

TOWARDS A "PEOPLE CENTERED" APPROACH
TO PARTICIPATORY PLANNING: ANALYSIS OF THE
GRASS ROOT LEVEL CONFLICT OVER WASTE FACILITY SITING

by

Deborah Marie McCarthy

Thesis submitted to the Faculty of the

Virginia Polytechnic Institute and State University

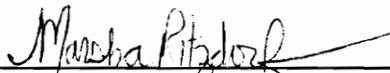
in partial fulfillment of the requirements for the degree of

MASTER OF URBAN AFFAIRS


in

Urban Affairs and Planning

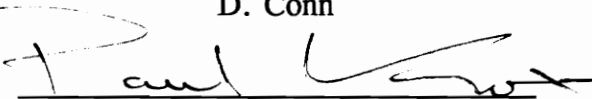
APPROVED:



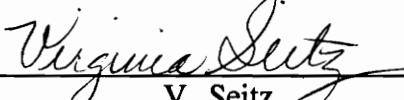
M. Ritzdorf, Chairwoman



D. Conn



P. Knox



V. Seitz

August, 1994

Blacksburg, Virginia

c.2

LD
5655
V855
1994
M3474
c.2

TOWARDS A "PEOPLE CENTERED" APPROACH
TO PARTICIPATORY PLANNING: ANALYSIS OF THE
GRASS ROOT LEVEL CONFLICT OVER WASTE FACILITY SITING

by

Deborah Marie McCarthy

Committee Chairwoman: Marsha Ritzdorff
Urban Affairs and Planning

(ABSTRACT)

This paper analyzes the role of both cooperative and oppositional modes of citizen participation in public decision making related to waste facility siting. Politicians, bureaucrats, and waste industry representatives embrace participatory planning as an equitable and efficient solution to the waste siting dilemma. Ideally, citizen involvement in waste planning would foster solutions both environmentally and economically satisfactory to all stakeholders. To date, however, no clear consensus exists over the instrumental objectives of participatory planning.

Participatory planning encompasses a wide spectrum of activities ranging from coalition-building to grassroots development. The broad use of the term "participation" complicates efforts to distinguish between those planning activities which are co-optive and those which are participatory.

Guided by two critical questions ('who' and 'why,') the first section of this paper proposes a 'people centered' conceptual framework for defining the

instrumental goals of participation and for differentiating between co-optive and participatory planning. In the second and third sections, I present a comparative case study of the two predominant modes of participation (cooperative oppositional) currently operating in the United State's waste facility siting crisis.

I use a 'people centered' conceptual framework to show that the current cooperative participatory approaches to waste facility siting serve more to facilitate citizen co-optation than participation. I further demonstrate that the grassroots oppositional movement against waste facility siting represents successful participation on the part of the citizens in the face of co-optive attempts on the part of the state and the waste industry.

I would like to remember my grandmother, Rosalie Hocke, whose encouragement and love instilled in me the confidence to start this paper and whose example gave me the stamina to see it through. I am grateful to Marsha Ritzdorf (Committee Chair) and David Conn, Paul Knox, and Virginia Seitz (Committee Members) for the guidance and thoughtful criticism they brought to the development and completion of this paper. I am especially grateful to Marsha for helping me to believe enough in my own words that I could see the final paper even out of the tangle of broken sentences and seemingly unconnected ideas.

OUTLINE

SECTION ONE: A Critical Look at the Ideals and Realities of Participatory Planning

- I. Defining Participation
- II. Interpretations of Participation
- III. Scope of Definition: Why, Whose, When, How
- IV. Conclusions

SECTION TWO: Analysis of the Development of the Role of Participation in Waste Management Planning

- I. Background of Waste Management Planning
 - A. Waste Disposal Tactics
 - B. Scope and Source of Waste Problem
- II. Case Study in Cooperative Approaches to Waste Management
 - A. Participation (Who and Why?)
 - B. Economic Compensation as a Participatory Approach: Co-optation or Participation?
 - 1. Practical and strategic interests
 - 2. Social, economic, and livelihood crises
 - 3. Intentions
 - 4. Mainstream critique of participation in waste management

**SECTION THREE: Towards a 'People Centered' Approach to Participatory Planning:
Lessons from the Grassroots Movement Against Toxins**

- I. Participation as an End
- II. Empowerment
- III. Evolution: From Practical to Strategic
- IV. Evolution: From Local to Global
- V. Top Down Vs. Bottom Up

SECTION FOUR: Conclusions

SECTION ONE

A NOTE ON THE CONCEPTS BOTTOM-UP, TOP-DOWN, ACTIVIST, AND GRASSROOTS PARTICIPATION

Participation takes place in both bottom-up and top-down forms of planning and policy development. Bottom-up participation necessitates that citizens define the scope of the decision making process and articulate the problems and solutions themselves (this may occur separate from or in cooperation with an outside agency.) Bottom-up participation does not necessitate that the citizens initiate the process or exercise total decision making control in every aspect of every stage of the process. For the purposes of this paper, I will sub-divide bottom-up participation into: 1) reactive participation (activism, grassroots movements), and 2) proactive participation (grassroots development).

Top-down participation occurs in situations where an outside organization, agency, or institution defines the scope of the planning or policy issue. Though top-down participation ideally serves both the interests of the outside organization and the interests of the community, by constraining the scope of the issue, it leads to either intentional or unintentional co-optation of the citizens.

Activism

The term "activism" refers to reactionary efforts on the part of citizens to change an outside organization's or institution's methods, plans, or policies. Most activism is spontaneous, single issue, and local in scope. However, some activist organizations (such as Green Peace) address a wide range of issues and operate at state, national, and global levels.

Grassroots Movement

The term "grassroots movement" refers to reactive participation in which activities at the local level become organized and united at the regional, state and/or national level. Grassroots movements organize from the bottom-up and as such differ from mainstream interest groups, like the Sierra Club, which organize from the top-down.

Grassroots Development

Where the term "grassroots movement" refers to reactive participation, the term "grassroots development" refers to proactive participation in which the citizens actively conceptualize and manage plans at the community level. Grassroots development, which emerges out of activism, is necessarily a bottom-up activity, though it may receive outside assistance. If the assistance, however, is made contingent upon pre-determined goals of an assisting organization it is top-down.

Within the context of this paper, the terms "outside agency," "outside organization," and "outside institution" refer to the waste industries, planning commissions, and government institutions involved in the waste planning process. While a planning agency may or may not be involved in many of the relations

between the communities and outside agencies, the term "planning" refers to the instrumental role of outside agencies in shaping the future of communities.

I. DEFINING PARTICIPATION

The purpose of this section is to explore the goals of and assumptions behind the concepts of both participation and co-optation. This exploration provides a conceptual framework for identifying the elements of a 'people centered' participatory approach and for differentiating between co-optive and participatory planning.

