## Proposed Project Total Construction-Related and Operational Gasoline Usage

Table 1. Reservoir and Booster Station Construction Year One					
Action	Carbon Dioxide Equivalents (CO <sub>2</sub> e) in Metric Tons <sup>1</sup>	Conversion of Metric Tons to Kilograms <sup>2</sup>	Construction Equipment Emission Factor <sup>2</sup>		
Project Construction	0,412	412,000	10.15		
Total Gallons Consumed During Project Construction:			40,591		



## **Diesel Engine Emissions Calculations**

Table 2. Emergency Generator Operational Data					
Parameter	Value	Units	Source/Justification		
Operational Time	24	hrs			
Generator Size	173	bhp	Generator Size per CalEEMod		
BSFC	7,000	Btu/hp-hr	AP-42		
Heating Value	19,300	Btu/lb			
Diesel Density	7	lb/gal			
Load Factor	74%		CalEEMod		

Total fuel consumption:

159 gallons

1. Fuel Usage (gal) = Engine Size (bhp) \* load factor (%) \* operating hours (hrs) \* BSFC (Btu/hp-hr) / Heating Value Diesel (Btu/lb) / Density Diesel (lb/gal)

Acronyms		
BSFC	Break Specific Fuel Content	
Btu	British Thermal Unit	
CalEEMod	Salifornia EmissionsEestimator Model	