CHEMICAL MANUFACTURERS ASSOCIATION

Robert A. Roland
President

January 26, 1990

Mr. Thomas G. Grumbles
Environmental Quality Manager
Vista Chemical Company
900 Threadneedle
Houston, TX 77079

Re: Responsible Care: Draft Process Safety Code of Management Practices and Member Self Evaluation Form

Dear Mr. Grumbles:

The draft Process Safety Code (PSC) of Management Practices is enclosed for your Company's review. Developed by the Engineering and Operations Committee through its Safe Plant Operations Task Group (roster enclosed), the draft reflects the combined efforts of dozens of experienced professionals from a wide cross section of the chemical industry. A separate code area, which is now being considered for development, will address occupational safety and health issues and will complement the PSC. Ultimately, these two code areas, process safety and worker health and safety, will comprise a single Safe Plant Operations Code.

Please review the draft code and provide your comments to CMA by March 26, 1990. A response form is enclosed for your convenience.

The Process Safety Code is intended to serve as a plan of action for companies both large and small in the continuous improvement of their process safety performance. It is, as the purpose states, "designed to prevent fires, explosions and accidental chemical releases". By so doing, the chemical industry can provide even greater protection to its workers, the environment and the communities in which we are located.

The elements of the PSC are closely harmonized with the Process Safety Management Principles developed and published by the American Institute of Chemical Engineers' Center for Chemical Process Safety and the American Petroleum Institute's Process Hazard Management Guidelines. Although similar in approach, this code extends beyond the scope of the other documents, as follows:

- The code is an obligation of membership whereas the others are voluntary or advisory in nature.

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- The code requires a commitment from senior management to achieve process safety improvements.
- The code requires companies to share a relevant safety information, obtained in the course of accident or near-miss investigations, with industry, government and the community.
- The code requires companies to substantially address public comments and concerns in designing and implementing process safety systems in the plant.
- The code requires provisions for control in the event of emergencies caused by external conditions (e.g., earthquakes, hurricanes, etc.).
- The code requires the establishment of programs to ensure that safety critical jobs are not performed by persons impaired by drugs, alcohol or other external factors.

Implementation of the PSC as an obligation of membership under Responsible Care will require the commitment of significant resources by both CMA and its member companies. Implementation will be supported by both new and existing materials from CMA, as well as other appropriate sources. An implementation resource manual is currently under development by the task group which has developed the code. With this in mind, I urge that the draft code be reviewed by everyone within your company who will be responsible for its implementation.

Earlier drafts of the code were reviewed by the Responsible Care Public Advisory Panel, and by the Responsible Care Coordinators who attended the first Coordinators Conference in June, 1989. This draft reflects advice and comments from those groups, as well as from the Engineering and Operations Committee, the Responsible Care Coordinating Group and other CMA work groups and staff. A proposed member self-evaluation form is also enclosed for your review.

To assure that all member companies have an opportunity to review the code before it is sent to CMA's Board of Directors for approval in June, please submit any comments you may have in writing. I have attached a response form with questions that target specific issues. Please send the completed form and any supplemental comments to Kyle B. Olson, Director, Safety and Plant Operations, by March 26, 1990. The code drafting group will study and consider all submittals.

CMA's Engineering and Operations Committee is holding an Open Forum on March 1, 1990, for member company representatives, to discuss the draft PSC in detail with its authors, raise specific questions and concerns and to suggest improvements, as necessary. The Forum will be held at the Marriott Marquis in Atlanta, Georgia. An Open Forum registration form is enclosed. Please make plans to have a representative from your company in attendance.

This code represents the continuing commitment of CMA and the chemical industry to the principles of Responsible Care. It reflects our understanding that we cannot stand pat on safety if we hope to earn the public's trust. That trust will not be achieved without considerable effort nor will it come quickly. In the long run, however, regaining the public's faith is the key to our industry's continued growth and success.

Sincerely,

Robert A. Roland
President

cc: Executive Contacts
Engineering Contacts
Responsible Care Coordinating Group

Attachments

DRAFT

December 11, 1989

PROCESS SAFETY
CODE OF MANAGEMENT PRACTICES

PURPOSE

The Process Safety Code of Management Practices is designed to prevent fires, explosions and accidental chemical releases. The practices are based on the principle that facilities will be safe if they are designed according to sound engineering practices, built, operated and maintained properly and periodically reviewed for conformance.

Process safety is an interdisciplinary effort. Consequently, the Code is divided into the following four sections: management leadership, technology, facilities and personnel. Individually, each Practice describes an activity or approach important to preventing fires, explosions and accidental chemical releases. Collectively, the Practices encompass process safety from the design stage through operation, maintenance and training. The scope of this Code includes manufacturing, processing, handling and on-site storage of chemicals. This Code must be implemented with full recognition of the community's interest, expectations and participation in achieving safe operations.

