

**TESTIMONY
OF
THE NATIONAL ASSOCIATION OF CHEMICAL DISTRIBUTORS**

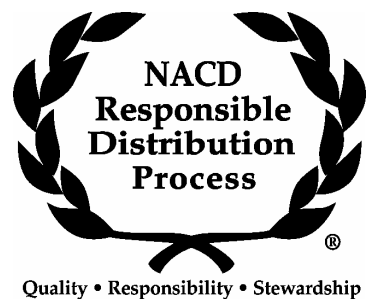
BEFORE THE

SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

ON

“INHERENTLY SAFER TECHNOLOGIES”

JUNE 21, 2006



Introduction

The National Association of Chemical Distributors (NACD) is an international trade association headquartered in Arlington, Virginia with more than 250 chemical distribution companies in the United States and Canada. These companies represent between 80% and 90% of the chemical distribution facilities in the nation and more than 90% of the industry's gross revenue. NACD member companies have established themselves as leaders in health, safety, security, and environmental performance through implementation of the Responsible Distribution ProcessSM (RDP), established in 1991 as a condition of membership in NACD. RDP is a third-party verified management practice.

“Inherently Safer Technologies” and Chemical Distribution

We all share the ultimate goal of manufacturing, storing, handling, distributing and utilizing chemicals as safely as we reasonably can. Members of NACD certainly promote this goal through adherence with the Responsible Distribution ProcessSM (RDP), which includes 12 Codes of Management Practice, including commitments to address risk management; compliance review and training; handling and storage, including site and transportation security; and product stewardship. A copy of the RDP Guiding Principles and Code of Management Practice is attached to the end of this testimony as an appendix.

The strongest incentive already exists for this industry to utilize the safest materials and processes possible in its operations—the fact that many of our employees and their families live, work, worship and play in the communities in which their chemical employment is based. Government oversight efforts include the Environmental Protection Agency's Risk Management Program and the Occupational Safety and Health Administration's Process Safety Management requirements, which already effectively govern how facilities manufacture, store, process, and otherwise use their chemicals in the safest manner possible to reduce the risk to employees, the environment, and their local communities. Market-based incentives include the ever-present goal of companies to avoid costly incidents and to minimize potential consequences of such incidents, and the desire of companies to do what is in the best interest of their employees, their communities, and their business reputations.

A government mandate to use “inherently safer technologies” without a thorough examination of the costs, benefits, potential public health effects, and unintended product substitution consequences would be a mistake. This nation has already experienced a similar situation with the requirement to use MTBE in gasoline. When this mandate was adopted, the consequences that arose were not anticipated earlier. As a result, today groundwater is contaminated, some watersheds in the country are severely damaged, gasoline availability is constrained, and lawsuits are consuming resources that would be more effectively used for other purposes. Lessons should be learned from this experience to thoroughly examine and study all possible consequences, including economic and public health benefits and risks of product substitutions.

A government mandate to adopt “inherently safer technologies” will not eliminate risk. The risk will still exist and will simply move to different stages in the process. Chemistry cannot be reinvented, and the molecules required to manufacture many necessary products will still exist at some point in the process.

Although product substitution in some cases is feasible and desirable, blanket mandates to do so are a poor policy choice. For example, while chlorine substitution may seem sensible in some cases, chlorine also demonstrates how a legislative “one size fits all” “inherently safer technologies” approach is likely to be counterproductive. Elemental chlorine is frequently used as a disinfectant at water and wastewater treatment facilities. A number of these facilities have switched or are considering switching from elemental chlorine to sodium hypochlorite solutions (a more concentrated version of laundry bleach). This requires a capital investment in storage tanks and pumps. In addition, issues of stability and quality need to be addressed individually by each of these sites.

It takes between six to seven tank trucks of sodium hypochlorite solution to supply the same disinfecting power as one cargo tank of elemental chlorine. Therefore, switching from elemental chlorine to sodium hypochlorite increases the highway traffic by a factor more than six-fold. The increased use of sodium hypochlorite simply transfers the risk from end-user sites such as water treatment facilities to bleach production sites that use elemental chlorine to manufacture the bleach and to the trucks on the highways. The bleach manufacturing sites may be in the same areas as the water treatment plants. Therefore, all that is accomplished is to increase by nearly seven-fold the number of truck shipments to the water treatment plants. The end-user sites have a different risk, but the population may have an increased overall risk due to the additional truck shipments on the roads.

