Contaminated Communities: A video documentary of the Alberton, Montana mixed-chemical spill and an analysis of how its effects on toxics victims fits into a larger contamination framework from a political ecology perspective

Lisa A. Mosca

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Contaminated Communities: A video documentary of the Alberton, Montana mixed-chemical spill and an analysis of how its effects on toxics victims fits into a larger contamination framework from a political ecology perspective.

by

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B.A. Biology, Swarthmore College, 1994

Presented in partial fulfillment of the requirements for the degree of Master of Science

University of Montana

1998

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12-30-98
ABSTRACT

Mosca, Lisa A. M.S., December 1998 Environmental Studies

Contaminated Communities: A video documentary of the Alberton, Montana mixed-chemical spill and an analysis of how its effects on toxics victims fits into a larger contamination framework from a political ecology perspective.

Director: Tom Roy

The small rural mountain town of Alberton, MT located 32 miles west of Missoula, MT was the 1996 site of the largest contamination event in railroad history involving a mixture of chemicals. On April 11, 1996 a Montana Rail Link train derailed just west of the town of Alberton, leaking 130,000 pounds of chlorine gas, 17,000 of potassium cresylate (spent oil refinery waste), and 85 dry bulk pounds of sodium chlorate into the Alberton environment. Approximately 1000 people were evacuated from their homes, many for the seventeen day evacuation period that followed. The video documentary project that I embarked on in January 1997, the following year, attempts to chronicle the impact of this tragedy, on the lives of the evacuees from a political ecology perspective. It also documents the bureaucratic and medical responses to the changes in victims' health and welfare over the course of the two and a half year period since the spill. The accompanying paper briefly describes the political ecology analysis of contamination events that guided my editing decisions for the documentary. The Appendix to this analysis contains a resource manual and action guide for preventing future Albertons, as well as an emergency response strategy for communities to follow, if such a tragedy does befall their community.
ACKNOWLEDGEMENTS

Thank you to my loving family, Gerda, Mike, and Tina for all your support over the years. Special thanks also goes out to all the evacuees who have so graciously shared their stories with me over the past two years, and particularly to the Alberton Community Coalition for Environmental Health, for sharing their hard-won information; Ada and Roger Chalmers, Deb Griffin, Lucinda Hodges, Katina and Rick Maedje and Beverly Ridenhour. I wish you all health, peace and a future of meaningful and conscious resistance to the entities that have polluted your lives.

Special thanks also goes to my committee members, Jim Burchfield, Sean O’Brien, and Tom Roy, for their willingness to take on a less than conventional format for a master’s thesis, and for their excellent critical feedback and patience as I developed my work. Special thanks also goes to Vicki Watson, my advisor, an inspiration to me in mixing community activism and education from the heart. Finally, I am grateful for all the other excellent professors I have come into contact with here at the University of Montana; Jill Belsky and Steve Siebert, Josh Slotnick, Dan Flores, Fred Allendorf, Bill Chaloupka and Len Broberg.

There is one special person, who not only brought me in part to Missoula, but who fostered the connections to my thesis that grew out of her own passion for justice in Alberton. To Hope Sieck I am eternally grateful, both for shared stories and resources, and for your critical thinking and empathy.

My heartfelt appreciation goes out to a number of friends who have been my support network and inspiration (and car loaners!) these last few years; John Constan, Mo Kolster, Allison Handler, Jessica Higgs, Mark Heitchue, Bob Giordano, Molly Bleecher, Matt Dietz, Ron Scholl, Derek Birnie, Annie Szvetecz, Billy Stern, Darrell Geist, Tony Tweedale, Sandra Koelle, Kelley Segars, Rick Stern, Jory, Ralph, Kira, Roger and Brian, and farther away, Tara, David, Stu, Megh, Sara, Cathy, Jenn, Heather, Dee, Tiffany, Ajit, Eli, Mark, Yonathan, Aaron, Bart, B.J., Brendan, Darien, KT, Deb, Amy, Zulene Mayfield and CRCQL and those wacky Land Institute and Empty the Shelters folks. You have crafted my lens. I feel empowered to know you all.

My appreciation also goes to the incredible staff at MCAT and to the many videographers who have provided me generously with their time and kind critiques; Dru Carr, Doug Hawes-Davis, Storm Waters, Mike Meese and the EVST film class of 1997. Thanks to you the film is not ten times longer and aesthetically boring!