The optimistic environmental manifestos of the early 70s, fed by the environmental activism of the 60s, withered in the sluggish economy of the late 70s and early 80s. Public efforts towards a 'clean America' transformed into public debate over the importance of preserving seemingly insignificant 'endangered bugs' versus creating desperately needed 'jobs.' The defeatist tones of the debate spawned dooms-day predictions warning of the end of the world as well as fervent oratorials balking at the 'Chicken Littles.' The urgency posed by mounting environmental disasters coupled with the inconceivability of a world in which the economic and ecological systems could co-exist fostered radical environmentalist and utopian writings calling for the globe's governments to 'institute' comprehensive plans for a sustainable future (a 'green' police state).¹ The radical environmentalist's imperialist drive to 'manage' not only the eco-system, but also the human and social system was met with the backlash of an equally zealous Reagan and Bush administration. During the Reagan and Bush conservative rule, attempts to meet the demands of the "... the environmental conditions and political circumstances required tougher tactics, most of the mainstream organizations lost the momentum they had developed over the

previous decade."² The conservative stronghold against the environmentalist's demands to address the innumerable ecological, health and safety needs of the public was strengthened by the growing awareness of the complexity of the environmental problems. It became clear that the problem was far more convoluted to be adequately addressed by a simple emission standard; as the Nixon and Carter administrations had naively imagined. Exacerbating the complexity of the problem was the rise in the use of statistical analyses as decision points for politicians and bureaucrats. The statistics and formulas wielded by the political analysts was unfathomable to the general public and even most politicians. Political analyses transcended the scientific (rational) into the magical (irrational) realm of thought. Statistical analyses, though appearing nonsensical to the general public, retained and even gained in respectability as a decision making tool. This is in stark contrast to the comparatively 'irrational' outcries of the environmental activists who 'react out of fear' and won't listen to the 'logic' of the scientist's and politician's numbers and formulas.

Amidst mass confusion and political indecision, cooperative decision making offered a fresh approach, considered rational by both the citizens and politicians, to public decision making. Environmental groups and activists "(i)n a desperate drive to win respectability and access in Washington ... pursued a course of accommodation and capitulation with elected officials, regulators, and polluters. After having produced some limited gains in the 1970s, compromise became in the 1980s the entrenched and habitual practice of the mainstream environmental leaders, an

approach applied reflexively even in the face of irreversible degradation."³

Cooperative decision making, the golden solution, was seized fervently by greens, and capitalists alike.⁴ It promises 'win-win' solutions to even those most intractable disputes.⁵ The uncritical enthusiasm with which cooperative decision making is promoted by politicians and much of the popular and academic press has led one of its few critics, Barry Rabe, to label it as the "new panacea."⁶ Mystifying the potentials of cooperative decision making, advocates appeal to both society's utopian vision of a communitarian way of life, and its thirst for the material rewards of capitalist growth.

While the successes and failures of cooperative decision making, in fostering citizen participation are now well documented, explanations for that success and failure focus primarily on analyses of participatory methodologies and techniques.^{7 8} These analyses are meaningless without a public consensus over the goals of participation and, more specifically, of cooperative decision making. Fiorino writes that the term 'citizen participation'

... conjures up diverse images. To some people, it is synonymous with computer mailing lists, outreach meetings, well-publicized hearings, and slickly-packaged information brochures. To others, the term evokes images of raucous public meetings, rising costs, lawsuits, and delay. To still others, the term is a symbol for rallying opposition to government and corporate insensitivities, or a strategy for mobilizing otherwise disinterested publics. To the government administrator, participation can mean a nuisance or a strategy, the public affairs staff an opportunity, to the public interest group a tactic, and to newly-organized groups a symbol. Few terms in our contemporary political lexicon have been used with so little semantic precision. Citizen

participation in the administrative process will be only as good or useful as the meanings we give to it... the meanings we have given the term in recent decades have served neither our democratic ideals nor the goals of effective policy making. At a theoretical level, our conceptions of participation depend on interest-group, pluralist thinking. At a practical level, our conception of participation is narrow, superficial, and biased. Until we can devise new approaches, based on sounder theoretical and practical foundations, it will be difficult to achieve more effective lay participation in risk policy making.⁹

Articulation of the theoretical foundations of different participatory approaches is crucial to an understanding of both the limitations and possibilities of participatory planning and the development of specific participatory goals.

Hindering this goal development are the erroneous assumptions behind the explanations for the source of environmental conflict. Proponents of participatory approaches to environmental dispute resolution come primarily from two conflicting camps of thought. One camp assumes that environmental conflicts are largely caused by misunderstandings and mis-communications, rather than by differences in values. Through dialogue, the different stakeholders become aware of their common interests and co-develop common solutions. The other camp recognizes that many environmental conflicts are caused by differences in values, but argues that a satisfactory compromise can be reached in which the interests of each party are met.¹⁰

In situations where the source of the conflict truly resides in simple misunderstandings or differences over interests (not values) cooperative decision

making has been shown to be both effective and fair.¹¹ Many environmental conflicts, however, run deeper than a simple misunderstanding of the other party's interests.¹² Where the stakeholders diverge in beliefs over core values -successful cooperation is rare, successful co-optation is more likely. Where conflicts erupt over core values, consensus can be achieved under two circumstances. In the first, one of the groups will experience a fundamental change in how it views the world and defines its priorities. Consensus is achieved when this group changes its values to match the values of the other stakeholders. This is extremely rare. In the second situation, one group is co-opted into the belief system of the more economically and politically powerful stakeholder. The politically or economically weaker interest group sacrifices its position on core values in exchange for token concessions on the part of the stronger group. Most often, the more powerful group limits the context of the debate to negotiations over interests. The weaker stakeholder (unaware of the existence of a difference over core values or unaware of a set of values alternative to that articulated by the stronger stakeholder) is easily co-opted.¹³

Further hindering the development of participatory goals is the widely held public mis-conception that "citizen participation" and "cooperative decision making" are two words for the same process. Participation encompasses both oppositional and cooperative modes of participation. Successful participation, however, is measured as a function of the level of cooperation (agreement) reached, or the completion of project goals. While the media, academic press, and politicians praise those who

participate cooperatively in public decision making for acting 'rationally,' 'democratically,' and 'thoughtfully,' they criticize those who participate oppositionally for acting 'emotionally,' 'selfishly,' and 'radically.'¹⁴ For instance, Inhaber argues that the NIMBY 'syndrome' is less a product of a community's fight to keep away an unsafe facility and more a product of a lack of knowledge in which: "citizens express vehement opposition on the basis of hearsay or unfounded fears."¹⁵ Inhaber suggests that waste siting conflicts can be resolved by setting up a participatory Reverse Dutch Auction which will "... prompt citizens and officials alike to examine the issues in the light of reason."¹⁶ The opportunity, within such a political climate, for progressive political change at the systemic level is lost.

Though cooperative decision making serves as an effective mode of participation in specific contexts, it does not foster participation in all contexts. I have challenged the view that cooperative decision making and participation are synonymous. Next, I clarify the goals of participation and present a framework for understanding the danger of co-optive forms of participation and the merits of activist forms of participation.

