



# Inspiring Performance: The Government-Industry Team Approach To Improving Environmental Compliance



New Jersey  
Department of  
Environmental Protection





## State of New Jersey

Christine Todd Whitman  
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.  
Commissioner

MAY 1999

Dear Interested Party:

I am pleased to transmit to you the final report of the New Jersey Chemical Industry Project's Compliance Assistance Pilot. This two year pilot benefited from a unique collaboration of industry, government and trade associations who sought to improve existing compliance assistance resources.

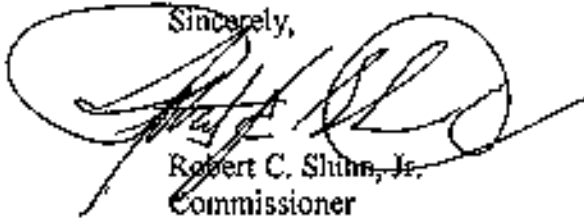
As we are all quickly realizing, compliance assistance is an integral part of an effective enforcement program. As we in New Jersey have seen, many companies today try diligently to comply with the regulations, but have difficulty due to lack of resources or technical expertise or simply because there are so many regulations that apply to them. Therefore, education has become an even more critical component of our jobs.

The New Jersey Chemical Industry Project was spearheaded by EPA's Office of Policy. The Project team included members of New Jersey's chemical industries and DEP permitting and enforcement representatives. After brainstorming at team meetings, the Project team decided to implement four pilots in New Jersey: effluent trading; hazardous waste exchange across facilities; flexible track for companies with superior environmental performance; and compliance assistance.

For the compliance assistance pilot, EPA, DEP, industry and trade associations worked together over a two year period to assess existing compliance assistance resources, survey the regulated community as to their compliance assistance needs, and develop and distribute a unique package of Compliance Assistance Materials. These materials are on the department's web page at [www.state.nj.us/dep/enforcement](http://www.state.nj.us/dep/enforcement). At the conclusion of the pilot, the team wrote a report to summarize the work they had done, but more importantly, to highlight the lessons they had learned. Their goal in writing the report was to enable other states and other DEP programs to benefit from the countless hours they invested in this project. Appended to the report are the survey findings, on which the compliance assistance materials were based.

If you have any questions about this project, please call Peg Hanna at (609) 984-1767, Chuck McCarty at (609) 292-5565 or Catherine Tunis of USEPA at (202) 260-2698.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Slum, Jr.", is written over a large, faint circular stamp or watermark. The signature is fluid and cursive.

Robert C. Slum, Jr.  
Commissioner

Attachment (1)

C: Marlen Dooley, Assistant Commissioner  
Catherine Tunis, USEPA, Office of Policy, Planning and Evaluation

**INSPIRING PERFORMANCE:  
The Government-Industry Team Approach  
to Improving Environmental Compliance**

*Lessons from the New Jersey Chemical Industry Project--  
Compliance Assistance Team*

*Final Report  
May 1999*

## PREFACE

---

The U.S. Environmental Protection Agency's (EPA) Office of Policy is working with the New Jersey Department of Environmental Protection (NJ DEP), EPA Region 2, and a Stakeholder group made up of industry, environmental group, union, and community representatives on a project involving the batch chemical industry in New Jersey. This project, named the New Jersey Chemical Industry Project, is an effort to assess current environmental protection strategies on a sector basis and develop better approaches.

The batch chemical industry in New Jersey was identified as a good candidate to complement the Office of Policy's work with a large continuous process chemical manufacturer. Several members of the Chemical Operations Team of the President's Council on Sustainable Development noted that many regulations seem to be written with large continuous process manufacturers in mind and urged EPA to look at the special challenges in complying with these regulations faced by batch chemical manufacturers. New Jersey is one of the top states for batch chemical manufacturing, and the industry was willing to work with EPA to look for innovative ways to achieve enhanced, cost effective environmental performance.

The New Jersey Project started by asking what inspires batch chemical companies to achieve--or keeps them from achieving--better environmental performance. From this information, the Stakeholder group developed a list of 45 issues for possible pilot projects to test new environmental protection strategies. The Compliance Assistance Pilot was developed as one of four pilot projects selected by the Stakeholder group. The other pilots selected by the group include: effluent limit trading between indirect dischargers, materials recycling, and flexible track for good environmental performers.

A subset of the Stakeholder group formed the Pilot Team for the Compliance Assistance Pilot, along with several additional facility and regulatory agency representatives with specific expertise in compliance issues who were invited to participate. The Pilot Team developed an extensive set of Compliance Assistance Materials (CAM) that includes plain language descriptions for many of the NJ state environmental regulations and agency contact information, descriptions of ongoing NJ DEP compliance assistance activities, applicability flowcharts for six key regulations, and an extensive bibliography of compliance assistance resources published by NJ DEP, other regulatory agencies and trade associations. The pilot culminated by posting the CAM on NJ DEP's web site and in sponsoring two one-day workshops in which NJ DEP and industry experts presented information on key compliance issues for the six key regulations. This report documents the lessons

learned from this pilot project. We hope that this information will be helpful to others seeking to establish compliance assistance efforts in other sectors or states.

Print copies of the CAM can be obtained through:

Chuck McCarty  
New Jersey Department of Environmental Protection  
Small Business Assistance Program  
401 East State Street (PO Box 423)  
3rd Floor, East Wing  
Trenton, NJ 08625  
telephone: 609-292-3600

These materials can also be viewed on NJ DEP's web site at:

**<http://www.state.nj.us/dep/enforcement/home.htm>**

The New Jersey Chemical Industry Project has prepared reports on the work of the Effluent Trading Pilot Team and the Materials Recycling Pilot Team. The Effluent Trading report describes our experience in implementing the first-ever trade of local pretreatment limits among indirect dischargers and provides guidance on how trading of local limits can be established at other Publicly Owned Treatment Works. This report is titled Sharing the Load: Effluent Trading for Indirect Dischargers, EPA 231-R-98-003, May 1998.

The Materials Recycling report, titled Promoting Chemical Recycling: Resource Conservation in Chemical Manufacturing, EPA 231-R-99-001, May 1999, describes five typical batch chemical process scenarios that present opportunities to recycle materials, explains how the hazardous waste regulations would apply to each scenario, and documents the environmental and economic benefits that have been realized to date by the one scenario that has already been implemented. The scenarios and regulatory interpretations may be helpful to other facilities with similar processes that wish to improve their materials reuse and recycling, including facilities outside of New Jersey. Because the New Jersey hazardous waste rules are the same as the federal rules, the information in this report may be useful to facilities in other states where the Federal rules apply.

The Flexible Track Pilot Team has been working with EPA and NJ DEP to develop a program that provides incentives to facilities that are good environmental performers to maintain and improve that performance. The program is expected to be announced by NJ DEP in the summer of 1999, with the first applications to be accepted in the fall. The Team is also working with NJ DEP and EPA to develop future enhancements for the Flexible Track program.

For more information about the New Jersey Chemical Industry Project, the Compliance Assistance Pilot, the Effluent Trading Pilot, the Materials Recycling Pilot, the Flexible Track Pilot, or additional copies of this or other New Jersey Chemical Industry Project reports, contact:

Catherine S. Tunis  
EPA Office of Policy  
401 M Street SW (2128)  
Washington, DC 20460  
telephone: 202-260-2698  
[tunis.catherine@epamail.epa.gov](mailto:tunis.catherine@epamail.epa.gov)

## ACKNOWLEDGMENTS

---

This project benefitted from the dedication, enthusiasm, creativity, and technical knowledge of the participants on the Compliance Assistance Pilot Team of the New Jersey Chemical Industry Project. Through the efforts of the Pilot Team, the expertise and perspectives of both industry and regulatory agencies have been incorporated throughout the definition, implementation, and documentation of this pilot project. The Team would like to extend a special "thank you" to the many managers and staff at NJ DEP, NJ Department of Treasury, and EPA Region 2 who contributed time reviewing the Compliance Assistance Materials and presenting the workshops.

This report was drafted by Sarah Holtz, Joshua Levine, and Eric Ruder of Industrial Economics, Incorporated with a considerable amount of guidance and input from many of the Pilot Team members representing regulatory agencies and industry. Specifically, the following Pilot Team members contributed their ideas and suggestions: Barry Bochner, Fabricolor, Inc.; Alan Bogard, Infineum USA L.P.; Joseph Gentile, CasChem; Peg Hanna, NJ DEP Office of Enforcement and Compliance; Scot Mackey, Chemical Industry Council of NJ; Chuck McCarty, NJ DEP Small Business Assistance Program; Barbara Mullis, TRICON Colors; Steve Scher, Scher Chemicals; and Jim Sinclair, NJ Business and Industry Association. We would also like to thank the EPA staff members who contributed to this report, especially those from the Office of Policy, Industry Sector Policy Division; Office of the Small Business Ombudsman; Office of Enforcement and Compliance Assurance, Chemical, Commercial Services, and Municipal Division; and Region 2, Division of Enforcement and Compliance Assistance. The success of this pilot project is a result of valuable contributions from the entire Pilot Team. A complete list of the Pilot Team members can be found on page v.