Finally, thanks to all those academic types who inspired in me a love of learning and a passion for mixing that learning with critical thinking and action; Temba Maquebela, Mark Koolen, Jacob Weiner, John Piper, Mark Jacobs, Marion Faber, Meta Mendell-Reyes and Prof. Legasse and the entire EVST faculty.

We as a nation must undergo a radical revolution of values... True revolution of value will soon cause us to question the fairness and justice of many of our past and present policies. On the one hand we are called to play the Good Samaritan on life’s roadside; but that will only be the initial act. One day we must come to see that the whole Jericho road must be transformed so that men and women will not be constantly beaten and robbed as they make their journey on Life’s highway. True compassion is more than flinging coins to a beggar; it is not haphazard and superficial. It comes to see that an edifice which produces beggars needs restructuring. These are revolutionary times.

-Dr. Martin Luther King, Jr.
Address given at Riverside Church
New York City, April 14, 1967
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Introduction

The video and research project that I have worked on for the past two years, delves into a specific contamination event that occurred in Alberton, Montana, when on April 11, 1996, a Montana Rail Link train derailed. This contamination event was the largest mixed chemical spill and second largest chlorine spill in railroad history. The video I have produced focuses on the story of this derailment’s effects on the community from the political ecology/political economy perspective elaborated upon below. This involved research and documentation of the local, state and national interests involved in the contamination event, as well as the personal stories of those most hurt in the effected area. It also involved research into the actual science of the contamination process, given the different political interests and local, state, and federal agencies involved as gatekeepers of this important information. Finally, it involved placement of this incident within the framework of history, both MRL corporate history and international toxic contamination/production decisions history. This paper is meant to provide a brief background in political ecology and the history of the toxics movement in the U.S. in this century. Hopefully this background will help illuminate the reasons for my editing decisions in producing the video.

Only one percent of chlorine use in the U.S. goes towards drinking water. Much of the rest of chlorine use goes towards the pulp and paper industry and PVC plastics, the largest growing intake source for chlorine (Greenpeace, 1998). To put into perspective the hazards of transporting this and other hazardous materials, consider the following statistics both locally
and nationally; 25,000 hazardous waste filled railcars pass through Montana annually, chlorine is within the top ten list of hazardous materials transported as measured by carload. Of the extremely hazardous substances (EHS) listed by the toxic release inventory, chlorine is ranked second by worst-case “disaster potential” by the National Environmental Law Center (Gray, 1998). Phenols (also spilled in Alberton) ranked sixth on this same list. This same study found that one in six Americans, or 41 million, including 128,908 people in Montana, live within range of a toxic cloud that could result from a chemical accident at a facility located in their home zip code.

Contamination Defined

Michael Edelstein, author of Contaminated Communities, defines contamination as follows; “a ‘contaminated community’ refers to any residential area located within the identified boundaries for a known exposure to some form of pollution” (Edelstein 1996:6). In using this definition I acknowledge, however, that the process by which that “boundary” is identified, and by which a community is “identified as contaminated”, are both questions for political ecology research as well. While I attempted to address these issues somewhat in my analysis, I could not do justice to the need to delve deeply into these aspects of what Mary Curran (1996) labels “contested terrain”. It is important to make clear, however, that I consider the lived experiences of hundreds of residents who identify themselves as being sick, to be an identification of likely contamination (i.e. some contamination is very hard for “science” to empirically identify.)
Methodology

My framework of analysis for the video, focused its discussion and analysis on who is benefiting and losing when communities are contaminated, by what process, and the relevance of historical context. In analyzing the topic of contamination of communities, I used discourse analysis and considered concepts such as social capital and power. Informed by a political ecology/political economy approach, I considered how, in movement against toxics contamination, these social science theories can help explain why certain communities of interest and place seem to benefit, while others lose, especially within the context of an increasing global, capitalist industrial system. I hoped to flush out the means by which these theories can lead to empowerment of these communities in fighting the NIABY fight (i.e. of contamination in nobody's backyard) with an understanding of the links of these contaminations to our current production system and dominant discourse. Thus, I attempted to investigate what kind of social movement is being created in response to these toxic contamination events, and what will constitute its effective response to the toxics dilemma.

