

# Emission Inventory Overview

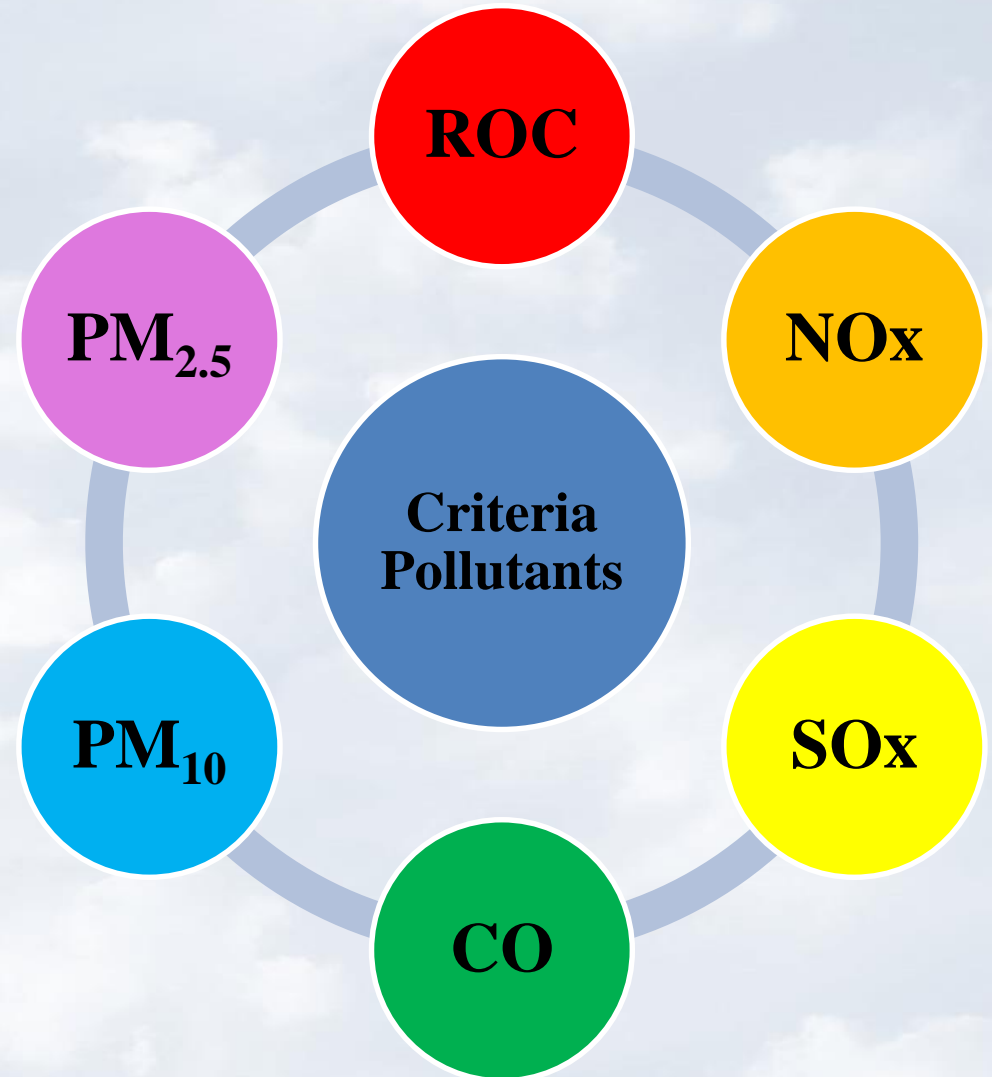
## Board of Directors Santa Barbara County Air Pollution Control District

Our Mission: To protect the people and the environment of Santa Barbara County from the effects of air pollution.