# NEW JERSEY CHEMICAL INDUSTRY PROJECT

---

## THE COMPLIANCE ASSISTANCE PILOT TEAM

### New Jersey Chemical Industry Project Stakeholders

Barry Bochner	Fabricolor, Inc.
Alan Bogard	Infineum USA L.P.
Peter Downing	Reach Associates
Sherry Edwards	formerly, Synthetic Organic Chemical Manufacturers Association - currently at American Meat Institute
Joseph W. Gentile	CasChem, Inc.
Peter Lederman	New Jersey Institute of Technology
Jehuda Menczel	US EPA, Region 2
Barbara Mullis	TRICON Colors
Richard Rosera	formerly, Pilot Chemical Company
Steve Scher	Scher Chemicals
Catherine Tunis	US EPA, Office of Policy
Trish Zita	Chemical Industry Council/NJ

### Additional Participants

Emily Chow	US EPA, Office of Enforcement and Compliance Assurance
Kent Davis	NJ DEP, Office of Enforcement and Compliance
Tom Detweiler	formerly, Chemical Industry Council/NJ
Gail French	Industrial Economics, Incorporated
Michele Glassburg	New Jersey Business and Industry Association
Peg Hanna	NJ DEP, Office of Enforcement and Compliance
Sarah Henricks Holtz	Industrial Economics, Incorporated
Carl Koch	US EPA, Office of Policy
Joshua Levine	Industrial Economics, Incorporated
Ron Lockwood	US EPA, Region 2
Scot Mackey	Chemical Industry Council/NJ
Kathleen Malone	US EPA, Region 2
Chuck McCarty	NJ DEP, Small Business Assistance Program
Arnold Medbery	US EPA, Office of the Small Business Ombudsman
Cheryl Morton	formerly, Synthetic Organic Chemical Manufacturers Association - currently at Chemical Manufacturers Association
Eric Ruder	Industrial Economics, Incorporated
Jim Sinclair	New Jersey Business and Industry Association
Marcus Zobrist	formerly, US EPA, Region 2

## TABLE OF CONTENTS

PREFACE .....	i
ACKNOWLEDGMENTS .....	iv
COMPLIANCE ASSISTANCE PILOT TEAM .....	v
INTRODUCTION .....	CHAPTER 1
Lessons From Pilot Team Activities .....	1-2
Benefits From Pilot Team Efforts .....	1-3
Future Activities .....	1-5
Structure of the Report .....	1-5
PROCESS AND PRODUCTS OF THE COMPLIANCE ASSISTANCE PILOT PROJECT .....	CHAPTER 2
Project Initiation .....	2-1
Define Pilot Team and Objectives .....	2-3
Research Industry Compliance Assistance Needs and Existing Resources; Define the Scope of Pilot Activities .....	2-5
Develop Compliance Assistance Materials .....	2-8
Conduct Outreach Activities for Compliance Assistance Materials .....	2-10
FUTURE COMPLIANCE ASSISTANCE ACTIVITIES AND A CONTINUING PARTNERSHIP BETWEEN NJ DEP AND INDUSTRY .....	CHAPTER 3
Sustained Compliance Assistance Activities .....	3-1
LESSONS LEARNED: PREPARING COMPLIANCE ASSISTANCE MATERIALS THROUGH A MULTI-STAKEHOLDER PROCESS .....	CHAPTER 4
General Lessons .....	4-1
Getting Started .....	4-2
Process .....	4-4
Identifying and Developing Compliance Assistance Materials .....	4-4
Compliance Assistance Workshops .....	4-6

**TABLE OF CONTENTS (continued)**

APPENDICES

- Appendix A: Summary of Available Information on Compliance Assistance Needs
- Appendix B: Compliance Assistance Workshop Agenda
- Appendix C: Flyer for the Compliance Assistance Pilot
- Appendix D: Summary of Compliance Assistance Workshop Evaluation Forms

LIST OF EXHIBITS

- Exhibit 2-1: Timeline for Compliance Assistance Pilot Project ..... 2-2
- Exhibit 2-2: Applicability Flowchart - NJ Community Right to Know Survey ..... 2-9
- Exhibit 3-1: Regulations Suggested for Additional Compliance Assistance  
Materials ..... 3-3

The goal of the Compliance Assistance Pilot was to facilitate compliance by providing improved compliance assistance to New Jersey's batch chemical industry. This was achieved by developing types of compliance assistance that would be most helpful to industry and have the greatest potential to improve a facility's ability to meet its regulatory requirements. To achieve this goal, the Pilot Team prepared a set of Compliance Assistance Materials (CAM), which includes the following:

- A list of 32 New Jersey environmental regulations.
- Plain language summaries of 20 New Jersey environmental regulations.
- Detailed applicability flowcharts for six regulations that can help determine how the regulations apply to a facility.
- Summaries of NJ DEP's compliance assistance programs and information on how to take advantage of them, and
- Information on how to obtain additional New Jersey and federal compliance assistance resources, such as training materials and regulatory guides.

The CAM focuses on New Jersey regulations in an effort to complement EPA's Chemical Industry Compliance Assistance Center, ChemAlliance, which is designed to help small chemical manufacturing firms comply with federal rules. While the team chose to address topics that are particularly relevant to the batch chemical industry, information in the CAM is not limited to batch chemical facilities and should also prove useful to many other industries.

Once the Pilot Team finalized the CAM, it undertook several outreach activities to increase industry's access to these materials. This included putting the CAM on the NJ DEP web site and organizing two compliance assistance workshops.

The Pilot Team believes that the team approach used to develop the CAM and conduct outreach activities was particularly valuable because it allowed efforts to be targeted toward compliance assistance activities that industry finds most useful. The team approach also leveraged agency resources available for developing the CAM and implementing outreach activities.

The purpose of this report is to document the activities of the Compliance Assistance Pilot in an effort to help sustain these activities in New Jersey and to encourage the transfer of this experience to other states. In this chapter we summarize key findings from this pilot effort, including lessons learned from pilot activities and potential benefits of the pilot. We also describe an ongoing partnership between industry and NJ DEP aimed at continuing to help facilities improve their environmental compliance.

## **LESSONS FROM PILOT TEAM ACTIVITIES**

We have identified key lessons from each phase of the Pilot Team's efforts, including defining the scope of the work, identifying and preparing the CAM, and conducting outreach activities to publicize the CAM. We hope that these lessons will help guide future compliance assistance efforts. These lessons are listed below and described in greater detail in Chapter 4 of this report.

### **General Lessons**

- Lesson 1.** Government and industry working together cooperatively can achieve an enhanced outcome.
- Lesson 2.** Obtain agency understanding and commitment that resources will be provided to sustain the compliance assistance activities initiated through this type of effort.
- Lesson 3.** Develop guidelines for open communication.

### **Getting Started**

- Lesson 4.** Ensure that the project team has representation from all relevant parties and maintains the flexibility to adjust the mix of participants to meet the demands of specific project activities, if necessary.
- Lesson 5.** Recruiting a larger Pilot Team can reduce the time commitment for individual members.
- Lesson 6.** Gain up-front commitment from team members that they will see the project through to completion.
- Lesson 7.** Allocate sufficient resources for managing a multi-stakeholder process.

**Lesson 8.** Gain full support of managers at the agencies implementing the regulations.

### **Process**

**Lesson 9.** Communicate regularly and establish tasks and responsibilities.

**Lesson 10.** Consider alternative configurations of team task assignments.

### **Identifying and Developing Compliance Assistance Materials**

**Lesson 11.** Research other compliance assistance efforts in order to identify potential activities and products that fill gaps in, rather than duplicate, current resources.

**Lesson 12.** Identify and use an efficient method for determining what forms of compliance assistance activities are most useful.

**Lesson 13.** Select compliance assistance activities according to available resources.

**Lesson 14.** Allocate sufficient time to prepare and finalize compliance assistance materials.

**Lesson 15.** Distribute workload across Pilot Team members.

### **Compliance Assistance Workshops**

**Lesson 16.** When developing compliance assistance workshops, strike a balance between depth and breadth according to facility needs and existing or planned compliance assistance activities.

## **BENEFITS FROM PILOT TEAM EFFORTS**

Pilot Team members and workshop participants have commented that they benefitted significantly from Pilot Team activities. Pilot Team members have benefitted from the cooperative nature of this effort that has created a positive, constructive relationship among representatives from industry, NJ DEP, and EPA. Workshop participants have benefitted from increased accessibility to compliance assistance information. We expect that Pilot Team activities will yield additional benefits that can not yet be quantified, such as increased compliance with environmental regulations. We describe both actual and potential benefits below.

## Actual Benefits

- **Enhanced communication and cooperation between industry and regulators.** Government and industry representatives worked jointly to define objectives, select and prepare compliance assistance materials, and organize and participate in compliance assistance workshops. This cooperative effort has helped create a positive atmosphere in which industry representatives and NJ DEP can work together to increase environmental compliance.
- **More efficient and effective delivery of compliance assistance.** By working directly with industry and trade association representatives in developing compliance assistance tools, NJ DEP can better target its efforts to meet the most pressing needs in terms of both topics to be addressed by and formats of compliance assistance. The direct involvement of industry in developing the CAM and organizing and presenting the workshops also meant that effective compliance assistance tools could be developed with less agency resources.
- **Increased access to compliance assistance information and regulatory staff.** In the past, regulatory agencies did not appear to be a primary source of compliance assistance. This project worked to change that in New Jersey. The project provided workshop participants with the CAM, a list of NJ DEP contacts, and an opportunity to hear NJ DEP staff and industry experts discuss keys to compliance. The Pilot Team increased access to the CAM by posting it on the NJ DEP web site and announcing it through flyers and notices in trade association newsletters.

## Potential Benefits

- **Peace of mind for industry.** With a greater understanding of environmental regulatory requirements, facilities may have less concern over the potential to be unknowingly out of compliance with some of the many environmental requirements that apply to them.
- **Economic benefits for industry.** With increased access to compliance assistance information, industry may need fewer staff resources to track regulatory requirements and comply with regulations. Also, to the extent that the CAM and compliance assistance workshops lead to a higher degree of compliance, a facility may be subject to fewer fines.
- **Enhanced environmental compliance.** The Pilot Team anticipates that the increased access to compliance assistance materials and access to NJ DEP staff may improve environmental compliance. This will benefit the environment and the public if the improved compliance results in fewer releases to the environment.

## **FUTURE ACTIVITIES**

The completion of the CAM and the compliance assistance workshops represents the culmination of the Compliance Assistance Pilot. However, another important goal of the pilot is to create a framework for sustained cooperation between NJ DEP and industry in developing improved tools for compliance assistance.

Pursuant to the Pilot Team's recommendations, NJ DEP and industry representatives have formed an ongoing partnership, tentatively called the Compliance Assistance Working Group. A number of industry representatives on the Pilot Team and participants in the compliance assistance workshops have volunteered to participate in the Working Group along with NJ DEP staff. Industry, NJ DEP, and trade association representatives are currently discussing the specific activities of the group.

The goal of this continued partnership between government and industry representatives is to maintain the CAM and evaluate the need for new compliance assistance products. Keeping the information presented in the CAM up to date is key to ensuring that this information continues to be a valuable resource for facilities and a valuable reference for NJ DEP. The Working Group may also develop new compliance assistance tools to fill specific needs identified through feedback from the regulated community. This could include such activities as identifying additional priority regulations for developing applicability flowcharts, conducting additional compliance assistance workshops as new materials are developed or as significant regulatory changes occur, and sending periodic mailings of regulatory and bibliographic updates to industry.