II. INTERPRETATIONS OF PARTICIPATION

Offering something for everyone, the politically neutral term "participation" is easy to praise and promote. Rather than reflecting the proven successes of citizen participation, the applause glosses over the pitfalls of participation in practice while it exaggerates the democratic virtues and capabilities of participation in theory.¹⁷

Fagence writes that

(t)he lack of precision in the term facilitates both unconscious and willful manipulation of its spirit and purpose, for legitimate or less scrupulous reasons. The lack of consensus affords the opportunity for indulgence in the charismatic appeal of the term and its expressions.¹⁸

Fagence further suggests that the failure to identify clear goals for a participation strategy results in a gap between what the outside organization purports to do on the one hand, and what citizens expect to be done and what they actually do on the other. A precise consensus on the interpretation of 'citizen participation' is, therefore, crucial to the development of meaningful participation.¹⁹

III. SCOPE OF DEFINITION: WHY, WHOSE, WHEN, HOW

Moser (1989), in her evaluation of the role of community participation in housing development projects, distinguishes between four critical questions: why, who, when, and how one participates.²⁰ Though each of these questions is pertinent to a clarification of the meaning and goals of participation, this paper is specifically concerned with clarifying the difference between decision making processes which foster citizen co-optation and those which foster participation. Though the questions of 'when' and 'how' do relate directly to the extent to which a project is participatory or co-optive, the questions of 'why' and 'who' have been, in comparison, largely unaddressed in participatory literature. The questions of 'why' and 'who' are more difficult to articulate and hence identify, measure and evaluate. The danger, therefore, that a project may be co-optive in terms of 'who' and 'why' is more imminent because it is less evident and can hence inflict more potential damage on the participatory efforts of the citizens. Therefore, I focus my discussion on the questions of 'why' and 'who.'

Morrisey briefly outlines the basic assertions behind the normative, substantive, and instrumental arguments for 'why' participatory planning should be implemented and 'who' should participate. The definitions of these three arguments are interrelated and hence overlap. Distinction between them, however, fosters clarification of some of the theoretical premises behind citizen participation. The normative argument asserts that participation fosters the realization of basic

democratic ideals and that citizens possess a basic right to provide input into those public decisions which directly impact their lives and lifestyles.²¹ For instance, Burke writes that

(c)itizen participation is part of our heritage, often proclaimed as a means to perfect the democratic process. Stated most simply, it views the citizen as the ultimate voice in community decision-making. Citizens should share in decisions affecting their destinies. Anything less is a betrayal of our democratic tradition.²²

Where the normative argument draws on an age old discourse over the nature and purpose of human existence itself, the substantive argument draws on more pragmatic issues. The substantive argument is primarily concerned with the quality and efficiency of the process of public decision making. This perspective makes assertions about the nature of knowledge and the role of the 'expert' and 'lay person' in decision making. It argues that the knowledge possessed by citizens (lay persons) is just as legitimate as the knowledge possessed by politicians and technical experts and should, therefore, be incorporated into the public decision making process. It further asserts that a lay person's knowledge may be considered superior to an expert's knowledge, in that the people themselves know best what they need.

The instrumental argument focuses on the use value of citizen participation as a planning tool. The predominant instrumental argument proposes that the use value of participatory planning lies in its effectiveness as an efficient implementation technique for the state and other organizations in which citizen involvement is a new 'tool' for planners which can be grafted onto the 'old' technocratic approaches to

planning. The utility of participation is valued in terms of its effectiveness as a buffer against potential citizen opposition.

I accept the assumptions behind the normative and substantive arguments. I question, however, the assumptions behind the instrumental argument. This argument privileges the value of participation for its use to politicians and planners, not its use to citizens. Burke writes that this view of participation "... suggests that citizens can be used as instruments for the attainment of specific ends."²³ I propose an alternative instrumental argument in which current assumptions about 'who' participation is for and 'why' one participates are challenged. I argue for the development of a 'people centered' definition of participation which recognizes its use value to citizens as well as to outside agencies. Where the traditional perspective defines participation as a tool for planners, a 'people centered' perspective defines planning as a tool for participators. A 'people centered' perspective also challenges the notion that the use value of participation is primarily as a means. Participation is also an ends, and as such is valuable for fostering systemic as well as project specific changes.

Arnstein first articulated the thrust behind a 'people centered' definition in 1969. In her hierarchy of citizen involvement, Arnstein emphasizes the importance of clarifying 'who' participation is for. She writes that "(t)here has been very little analysis of the content of the current controversial slogan: 'citizen participation' or 'maximum feasible participation.'"²⁴ Arnstein argues that the term 'citizen

participation' embodies vague and ambiguous meanings precisely because the potential meaning of citizen participation is politically volatile. The meaning of citizen participation lies between understated euphemisms like 'self-help' or 'citizen involvement' and exacerbated rhetoric like 'absolute control.'²⁵ She writes that while the idea of participation is "... vigorously applauded by everyone," the reality is that participation defined in terms of its use to government officials, and industry representatives is markedly different than participation defined in terms of its use to citizens.²⁶ Arnstein examines citizen participation in three federal social programs (Urban Renewal, Antipoverty, and Model Cities) to provide examples of the dangers of a participatory approach which is not explicitly designed to meet the needs of the citizens.

Arnstein presents a typology of citizen participation in which participatory techniques are "... arranged in a ladder pattern with each rung corresponding to the extent of citizens' power in determining the plan and/or program."²⁷ The ladder is composed of eight rungs which correspond to three levels of citizen power. (Refer to Appendix B)

The bottom level of citizen power, nonparticipation, is composed of two rungs 1) manipulation and 2) therapy. Examples of manipulation include rubber stamp advisory committees, advisory boards, or town meetings. She argues that these boards and meetings are set up to "educate" the public. Arnstein writes that "(i)nstead of genuine citizen participation, the bottom rung of the ladder signifies the

distortion of participation into a public relations vehicle by power holders."²⁸ The approach of therapy is "... on curing them of their 'pathology' rather than changing the (conditions) that create their pathologies."²⁹ Though some may perceive activities within these two levels of citizen power as representative of a legitimate participatory approach, Arnstein argues that the real objective is to "educate" or "cure" the participants.

The middle level of citizen power progresses into tokenism. Tokenism consists of three rungs 1) Informing, 2) Consultation, and 3) Placation. Informing involves a one-way flow of information transferred from officials to citizens. Common tools of informing include news media, pamphlets, posters, and responses to inquiries. No opportunity is provided for citizen input. Consultation offers citizens a forum in which to speak. Examples of consultation include: attitude surveys, neighborhood meetings, and public hearings. Though the citizens may present their views to the officials, they have no power to ensure that their views are incorporated into the decision process or outcome in any way. Arnstein writes that "(p)eople are primarily perceived as statistical abstractions, and participation is measured by how many come to meetings, take brochures home, or answer the questionnaire."³⁰ Placation is a higher level of tokenism in which the participants play the role of advisors. Though the citizens engage in two way communication with the outside agency, they have little access to significant power over the decision making process or outcomes. As an example of placation, Arnstein cites the establishment of citizens'

advisory boards in which citizens hold some of the board's votes.