Much current academic discussion of contamination events revolves around the idea of creating a NIABY movement as opposed to the NIMBY (Not In My Backyard) movement of the past, that still hurt some community, somewhere. This discussion depends much more heavily on creating alternatives to current production methods, and looking at prevention of contamination events. As Michael Heiman (1996:115) suggests, “This [discussion] moves us beyond the static “chicken or egg” debate to question
inequality in all of its forms, be it race, class, gender, or age, as socially constructed as a necessary feature of capitalist production. *Only* with this insight in hand can we move on to forge a multi-cultural and counter-hegemonic alliance (emphasis mine).”

The insights gained from my intellectual pursuits in the area of contamination and political ecology, helped guide me in deciding who the key political and scientific decision-makers were in the Alberton contamination event, and thereby guided my interview process. Such knowledge also guided the editing process for the film; I attempted to place this event within the historical, political and economic context of such events, as they have occurred historically throughout the country. It is my intent, that this film should thereby empower residents in Alberton, as well as other concerned individuals, with an understanding that their experience, while in some ways unique, is also a shared experience that holds the potential to be prevented in the future. The most challenging part of the analysis is the look at prevention (both prevention of such toxic events, and prevention of so much trauma) and so little true help to victims in the case that such an event occurs. The great potential for prevention is addressed via the resource manual (Appendix A) that will accompany the video jacket in distribution of the film. Much of this prevention focuses on Community Right to Know efforts, in keeping with the idea that the Right to Know brings the ability for citizens to act (see EPCRA Appendix A).

**Political Economy/Ecology Defined**

Authors like Blaike (1996), Bryant (1991), Taylor and Garcia-Barrios
McNaughton and Urry (1995) and Greider and Garcovich (1994) all write about aspects of political ecology analysis. Bryant (1991) describes the importance of putting politics first in sociological analysis. He describes a political ecology approach as embracing political issues, that he suggests, "may be defined as an inquiry into the political sources, conditions, and ramifications of environmental change. Unlike sustainable development literature, it focuses on the interplay of diverse socio-political forces, and the relationship of those forces to environmental change. Embracing different social and ecological scales, political ecology addresses at least three distinct but inter-related research areas (Bryant: 1991:165)." He goes on to suggest that these areas are 1) the general environmental impacts of the state and its policies, interstate relations and global capitalism; 2) location-specific aspects of environmental change; and 3) the effects of environmental change on socio-economic and political relationships. He asks, "to what extent are environmental costs borne by socially disadvantaged groups, and how does this unequal burden affect existing socio-economic inequalities? Under what circumstances does unequal exposure to environmental change lead to political confrontation (e.g. environmental movements)? (Bryant 1991:165)."

Bryant contests that the impacts of environmental change are rarely neutral, and that, "political ecology also rejects the facile assumptions about environmental change and human welfare, that ecological degradation, for instance is a universal evil affecting rich and poor alike. Rather, it explores how such change is incorporated into concrete political and economic relationships, and the ways that it may be used to reinforce or challenge those relationships. (Bryant 1991:166)." This framework for a political ecology
analysis incorporates the many features I considered in editing the video, including nested scales of analysis, history, science, power and issues of access, social capital, discourse analysis, communities of place vs. communities of interest, and media representation. That this is a laundry list, highlights the complexity of the issues and the need for a complex, interdisciplinary synthesis and analysis. I will very briefly give a flavor for what I mean by each of these below.

**Nested scales of analysis.** Residents who live in contaminated communities are affected by the physical and mental strains that this pollution places upon them, whether they themselves choose to define their community as contaminated or not. In fact, it is possible that even more mental stress is placed on those individuals who are ill, but choose/have chosen for themselves to deny their illness, for whatever reason. Each individual’s body reacts somewhat differently to different body-burden levels of contamination. Everyone also has a somewhat different history of exposure to contamination, even within any given community. Thus, the “population of residents” and the consequences of their “contamination” in a contaminated community is not monolithic. People are more susceptible to sickness from contamination at different ages and stages in their development, as well as in different classes, with different gender and ethnic backgrounds. At the household level, this can often lead to complex differential interactions, due to exposure to the same contamination incident, whether it is short or long-lived. Alberton residents, for instance relay stories of the break-up of relationships in the months after the spill, due partially to differences in how spouses refute their own sickness or their children’s,
and quarrels over whether to move away, or stay because “there is no problem”. There is also some evidence that contaminants like dioxins, as hormone disrupters, affect women and men differentially (Steingraber 1997, Gibbs 1995, Colborn 1996). Such differences in biological response along gender lines are important to be conscious of in any sociological analysis.