## **STRUCTURE OF THE REPORT**

The following chapters of this report document the activities of the Pilot Team, discuss potential future compliance assistance activities, and highlight the lessons learned from this effort to improve access to compliance assistance information. Chapter 2 describes the specific activities undertaken by the Pilot Team, including preparing the CAM and conducting outreach efforts. Chapter 3 describes future compliance assistance activities based on the continuing partnership between NJ DEP and industry. In Chapter 4, we present key lessons learned from the Pilot Team's efforts.

Four appendices to this report provide additional details on the Compliance Assistance Pilot that may be useful for implementing similar efforts in other states or for other jurisdictions. These include the agenda for the compliance assistance workshops, a flyer providing an overview of Pilot Team activities, and a summary of the evaluation forms submitted at the workshops. We also include a summary of research on compliance assistance needs conducted through this pilot project, which is a compilation of compliance assistance needs identified by the Chemical Manufacturers Association, EPA's Office of Enforcement and Compliance Assurance, and industry participants in this pilot project and the overall New Jersey Chemical Industry Project.



The Compliance Assistance Pilot was launched in October 1996. Exhibit 2-1 charts the progress of this effort over a two and one-half year timeline. During this period, the Pilot Team defined the scope of its activities, identified specific industry needs for compliance assistance, developed compliance assistance materials to meet these needs, and conducted outreach activities within the regulated community to help facilities take advantage of these new materials. The Pilot Team's work culminated in organizing two compliance assistance workshops that were attended by more than 100 facility representatives. This chapter describes the specific activities undertaken by the Pilot Team. Our hope in presenting this information is that others who wish to undertake similar efforts to provide more effective compliance assistance can benefit from our experiences.

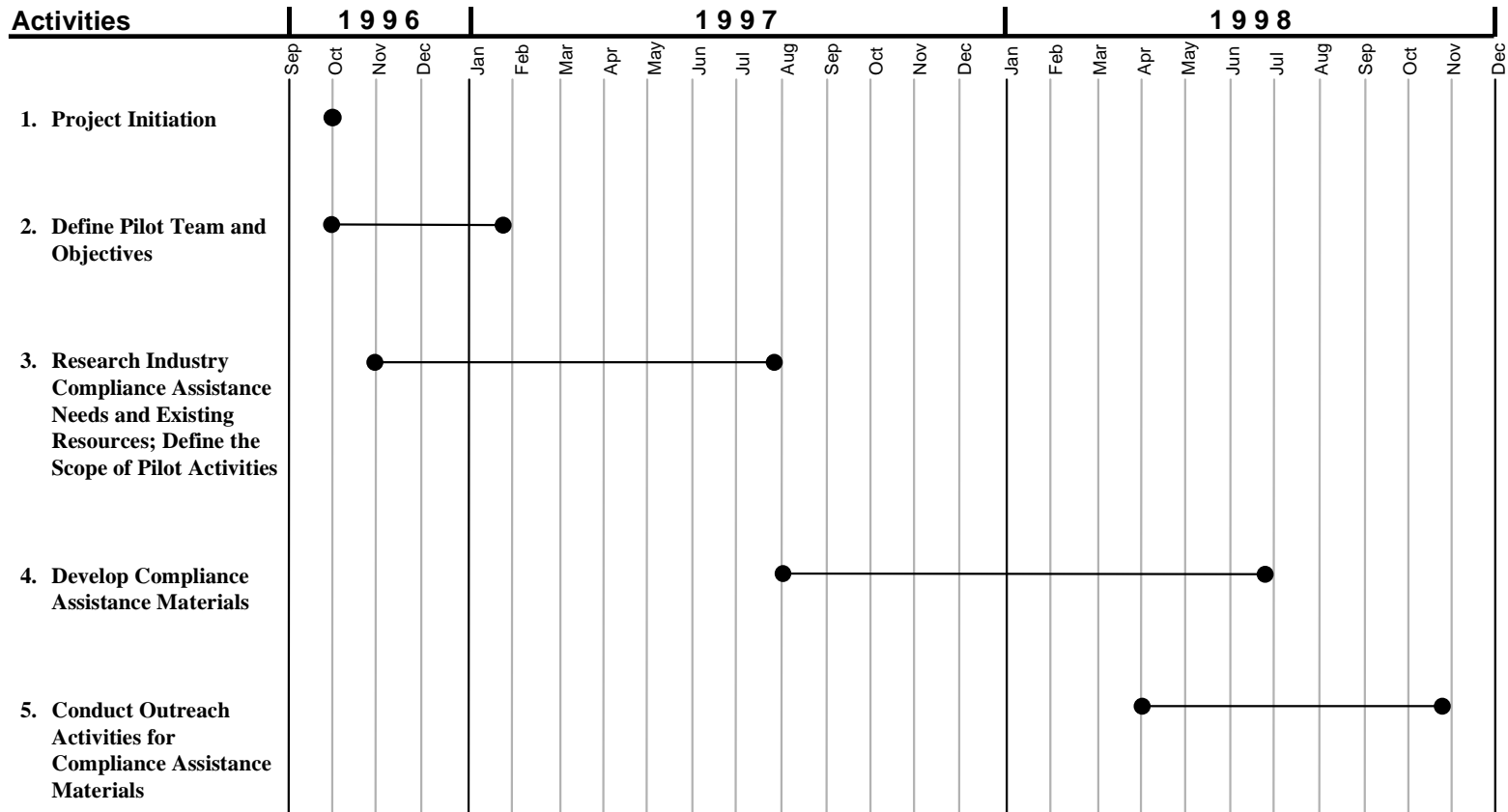
### **1. Project Initiation (October 1996)**

Compliance assistance was selected as one of four pilot projects for the NJCIP at its second Stakeholder meeting, held in October 1996. During this meeting, the Stakeholders reviewed a list of 45 issues they had identified concerning improvements in approaches to environmental regulation of the batch chemical industry in New Jersey. Two of these issues, which involved seeking better approaches to providing compliance assistance in the form of a compliance guidebook and notification of regulatory changes, were combined into a single project and selected as a pilot by the Stakeholders.

In choosing this pilot project, Stakeholders concluded that the primary barrier to compliance was not the amount of information available for companies, but effective presentation and dissemination of this information. A number of facility representatives felt that compliance information was difficult to find and was sometimes prohibitively expensive to obtain. In addition, they emphasized the need for simplified explanations of regulations. They suggested a two-fold focus for the pilot project: (i) support and augment ongoing compliance initiatives, and (ii) devise ways in which compliance information could be made more readily available for all companies.

**Exhibit 2-1**

**Timeline for Compliance Assistance Pilot Project**



## **2. Define Pilot Team and Objectives (October 1996-January 1997)**

### **Pilot Team**

The initial Pilot Team was comprised of representatives from EPA, NJ DEP, industrial facilities, academia, and trade associations. In an effort to have all interests fully represented on the Pilot Team and to ensure that the team would have the necessary expertise, additional representatives from EPA's Office of Enforcement and Compliance Assurance (OECA), Office of the Small Business Ombudsman and Region 2 Division of Enforcement and Compliance Assistance, as well as NJ DEP's Office of Enforcement and Compliance and Small Business Assistance Program were invited to join the project team.

Many of these new team members provided insight into current compliance assistance efforts that were being undertaken in their respective organizations. For example, EPA's OECA had already developed virtual compliance assistance centers on the Internet for four sectors; printing, automotive service, metal finishing, and agriculture. They were also in the process of developing a compliance assistance center for the chemical industry. In general, these centers are intended to assist small companies in these sectors in the following ways:

- Help companies understand regulations;
- Identify where companies are having problems complying; and
- Encourage companies to undertake pollution prevention activities.

Among the original members of the Pilot Team were representatives from two trade associations -- the Chemical Industry Council of New Jersey (CIC/NJ) and the Synthetic Organic Chemical Manufacturers Association (SOCMA) -- who made valuable contributions to the pilot by drawing from their experiences working with members to offer suggestions for the types of compliance assistance that would be most helpful. Representatives from a third trade association, the New Jersey Business and Industry Association (NJBIA) were subsequently invited to join the Pilot Team and shared their expertise in organizing workshops. Representatives from all three trade associations also helped identify additional company representatives interested in supporting specific aspects of the pilot.

Unlike the Stakeholder group for the full NJCIP, the Pilot Team did not include representatives from community or environmental groups. Non-governmental representatives from the Stakeholder group did not choose to participate on this particular pilot project, and their participation was not critical to the success of this pilot given its focus on developing compliance assistance materials for industry; this did not pose any controversial issues.

In addition, EPA provided funding for contractor support. The contractor supported the pilot in many different facets such as coordinating, planning, helping to facilitate and summarizing

conference calls and meetings. In this way, EPA's contractor played an important role in sustaining communication among Pilot Team members and in documenting the team's activities. Contractor staff also compiled and analyzed information on compliance assistance, prepared drafts of materials developed by the Pilot Team and formatted them to be posted on the NJ DEP web site. Without contractor support, other members of the Pilot Team would have had to perform these tasks.

Overall, we were successful in establishing a Pilot Team with members that fully represented the relevant constituencies for this compliance assistance initiative -- agencies that establish environmental regulations, companies (both large and small) that need to comply with them, and trade groups that assist industry. In forming the team, we obtained up-front commitments from participants to see the pilot project through to completion. However, due to the length of the project, there was some attrition of the original team members -- mostly related to changes in job status. Approximately half of the original 13 Pilot Team members remained active in the pilot for the full two and one-half years. We recruited replacements for team members, as well as some additional participants to assist when the work load was particularly heavy or when special expertise was needed.

The time commitment that each team member made to the pilot varied. On average the level of effort for core team members who participated in the full range of pilot activities was approximately one day per month over the duration of the pilot. There were 12 core team members, including six from industry and trade associations, two from NJ DEP, three from EPA Headquarters (Office of Policy and Office of the Small Business Ombudsman), and one from EPA Region 2. In addition, three staff members from EPA's contractor each worked an average of five days per month on the pilot project. There were times of increased activity when the core Pilot Team needed additional help. For example, in organizing and presenting two compliance assistance workshops, the team recruited six additional industry representatives and eight state regulatory staff (seven from NJ DEP and one from the NJ Department of Transportation) to help prepare and present material. Summing up the contributions of all Pilot Team members over the more than two-year life of the pilot, the total effort was approximately the equivalent of four person-years, or an average of just under two full time staff per year. In planning future efforts, it is important to keep in mind that the level of effort required of any one individual can be moderated by the number of team members recruited to help in any given activity.

