David Laws and Martin Rein – "Reframing Practice" in Maarten Hajer and Hendrik Wagenaar (eds) *Deliberative Policy Analysis* (Cambridge: Cambridge University Press, 2003)

Read pages 180-201

## Alternate introduction for 11.002/17.30J Students

The attached reading is for our upcoming session on environmental policy where we will talk about toxics policy and environmental justice. Please focus on the story within the article (pages 180-201) that describes how environmental justice developed as both a way to understand, and a way to approach, a family of perceived public problems.

This story is part of an article on the development of policy frames and the section you will read includes a few references to this subject. You can just read through them and follow the main story line, focusing on the historical sequence in which environmental justice emerged. If you are interested, we have included the sections of the article that address policy frames. Please don't let this become a distraction, however.

Environmental justice is part of a generation of policies and policy problems that followed the first generation of environmental policies that was developed in the 1970s. This first generation included the *Federal Water Pollution Control Act Amendments* of 1972 (that was again amended in 1977 and is know as the Clean Water Act), the *Clean Air Act* (1970, which was an amendment of the 1963 Act of the same name and has since been amended in 1977 and 1990), the *National Environmental Protection Act* (NEPA, 1969), the *Marine Mammal Protection Act* (1972), the *Endangered Species Act* (1973), and the *Wilderness Act* (1976). It also produced the Environmental Protection Agency (EPA) as the organization responsible for implementing environmental policy at the federal level. During this period many states also developed environmental policies that included state environmental protection acts (SEPAs) and established state environmental agencies that have the responsibility for implementing policy.

The policies established in this first generation are primarily regulatory policies that placed government in the position of setting and enforcing standards. In practical terms, this means overseeing the behavior or other, mostly private, actors. The policies focused on improving environmental quality and protecting natural resources in general terms, rather than on, say, specific threats. They tried to accomplish this (and have made substantial progress) by setting uniform standards and then monitoring the behavior of private actors, mostly firms. The policies were also supported by other measures that, for instance, provided money for cities and towns to build the sewage treatment plants that were required by the *Clean Water Act*. The standards were originally intended, in the case of the *Clean Air Act* and the *Clean Water Act*, to relate to ambient environmental quality and, behind that, to an objective base in human health. In many cases, this goal proved elusive and standards were set with reference to pollution control technologies, either directly or indirectly.

This first generation of environmental policies was also marked by strong federal leadership that provided a uniform framework for policy across the states and put EPA in charge of implementation, either directly or through oversight of state environmental agencies. Another hallmark of the policies, which remains an active and important part of environmental policy in the U.S., is the emphasis on enforcement as the way to change behavior and improve the quality of the environment.

The piece that you will read picks up after this generation of policies had been in place for about a decade. At this time the set of programs that constituted environmental policy in the U.S. had just begun to give specific attention to the problem of toxic industrial wastes. Industrial wastes were addressed as pollutants under the Clean Air and Clean Water Acts, you could no longer dump many of these substances in a river for instance, but many aspects of the production, transport, and disposal of these wastes were not covered. New regulations and implementation programs were just being established to track and oversee the use and disposal of industrial chemicals. No policy was in place at this time to actively promote the construction of disposal facilities. There were many holes in the policy framework for managing hazardous wastes and illegal practices like "midnight dumping," where waste haulers would illegally dump wastes (often at night) in remote locations, were all too common. One of the biggest holes was the lack of a policy to deal with the historical burden of wastes that were buried, or in some cases sitting in barrels and open ponds, on sites throughout the U.S.

Beginning in the mid 1970s, a series of events dramatized the risks that industrial chemicals and wastes posed to public health, safety, and welfare. The first of these occurred in a small town just north of Milan, Italy in July of 1976. A recent study (De Marchi, Funtowicz, and Ravetz, 1996) describes the events and the reaction to them:

Around midday on Saturday 10 July 1976, an explosion occurred in a TCP (2,4,5-trichlorophenol) reactor of the ICMESA chemical plant on the outskirts of Meda, a small town about 20 kilometres north of Milan, Italy. 1A toxic cloud containing TCDD (2,3,7,8-tetrachlorodibenzo- *p*-dioxin), then widely believed to be one of the most toxic man-made chemicals (Mocarelli et al. 1991), was accidentally released into the atmosphere. The dioxin cloud contaminated a densely populated area about six kilometres long and one kilometre wide, lying downwind from the site (fig. 4.1). This event became internationally known as the Seveso disaster, after the name of a neighbouring municipality that was most severely affected (Hay 1982; Pocchiari, Silano, and Zapponi 1987).

Eleven communities in the rolling countryside between Milan and Lake Como were directly involved in the toxic release and its aftermath. The four most impacted municipalities included Seveso (1976 population 17,000), Meda (19,000), Desio (33,000), and Cesano Maderno (34,000). Two other municipalities were subject to postaccident restrictions: Barlassina (6,000) and Bovisio Masciago (11,000). Health monitoring was extended to a further five municipalities. The entire affected area is part of the Brianza, a prosperous district of Lombardy, itself one of the wealthiest and most industrialized regions of Italy (fig. 4.2). Though originally agricultural, the economy of this area depended on a cluster of small workshops and industries, mainly engaged in manufacturing furniture.

The Seveso disaster had a particularly traumatic effect on exposed local populations

because its seriousness was recognized only gradually. The community was divided by rancorous conflicts. People in other countries also experienced much heightened concern about industrial risks and the need for tighter regulation of hazardous chemical installations. In these respects Seveso resembled Bhopal (1984) and Chernobyl (1986), which have both come to be regarded as international symbols of industrial pathology.