Aeron Arlin Genet  
Director / APCO

Timothy Mitro, Air Quality Engineer  
Alex Economou, Air Quality Specialist

October 19, 2017



# Types of Emission Inventories

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- Criteria Pollutants and their precursors:
  - Pollutants that can cause exceedances of the health-based ambient air quality standards set by the State and U.S. EPA
  - ROC, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>
- Toxic Pollutants:
  - Benzene, Hexane, Formaldehyde, Diesel Particulate Matter
- GHG Pollutants:
  - Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous Oxide (N<sub>2</sub>O)

# Types of Emission Sources

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- Stationary Sources:
  - Commercial & Industrial processes
    - Autobody Shops, Landfills, Oil & Gas Production Fields
- Area-wide Sources:
  - Small processes that don't require an air quality permit
    - Architectural Paints, Residential Heaters


# Types of Emission Sources

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- On-Road Vehicles:
  - Passenger Vehicles, Heavy-duty Trucks
- Off-Road Sources:
  - Boats, Trains, Airplanes
  - Bulldozers, Forklifts, Agricultural Equipment

# Annual Reports



Our Vision  Clean Air

**Santa Barbara County  
Air Pollution Control District**

**ANNUAL REPORT: GASOLINE DISPENSING FACILITIES**

Company Name: \_\_\_\_\_ Facility ID#: \_\_\_\_\_  
Contact Name: \_\_\_\_\_ Permit #: \_\_\_\_\_  
Address: \_\_\_\_\_ Phone #: \_\_\_\_\_  
City/State/Zip Code: \_\_\_\_\_  
Facility Name/Location: \_\_\_\_\_

Operating Schedule: Year \_\_\_\_\_ Hours/Day: \_\_\_\_\_ Days/Week: \_\_\_\_\_ Weeks/Year: \_\_\_\_\_

Please review your permit's annual reporting requirements and provide any other information that you are required to submit with this report. Indicate the fuel type, facility type, and tank type below. List the total gallons of fuel dispensed. Use a duplicate sheet if you dispensed more than one type of fuel. Refer to the back of this sheet for further instructions.

1. Fuel Type:  Unleaded Gasoline  AV Gas  Jet A  Other \_\_\_\_\_  
2. Facility Type:  Retail  Non Retail  Not Applicable  
3. Tank Type:  Under Ground  Above Ground

Please list the total gallons dispensed per month and the annual total of the fuel checked above.

January	_____ Gallons	July	_____ Gallons
February	_____ Gallons	August	_____ Gallons
March	_____ Gallons	September	_____ Gallons
April	_____ Gallons	October	_____ Gallons
May	_____ Gallons	November	_____ Gallons
June	_____ Gallons	December	_____ Gallons

Total Annual Fuel Throughput: \_\_\_\_\_ Gallons  
Monthly Throughput Limit (see your permit): \_\_\_\_\_ Gallons  
Annual Throughput Limit (see your permit): \_\_\_\_\_ Gallons

I certify that the above and/or attached information is true to the best of my knowledge.