Within the framework of the bureaucracies that have power over decisions affecting contaminated communities, the local-level and state-level health officials as well as the Environmental Protection Agency (EPA) and Agency for Toxic Substances Disease Registry (ATSDR) were important institutional bodies to investigate. Their mandates, what information and decision-making they have power over, and how they wield that power, are all questions for consideration. Important considerations here, include a consciousness about how science is reported to people, and how it is interpreted and by whom. Examples include how risk assessment is done, and how science is used appropriately or abused, and what assumptions are made, and who they affect.

On a global level, authors like Vandana Shiva write about the shifts in contamination from more to less industrialized countries following the path of resource extraction. So, while the focus of my video was on contamination in the United States, it is important to recognize that global restructuring and NIMBY (Not in My Backyard) tactics just send toxic wastes and industries overseas, or across the border, to the “international states of least resistance”, instead of “the communities of least resistance” in the U.S. This is more and more likely as NAFTA and the proposed Multilateral Agreement on Investment (MIA) become realities (Sforza, 1998). This is
where alternative modes of production become so important.

*History.* Within a political economy/political ecology framework, historical context is considered key to analysis of the situation. In describing shifts during the industrial revolution, McNaughton and Urry (1995:206) point out the shifts in social construction of nature as they relate to shifts in our modes of production. These shifts may help explain why contamination of communities has not been addressed by policy in this country to date. “Just as ‘improvers’ were claiming the inevitability of their acts many began to experience the environmental degradation and social exploitation deriving from massive interference in ‘nature’. Many of the side effects of industrialism became criticized as inhumane, unjust, and ‘unnatural’. However, while these negative effects were easy to acknowledge, developing a ‘natural’ alternative became more difficult. As the market became institutionalized in society, it was hard to criticize the very mechanism which was identified as the creator of wealth, prosperity, profits, and liberal democracy. The market came to be understood as itself ‘natural’ and the laws of the market as analogous to the laws of the natural world, and therefore not to be interfered with or contested. Clearly, within the system of capitalist industrialism it is easier for those who benefit from profits, to disassociate themselves from the negative side-effects that those industrial processes have on the land and people.” The social construction of nature that MacNaughton and Urry address, is an instructive lens by which to view contamination. If people construct contamination into their concepts of nature, as a natural byproduct, they are less likely to blame the specific interests and global processes that are truly benefiting from this mode of
production, and are more willing to accept the burden of contamination as a necessary evil, or even their own fault.

**Science.**

"Models of global climate change, implicitly correspond to questionable moral and epistemological commitments to modernist ideals of order, prediction, and standardized knowledges; where science and policy makers effectively mutually reconstruct political orders, unreceptive to whether, for example, a unit of CO$_2$ refers to subsistence paddy fields, or luxury air conditioning. A related point lies in how a more critically informed sociology can challenge the technical and natural sciences more generally by demonstrating that science itself rests upon social assumptions which in the ‘real world’ mean that predictions of the theory derived from the laboratory do not always work out in particular ‘real world’ circumstances (MacNaughton and Urry 1995:209-210).”

When contamination of a community is reconstructed within a scientific framework, often the way residents “feel” is not taken into consideration. Scientists focus on measurable aspects of exposure, often missing out on the synergistic effects of many different chemicals that are hard to measure, let alone identify. Costs can often be prohibitive to adequate analysis. For instance, in Alberton, the media portrayed a mixed chemical spill as a chlorine spill. The lack of understanding that many chemicals mixed to potentially form dioxins or other nasties from the spent fuel and chlorine spilled, is one way that scientific understanding of synergism in contamination has been obviscated.

How risk assessment is done, has a major impact on contaminated communities. This particular aspect of science has been heavily impacted by politics and history. Much environmental justice debate in recent years has focused upon whom the burden of proof should be placed in risk assessment,
the public community of resistance or the industry. The precautionary principle (see appendix) suggests that onus of safety should be placed on the proponent of a project. In the end much of risk assessment is about using an overwhelming amount of information to suggest that a proposed project is safe, so that any community trying to oppose the project or the transport, etc... and advocate for alternatives is overwhelmed. It is difficult for grassroots groups to win this argument, unless the burden of proof is shifted (Mary O'Brien, 1998). There are no current Federal standards for track maintenance, so railroads currently get to decide for themselves what is considered “safe” enough in terms of track standards.

