



**Center for
Contemporary
History and Policy**

S t u d i e s i n S u s t a i n a b i l i t y

**Assessing Community Advisory Panels:
A Case Study from Louisiana's
Industrial Corridor**



C h e m i c a l H e r i t a g e F o u n d a t i o n

[Inside Front Cover]



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Assessing Community
Advisory Panels: A Case Study
from Louisiana's Industrial Corridor

Gwen Ottinger

C h e m i c a l H e r i t a g e F o u n d a t i o n

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Executive Summary

Community advisory panels, or CAPs, are a central feature of the U.S. chemical industry's public outreach efforts. CAPs have fostered dialogue between chemical facilities and neighboring communities nationwide; however, they are also frequently criticized for being merely public-relations vehicles for the chemical industry. This paper investigates the performance of CAPs and highlights potential sources of public discontent with the dialogues. Drawing on observations of CAP meetings in St. Charles Parish, Louisiana, in the heart of the state's Mississippi River Industrial Corridor, the paper assesses CAP performance with respect to four key goals: building relationships between chemical facilities and nearby communities, educating residents about plant operations, informing facility managers about community concerns, and facilitating improvements in environmental performance. The case study suggests that CAPs are very effective at building relationships between facilities and community members and conveying to residents information about a facility's operations and environmental performance. However, CAPs often fail to convince residents that facilities pose no threat to their health. In addition, facility representatives' understanding of community concerns raised in CAP meetings is often hampered by the preexisting expectations the representatives have for CAP dialogues. Further, the potential for these panels to foster environmental improvements at plants is limited by the industry's unwillingness to see residents' concerns about environmental and health issues as possibly suggesting new insights into or directions for enhancing environmental performance.

Introduction

Following major accidents at a number of chemical facilities in the 1980s that severely undermined public confidence in the global chemical industry, industry trade associations established the Responsible Care initiative. Responsible Care aims to rebuild public confidence in the industry by improving environmental performance and creating a forum for open communication with stakeholders.

In the United States community advisory panels, or CAPs, have emerged as the dominant form of Responsible Care, motivating a new interest in public outreach. During regularly scheduled meetings CAPs bring together representatives from chemical facilities with residents of the communities in which those facilities are located. While CAPs have been lauded for fostering community-industry dialogue, they have also been criticized by those who suspect them of being little more than public-relations vehicles for the industry. Through a detailed analysis of community-industry interactions in three CAPs in St. Charles Parish, Louisiana, this paper explores the panels' successes, highlights their limitations, and suggests ways that their credibility as forums for genuine dialogue might be improved.

After reviewing the history of CAPs and the political and regulatory contexts in which they developed, the paper creates a framework for assessing CAP performance. It establishes four main goals for CAPs: building relationships between chemical facilities and nearby communities; educating residents about plant

operations; informing facility managers about community concerns; and facilitating improvements in environmental performance. Following a brief discussion of the specific CAPs on which it focuses, the paper describes how the four goals are pursued and to what extent they are met. The study finds that the CAPs are most successful at developing relationships between industry and local communities and providing information to residents but recommends that industry representatives engage more seriously with community concerns in order for the panels to realize their other goals fully.

The analysis presented in this paper is based on ethnographic research conducted in St. Charles Parish, primarily between July 2002 and June 2003. Rather than relying on quantitative indicators of whether CAP goals are being met,¹ it offers a "thick description"² of CAP dynamics based on my observations as a participant in CAP meetings and in community life. My conclusions shed light not only on the nominal goals of CAPs but also on how those goals are understood and put into practice by different participants and on the

¹ Frances M. Lynn et al., "Chemical Industry's Community Advisory Panels: What Has Been Their Impact?" *Environmental Science and Technology* 34:10 (2000): 1881–1886.

² Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (Basic Books, 1973).

ways larger community contexts shape interactions between CAP participants. The study highlights the subtle, deep-seated issues that affect CAP performance, partic-

ularly those issues that stem from fundamental differences in the perspectives of facility representatives and community members.