Citizen power, the top level of the hierarchy, centers on the redistribution of decision making power. This level is made up of three rungs beginning with partnership. Partnership enables citizens to negotiate and engage in trade-offs with traditional power holders and, is most effective for citizens in cases where

... the citizen group has the financial resources to pay its leaders reasonable honoraria for their time ... and to hire (and fire) its own technicians, lawyers, and community organizers ... with these ingredients citizens have genuine bargaining tools. In most cases where power has come to be shared it was taken by the citizens, not given by the city.³¹

Examples of partnership include membership on joint policy boards and planning committees. The second rung of this level is delegated power. In a system of delegated power, full control over the planning process is not yet reached; however the goals, management, and outcomes of the plan are accountable to the citizens. The final rung, citizen control, "... guarantees that participants or residents can govern a program or an institution, be in full charge of policy and managerial aspects, and be able to negotiate the conditions under which 'outsiders' might change them."³²

Citizen control does not exist in situations where final decision making power and accountability rests with the city council or other organization.

The crux of Arnstein's typology is that citizen participation is synonymous with citizen control. Arnstein writes that

(t)he idea of citizen participation is a little like eating spinach: no one is against it in principle because it is good for you. Participation of the

governed in their government is, in theory, the cornerstone of a democracy revered idea ... (however) ... when the have-nots define participation as redistribution of power, the American consensus on the fundamental principle explodes into many shades of outright racial, ethnic, ideological, and political opposition.³³

Though Arnstein addressed the ambiguities of the term "citizen participation" in 1969, the meaning of the term as it is used and understood by government, industry, citizens, and academia, is still vague. A common measurement for determining whether any act or series of actions has been participatory has not been agreed upon. Part of the problem is that Arnstein and others, by displaying modes of participation as a hierarchy of decision making power, imply that participation is power.³⁴ The apex of these hierarchies is total citizen control over public decision making and the base is complete non-involvement. This depiction makes any participatory mode which fosters anything less than citizens' absolute decision making control appear to represent either a degree of apathy on the part of the citizens or a degree of co-optation on the part of the outside agency. This creates a situation in which, for instance, academicians and citizens reject sincere attempts at public education on the grounds that it is co-optive. Similarly, a dangerous trend is set in which citizens are tempted to accept participatory plans which enlist citizens on advisory boards and planning committees simply because those 'techniques' are presumed to foster legitimate participation.

The assertion that citizen participation necessarily involves the redistribution of

power has crystallized efforts to define participation into an intractable debate between the status quo interests of the 'elites' and revolutionary interests of the 'masses.'

Fagence (1977) writes that

(i)n the development of structures to achieve a meaningful state of participation there is a danger that the exercise will become the focus of a power struggle, between those emphasizing the need for more participation from the public, and those who emphasize the desirability of reserving decision-making functions and responsibilities to an elite ... One of the most distressing elements in the debate ... is the lack of consensus on the definition of 'participation' (and) in this definitional vacuum, it is joined by the concept of 'power' ... it is probably this lack of consensus that is the fundamental cause of the unsatisfactory state of participation theory, and contributory to the generally less than satisfactory state of the practice.³⁵

The typologies promoted by Arnstein and others are useful for understanding how decision making power fluctuates as a function of different participatory approaches. Their conceptual framework, however, creates the illusion that public hearings and citizen education meetings cannot represent true forms of participation, but can only represent tools of the government to create charades of participation.

Arnstein assumes that different styles or techniques of participation (i.e. cooperative problem solving, public education, task force) can be arranged on a continuum of maximum quality of participation to least. While different styles can be arranged on a continuum of maximum decision making power to least, I argue that the relative quality of the participation is context dependent and is distinct from the relationship of participation style to decision making power. The relationship between participation and co-optation becomes more clear if the two processes are separated

into distinct continuums. The term "public education" does not necessarily represent a code word for an advertising campaign. As Rakodi writes

(p)articipation in decision making ranges from 'information collection', with residents given the opportunity to state their preferences and priorities for the planners to take into account in project planning and design, to the actual determination of priorities, definition of components and taking of planning and design decisions by participants.³⁶

The goals of citizen participation exist in the murky swamp between the ideals of a participatory democracy and the pragmatic need for efficient and expert decision making. Imagine, for instance, if every citizen were expected to convene over whether their local transportation board should purchase five containers of paper clips or six. Direct control over every plan and every aspect of every plan is neither necessary, efficient, nor feasible. Efficient fulfillment of the basic needs of the very people attempting to participate would be jeopardized.

The line between co-optation and participation is a function not of the participatory mode or the level of decision making power; it is a function, rather, of the intentions with which a participatory plan is approached. The crucial questions which lead to a distinction between a co-optive and a participatory plan are 'who is the participation intended for' and 'why.' While Arnstein succeeds in addressing the 'who' question; her continuum, which muddles the distinction between co-optation and participation, adds only confusion to the question of 'why.'

An exploration of the 'why' question is an exploration of the alternative

intentions behind a participatory plan. The 'why' of participation manifests in two primary forms (as a means and as an end.) The intentions behind the current approach to participation are to use it as a means for outside agencies and/or citizens to achieve a final product.³⁷ Where participation is intended solely as a means for an outside agency, direct co-optation has occurred. Where participation is intended as a means for both citizens and outside agencies, but is limited in its instrumental function as a means, indirect co-optation can occur. Participation as a means for citizens is a necessary condition for but not a sufficient condition for a 'people-centered' approach to participation. A redefinition of participation points to the value of a participatory approach as an end as well as a means. Participation as a means for outside agencies serves two major functions. The first function, in which participation is utilized as a tool of persuasion, is completely incompatible with a 'people centered' definition of participation. Though the act of persuasion is in no way inherently irreputable, the same act when purposefully masqueraded as an act of participation is co-optation. Burke writes that co-optation is the involvement of citizens

... in order to prevent anticipated obstructionism. In this sense citizens are not seen as a means to achieve better planning goals nor are they seen as partners in assisting an organization in achieving its goal; rather, they are viewed as potential elements of obstruction or frustration whose cooperation and sanction are found necessary.³⁸

When co-optation is the objective, community members are involved in public decision making not to be empowered, but to be pacified. As a function of their

involvement, the citizens may gain small concessions. The nature of that involvement, however, is completely guided by the planning organization. The outside organization permits citizens to exercise decision making power over pre-selected issues which have little impact on the larger objectives (core values) of that organization. Though the organization makes concessions, its main objectives are realized unchallenged.

Participatory planning's life as a persuasive tool feeds off the misconception that cooperative decision making and participation are synonymous and further feeds off the promotion and use of participation as a tool for planners but not for citizens. Specifically, it is dependent on the view that there is a need to transform or fix the public's attitudes and/or opposition rather than a need to respond to them. For instance, the citizens' fight against the siting of unwanted land uses is referred to as the "Not In My Backyard" (NIMBY) syndrome, in which the term "syndrome" alludes to a social malady in need of a cure. To the contrary, Bately suggests that "... the point of participation would not be to adjust people to fit programs, but to make official agencies more responsive to the demands of the hitherto excluded groups."³⁹

The second function, in which participation serves as a decision making aid in the planning process, is more compatible with a 'people centered' definition of participation. The purpose is to ensure that plan development and implementation adequately reflect the special characteristics and needs of the community.

