



air pollution control district
SANTA BARBARA COUNTY

PROPOSED RULE 364: REFINERY FENCELINE AND COMMUNITY AIR MONITORING

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
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ASSEMBLY BILL 1647 (2017-2018)

- Concerns about public health and air quality impacts from refineries.
- AB 1647 approved by the Governor of California on October 8, 2017.
 - Applicable to all refineries statewide.
 - Only 1 refinery within Santa Barbara County.
- AB 1647, as incorporated into HS&C 42705.6, requires the following by January 1, 2020:
 - 1) Petroleum refineries install, operate, and maintain a fenceline air monitoring system.
 - 2) Air districts install, operate, and maintain a refinery-related community air monitoring system.
 - 3) Real-time data is made accessible to the public.
 - 4) Refineries are responsible for the costs to implement the requirements.

SANTA MARIA ASPHALT REFINERY



REFINERY FENCELINE MONITORING

- Rule 364 will require six pollutants to be continuously monitored at the refinery's fence line:

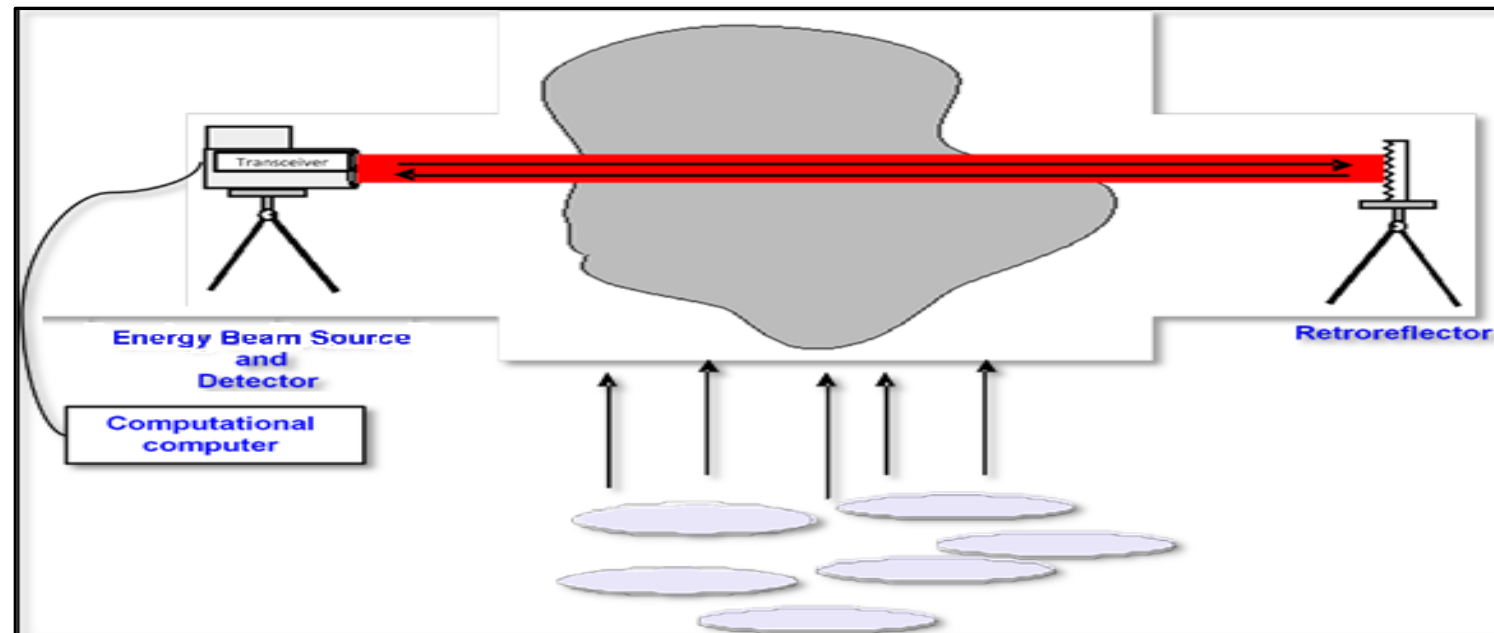
TABLE 1 - POLLUTANTS FOR FENCELINE AIR MONITORING

<i>Air Pollutants</i>
Benzene
Toluene
Ethylbenzene
Xylene
Sulfur Dioxide (SO ₂)
Hydrogen Sulfide (H ₂ S)

REFINERY FENCELINE MONITORING

■ Open Path Monitoring System

- Collect measurements over a large area.
- Light beam paths typically designed to be 200 – 500 meters long.
- Recommend using UVDOAS (Ultraviolet Differential Optical Absorption Spectroscopy).



REFINERY FENCELINE MONITORING

- Monitoring Plan needs to conform with the Rule 364 Fenceline Air Monitoring Plan Guidelines:
 - Description of the equipment and how it will accurately measure the pollutants.
 - Quality Assurance and Quality Control procedures.
 - Methods for disseminating data to the public.
- After District review and approval of the Monitoring Plan, the refinery has 1 year to install and operate the fenceline system.
- Refinery's data website needs to have educational materials for the public.

COMMUNITY AIR MONITORING

- District must operate a community monitor to measure the same refinery-related pollutants (BTEX, SO₂, H₂S).
- Nearest existing monitoring station is in central Santa Maria.
 - Monitors ozone, NO₂, CO, PM₁₀ and PM_{2.5}
 - The location is unlikely to detect the refinery pollutants due to regional wind patterns.
- The District is evaluating locations to move the existing station and to co-locate with the community monitoring station.



PUBLIC REVIEW

- Began discussions with refinery in September, 2019.
- Public Workshop on December 16, 2019 at APCD office in Santa Barbara.
 - Attended by the refinery and consultants.
- Community Advisory Council (CAC) meetings on January 22 and February 26, 2020 in Buellton.
 - **January meeting:** Item continued for additional discussion.
 - **February meeting:** CAC unanimously recommended that the Board approves Rule 364.
- Comments from the meetings and responses are attached to the Staff Report.

CONTACT INFORMATION

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