St. Charles Parish in Context

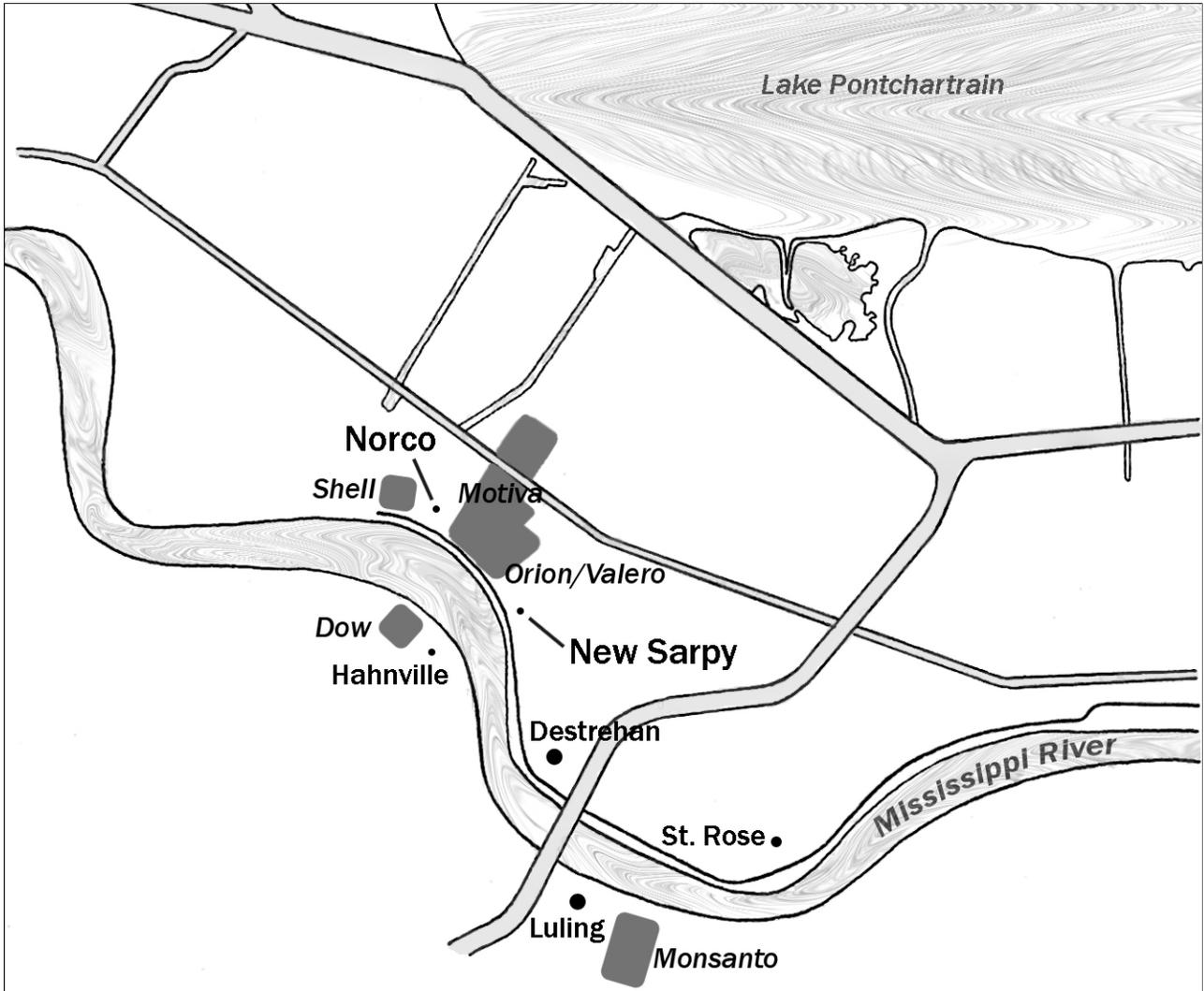


Illustration by Megan Scott Verzi

CAP Background

CAPs are an outgrowth of the Responsible Care program, a global chemical industry initiative established in 1995.³ As implemented by the American Chemistry Council (ACC, formerly the Chemical Manufacturer's Association) in the United States, Responsible Care asks chemical facilities to improve health, safety, and environmental performance beyond what is required by law and to communicate openly with neighbors and other members of the public about the facilities' performance.⁴ Adherence to the detailed guidelines of Responsible Care is an obligation of membership in the ACC.⁵ All ACC member companies are thus required to participate in public dialogues. Although companies need not necessarily establish CAPs to fulfill this requirement, such panels are a prevalent form of public dialogue in the industry.

In 2004 the ACC reported that member companies had established roughly three hundred CAPs.⁶ These panels are such a popular form of public dialogue that the ACC has published the *Guide to Community Advisory Panels*, which advises companies on how to start and sustain effective CAPs.⁷

Political Contexts

CAPs and Responsible Care respond to a crisis of public confidence in the chemical industry.⁸ The crisis was

largely catalyzed by the 1984 Bhopal, India, tragedy, in which a forty-ton methyl isocyanate release from a Union Carbide subsidiary killed thousands of Indian villagers.⁹ The event led to questions about the safety of chemical plant operations worldwide and in the United States triggered community right-to-know legislation and new forms of emergency planning.¹⁰

The growing anti-toxics and environmental justice movements, which emerged in the early 1980s, have also fueled negative public perceptions of the U.S. chem-

³ International Council of Chemical Associations, "Responsible Care," www.responsiblecare.org (accessed 27 June 2007).

⁴ American Chemistry Council, "Responsible Care" (2007), http://www.americanchemistry.com/s_responsiblecare/sec.asp?CID=1298&DID=4841.

⁵ American Chemistry Council, *Guide to Community Advisory Panels* (Arlington, VA: American Chemistry Council, 2001).

⁶ American Chemistry Council, "American Chemistry Council on the Twentieth Anniversary of the Bhopal Tragedy: Lessons Learned Lead to Safer Operations" (Arlington, VA: American Chemistry Council 2004).

⁷ American Chemistry Council, *Guide to Community Advisory Panels* (cit. n. 5).

⁸ Marc S. Reisch, "Chemical Industry Tries to Improve Its Community Relations," *Chemical and Engineering News* 72 (1994): 8–17, 20–21; Barbara Scott Murdock and Ken Sexton, "Community-Based Environmental Partnerships," in *Better Environmental Decisions: Strategies for Governments, Businesses, and Communities*, ed. Ken Sexton, et al. (Washington, D.C.: Island Press, 1999); and Peter Simmons and Brian Wynne, "Responsible Care: Trust, Credibility and Environmental Management," in *Environmental Strategies for Industry: International Perspectives on Research Needs and Policy Implications*, ed. Kurt Fischer and Johan Schot (Washington, D.C.: Island Press, 1993), 201–226.

⁹ American Chemistry Council, *Guide to Community Advisory Panels* (cit. n. 5); Kim Fortun, *Advocacy after Bhopal: Environmentalism,*

ical industry.¹¹ They allege that even the normal operations of industrial facilities threaten the environment and the health of nearby communities. Anti-toxics and environmental justice activists have been effective in introducing concerns about everyday health hazards into the public discourse about the chemical industry, dubbing the Mississippi River Industrial Corridor, with its high concentration of chemical and petrochemical facilities, “Cancer Alley.”