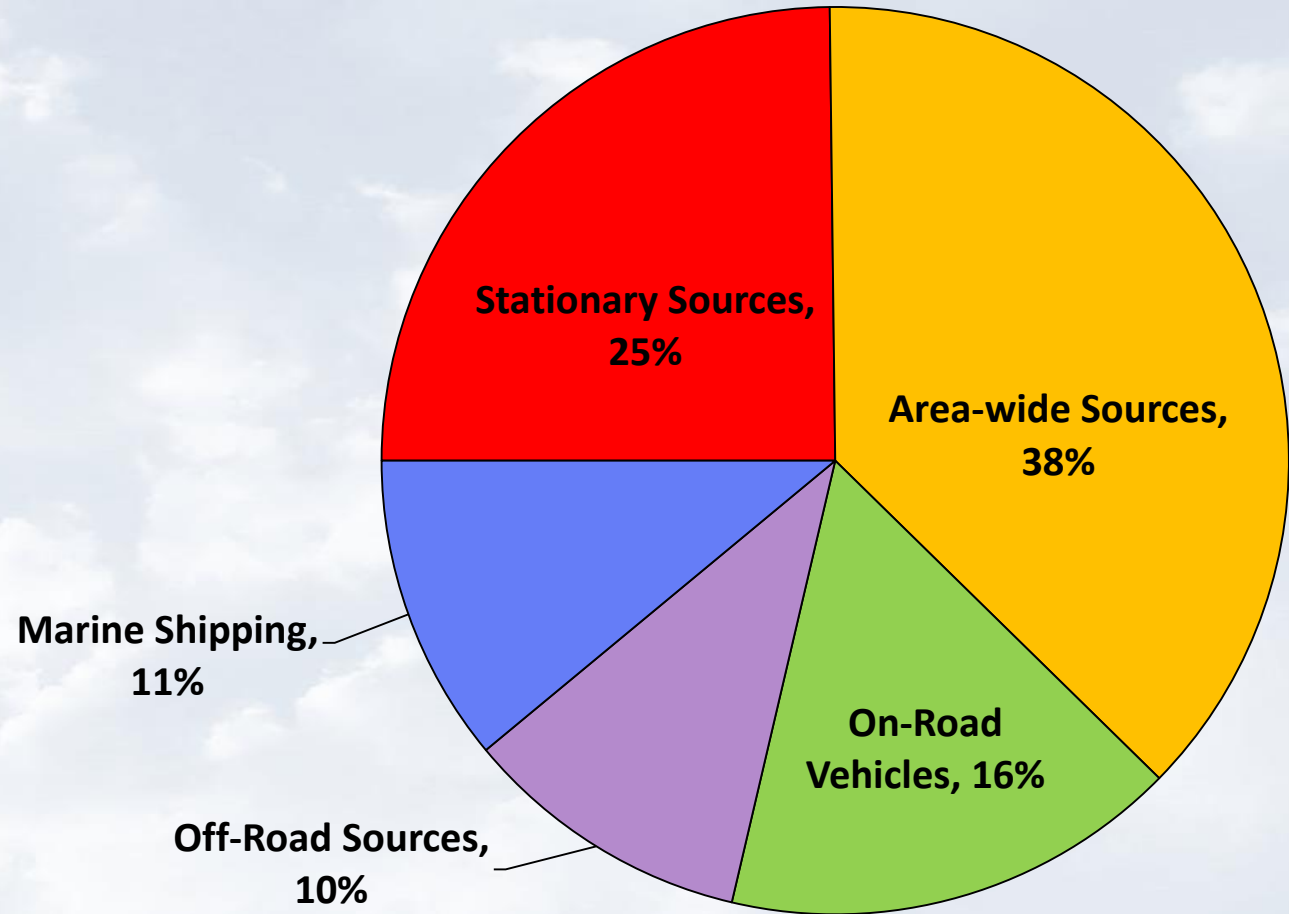
Signature \_\_\_\_\_ / \_\_\_\_\_  
Print name/date

**PLEASE RETURN THE COMPLETED ANNUAL REPORT TO:**  
AIR POLLUTION CONTROL DISTRICT, 260 N. SAN ANTONIO RD., SUITE A, SANTA BARBARA CA 93110-1315  
or E-mail [annualreport@sbcapcd.org](mailto:annualreport@sbcapcd.org) (FAXES NOT ACCEPTED)

- Every year, permitted facilities submit Annual Reports; compliance tool
- $\text{Throughput} \times \text{Emission Factor} = \text{Emissions}$ 
  - Emission Factor based on Engineering Permit to Operate, Source Test Data, or CARB/EPA
- Data is submitted to CARB, who then submits it to the U.S. EPA