The process safety management program in each facility is complemented by workplace health and safety programs, as well as waste and release reduction programs which address and minimize releases and waste generation. These three programs, and others, will help assure that our facilities are operated in a manner that protects the environment and the health and safety of employees and the public.

RELATIONSHIP TO GUIDING PRINCIPLES

The Code helps achieve several of the Responsible Care Guiding Principles:

- To recognize and respond to community concerns about chemicals and our operations,

- To make health, safety and environmental considerations a priority in our planning for all existing and new plants and processes.

- To operate our plants and processes in a manner that protects the environment and the health and safety of our employees and the public.

MANAGEMENT PRACTICES

Each member company shall have an ongoing process safety program which includes:

A. MANAGEMENT LEADERSHIP

1. Leadership by senior management through policy, participation, communications and resource commitments in achieving continuous improvement of safety performance.

2. Clear accountability for performance against specific goals for continuous safety improvement.

3. Measurement of safety performance, audits of compliance and implementation of corrective actions.

4. Investigation, reporting, appropriate corrective action and followup of each incident which results or could have resulted in a fire, explosion or accidental chemical release.

5. Sharing of relevant safety knowledge and lessons learned from such incidents with industry, government and the community.

6. Use of the CAER process to assure public comments and concerns are considered in design and implementation of the facility's process safety systems.

B. TECHNOLOGY

1. Current, complete documentation of process design and operating parameters and procedures.

2. Current, complete documentation of process safety information relating to the hazards of materials and process technology.

3. Periodic assessment and documentation of process hazards, and implementation of actions to minimize risks associated with chemical operations, including the possibility of human error.

4. Management of changes to chemical operations to maintain or enhance the safety originally designed into the facility.

C. FACILITIES

1. Consideration and mitigation of the potential effects of expansions, modifications and new sites on the community and environment.

2. Facility design, construction and maintenance using sound engineering practices consistent with recognized codes and standards.

3. Safety reviews on all new and modified facilities during design and prior to start-up.

4. Sufficient layers of protection through technology, facilities and personnel to prevent escalation from a single failure to a catastrophic event.

5. Provision for control of processes and equipment during emergencies resulting from natural events, utility disruptions and other external conditions.

D. PERSONNEL

1. Identification of the skills and knowledge necessary to perform each job.

2. Establishment of safe work practices for operating and maintenance activities.

3. Training for all personnel to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job.

4. Demonstrations and documentation of skill proficiency prior to assignment to independent work, and periodically thereafter.

5. 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.

EXHIBIT A

CHEMICAL MANUFACTURERS ASSOCIATION
MEMBER SELF-EVALUATION FORM

PROCESS SAFETY
CODE OF MANAGEMENT PRACTICES

Member Company:

Name: ______________________________

Responsible Care Coordinator:

Name: ______________________________

Address: ______________________________
____
____
____

Telephone: ______________________________

Number of facilities subject to Code: ____________

*   *   *   *   *   *   *   *   *   *

<u>Instructions:</u>

1. This form is to be submitted annually to CMA by each member company. CMA will announce dates for each Code.

2. Indicate on the cover page the number of member company facilities subject to the Code. All facilities subject to the Code must be included in this report.

3. For each Management Practice on the following pages, indicate the number of facilities that have attained each stage. The total number of facilities for each Management Practice should equal the total number of facilities subject to the Code.

4. Only subject facilities owned or operated as of the reporting date should be included.

5. The stages of implementation are:

- Stage I - No action;
- Stage II - Evaluating company practices against Code practice;
- Stage III - Developing action plan to implement Code practice;
- Stage IV - Implementing action plan;
- Stage V - Code management practice in place;
- Stage VI - Implementation reviewed and reaffirmed this year.

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	STAGES					
MANAGEMENT LEADERSHIP	I	II	III	IV	V	VI
1. Leadership by senior management through policy, participation, communications and resource commitments in achieving continuous improvement of safety performance.						
2. Clear accountability for performance against specific goals for continuous safety improvement.						
3. Measurement of safety performance, audits of compliance and implementation of corrective actions.						
4. Investigation, reporting, appropriate corrective action and follow-up of each incident which results or could have resulted in a fire, explosion, or accidental chemical release.						
5. Sharing of relevant safety knowledge and lessons learned from such incidents with industry, government, and the community.						