### **Project Objectives**

To help structure the pilot and maintain our focus, the team developed a "Project Plan" that defined the project and outlined its goals, objectives, and milestones. We determined that the pilot project would attempt to improve environmental compliance within the batch chemical industry by identifying those forms of compliance assistance that are most beneficial to the industry and have the greatest potential for helping companies improve their environmental performance. The goal of this project is to make recommendations for improving the compliance assistance available to the batch chemical industry in New Jersey and, if possible, provide specific tools to help facilities in this industry better understand and meet their environmental requirements.

### **3. Research Industry Compliance Assistance Needs and Existing Resources; Define the Scope of Pilot Activities (November 1996-July 1997)**

#### **Research Compliance Assistance Needs**

The next phase of the pilot involved determining how the team could make the most valuable contribution to meeting industry's needs for compliance assistance. We recognized that the universe of possible activities was immense and that our resources were not. To help us focus our work, some NJCIP Stakeholder and Tracker facilities provided information about their current commercial compliance assistance resources and regulations for which they needed the most assistance.<sup>1</sup> In addition, SOCMA and CIC/NJ sought similar information from their members. Specific questions asked of these facilities included:

- What compliance assistance tools did they currently use (both government-sponsored and commercial services)?
- What regulations were covered by the compliance services they listed?
- What tools were offered by trade associations?
- What additional compliance assistance materials would they like to see in the future? and
- What format would be most useful for presenting these materials?

The project team also considered information on compliance assistance needs from two additional sources -- the results of a 1994 Chemical Manufacturers Association's (CMA) survey of its members designed to identify the regulations for which companies most needed compliance assistance; and discussions with OECA staff about their understanding of the needs for compliance assistance in the chemical industry, which is based on informal contact with representatives from chemical companies and trade associations. Information from these contacts has helped OECA in designing its Internet-based national chemical industry compliance assistance center, ChemAlliance, which is available at:

**<http://www.chemalliance.org>**

Based on the information available from CMA and OECA, plus the results of our own efforts, we concluded that chemical companies have difficulty understanding many NJ regulations and that complying with these regulations is very time-intensive, especially for smaller companies

---

<sup>1</sup> In addition to Stakeholder facilities, the NJCIP maintains contact with approximately 20 Tracker facilities. These Trackers are actively interested in the NJCIP, but unable to commit to participating as full Stakeholders. We keep them informed of project activities and they provide comments or input as appropriate.

that do not have staff specializing in environmental compliance. We concluded that companies' most urgent needs are for information on:

- What regulations apply to them;
- How the regulations apply to them;
- What they need to do to comply with the regulations; and
- How they can stay abreast of regulatory changes.

The information collected also indicated that companies preferred receiving this additional compliance assistance in the following formats:

- Electronically searchable compliance information;
- Plain language summaries of regulations/applicability flowcharts;
- Training programs;
- Confidential question and answer sessions; and
- Regulatory alert services.

The task of gathering this information was difficult and, therefore, very time-consuming. In retrospect, defining compliance assistance needs was one of the biggest challenges that the Pilot Team encountered. Future efforts may be able to streamline this process by relying more on existing information. Toward this end, Appendix A presents the detailed results of our findings based on existing information and information that was collected from the NJ CIP Stakeholders and Trackers under this pilot.

### **Define Scope of Pilot Activities**

The project team decided that the pilot should focus on NJ state regulations and not attempt to address federal requirements, largely because OECA had already begun to develop its Internet-based national compliance assistance center for the chemical industry that was expected to focus on federal regulations. We also decided to develop three compliance assistance products to help meet the industry needs described above:

- (1) A list of major state regulations that are relevant to batch chemical manufacturers, along with short plain language descriptions and contacts within NJ DEP's enforcement and permitting programs that facilities can call with questions;
- (2) Applicability flowcharts for several key regulations that have significant impact on batch chemical companies and appear to present particular compliance challenges for facilities; and
- (3) A working bibliography of available compliance assistance resources.

In addition to these three major tools, we decided to develop a summary of NJ DEP compliance assistance programs, a glossary of acronyms, and a user survey. These products were combined into a single package of compliance assistance materials (CAM). To make the CAM more accessible, it was produced in traditional print format and also posted on NJ DEP's web site (see text box).

Based on the resources of the Pilot Team, we anticipated that it would be possible to develop applicability flowcharts for only a limited number of New Jersey regulations. Therefore, the team had to select priority regulations for which we would develop flowcharts. The Pilot Team selected these regulations based on the following criteria:

- Industry-reported difficulty in understanding how a regulation applies to them;
- The regulation is not currently undergoing revision;
- Requirements or applicability of the regulation have changed recently; and
- No major changes in the regulation are anticipated in the near future.

Using these criteria, the team narrowed the list of 32 environmental regulations administered by NJ DEP (including one administered by the NJ Department of Treasury -- the Spill Compensation and Control Tax) down to the following six regulations for developing applicability flowcharts:

- (1) Air Pollution Control: Subchapter 8, General Permits (N.J.A.C. 7:27)
- (2) New Jersey Release and Pollution Prevention (N.J.A.C. 7:1K)
- (3) Community Right-to-Know (N.J.A.C. 7:1G)
- (4) Discharge of Petroleum and Other Hazardous Substances (N.J.A.C. 7:1 E)
- (5) Spill Compensation and Control Tax (N.J.S.A. 58:10-23.11, et seq.)
- (6) Industrial Site Recovery Act (N.J.A.C. 7:26B).

The Pilot Team's work in defining the scope of its activities was a critical step in the project during which we developed a clear vision of tangible compliance assistance materials that could be useful to facilities. These materials served as the focus of the team's future efforts. Given their perspective as potential users of the compliance assistance materials, input from industry representatives on the Pilot Team was a key factor in defining the components of the CAM and in selecting the six regulations for flowcharts.

Printed copies of the Compliance Assistance Materials can be obtained from:

Chuck McCarty  
NJ Department of Environmental Protection  
Small Business Assistance Program  
401 East State Street (PO Box 423)  
3rd Floor, East Wing  
Trenton, NJ 08625  
telephone: 609-292-3600

These materials can also be viewed on NJ DEP's web site at:

<http://www.state.nj.us/dep/enforcement/home.htm>

#### **4. Develop Compliance Assistance Materials (August 1997-June 1998)**

The CAM was developed over a period of 11 months. This was accomplished through a group effort that involved all members of the Pilot Team working together to compile the information, write the materials, and review them for clarity and accuracy. The CAM consists of many components (see text box) which are intended to be used together as a valuable resource to all types of facilities, including batch chemical manufacturers.

---

##### **Compliance Assistance Materials**

- Summary of New Jersey regulations
  - Summary of NJ DEP compliance assistance programs
  - Applicability flowcharts for selected New Jersey regulations
  - Bibliography of compliance assistance resources
  - Glossary of acronyms
  - User survey
- 

The plain language summaries of the New Jersey regulations were largely drafted by NJ DEP personnel who were most familiar with them. Along with the regulation summaries, NJ DEP staff prepared a summary of the Department's current compliance assistance activities including the *Greenstart* program, the Small Business Assistance Program, the New Jersey Technical Assistance program, NJ DEP's One-Stop, and the Hazardous Waste Welcome Wagon Initiative.

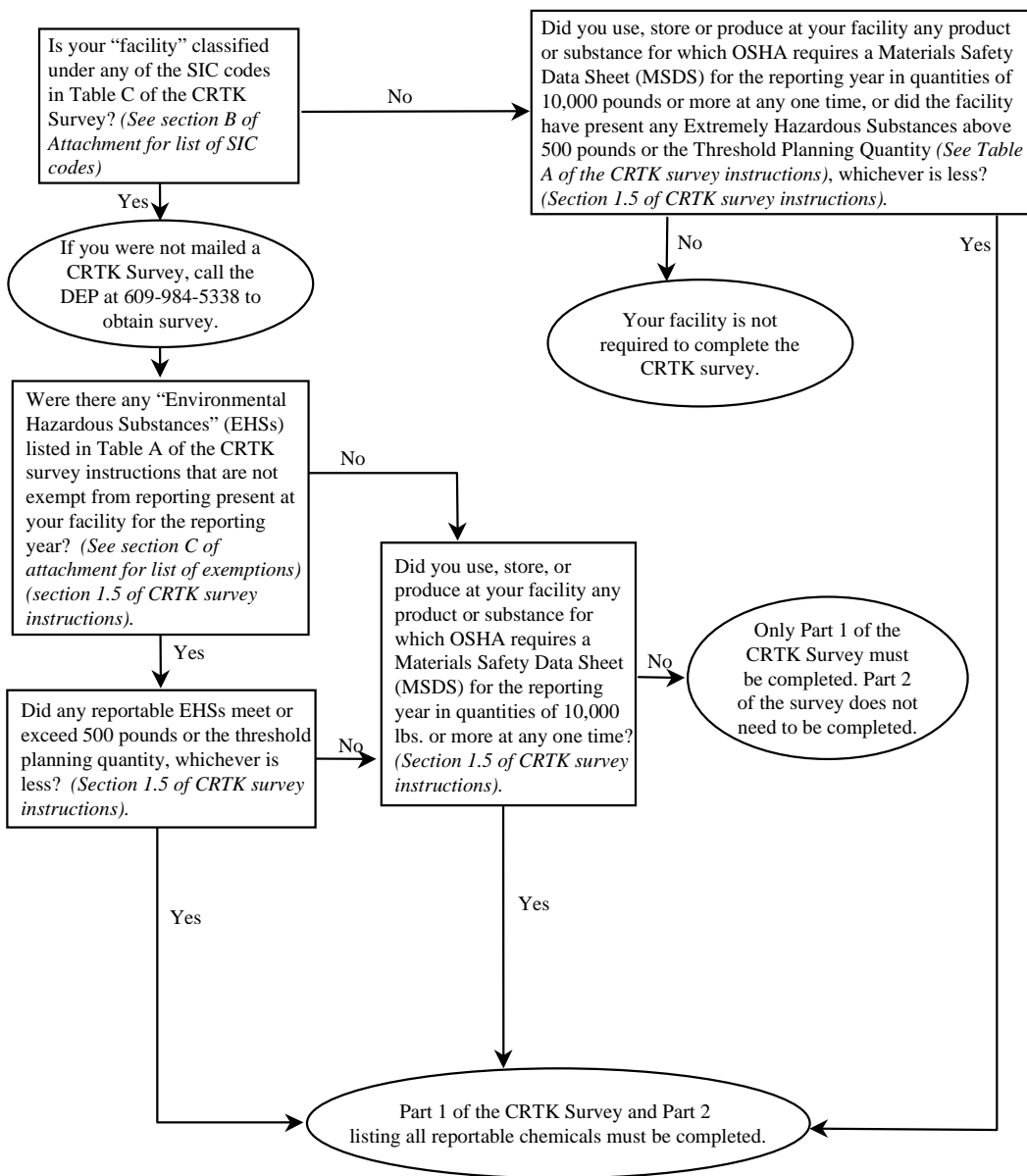
To facilitate the development of the applicability flowcharts, the Pilot Team established small subgroups responsible for drafting the chart for each of the regulations. The teams were comprised of EPA, industry, and trade association representatives, as well as staff from EPA's contractor who played an integral role in formatting and finalizing the applicability flowcharts. An example of one of the flowcharts is presented in Exhibit 2-2. The flowcharts were designed to assist a facility in determining whether and how a regulation applies to them. As shown in the example, the charts pose a series of questions that break a regulation into sub-parts. By carefully deciding the appropriate response to each subsequent question, it is possible for a facility representative to determine any necessary action(s) for complying with the regulation. For each flowchart there is a cover sheet that includes the NJ regulatory citation, a short summary of the regulation, contact phone numbers at NJ DEP, the date the flowchart was prepared, and the due date for any significant annual reports.