In addition, the accidental mixing of numerous other water and wastewater treatment chemicals with sodium hypochlorite solutions (i.e. alum, ferric and ferrous chlorides and hydrochloric, phosphoric and sulfuric acids) can release chlorine gas from the sodium hypochlorite. Ammonia hydroxide solutions also react hazardously with this chemical. Therefore, risk reduction and counter measures are still necessary after the switching from elemental chlorine to sodium hypochlorite.

NACD members who have undergone U.S. Department of Homeland Security (DHS) security audits report that DHS has expressed concern about tank trucks on the roads. It is much more feasible to harden the security at a fixed facility than to secure numerous trucks on the road. Requiring substitution of certain raw materials for other raw materials perceived as “inherently safer” could require greater volumes to accomplish desired chemical outcomes. This, in turn, could easily result in more chemicals being transported on the roads, which could increase the overall risk of safety incidents as well as opportunities for terrorist incidents.

Chemical distributors must meet the needs of customers, who make purchasing decisions based on factors such as the laws of chemistry, cost, availability, functionality, and safety. In many cases, customers would have to expend significant resources to switch to different products. In many cases, no alternative substances exist that will serve the necessary purpose. Chemical distributors are not the final arbiters of what materials customers want and need; however, through practices adopted as part of the Responsible Distribution ProcessSM, NACD members assist customers in safely handling chemicals. This debate is focused on chemicals, but there are many other risks. The overall focus should be how products are stored and used, as well as making that storage and handling as safe as reasonably possible, not so much the product itself. To do otherwise would result in the proverbial “concrete airplane,” which would be incredibly strong and safe, but would aerodynamically never be able to leave the ground, therefore never achieving its intended purpose.

The economic impacts of mandated use of ISTs must also be considered. Required product substitutions would impact many different industries ranging from pharmaceuticals to auto parts and supplies to water treatment and many more necessary and vital sectors of the economy. In a time of record high energy costs and trade deficits, the potential impacts on U.S. consumers, exports, and global competitiveness must be taken into account.

Conclusion

In conclusion, NACD appreciates the opportunity to provide testimony to the committee on this important issue. In the absence of a clear definition of the concept of “inherently safer technologies” and the difficulties in determining whether or not required measures would in fact reduce overall long term risk, NACD strongly recommends that Congress not impose its judgment about which product to utilize for a given task without more data that supports reasonable cost benefit and safety benchmarks.

Additional Details on the NACD Membership

NACD member companies process, formulate, blend, re-package, warehouse, transport, and market chemical products for an industrial customer base of approximately 750,000. Approximately \$18 billion of U.S. chemical industry sales are through chemical distributors, who are also actively engaged in various phases of import/export trade. Chemical distributors’ industrial customers use these materials to produce such everyday items as computers, detergents, cosmetics and toiletries, food flavorings, perfumes, automobile parts, water purifiers, fiberglass, plastics, pharmaceuticals, paints and coatings, and many other products.

To become a member of NACD, chemical distribution companies must take title to product and adhere to management practices related to health, safety, security, and the environment outlined in the Association’s industry practice known as the Responsible Distribution ProcessSM (RDP).

Before a company is admitted as a member, it must first be approved by successfully completing an independent, third-party verification of its written policies and procedures under RDP. To ensure continued compliance with RDP, every member must undergo an on-site verification by an independent third-party verifier once every three years. This mandatory practice has been in place since 1998, and members will begin their third on-site verification cycle later this year. NACD’s Responsible Distribution ProcessSM is the most comprehensive and rigorous industry practice of any in the chemical industry, primarily because of its requirement for independent third-party verification of health, safety, security, and environmental practices. Continued compliance with RDP is a condition of membership in NACD.

