

Rule 6-5: Myths and Facts

The Bay Area Air Quality Management District is poised to vote on Rule 6-5, a pollution rule for Fluidized Catalytic Cracking Units (FCCUs) that will reduce deadly particulate matter from the Chevron Refinery in Richmond and PBF Refinery in Martinez. State law AB 617, passed in 2017, mandates this rule and it has taken years to get this far.

Rule 6-5 will improve public health and save lives, particularly in environmental justice communities, while creating thousands of jobs. However, the refineries have been spreading misinformation about this rule in a last-ditch effort to confuse politicians, and ultimately pass a weaker, more dangerous rule at a deadly cost to residents' lives. The refineries and oil industry have a history of deception, manipulating information only to protect their profits at all costs. **To straighten out the record, here are some of the most egregious lies, twisted facts, and the truth about them.**

Myth: Wet gas scrubbing is unprecedented and will require the refineries to shut down

Fact: Wet gas scrubbers are already common in the industry, used at a majority of U.S. refineries to control FCCU emissions.¹ This rule would catch up Bay Area refineries to those in places like Texas, one of which installed this technology over 15 years ago. All of the refineries with wet gas scrubbers identified by the District are still operating profitably.²

Myth: This rule will force the refineries to layoff workers and will make gas prices spike

Fact: The refineries' doomsday predictions are simply false. The District's own analysis shows that the refineries can likely fully cover the costs of this rule, or if necessary, can cover the full costs with only a \$0.01 - 0.02 per gallon increase in fuel prices, an insignificant amount when compared to normal swings in gas prices.³

While District consultants have shown that refineries *could* choose to layoff workers to absorb the costs of the rule, even they say layoffs are unlikely, and further, their math should be treated skeptically. Consultants have used a very crude method, last updated in 1995, to calculate potential layoff numbers.⁴ Ultimately the refineries would still be highly profitable, even if they absorbed the full costs of the rule.

In fact, an analysis by the UCLA's Luskin Center for Innovation found that the rule would actually create thousands of jobs through the construction and installation of wet gas scrubbers.⁵ If passed, environmental justice communities, workers, and the Bay Area economy all benefit. **This rule isn't about jobs versus the environment -- it's about corporate profits versus everyone.**

Myth: This rule would be too costly

Fact: The cost claims made by the refineries have been thoroughly debunked by the Air District. PBF is claiming overblown compliance costs of \$800 million and Chevron is claiming nearly \$1.5 billion, **three to six times higher** than District estimates.⁶ These costs are also dramatically higher than every single instance the District found when reviewing costs of installing wet gas scrubbers across the country.⁷ The District has already normalized costs to elevated Bay Area standards and has already taken into account PBF's space limitations in calculating cost estimates.

What is too costly, and dangerous, is what the oil industry wants - a weaker version of the rule that will require unnecessary delay. Refineries are advocating for a rule requiring Electrostatic Precipitators, the technology responsible for the 2015 explosion at the Torrance refinery, which cost the public a total of **\$6.9 billion.**⁸ We cannot afford a repeat, which could harm workers next time, and we cannot afford another year of delay in this rulemaking process.

Myth: Wet gas scrubbers will use too much water and will simply pass the pollution into wastewater

Fact: This rule will actually have minimal impact on water, compared to the refineries' existing use. Water use from a wet gas scrubber would represent **only 2-4%** of existing water use at the refineries.⁹ In addition, millions of gallons of recycled water per day are already provided to Chevron from the West County Wastewater District.¹⁰

Scrubbed pollution solids are also removed before being discharged as wastewater. Wet gas scrubbers have a Purge Treatment Unit specifically to remove solid particulates from the scrubbing liquid.¹¹ And the refineries can invest in regenerative scrubber units to further save water and clean the wastewater stream, as Valero's refinery in Benicia already has.¹²

Myth: This rule wouldn't reduce pollution by much, Bay Area wide

Fact: This is just an outright lie. If passed, this rule would cut PM2.5 pollution from Chevron and PBF FCCUs, the largest source of PM2.5 at the facilities, **by nearly 70%.**¹³ While the benefits would be most concentrated in environmental justice communities, benefits would extend to the entire East Bay and beyond, where 1 million residents breathe in the plume of pollution from these sources every day.¹⁴

The District must take action where they have jurisdiction, and FCCUs account for nearly one-fifth of PM2.5 from sources that they have permitted.¹⁵ **Let's not undermine the importance of this rule - this would likely be the most significant, much urgently needed action taken by the District on Bay Area PM2.5 ever, and should have been passed years ago!**

Myth: BAAQMD is rushing through the rule-making process - more time is needed to study the problem

Fact: The Air District has been working on this regulation for years - this rule can be traced to the District's Petroleum Refinery Emissions Reduction Strategy dating back to 2012 and to AB 617 in 2017, where a promise was made to environmental justice communities that Air Districts would adopt the Best Available Retrofit Control Technology (BARCT) at sources like FCCUs.

Refineries and their workers have had numerous opportunities to engage with this rule - from the Refinery Rules Technical Working Group that unions were invited to, several Stationary Source Committee meetings, and a Public Workshop in 2021. **We urge the District to ignore this last-ditch cry to slow the process down - this rule has already been delayed for too long and should be passed as soon as possible!**

Sources

- ¹ See Component 1 Data of 2011 U.S. EPA Information Collection Request to the U.S. petroleum refining industry. <https://www.epa.gov/stationary-sources-air-pollution/comprehensive-data-collected-petroleum-refining-sector>.
- ² Final Staff Report for the Proposed Amendments to Regulation 6, Rule 5: Particulate Emissions from Petroleum Refinery Fluidized Catalytic Cracking Units ("Final Staff Report"). https://www.baaqmd.gov/~media/dotgov/files/rules/reg-6-rule-5-particulate-emissions-from-refinery-fluidized-catalytic-cracking-units/2020-amendment/documents/20210525_13_fsr_0605-pdf.pdf at pg. 25.
- ³ Final Staff Report for the Proposed Amendments to Regulation 6, Rule 5: Particulate Emissions from Petroleum Refinery Fluidized Catalytic Cracking Units, Appendix C, Socioeconomic Analysis ("Socioeconomic Analysis") https://www.baaqmd.gov/~media/dotgov/files/rules/reg-6-rule-5-particulate-emissions-from-refinery-fluidized-catalytic-cracking-units/2020-amendment/documents/20210525_05_fsr_0605_app_c-pdf.pdf at pg. 18.
- ⁴ *Id.* at pg. 7.
- ⁵ <https://innovation.luskin.ucla.edu/wp-content/uploads/2021/06/Economic-Benefits-of-BAAQMD-Proposed-Rule.pdf>
- ⁶ Final Staff Report at pg. 26.
- ⁷ *Id.* at pg. 25.
- ⁸ https://www.rand.org/content/dam/rand/pubs/research_reports/RR1400/RR1421/RAND_RR1421.pdf at pg. 79.
- ⁹ Referenced by BAAQMD staff during June 2nd Board Meeting.
- ¹⁰ <https://www.ebmud.com/water/recycled-water/current-recycled-water-users/>
- ¹¹ See, e.g., <https://www.hamon.com/solutions/acid-gas-removal/wet-gas-scrubbers-exxon-process-1/>
- ¹² Final Staff Report at pg. 23.
- ¹³ *Id.* at pg. 20.
- ¹⁴ *Id.* at pg. 41.
- ¹⁵ *Id.* at pg. 19.