

## Learning the Lessons of a Tragedy

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### Summary

Following the San Bruno natural gas pipeline explosion in September 2010, the National Transportation Safety Board (NTSB) conducted a thorough investigation of the incident.<sup>[1]</sup> In a detailed report, the NTSB concluded that Pacific Gas & Electric Company (PG&E) was negligent in critical areas such as having detailed maps showing the location of all natural gas pipelines, conducting proper safety testing on their pipelines, replacing aged pipelines in a timely manner, and working with emergency response teams on a coordinated emergency response plan. Furthermore, PG&E failed to alert emergency responders when they realized the line had burst. It took more than an hour to isolate the rupture to stop the flow of gas, putting first responders in a defensive mode as they struggled to put out the fire, according to NTSB investigators.<sup>[2]</sup>

The NTSB faulted the California Public Utilities Commission (CPUC) for failure to perform their basic function, to “inspect what was expected,” by failing to ensure that PG&E:

- conducted proper tests
- reported on pipeline conditions
- had plans in place to replace aged pipelines<sup>[1]</sup>

The NTSB findings led members of the Grand Jury to ask, “What are the conditions of the PG&E pipelines in Santa Cruz County, and do our emergency services agencies maintain close communications and coordination with PG&E, should a natural gas pipeline explosion lead to similar devastation in Santa Cruz County?”

### Background

Initially, the Grand Jury reviewed the report on the emergency response to the September 9, 2010, San Bruno natural gas pipeline explosion, and interviewed Santa Cruz County emergency response agencies to find out if any lessons were learned.

The NTSB report dated August 2011 noted that a faulty pipe, flawed operations, and inadequate state and federal government oversight led to the natural gas explosion in San Bruno.<sup>[1]</sup> During a public board meeting following their final report on the matter,

NTSB investigators sharply criticized pipeline owner PG&E for the explosion, saying the pipe was inadequate from the time it was installed in 1956:

*This accident is not just about the failure of a seam in a pipeline. Rather it's about a failure of an entire system -- a system of checks and balances that should have been in place to prevent the disaster.*

-Robert Sumwalt, NTSB Board Member

Additionally, NTSB stated that the CPUC failed to exercise adequate oversight and enforcement of PG&E, and that the federal regulator, the Pipeline and Hazardous Material Safety Administration (PHMSA), failed to monitor the CPUC's oversight of PG&E.<sup>[1]</sup>

In light of the above, we wondered if our county officials know the following about pipelines and emergency response procedures in Santa Cruz County:

- The location of PG&E pipelines
- The age, composition, and condition of the pipelines
- Location of critical shut-off valves
- Test dates, locations, and test results conducted by PG&E
- PG&E replacement plans for aging pipelines
- Whether adequate emergency response procedures exist, and have they been updated based upon conclusions from the San Bruno event

We found a disturbing picture of complacency during a series of interviews with local fire officials, other city and county officials, and the Santa Cruz County Office of Emergency Services (OES).

## **Scope**

PG&E and the CPUC are beyond the jurisdiction of the Grand Jury; thus, we focused our investigation on the county emergency response agencies, and the level of communication amongst those agencies and PG&E. Although PG&E has made assertions that they are taking aggressive action, we focused our investigation on the level of knowledge and the efforts that exist in Santa Cruz County to reduce the probability of a similar catastrophe.

## **Investigation**

We interviewed government officials at the county and city levels, including Planning, Public Works, Environmental Health, City Council members, County Office of Emergency Services, and local fire departments.

Documents reviewed included NTSB<sup>[1]</sup> and CPUC's "Report of the Independent Review Panel San Bruno Explosion,"<sup>[3]</sup> news media and Internet accounts regarding the San Bruno incident, PG&E's responses to those reports, and the investigators' recommendations.

Overall, interviewees had little information regarding location, condition, and composition of pipelines in Santa Cruz County. While the CPUC and the PHMSA are the ones responsible for regulatory oversight of PG&E's infrastructure, the failures of PG&E and these agencies to ensure compliance with safety requirements leave local emergency responders and the public in a vulnerable position. Local emergency agencies should not rely on state and federal oversight, or be left in the position of having to accept the safety representations of PG&E. Local emergency agencies should increase their preparations for possible emergencies similar to San Bruno. They also seemed to take at face value PG&E's statement that the condition and safety of the gas pipelines would be improved.

