

heat, cool, and pressurize the water they use in their homes and businesses. Together these water-related energy uses annually account for roughly 20 percent of the State’s electricity consumption, one-third of non-power plant natural gas consumption, and about 88 million gallons of diesel fuel consumption. The California Energy Commission has reported that the energy intensity of the water use cycle in Southern California is 12,700 kilowatt-hours per million gallons.

Construction Emissions

Regional Impacts. Construction of the proposed project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers traveling to and from the project site. Fugitive dust emissions would primarily result from grading of the athletic field area. NO_x emissions would primarily result from the use of construction equipment. During the finishing phase, paving operations and the application of architectural coatings (e.g., paints) and other building materials would release VOC. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 for Fugitive Dust. Specific Rule 403 control requirements include, but are not limited to, applying water in sufficient quantities to prevent the generation of visible dust plumes, applying soil binders to uncovered areas, reestablishing ground cover as quickly as possible, utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site, and maintaining effective cover over exposed areas. Compliance with Rule 403 would reduce PM_{2.5} and PM₁₀ emissions associated with construction activities by approximately 61 percent.

Table 4.2-6 shows the maximum estimated daily emissions associated with construction activity. Daily construction emissions would exceed the SCAQMD regional significance threshold for VOC emissions. Regional construction emissions would result in a significant impact without mitigation.

TABLE 4.2-6: DAILY CONSTRUCTION EMISSIONS						
	Pounds Per Day					
	VOC	NO_x	CO	SO_x	PM_{2.5} /a/	PM₁₀ /a/
Maximum Regional Total	217 /b/	95 /c/	385 /d/	<1	15 /e/	57 /e/
Regional Significance Threshold	75	100	550	150	55	150
Exceed Threshold?	Yes	No	No	No	No	No
Maximum On-Site Total	212 /b/	55 /c/	33 /d/	<1	14 /e/	55 /e/
Localized Significance Threshold /f/	-- /g/	98	630	-- /g/	7	13
Exceed Threshold?	--	No	No	--	Yes	Yes
/a/ URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403. /b/ The maximum VOC emissions would occur in 2013 when general construction and coating activities overlap. /c/ The maximum NO _x emissions would occur in 2010 when general construction activities overlap with demolition of Building 4. /d/ The maximum CO emissions would occur in 2010 when construction activities for the parking structure and the adaptive re-use of Buildings 1 and 3 would overlap. /e/ The maximum PM _{2.5} and PM ₁₀ emissions would occur when general construction activities overlaps with grading of the play field. /f/ The grading phase would generate the maximum daily localized emissions. Grading activity would cover approximately five acres and the nearest sensitive land use is the Los Angeles Unified School District continuation school building which is located on the project site. Thus, the analysis assumed a five-acre project site and a 25-meter (82-foot) receptor distance. /g/ SCAQMD has not developed localized significance methodology for VOC or SO _x at this time. SOURCE: TAHA, 2009.						