## Exhibit 2-2

### APPLICABILITY FLOW CHART NJ COMMUNITY RIGHT TO KNOW SURVEY N.J.A.C. 7:1G (DEQ-094)

Note: Terms in quotations are defined in section A of Attachment (or N.J.A.C. 7:1G-1.2)



All team members provided suggestions of information to be included in the bibliography of compliance assistance resources. EPA's contractor compiled a listing of these resources and checked the accuracy of the information. The list of resource documents was not limited to EPA or NJ DEP material, but -- in keeping with the multi-stakeholder approach -- also included material prepared by several trade associations. It was clearly stated in the bibliography that the presence of these resources in the bibliography did not constitute an endorsement of them by EPA or NJ DEP. This task required substantial effort, as contact information for the resources often changes and can be difficult to track down.

This effort was coordinated through a series of bi-monthly conference calls and a full-day meeting held in October 1997. At the meeting, individual team members presented drafts of the different components of the CAM to the Pilot Team and received comments on how to improve the drafts from the group. Discussions on format, content, and intended usage of the CAM contributed to a well-organized and flowing presentation of materials.

Once the Pilot Team completed final drafts of the CAM, the materials were reviewed by NJ DEP enforcement and program staff. It was critical that our team had NJ DEP participants who had enough authority/experience with their agency to know whom to call upon in the various program offices for this technical review. The purpose of this review was for NJ DEP to check all of the materials, especially our interpretation of the regulations in the flowcharts, for accuracy. The CAM underwent multiple rounds of review within NJ DEP. This stage of the pilot was very time-intensive, but was also necessary to ensure that the CAM was accurate and would serve as a reliable guide for industry.

## **5. Conduct Outreach Activities for Compliance Assistance Materials (April-October 1998)**

As the team progressed in developing the components of the CAM, we began to discuss how the CAM would be made available to the industry. The team focused on two main outreach activities: placing the CAM on the Internet, and hosting two compliance assistance workshops for industry representatives. To facilitate the process, the Pilot Team again divided into subgroups to organize these efforts. The first activity that the team focused on was putting the CAM onto NJ DEP's web site. Placing the CAM onto this web site meets many of the industry compliance assistance needs that the team identified early in the project -- it is accessible, searchable, cost-effective, and it provides links to other relevant programs, trade association sites, and bibliographic resources. The CAM was placed on NJ DEP's web site under the Compliance and Enforcement Division in August 1998. The CAM can be viewed at:

**<http://www.state.nj.us/dep/enforcement/home.htm>**

The group agreed to hold two compliance assistance workshops for facility representatives in October 1998. Along with the web site, these workshops helped publicize the CAM. To increase opportunities for participation in the workshops across the state, it was decided to hold one workshop in Newark, and the second further south in Trenton. The group agreed that these workshops would distinguish themselves from typical "regulatory roundup" sessions by providing a name, a face, and a phone number for state officials who commonly deal with regulatory and compliance issues. The workshops also differed from typical workshops because it was sponsored and presented jointly by agencies and industry. The workshops were intended to be technical and focused on the regulations. Presentations addressed major issues associated with the regulations, such as:

- How to comply with specific elements of the regulations;
- Things inspectors may look for in determining whether the facility is in compliance;
- Common compliance problems;
- The relationship of the state regulation to any federal regulations;
- Any new or upcoming changes in the regulations; and
- Other information specific to the regulation, such as electronic compliance forms.

The workshops were structured around presentations on the six regulations highlighted in the CAM with applicability flowcharts (see Appendix B for a copy of the workshop agenda). The composition of the presentation panels reflected the cooperation between industry and NJ regulators that was evident throughout this project. Panels included one or more NJ DEP representatives (or in the case of the Spill Compensation Tax, a representative from the Department of Treasury) who made an initial presentation about the regulation plus industry representatives who provided additional insights from their perspective and helped identify effective approaches to compliance.

Pilot Team members shared responsibility for coordinating the logistics for the workshops. We publicized the workshops through preparation of an announcement of the workshops and a flyer that provided information on the overall compliance assistance pilot. The announcement and flyer were sent to numerous trade associations to forward to their memberships, as well as to specific publications and newsletters (see Appendix C for a copy of the flyer).

The workshops were held in Trenton, on October 20, 1998, and in Newark, on October 27, 1998. There were 39 participants in Trenton and 67 in Newark. The workshops received positive feedback, with over 85 percent of the participants completing evaluation forms indicating that the presentations improved their understanding of the regulations and 98 percent commenting that they would recommend the workshops to a colleague (see Appendix D for a summary of workshop evaluations).

**FUTURE COMPLIANCE ASSISTANCE ACTIVITIES  
AND A CONTINUING PARTNERSHIP BETWEEN  
NJ DEP AND INDUSTRY**

**CHAPTER 3**

---

The Pilot Team achieved its goal of increasing industry's access to compliance assistance by developing the Compliance Assistance Materials (CAM) and conducting compliance assistance workshops. However, another important goal of the pilot is to create a framework for sustained cooperation between NJ DEP and industry, with the specific objectives of maintaining the CAM and evaluating the need to develop new tools to further improve compliance assistance activities in the future.

The benefits of continuing the activities initiated through this pilot are apparent from the breadth of the industry representatives that participated in the October 1998 compliance assistance workshops organized by the Pilot Team. The workshops were successful in reaching out to a number of companies that do not usually attend environmental activities sponsored by NJ DEP or trade associations. Helping these companies to become more knowledgeable about their responsibilities under environmental regulations, and ultimately, to improve their environmental performance, is a goal shared by both industry and NJ DEP.

Pursuant to the Pilot Team's recommendations, NJ DEP and industry representatives have formed an ongoing partnership, tentatively called the Compliance Assistance Working Group. Through this partnership, industry representatives and NJ DEP hope to maintain an open dialogue on industry's compliance assistance needs and work jointly to identify and develop additional compliance assistance tools to meet these needs. A number of industry representatives on the Pilot Team and participants in the compliance assistance workshops have volunteered to participate in the Working Group along with NJ DEP staff. Industry, NJ DEP, and trade association representatives are currently discussing the specific activities of the group.

**SUSTAINED COMPLIANCE ASSISTANCE ACTIVITIES**

The objectives of the Compliance Assistance Working Group are to maintain the CAM and suggest and/or develop new compliance assistance products based on feedback from the regulated community. Maintaining the CAM is key to ensuring that these materials continue to be a valuable resource for facilities. The group's goal is to keep the individual components of the CAM and the NJ DEP compliance assistance web site up to date.

The Working Group might also consider undertaking new compliance assistance activities. Potential activities include:

- Identifying additional priority regulations for developing applicability flowcharts.
- Conducting additional compliance workshops as new materials are developed or as significant regulatory changes occur.
- Sending periodic mailings of regulatory and bibliographic updates to industry.
- Using new vehicles to publicize the compliance assistance materials, such as placing notices highlighting the CAM or other compliance assistance activities in trade association newsletters.
- Integrating the preparation of applicability flowcharts and plain language summaries into the regulatory development process.

It is important for the Working Group to select future compliance assistance activities based on both available resources and industry feedback. The group may obtain this feedback by compiling user surveys from both the web site and printed CAM. Pilot Team members and participants at the October 1998 compliance assistance workshops have already recommended several regulations for future applicability flowcharts. These regulations are listed in Exhibit 3-1. While the exhibit lists both state and federal regulations, the Working Group is likely to continue focusing on state regulations in an effort to avoid duplicating efforts of EPA's National Chemical Industry Compliance Assistance Center, ChemAlliance.

The Pilot Team considered three of the regulations presented in this table -- Water Pollution Control Act, Toxic Catastrophe Prevention Act, and Air Pollution Control Subchapter 16 (VOC RACT) -- as priorities for developing applicability flowcharts, but did not select them for the CAM because either they were undergoing revisions or were too complex, and therefore too resource-intensive for the group to address at that time.

**Exhibit 3-1**

**REGULATIONS SUGGESTED FOR ADDITIONAL  
COMPLIANCE ASSISTANCE MATERIALS<sup>1,2</sup>**

(Suggestions made by Pilot Team members and workshop participants)

**State Regulations**

Water Pollution Control Act\* (9)

Toxic Catastrophe Prevention Act\* (5)

Underground Storage Tanks (4)

Air Pollution Control, Subchapter 16: VOC RACT\*

**Federal Regulations**

Resource Conservation and Recovery Act<sup>3</sup> (5)

Occupational Safety and Health Administration Regulations (4)

Toxic Substances Control Act (2)

Clean Air Act Title V (2)

Clean Air Act Risk Management Plans (1)

Federal Insecticide, Fungicide, and Rodenticide Act (1)

**Notes:**

1) An asterisk indicates that the Pilot Team ranked the regulation as a priority for developing applicability flowcharts. The team did not select these regulations because they were undergoing NJ DEP revisions, or the effort to develop a flowchart was considered too resource-intensive at the time.