Participation defined in these terms does not demand, but does allow for participation to serve as a tool for citizens as well as planners.

Moser outlines the following argument for the importance of participation as a means for citizens to improve project results

(i)f people participate in the execution of projects by contributing their ingenuity, skills and other untapped resources, more people can benefit, implementation is facilitated, and the outcome responds better to the needs and priorities of the beneficiaries.⁴⁰

Citizen participation, even when defined as a means for both planners and citizens is, however, insufficient for understanding a 'people centered' approach. Room for unintentional co-optation still exists. The scope of the problem is limited to the issues of that specific project or plan, and the structural roots of the problem are not addressed. Projects and plans, though conceived and/or managed by the planners and citizens, remain within the confines of status quo.

While the function of citizen participation for outside organizations is solely as a means, for citizens it also potentially functions as an end in itself. Moser writes that "(w)here participation is identified as an end, the objective is not a fixed quantifiable development goal but a process whose outcome is an increasingly 'meaningful' participation in the development process."⁴¹

Participation is meaningful as a continuous process of self-development and education that affords citizens, traditionally excluded from public decision making, the opportunity to discover and act upon their real interests.⁴² This process transcends

the situation specific benefits of participation.⁴³ Bachrach and Botwinick argue that the involvement of citizens in public decision making furthers the democratic objective of equality by enabling less powerful citizens to participate more effectively in politics on the local, state, and federal level.⁴⁴

The function of participation as an end is twofold, serving both as an empowering process and as a critical political evolutionary process. Empowerment is the process by which citizens build self reliance and confidence as political actors in their communities. Participation is a learning process which empowers citizens by building their capacity to conceptualize and address the needs of their communities. The empowerment of individuals over a single issue can become a self generating process in which people are stimulated to continue to expand the scope of their political lives.

To assert that participation is an evolutionary process is to argue for grassroots level movements (though their beginnings may be disorganized and single issue focused) to be taken seriously as critical political social movements capable of making progressive demands and changes. Participation as evolution refers to the process by which fragmented grassroots level citizens' groups evolve into cohesive social movements as they discover and define their strategic goals through involvement in oppositional activities at the local level.

The importance of participation as an end is directly dependent on the importance of the material roots of all social, political, economic, and environmental

problems. The term "material" is used to emphasize the role that peoples' basic needs play as a motivator for peoples' actions.

The materialist perspective that participation is important as an end in itself points to the process by which citizens formulate strategic goals and values out of more basic attempts to address practical (material) interests. As a process participation enables citizens to probe the systemic roots to material (basic, practical) problems and to formulate strategic goals for addressing those problems.

Molyneux writes that strategic goals are derived deductively from an analysis of society's structure. A higher level of consciousness is needed to struggle for strategic objectives than is needed to struggle for practical objectives.⁴⁵ For instance, the struggle to oppose waste facility siting at the local level does not address the systemic roots of the waste crisis. Successful opposition to a waste facility plan does not eradicate the problem; it simply becomes a different community's problem. The formulation of a strategic objective involves the creation of strategic criteria at the theoretical and ethical level. The consciousness of citizens with a concern over practical issues can be raised to a concern over strategic issues as a function of their involvement.

Practical interests are those that are derived inductively and arise from the effort to satisfy basic material interests. Practical interests arise out of person's concrete living conditions. Such interests are formulated by the citizens themselves in response to conditions in their immediate environment.⁴⁶

Moser, Molyneux, Morrisey, Bachrach and Botwinick explain what participation as a process looks like and why it is important. Maslow, in his hierarchy of human motivation, explains why the goals of participation and the participator evolve the way they do. Maslow uses the terms "basic/conative needs" and "higher/cognitive needs," respectively, to refer to the same ideas discussed by Moser and Molyneux in their use of the terms "practical interests" and "strategic interests".⁴⁷ Maslow ranks human needs into two hierarchies: the hierarchy of basic needs and the hierarchy of higher needs. The needs of the first hierarchy must be satisfied before the individual has the energy or desire to address higher needs of the second hierarchy. The needs within each hierarchy are also ranked in hierarchical order. The bottom hierarchy (basic needs) is made up of: 1) physiological needs (i.e. thirst and hunger), and 2) safety needs (i.e. avoidance of catastrophe and disease). The second hierarchy (cognitive needs) is made up of: 3) belongingness and love needs, 4) esteem needs, 5) and self actualization needs.⁴⁸

Though Maslow ranks the needs in a hierarchy, they are not addressed in a fixed order. The two main hierarchies are "... intertwined rather than sharply separated; and are ... synergetic rather than antagonistic."⁴⁹ A person is simultaneously struggling to meet both the basic and higher needs (practical and strategic needs.) Maslow writes that the chief principle of human organization

... is the arrangement of needs in a hierarchy of less or greater priority or potency. The chief dynamic principle animating this organization is the emergence of less potent needs upon gratification of the more

potent ones. The physiological needs, when unsatisfied, dominate the organism, pressing all capacities into their service and organizing these capacities so that they may be most efficient in this service. Relative gratification submerges them and allows the next higher set of needs in the hierarchy to emerge, dominate, and organize the personality.⁵⁰

He further writes that "(a)ny conscious (cognitive) desires (partial goals) are more or less important as they are more or less close to the basic (conative) needs."⁵¹ Though the basic needs must be met before one has the energy, time, or desire to address cognitive needs, these higher needs often make up the preconditions for the satisfaction of basic needs. Maslow explains that

(d)anger to these is reacted to as if it were direct danger to the basic needs themselves. Such conditions as freedom to speak, freedom to do what one wishes so long as no harm is done to others, freedom to express oneself, freedom to investigate and seek information, freedom to defend oneself, justice, fairness honesty, orderliness in the group are examples of such preconditions for basic need satisfactions ... These conditions are not ends in themselves but they are almost so since they are so closely related to the basic needs, which are apparently the only ends in themselves. These conditions are defended because without them the basic satisfactions are quite impossible, or at least, severely endangered.⁵²

IV. CONCLUSIONS

Participation is promoted by government, industry, and citizens alike. The concept of participatory planning promises to move governance beyond the limitations of representative democracy into the ideals of direct democracy. The participatory approach, however, can be as powerful a tool for non-democratic as it is for democratic means. As a tool for outside agencies, participation is used to enlist citizens in promoting and preserving the status quo. Participation as a tool for citizens, on the other hand, serves not only to enable citizens to influence planning directions but also serves as a catalyst for progressive change on personal, social, and political levels.

The legitimacy of formal participatory planning is jeopardized by the erroneous notion that the terms "cooperative" and "participatory" planning are synonymous. Successful participation is measured by the level of cooperation, or the degree to which project objectives are reached. This perspective promotes citizen involvement as a new "tool" for planners which can be grafted onto the "old" technocratic planning approaches. This notion invalidates the role of activism as an indicator of the existence of social, economic, or environmental problems. Activism itself is targeted as the problem, thereby avoiding any possibility that the real problems are addressed. It further invalidates the legitimacy of citizen opinion where it conflicts with that of an outside organization.

