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Donald R. Knauss, Chairman of the Board and Chief Executive Officer  
The Clorox Company  
1221 Broadway  
Oakland, CA 94612-1888

Dear Mr. Knauss;

We would like to meet with you regarding Clorox's use of use of chlorine gas and resulting potential liabilities and regulatory obligations. To make sure that Clorox is fully aware of these liabilities we have attached a comprehensive list of more than 50 reports from over 40 authoritative sources, including excerpts, on the hazards inherent in the bulk storage and use of chlorine gas. These sources include the Association of American Railroads, Brookings Institute, Center for American Progress, Chlorine Institute, Congressional Research Service, Federal Bureau of Investigation, National Research Council, U.S. Government Accountability Office and the U.S. Homeland Security Council. In addition, please note the hundreds of examples of chemical facilities that secured their plants by converting to safer technologies that eliminated the risk of a catastrophic release. Knowing about these foreseeable risks and failing to act to eliminate them could result in even greater liability for Clorox in the future.

As Clorox reported in its August 19, 2008 10K Report to the Securities Exchange (SEC) Commission, **"A release of such chemicals, whether in transit or at our facilities, due to accident or an intentional act, could result in substantial liability."** In fact, Clorox's liability for such a disaster could be "a company ending event." According to Clorox's risk management reports to the Environmental Protection Agency (EPA), a chemical disaster at any of four Clorox plants will put more than 1 million people at risk. Three other Clorox plants each put more than 100,000 people at risk. Together more than 13.6 million people live and work in the "vulnerability zones" of seven Clorox plants (see attached list). In addition to the human tragedy, the liability to Clorox for just one disaster of this magnitude could exceed the 9/11 attacks. According to the New York City Comptroller, economic impacts of the 9/11 attack were \$94.8 billion: [www.comptroller.nyc.gov/bureaus/bud/reports/impact-9-11-year-later.pdf](http://www.comptroller.nyc.gov/bureaus/bud/reports/impact-9-11-year-later.pdf)

Clorox facilities are also subject to the new Chemical Facility Anti-Terrorism Standards (CFATS) issued by the Department of Homeland Security (DHS) which has developed interim regulations for "high risk" chemical facilities. In defining the consequences of an attack compared to the accident scenarios reported to the EPA above, the DHS warns that, **"The key difference is that they may involve effects that are more severe than expected with accidental risk."**

As a result, the DHS recommends that facilities use a conservative model in calculating the consequences (fatalities, injuries, property & economic damage) of a successful attack. Government sources have estimated a range of potential casualties from 100,000 (U.S. Naval Research Laboratory) to over 2.4 million (U.S. Army Surgeon General).

As you know, all of these hazards are unnecessary and preventable. Ideally Clorox could switch to non-chlorinated bleach products which would complement its new line of cleaning

products. Such a conversion would not only eliminate Clorox's enormous potential liability discussed above but would also eliminate all regulatory compliance and insurance costs associated with chlorine gas.

If, however, Clorox chooses to continue producing chlorine bleach, there are also ways to produce and use chlorine much more safely. For example, K2 Pure Solutions ([www.K2pure.com](http://www.K2pure.com)) is proposing to build several new U.S. facilities that will eliminate transportation risks and will also limit chlorine gas storage to approximately 50 pounds in most situations. In December they announced a partnership with Dow Chemical in the San Francisco Bay area. This is not the most preferred option but it will result in a dramatic reduction in both risk and liability compared to the ongoing use and storage of 90-ton rail cars of chlorine gas in large urban areas.

Since 9/11 at least 220 facilities have converted to safer technologies. More than 87 percent of those interviewed said their conversion costs ranged from less than \$100,000 to \$1 million or less. A third of those surveyed said they expected to save money. The Center for American Progress has produced several reports documenting these success stories and the outstanding risks posed by facilities using toxic by inhalation (TIH) gases such as an April 2006 report on the hundreds of facilities which have recently converted to safer technologies:

[http://www.americanprogress.org/issues/2006/04/b681085\\_ct2556757.html/chem\\_survey.pdf](http://www.americanprogress.org/issues/2006/04/b681085_ct2556757.html/chem_survey.pdf)

Given these risks and potential liability and widely available safer alternatives, we would not be surprised to learn that Clorox has a plan to convert its bulk use of chlorine gas to safer technologies. For example, in Clorox's 2008 submission to the SEC says that Clorox anticipates a "restructuring" of its supply chain by fiscal year 2012. Is this an indication of such a conversion plan?

