# AREA SOURCE EMISSIONS FOR CALENDAR YEAR 2023
# METHODOLOGY DOCUMENTATION
# LPG TRANSFER AND DISPENSING – FUGITIVE LOSSES

## DESCRIPTION OF CATEGORY

This category estimates the emissions of VOC from liquified petroleum gas (LPG) transfer and dispensing – fugitive losses at residential, commercial, industrial, chemical, agricultural and retail sales facilities.

| CES | EIC | Description |
|---|---|---|
| 94466 | 330-319-0120-0000 | LPG Transfer and Dispensing – Fugitive Losses |

## METHODOLOGY AND ASSUMPTIONS

This section describes the methodology used to derive the emissions for the 2022 AQMP and prospective future SIP/AQMP. Emissions are a function of LPG consumption (throughput), an emission factor, and a control factor. Emissions are calculated as follows:

*Emission = Throughput × Emission Factor (*EF*) × Control Factor (CF)*

*Where:*

- Throughput is based on 2023 Energy Information Administration (EIA) total California consumption activity data.[1] Projected 2023 population comes from the 2024 Regional Transportation Plan developed by the Southern California Association of Governments[2] and is used to apportion 2023 state throughput to South Coast AQMD jurisdiction at the county/basin level. Consumption in 2023 in the South Coast Air Basin and the Coachella Valley are 288.85 and 8.24 million gallons of LPG, respectively.
- The emissions factor is an average loss rate of 3.73 tons of VOC per million gallons of LPG throughput.
- The control factor is based on South Coast AQMD Rule 1177 implementation, with a control factor of 0.291

[1] https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_hl.html&sid=CA
[2] https://scag.ca.gov/connect-socal

## SUMMARY AND NEW EMISSIONS

**Table 1. Emissions for base year 2023 for South Coast Air Basin and Salton Sea Air Basin**

| LPG Transfer and Dispensing – Fugitive Losses (tpd) | | | |
|---|---|---|---|
| **Pollutant** | **2022 AQMP** | **Prospective SIP/AQMP (South Coast Air Basin)** | **Prospective SIP/AQMP (Coachella Valley)** |
| **VOC** | 2.38 | 2.96 | 0.08 |