‘People centered’ participation is necessarily bottom up participation. This is

not to be confused with the 'back to the earth' communal lifestyle advocated in the writings of the Deep Ecologists. ⁵³ A 'people centered' approach recognizes that the problems of the modern age are complex, interrelated, and global in scope, and that systematic, comprehensive, national, and global plans are needed to address those problems. The 'people centered' approach, however, proposes that comprehensive plans be formulated out of the basic material interests of citizens at the community level. Where 'people centered' participation fosters the formulation of practical interests into strategic goals, co-optive participation fosters the formulation of practical interests out of strategic goals. I draw from the work of Moser, Molyneux, Morrisey, and Bachrach and Botwinick to describe how this can happen; and Maslow to explain why.

The second and third sections of this paper compares case studies of cooperative and oppositional participation and uses the comparison to present examples of the differences between co-optative and participatory decision making. Analysis of these case studies leads to further understanding of the goals of and justifications for a 'people centered' planning approach.

1. For a general representation of writings on Deep Ecology, see George Sessions et al., Environmental Philosophy, ed. Michael E. Zimmerman (Englewood Cliffs: Prentice Hall, 1993), 159-233. For an overview of the main tenets behind Deep Ecology, see Michael Colby, "Environmental Management in Development: The Evolution of Paradigms," World Bank Discussion Papers (Washington, D.C.: The World Bank, 1989), 13-15. For a general discussion of both Deep and Spiritual Ecology, see Carolyn Merchant, Radical Ecology: The Search For a Liveable World (New York and London: Routledge, 1992), 85-129. For a general critique of Ecocommunalism, see Robyn Eckersley, Environmentalism and Political Theory: Toward an Ecocentric Approach (New York: State University of New York Press, 1992), 160-186. For a fictional portrayal of an ecological utopia from a deep ecology perspective see Ernest Callenbach, Ecotopia (New York: Bantam Books, 1975).

2. Mark Dowie, "American Environmentalism: A Movement Courting Irrelevance," World Policy Journal 9, no. 1 (winter 1992): 68.

3. Ibid.

4. For documentation of the positive public response to the concept of participatory planning, see Penelope Canan, "Citizen Participation: Protecting the Democratic Approach to Environmental Disputes," Environmental Impact Assessment Review 9 (1989): 333-335.

5. For literature promoting the potentials of cooperative approaches to environmental dispute resolution, see Audrey Armour, "The Siting of Locally Unwanted Land Uses: Towards A Cooperative Approach," Progress in Planning 35, part 1 (1991): 68-69; Lawrence Bacow and Michael Wheeler, Environmental Dispute Resolution (New York: Plenum Press, 1984), 359; Lawrence Bacow and James Milkey, "Overcoming Local Opposition to Hazardous Waste Facilities: The Massachusetts Approach," Harvard Environmental Law Review 6, no. 24 (1982): 265-305; Howard Bellman, "Siting For a Sanitary Landfill For Eau Claire, Wisconsin," The Environmental Professional 2 (1980): 56-57; Gail Bingham and Daniel Miller, "Prospects for Resolving Hazardous Waste Siting Disputes Through Negotiation," Natural Resource Lawyer 17, no. 3 (1984): 473-489; Gail Bingham, Resolving Environmental Disputes: A Decade of Experience (Washington, D.C.: The Conservation Foundation, 1986); Canan, "Citizen Participation: Protecting the Democratic Approach to Environmental Disputes," 333-335; Susan Carpenter and W.J.D. Kennedy, Managing Public Disputes (San Francisco and Oxford: Jossey-Bass Publishers, 1991); Roger Fisher and William Ury, Getting To Yes: Negotiating Agreement Without Giving In (New York: Viking Penguin, 1983). Herbert Inhaber, "Of LULUs, NIMBYs, and NIMTOOs," Public Interest, no. 107 (Spring 1992): 52-65; Denise Kearns, "Cooperation Helps Build Hi-Tech Landfill," The Management of World Wastes: The Independent Voice of the Industry, July 1990; and Paul Craig,

"Siting a Liquid Hazardous Waste Incinerator: Experience with California's Tanner Act," Environmental Impact Assessment Review 12 (1992): 363-386. For a critique of the environmental literature which promotes cooperative approaches to decision making, see Douglas J. Amy, The Politics of Environmental Mediation (New York: Columbia University Press, 1987), 67-163.

6. Barry Rabe, "The Politics of Environmental Dispute Resolution," Policy Studies Journal 16, no. 3 (1988): 590.

7. For a general discussion of and documentation of both the successes and failures, see Amy, The Politics of Environmental Mediation, 67-163. For a compilation of case studies which document both successful and failed attempts at cooperative decision making, see Michael O'Hare, Lawrence Bacow, and Debra Sanderson, Facility Siting and Public Opposition (New York: Van Nostrand Reinhold Company Inc., 1983). For documentation of successful attempts at cooperative decision making, see Armour, "The Siting of Locally Unwanted Land Uses," 68-69; Bacow and Wheeler, Environmental Dispute Resolution; Bingham, Resolving Environmental Disputes; and Elizabeth Kline, Promising Techniques: Hazardous Waste Siting Process (Medford: The Center for Environmental Management, Tufts University, 1993). For documentation of failed attempts at cooperative decision making, see Sarah Crim, "The NIMBY Syndrome in the 1990s: Where Do You Go After Getting to 'No'?", The Environment Reporter, A special report prepared by The Bureau of National Affairs, Inc., (Washington D.C.: Government Printing Office, 1990), 132-138; Leonard G. Buckle and Suzann R. Thomas-Buckle, "Placing Environmental Mediation in Context: Lessons From Failed Mediations," Environmental Impact Assessment Review, 6 (1985): 71-74; Robert Nakamura, Thomas Church, and Phillip Cooper, "Environmental Dispute Resolution and Hazardous Waste Cleanups: A Cautionary Tale of Policy Implementation," Journal of Policy Analysis and Management 10, no. 2 (1991): 204-221; Michael O'Hare and Debra Sanderson, "Facility Siting and Compensation: Lessons from the Massachusetts Experience," Journal of Policy Analysis and Management 12, no.2 (1993): 364-376; and Craig, "Siting A Liquid Hazardous Waste Incinerator: Experience with California's Tanner Act," 363-386.