Communities of place vs. communities of interest. When a contamination event occurs, it occurs in a specific place and to specific people. As authors like Robert Bullard (1993,1994,1997) and Lois Gibbs (1995) point out, these contamination events most often affect communities with the least political resistance (see also the Cerrell Report: 1994). These communities are often lacking the social capital to make their voices of protest heard, either before the contamination event, during siting of a facility, or after an event. This contrasts with communities of interest around the country and world, who use NIMBY tactics to keep contamination out of their community, by accessing the power they hold via social capital that they possess. Studies like the Cerrell Study, which I will discuss in more detail in my paper, highlight these differences in access to political power. The interplay between communities of interest and communities of place is complex. There are global and national corporate interests, there are national, state-level and even local interests, there are
bureaucratic interests, and then there are the interests of those who will be biologically contaminated.

**Law.** Litigation is often the final response for residents who organize around the issue of contamination. This is, of course, not the best way to get immediate help, as it often requires many years, during which time the residents are still suffering. And often the remedies the court provides are inadequate. What can replace your health or the health of your family, once it has been permanently damaged? Also, it is often questionable to what extent the polluter pays the price. It is often hard to prove liability when contamination events occur over many years, when many owners are involved, or when it is difficult to prove causality of the health effects for which the state, or a corporate interest is being implicated. In 1994, the Federal government acknowledged the concept of environmental justice with Executive Order 12898, often considered the Environmental Justice Executive Order. The order directs Federal agencies to consider the possibility that their environmental decisions could discriminate on the basis of race or income. Guidance from the EPA on interpretation of this order focuses on the use of Title VI of the 1964 Civil Rights Act, which bars from discrimination any government agency that receives federal funds. To date however, legal battles using Title IV have not been as successful as environmental justice advocates had hoped (Lovera, 1998).

In recent years, U.S. legislation has been passed by Congress that is more prevention-oriented. As discussed in the resource manual, (Emergency Planning and Community Right to Know Act (EPCRA) and the creation of Local Emergency Planning Committees (LEPCs) nationwide, as well as the
creation of a Chemical Hazard Safety Board for independent review of contamination on a federal level, are all steps towards risk-reduction. While these systems create an avenue for citizen participation and increased access to risk information, they do not necessarily force prevention through alternative modes of production (like phase out of chlorine production). Unlike the methods advocated for by the precautionary principle, the burden is still left up to citizens to use the risk information in pressuring for change as they see fit. This could lead to environmental equity battles or to pressure for alternative production methods.

Discourse analysis. One of the most fascinating aspects of the current discourse on toxics and contamination, is the current dialogue questioning whether "environmental justice" in toxics should become a social movement addressing modes of production, the source of toxics, and thereby the prevention of toxics production, or whether it should just be addressing "environmental equity" and thereby spreading the contamination around equally. I considered this debate within the context of my video production, in terms of the production of chlorine, and whether alternatives should be found, or whether the burden of chlorine production just needs to be more "equitably shared" by all communities.

Also important to discourse on contamination are the issues of chemical sensitivity, sensitization and multiple chemical sensitivity (MCS) and sickness; i.e. when is someone recognized as sick and by whom. A recent article by Nicholas Ashford and Claudia Miller (1998) suggests that diseases related to chemical exposure have been hard for the medical community to define and diagnose. These illnesses differ from classic disease -
symptomology, in that they seem to affect more than one target organ. They can also be caused by multiple exposures events, and sometimes-involve different chemicals. Often chemical exposures affect communication systems or networks, such as the immune system or neurological system (Ashford and Miller, 1998: 508). All of these complex interactions, along with a lack of training in environmental medicine for most doctors, can leave many doctors in the dark as to recognition and treatment of victims. It seems that many doctors associate these illnesses with psychological stress and simply ignore the physical illnesses. I have had numerous Alberton victims describe their frustration to me over doctor visits that lead the doctor to refer them to a psychiatrist for an ailment they never experienced before the spill. I also have had numerous victims say that their doctors refused to discuss anything but classic chlorine symptoms (respiratory). This can lead to distrust of the medical community and frustration for contamination victims regarding medical treatment as discussed by Edelstein (1988).

A final area of interest in discourse analysis is that of boundaries for contaminated areas. Who defines the area; a government agency, a citizen’s group, an outside environmental group, an industry, scientific tests? As Michael Edelstein (1988) and Lois Gibbs point out (1998), there are social and psychological impacts both for those who come to live inside and outside this boundary. The discourse around all these subjects is affected by the many aspects that political ecology considers.
"All socioeconomic groupings tend to resent the nearby siting of major facilities, but middle and upper socioeconomic strata possess better resources to effectuate their opposition. Middle and higher socioeconomic strata neighborhoods should not fall within the one-mile and five-mile radius of the proposed site."


