Industrial Crisis Quarterly 3 (1989) 61–75
Elsevier Science Publishers B.V., Amsterdam — Printed in The Netherlands

# Community planning for industrial risk: a Title III research agenda

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## Abstract

Kartez, J.D., 1989. Community planning for industrial risk: a Title III research agenda. Industrial Crisis Quarterly, 3: 61–75.

Title III of the Superfund Amendments and Reauthorization Act (SARA) mandates a nationwide local government effort to plan for industrial risk and crisis response. Title III planning is primarily defined by its requirements for public participation, but the law is somewhat vague on that criterion as well as on expected planning outcomes. Title III is misconstrued in some quarters as risk communication, yet that is only one part of planning. An evaluative framework is presented in this paper for analyzing the performance of this planning mandate, drawing on both planning theory in general and lessons from disaster planning research in particular.

## Introduction

A public planning process can be an attractive facade for political or technical decision making that is either preordained or completely inadequate for the problem at hand. The ideal, of course, is to integrate functionally effective technical analysis with the social legitimacy of a political process (Friedmann, 1973, 1987; Forester, 1982; Klosterman, 1983; Hoch, 1984). Sometimes a planning effort serves that ideal, in spite of cynicism or resignation about the odds of success.

What is the case with the local emergency planning process mandated by Title III of the 1986 Superfund Amendments and Reauthorization Act (SARA)? Title III is examined as a *planning* process here. The differences in opinion as to what Title III should accomplish, and the law's ambiguity about

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the process and outcomes of planning, indicate a need to evaluate the program early in its life. A framework for defining and evaluating planning outcomes is proposed here.

*Title III overview*

Title III, the "Emergency Planning and Community Right-to-Know Act of 1986," has two components. First, there are the requirements forcing private industrial and commercial businesses to disclose their use of 402 hazardous substances and to report routine releases of most of those substances to local government. Cities and counties must then make those data available to the general public. This communitywide disclosure requirement extends the policy of workers' right-to-know, which has been institutionalized in the US Occupational Safety and Health Administration's "Hazard Communication Standard" for disclosures to workers (Chess, 1986). The deadlines for initial industry compliance with the community "right-to-know" component occurred in May 1987, when firms using hazardous substances were to identify themselves, and July 1988, when detailed reports on the use and stocks of those substances, and their routine release into the environment, were to be provided to state and local governments.

The second component is a planning mandate. It requires the creation of state and local emergency planning committees to receive the information divulged by industry and to prepare emergency response plans for chemical hazards in the community by October 17, 1988. That component is the focus here. The planning deadline is an overly optimistic one. At the time of this writing it appears that at best perhaps half of these plans will be completed. Title III does require annual reviews of the plans, however, and it should be viewed as an ongoing process. The early outcomes of that process should be evaluated soon after the October 1988 deadline to determine the adequacy of this approach to community risk adjustment.

Several questions must be answered to develop a framework for that evaluation. First, what are the expectations about what Title III planning should accomplish? Examples in the next section illustrate that there are different expectations about outcomes, some of which are not acknowledged by the law itself. Those expectations for planning alert us to the competing values at stake (Goldstein, 1984).

Different expectations can also imply different approaches to planning as well. What kind of planning does Title III represent? There are competing planning traditions (Friedmann, 1987), each with different assumptions about the effective and proper role of the public sector, as well as about science vs. politics. That may come as a surprise to those with a narrow view of risk planning as either a public relations strategy or an exercise in centralized regulation. Knowing what type of planning model underlies Title III — its internal measure of effectiveness — is necessary to evaluate the outcomes. For example,



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centralized planning efforts are judged on the basis of uniform compliance, but decentralized planning may stress innovation or local solution legitimacy as success criteria.