8. For examples of such analyses, see O'Hare, Bacow, and Sanderson, Facility Siting and Public Opposition; Kline, Promising Techniques: Hazardous Waste Siting Process; O'Hare and Sanderson, "Facility Siting and Compensation: Lessons from the Massachusetts Experience;" Bacow and Milkey, "Overcoming Local Opposition to Hazardous Waste Facilities: The Massachusetts Approach," 265-305; David Bella, Charles Mosher, and Steven Calvo, "Establishing Trust: Nuclear Waste Disposal," Journal of Professional Issues in Engineering 114, no.1 (1988): 67-85; Bingham and Miller, "Prospects for Resolving Environmental Disputes Through Negotiation," 472-489; Carpenter and Kennedy, "Environmental Conflict Management," 67-74; Craig, "Siting a Liquid Hazardous Waste Incinerator: Experience with California's Tanner Act,"

363-386; Crosby, Kelly, and Schaefer, "Citizens Panels: A New Approach to Citizen Participation," 170-178; Charles Davis, "Public Involvement in Hazardous Waste Siting Decisions," Polity 19 (Winter 1986): 296-304; Robin Gregory et al, "Incentives Policies to Site Hazardous Waste Facilities," Risk Analysis 11, no. 4 (1991): 667-675; Bernard Holzngel, "Negotiation and Mediation: The Newest Approach to Hazardous Waste Facility Siting," Environmental Affairs 13, no. 329 (1986): 329-378; Herbert Inhaber, "Yard Sale: Society Should Bid for the Right to Site Its Prisons and Its Dumps," The Sciences, January/February 1992, 16-21; Michael Kraft and Ruth Kraut, "The Impact of Citizen Participation on Hazardous Waste Policy Implementation: The Case of Clermont County, Ohio," Policy Studies Journal 14, no. 1 (1985): 52-61; Michael Kraft and Bruce Clary, "Citizen Participation and the NIMBY Syndrome: Public Response to Radioactive Waste Disposal," The Western Political Quarterly 44, no. 2 (1991): 298-327; Lawrence MacDonnell, "Natural Resources Dispute Resolution: An Overview," Natural Resources Journal 28 (Winter 1988): 5-19; Jennifer McQuaid-Cook and Kenneth Simpson, "Siting a Fully Integrated Waste Management Facility," Journal of the Air Pollution Control Association 36, no. 9 (1986): 1031-1036; Alan Miller and Wil Cuff, "The Delphi Approach to the Mediation of Environmental Disputes," Environmental Management 10, no. 3 (1986): 321-330; O'Hare and Sanderson, "Facility Siting and Compensation: Lessons From the Massachusetts Experience," 364-376; O'Hare, Bacow, and Sanderson, Facility Siting and Public Opposition; Michael O'Hare, "'Not on my Block You Don't': Facility Siting and the Strategic Importance of Compensation," Public Policy 25, no. 4 (1977): 407-457; Leah K. Patton, "Problems in Environmental Mediation: Human, Procedural, and Substantive," Environmental Comment, November 1981, 7-10; Leah K. Patton, "Settling Environmental Disputes: The Experience with and Future of Environmental Mediation," Environmental Law 14 (Spring 1984): 547-554; Kent E. Portney, "Allaying the NIMBY Syndrome: The Potential for Compensation in Hazardous Waste Treatment Facility Siting," Hazardous Waste 1, no. 3 (1984): 411-421; Kent E. Portney, "The Potential of the Theory of Compensation for Mitigating Public Opposition to Hazardous Waste Treatment Facility Siting: Some Evidence From Five Massachusetts Communities," Policy Studies Journal 14, no. 1 (1985): 89; Donald Strauss and Peter Clark, "Computer-Assisted Negotiations: Bigger Problems Need Better Tools," The Environmental Professional 2 (1980): 75-87; Lawrence Susskind, "A Sharper Focus: Defining the common Issues in Dispute Resolution," Environmental Impact Assessment Review 6 (1986): 51-53; and Daniel Swartzman, Kevin Croke, and Sheri Swibel, "Reducing Aversion to Living Near Hazardous Waste Facilities Through Compensation and Risk Reduction," Journal of Environmental Management 20 (1985): 43-50.

9. Daniel Fiorino, "Environmental Risk and Democratic Process: A Critical Review," Columbia Journal of Environmental Law 14, no. 50 (1989): 501-547.

10. Amy, The Politics of Environmental Mediation, 161-198.

11. Daniel Fiorino, "Regulatory Negotiation as a Policy Process," Public Administration Review, July/August 1988, 770-771.

12. MacDonnell, "Natural Resources Dispute Resolution," 8.

13. For a discussion of this process, see Amy, The Politics of Environmental Mediation, and Michael Heiman, "From 'Not in my Backyard!' to 'Not in Anybody's Backyard!': Grassroots Challenge to Hazardous Waste Facility Siting," APA Journal, Summer 1990, 359-363. For an example of how the more powerful stakeholders can use cooperative decision making to shape the perception of negotiable alternatives, see Nakamura, Church, and Cooper, "Environmental Dispute Resolution and Hazardous Waste Cleanups," 204-221.

14. Many academic case studies and popular editorials portray oppositional forms of participation as negative and cooperative forms of participation as positive, for examples see Armour, "The Siting of Locally Unwanted Land Uses," 12-23; Bacow and Milkey, "Overcoming Local Opposition to Hazardous Waste Facilities: The Massachusetts Approach," 264-305; Bingham and Miller, "Prospects for Resolving Hazardous Waste Siting Disputes Through Negotiation," 473-489; Bingham, Resolving Environmental Disputes: A Decade of Experience; Bacow and Wheeler, Environmental Dispute Resolution; Brian N.R. Baird, "Tolerance for Environmental Health Risks: The Influence of Knowledge, Benefits, Voluntariness, and Environmental Attitudes," Risk Analysis 6, no. 4, (1986): 425-435; Craig, "Environmental Impact Assessment Review," 363-386; Owen J. Furuseth and Mark S. Johnson, "Neighborhood Attitudes Towards a Sanitary Landfill: A North Carolina Study," Applied Geography 8, (1988): 135-145; Gregory, "Incentives Policies to Site Hazardous Waste Facilities," 667-675; Holznagel, "Negotiation and Mediation: The Newest Approach to Hazardous Waste Facility Siting," 329-379; Inhaber, "Of LULUs, NIMBYs, and NIMTOOs," 52-65; Inhaber, "Yard Sale: Society Should Bid for the Right to Site Its Prisons and Its Dumps," 16-21; Jack D. Kartez, "Rational Arguments and Irrational Audiences: Psychology, Planning, and Public Judgement," APA Journal, Autumn 1989, 445-455; Michael Kraft and Bruce Clary, "Citizen Participation and the NIMBY Syndrome: Public Response to Radioactive Waste Disposal," The Western Political Quarterly 44, no. 2, (June 1991): 299-326; William Lyons, Michael R. Fitzgerald, and Amy McCabe, "Public Opinion and Hazardous Waste," Forum For Applied Research and Public Policy (Fall 1987): 89-97; Patrick G. Marshall, "Not In My Backyard!," Editorial Research Reports, 9 June 1989, 306-318; O'Hare and Sanderson, "Facility Siting and Compensation: Lessons form the Massachusetts Experience," 364-376; O'Hare, Bacow, and Sanderson, Facility Siting and Public Opposition; O'Hare "'Not On My Block You Don't': Facility Siting and the Strategic Importance of Compensation," 407-458; Patton, "Problems in Environmental Mediation: Human, Procedural, and Substantive," 7-10; Portney, "Allaying the NIMBY Syndrome: The Potential for Compensation in Hazardous Waste Treatment Facility

Siting," 411-421; Howard Raiffa, "Creative Compensation: Maybe 'In My Backyard,'" Negotiation Journal, July 1985, 197-203; Swartzman, Croke, and Swibel, "Reducing Aversion to Living Near Hazardous Waste Facilities," 43-50; and Kharbanda Stallworthy, Waste Management: Towards a Sustainable Society (Aldershot: Gower House, 1990), 243-245.