Alongside diminished public support the chemical industry faces targeted opposition from residents of communities adjacent to its facilities and from potential host communities for proposed facilities.¹² These grassroots campaigns, which comprise the environmental justice and anti-toxics movements, focus on a combination of safety, health, and social issues, including racism in industrial siting practices, and can demand anything from environmental cleanup to relocation of whole communities. While Responsible Care endeavors to shift negative public perceptions of the chemical industry in general, CAPs attempt to forestall grassroots opposition to specific facilities by engaging stakeholders at the community level.

Regulatory Contexts

CAPs are also potentially important in the regulatory

context. Environmental regulations do not explicitly require structured dialogues, or even good relations, between chemical facilities and the communities in which they operate. However, regulatory agencies themselves are required to invite public comment before issuing permits, and organized opposition to a facility may make regulators more reluctant to grant a permit or more likely to scrutinize a facility’s performance.¹³ To the extent that CAPs build community trust and support for a facility, they help establish an informal “license to operate” from residents that regulators and chemical companies alike acknowledge to be important.

Further, CAPs are consonant with existing regulatory approaches to public or community involvement. The panels closely resemble (and, some have suggested, are modeled on) government-sponsored citizen advisory committees or boards, mechanisms long used by regulatory agencies to facilitate public input into environmental decision making.¹⁴ CAPs also mirror agencies’ own approaches to addressing intractable conflicts around industrial facilities: the Louisiana Department of Environmental Quality, for example, has instituted a community-industry panel program that sponsors dialogues in communities where residents and chemical facilities are in contention.¹⁵

Disaster; New Global Orders (Chicago: University of Chicago Press, 2001).

¹⁰ Caron Chess and Frances M. Lynn, “Industry Relationships with Communities: Business as Usual?” in *The Greening of Industry Resource Guide and Bibliography*, ed. Peter Groenewegen et al. (Washington, D.C.: Island Press, 1996); and Fortun, *Advocacy after Bhopal*: (cit. n. 9).

¹¹ For a discussion of the environmental justice and anti-toxics movements, see Luke W. Cole and Sheila R. Foster, *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement* (New York: New York University Press, 2001).

¹² Among the works chronicling such opposition in southeastern Louisiana are J. Timmons Roberts and Melissa M. Toffolon-Weiss, *Chronicles from the Environmental Justice Frontline* (Cambridge: Cambridge University Press, 2001); and Steve Lerner, *Diamond: A Struggle for Justice in Louisiana’s Chemical Corridor* (Cambridge, MA: MIT Press, 2005).

¹³ For examples of this trend, see Reisch, “Chemical Industry Tries to Improve Its Community Relations” (cit. n. 8).

¹⁴ Frances M. Lynn and Jack D. Kartez, “The Redemption of Citizen Advisory Committees: A Perspective from Critical Theory,” in *Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse*, ed. Ortwin Renn, Thomas Webler, and Peter Wiedermann (Dordrecht: Kluwer Academic Publishers, 1995), 87–101; Lynn et al., “Chemical Industry’s Community Advisory Panels” (cit. n. 1); Judith Petts, “Evaluating the Effectiveness of Deliberative Processes: Waste Management Case Studies,” *Journal of Environmental Planning and Management* 44:2 (2001): 207–226; Susan L. Santos and Caron Chess, “Evaluating Citizen Advisory Boards: The Importance of Theory and Participant-Based Criteria and Practical Implications,” *Risk Analysis* 23:2 (2003): 269–279.

¹⁵ Roger Ward and Janice Dickerson, “Community-Industry Panel (SOP)” (Baton Rouge, LA: Louisiana Department of Environmental Quality, Community-Industry Relations Group, 2001).

Assessing CAP Performance

Assessing the successes and limitations of CAPs is difficult because no coherent framework of goals or outcomes has emerged against which CAP performance can be evaluated. The specific goals of individual CAPs are determined to a large extent by the panel members themselves as part of the process of establishing the CAP.¹⁶ However, as a chemical industry “best practice” that responds to political trends affecting the industry as a whole, CAPs can be assumed to share a common set of overarching purposes.

While a framework for evaluating CAPs has not yet been created, frameworks for assessing the success of closely related, government-sponsored citizen advisory committees (CACs) have been proposed.¹⁷ In these frameworks a few common elements appear repeatedly. Successful CACs should educate citizens on the policy issues under discussion, inform decision makers about public values, improve the quality of policy decisions, and build relationships between citizens and policy makers.

The last three items are especially important to the credibility of CACs as deliberative bodies. Agencies have been criticized for using a “decide-announce-defend” model in which the public is not consulted until after important decisions have already been made; effective CACs answer these criticisms by not only inviting citizen input but also actually using it to arrive at better decisions.¹⁸

A Framework for CAPs

CAPs differ from CACs in that chemical facilities, unlike government agencies, have no formal obligation to consult with the public about their decisions. The goals developed to assess the effectiveness of CACs are nonetheless relevant to understanding the success of CAPs. Like CACs, CAPs are a form of public consultation. As such, they face parallel questions about the extent to which they take public input seriously. CAPs that aim only to educate community members about plant operations, for example, are easily dismissed as attempting merely to legitimate the industry without hearing concerns and criticisms from outside stakeholders.¹⁹

Four central goals against which CAP performance can be evaluated, when adapted to industry contexts, are building relationships and trust between chemical facilities and community members, educating community

¹⁶ Reisch, “Chemical Industry Tries to Improve Its Community Relations” (cit. n. 8); American Chemistry Council, *Guide to Community Advisory Panels* (cit. n. 5).