Although chemical distribution is a sector of the chemical industry, distribution facilities differ in numerous ways from chemical manufacturing facilities. One notable example is the low levels of release of toxic emissions from everyday operations. According to data compiled each year by the Environmental Protection Agency (EPA), chemical distribution is a minor source of environmental releases. Of all industrial sectors required to submit annual Toxic Release Inventory (TRI) reports, including the chemical industry, chemical distribution is by far the lowest emitter of toxic emissions. The average yearly release per distribution facility is just over 3,000 pounds over a 12-month period, whereas the average emissions of all TRI facilities is 179,000 pounds. While the

possibility of chemical releases exists at chemical distribution facilities, it is minimized because of several factors, not the least of which is adherence to the industry's environmental, health, safety, and security practice – the Responsible Distribution ProcessSM – among NACD members.

**National Association of Chemical Distributors
The Responsible Distribution ProcessSM**

Guiding Principles

As a member of the National Association of Chemical Distributors, this company is committed to continuous improvement in the chemical distribution industry's responsible management of chemicals. We pledge to manage our business according to these principles.

1. To recognize and respond to community concerns about chemicals, their handling, and transportation.
2. To make health, safety, security, and environmental considerations a priority in our planning for all existing and new operations, products, processes, and facilities.
3. To inform emergency response officials, employees, customers, and the public of manufacturer's information on chemical-related health or environmental hazards, and the manufacturer's recommendations on protective measures.
4. To work with customers, in accordance with manufacturer's recommendations, on product stewardship including handling, use, transportation, and disposal of chemical products.
5. To operate our plants and facilities in a manner that protects the health and safety of our employees, the public and the environment.
6. To cooperate in resolving problems created by past handling and disposal of hazardous chemicals.
7. To participate with government and others in creating responsible laws, regulations, and practices to help safeguard the community, workplace, and environment.
8. To promote the principles and practices of Responsible Distribution ProcessSM by sharing experiences and offering assistance to others who produce, handle, use, transport, or dispose of chemicals.

**National Association of Chemical Distributors
The Responsible Distribution ProcessSM**

Code of Management Practice

Each member company shall have an active program designed to continuously improve safety and reduce incidents. This Code does not impose upon member companies any obligation to guarantee compliance by third parties, i.e., parties over whom the member companies have no control. This program shall include:

I. Risk Management

- A. Senior management commitment, through policy, communications, and resources, to on-going improvements in chemical distribution safety.
- B. Regular review with suppliers of the hazards of materials.
- C. Identification and implementation of risk reduction measures.

II. Compliance Review and Training

- A. A process for monitoring regulations and industry practices for their application to chemical distribution activities.
- B. A process for implementing applicable regulations and industry practices that apply to chemical distribution activities.
- C. Training for all employees in the implementation of applicable regulations, as well as member company's specific requirements.
- D. A process for review of employee compliance with applicable regulations and member company's specific requirements and review of outside contractor and re-seller compliance with member company's specific requirements.

III. Carrier Selection

- A. A process for selecting carriers to transport chemicals that includes carrier safety and fitness, security, regulatory compliance, and performance review.

IV. Handling and Storage

- A. Procedures for ensuring that containers are appropriate for the chemical being shipped, comply with regulatory requirements, and are free from leaks and visible defects.
- B. Criteria for the cleaning and re-use of transportation equipment and chemical containers, and the proper disposal of cleaning residues.
- C. Procedures for loading and unloading chemicals at the member company's facilities that result in protection of personnel, a reduction in emissions to the environment, and an increased awareness of hazards from inadvertent mixing of incompatible chemicals.
- D. A process for providing manufacturer guidance and information to customers, warehouses, terminals and/or carriers on procedures for loading, unloading, and/or storing chemicals; and a process to increase awareness of hazards from inadvertent mixing of incompatible chemicals.
- E. A process for selecting owned and contracted facilities and sites for chemical storage or handling that emphasizes safety, fitness and includes reviews.
- F. Documentation of current operating procedures for handling and storing chemicals.
- G. Facility design, construction, maintenance, inspection, and security practices that promote facility integrity, consistent with recognized codes and regulations
- H. Develop a process for addressing chemical site and chemical transportation security, to include conducting a security vulnerability assessment.
- I. Provisions for control of processes and equipment during emergencies resulting from natural events, utility disruptions, and other external conditions.
- J. Procedures to properly label and mark packages and containers.

V. Job Procedures and Training

- A. Identification of the skills and knowledge necessary to perform each job.
- B. Establishment of procedures and work practices for safe operating and maintenance activities.