	I	II	III	IV	V	VI
6. Use of the CAER process to assure public comments and concerns are considered in design and implementation of the facility's process safety system.						
<u>TECHNOLOGY</u>						
1. Current, complete documentation of process design and operating parameters and procedures.						
2. Current, complete documentation of process safety information relating to the hazards of materials and process technology.						
3. Periodic assessment and documentation of process hazards, and implementation of actions to minimize risks associated with chemical operations, including the possibility of human error.						
4. Management of changes to chemical operations to maintain or enhance the safety originally designed into the facility.						
<u>FACILITIES</u>						
1. Consideration and mitigation of the potential effects of expansions, modifications and new sites on the community and environment.						
2. Facility design, construction, and maintenance using sound engineering practices consistent with recognized codes and standards.						

	I	II	III	IV	V	VI
3. Safety reviews on all new and modified facilities during design and prior to start-up.						
4. Sufficient layers of protection through technology, facilities and personnel to prevent escalation from a single failure to a catastrophic event.						
5. Provision for control of processes and equipment during emergencies resulting from natural events, utility disruptions and other external conditions.						
PERSONNEL						
1. Identification of the skills and knowledge necessary to perform each job.						
2. Establishment of safe work practices for operating and maintenance activities.						
3. Training for all personnel to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their jobs.						
4. Demonstrations and documentation of skill proficiency prior to assignment to independent work, and periodically thereafter.						

	I	II	III	IV	V	VI
5. 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.						

PROCESS SAFETY
CODE OF MANAGEMENT PRACTICES
RESPONSE FORM

1. Both in the purpose section and at A.6. of the Management Leadership section, the Code emphasizes incorporation of public input into the safety management of our facilities. Do you agree that this element is reasonable and necessary? Explain.________

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____

2. The Code's scope includes the "manufacturing, processing, handling and on-site storage of chemicals." Does this properly define the operations that should be addressed under the Code? Explain.____

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3. Do you fully understand the references to "sound engineering practices"? Is greater specificity needed? Explain.__________

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4. Do you feel parts of the Code are redundant? If so, which parts?

____

____

____

5. Do you feel the member evaluation form will be useful to monitor and evaluate your progress in implementing the Code?____________

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6. Will the practices outlined in this draft satisfy the goals of the Code as outlined in the purpose section? Explain.______________

____

____

7. What kinds of resources will you find helpful in implementing the practices of this Code?____

____

____

8. _____ I have no specific comments or questions about the Code.

Please return by March 5, 1990 to:

Kyle B. Olson
Director, Safety and Plant
Operations
Chemical Manufacturers Association
2501 M Street, NW
Washington, DC 20037

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PROCESS SAFETY
CODE OF MANAGEMENT PRACTICES
OPEN FORUM REGISTRATION FORM

Please register the following person(s) for the Responsible Care Process Safety Code of Management Practices Open Forum to be held March 1, 1990, at the Marriott Marquis, Atlanta, GA. (The Open Forum will start at 9:00 a.m.) A check in the amount of $__________ ($100 per person) is enclosed. The registration fee covers continental breakfast, lunch, conference room charges, break and meeting materials.

Mail registration form and a check or money order, payable to the Chemical Manufacturers Association, to: Stephanie V. Kopetz, CMA, 2501 M Street, NW, Washington, DC 20037. Refunds will be made if cancellations are received by CMA before close of business February 23, 1990.

NAME____________________________

NAME____________________________

NAME____________________________

COMPANY_________________________

ADDRESS_________________________

CITY____________________________

STATE__________ ZIP__________

PHONE(___)________________________

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CHEMICAL MANUFACTURERS ASSOCIATION
PROCESS SAFETY
CODE OF MANAGEMENT PRACTICES
OPEN FORUM

DATE: March 1, 1990

TIME: 8:30 am - 4:30 pm

PLACE: Marriott Marquis Hotel
Atlanta, Georgia

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TENTATIVE AGENDA

8:30	Introduction - K.B. Olson, CMA
8:35	Code Development Background - P. Kavasmaneck, Union Carbide Vice-Chairman, Engineering and Operations Committee
9:00	Code Overview - R. Olsen, Exxon Chairman, Safe Plant Operations Task Group
9:30	Discussion
10:00	Break
10:30	Presentation of Management Leadership Elements - V. Boyen, Monsanto
11:00	Discussion
11:45	Lunch
1:00	Presentation of Technology Elements - L. Csengery, Shell
1:30	Discussion
2:00	Presentation of Facility Elements - H. Calsing, BFGoodrich
2:30	Discussion
3:00	Break
3:30	Presentation of Personnel Elements - G. Scott, ARCO
4:00	Discussion
4:30	Closing Comments - P. Kavasmaneck, Union Carbide
	Adjourn

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