¹⁷ Caron Chess and Kristen Purcell, “Public Participation and the Environment: Do We Know What Works?” *Environmental Science and Technology* 33:16 (1999), 2685–2692; Lynn et al., “Chemical Industry’s Community Advisory Panels” (cit. n. 1); and Thomas C. Beierle, “Using Social Goals to Evaluate Public Participation in Environmental Decisions,” *Policy Studies Review* 16:3/4 (1999), 75–103.

¹⁸ Beierle, “Using Social Goals” (cit. n. 17).

¹⁹ Frances M. Lynn and Caron Chess, “Community Advisory Panels within the Chemical Industry: Antecedents and Issues,” *Business*

members about plant operations and performance, informing facilities about community concerns, and facilitating environmental improvements at plants.

The appropriateness of this framework is confirmed in part by the results of a survey of CAP participants that asked them to identify the CAP's primary goals and its effectiveness in meeting them.²⁰ Facility representatives and community members alike believed their CAPs to be very effective at building trust between the company and the community; they also placed a high priority on goals related to improving community understanding of plant operations and industry understanding of community concerns.²¹

Having community members participate in improving plants' environmental records was rated as a less important goal, especially by facility representatives. The goal nonetheless remains an important part of an evaluative framework in light of Responsible Care's interest in "engaging communities in improving plant

operations"²² combined with documented cases in which input from CAP members in fact precipitated significant environmental improvements at facilities.²³

Challenges to CAP Effectiveness

Whether CAPs (and CACs) can meet their goals is influenced by a number of factors, including the involvement of independent facilitators, community participation in agenda setting, commitment to CAPs by high-level facility officials, and even the availability of outside technical experts to community members.²⁴ This case study suggests that while these factors are instrumental to success, they are insufficient to guarantee that a CAP will achieve its goals. The success of CAPs is also limited in subtle but significant ways by fundamental differences in the perspectives on community issues and especially on environmental issues brought to the panels both by community members and by facility representatives.

A Framework for Assessment: CAP Goals

- Building trusting relationships between chemical facilities and community members
- Educating community members about plant operations and performance
- Informing facilities about community concerns
- Facilitating environmental improvements at chemical plants

Strategy and the Environment 3:2 (1994), 92–99; and Reisch, "Chemical Industry Tries to Improve Its Community Relations" (cit. n. 8).

²⁰ Lynn et al., "Chemical Industry's Community Advisory Panels" (cit. n. 1).

²¹ See also Reisch, "Chemical Industry Tries to Improve Its Community Relations" (cit. n. 8).

²² American Chemistry Council, "American Chemistry Council on the Twentieth Anniversary of the Bhopal Tragedy" (cit. n. 6).

²³ Lynn et al., "Chemical Industry's Community Advisory Panels" (cit. n. 1); and Alastair Iles, "Patching Local and Global Knowledge Together: Citizens inside the U.S. Chemical Industry," in *Earthly Politics: Local and Global in Environmental Governance*, ed. Sheila Jasanoff and Marybeth Long Martello (Cambridge, MA: MIT Press, 2004), 285–307.

²⁴ Barbara Scott Murdock and Ken Sexton, "Promoting Pollution Prevention through Community-Industry Dialogues: The Good Neighbor Model in Minnesota," *Environmental Science and Technology* 36:10 (2002): 2130–2137; Murdock and Sexton, "Community-Based Environmental Partnerships" (cit. n. 8); Lynn et al., "Chemical Industry's Community Advisory Panels" (cit. n. 1); and Petts, "Evaluating the Effectiveness of Deliberative Processes" (cit. n. 14).

Case Study: CAPs in St. Charles Parish, Louisiana

How CAPs fare with respect to the goals outlined above is discussed here with reference to community-industry interactions in St. Charles Parish, Louisiana. The parish is home to numerous chemical facilities and several CAPs. This case study includes observations from the three CAPs (and one community-industry panel) attended by residents of two St. Charles Parish towns, each with a history of contention with neighboring chemical facilities.

St. Charles Parish is located roughly twenty miles east of New Orleans, in the heart of the heavily industrialized region known officially as the Mississippi River Industrial Corridor. (See map, page 4.) The parish is split in two by the river. The area to the north of the river, known as the East Bank, is smaller and more densely populated by both people and chemical facilities than the West Bank, where towns and plants near the river give way to rural bayous to the south.

My research focuses on two unincorporated towns on the East Bank: Norco and New Sarpy. Norco is sandwiched between two major petrochemical facilities: a Shell Chemical plant to the west and a Motiva (formerly also Shell) refinery to the east. New Sarpy borders on a second refinery, contiguous with Motiva. Located to the west of town, the refinery began as the Good Hope Refinery in the 1960s and has since been operated by Transamerican (1996–2000), Orion (2000–2003), and now Valero.

Norco and New Sarpy were sites of significant community-industry tension from the late 1990s until

2002. Residents of the all–African American Diamond subdivision in Norco campaigned against Shell Chemical, citing health and safety concerns as well as a history of racist practices as reasons that the company should relocate them. Community activists ultimately won their demands: in June 2002 Shell agreed to offer all Diamond families the option to sell their properties to Shell at a price that would allow them to move to a comparable house away from the plant.²⁵

New Sarpy residents—both white and African American—waged a similar campaign for relocation against Orion Refining in 2001 and 2002. The campaign ended in December 2002 when Orion agreed to sponsor a series of community-improvement projects, to reduce its flaring, and to install a sophisticated monitor to measure sulfur dioxide emissions. Valero continued these projects when it took over the refinery in July 2003.

The CAPs

This report focuses on the CAPs in which residents of

²⁵ For a full discussion of the campaign in Norco, see Lerner, *Diamond: A Struggle for Justice in Louisiana's Chemical Corridor* (cit. n. 12).

