

Residents must be integral part of refinery monitoring system

Monitoring and information technology are constantly advancing, and Bay Area residents can be a source of ideas about how new social networking platforms, for example, could make monitoring information more accessible and more fully used. Active community involvement also is necessary to make data credible to the public.

By Gwen Ottinger

Twenty years ago Saturday, residents of Crockett and Rodeo learned that the Unocal refinery had been leaking. And leaking. And leaking. For about 16 days, the refinery had been spewing a hazardous chemical called catacarb unbeknown to community members or regulators, releasing an estimated 200 tons and making more than 1,000 workers and residents ill. A whistle-blower finally brought the release to light, forcing the shutdown of the unit.

After the release, Crockett and Rodeo residents quickly mobilized to make sure that it could never happen again. They demanded a state-of-the-art air monitoring system that lets the public to track chemicals in the air in real time — and ensures that large releases don't go unnoticed.

Now, in the wake of the 2012 fire at the Chevron refinery in Richmond, the Bay Area Air Quality Management District is following suit: The agency is currently developing a rule — the first of its kind — that would require all of the region's refineries to install real-time air monitors at their fencelines.

The requirement is an important step toward guaranteeing that all Bay Area residents

are protected from massive, prolonged events like the 1994 catacarb release, and in helping residents to better understand the effects of refinery emissions more generally.

But installing monitors is not enough. For monitoring systems to be truly effective — for them to remain state-of-the-art and trusted by the public — community groups need to be an integral part of air monitoring planning and oversight.

Community involvement spurs innovation in monitoring. When Crockett residents first demanded a real-time fenceline monitoring system two decades ago, what they wanted did not exist. Residents themselves identified promising technologies and field-tested them. When the system went into operation, they tracked areas that needed improvement, developing (among other things) a way to make data publicly available on the Internet — at a time before the technology was ubiquitous. Residents also realized that they needed to specify standards for keeping monitoring systems operating and established "uptime" requirements.

Innovation is still necessary — and community participation remains vital. Monitoring and information technology

are constantly advancing, and Bay Area residents can be a source of ideas about how new social networking platforms, for example, could make monitoring information more accessible and more fully used.

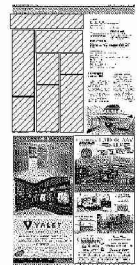
Active community involvement also is necessary to make data credible to the public. Information generated by refinery-funded programs is often dismissed as biased.

Making residents integral to the planning process will help counteract the perception that monitoring programs are designed to show only what companies are willing to let us see.

In Norco, Louisiana, engineers acting alone would have installed a single monitor to represent air quality in a racially divided community, not understanding that data from any one monitoring station would be dismissed by some part of the community as not representing "our" air. As a result of community involvement, their plan included six monitoring sites, and results were widely accepted by the community.

In the Bay Area, refineries can avoid mistakes that would invalidate data in the public's eyes by soliciting residents' input into where, when and what to monitor.

The air district's draft rule



establishes public comment periods for refineries' monitoring plans. Like refinery "public outreach" efforts, though, this provision stops short of making residents of Bay Area refining communities full partners in air monitoring.

To be most effective, community participation needs to start early in the planning process, and to continue even once monitors are in operation.

Creating effective monitoring systems requires more than just sophisticated air monitors. It depends on public participation. Residents in communities with refineries will have to step up — as they have time and time again. Refineries will have to make a bigger change, and become receptive to community engagement on issues that engineers consider "technical" and beyond the understanding of ordinary residents. For the sake of innovative, credible fence-line monitoring, let's hope they do.

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