2) The numbers in parentheses indicate the number of compliance assistance workshop participants suggesting a particular regulation. If no number is listed, the regulation was not suggested by workshop participants.

3) The New Jersey Chemical Industry Project's Materials Recycling Pilot Team has prepared a report that identifies five likely materials recycling scenarios for the batch chemical industry and explains how the hazardous waste regulations, which in New Jersey are the same as federal regulations, apply to these scenarios. The goal of the Materials Recycling Pilot is to promote safe and economical recycling of materials produced by batch chemical manufacturing processes by encouraging the use of non-product output from one process as an input in the same or another process. The report is: "Promoting Chemical Recycling: Resource Conservation in Chemical Manufacturing" EPA 231-R-99-001, May 1999.

**LESSONS LEARNED:  
PREPARING COMPLIANCE ASSISTANCE MATERIALS  
THROUGH A MULTI-STAKEHOLDER PROCESS**

**CHAPTER 4**

---

The Compliance Assistance Pilot Team undertook a number of activities to develop the Compliance Assistance Materials (CAM), including defining the scope of the pilot, identifying and preparing the CAM, and conducting outreach activities to publicize these materials. We present key lessons learned from these activities in the sections below. While many of these lessons may appear intuitive, the process of gathering together a diverse set of stakeholders and agreeing on each step along the way can be complex and time-consuming. Yet when done carefully, the products provided are considerably more valuable because they directly address industry's compliance assistance needs. We hope that these lessons help guide future compliance assistance efforts so that they will be as cost-effective as possible.

**GENERAL LESSONS**

**Lesson 1. Government and industry working together cooperatively can achieve an enhanced outcome.** Government and industry representatives worked jointly in the context of this pilot project to define objectives, select and prepare compliance assistance materials, and organize and participate in compliance assistance workshops. Industry input at all stages of the project was critical in producing materials that are targeted to meet their specific compliance assistance needs. The regulatory expertise of government representatives ensured that the materials were comprehensive and accurate. Participants in the compliance assistance workshops considered the materials highly valuable, reflecting the success of the Pilot Team in combining input from government and industry representatives.

In a broader context, outcomes similar to those achieved through this pilot project can significantly contribute to ongoing efforts within many state agencies to complement enforcement activities by placing more emphasis on helping companies comply with environmental requirements. A cooperative project between government and industry such as this can improve relationships; it enables industry to recognize agency efforts to help them comply in a positive light, as opposed to agency efforts to "catch them" doing something wrong. Furthermore, the relationships developed between government and industry can serve as a foundation

for cooperatively developing other innovative approaches to environmental protection.

**Lesson 2. Obtain agency understanding and commitment that resources will be provided to sustain the compliance assistance activities initiated through this type of effort.** The relevant agency should commit to provide resources for keeping the materials prepared through the project up to date, continuing cooperative efforts with industry to identify helpful compliance assistance activities, and integrating compliance assistance tools into the development of regulations (e.g., preparing plain language summaries and applicability flowcharts when regulations are written). While it may be difficult to get this commitment before the compliance assistance materials have been developed, the agency can make a commitment to evaluate the effectiveness of the activities, maintain them, and develop additional materials accordingly.

**Lesson 3. Develop guidelines for open communication.** At the outset of the New Jersey Chemical Industry Project, team members agreed to communicate openly and honestly and to listen and respect all Stakeholder perspectives. This commitment extended to the activities undertaken by the Compliance Assistance Pilot Team and contributed to the high degree of cooperation among team members from government and industry.

## GETTING STARTED

**Lesson 4. Ensure that the project team has representation from all relevant parties and maintains the flexibility to adjust the mix of participants to meet the demands of specific project activities, if necessary.** Our initial Pilot Team, which was drawn from the larger New Jersey Chemical Industry Project Stakeholder group, included representatives from industry, EPA headquarters, EPA Region 2, academia, and several trade associations. To augment the Pilot Team's compliance assistance expertise and obtain input on current EPA and NJ DEP compliance assistance activities, we invited representatives from EPA's Office of the Small Business Ombudsman, EPA's Office of Enforcement and Compliance Assurance (OECA), NJ DEP's Office of Enforcement and Compliance, and NJ DEP's Small Business Assistance Program to join the team. While stakeholders representing community and environmental groups did not choose to participate in this pilot, we considered the team's composition to be appropriate given its focus on developing compliance assistance materials for industry.

We augmented the Pilot Team for some tasks that required additional expertise and a greater level of effort. While Pilot Team members had experience with chemical



and regulatory issues, none had experience organizing workshops. The New Jersey Business and Industry Association joined the Pilot Team to help organize and publicize the compliance assistance workshops. Additional representatives of the Chemical Industry Council of New Jersey joined the Pilot Team to help identify industry panelists for the workshops. Trade associations such as these also can be instrumental for identifying industry representatives and others to participate as Pilot Team members at the outset of the project.

**Lesson 5. Recruiting a larger Pilot Team can reduce the time commitment for individual members.** Some of the tasks undertaken by the Pilot Team, including organizing the compliance assistance workshops and developing the CAM, required substantial effort from many of the Pilot Team members. It is possible to decrease the level of effort required for each team member by recruiting additional members. If the team becomes too large, however, organization and decision-making may become less effective.

**Lesson 6. Gain up-front commitment from team members that they will see the project through to completion.** Pilot Team members made a commitment to complete the project, and while we experienced some attrition among team members primarily due to job changes, we maintained a core group throughout the project. To ensure continuing participation, we encouraged team members to make varying levels of commitment according to their interest and availability. For example, two industry representatives agreed to co-chair the pilot. The co-chairs helped to develop the project workplan, set agendas for and facilitated portions of the conference calls, and participated in all Pilot Team activities. The level of effort of other Pilot Team members ranged from participating in all activities, including conference calls, preparation of the CAM, and workshops, to participating in only some of these activities.

**Lesson 7. Allocate sufficient resources for managing a multi-stakeholder process.** EPA provided funding to hire a consulting firm to facilitate the Pilot Team's efforts. The contractor's activities included preparing agendas and supporting materials for all conference calls and meetings, as well as helping to facilitate and summarize them; undertaking a variety of research tasks; and distributing all materials to Pilot Team members. The contractor also drafted much of the CAM. Without this contractor support, the project activities would have taken significantly longer to complete. Future efforts may want to consider hiring an outside consultant to perform these activities so that they are completed in a timely fashion. As an alternative, agency representatives or Pilot Team members may volunteer to provide these services, although this will increase their responsibilities and time commitments significantly.

**Lesson 8. Gain full support of managers at the agencies implementing the regulations.** Obtaining early support of managers at the participating regulatory agencies is important so that adequate staff resources will be allocated to the project, and activities related to the project will be considered part of their primary responsibilities. However, gaining this support may be difficult before concrete work products are developed, and an initial hesitancy does not mean that full support will not be granted later in the process. While NJ DEP managers were cautious about committing staff time at first, they recognized the value of the effort once they saw initial drafts of the CAM and became enthusiastic about finalizing the materials, putting them on the NJ DEP web site and presenting them at the workshops.

## PROCESS

**Lesson 9. Communicate regularly and establish tasks and responsibilities.** Pilot Team members participated in conference calls once or twice every month. EPA's teleconferencing system provided a valuable resource for these calls. The system made it easy to organize calls and provided convenient call-in access for conference call participants. To ensure that team members had a record of key decisions made on the conference calls as well as a list of tasks agreed upon, the EPA funded contractor summarized each of these conference calls, formed task lists with responsibilities, and distributed these materials to the Pilot Team. Team members also participated in two face-to-face meetings -- one to present and review the first draft of the CAM and a second to plan for the compliance assistance workshops. This regular pattern of communication provided continuity, which helped the project to move forward productively.

**Lesson 10. Consider alternative configurations of team task assignments.** We chose to have industry representatives and contractors prepare initial drafts of the CAM. This required multiple drafts, as we learned to interpret and present the regulations accurately. An alternative approach would be to have agency program experts prepare initial drafts of materials and industry participants review them for clarity.

## IDENTIFYING AND DEVELOPING COMPLIANCE ASSISTANCE MATERIALS

**Lesson 11. Research other compliance assistance efforts in order to identify potential activities and products that fill gaps in, rather than duplicate, current resources.** By researching other compliance assistance efforts, we discovered that OECA was in the process of developing a national chemical compliance assistance center. To avoid duplicating this effort, the team agreed to focus the pilot on New Jersey regulations. Also, the expertise of a Pilot Team member from the Synthetic Organic

Chemical Manufacturers Association (SOCMA) in preparing applicability flowcharts helped the team to focus on this type of compliance assistance tool.

**Lesson 12. Identify and use an efficient method for determining what forms of compliance assistance activities are most useful.** The group initially attempted to identify compliance assistance needs by developing a list of questions for participating facilities. Based on the limited feedback received, it appears that these facilities may have been reluctant to provide this information directly to government representatives. Future efforts may want to task trade associations with obtaining this information from their members, thus providing facilities with anonymity.

As another alternative, future efforts may be able to identify useful compliance assistance activities by relying solely on the input of agency and industry representatives participating in the project and reviewing results of previous efforts to collect information on industry's compliance assistance needs. To facilitate this approach, we present a summary of existing information on compliance assistance needs in Appendix A, including information from our own attempt to solicit industry feedback, the compliance assistance survey implemented by the Chemical Manufacturers' Association (CMA), and OECA's informal contacts with chemical industry representatives.

**Lesson 13. Select compliance assistance activities according to available resources.** The Pilot Team developed several types of compliance assistance materials, in part because of the available contractor support. Projects with tighter resource constraints may want to limit the types of compliance assistance materials prepared and the number of regulations covered. Also, it is important to consider the relative level of effort required to develop the different types of materials. In the case of this pilot, compiling the working bibliography required a significant level of effort, and facilities may have been able to find many of these materials on their own. Projects with tighter resource constraints may want to focus efforts on preparing materials for specific regulations, such as the applicability flowcharts and plain language summaries.