Until recently, OES had not met with officials of PG&E to ask specific questions about the status of Santa Cruz County natural gas pipelines, test results, replacement plans, and emergency response plans.

***Since we began our investigation, OES has taken an increasingly active role in addressing the above issues, by setting up joint meetings with PG&E and local fire officials.***

OES has a PG&E desk in their emergency response headquarters, and conducts regular training exercises with local emergency response officials. Historically, PG&E seldom attended. However, as of May 2012, OES reported that PG&E has attended two meetings and held a training session for first responders. OES also succeeded in coordinating a meeting with PG&E where the issues were addressed. At this meeting, PG&E finally provided current pipeline maps, and testing and replacement plans.

When we began our investigation, neither OES nor any county agency had received updated emergency disaster response plans from PG&E. In January 2012, local fire officials and PG&E met to review updated emergency disaster response plans.

Prior to the second quarter of 2012, Santa Cruz County OES had not contacted San Mateo County OES or San Mateo County emergency response personnel regarding lessons learned from the San Bruno incident. In the second quarter of 2012, OES requested and received the San Bruno post-incident report.

The Grand Jury and Santa Cruz County Office of Emergency Services have no direct jurisdiction over PG&E. The Consumer Protection and Safety Division of the CPUC have safety oversight of our natural gas pipelines.<sup>[4]</sup> The ultimate responsibility for the CPUC lies with the Governor, who, with Senate confirmation, appoints all of the commissioners.<sup>[4]</sup> The commissioners give direction to the Executive Director, who in turn oversees all the different divisions of the CPUC. The current organization of the

CPUC places multiple layers of bureaucracy between citizens and the Consumer Protection and Safety Division.

However, options are available to the citizens of our county. Citizens can and should voice their concerns regarding pipeline safety to the Governor, their state legislators, and the County Board of Supervisors. Another effective method of communication is for the County Board of Supervisors to request help from the Governor and our local state representatives.

## **Findings**

**F1.** The Grand Jury and Santa Cruz County Office of Emergency Services have no jurisdiction over PG&E. However, the County Board of Supervisors can request help from the Governor and from their state legislators to require that the California Public Utilities Commission uphold their state mandate, as the oversight body of PG&E: **“to ensure the provision of safe, reliable utility service and infrastructure at reasonable rates.”**<sup>51</sup>

**F2.** During the course of our investigation, the Santa Cruz County Office of Emergency Services made significant progress in coordinating the flow of essential emergency response information regarding pipeline safety to the appropriate agencies.

## **Recommendations**

**R1.** The County Board of Supervisors should request periodic updates on the condition and safety of PG&E gas pipelines in Santa Cruz County, urging the Governor and state legislators to demand that the CPUC improve their oversight of gas pipeline safety.

## **Commendations**

**C1.** The Grand Jury wishes to commend the Santa Cruz County Office of Emergency Services, who continues to demonstrate excellence and professionalism, despite budget cuts. Their preparedness, use of community resources, organization, and foresight make this office a model for other counties. The citizens of Santa Cruz County are far safer because of their work.

**Responses Required**

<b>Respondent</b>	<b>Findings</b>	<b>Recommendations</b>	<b>Respond Within/ Respond By</b>
Santa Cruz County Board of Supervisors	F1, F2	R1	90 Days October 1, 2012

**Definitions**

- **CPUC:** *California Public Utilities Commission* - A state agency authorized to regulate privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies and serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service.
- **NTSB:** *National Transportation Safety Board* - An independent federal agency charged with determining the probable cause of transportation accidents, promoting transportation safety, and assisting victims of transportation accidents and their families.
- **OES:** *Santa Cruz County Office of Emergency Services* - The County agency responsible for emergency planning and preparation for Santa Cruz County.
- **PG&E:** *Pacific Gas & Electric Company* - The utility that provides natural gas and electricity to most of Northern California.
- **PHMSA:** *Pipeline and Hazardous Materials Safety Administration* - The federal safety authority for the nation's 2.3 million miles of natural gas and hazardous liquid pipelines.

**Sources**

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3. California Public Utilities Commission. 2011. "Report of the Independent Review Panel San Bruno Explosion, Revised Copy." Last modified June 24, 2011. Accessed May 20, 2012. <http://www.nbcbayarea.com/news/local/PGE-Investigating-Complaints-of-Gas-Smell-in-San-Bruno-102625569.html>

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## **Resources**

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