Answers on Navy Fire’s Health Impacts Won’t Come Right Away

As one of the biggest fires on a Navy ship outside of combat smoldered for a third day, so raged community members’ concerns over the contents of the billowing smoke.

The short answer is that we don’t know how toxic it is yet because: science. Well, and some other inconvenient happenstances stalling the testing process.

Long before the USS Bonhomme Richard, an amphibious assault ship, caught fire Sunday morning, San Diego portside communities were already working to measure and quell the air pollution they regularly experience from nearby industrial shipyards.

But the ship fire erupted as the county was in the middle of an effort to install a new suite of air pollution sensors established under state law.

What’s more, instrumental employees who analyze air samples from the sensitive equipment are on vacation. And some samples can’t be fully tested because a new shipment of liquid nitrogen used to cool one of the instruments didn’t arrive on schedule, Bill Brick, San Diego County Air Pollution Control District’s chief, said Tuesday.

An environmental justice organization isn’t satisfied, and believes the county should have an emergency air quality monitoring plan in place for such a situation. The county didn’t give enough warning about...
the fire and so residents without air conditioning had to leave their houses because they couldn't stay at home with the windows shut, according to a Monday statement from the Environmental Health Coalition.

“Clearly what they have isn’t working,” said Diane Takvorian, the coalition's executive director. “There should be some protocol that says, go where the smoke is going and take measurements. Those moments are now lost forever.”

**Pollution Analysis Isn’t Instantaneous**

The state of California declared Barrio Logan, Logan Heights, Sherman Heights and National City environmental justice communities under a community air protection program established under a 2017 law. With it came grant money to install a new suite of air pollution sensors that would measure toxic metals and other chemicals not regularly picked up by other sensors the county already operates.

But not all of those new sensors were up and running by the time flames appeared. And those that are don't produce instant answers.

Sensors at Sherman Elementary School, Ocean View Boulevard and I-15 and the 10th Avenue Marine Terminal are being equipped with new instruments that can track black carbon (a diesel fuel byproduct), airborne toxins and metals.

Those that measure toxic volatile organic compounds – released from burning petroleum-based products like gasoline, paints, solvents and myriad industrial products – are operational at Sherman Elementary School. Benzene, a pollutant from automobile exhaust, is carcinogenic and linked to childhood and adult leukemia and probably lymphoma.

The Navy said the ship contained 1 million gallons of fuel, though the fire had not reached it as of Tuesday afternoon. Navy spokesman Brian O'Rourke confirmed that the Navy doesn't do air quality monitoring and leaves that to the county. The county is going to test for 57 compounds, according to its monitoring plan, but it can take at least 24 hours to collect a full sample. That sample must then be physically retrieved and sent to a lab in order to derive its chemical content, said Brick.

Brick announced to portside communities Tuesday that samples taken from four locations downwind of the fire are at the lab for analysis. Results are expected Wednesday, and additional samples should be collected Tuesday, Brick wrote in an email.

Metals require a more involved process to measure.

Analysts sample metals in the air through special filters, which capture tiny metal particles light enough to catch the wind Brick said because metals measurement is such an involved process, samples are drawn frequently but not analyzed every week.
“It takes time and we’re dealing with such small (measurements) that normally we spend a whole lot of
time trying to make sure we know our (measurement) is good,” Brick said.

Brick said he had to check with the county's chemists to see how long it will take to get answers on the
metals content of the smoke.

In the meantime, Brick said the county put out a few portable air quality sensors Sunday night that
measure smoke or dust particles, which are usually deployed only during wildfire events or special stud-
ies. That data is rolling in live, though it still takes time to transfer via satellite.

Brick said he expects to put additional monitors in National City after residents said they were impacted
by the smoke.

As of Tuesday, smoke from the fire dissipated some but not enough to quell concerns from community
members. Barrio Logan residents, just adjacent to the port, reported nausea and headaches, according to
the San Diego Union-Tribune.

The coalition said the county was “underprepared” and criticized officials for waiting until 2:30 p.m.
Sunday to warn citizens living near the fire zone, several hours after it started, the group’s statement
said.

The group called for an emergency monitoring plan with input from communities to deal with disasters
of this scale. It also called on the Navy to release its findings regarding the cause and source of the fire
as soon as possible.

“The community deserves to have complete information about the toxins in the fire and how those could
harm their health,” the statement reads.