

Table 1 – Total Construction-Related Fuel Consumption

15719 and 15755 Arrow Route Warehouse Project

Fuel	Consumption	
Diesel		
On-Road Construction Trips ¹	10,397	Gallons
Off-Road Construction Equipment ²	67,186	Gallons
Diesel Total	77,583	Gallons
Gasoline		
On-Road Construction Trips ¹	17,045	Gallons
Off-Road Construction Equipment ³	-	Gallons
Gasoline Total	17,045	Gallons

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod for construction in 2022 and fleet-average fuel consumption in gallons per mile from EMFAC2017 web based data for San Bernardino County. See Table 2 for calculation details.
2. Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on SCAQMD CEQA Air Quality Handbook, Table A9-3E.
3. All emissions from off-road construction equipment were assumed to be diesel.

Table 2 – On-Road Construction Trip Estimates

15719 and 15755 Arrow Route Warehouse Project

Trip Type	Trips	Trip length	Vehicle Miles Traveled (VMT)	Fuel Efficiency	Annual Fuel Usage ¹	
	(trips)	(miles)	(miles)	(mpg)	(Fuel)	(gallon)
Worker ^{2,3}	32,976	14.7	484,747	27.8	Gasoline	17,045
Vendor ⁴	12,354	6.9	85,243	8.9	Diesel	10,048
Hauling ⁵	121	20	2,420	6.9	Diesel	349

Notes:

1. On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod output (See Air Quality/GHG Memo) for construction and fleet-average fuel consumption in gallons per mile from EMFAC2017 web based data for 2022 in San Bernardino County.
2. Worker trips were assumed to be 100% gasoline powered vehicles.
3. Per CalEEMod, worker Trips were assumed to be 50% LDA, 25% LDT1, and 25% LDT2.
4. Vendor trips were assumed to be 50% MHDT and 50% HHDT, split evenly between the MHDT and HHDT construction categories.
5. Per CalEEMod, hauling trips were assumed to be 100% HHDT.

Table 3 – Annual Energy Consumption from Operation

15719 and 15755 Arrow Route Warehouse Project

Fuel Type	Energy Consumption	Units	Natural Gas	Units
Electricity				
Building ¹	518,801	kWh/year	281,210	kBTU/yr
Water ²	74,774	kWh/year		
Total Electricity	593,575	kWh/year		
Mobile³				
Gasoline	81,934	gallons/year		
Diesel	150,663	gallons/year		

Notes:

1. Building electricity use from CalEEMod output (See Air Quality/GHG Memo).
2. Calculated based on the Project's annual water consumption using CalEEMod SCAQMD energy intensity of 0.0111 kWhr per gallon for supply, distribution, and treatment of water and .013021 kWhr per gallon for supply, distribution, and treatment of water and wastewater treatment.
3. Mobile source fuel use based on annual vehicle miles traveled (VMT) from CalEEMod output for operational year 2022 and fleet-average fuel consumption in gallons per mile from EMFAC2017 web based data in San Bernardino County.