Octave	Distance		
Band	5 ft.	50 ft.	
1	66	59	
2	67	54	
3	65	56	
4	59	50	
5	54	46	
6	48	38	
7	42	34	
8	40	31	
A-wgtd	61	52	

Air Inlet			
Octave	Distance		
Band	5 ft.	50 ft.	
1	74	59	
2	76	58	
3	74	60	
4	69	56	
5	63	52	
6	58	45	
7	54	40	
8	51	37	
A-wgtd	71	58	

Note: The use of frequency inverters (variable frequency drives) can increase sound levels.