# 2016 ROC Emissions

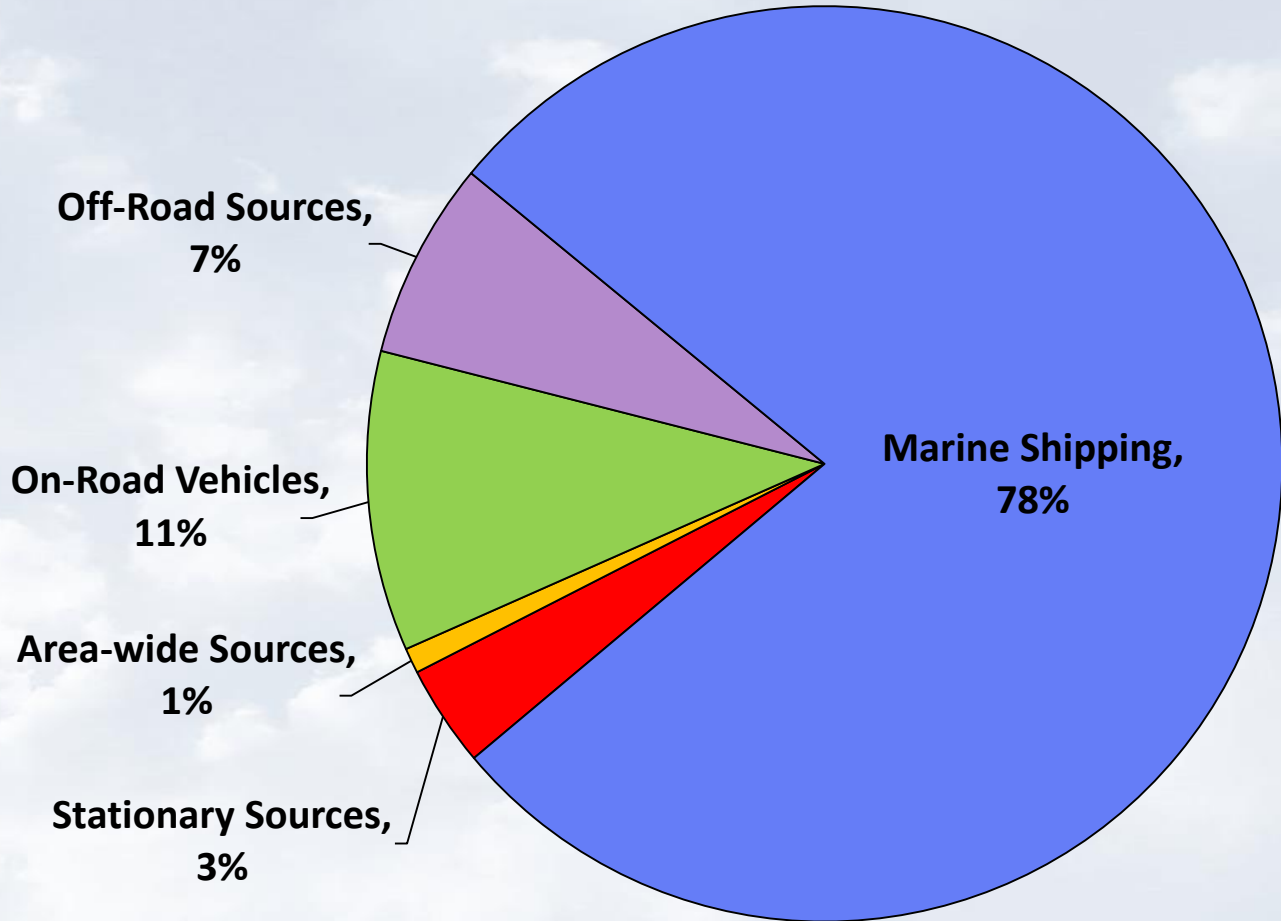
	Emissions (tons/day)
<b>ROC</b>	<b>23.3</b>
<b>NO<sub>x</sub></b>	71.6
<b>PM<sub>10</sub></b>	13.4
<b>PM<sub>2.5</sub></b>	4.0