New Sarpy and Norco participated in 2002 and 2003—the St. Charles CAP, the Orion CAP, the closely related Norco–New Sarpy Community-Industry Panel (CIP), and the Orion CAP’s successor, the Valero CAP.²⁶ The St. Charles CAP, established in 1992, was cosponsored by several companies, including Shell and Motiva, and drew its members from all over St. Charles Parish. The Orion CAP was started in January 2002 partly in response to New Sarpy residents’ vigorous campaign against the refinery; however, it too was composed of community members from all over the parish, and prior to 2003 only two of the New Sarpy community leaders opposed to the refinery were CAP members. (After purchasing the Orion refinery Valero began its own CAP in 2005 and involved the majority of the leaders of the earlier New Sarpy campaign as members.)

In contrast to the CAPs the Norco–New Sarpy CIP was set up by the Louisiana Department of Environmental Quality (LDEQ) in September 1999 in the hope of ameliorating the rancor between Shell, Diamond activists, and white Norco residents. It comprised residents from Norco and New Sarpy and representatives of Shell, Norco, Orion, and a handful of smaller chemical companies operating in Norco. After eighteen months of LDEQ sponsorship the companies involved assumed responsibility for the CIP, paying for its facilitator and providing snacks for the meetings. By 2002 the primary difference between the CIP and the CAPs was that CIP meetings were more accessible to members of the public who were not already members of the panel. All three panels met bimonthly, were run by a professional facilitator, and covered similar topics in their programs.

²⁶ I attended two meetings of the St. Charles CAP, two of the Orion CAP, and one of the Valero CAP, as well as five meetings of the Norco–New Sarpy CIP. I also studied the publicly available minutes of St. Charles CAP meetings, beginning with the CAP’s establishment in 1992 and extending to Shell’s and Motiva’s withdrawal from the CAP in 2004, and minutes from the first meetings of the Valero CAP (April–December 2005). In addition, as part of my larger ethnographic research on community-industry relations, I was a participant-observer in everyday community life in New Sarpy, I attended community meetings and spoke with community leaders in Norco, and I conducted interviews with representatives from Shell, Motiva, Orion, and, in a follow-up visit in February 2006, Valero. These interactions also inform the analysis.

Results in St. Charles Parish

St. Charles Parish CAPs were highly valued by both chemical facility representatives and community participants. Their most important contribution, in the minds of CAP members, and their area of greatest strength in terms of the goals outlined above was developing relationships between industry and community members. Those relationships rested on satisfying two-way communication between the groups. However, industry representatives felt subtle frustration with their inability to communicate technical information to community members.

Likewise, community members' ability to convey their concerns to facility managers was limited by industry representatives' expectations of CAP discussions, including the representatives' appropriate role within them. Industry representatives saw themselves as authorities on technical matters, making them reluctant either to engage with broader public issues that were often community members' primary concerns or to hear criticisms and suggestions from community members about technical aspects of plant performance. Although these underlying tensions, explained in detail in this section, did not cause participants to question the overall value of the CAPs, they did limit the CAPs' effectiveness, especially their potential to foster environmental improvements.

Developing Relationships

Developing relationships between managers of chemical facilities and residents of nearby communities is a goal of CAPs that is mentioned frequently, not only in the internal industry-based literature on CAPs but also by participants in the St. Charles Parish panels. Community members and facility representatives,

including plant managers, told me they valued the opportunity to meet regularly, to get to know one another, and to establish an ongoing dialogue. In St. Charles Parish the structure of CAP meetings encouraged the development of friendly relationships between community members and facility representatives. Seating arrangements mingled industry and community representatives; meetings included time for socializing, typically over a meal; and presenters were usually recruited from outside the CAP, reinforcing the idea that all CAP members, whether residents or industry officials, were equally in a position to learn from the presentations.

The success of the CAPs in building amiable and egalitarian relationships was to some extent obvious in the interactions of panel members and in members' comments about the panels. CAP members addressed one another informally and were on familiar enough terms that they often joked with or even teased one another in meetings. Asked about the CAPs, plant representatives frequently spoke of their community counterparts with great affection; for example, after a New Sarpy CAP member publicly paid Valero personnel a compliment in a meeting, one of the Valero representa-

tives expressed to me her appreciation of the community members: “That was real nice. They’re great people. I love them.” Community members for their part enjoyed getting to know plant managers and other high-level managers as people as well as professionals. Many community CAP participants marveled at how approachable and down-to-earth plant officials were, despite their impressive professional responsibilities and accomplishments, and sometimes even remarked on how much they had in common with facility representatives as, for example, parents or homeowners.

The full measure of the success of the CAPs in building relationships, however, becomes evident only outside the panel meetings. Between meetings, community panel members took advantage of their relationships with industry representatives to get answers to questions they otherwise would not have been able to ask.

For example, in January 2003 the Orion refinery had a fire in its coker unit that sent up billows of smoke, brought out emergency responders, and—of course—worried New Sarpy residents. One resident, a member of the St. Charles CAP (in which Orion did not participate), told me that at first she had no idea what was going on or what she should do. Then it occurred to her that she could call one of the industry representatives on the St. Charles CAP, an especially approachable community-relations officer at Dow. She was confident, she said, that he would know what was going on or how to find out.

The New Sarpy resident’s preexisting relationship with the Dow representative thus became an important resource for understanding a scary situation—a relationship she would not have had without the CAP (note that she did not think of anyone at Orion to call). Other community members also noted that before the CAPs were formed they had nowhere to go to ask questions and get answers, but with the CAPs in place they did.