Third, what specific outcomes of Title III planning should be expected, and how shall the effectiveness and legitimacy of those outcomes be evaluated in terms of the context for planning (the givens) and the planning process (which allows some choice)? A key assumption in the evaluation proposed here will be that local government is the proper unit of analysis, not private industry or the federal government. A burden is on industry to disclose information, and on the federal Environmental Protection Agency (EPA) to set standards for and enforce disclosure. But Title III places the burden of planning and acting to improve community adjustment to risk on local government.

## Claims vs. reality

The planning effort mandated by Title III is highly procedural. The law defines the requirements for a planning process with rather limited objectives, not substantive outcomes, such as a certain reduction in risk. That process is local emergency response planning for hazardous substances releases at, or in transit to, industrial and commercial facilities. The goals are to improve communication between private facilities and public safety agencies when chemical releases occur, and to prepare for effective warning and protective evacuation of persons at risk. In addition, the law calls for technical improvement of local hazardous materials emergency response capabilities through ongoing training of public personnel, although it does not provide more than token funding for that task.

The only explicit substantive requirement for the *planning* process concerns public participation. Local Emergency Planning Committees (LEPC's) are to include, at a minimum, representatives from four community sectors. The first are personnel from local government public safety, health, environmental, hospital and transportation agencies, as well as elected officials. The second are the commercial news media. The third are representatives of the private firms subject to the law. The fourth category is a vague and inclusive one: "community groups."

The implicit definition of planning under Title III is therefore one which views broad participation as the appropriate vehicle for risk adjustment through improved reactive emergency response capabilities. It will be shown in the following discussion that there are differences of opinion as to whether that objective is sufficient and whether the type of planning Title III specifies is even appropriate to the problem.



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### *Claims about centralized planning needs*

Deborah Sheiman of the Natural Resources Defense Council has criticized SARA Title III as "an exercise in public relations," rather than "better pollution control." "They are afraid of public hysteria," she said in February 1988, "and are concentrating on what they call risk communication," (Shabecoff, 1988). The planning strategy underlying pollution control in the United States has generally been a centralized one that relies on national standards set by technical experts — for example, the federal Clean Air and Clean Water Acts.

Some environmental advocates, therefore, fear that Title III mandates an inappropriate planning strategy, because there are certainly few standards in Title III itself. The NRDC has also criticized a prior EPA attempt to promote a voluntary chemical hazard emergency planning program; the abortive CEPP program (Sheiman, personal communication, 1988). Voluntary programs are anathema to proponents of hierarchical, rule-based planning approaches (Douglas and Wildavsky, 1982).

### *Risk communication*

The notion of risk communication demands special attention in this discussion to dispense with a misconception. Strictly speaking, risk communication means presenting technically complex information in a more comprehensible fashion (Earle and Cvetkovich, 1987; Slovic, 1987). Research by behavioral decision scientists has produced a number of principles to explain why people have exaggerated fears of certain hazards that are far out of proportion to scientific assessments of relative danger (Slovic et al., 1980).

For example, people fear a risk more when it *appears* to be one that is uncontrollable and involuntary. Experts, who view themselves as facing an irrational public audience, have seized on these principles of risk perception as techniques to gain public cooperation in risk management decisions (see Hance et al., 1988, for an example). The public can be manipulated through application of these principles just as much as it can be better informed, of course.

But Title III is *not a risk communication law.* It merely requires that the hazardous substances data divulged by industry be made available to the public. One risk communication researcher has therefore concluded:

> From my risk communication point of view, the right-to-know process appears rather sterile. The information to be supplied is of a narrow, technical nature. The implication of this is that there is no intention to communicate directly with citizens ... Any impact the information will have on citizens will have to be mediated through both specialized stakeholder groups and the news media: the information will have to be translated. (Earle, personal communication, 1988)

Even when information is made more comprehensible to the public, the understanding of risk is not equivalent to acceptance (Hance et al., 1988). Defining



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Title III wholly in terms of risk communication issues avoids the question of how communities make choices: a planning issue.