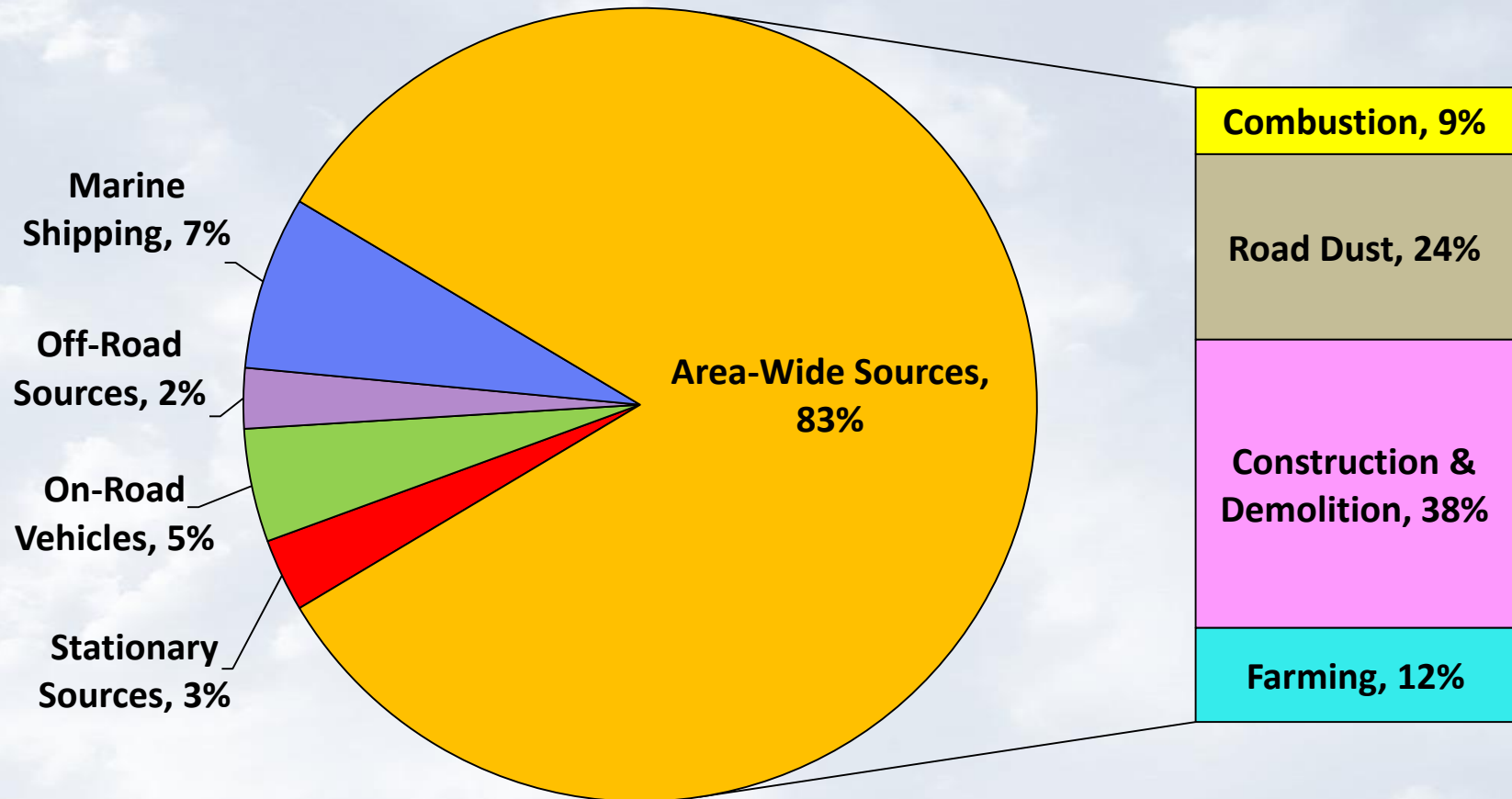
# 2016 NOx Emissions

	Emissions (tons/day)
ROC	23.3
<b>NOx</b>	<b>71.6</b>
PM <sub>10</sub>	13.4
PM <sub>2.5</sub>	4.0