The success of CAPs in developing constructive, trusting relationships between community members

and plant managers is also demonstrated by the Orion CAP’s role in bringing New Sarpy residents’ campaign against the refinery to an end. After nearly two years of contention between the refinery and the community group Concerned Citizens of New Sarpy (CCNS), the turning point in the campaign came immediately after a CAP meeting.

Having previously interacted with Orion representatives only in the company of lawyers and environmental justice organizers, the two CCNS leaders serving on the CAP approached the plant manager, also a panel member, directly. The residents’ suggestion that they talk resulted in a meeting between the plant manager and the CCNS board and ultimately in a settlement between Orion and community members that ended the campaign. According to Don Winston, a CAP member and CCNS officer, their decision to talk directly to the plant manager reflected in part their growing belief that they could sit down as equals and have a reasonable discussion of the problems the refinery was causing for the community—a belief undoubtedly informed by their interactions with him in the CAP.

As CCNS leaders became more interested in negotiating directly with Orion decision makers, they also became less willing to engage in activist tactics that targeted high-ranking officials personally, such as campaigns that asked why plant managers were not themselves willing to live next door to their plants.

The CAPs’ strength in developing relationships between chemical facilities and their residential neighbors is thus evidenced not only by interactions of community and industry representatives during CAP meetings but also and more important by the ways that residents engage with industrial facilities outside of panel meetings. CAPs create the possibility for community members to approach facility managers informally and directly. As a result residents have greater confidence that they can get questions answered and problems resolved without resorting to confrontational campaigns.

Educating Community Members

Informing community members about the facilities is a central goal of chemical plants that sponsor CAPs. Responsible Care emphasizes the importance of communicating environmental performance, especially improvements in performance, to the public.²⁷ But, although seldom stated explicitly, the underlying aim of providing information about plant performance to community members is not merely to make them aware and knowledgeable but also to combat actively the public's worst perceptions of the chemical industry.

Industry representatives feel as though community relations are constantly plagued by, in the words of one plant manager, "the myth of industry being bad, wanton polluters; killing people and enjoying it; causing cancer left and right; [and] adding no value to the world." By educating community members, CAPs are meant to dispel this myth—a myth summarized, in St. Charles Parish, by the name given to the region by environmental activists: "Cancer Alley."

Each CAP meeting in St. Charles Parish is organized around a presentation or panel designed to provide information about myriad aspects of facilities' performance with respect to nearby communities. Programs have included presentations on trends in facility emissions, emergency response plans at the plant and parish levels, industry hiring practices and training programs, and regional cancer statistics; one meeting every year is usually devoted to a plant tour.

Furthermore, during plant managers' reports and other less formal parts of CAP meetings, plant representatives encourage community participants to ask questions. These questions often serve as openings for plant representatives to explain further the complexities and nuances of plant operations. In one sense CAP meetings' presentations and question-and-answer periods are largely successful means for educating community members. The copious information made available by industry is apparently accepted and understood by com-

munity representatives to CAPs. Many community panel members respond to criticisms of local facilities by explaining, for example, that emissions are being progressively reduced or that flaring is an important safety mechanism.

Still more members say they are impressed by how knowledgeable and competent plant representatives are and how clean and efficient the facilities they see on plant tours appear to be. Some CAP members, especially in the St. Charles CAP, are even actively engaged in sharing what they have learned during panel meetings with others in their communities.

However, despite the apparent success of CAPs in educating community members about plant operations and performance, CAP participation does not necessarily assuage residents' concerns about health effects associated with living near a chemical plant. Many active CAP members, even those quite supportive of industry, still believe that plant operations may pose significant risks to their health.

For example, one former leader of the New Sarpy residents' campaign against Orion reported in 2006 that she was very satisfied with the way Valero had been running the refinery, was fond of the refinery managers, and was an active member of the CAP. She was also still convinced that emissions of air toxics from the refinery were the cause of health problems in the community.

Other CAP members took a more nuanced view but were nonetheless not persuaded by information presented in the CAP meetings that nearby plants were not harming human health or the environment. Instead, they argued that no one—including plant managers—knew what the effects of industry really were. These community members, in fact, strongly suspected that plant operations were hazardous to their health, but they also chose to trust that plant managers were doing what they could to minimize the hazards.

The CAPs' ability to provide information and increase community members' level of knowledge

²⁷ American Chemistry Council, "Responsible Care" (cit. n. 4).

about the industry cannot be equated with the panels' success in changing residents' perceptions of the overall effects, especially the health effects, of chemical facility operations. While becoming versed in the details of plant operations, community-panel members often retain their conviction that chemical facilities' emissions are hazardous. Their uptake of the information and explanations offered by plant representatives thus testifies less to their acceptance of the facilities' broader claims to pose minimal risks to residents and more to their trust in the competence and dedication of plant staff—trust undoubtedly fueled by the relationships developed in the CAPs.

Understanding Community Concerns

In the community-industry dialogue that CAPs represent, the complement to educating community members about chemical plants is informing industrial facilities about community needs and concerns. While this aspect of the dialogue is less formally institutionalized, CAPs offer several kinds of opportunities for community representatives to express their concerns. Each of the CAPs in St. Charles Parish gives community members the chance to question not only presenters but also plant managers, who at every meeting make reports on the status of their facilities. CAP members are also asked to make their own reports about events and issues in their communities, during which they can express their own concerns and those they have heard from neighbors. Finally, CAP members from the community and industry alike are involved in setting the panels' annual agendas, and community concerns are expressed through the issues selected by members for CAP programs.

However, just as the information provided by industry at CAP meetings does not necessarily convince community members that chemical facilities are not hazardous, the fact that CAPs provide a venue for community members to express their concerns does not necessarily indicate they are successful in increasing industry representatives' awareness and understanding of

community concerns. On the contrary, for most issues that community members raise, industry representatives' preconceptions about the nature of a CAP and the representatives' role in it significantly limit the extent to which they can acknowledge and appreciate community concerns.