### *Claims about comprehensive planning needs*

A different set of claims about Title III comes from the National Safety Council, an independent organization distributing technical assistance materials to both firms and localities. The Council claims that the benefits of Title III planning include: (1) reduced tax burdens from economies of scale in multi-jurisdictional emergency planning efforts; (2) support of economic development goals, due to public–private cooperation and an improved business climate; and (3) improved community safety (National Safety Council, 1987). Title III, however, only addresses the last of these goals. The first goal is possible, but not required. The second goal is more typically associated with comprehensive community land use and development planning, not narrow emergency planning. It is plausible that improved community plans for industrial risk might serve those broader goals, but nowhere is this mentioned in Title III.

### *Claims about radical planning needs*

Yet another sort of claim comes from workplace safety advocate Ward Morehouse, writing in *Industrial Crisis Quarterly.* He questions the legitimacy of Title III by arguing that "the right-to-know, while essential, is insufficient. There must also be the right-to-act," (Morehouse, 1987). According to Morehouse, Title III does not give communities the authority to stipulate the conditions under which industry operates. Therefore, Title III planning may be an empty promise when businesses can force citizens to take on all the burdens of adjusting to risk, rather than sharing the cost of reducing risks. This is a "radical planning" argument, because it questions the possibility of achieving desired outcomes under existing social relations of economic and political power (Friedmann, 1987).

### *Claims about innovative planning needs*

Finally, quite different claims are made by personnel of the EPA responsible for seeing the law implemented. James Makris, director of EPA emergency response programs, has said that "one of our great hopes is that this [law] will open a national dialogue around the issues of chemical risks." EPA toxic substances director Charles Elkins calls the disclosure provisions a "revolution" because citizens who are "empowered with knowledge" on local risks can advocate change. "The American people," said Elkins, "can take the lead identifying problems and saying what is to be done about them," (Shabecoff, 1988).

This decentralized approach, based on acquiring knowledge and engaging in dialogue at the level closest to the problem itself, is an example of the "social



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learning" tradition in planning (Friedmann, 1987). A prominent new alternative for planning twenty years ago, this tradition has its roots in John Dewey's "pragmatism" (Hoch, 1984).

Social learning strategies are inspired, in part, by the observation that it is just when technologically-induced change and threat are greatest that centralized policy approaches are least effective. By the time a decision has been made on what standards to adopt at the institutional "center," the actual conditions at the "periphery" have changed (Schon, 1971). The unresponsiveness of uniform standards to localized conditions undermines the perceived legitimacy of central planning. In comparison, the organizing principle for social learning strategies is the communications network, not the formal hierarchy. In that sense, the focus of Title III on a new flow of information that will enable decentralized problem-solving is more consistent with social learning than any other planning tradition.

*Convenient labels and false promises*

Much has been read into Title III that is not explicit in the law itself. Participation by the relevant actors — public agencies, businesses, the media and "community groups," may lead to effective outcomes, but the definition of possible outcomes in Title III is limited. It might be argued that community safety in chemical emergencies is a consensual issue for which priorities and desired outcomes are self-evident. The language surrounding Title III suggests there is more than that to community risk adjustment.

EPA Administrator Lee Thomas observed in 1986 that if the public was to share in decisions, it must do so "with a fuller understanding of the inevitable trade-offs involved in the social management of risk," (Chess, 1986, p. 50). Title III delegates the actual trade-off process (risk adjustment) to local government. But consider the argument by Matheny and Williams (1988) in their study of state laws for local hazardous waste facility siting decisions.

An abuse of participatory processes can occur when an inappropriate delegation of responsibility is made, they argue. It happens in social risk policy, for example, when a problem which requires acknowledgement of conflict and adjustment with real costs is legislatively exported to a technical level, which is not a legitimate forum for political discourse on conflicts (e.g., health and safety agencies), or exported to a lower and weaker level of government, such as cities and counties, which cannot absorb the redistributive costs of resolving the conflict. Outcomes in such cases are vulnerable to being considered "illegitimate by the public," (Matheny and Williams, 1988, p. 42).