- C. Training for all personnel to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job, including confirmation of competence.
- D. Programs designed to assure that personnel in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse.
- E. Outside Contractors: In areas where hazardous materials are present, members shall have a process in place to inform contractors of the known hazards and the emergency action plan.

VI. Waste Management and Conservation Practices

- A. Procedures to ensure that all self-generated waste and empty containers are disposed of in a responsible manner, and in accordance with existing regulations.
- B. A clear commitment by senior management through policy communications, resources, and programs to ongoing waste reductions and pollution prevention at each member facility.
- C. A commitment to institute resource conservation measures.

VII. Emergency Response and Public Preparedness

- A. A process for responding to, reporting on, and investigating chemical distribution incidents and releases involving the member company's chemicals, and implementation of appropriate preventive measures developed from that investigative process.
- B. A system of internal investigation, reporting, appropriate corrective action, and follow-up for each incident and/or near miss that result or could have resulted in chemical incidents or releases.
- C. Procedures for making emergency response information concerning the member company's chemicals available to response agencies.
- D. Communication with state and/or local emergency planning commissions and response organizations on the potential hazards of the member company's chemicals.
- E. Annual review, testing, and assessment of the operability of the member company's written emergency action and fire prevention plan and/or emergency response plan.

- F. Facility tours for first responders to promote emergency preparedness and to provide current knowledge of facility operations.
- G. Coordination of the written facility emergency response plan with the local emergency response team and other facilities. If no community plan exists, the facility should assist with efforts to create one.
- H. Participation in the Local Emergency Planning Committee's process to develop and periodically test the local emergency response plan.

VIII. Community Outreach

- A. Interaction with organizations, associations, government officials and/or the public on behalf of NACD's Responsible Distribution ProcessSM.
- B. Information and updates for employees on the Responsible Distribution ProcessSM to encourage key employees to become involved in community outreach efforts.
- C. Advocacy of responsible public policies and regulations for chemical distribution.

IX. Product Stewardship

Customers

- A. A process to qualify customers as prescribed by governmental regulation.
- B. Member companies should work with customers to foster appropriate dissemination of information on the proper use, handling and disposal of products commensurate with product risk. A member may decide to cease doing business with customers whose practices are clearly inconsistent with the Responsible Distribution ProcessSM.

X. Internal RDP Audits

- A. Member companies shall establish documented procedures for regularly scheduled **INTERNAL AUDITS** to verify the implementation of policies and procedures supporting the RDP Code of Management Practice. The audits will be used to evaluate the effectiveness of the policies and procedures. Internal Audits shall be done on a yearly basis beginning with successful completion of the Interim Verification Process.
- B. Audits shall be recorded and results brought to the attention of appropriate management personnel who must take timely corrective or preventive action. Annual audit results should be retained until the next Third-party On-Site Verification is completed.

XI. RDP Corrective and Preventive Action

- A. Member companies shall establish a **CORRECTIVE AND PREVENTIVE ACTION** system for RDP related issues. This system should permit the identification and communication of inadequacies or improvements in each member company's implementation of RDP.
- B. Member companies shall establish and maintain procedures for implementing corrective action and preventive actions arising from internal and external audits or other sources. Any corrective or preventive action taken to resolve the cause or RDP implementation inadequacy shall be appropriate, as determined by member company management, to the magnitude of the cause or inadequacy and commensurate with the risk involved.

XII. RDP Document and Data Control

- A. Member companies shall establish and maintain a documented system to control all policies and procedures supporting RDP. In addition, member companies shall maintain a documented system to control the documents and data relating to RDP itself as issued by the National Association of Chemical Distributors (NACD).
- B. Data includes any of the above that is electronically stored and utilized.
- C. These documented procedures shall include provisions for review and approval of any new or revised policies and procedures by the authorized personnel within the member company.
- D. A master list or functionally equivalent document control system identifying the current version of each document shall be established and be readily available to preclude the use of invalid and/or obsolete documents. The system shall ensure that:

Changes to documents and data shall be reviewed and approved by the same function/organization that performed the original review and approval, unless specifically designated otherwise. These functions/organizations shall have access to pertinent background information upon which to base their review and approval. Where practical, the nature of the change shall be identified in the document or appropriate attachments.