Among the issues frequently raised by resident CAP members are chemical plants' social and economic contributions to the community. Where community members express a specific, well-defined need, facility representatives are usually very responsive. In fact, the relationships fostered by CAP interactions can give residents a direct way to solicit industry support for community projects. Members of the St. Charles CAP, for example, successfully requested that companies represented on that panel support a special award program for parish teachers and the revitalization of a New Sarpy playground. More general concerns, such as concerns about the plants' hiring practices—many feel that too few local residents are employed at the plants—or questions about the plants' role in promoting local economic development, are also expressed by community panel members and frequently find their way on to the panels' annual agendas. CAP participants from industry respond to these concerns by highlighting programs already established by plants to address them. The May 2003 meeting of the St. Charles CAP, for example, featured a presentation about the parishwide vocational training program that the industry had helped establish in the hope of giving more local residents the educational background necessary to become operators. Facilities thus use CAP programs to demonstrate their awareness of community concerns rather than using the panels as an opportunity to query residents about their understanding of well-known issues.

Industry representatives also come to CAPs with specific expectations about the kinds of issues that should be discussed at the meetings and in the process miss valuable information about what is most important to community members. All of them recognize the

importance of issues related to the plants' social and economic effects on the community. However, many industry participants would also like to see community members' concerns with health, safety, and environmental issues be the primary focus of CAP discussions and express some dismay when agenda-setting meetings indicate relatively low interest in these issues among resident CAP members. Similarly, industry representatives express some frustration that many of the concerns raised by CAP members are more properly the responsibility of local government than that of industry. At the Valero CAP's February 2006 agenda-setting meeting, for example, resident CAP members expressed interest in talking about the parish's overburdened water-treatment facility and about hurricane preparedness. Valero representatives, with the help of the CAP facilitator, argued that water treatment was the parish's domain and should not be considered a topic for the panel. Hurricane preparedness was deemed a legitimate topic; a Valero representative, however, speaking to me after the meeting, drew the distinction between Valero's measures to ensure no environmental releases during a storm—a topic she thought would be appropriate for the CAP—and the levee system, which she feared community members were more interested in discussing.

Although discussions of plant-specific safety measures are certainly more in keeping with the kinds of issues CAPs were initially formed to address, plant representatives' commitment to talking about certain kinds of issues and not others arguably prevents them from acknowledging important information about community concerns. Specifically, CAP interactions make plain the relative priority that residents give to various aspects of industry's effects on their community—and even more broadly to how concerns about industry's effects rank with respect to other pressing issues. This information should contribute significantly to understanding community concerns fully, especially since

waning interest in technical issues seems to signal residents' increased willingness to trust rather than scrutinize the work of industry experts.

Finally, industry representatives' approach to the environmental and health issues raised in CAP meetings tends to obscure the substance of community concerns. That is, rather than appreciating residents' perspectives on the issues, industry scientists and engineers are quick to assert their authority on technical matters, putting forth their own perspectives in the process. Industry responses to community concerns tend to minimize the uncertainties surrounding environmental health science and policy. In one meeting of the Norco–New Sarpy Community-Industry Panel, for example, a New Sarpy resident questioned whether the Louisiana Ambient Air Standards were really strict enough to protect health. She was rapidly reassured that the standards were based on the best available science and frequently updated; no mention was made of the myriad difficulties involved in using occupational or animal-based laboratory studies to create standards that will protect residential populations.²⁸

Industry officials are also quick to interpret concerns expressed by community members in terms of their own highly specialized models for understanding environmental and health phenomena. The minutes of a 1992 St. Charles CAP meeting show that the suggestion that the panel consider issues of pollution and environmental health was transformed, with guidance from industry representatives, into a proposal to have a program devoted to emissions and another on risk. While the proposal and resulting presentations may have satisfied community members, it is important to understand that “emissions” and “risk”—compared with “pollution” and “health effects”—are in themselves specialized concepts routinely used by experts but not necessarily shared by community members.²⁹ Industry representatives' eagerness to minimize uncertainties and

²⁸ Sylvia Noble Tesh, *Uncertain Hazards: Environmental Activists and Scientific Proof* (Ithaca, NY: Cornell University Press, 2000).

²⁹ See, for example, Sheldon Krinsky and Dominic Golding, eds., *Social Theories of Risk* (Westport, CT: Praeger, 1992).

translate environmental and health issues raised by residents into familiar technical concepts are likely to impede the facilities' understanding of community concerns, in part by causing them to miss the doubts about industry's safety that many CAP participants retain.

Thus, the effectiveness of CAPs at informing industry of community concerns is limited by industry participants' expectations of CAP discussions and the positions those participants assume within them. While industry in some cases responds to issues raised by residents by supporting community initiatives, most community concerns raised in CAPs are met with further educational efforts. Where community members are concerned with health and safety issues, these efforts reframe community concerns to coincide with expert understanding. In neither case do industry representatives take the opportunity to probe community understanding of these issues. Furthermore, plant representatives' well-defined ideas of legitimate topics for CAP discussion undercut the potential for CAP interactions to help industry understand community priorities.

Improving Environmental Performance

Community-industry interaction on CAPs has not apparently contributed to any decisions by St. Charles Parish chemical facilities to undertake new environmental initiatives, investigate greener technologies, or rethink their operations in ways that would improve environmental performance. This is hardly surprising as the CAPs do not consider improving plant performance as among their goals. However, it is worth briefly noting characteristics of these CAPs that would tend to hinder their effectiveness as forums for community-industry collaboration on environmental improvements and that may be preventing more serious community engagement with environmental issues from emerging, as it has in other CAPs.³⁰

Most important, community participants on CAPs are not regarded by their industry counterparts as having meaningful contributions to make on technical issues, as indicated in part by industry responses to community concerns on environmental and health issues. The problem with industry representatives' expectation that they will communicate *to* community members about plant performance and hear *from* them about community concerns is illustrated by a case of public consultation organized independently of any CAP.