The accident at Seveso was the first to draw international attention to the risks of hazardous chemicals. It was followed by a series of accidents and controversies in the U.S. and abroad that kept this issue on the public agenda. In the late 1970s, local concerns about the effects of waste buried in the Love Canal outside of Buffalo New York drew national attention. The events at Love Canal are discussed in detail in the article below. They were followed in 1982 by an emergency in a small town outside of St. Louis called Times Beach. Times Beach became a focus of national attention when residents and town officials learned, first from a local reporter, that a contractor to the town may have sprayed their streets with waste oil containing dioxin. The reporter's call was followed by a similar one from EPA officials informing residents that Times Beach was high on a list of "suspected sites." (Leistner, 1995) The last Mayor of Times Beach has described the local reaction to this news.

Chaos broke loose. The residents immediately recalled that the roads had turned purple after being sprayed. The spraying had resulted in an awful odor. Birds had died and newborn animals succumbed shortly after their birth. One man remembered a dog found in one of the contaminated ditches. They thought the dog rabid and prevailed upon a policeman to shoot it. Another man told how he had called the St. Louis Health Department to tell them about the dead birds he kept finding. The department recommended that he freeze the dead birds and said they would be out to pick them up. No one ever came. (Leistner, 1995)

About two months later, after a severe flood (Times Beach is in the Mississippi flood plain) the residents of Times Beach received what they call their "Christmas message" from the EPA, "If you are in town it is advisable for you to leave and if your are out of town do not go back." (ibid) With this news the "community, virtually overnight, was transformed to a national symbol of something uninhabitable. The news media flooded the world with specials and reports of Times Beach and its contamination. It was at this time that the full impact of the dioxin tragedy registered with our citizens." (ibid) Eventually all 2,000 residents were permanently relocated, all the buildings in town were razed, and a massive cleanup program was undertaken. The current plan is to create a park where the town used to be.

Times Beach was followed in December 1984 by a disaster when "gas leaked from a tank of methyl isocyanate (MIC) at a plant in Bhopal, India, owned and operated by Union Carbide India Limited (UCIL)." (Union Carbide, n.d.) By the state government reports, 3,800 people died, 40 experienced total disability, and 2,680 experienced a permanent partial disability. (ibid) Bhopal was followed in 1986 by the accident at the nuclear reactor in Chernobyl. Interspersed among these high profile events were many smaller disasters that posed serious issues, but did not reach the same prominence in the news. A good example is fire that contaminated a state office building in Binghamton, N.Y. Similar issues about health risks posed by contamination and clean up were raised, but the case itself did not receive the kind of national and international attention that Times

Beach and Love Canal did. Overall, these incidents demonstrated, in a repeated and public way, the risks posed by hazardous chemicals and contributed to an environment where something had to be done.

The story you will read discusses the effort to understand and address these problems that really got underway in the early 1980s and continues today. The principal pieces of federal legislation that are part of the story are the *Resource Conservation and Recovery Act* (RCRA, 1976), the *Toxic Substances Control Act* (TSCA, 1976), and the *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA, 1980)

RCRA (pronounced *rick-rah*) gave EPA the authority to control hazardous waste "from the cradle to the grave," TSCA (pronounced *tos-kah*) gave EPA the authority to track domestically produced and imported chemicals and to require reporting or testing when the chemicals are found to pose a risk to human health. CERCLA created a 'trust fund" of resources through a tax on the chemical and petroleum industries and established a framework for cleaning up contaminated sites that is better known as Superfund. The *Superfund Amendments and Reauthorization Act* (SARA) in 1986 reauthorized, clarified, and amended the CERCLA program, increased the size of the trust fund, and, in Title III, created the *Emergency Planning and Community Right-to-Know Act* (EPCRA). The *Right-to-Know Act*, just as it sounds, gave communities the right to know about the chemicals that were used by companies with the idea that this would help groups work to protect the health and safety at the local level. It also "requires EPA and the States to annually collect data on releases and transfers of certain toxic chemicals from industrial facilities, and make the data available to the public in the *Toxics Release Inventory* (TRI)." (http://www.epa.gov/tri/whatis.htm)

These development and implementation of these policies provide the backdrop for the story in the article that follows. Many of the federal policies either explicitly required, or came to involve in practice, substantial participation from state and local organizations and a framework of state legislation. As you read the story, try to follow how each of the efforts to address the problem contained seeds of instability and how policy developed as these seeds became active in a set of interactions among community groups, firms, and policy-making organizations like the EPA. We will look at the case in part as an example of how and why policies change over time. Please try to read it with this in mind.

## **References Cited**

De Marchi, B., S. Funtowicz, and J. Ravetz. (1996): "Seveso: A paradoxical classical disaster," in James K. Mitchell (ed) *The long road to recovery: Community responses to industrial disaster*. (Tokyo, New York, Paris: UNU Press) Available online at <a href="http://www.unu.edu/unupress/unupbooks/uu21le/uu21le00.htm#Contents">http://www.unu.edu/unupress/unupbooks/uu21le/uu21le00.htm#Contents</a>

Leistner, Marilyn (1995): "The Times Beach Story" <a href="http://www.greens.org/s-r/078/07-09.html">http://www.greens.org/s-r/078/07-09.html</a> Leistner was the last Mayor of Times Beach.

Union Carbide (n.d.): "Bhopal: Incident Review" http://www.bhopal.com/review.htm