As you also know, the DHS regulations are very limited and will expire on October 4, 2009. Congress is now considering permanent legislation that could provide more certainty for Clorox and other businesses using TIHs. The current interim law actually bars the DHS from requiring any specific security measures including the most effective security measures, safer technologies. New legislation could correct this. Last year the House Homeland Security Committee adopted H.R. 5577, which required the highest risk (Tier 1) facilities to "reduce the consequences of an attack." This bill also allowed each facility to choose the safest, most appropriate technology to reduce the consequences of an attack at their plant and allowed exceptions for in-feasibility and onerous costs.

We would also like to discuss Clorox's current position regarding chemical security legislation. For example, in the past Clorox has been a member of the National Association of Manufacturers (NAM) which has opposed requiring the use of safer technologies. Other NAM members, however, disagree with the NAM. For example, in February 2008, the **Association of American Railroads (AAR) issued a statement saying, "It's time for the big chemical companies to do their part to help protect America. They should stop manufacturing dangerous chemicals when safer substitutes are available. And if they won't do it, Congress should do it for them."**

A growing number of political leaders agree with the AAR. In a March 2006 floor statement, then Senator Obama said, **"...there are other ways to reduce risk that need to be part of the equation. Specifically, by employing safer technologies [IST], we can reduce the attractiveness of chemical plants as a target...Each one of these methods reduces the**

***danger that chemical plants pose to our communities and makes them less appealing targets for terrorists."***

As you know, the September 11<sup>th</sup> terrorist attacks successfully used our own infrastructure against us with tragic results. The attacks also demonstrated that tight perimeter security, such as in the case of the Pentagon, is incapable of preventing such attacks. Should a chemical plant be targeted, a truck bomb, a small plane, helicopter or a high powered rifle would easily render any "target hardening" or fence-line security useless. DuPont Chairman Charles O. Holliday Jr. told the media in June 2007, ***"I feel very comfortable that we've taken all the reasonable steps, but obviously if someone wants to fly an airplane into a plant, it's very hard to guard against it."***

The vulnerability of U.S. chemical plants to terrorism and serious accidents such as the 1984 disaster in Bhopal, India killing 20,000 is widely recognized. The magnitude of these risks surpasses the 9/11 attacks. Once released, these chemicals and gases can remain dangerous for up to 14 miles in an urban area (20 miles in a rural area) and put the lives of millions of people at risk. U.S. chemical facilities were never designed to defend against terrorist attacks and predicting where an attack will take place is a fool's errand. No one predicted that Timothy McVeigh would attack the Federal Building in Oklahoma City in 1995, killing 168 innocent people.

The manner in which people would be killed and injured is terrifying. Poison gases such as chlorine will literally melt the lungs of its victims causing them to drown in their own lung fluid (pulmonary edema). Survivors would be left with life-long disorders.

Following the 9/11 attacks, The Washington Post reported that 9/11 ring leader, Mohamed Atta visited a Tennessee chemical plant asking lots of questions (December 16, 2001). In 2007, at least five successful terrorist attacks in Iraq used relatively small (150 to 250 pound) cylinders of chlorine gas to kill dozens of people. In 2007, thefts of 150 pound cylinders of chlorine gas occurred in California and Texas prompting the DHS to brief local bomb squads and chemical plants across the country. (April 24, 2007 USA Today). The time for fundamental preventive action to safeguard American communities is long overdue.

We look forward to a meeting with you at your earliest convenience to discuss Clorox's plans for converting its facilities and support for legislation that will ensure the use of the safest technologies where ever feasible. In the meantime, please review the attached list of authoritative sources on the hazards of chlorine gas, as well as the hundreds of examples of facilities that have secured their plants by converting to safer technologies that eliminate the risk of a catastrophic release.

Thank you.

Sincerely,

Rick Hind  
Legislative Director, Greenpeace  
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cc: Carl Pope, Sierra Club

## Seven Worst Clorox Facility Disaster Scenarios Reported to the EPA

EPA RMP* #	Facility Name	City	State	Chemical	Distance to Endpoint	Population at Risk
100000067571	Clorox Products	Los Angeles	CA	Chlorine	14.00	5,552,300
100000107038	Clorox Products	Forest Park	GA	Chlorine	14.00	1,077,700
100000099742	Clorox Products	Chicago	IL	Chlorine	14.00	4,013,600
100000091679	Clorox Products	Houston	TX	Chlorine	14.00	1,868,700
100000100259	Clorox Products	Tampa	FL	Chlorine	9.90	633,600
100000109474	Clorox Products	Fairfield	CA	Chlorine	14.00	233,400
100000167384	Clorox Products	Aberdeen	MD	Chlorine	14.00	229,400

\*Clorox Risk Management Plans (RMP) submitted to the Environmental Protection Agency

**Total Population at risk = 13,608,700**