**Lesson 14. Allocate sufficient time to prepare and finalize compliance assistance materials.** The total time required to prepare the compliance assistance materials includes not only initial preparation time, but review and production time. For example, we developed the draft applicability flowcharts in three months. However, it took eight additional months for the Pilot Team to develop supplementary information for the CAM, for NJ DEP to review the draft CAM, and for the Pilot Team to finalize the materials. It also took an additional month to get the CAM printed and distributed to the workshop sites.

**Lesson 15. Distribute workload across Pilot Team members.** The team divided into small working groups to prepare the six applicability flowcharts. This division of responsibilities helped expedite the development of the CAM and reduce the overall burden for individual team members by spreading the responsibility for preparing materials across the team.

## **COMPLIANCE ASSISTANCE WORKSHOPS**

**Lesson 16. When developing compliance assistance workshops, strike a balance between depth and breadth according to facility needs and existing or planned compliance assistance activities.** In part because NJ DEP already holds day-long compliance assistance workshops for several individual regulations, our compliance assistance workshops covered all six of the regulations for which we prepared applicability flowcharts. For each of these regulations, the workshops provided an overview of the applicability flowchart, a summary of the regulation, a description of common compliance problems, an analysis of any interaction with federal regulations, and information on contacts that facilities can call with questions.



# NEW JERSEY CHEMICAL INDUSTRY PROJECT

---

---

## APPENDIX A

### **SUMMARY OF AVAILABLE INFORMATION ON COMPLIANCE ASSISTANCE NEEDS**

In determining which activities to focus on, the Pilot Team needed to establish an understanding of the New Jersey batch chemical industry's need for compliance assistance. To whom do companies in the industry presently turn for answers to their questions concerning regulations? What kinds of compliance assistance tools would be most useful to them? What might be the most effective vehicles for disseminating information on how to meet environmental requirements? This is an important and potentially time-consuming task for any effort to provide compliance assistance. To aid future efforts, we have compiled the information on compliance assistance needs that we relied on in defining the scope of this pilot. By presenting this information, we hope that others who embark on similar efforts will not need to devote the same level of resources to the task of gathering information on what types of compliance assistance are most needed.

We attempted to identify these compliance assistance needs by asking participating facilities about current commercial compliance assistance resources, as well as regulations that pose the greatest compliance challenges. In addition, the Synthetic Organic Chemicals Manufacturers Association (SOCMA) and the Chemical Industry Council of New Jersey (CIC/NJ) sought similar information from their members.

We augmented our own inquiry by reviewing information reported in the Chemical Manufacturers Association's (CMA) *Compliance Assistance Survey* (December, 1994) and through discussions with U.S. EPA Office of Enforcement and Compliance Assurance (OECA) staff about their understanding of the need for compliance assistance in the chemical industry.

CMA's *Compliance Assistance Survey* included a sample of 47 companies at the corporate level and 65 companies at the facility level. CMA also provided some demographic information that allowed the team to look at differing needs between larger and smaller facilities.

In their efforts to develop more effective compliance assistance tools, OECA staff have had informal discussions with representatives of chemical manufacturers and trade associations. Information from these stakeholders has been helpful in the development of OECA's Internet-based national chemical industry compliance center, ChemAlliance, which is available at: <http://www.chemalliance.org>.

Below, we present a summary of the information that we gathered on the compliance needs of the chemical industry as reported by facility representatives. It represents a compilation of

insights from the various sources that we considered, including information from facilities participating in the NJCIP, SOCMA and CIC/NJ member companies, CMA's survey of member companies at the corporate and facility levels, and OECA staff's informal contacts with chemical industry representatives. There were many overlaps and similarities in the results of these efforts.

## Barriers to Regulatory Compliance

- The most frequently cited reasons for difficulty in complying with regulations are:
  - (1) Insufficient/inadequate resources, including staffing and funding at facilities and compliance guidance from agencies;
  - (2) Unsure *which* regulations apply to the company;
  - (3) Unclear *whether* a regulation applies to the company and, if so, *how* it applies;
  - (4) Employees don't understand what to do; and
  - (5) Insufficient self-auditing program.
- ***Interpretation and Applicability of Regulations.*** It is often difficult for companies to get clear, consistent interpretation and information on applicability from the appropriate agency. Some facility representatives feel the need to document conversations with agency representatives because they are concerned that the interpretation that a company will be held to for enforcement purposes may differ from the one offered by the agency representatives during informal conversations. In addition, industry representatives commented that agency staff interpretations differ from one facility to the next, even for facilities with similar situations.
- ***Time-Consuming Nature of Addressing Regulations.*** It is very time-consuming for facility staff to manage large volumes of information and to read and interpret regulations.
- ***Staying Abreast of Regulatory Changes.*** This is not as important an issue for companies that are members of trade associations and have access to regulatory updates issued by them. In fact, in areas where there is a particularly strong and active state trade association, member companies' needs for accessing, exchanging, and retrieving regulatory information are generally being met. However, a large fraction of the chemical industry, especially smaller companies, do not belong to trade associations and have difficulty accessing this essential information.
- ***Assistance at the Local Level.*** There is a substantial need for state- and county-specific compliance assistance.

## Compliance Tools Currently in Use

- The compliance tools most commonly used by chemical manufacturers include seminars, newsletters, and fee-based services. Companies also indicated that an ideal format for receiving compliance assistance would be a telephone call to a staff expert. In addition, while some of the facility representatives indicated that they would most like to see assistance given over the Internet, others, primarily those from smaller businesses, indicated that this would be the least desirable way to receive assistance.<sup>1</sup> Even with the recent increase in access to the Internet, simply posting compliance assistance information on agency web sites would not be useful to some small businesses since they do not universally have access to this resource.

## Utilization of Information/Assistance Sources

- Available information from industry representatives suggests that small facilities use various assistance/information sources. The primary sources of information and assistance for the industry are state and national trade associations, "peer-to-peer" networks, and the supplier/distributor chain. Regulatory agencies do not appear to be a primary source of compliance assistance. This may be due to the fact that compliance assistance programs at the local, state and federal levels were relatively novel when we compiled this information in the early stages of this pilot (early 1997). Industry representatives also said that they rarely used technical assistance programs, which may be a reflection of these programs not focusing their assistance efforts on the chemical industry.

## Most Commonly Requested Forms of Compliance Assistance

- The compliance assistance services and activities that are of greatest interest to companies include:
  - (1) **Compliance guidance** materials that provide plain language interpretations of each regulation. These should include concise summaries, checklists, and flowcharts.
  - (2) The ability to **receive information confidentially, without fear of enforcement actions.**
  - (3) A **regulatory alert service** that provides timely notification of new/upcoming regulations and a monthly list of regulatory due dates.

---

<sup>1</sup> It is important to note that this research was compiled in early 1997 when relatively few small businesses had access to the Internet. This situation is changing rapidly and many facility representatives would now like to see assistance given over the Internet.

- (4) **Training courses** on specific regulatory topics geared to help those at the plant level.
- (5) **Protocols, procedures, and checklists for plant self-audits** to evaluate regulatory compliance and identify areas for improvement.
- (6) An **electronically searchable clearinghouse** of regulations, interpretative memoranda, EPA/state policies, etc.
- (7) **Comparative information between federal and state regulations** that identifies the specific requirements at each regulatory level and helps to determine how to comply with them simultaneously.
- (8) **Database** of regulatory contacts, assistance programs, hotlines, etc.
- (9) **Electronic List-server** through which users could post questions and exchange information.
- (10) **Mechanism for providing feedback to regulatory agencies** on troublesome and/or confusing regulations.
- (11) **Catalogue of training requirements** contained in federal regulations relevant to the chemical industry.





# **NEW JERSEY CHEMICAL INDUSTRY PROJECT**

---

---

## **APPENDIX B**

### **COMPLIANCE ASSISTANCE WORKSHOP AGENDA**

#### **Environmental Regulatory Compliance In New Jersey: What Business Needs To Know**

8:00 to 9:00	Registration and Coffee
9:00 to 9:30	Introduction and Overview of Website
9:30 to 10:15	Air Subchapter 8 Session
10:15 to 10:30	Break
10:30 to 11:15	Pollution Prevention Session
11:15 to 12:00	Community Right to Know Session
12:00 to 1:00	Lunch
1:00 to 1:45	Discharge of Petroleum and Other Hazardous Substances Session
1:45 to 2:30	Spill Tax Session
2:30 to 2:45	Break
2:45 to 3:30	ISRA Session
3:30 to 3:45	Closing Remarks
3:45 to 4:15	Demonstration of NJ DEP Compliance Assistance Webpage and Informal Discussions with NJ DEP and EPA Region 2 Staff



# **NEW JERSEY CHEMICAL INDUSTRY PROJECT**

## **APPENDIX C**

### **Flyer For the Compliance Assistance Pilot**

#### ***About the New Jersey Chemical Industry Project***

For over two years, a unique partnership of industry, environmental groups, trade associations, unions, community representatives, the U.S. Environmental Protection Agency (US EPA), and the New Jersey Department of Environmental Protection (NJ DEP) has collaborated on a project centered on the environmental performance of the batch chemical manufacturing industry in New Jersey. This effort is one of several ongoing sector-based projects within EPA's Industry Sector Policy Division.

The New Jersey Chemical Industry Project began by asking the Stakeholders what inspires companies to achieve – or keeps them from achieving – better environmental performance. Based on the answers and subsequent research, the group chose to implement four pilot projects: materials recycling across and within facilities, flexible track for good environmental performers, trading effluent limits, and this pilot, which is concerned with compliance assistance.

#### ***About the Compliance Assistance Pilot***

The goal of the Compliance Assistance Pilot is to improve environmental compliance, especially within the batch chemical industry, by identifying the forms of compliance assistance that are the most helpful to industry and have the greatest potential to improve the environment.

To meet this goal, the pilot team has prepared Compliance Assistance Materials (CAM), which focus on New Jersey environmental regulations. While we chose topics that apply primarily to the batch chemical industry, they are useful to many other industries as well. The CAM contain the following:

- Plain language summaries of 20 New Jersey environmental regulations.
- Detailed “applicability” flowcharts for 6 regulations that can help determine how the regulations apply to a facility.
- Summaries of NJ DEP's compliance assistance programs and information on how to take advantage of them.
- Information on how to obtain additional New Jersey and Federal compliance assistance resources, such as training materials and regulatory guides.