Questions exist about both the effectiveness and legitimacy of recent legislative mandates for public participation in hazardous waste facility siting (Rosenbaum, 1983; Anderson, 1986). Effectiveness suffers when either a poor decision is made, as to a specific site or disposal technology, or when the process breaks down completely and no decision can be made. Loss of legitimacy in



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the public eye can lead to stalemates. But a successful decision that significantly injures the interests of one sector of the community, without adequate compensation or other justification, is also illegitimate.

The record of satisfaction is not overwhelming for other participatory community planning processes either (Arnstein, 1969; Rosenbaum, 1976; Freudenberg and Olsen, 1983; Hutcheson, 1984). The social learning approach to planning was in part an acknowledgment of the same criticism now being made in the hazardous waste facility area: that simply being informed of issues is not adequate participation. The relevant public must be able to substantively guide the development of policy proposals, not just react to them.

Despite an emphasis on "authentic" participation (Friedmann, 1973) and local innovation, the social learning approach has been criticized on structural grounds (Goldstein and Rosenberry, 1978; Friedmann, 1987). It can easily serve the purposes of a dominant institution or interest if the participants are unable to overcome given economic and social constraints to change.

What if the outcomes of Title III planning are determined by the community context, not a participatory process? That would indicate that the social learning or "authentic dialogue" principles underlying the Title III planning process are inadequate to overcome barriers to change (Friedmann, 1981; Pierson, 1985). That type of question, comparing the context, process and outcomes of planning, should be part of any evaluation of a planning effort (Bryson and Delbecq, 1979; Bryson, 1983). Title III is a planning mandate as well as a disclosure law, and should be evaluated as such. As long as the process is considered "risk communication" when that meets experts' or critics' objectives, but labeled "planning" for popular appeal, the task of evaluation will be confused. An alternative conceptual framework is now presented.

## Evaluating Title III planning

If Title III planning is best described as a social learning strategy, then outcomes must be evaluated in terms of the matches between each set of local conditions and local solutions, not on the basis of a uniform standard. At the same time, an analysis must test for the primary weakness of that planning approach — the inability to overcome structural barriers — by comparing outcomes across a number of localities and determining if outcomes are systematically constrained for some types of communities. Evaluation must begin with a definition of possible outcomes, and outcomes must then be related to the characteristics of the planning process and the community context for planning (see Fig. 1).

### *Defining the range of outcomes*

Ten years ago the National Governor's Association (Whittaker, 1978) made a definitive case for comprehensive emergency management (CEM). The CEM



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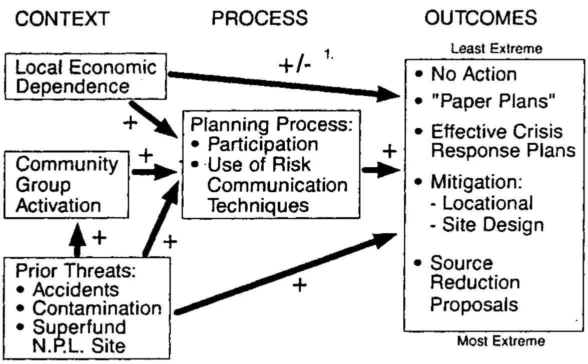


Fig. 1. A conceptual model for Title III planning.

principle asserts that hazards should be addressed by simultaneous efforts to both prepare to respond to and to mitigate (reduce) hazards. The importance of hazard reduction, as a complement to emergency response planning, has been institutionally acknowledged in the National Flood Insurance Program (NFIP), where the legislation requires special conditions for land development in foodplains and local prohibition of structures in floodways. Those policies shift the costs of risk adjustment onto land users to a limited degree.