In 2002 when Shell and Motiva set out to establish an ambient air-toxics monitoring program in Norco, the companies invited several Norco residents to participate in the planning process. Originally assigned to the "communications team," which was responsible for creating a plan for disseminating monitoring results, community representatives soon asked to attend meetings of the "technical team" as well.

In the technical team's discussions of where to locate a monitoring station, community representatives expressed the desire to have several monitoring stations in order to determine whether air quality varied across Norco. Their interest in the question was prompted by the radically different perceptions of the facilities' effects held by African American residents in one part of town and white residents in another. Although technical team scientists and engineers felt confident—on the basis of meteorological data and dispersion models—that one monitor would be enough to yield data representative of air quality throughout the small town, they agreed to "do the experiment" and initially established six monitoring stations over the town's two square miles.

Reports on the air-monitoring program officially concluded that Norco's air was "fairly uniform," and industry scientists and engineers were quick to point out

³⁰ Iles, "Patching Local and Global Knowledge Together" (cit. n. 23); and Lynn et al., "Chemical Industry's Community Advisory Panels" (cit. n. 1).

that their models had been right all along. However, the different monitoring stations showed enough variation to lead Shell to investigate—and correct—at least two sources of fugitive emissions and to convince the companies to retain one primary and two auxiliary monitoring stations in the program’s final design. Questions generated by community members thus resulted in facilities’ gathering information relevant to their efforts to improve environmental performance, yet the significance of residents’ input was not acknowledged by industry representatives. Had Shell and Motiva experts recognized the possibility for community concerns to shape their environmental programs, they might have looked for ways to use community engagement proactively to help with such issues as developing strategies for identifying and reducing fugitive emissions.

The model of dialogue evidenced in the Norco air-monitoring program—a model best thought of as “two-way communication,” in which technical information is

communicated to residents and social information is communicated to industry—is shared by St. Charles Parish CAPs.

Although failing to understand community members’ concerns completely is often a problem with plant representatives to CAPs, they do generally acknowledge community members’ ability to inform them about local, social, and economic issues; it is only the community members’ environmental concerns that these representatives treat as reflecting lack of education about the technical issues involved.

The case thus highlights one key obstacle to the success of CAPs as potential contributors to environmental improvements: industry’s unwillingness to view community members as individuals with the potential to offer creative solutions to or new insights into complex problems in environmental performance effectively eliminates the possibility of CAP discussions facilitating improved plant operations.

Conclusion and Recommendations

This report investigates the effectiveness of CAPs through a case study in St. Charles Parish, Louisiana. By highlighting the interactions of industry representatives and community members in CAP meetings and situating the panels in the context of community life more generally, the case study approach allows for more than just an assessment of St. Charles CAPs. It describes how particular dynamics of community-industry interaction—dynamics likely to be found in some combination in many CAPs—contribute to or limit the effectiveness of the CAPs. To the extent that these interactions in other CAPs are characterized by these dynamics, the case study suggests a few general lessons.

The greatest strength of CAPs lies in their ability to foster direct, personal relationships between chemical facility managers and residents of nearby communities. These relationships have myriad benefits: they increase residents' confidence that their concerns can be satisfied by contacting the plant directly; they make residents less likely to engage in confrontational campaigns; and they increase the likelihood that residents will trust the environmental and health information provided by facility representatives. CAPs are also relatively effective at educating community members about plant performance by providing this kind of information. However, the St. Charles Parish case suggests that this kind of education is not necessarily enough to overcome residents' beliefs that nearby chemical plants are hazardous to their health. Similarly, although CAPs provide a forum for community members to express their concerns about chemical plants and their effects, residents' expressions of concern do not automatically inform industry's approach to the community. For CAPs to

meet this goal effectively, industry representatives must be willing to set aside their own perspectives enough to appreciate the contrasting perspectives from which community members' concerns stem. Finally, the degree to which chemical facility representatives are willing to acknowledge community members' contributions on environmental questions is important to determining how successful CAPs can be in helping to improve plants' environmental performance.

The analysis here suggests that the one factor likely to have the biggest impact on the overall effectiveness of CAPs is the treatment of community concerns. By being more willing to probe community members' understanding of known issues and in the process being more aware of industry's corresponding, often taken-for-granted understanding, industry representatives are more likely to learn from their interactions with resident CAP members. This is especially true of community members' environmental and health concerns. Research on public understanding of science suggests that,

more than being technically ignorant or incompetent, so-called laypeople have very different ways of understanding the world than do scientists and engineers.³¹ Community members' concerns about health and envi-

ronmental issues, expressed in CAPs, could thus offer creative and novel ways of understanding complex problems of plant performance and, if taken seriously, lead to improvements in plant operations.

CAP Strengths and Weaknesses

Strengths

- Building relationships
- Providing information

Weaknesses

- Overcoming health and environmental concerns
- Fully understanding community social concerns
- Acknowledging residents' potential technical contributions
- Facilitating environmental improvements

³¹ For example, Alan Irwin and Brian Wynne, eds., *Misunderstanding Science? The Public Reconstruction of Science and Technology* (Cambridge: Cambridge University Press, 1996); and Brian Wynne, "Misunderstood Misunderstandings: Social Identities and Public Uptake of Science," in *ibid.*, 19–46.

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