A printed version of the CAM may be obtained by contacting NJ DEP's Office of Pollution Prevention and Permit Coordination at 609-292-3600 or Office of Compliance Assistance at 609-633-0727. It is also available on the NJ DEP web site at:

<http://www.state.nj.us/dep/enforcement/home.htm>.

In addition to the CAM, the compliance assistance web site provides links to other relevant NJ DEP, EPA and trade association web pages.

Another aspect of this effort is the organizing of workshops in which experts from NJ DEP and industry address common compliance problems for the 6 selected regulations and present the applicability flow charts. In addition, experts from US EPA are available to discuss associated federal regulations. The workshops also include information on how to use the compliance assistance web page and how to stay current with regulatory developments.

---

### **Applicability Flowcharts**

- ◆ Release and Pollution Prevention
  - ◆ Community Right to Know
  - ◆ Industrial Site Recovery Act
  - ◆ Air Pollution Control Act, Subchapter 8
  - ◆ Discharge of Petroleum and Other Hazardous Substances
  - ◆ Spill Compensation and Control Tax
- 

### **Future Efforts**

NJ DEP has made a commitment to keep the compliance assistance materials current as additions or changes to State environmental regulatory requirements occur. NJ DEP is also interested in continuing to work with industry and others to make additions to the CAM based on suggestions from the public, including summaries and applicability flowcharts for additional environmental regulations affecting the batch chemical or other industrial sectors. *If you have suggestions for additions to the Compliance Assistance Materials or would like to participate in preparing additional materials, please contact NJ DEP's Small Business Assistance Program at 609-292-3600 or Office of Compliance Assistance at 609-633-0727.*

### **Compliance Assistance Pilot Team Members**

- Chemical Industry Council/NJ
- New Jersey Business and Industry Association
- New Jersey Institute of Technology
- Synthetic Organic Chemical Manufacturers Association, Inc.
- CasChem, Inc.
- Fabricolor Incorporated
- Fidelity Chemical Products Corp.
- Scher Chemicals, Inc.
- Tricon Colors, LLC
- NJ Department of Environmental Protection
- US Environmental Protection Agency

## **Contacts**

*For further information on the Compliance Assistance Materials and other related activities at NJ DEP and US EPA:*

Chuck McCarty  
Small Business Assistance Program  
NJ DEP  
PO Box 423  
401 East State Street  
Trenton, NJ 08625  
Phone: 609-292-3600  
Fax: 609-777-1330  
Email: cmccarty@dep.state.nj.us

Peg Hanna  
Office of Compliance Assistance  
NJ DEP  
PO Box 422  
401 East State Street  
Trenton, NJ 08625  
Phone: 609-633-0727  
Fax: 609-292-1803  
Email: phanna@dep.state.nj.us

Ron Lockwood  
Compliance Assistance and Program Support Branch  
US EPA Region 2  
290 Broadway, 21<sup>st</sup> Floor  
New York, NY 10007-1866  
Phone: 212-637-3413  
Fax: 212-637-4035  
Email: lockwood.ronald@epamail.epa.gov

Arnold Medbery  
Office of Small Business Ombudsman  
US EPA, Mail Code 2131  
401 M Street, SW  
Washington, DC 20460  
Phone: 800-368-5888  
Fax: 202-401-2302  
Email: medbery.arnold@epamail.epa.gov

***For information on the NJ Chemical Industry Project and EPA's other Sector-Based Projects:***

Catherine Tunis  
US EPA, Mail Code 2128  
401 M Street, SW  
Washington, DC 20460  
Phone: 202-260-2698  
Fax: 202-260-8662  
Email: tunis.catherine@epamail.epa.gov



# NEW JERSEY CHEMICAL INDUSTRY PROJECT

## APPENDIX D

### **Summary of Compliance Assistance Workshop Evaluation Forms**

#### Workshop Details

	<b>Trenton</b>	<b>Newark</b>
<b>Date</b>	October 20, 1998	October 27, 1998
<b>Location</b>	Masonic Temple	New Jersey Institute of Technology
<b>Attendees</b> (excluding team members and presenters)	39	67
<b>Evaluation Forms Submitted</b>	28	39

*(Note that not all respondents completed all questions)*

#### Workshop Evaluation Forms

**I. How would you describe the impact of the panel presentations on your understanding of the applicability of New Jersey regulatory requirements for the selection of regulations?**

	<b>Significant Improvement</b>	<b>Some Improvement</b>	<b>No Improvement</b>
Air Subchapter 8	30	30	5
Release and Pollution Prevention	29	30	8
Community Right to Know	18	41	8
Discharge of Petroleum and Hazardous Substances	21	31	6
Spill Tax	22	23	5
Industrial Site Recovery Act	16	14	4

**Comments on Presentations**

Several respondents offered suggestions for improving the presentations. These suggestions are summarized in the following table. ( ) indicates number of responses if more than one

<b>Presentation</b>	<b>Comments</b>
Air Subchapter 8	Excellent handout. May have been too technical for an overview. Don't spend a lot of time going through applicability slides, focus more on permits. Unfocused. Could have made better distinction between Title V facilities and smaller facilities.
Release and Pollution Prevention	Excellent handout. Didn't feel it was explained well. Not enough panel participation, questions, etc.
Community Right to Know	General information, but everyone needs to know it. Not enough panel participation, questions, etc. Poor presentation.
Discharge of Petroleum and Hazardous Substances	Good overview. Good presentation, just nothing new. Should have mentioned Spill Compensation and Control Act. Too fast and not enough depth (Trenton). Difficult to understand at times (Newark).
Spill Tax	Excellent presentation (2). Good info, but could have been tucked into DPCC session. Department of Treasury should have had graphs and handouts. Should not read straight from tax code (3).
Industrial Site Recovery Act	Informative. Good overview.

**II. The workshop's pace was:**

<b>Too fast</b>	<b>Too slow</b>	<b>About right</b>	<b>Variable</b>
3	0	49	13

**III. Was there sufficient time allotted for questions after each panel presentation?**

Yes	No
65	1

**IV. What were the most useful or relevant aspects of the workshop?**

( ) indicates number of responses if more than one

Presentations:

- Air Subchapter 8 (9)
- Community Right to Know (6)
- Discharge of Petroleum and Hazardous Substances (4)
- Release and Pollution Prevention (3)
- Spill Tax
- Industrial Site Recovery Act

Other:

- Compliance Assistance Materials (9)
- Where to go to get information and contacts (7)
- Panel performance, question and answer sessions (4)
- Web site demonstration (4)
- Abundance of handouts (4)
- Helpful to bring business and regulatory agencies together (4)
- Information conveyed in easy to understand manner (3)
- The quality of the presentation materials/overheads and the intermediate level of the presentation. Excellent overview of key areas. Well balanced and relevant (3)
- Mention of recent regulatory changes (2)
- Binder with enclosed presentation slides and note-taking space (2)
- Flowcharts
- Better understanding of regulations for our new facility
- "One-stop knowledge" – having all the regulations covered in one program
- Compliance "challenges" included in presentations
- Criteria for coverage and non-coverage
- Finding that we are exempt from most requirements

**V. What were the least useful or relevant aspects of the workshop?**

( ) indicates number of responses if more than one

Presentations:

- Spill Tax (14)

- Discharge of Petroleum and Hazardous Substances (3)
- Industrial Site Recovery Act (2)
- Community Right to Know (2)

Other:

- Most of the presentations were too broad in scope. Perhaps a seminar focusing on specific industries and how these issues apply to them would be more useful (3)
- Presenter's reading directly from the regulations or overheads (2)
- Web presentation too long – sufficient to give URL/ address (2)
- Generalizations
- The delivery of some of the information was hard to follow.
- Presentations covered subjects that my business doesn't address.
- Topics covered large facilities and are not applicable to me.

**VI. Would you recommend the Compliance Assistance Materials to a colleague?**

Yes	No
60	1

**VII. Are there other environmental regulations affecting your business that you would like to see addressed in the Compliance Assistance Materials in the future?**

( ) indicates number of responses if more than one.

- Water/discharge (9)
- Hazardous waste generation (5)
- Risk Management Plans (5)
- Toxic Catastrophe Prevention Act(5)
- Underground Storage Tanks (4)
- OSHA Standards (3)
- Emergency Response Planning (2)
- Toxic Substances Control Act (2)
- Air Permits
- Federal Insecticide, Fungicide, and Rodenticide Act
- Coordination between EPA regional offices and NJ programs (e.g., DPCC/SPCC plan formats and cross-referencing).
- MACT (pharmaceuticals)
- Handling waste
- Remediation/ investigative sites
- Oversight Rules
- Technical Rules
- 29 CFR
- National Resource Damages
- DOT Hazardous Materials Shipping
- ISO 14000
- Avoiding problems with field inspectors.



**VIII. Do you have suggestions for improving the Compliance Assistance Materials (CAM) and Workshops?**

**Compliance Assistance Materials/Binders**

( ) indicates number of responses if more than one

- Organize CAM in order of presentations or tell people where things should go if changes are made (2)
- Copies of presentations included in book are difficult to read (2)
- Obtain a NJ DEP commitment to keep the CAM up to date.
- Should include Appendix A with DPCC regulations.
- Expand the scope.
- Include a list of abbreviations (*Note - glossary of acronyms is included in the CAM*).
- Verify information on programs – some may be incorrect.
- CAM is “considerably enough.”
- Color coding for different sections of the CAM might organize it better.
- It would be very helpful if the DEP could provide "model" documents for certain submittals (e.g., SPCC plan; P2 plans).
- Industrial Site Recovery Act overheads should be included (and copies should be sent to participants).

**Workshops**

( ) indicates number of responses if more than one

- Have an all day session on Air Sub Chapter 8.
- More detailed information on permit limits.
- Future presenters should better integrate the CAM into their presentations.
- Screen the presentations prior to the session.
- Do not read overheads.
- Use more real world examples or case studies.
- Where possible, be more specific.
- Ask/ survey attendees prior to seminar as to specifics of materials in question.
- Web presentation needs to face audience.
- These courses are valuable and an offering in South Jersey would be appreciated (Trenton).

**IX. Would you be willing to participate in a follow-up focus group to discuss further the revision or development of additional compliance assistance materials?**

Yes	No
12	38