Conclusion

As we look towards the new millennium, it is time to consider environmental justice for all communities, and to recognize that past NIABY tactics can no longer suffice, as our public trust resources such as air and water are destroyed by the overwhelming number of chemicals produced in this country each year. Who benefits and who loses in the production decisions that allow hazardous materials to be used when alternatives exist? I hope that is abundantly clear, as Alberton residents continue to struggle for their health, while those residents in Bellingham Washington (where the Georgia Pacific plant that manufactures the chlorine) also continue to struggle, and the residents of San Francisco’s East Bay and eastern Washington and other sites for TOSCO Oil Refineries (the producers of the potassium cresylate spilled in Alberton) continue to struggle for fresh air. Only when citizens not only have the right to know what passes through their communities, but also the ability and political structure that allows them to look to safer alternatives, will there truly be any environmental justice for the residents of the world.
Appendix A

A Toxic Train Ran Through It: Resource Manual

Part I: Emergency Exposure Situations
What to do if you’ve just experienced a chemical emergency

If you have just been exposed in a chemical disaster, one of the best ways to document your exposure is with blood serum samples. If you live in a community that is at high risk for exposure, you can keep complete kits on hand for an emergency. The kits come prepared to be Fed-Xed in an emergency.

To receive a complete blood analysis kit write to:
Antibody Assay Laboratory
1715 E. Wilshire, Suite 715
Santa Ana, CA 92705
or call: (714)972-9979 or (800)522-2611
or check out their web page at: <http:\www.immu-no-sci-lab.com> another lab idea:
Immunoscience Lab., Inc.
8730 Wilshire Blvd.
Suite 305
Beverly Hills, CA 90211
e-mail immunoscience@ix.netcom.com
phone: (310) 0657-1077
fax: (310) 657-1053
toll free: 800-950-4686

In looking for doctors who specialize in environmental medicine, some of whom specialize in toxic exposures, your community can start by contacting the group of doctors below, who have kept the dialogue on environmental medicine open on medical effects of pollution:

National Association of Physicians for the Environment
6410 Rockledge Dr., Suite 412
Bethesda, MD 20817
fax: (301)305-8910
http:\\www.napenet.org
There are also three **clinics in North America that specialize in treating victims of chemical exposure.** Beware, though, some of these facilities can be expensive, so for injuries not covered by workman’s compensation, you should ask carefully what would be covered by any insurance you might have:

The Environmental Health Center  
8345 Walnut Hill Lane  
Suite 220  
Dallas, TX 75231  
(214)368-4132 (patient information)

Edelson Center for Environmental and Preventive Medicine  
3833 Roswell Rd., Suite 110  
Atlanta, GA 30342  
Phone (404) 841-0088  
Fax: (404) 841-6416

If your community has just experienced a toxic exposure, you will want to discern what chemicals you were exposed to as soon as possible. If you have already been told what chemicals spilled, you may be able to find out more about the health impacts of these chemicals through the **Material Safety Data Sheets (MSDS).** Keep in mind that environmental and medical experts have found that **only approximately 15% of the overall information provided by MSDS sheets is usually accurate,** but at least it is a start.

One resource for receiving MSDS sheets and Hazardous Substance Fact Sheets is the:  
New Jersey Department of Health & Senior Services  
Right to Know Program  
P.O. Box 368  
Trenton, NJ 08625-0368  
(609) 984-2202

If numerous chemicals spilled, also keep in mind that the interactions between multiple chemicals can be scientifically controversial. As soon as possible, get the opinion of an **independent non-industry scientist** on what your community was exposed to. A good place to start, would be with **Dr. Paul Connett,** a chemistry professor at St. Lawrence University in New York at (315)229-5853 or with **Steven Lester** at the Center for Health, Environment and Justice at (703)237-2249, or if it is related to the oil industry, with **Denny Larson** of Communities for A Better Environment at (415)243-8373.
For help in learning more about potential medical, scientific, or activist resources right after an exposure, contact the resource groups below:

National Coalition Against the Misuse of Pesticides
http://www.csn.net/ncamp
NCAMP can help you get more information on MSDS sheets. They also have started working on collecting information on potential medical help for those who have been exposed.

