A CBE News Release

Contacts:
Greg Karras, Senior Scientist (510) 302-0430 x19
Roger Lin, Staff Attorney (510) 302-0430 x16

Dirty Crude Link Suspected in Refinery Fire Probe

Graphic evidence: See attached chart, following page

Corrosion from processing higher-sulfur crude oils in existing refinery equipment is a new path of investigation into the causes of the August 6th pipe rupture and crude unit fire at the Chevron refinery, government investigators said in a briefing at Richmond City Hall today. The announcement by the U.S. Chemical Safety Board and Bay Area Air Quality Management District came in response to evidence provided by Communities for a Better Environment (CBE) that Chevron has been refining an increasingly higher-sulfur crude slate despite finding that sulfur corrosion contributed to at least one of its repeated crude unit piping problems.

“Corrosion from refining dirtier crude is a potential cause of this tragic pollution incident that requires investigation,” said CBE Senior Scientist Greg Karras.

The crude unit leak and fire that created a massive plume of petroleum smoke on August 6th injured five workers and sent more than 14,000 people to hospital emergency rooms, according to Chevron and County reports.

Sulfur in crude oil forms hydrogen sulfide (H$_2$S) gas that can be toxic to humans and highly corrosive to refinery equipment, generally increasing the risk of refinery pollution incidents. In addition, refining heavier, higher-sulfur crude also requires more energy, burning more fuel in refineries and increasing day-to-day emissions of toxic pollutants and greenhouse gases. Those threats to community and worker health and safety and global climate have been central concerns in the long struggle over the community’s right to know about the implications of Chevron’s proposed refinery expansion.

Chevron’s originally proposed “Renewal Project” would enable refining a dirtier crude slate with up to 3% sulfur, but the project has been revised by the company and a revised Environmental Impact Report for the project has not yet been released. Meanwhile, Chevron has shifted toward processing increasingly higher-sulfur crude using its existing refinery equipment. The annual average sulfur content of the Richmond refinery crude slate increased from approximately 1% sulfur before 1998 to approximately 1.55% as of May 2012—the most recent month when data was available. A graphic of this evidence is attached as the next and final page of this release.
Sulfur in crude refined at Richmond, January 1995—May 2012
Rolling annual average of monthly data. Chart by Communities for a Better Environment.

The sulfur content of crude processed by Chevron’s Richmond refinery generally increased from 1995–2012. Higher sulfur oil requires more intensive processing that increases day-to-day pollutant emissions, acid corrosion that can lead to leaks, spills, fires and other pollution incidents, and the amounts of toxic gases in refineries that can be released in such incidents. Data shown on the mix of domestic and foreign crude oils refined at Richmond are from Chevron and the U.S. Energy Information Administration.