Title III appears to be at odds with the CEM principle. Its objectives only address preparedness to move populations out of the way of industrial risks, not efforts to reduce risks through mitigation. But is it reasonable to include mitigation as a possible outcome of Title III planning? A recent study of hazardous materials and waste problems, conducted for the North Carolina Board of Science and Technology, suggests it is (Andrews et al., 1985). Two potential mitigation measures are within the scope of the local police power to enact zoning and site planning regulations affecting private land use.

The first is to reduce the susceptibility to harm from hazardous materials and wastes by changing the location of risk-generating activities in relation to other activities, such as residential land uses. Prohibition of activities in locations where dense populations might be at risk and difficult to evacuate, or where groundwater transport can spread gradual contamination, are examples of locational mitigation policies. A second mitigation measure concerns the "site-level" design of activities that generate risks, especially for existing industrial uses. Regulations concerning locations of materials, transportation routes and buffers between adjacent land uses of a different character are all legally applicable to new development under the police power, as well as for any expansions of existing uses.

Mitigation through both of those "hazardous materials zoning" techniques represents a more extreme adjustment than do reactive emergency plans, because those requirements intrude more directly on industrial and commercial firms. For example, the City of Durham in North Carolina adopted a local



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right-to-know law in 1985. That law was a precursor to the state law adopted soon afterward, one of the first of its type in the nation. This local effort, supported by a Citizens Advisory Committee that some consider a model for LEPC's (Lynn, 1987), also included attempts to pass hazardous materials zoning as a longer term mitigation measure (Andrews et al., 1985).

It is reasonable to conceive of the local risk adjustment outcomes from Title III planning as falling on a continuum from minor changes to major long-term mitigation efforts (Fig. 1). The range of Title III outcomes can be considered a Guttman-type scale, where more extreme adjustments are unlikely unless less intrusive ones have been adopted. At one extreme is no action, followed by reactive adjustments through improved knowledge of hazards due to disclosure, and new emergency notification, warning and evacuation measures. Next are mitigation efforts like those described: zoning for new industrial and commercial uses and site use conditions for existing facility expansions.

An additional and most extreme measure to include in that scale would be changes in a firm's actual production processes to minimize waste flows of toxic substances or reduce volumes or types of materials that are inputs to production. Source reduction strategies are typically associated with national policies because of the technical and redistributive cost issues involved. But if Title III represents the only opportunity communities have to adjust to industrial risk, then it would be an error to not conceptualize source reduction as a possible outcome, however unlikely that may be.

Even within the area of reactive measures for emergency warning, coordination and evacuation, there have been lessons learned from failures in natural disaster management. The tendency for previous federal mandates for local disaster preparedness to degenerate into "paper planning" is associated with several well-researched problems. These include: ineffective evacuation warning methods that citizens do not know how to respond to or distrust (Perry et al., 1981; Belleto de Pujo, 1985) inadequate organizational preparations for the multiple-factor, boundary-spanning management demands of community emergencies (Drabek et al., 1981); and lack of preparations for the high degree of collaboration government must achieve with the broadcast news media and neighborhood leaders during crises (Kartez, 1984; Kartez and Lindell, 1987).

The actual measurement of local Title III planning outcomes on a scale like that proposed here must be sensitive to the differences between the mere adoption of "plans" and the development of crisis response preparations that are likely to be truly effective, based on the evidence from disaster research.

### *Predicting Title III outcomes*

Making hypotheses about the influence of the planning process and of the context for planning on outcomes provides a richer vehicle for evaluating Title III than does the incomplete concept of "risk communication." One hypothesis of process effects on outcomes that is suggested by the Title III law itself (per-



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haps the only one) is that a broader base of community participation will result in more effective outcomes, specifically better emergency response measures (see Fig. 1).