# 2016 PM<sub>10</sub> Emissions

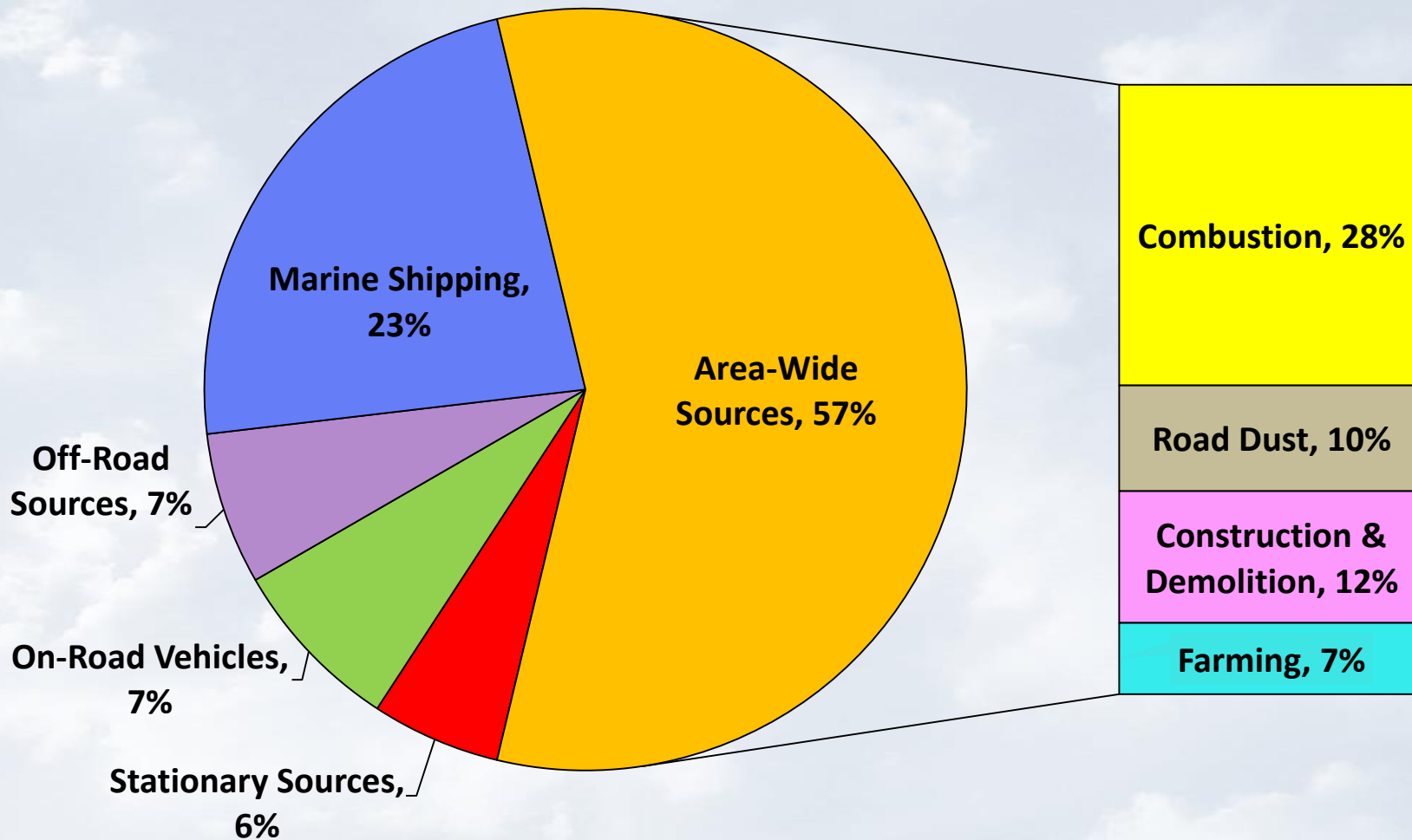
	Emissions (tons/day)
ROC	23.3
NOx	71.6
<b>PM<sub>10</sub></b>	<b>13.4</b>
PM <sub>2.5</sub>	4.0





# 2016 PM<sub>2.5</sub> Emissions

	Emissions (tons/day)
ROC	23.3
NOx	71.6
PM <sub>10</sub>	13.4
PM <sub>2.5</sub>	4.0



# What is the Emission Inventory used for?

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- Planning Documents
  - Example: 2016 Ozone Plan
  - Historical emission trends and forecasting future emissions
  - Developing control strategies & new rules
- Emission Fees for Stationary Sources
- Informing the public/community of nearby emissions

# District Permitted Facilities Map

- District Offices
- Monitoring Sites
- Schools
- Permitted Facilities
  - Autobody Shops
  - Boilers Heaters Turbines and Engines
  - Contaminated Soil Cleanup Sites
  - Dry Cleaners
  - Emergency Diesel Generators
  - Gas Stations
  - General Solvent Use Facilities
  - Landfills and Waste Treatment Plants
  - Minerals Handling Facilities
  - Oil and Gas Production
  - Wineries
  - Uncategorized Facilities

