

From: Kathy Kerridge
To: [CommentsP66RodeoRenewed](#)
Cc: (REDACTED); Gwen Ottinger; Nancy Rieser; Janet Callaghan; JANET PYGEORGE; Jerry Bovee
Subject: Comments on Permit Application #31157, Rodeo Renewed
Date: Thursday, December 15, 2022 4:00:26 PM
Attachments: [Recommendations for Fenceline Monitoring Data Access Requirements, May 2022 \(4\).pdf](#)

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commentsp66rodeorenewed@baaqmd.gov

Comments RE: Permit Application #31157 , the following source(s) of air pollution:

Rodeo Renewed Project

Phillips 66 Company - San Francisco Refinery

1380 San Pablo Ave, Rodeo, CA 94572

Dear Sir or Madame,

I live downwind of the Rodeo renewed project and feel that it could have a direct impact on me and my family. I am a board member of the Benicia Community Air Monitoring Program (BCAMP). BCAMP runs a state-of-the-art community monitoring station that provides real time raw data to the public. This is a personal comment, but I now have personal experience about what a state of the art monitoring station can provide in the way of scientific access and review, as well as giving the community a place to go for trustworthy information.

Rodeo residents have experienced residue left in their neighborhood that has tested positive for heavy metal contamination. This is of the greatest concern. The Air District's primary responsibility is to protect public health. There must be conditions written into the permit to address this public health risk. I would ask for the permit not to be issued until the following is done or that these items become a condition of the permit and if not complied with the permit is revoked.

1. As part of the permit conditions there should be blood testing and analysis done of the people potentially exposed to the toxic residue in the neighborhood.
2. The permit should be denied until the source of the emission of heavy metals is identified, a root cause analysis is done, and the source is eliminated. It is essential that this exposure to toxic heavy metals does not reoccur.
3. A methodology must be developed to identify and track the emissions of solid materials that does not depend on a witness to see the material being deposited. A methodology must be developed that will track any material that crosses the fenceline. The problem with requiring a witness is that it gives freedom to the refinery to emit dangerous materials at night when it is impossible to see. It also gives the refinery freedom to emit materials that are small enough to be difficult to detect with the human eye. Requiring a witness is a license to pollute.

A material detection system needs to be implemented. A filtration system could be set up that would be remotely triggered by an increase in particulate matter. Particulate matter can be determined through current monitoring. Filtration systems should be set up throughout the area that could collect the type of residue that has already been emitted in Rodeo. These filter systems should be widely used to detect whatever solid material is coming from the refinery. Until a system is in place the permit should not be issued.

4. The fenceline monitoring system used needs to meet the BAAQMD performance criteria for

hydrogen sulfide that is to go into effect on Jan. 1, 2023. The hydrogen sulfide standards must be met. If P66 is unable to bring its H₂S fenceline system into compliance with BAAQMD's Rule 12-15 performance criteria, then P66 shall be required to replace the currently installed H₂S system with an EPA-proven, advanced system that can reliably and accurately meet the District's performance criteria. The criteria are below. This should be part of the permit with language that it could be modified to be even more stringent, but not less stringent. There are systems that meet this performance criteria and they must be used.

The BAAQMD's eleven Performance Criteria that represent updated monitoring performance standards.

1. Routine detection limit verification checks and confirmed detection limits which range from 3 to 25* ppb H₂S, depending on environmental and operational conditions, with an average integrated path detection limit of 15 ppb H₂S.
 2. A repeatable detection limit of 25 ppb at a light transmission less than 1%.
 3. Path average measurement range of 3 to 5000 ppb H₂S with an accuracy of 2% of reading and repeatability of 1% of reading.
 4. Sealed gas cell, or equivalent, 3-point calibration checks performed quarterly at a minimum.
 5. Audit bump checks performed at least monthly at a unique concentration that differs from the calibration checks.
 6. Real time validation of TDL data using measurement of another common ambient air component, such as methane, water, or carbon monoxide if present in the spectra.
 7. Detection limit quantification and verification performed continuously in real time, reported in near real time on the refinery fenceline monitoring website, and included in the quarterly reports along with the measurement data.
 8. Signal intensity measured in real time and provided in the quarterly reports.
 9. Raw spectral data files saved as single files and made available to the Air District upon request.
 10. Documentation of quality assurance and quality control metrics and procedures fully documented in the AMP and integrated QAPP.
 11. System operation and performance to be based on a standardized method, such as EPA Method TO-16, or a method developed by a credible standardization body, such as ASTM International or The International Organization for Standardization (ISO).
5. Part of the permit requirement should be that community monitoring stations, surrounding the refinery, paid for by the refinery, but run independently must be established. All fenceline and community air monitoring systems must have independent validation of hardware, independent auditing, ongoing real-time review, and a real-time dashboard. The systems installed will have advanced capability for lowest detection on sampling for H₂S, BTEX, PM₁₀ and PM_{2.5}, black carbon, and ozone. The permit should not be issued until these stations are up and running.
6. For all fenceline and community monitoring systems raw data must be immediately available to the public, on a dedicated website with data directly uploaded from the system; data must be

independently verified by a 3rd party in near real-time. All raw data must be publicly available. Please see the attached guidelines from the Fair Tech Collective at Drexel University

7. The monitoring criteria must be at least as comprehensive as the monitoring provided for in the land use permit. If it is not, the county must immediately be notified that the refinery is in violation of its land use permit.

8. Monitoring systems must pick up odors. Assessing community members' odor complaints should in the future be a function of the new fence line and community monitoring technology, such that individual on-site investigations of odor complaints by BAAQMD could be curtailed or eliminated.