Northwest Coalition Against Pesticides
http://www.efn.org/~ncap/
NCAP houses information on many chemicals, and MSDS sheets.

Center for Health Environment and Justice
150 S. Washington St., Suite 300
P.O. Box 6806
Falls Church, VA 22040
(703)237-2249
e-mail <chej@essential.org>

Alberton Community Coalition for Environmental Health
http://www.wildrockies.org/cmcr/Campaign/acceh.html
chlorina@marsweb.com
(406)728-1001
ACCEH is working on an emergency response team to help communities that have experienced a toxic exposure emergency.

Chemical Injury Information Network
http://biz-comm.com/CIIN/newsletter.htm
(406)547-2255
CIIN publishes Out Toxic Times and can guide victims to many resources.

Communities for A Better Environment
National Oil Refinery Action Network
500 Howard St., Suite 506
San Francisco, CA 94105
(415)243-8373 fax:(415)243-8980
e-mail:cbesf@igc.apc.org
web site:http://www.igc.org/cbesf/
Along with the resources above, we encourage you to contact your local crisis lines and provide them with the information you come up with, which will in turn help them help the community at large. While counseling hotlines are not a replacement for medical treatment for physical exposure, the stress related to exposure also needs to be dealt with. Along with physical illness, the related stresses from chemical exposure can become an issue weeks and months after the exposure. Don’t leave your crisis lines in the dark.

If your community has been exposed to chemicals, you may want to immediately start gathering information through your own independent community health surveys. Many communities exposed to chemicals have been dissatisfied with the current government health studies on exposure. We recommend you start a database of victims who can remain informed of findings by your community, and whose health can be followed over time. The following organizations are already equipped with community health surveys that you can adjust to your community:

Center for Health Environment and Justice (see above)

Environmental Health Network
Great Bridge Station
P.O. Box 16267
Chesapeake, VA 23328-6267
phone: (804)424-1162
fax: (804)424-1517

ACCEH (see above)
Part II: Prevention
Don’t Let Your Community Take Unnecessary Risks!

So your community has been lucky enough to avoid a chemical exposure catastrophe so far, but you are concerned about risks for future exposure. Listed below are some resources and concepts that are allowing communities to take action to minimize risks as well as expose risks to the entire community for debate. According to a recently released report by the National Environmental Law Center, more than 41 million Americans live within range of a toxic cloud that could result from a chemical accident at a facility located in their home zip code, and more than 23,000 toxic chemical accidents were reported in the U.S. between 1993 and 1995.

One way to implement risk prevention in your community is through use of the precautionary principle, in decision-making about flow of hazardous chemicals through your community:

The Precautionary Principle (via 1998 Wingspread Conference in Wisconsin and Dr. Mary O’Brien at NCAP <mob@dunkwing.uoregon.edu>):

We believe the release and use of toxic substances, the exploitation of resources and the physical alteration of the environment have had substantial unintended consequences affecting human health and the environment. Some of these concerns are high rates of learning deficiencies, asthma, cancer, birth defects, species extinctions, along with global climate change stratospheric ozone depletion, and worldwide contamination with toxic substances and nuclear materials.

We believe existing environmental regulations and other decisions, particularly those based on risk assessment, have failed to protect adequately, human health and the environment, the larger system of which humans are but a part.

We believe there is compelling evidence that damage to humans and the worldwide environment, is of such magnitude and seriousness that new principles for conducting human activity are necessary.

While we realize that human activities may involve hazards, people must proceed more carefully than has been the case in recent history. Corporations, government entities, organizations, communities, science and other individuals, must adopt the precautionary approach to all human endeavors. Therefore, it is necessary to implement the precautionary principle:
When an activity raises threats of harm to human health or the environment, precautionary measures should be taken, even if some cause and effect relationships are not fully established scientifically. In this context, the proponent of an activity, rather than the public, should bear the burden of proof. The process of applying the precautionary principle must be open, informed, and democratic, and must include potentially effected parties. It must also involve an examination of the full range of alternatives.

EPCRA (42 U.S.C.A. SS 11001-11050; also SARA Title III.)