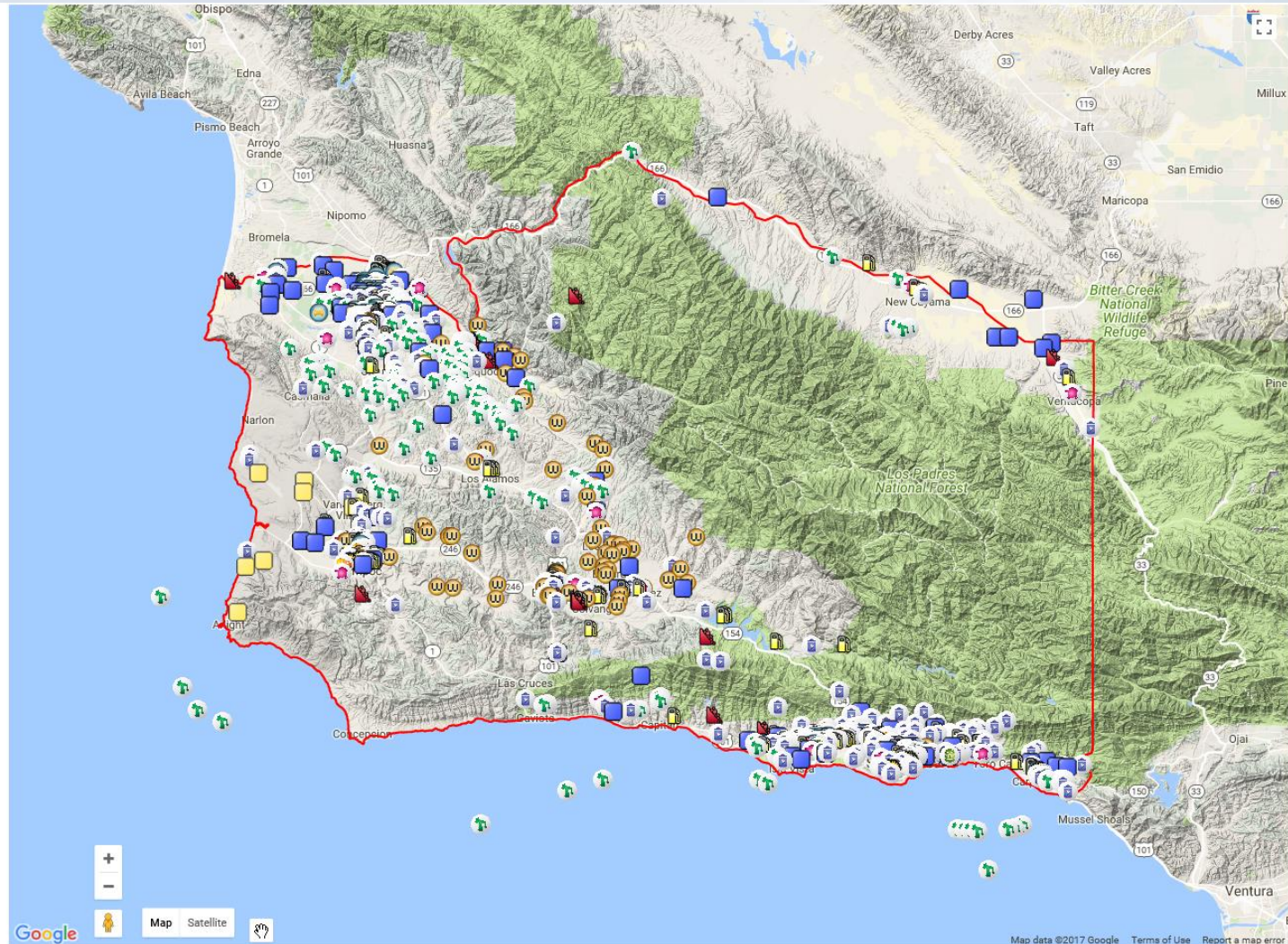
Search by facility/company/APN

Facilities within  miles of

Enter facility name or part of name examples:  
County of Santa Barbara  
County

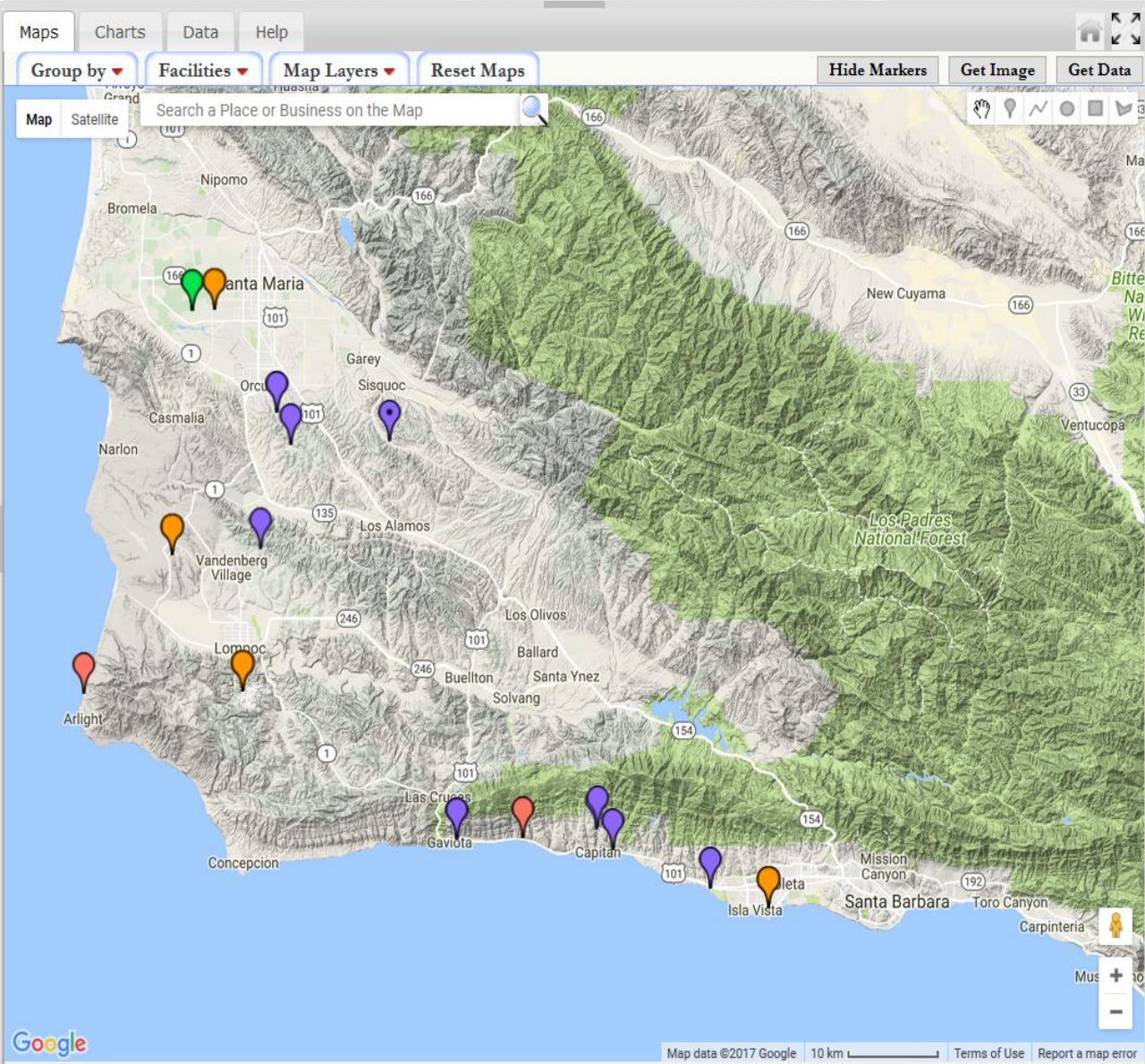
For more information on how to use the map, see [About the Permitted Facilities Map](#)

Data current as of: 10/16/2017 5:00:21 AM





# CARB Pollution Mapping Tool



- Shows GHG and criteria pollutant data for CA facilities subject to the GHG Mandatory Reporting Regulation.
- Contains various filters and tools to evaluate the largest emitters around the state.
- Toxic pollutant data will be included by Jan. 1, 2018.

# The Future of Inventory

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- Process Improvements
  - Automation
  - Updated Methodologies
- Interagency Coordination
  - CARB, Other Districts, Permitted Sources
- AB 617
  - Uniform statewide reporting system for large point sources



# Questions?

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