There should be a very short time frame for a root cause analysis to be made of what is causing the odor – maybe one week. There should be a very limited time for odor abatement to take place. Bad odors will devastate a community and can make it unlivable. A multibillion-dollar industry must be required to have stringent odor abatement requirements with fines of at least a million dollars a day for whenever odors are present. This must be part of the permit and if there are odors that last more than 30 days the permit must be revoked. All monitoring of odors must be paid for by the refinery but run independently.

9. There must be public access to feedstock quality test reports.

10. The refinery is exempt from some pollution requirements during shut down/start up. According to p.26, Condition #27648 “exempts S-599 from the requirement to meet the NOx concentration of 150 ppm @ 3% O2 specified in Condition #27648 during startup/shutdown (not to exceed 36 hours per startup/shutdown event) and refractory changeout (not to exceed 60 hours per changeout event). The enforceable permit condition annual emissions limits already account for and include emissions that occur during startups, shutdowns, and refractory changeouts.”

If not already required in order to protect community health the public should be notified at least 3 days in advance of any shut down/startup. This puts the public on alert and gives the public an opportunity to take protective measures.

11. A public notification system through email, text, or phone calls, paid for by the refinery, but run independently, should give notice to the public if there is an exceedance of any OEHHA limits for more than 15 minutes from any fence line or community monitoring system.

12. As a condition of the permit, the refinery will be required to dismantle and dispose of all retired equipment and clean up whatever toxic soil contaminants are present around that retired equipment. This is the only way to ensure that the cost of remediation is paid by the refinery and not by the public. Leaving toxic soil in place that could dry out and blow into the surrounding community is an air pollution health risk.

Thank you for considering these comments,

Kathy Kerridge
Good Neighbor Steering Committee member and board member of Benicia Community Air Monitoring Program

Recommendations for Fenceline Monitoring Requirements at Petrochemical Facilities

Designing regulation for transparent, reliable public access

[The Fair Tech Collective](#)

Drexel University
Professor Gwen Ottinger, Director

Introduction

Requirements for ambient air monitoring at petrochemical facility fencelines are increasingly prevalent as part of regulatory statutes, land use permits, and consent decrees. Communities have fought for these requirements as a means of securing their right to know what is in the air they are breathing. Fenceline monitoring requirements help create transparency about industrial emissions and have the potential to further scientific knowledge of the impacts of emissions on human health and the environment.

Achieving these goals requires easy, consistent public access to the datasets produced by air monitoring. Fenceline monitoring requirements therefore need to do more than specify the data to be collected. They need also to offer guidelines for how those data are stored, maintained, and made available to potential users.

Background

The [Fair Tech Collective](#), an interdisciplinary research group based at Drexel University in Philadelphia, PA, has been working with fenceline monitoring data since 2015. Our goal has been to [make monitoring data more meaningful](#) for communities near oil refinery fencelines. To this end, we have [developed web-based tools](#) to enhance communities' ability to access and interact with monitoring data, in collaboration with refinery-adjacent communities in the San Francisco Bay Area. We have also created [innovative techniques for analyzing data](#).

Our success has been constrained by two key factors: (1) data are not available in standardized, interoperable formats, and (2) data quality is difficult to assess. Both of these constraints on meaningful public access could be addressed by requirements for fenceline monitoring that specify how data are to be provided to the public.

Recommendations

Based on our experiences, we recommend that the following provisions be included in all requirements, new and existing, for fenceline monitoring.

To ensure data quality

- Raw spectral data from open-path sensing and gas chromatography should be made publicly available. This allows for the auditing of monitoring results and the identification of monitors that are not operating properly.
- Time and date values should be expressed in Coordinated Universal Time (UTC), using ISO-8601 standard formatting.



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- Metadata should accompany pollution measurements to allow data users to assess the contexts and quality of data collection. Relevant metadata include but are not limited to locations of monitors (latitude and longitude), detection limits, signal strength (for open path monitors), documentation of calibration and other quality control checks, and QA/QC plans.
- Data quality audits should be conducted routinely by trusted third parties. Funds for this work should be provided as part of the monitoring plan.

To ensure public access to data

- REST APIs (application programming interfaces) should be provided for all data endpoints.
- APIs should be documented using a widely recognized standard such as OpenAPI.
- APIs should be public and open. Any measures instituted to prevent inauthentic requests should be designed in such a way that users need not ask permission of monitor operators or other entities to be able to access the data.
- APIs should be versioned, with ample notification provided to users when new versions are available or old versions phased out.
- Databases and their APIs should be optimized to minimize API latency when executing requests for data. Under most circumstances, users should not have to wait more than a few seconds for requested data to be delivered.
- Intuitive, ADA-compliant user interfaces should be created to enable individuals with no programming background to select and download data in .csv format.

To ensure long-term resilience of monitoring systems

- Monitoring plans should specify measures for routine maintenance and periodic upgrades to monitoring systems.
- Monitoring plans should specify measures for maintenance and periodic upgrades to APIs and user interfaces.
- Monitoring data should be stored on a hosted cloud service (rather than local servers) to provide redundancy and protection against loss.
- Adequate resources should be allocated for maintenance and upgrades. These include not only funding but also appropriate expertise (e.g., experts in database and user interface design as well as experts in monitoring techniques).

To foster community understanding and engagement

- Funding should be made available for affected communities and professional researchers to explore and analyze fenceline monitoring data, using methods that can shed light on community concerns.
- Regulators should facilitate discussions with affected communities about fenceline monitoring results. The purpose of these discussions should be to mobilize local knowledge to give context to data, collaboratively formulate questions for further investigation, and identify priorities for immediate action—not merely to instruct or reassure communities.