One of the best ways that communities can get information about the manufacture, transport, and disposal of hazardous materials within any given community, is through the Emergency Planning and Community Right to Know Act (EPCRA). EPCRA was passed in 1986, in response to the tragic chemical accident at a Union Carbide facility in Bhopal, India. Local Emergency Planning Committees (LEPCs) are one of the systems established by EPCRA for dealing with chemical emergencies. One of the duties conferred on LEPCs is to prepare comprehensive emergency plans outlining local emergency hazards and emergency response procedures. For these plans the Environmental Protection Agency (EPA) recommended until the past week (due to controversy about terrorism) that LEPCs either prepare or require facilities to prepare “worst-case” accident scenarios. Worst-case scenarios indicate the geographic area affected by the worst possible accident at a facility, given almost immediate release of all contents stored in a facility and with failure of safety mechanisms.

If your community doesn’t already have a local LEPC, then consider starting one. Toxic Release Inventory Data or (TRI) data released by the EPA can help provide some of the information on fixed facilities in your community. Transporters however, create complications, through current hazardous chemical reporting loopholes. Consider setting aside a day to monitor the flow of placarded hazardous materials through your community via volunteer monitoring on highways, railroads and other transporter routes. Figure out what’s coming through your community and whether you are prepared for a chemical emergency. Consider the precautionary principle above in your plans. Most importantly, educate community members about alternatives to these hazardous materials, and encourage members to support markets for these alternatives.

The following are a number of resources that provide information on product alternatives to some hazardous materials (mostly chlorine) and information on citizen Right to Know efforts:

Greenpeace Toxics Campaign
Greenpeace http:\www.greenpeaceusa.org\toxics
1436 U Street, NW
Washington, DC 20009
1-800-326-0956
ACCEH (see above) is currently researching ways to effectively implement local ordinances that would give citizens information about what type, frequency and quantity of hazardous materials are traveling through the community via transporters.

Clark Fork Pend-Orielle Coalition
Reach for Unbleached Campaign
http://www.montana.com/cfpoec/paper.html

Rachel’s Hazardous Waste News
http://www.monitor.net/rachel
Environmental Research Foundation
P.O. Box 5036
Annapolis, MD 21403-7036

Earth Island Institute Alternative Paper Sources
http://www.earthisland.org/paper/ecosources.html

Cold Mountain-Cold Rivers
P.O. Box
Missoula, MT 59807
(406)728-0867
http://www.wildrockies.org/cmcr/

Environmental Working Group
http://www.ewg.org/

Native Forest Network
http://www.nativeforest.org

Chlorine Free Products Association
102 North Hubbard
Algonquin, IL 60102
phone: (847)658-6104 fax:(847)658-3152

Center for Health Environment and Justice
(see Part I)

Seventh Generation
http://www.seventhgen.com

Real Goods
http://www.realgoods.com
Part III Other Resources

The following is a list of other resources that your community may find helpful in the fight against toxic chemical contamination:

Silver Valley People’s Action Coalition
P.O. Box 362
Kellogg, ID 83837
(208)784-8891
e-mail: paccrcco@nidlink.com
<http:\www.nidlink.com\~paccrcco>.
SV-PAC is organized around lead exposure and public health concerns. If the Agency for Toxic Substances Disease Registry (ATSDR) is coming to your community to do health surveys after an exposure incident, you should call SV-PAC to find out more about their 20 year experience with ATSDR.

National Coalition for the Chemically Injured (NCCI)
Dr. Lawrence Plumlee
2499 Virginia Ave.
Suite C501
Washington, D.C. 20037
phone and fax: (301)897-9614

Pesticide Action Network
http:\www.panna.org\panna\nMore info. on pesticide exposure and MSDS info.

National Environmental Law Center
29 Temple Place
Boston, MA 02111
(617)422-0880

U.S. Public Interest Research Group
218 D Street, SE
Washington, D.C. 20003
(202)546-9707

These last two groups have written some reports on chemical accident risks in the U.S.

For a reading list or for a more complete "Field Guide to Chemical Injury" contact ACCEH at the address listed earlier.
Bibliography


New Jersey Department of Health and Senior Services, Right to Know Program. 1998. “Hazardous Substance Fact Sheet RTK Substance number 3509 (Cresols).” Trenton, NJ.

__________ 1998. “Hazardous Substance Fact Sheet DOT Number UN 2022/UN 2076. CAS Number 1319-77-3 (Cresylic Acid).” Trenton, NJ.


O’Brien, Mary. 1998. Eugene Environmental Law Conference Presentation on Risk Assessment. Eugene, OR (can be reached through the Northwest Coalition Against Pesticides in Eugene, OR or at <mob@darkwing.uoregon.edu>).


