



Avoiding and Managing Product Recalls

Consider this: the Consumer Product Safety Commission (CPSC) is demanding a product recall of your best-selling product due to a defect that poses a potential danger to consumers.

You must now ask yourself the following questions: Are our customers safe? How well are we prepared for a recall? How do we protect the brand? What impact will this have on our future? How badly will our stock get hit? What other risks does this present for our company?

According to CPSC, there were over 450 voluntary recalls announced during fiscal year 2006. Although it is difficult to quantify in terms of quantitative costs, recalls can result in irreparable damage to a company's brand or reputation. It should come as no surprise, then, that recalls are becoming more frequent and are now a harsh reality in today's business environment.

To avoid the costs, proactive companies are assembling the necessary resources to develop product recall prevention initiatives well before a potential crisis occurs. These programs are especially important in a global business environment; as more products are manufactured in different legal, business and regulatory environments, recalls have the potential to become even more commonplace in the future than they are today.

The components of a product recall prevention and management initiative may vary, but an effective approach should incorporate the following elements:

by
*Gene Grabowski
and
Jason L. Hertzberg*

From pet food to children's toys, product recalls dominated the news this year. How can you prevent a recall situation from happening to your company, and what should you do in the unfortunate event that it does?

Think like a consumer.

In the Consumer Product Safety Act of 1972, the term “consumer product” is defined as “any article, or component part thereof, produced or distributed (i) for sale to a consumer for use in or around a permanent or temporary household or residence, a school, in recreation, or otherwise, or (ii) for the personal use, consumption or enjoyment of a consumer in or around a permanent or temporary household or residence, a school, in recreation, or otherwise.” Therefore, independent of the nature of the product, designers and manufacturers of products are challenged to keep in mind how consumers think and how they might interact with the products, namely the aspect of product development associated with human factors. This aspect includes everything from the construction of the product to the instructions and warnings supplied with it.

Thus, questions such as “Are the supplied warnings and instructions clear?” or “How might they be interpreted or misinterpreted?” are relevant to those charged with designing or evaluating products. It is worth noting that the CPSC has taken the position that faulty product instructions, warnings or labels alone can constitute a product defect worthy of a recall, even if the actual product itself is not defective. Thinking like a consumer is a fundamentally important concept; incorporating this view in the design, construction and packaging processes can raise awareness of important human factors before the product ever reaches the consumer.

Determine how your products can fail and test them accordingly.

Risk analysis, a valuable exercise that can be used to help determine just how a product can fail, can take place in a variety of forms, including a failure modes and effects analysis, fault tree analysis, and event tree analysis. These are powerful tools, especially when they reflect the experience of seasoned designers and subject matter experts. After performing these types

of analyses, a company can rank risks associated with the product and test them accordingly.

Problems can result from companies not performing comprehensive testing of their products before they are in their customers’ hands. In some cases, products can fail in a manner that was not anticipated and cause injury or death. One way to limit this possibility is to perform rigorous, well-planned tests during the product development stages, including tests that appropriately represent end-use conditions.

Various types of design validation tests can shed light into possible failure scenarios and resulting consequences. These include normal-use tests, in which the product is used in accordance with the instructions; misuse tests, in which the product is tested in ways that are reasonably foreseeable, (i.e., not precisely according to the instructions but in a manner that might be reasonably extrapolated from conventional use) in an effort to study the various outcomes; and abuse tests, whereby the product is purposely abused with an aggressive testing approach to see what might happen. While accelerating conditions might be applied to each of these test types, caution should be applied when selecting relevant conditions. In addition, forced-failure tests can be useful where, for example, specific components are rendered inoperable prior to testing to determine how the product will behave or fail under different scenarios. It is helpful to know what to anticipate if Murphy’s Law affects your product.

Consider having an independent party evaluate your product.

After internal testing has been completed, it can be extremely beneficial to have your product evaluated and tested by an independent party that possesses relevant engineering expertise relating to your product. In many cases, consumer products are evaluated by a certified testing laboratory in order to verify compliance with a vol-

untary or mandatory standard; however, these tests should be considered as a “minimum bar” to be met as they do not prove that the product is completely safe and will never be the subject of a product recall. In fact, testing to standards is not a substitute for product-specific, end-use testing. Testing conducted by an independent third party can be focused on those scenarios not covered by voluntary or mandatory standards and, perhaps, not considered during internal testing. It is easier and far less costly to understand how your product might fail during prototype or qualification testing in a laboratory than when in use in a consumer’s home.