Why does Title III mandate a broadly (if vaguely defined) participative process when its explicit objectives are limited to public safety concerns; ones that would seem to be the domain of professional specialists in local government and industry? Evidence that public participation is important to effective emergency response capabilities comes from a recent cross-sectional study of emergency planning in 400 large cities in the United States (Kartez, 1988; Kartez and Lindell, 1989). Municipal use of thirteen anticipatory preparations for managing the emergency environment was measured. Among those practices are methods for communicating with the public, pre-establishing emergency working relationships with resource providers, other governmental units, volunteer groups and neighborhoods, and evacuating different populations with special needs.

The idea of broad community participation in emergency planning did not originate with Title III. Cities and counties have been encouraged to create "disaster assistance councils" (DAC's) for years, often without success. In the study being discussed, the cities that used DAC's were 29% more likely on average to adopt the good preparedness practices than were cities with no DAC's. More striking was the higher rate of adoption of techniques to effectively work directly with citizen populations in evacuations and other protective action situations.

Cities with DAC's were 69% more likely to train neighborhood leaders for emergency self-help and cooperation, 55% more likely to have plans for managing spontaneous volunteerism by citizens, 35% more likely to maintain special evacuation warning confirmation systems like emergency phone "hotlines" and 44% more likely to have prepared for the transport of the handicapped and elderly during evacuations. Participation improves response preparations because it sensitizes public agencies to the needs for such techniques in the emergency environment.

Participation may also be likely to influence local efforts to move up the scale of planning outcomes towards mitigation policies. In the City of Durham, North Carolina, for example, proposals for both the right-to-know and hazardous materials zoning laws resulted from the city's creation of a Citizens Advisory Committee on hazardous materials. It can be hypothesized that participation by broad interests in the community will also be associated with mitigation or more radical source reduction proposals (Fig. 1).

The use of risk communication methods should also be included as a characteristic of the local planning process. It has been argued here that risk communication does not constitute planning, but it can nonetheless be an important part of the process. Title III only mandates public access to materials safety data, but does not help explain what those data mean. Risk communication techniques can include making relative comparisons of the toxicity of sub-



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stances present in the community from published sources, visual maps of the concentrations of substance users and the adjacent populations at risk and, most ambitiously, formal analyses of the risks at different locations.

Successful risk communication ought to enable communities to make effective emergency plans as a risk adjustment, given superior knowledge of what to plan for. It is also conceivable that greater understanding of the risks present would stimulate more intrusive mitigation and source reduction proposals as planning outcomes. Thus the use of risk communication techniques in the planning process should have positive effects on outcomes (Fig. 1).

Two aspects of the pre-existing context for planning are likely to affect the types and numbers of groups participating in the Title III LEPC's: prior experience with threats and existing interest group activation. The two may be interconnected, as was the case in Durham, North Carolina. The City's formal creation of the CAC was only the eventual result of spontaneous citizen organizing efforts after the 1983 explosion of a butyl acetate container in a blue collar neighborhood. Therefore, it can be hypothesized that community group activation will lead to greater participation in the Title III LEPC's.

Threats, like the Durham explosion, are risks that have become actualized. Threats spur action to assess future risks. Community activation can also result from ongoing threats, such as groundwater contamination from faulty materials storage, drawing in existing general purpose community neighborhood and environmental interest groups. Therefore, it can be hypothesized that prior chemical threats increase interest group activation and lead to broader Title III participation. Among those threats should be counted the location in any community of one of the 1,300 Superfund National Priority List waste sites. Many of those sites chosen for remedial waste clean-up are considered ongoing environmental health emergencies, and SARA also requires public participation in remediation decisions.

It can also be hypothesized that prior threats and interest group activation can directly influence risk adjustment outcomes (Fig. 1). Title III does not acknowledge that community organizations typically represent conflicting interests. Should involvement by the local Chamber of Commerce be considered a satisfactory compliance with the mandate? How far must local governments go to accommodate a number of unintegrated, single-issue oriented groups that may be active in a single community?

