The state-of-the art warning system that sounded alarms in the wake of Monday’s fire at the Chevron refinery in Richmond worked as planned - for the most part, officials said.

Yet, records also show some residents waited three hours to receive an emergency telephone call that advised them to stay indoors.

The estimated 20,000 telephone calls sent out Monday may have jammed lines and caused delays to residents living in the smoke plume’s immediate path of Richmond, North Richmond and San Pablo, officials said.

Katherine Hern, manager of the Contra Costa County Community Warning System, acknowledged that improvements are needed.

She noted that the first wave of calls went to the 2,600 residents living closest to the fire at 6:40 p.m., two minutes after Chevron officials reported a "Level 3" incident at the refinery. The Level 3 classification is the most serious. It calls for residents to go inside, close windows, turn off air conditioners and seal off doors with damp towels.

Six minutes later, a second round of automated calls went to more than 17,000 residents living downwind from the black plume that drifted east.

Hern said some of those residents did not receive the recorded warning until at least 9:30 p.m., possibly because the computer could only meter out 500 to 1,000 calls at a time. Calls that went unanswered bounced back to the control center to be redialed and contributed to the backlog.

**Mixed reviews**

"It was longer than we would prefer," Hern said. "The improvement has to happen on the technology side."

The performance of the $5 million warning system, which is paid for by the gas and chemical companies and has been in place since the early 1990s, has had mixed reviews in the past.

In January 2007, Richmond City Councilman Tom Butt declared that "the community warning system is a joke" after there was a lag of more than an hour between the time a fire erupted at the Chevron refinery and the time residents got their first automated phone calls advising them to stay indoors.
One year earlier, the county phone system called only 4,583 of the 8,734 households on the list to be notified after the ConocoPhillips refinery in Rodeo accidentally spewed a huge cloud of hydrocarbons and sulfur compounds into the air.

Similar phone delays or omissions triggered community outrage in 2001 after two Shell Oil accidents in Martinez and a gas leak at Tosco in Rodeo in 1998.

Contra Costa County Supervisor John Gioia, who has been critical of the system's shortcomings, said a full analysis of Monday's performance is in the works.

Gioia lives in the Marina Bay neighborhood of Richmond and said he received an alert on his cell phone at 6:45 p.m., followed by one to his landline at 7:30 p.m.

"We're concerned some areas were not called as soon as others and we want to get to the bottom of it," he said.

If all things go as planned, after a refinery reports an incident the warning system automatically sounds sirens and calls home phones, as well as cell phone users who have registered their numbers with the county. Only 7,000 people have registered their mobile phones for alerts, Hern said.

Follow-up calls

If the automated call does not receive a live answer, it attempts another call later. After three failed attempts, the warning system will leave a voice message.

But that call never arrived for Sara and Ignacio Monares, who live two blocks from Chevron's eastern fence. On Monday, Sara heard "seven or eight loud booms" and dashed outside and saw black smoke billowing into the sky.

"By the time I ran back home, my throat was kind of scratchy," she said. "I stayed by my phone waiting for the county emergency officials to call - and they didn't.

"Then I heard the sirens go off, so I sheltered in place. But I should have had that call."

Ignacio Monares said the only call the family received was the "all clear" signal at 1 a.m. "That's it," he said. "It's pretty terrible."

Andres Soto, an organizer with Communities for a Better Environment in Richmond, described Monday's robocalls as inadequate. He said the 20,000 calls reached only a fraction of the residents who were put at risk by the fire.

"It's tantamount to a complete failure," Soto said. "Even for the people who got the calls, it was too late."
Hern said overall it appeared as if the system worked as designed. One of the first calls went to media outlets, which issued an emergency warning signal, and many residents learned of the fire via television or radio. The county also issued a warning on Twitter and Facebook, and picked up hundreds of new followers after the fire Monday night.

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