Keep accurate and complete documentation and ensure that products are traceable.

Good records enhance the possibility of traceability if a problem occurs. The “fingerprint” of a product—including the manufacturing date, serial number, specific model, batch number and the manufacturing facility where it was assembled—can help narrow or define the extent of a problem and help clarify precisely which products might be affected. If an engineering-based argument can be made for why a product recall need only be conducted for a specific population, comprehensive documentation and product traceability can allow a company to put a fence around the problem and limit costs associated with a recall. You cannot limit the scope of a problem if you cannot confirm the problem’s boundaries.

Manage change very carefully.

In some cases, a safe product is produced with no problems for a period of time and then something about the product is changed—possibly a modification based on consumer feedback or a new component supplier is introduced, or a manufacturing process is slightly altered to increase efficiency or to conform to environmental regulations. Unfortunately, in some cases, solving one problem can lead to another. Even seemingly insignificant

changes can have huge ramifications in the performance or safety of a product. If a change to a product is contemplated, performance tests that may be relevant to the change in order should be carefully considered and evaluated to determine the associated risks. For products without a historical risk analysis, this may be the time to update the files and revisit technical assumptions.

Remain focused on product safety in a changing global landscape.

Given the rapid pace of product innovation and technology evolution, shorter development times put pressure on companies to get products to market quicker than ever before. Additionally, the globalization of the manufacturing marketplace creates added pricing pressures, increasing the potential for jeopardizing quality and safety in the process.

For example, the most recent U.S. Census Bureau data show Chinese factories shipped \$288 billion worth of goods to the United States in 2006. Virtual companies (those that outsource most aspects of a business) are particularly prone to quality and safety problems—and recalls—in part due to pressures from retailers and distributors to lower profit margins, thereby putting engineering and auditing functions at risk. In addition, as more products are outsourced and/or manufactured overseas, another layer of complexity is added to product development. It is not just the physical separation between corporate headquarters and factory floors, but language differences that can complicate operations and the ability to communicate effectively. Risk is best managed when lines of communication are well maintained and when product safety requirements are clearly stated and enforced.

Build and refine a formal feedback system.

In order to be aware of safety issues in the marketplace, it is important that customer feedback reaches the right

SELECTED U.S. RECALLS 2007

In 2007, many recalls made headlines in the United States including:

- **Easy-Bake Ovens:** Easy-Bake (a division of Hasbro, Inc.) had to recall 985,000 of the popular children's toy in February because of entrapment and burn risks.

- **Dishwashers:** Maytag Corp. recalled 2.3 million Maytag and Jenn-Air dishwashers in February due to a potential leak that could lead to an electrical short and fire hazard. GE had a similar problem in May and recalled 2.5 million of its dishwashers.

- **Peter Pan peanut butter:** ConAgra Foods was forced to initiate a recall of its Peter Pan and Great Value peanut butter brands when they were found to be contaminated with salmonella in February and March. In all, 625 people in 47 states fell ill and ConAgra faces several lawsuits related to the incident.

- **Pet food:** In March, it was discovered that certain pet foods were sickening and killing cats and dogs. After an investigation, it was determined that the wheat gluten and rice protein imported from China and used as an ingredient in the pet food, was contaminated with the industrial chemical melamine. The recall affected brands made by a variety of companies including Menu Foods, Del Monte Pet Products, Hill's Pet Nutrition, Nestle Purina PetCare Company and P&G Pet Care.

- **Magnetic toys:** Mega Brands America, Inc. recalled over 4 million of its Magnetix Magnetic Building Sets in April when it was discovered that the small pieces not only presented a choking hazard, but put children at risk for internal injury. In August, Mattel, Inc. followed suit and recalled over 2 million magnetic toys.

- **Toothpaste:** In June, various manufacturers and distributors had to pull toothpaste made in China when it was discovered that the products had high levels of diethylene glycol, the main ingredient in anti-freeze. The recall primarily affected discount brands such as BrightMax, DentaPro, ShirFresh and Dentakleen.

- **Light truck tires:** In June, 450,000 Chinese-made light truck tires were recalled because of an increased risk of tread separation. This was the same defect that led to the recall of millions of Firestone tires in 2000.

- **Canned meats/chili:** In July, Castleberry's Food initiated a recall of tens of millions of cans (over 800,000 pounds) of canned meats and chili after the products were found to be contaminated with botulism. The recall affected multiple brands, including Castleberry's and Austex, as well as store brands like Kroger and Piggly Wiggly.