Consider the case in which a community with prior threats and highly activated interest groups judges the LEPC planning process to be illegitimate, perhaps because of restrictions placed on participation, or the political intransigence of public officials, or managerial ineptitude. Activated interest groups, motivated by prior experience with threats, might create direct political pressures for actions that would not be predicted by the performance of the planning process, but would occur in spite of it. Direct community group action of that sort is represented in Fig. 1 by direct relationships between prior threats and community activation, and planning outcomes.



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Predictions about the context for participation must also include the role of local industry, a powerful force with an equal mandate to participate. The Chemical Manufacturer Association's technical assistance program CAER (Community Awareness and Emergency Response) has often represented a greater resource for many localities struggling with hazardous materials risk management since 1985 than the support offered by federal or state government.

An example of the beneficial impact of technical assistance from industry, and one which the author was familiar with as a consultant to the Tennessee Emergency Management Agency (TEMA), is the successful DAC in the Kingsport/Sullivan County area of that state. The Eastman Kodak Company, the area's major employer, was both an early CMA/CAER program sponsor and an innovator in leading the formation of a broadly representative Disaster Assistance Council. The TEMA has since used that local example of a successful DAC as a model for the rest of the state (Lavalla et al., 1986). Local economic dependence on industries is, therefore, likely to increase participation. Nonetheless, industries have an incentive to strategically manage their environment to their own advantage. That means encouraging communities to adjust to industrial risk through effective emergency planning, rather than forcing industry to adjust by internalizing the costs of risk-reducing mitigation strategies.

The distinguished American political theorist Charles Lindblom has put this "market constraint" in blunter terms:

> A chemical plant discharges something into the atmosphere that carries both a bad odor and irritants to the eyes. Town and state governments are reluctant to put an end to it for fear that the plant will find it advantageous to move to ... another state ... One line of reform after another is blocked by prospective market punishment. (1982, p. 325)

If local economic dependence discourages risk adjustment strategies that are more intrusive from industry's point of view, then industry participation in LEPC's will have different influences on different risk adjustment outcomes. Effective emergency management may be promoted while mitigation or more extreme adjustment strategies will be discouraged (Fig. 1).

We interpreted the planning theory underlying Title III to be a decentralized/local innovation strategy. One reason that much air and water environmental policy is built on centralized, national standards is to avoid the monopsonistic effects that would exist if any single locality or even state tried to regulate a dominant industry within its borders. To some degree, that removes the leverage that might be applied to any one locality by an industry demanding exemption from environmental policies. It is difficult to say what standards should or could possibly be made for community industrial risk policy. Should all firms storing more than 10,000 pounds per year of ketones be required to put 1,000 feet of buffer space between themselves and other land users? That type of troublesome micro-policy is best left to local and state governments under the police power, with some good reason.

But if the analysis proposed here were to find that communities dominated



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by large or politically integrated industries are systematically less likely to adopt mitigation measures than are other communities, that would cast doubt on the equity and effectiveness of the decentralized approach to community risk planning. It is outside the scope of this present discussion to elaborate on all the specific measurement problems that would be entailed in carrying out this test.

## Conclusion

The purpose here has been to argue that a national policy for risk adjustment which is based on the concept of community planning ought to be evaluated as such, and not as an experiment in risk communication. There are good reasons for addressing some industrial risks on a decentralized basis, as Title III does by mandating localized planning. The evidence from other types of disaster planning suggests that public participation has instrumental as well as legitimation benefits for improving emergency protection plans.

Nonetheless, the legislation is vague about many aspects of the planning effort it mandates. At the very least, we need to determine how Title III is working in practice, and whether decentralized planning for industrial risk is an adequate vehicle for realizing the range of risk adjustments that communities perceive is needed. At present, we do not even know what that range of outcomes may be, and the evaluation of Title III becomes based on unfalsifiable rhetoric, and misconstrued as risk communication instead of community choice.

## Acknowledgements

Valuable comments were received from Michael K. Lindell and Timothy C. Earle, as well as from the editor and anonymous reviewers.

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