- **Ford SUVs:** 3.6 million Ford Broncos, F150s, Expeditions and Lincoln Navigators were recalled in August when it was discovered that a faulty cruise control switch could cause vehicle fires.

- **Toys:** Millions of toys manufactured or distributed by Mattel, FisherPrice and others had to be recalled over the summer when it was discovered that the Chinese-made products had excessively high levels of lead paint, which could be poisonous to children if ingested.

- **Dole bagged salad:** The Dole Food Company recalled 5,000 bags of its Dole Hearts Delight salad after it was found to be contaminated with *E.coli* in September. Last year, a similar outbreak in Dole bagged baby spinach was responsible three deaths and hundreds of illnesses around the United States.

- **Topps frozen hamburger patties:** In early October, Topps Meat Company was forced to recall 21.7 million pounds of frozen hamburger patties due to *E. coli* contamination. The recall forced the company to go out of business after 67 years of operation.

- **Banquet pot pies:** ConAgra Foods recalled an undetermined amount of frozen pot pies due to salmonella contamination. This was the third major recall of ConAgra products this year. (In addition to the peanut butter recall, the company also had to recall more than 400,000 Banquet pasta and meatball meals in February because of underprocessing.)

—Morgan O'Rourke

individuals in the company, including, ultimately, the operational management of the business. It is good practice to establish a formalized system for collecting and reviewing customer feedback, incident reports, complaints, customer letters and hotline calls.

This information, if properly collected and analyzed, will allow a company to spot trends and potential issues. The information should also be integrated with retailers' and distributors' systems so that manufacturers can get necessary feedback to identify potential problems quickly and determine if there are any safety-related issues that require action. Such information also provides valuable input into the design process for new products. Customer feedback is an extremely valuable resource for designing and refining well-made products.

Preparing for the worst-case scenario is always a good idea. For companies that find themselves having to conduct a product recall, managing the process typically begins with the following:

Develop an effective crisis communications plan.

The key to developing a good crisis communications plan is to create an interdisciplinary team that draws on expertise from every corner of the company, including the chief financial officer, marketing officers, engineering department and general counsel. It is a good idea to have an independent, unbiased perspective from individuals outside of the company on this team, as well, in order to avoid the "my

baby" syndrome, where team members who have developed the product from cradle to market have a difficult time acknowledging a problem. The challenge in developing a crisis communication plan is determining the critical message(s) that need to be delivered to the public and doing so swiftly and clearly. With a clear message and a strong team, the crisis of a recall can be effectively managed.

Pick the right spokesperson.

If a product is investigated by the government or news media, some companies initially circle the wagons and become defensive and unresponsive because they believe that the crisis situation is nobody's business but the firm's. In fact, a product recall is one of the most "public" periods of time for a business.

To avoid a self-defensive posture, a company should consider putting itself in its consumers' shoes, to gain a better understanding of how to protect consumers and perhaps even motivate them. During a crisis or a recall, the messenger is often inseparable from the message itself, so it is important to choose the most appropriate person to deliver your message. If a product is mainly purchased by mothers (e.g., diapers), consider having a mother speak about the issue.

Your messenger must speak to the outside world, not just to the media. In fact, it is critical to remember that the media is a conduit for reaching out to the consumer. Consumers want to see people who appear trustworthy and knowledgeable and can communicate effectively.

For example, in the crisis of 1982 involving poisoned Tylenol capsules, the CEO of Johnson & Johnson became the spokesperson, stepping up to "take the heat" and to interface with the public. Since the company did not know the source of the poison, it decided to remove all products from stores, sacrificing short-term profits, but building trust with the public that would last for decades. The case, still studied years later, has become a gold standard for how to conduct a recall.

While the preceding concepts are not meant to be comprehensive, they are important points for a company to consider when addressing product safety. The more energy directed towards product development and implementing corporate systems geared towards product safety, the less likely a costly product recall crisis is to occur. ■

Gene Grabowski, vice president of Washington, D.C.-based Levick Strategic Communications, is a crisis communications counselor specializing in product recall and liability issues for law firms, Fortune 500 companies, trade associations and government agencies.

Jason L. Hertzberg, Ph.D., PE., is a principal engineer at Exponent and the director of the Chicago office. He provides technical expertise in the areas of product recall and CPSC related issues, product liability, and support for a wide variety of industries ranging from consumer products to medical devices.