15. Inhaber, "Of LULUs, NIMBYs, and NIMTOOs," 21.

16. Ibid.

17. See Bingham and Miller, "Prospects for Resolving Hazardous Waste Siting Disputes Through Negotiation," 473-489; Bingham, Resolving Environmental Disputes: A Decade of Experience; Elliott, "Improving Community Acceptance of Hazardous Waste Facilities Through Alternative Systems for Mitigating and Managing Risk," Hazardous Waste 1, no. 3 (1984): 397-410; Holznagel, "Negotiation and Mediation: The Newest Approach to Waste Facility Siting," 329-378; Inhaber, "Of LULUs, NIMBYs, and NIMTOOs," 16-21; Kraft and Kraut, "The Impact of Citizen Participation on Hazardous Waste Policy Implementation: The Case of Clermont, Ohio," 52-61; Kraft and Clary, "Citizen Participation and the NIMBY syndrome," 299-328; and Susskind, "Negotiating Better," 11-13.

18. Michael Fagence, Citizen Participation in Planning (New York, Pergamon Press, 1977), 22.

19. Ibid., 3-4.

20. Caroline Moser, "Community Participation in Urban Projects," Progress in Planning 32, part 2 (1989a).

21. Janice Morrisey, "Citizen Participation in Solid Waste Disposal Decisions: Landfill Siting in Two Rural Communities," Dismantling the Barriers: Rural Communities, Public Participation, and the Solid Waste Policy Dilemma, ed. Janice Morrisey, Lachelle Norris, and John Gaventa (Tennessee: Highlander Research and Education Center, 1993), 3.2 - 3.3.

22. Edmund Burke, "Citizen Participation Strategies," AIP Journal, September 1968, 287.

23. Ibid.

24. Sherry Arnstein, "A Ladder of Citizen Participaiton," AIP Journal, July 1969, 216.

25. Ibid., 216.

26. Ibid., 216.

27. Ibid.

28. Ibid., 218.

29. Ibid.

30. Ibid., 219.

31. Ibid., 221-222.

32. Ibid., 222.

33. Ibid., 216.

34. For examples of conceptual frameworks which also differentiate participatory techniques in terms of the varying extent to which they foster citizen power and control, see H. B. C., Spiegel, and Mittenthal, "The Many Faces of Citizen Participation: A Bibliographic Overview," in Citizen Participation in Urban Development 1, ed. H.B.C., Spiegel (Washington D.C., National Institute for Applied Behavioral Science, 1968): 3-17; M.B. Mogulof, Citizen Participation (Washington D.C.: Urban Institute, 1970). For examples of conceptual frameworks which differentiate participatory techniques in terms of the varying extent to which the citizen exercises choice and is 'free' politically to exercise control or power, see L. W. Milbrath, Political Participation (Chicago: Rand McNally, 1965), and Burke, "Citizen Participation Strategies," 287-294.

35. Fagence, Citizen Participation, 7.

36. Carole Rakodi, "The World Bank Experience: Mass Community Participation in the Lusaka Squatter Upgrading Project," of "Evaluating Community Participation in Urban Development Projects," ed. Caroline Moser, Development Planning Unit (London: Bartlett School of Architecture and Planning, 1983): 23.

37. Langton discusses the dual citizen-participation movements. One movement, citizen action, is informal and is initiated by the citizens to change or monitor government. The other is formal and is initiated by the government to gain the support of the citizens for administrative decisions, programs and policies. The formal approach represents the predominant approach acceptable to outside agencies. For a brief discussion of the intentions behind the formal participatory approach, see Stuart Langton, Citizen Participation in America: Essays on the State of the Art (Lexington: Lexington Books,

1978), 2-6.

38. Burke, Citizen Participation, 291.

39. Richard Bately, "Participation in Urban Projects-Meanings and Possibilities," of "Evaluating Community Participation," Development Planning Unit, ed. Moser, (London: Bartlett School of Architecture and Planning, 1983): 9.

40. This argument was first posed by the UNCHS. For a summary of this argument see Moser, "Community Participation in Urban Projects," 82.

41. Caroline Moser, "The Problem of Evaluating Community Participation in Urban Development Projects," of "Evaluating Community Participation," Development Planning Unit, ed. Moser (1983): 3.

42. Morrissey, "Citizen Participation in Landfill Siting," ed. Morrissey, Norris, and Gaventa, "Dismantling the Barriers," 3.1 - 3.77.

43. Peter Bachrach and Aryeh Botwinick, Power and Empowerment: A Radical Theory of Participatory Democracy (Philadelphia: Temple University Press, 1992).

44. Bachrach and Botwinick, Power and Empowerment.

45. Maxine Molyneux, "Mobilization Without Emancipation? Women's Interests, the State, and Revolution in Nicaragua," Feminist Studies 11, no. 2 (1985): 227-254.

46. Caroline Moser, Women, Human Settlements, and Housing (London: Tavistock, 1987), 30.

47. Abraham H. Maslow, Motivation and Personality (New York: Harper and Brothers, 1954), 97.

48. Ibid.

49. Ibid.

50. Ibid., 107.

51. Ibid., 93.

52. Ibid., 92.

53. For an example of a work written from the deep ecology perspective, see Callenbach, Ecotopia. For an outline of the basic principles of deep ecology, see Michael E. Zimmerman, Environmental Philosophy: From Animal Rights to Radical Ecology (New Jersey: Prentice Hall, 1993), 159-250; and Merchant, Radical Ecology, 85-109. For a critique of deep ecological thought from an ecocentric perspective, see Eckersley, Environmentalism and Political Theory, 145-178. For a comparison of the principles of deep ecology approach with the principles of four dominant approaches to environmental management, see Colby, "Environmental Management in Development."

SECTION TWO

I. BACKGROUND OF WASTE MANAGEMENT PLANNING

A. WASTE DISPOSAL TACTICS

Given the vast quantities and types of waste generated, the public impasse over facility siting poses a serious threat to safe waste disposal. Where facility siting is successful, several alternatives exist for hazardous waste (HW) and solid waste (SW) disposal. Among the alternatives, landfilling, incinerating, and lastly recycling are the most common. Into the 1960s, wastes were burned or left to decompose in open dumps. Landfill and incineration facilities now stand in place of the old dumps.¹ The landfill, one of the oldest methods of waste disposal, is an engineered depression in the ground or mound on top of the ground which serves as a repository for municipal and hazardous wastes. The four most critical elements of a modern landfill include: a bottom liner, a leachate collection system, a cover, and the natural hydrologic setting.

Before landfills, open dumps usually provided adequate protection to the surrounding environment. The chemical revolution of Post World War II marked drastic changes in the composition of the waste stream. An onslaught of new toxins (i.e. plastics, pesticides, organic solvents, and petroleum products) were introduced into the waste stream and even the modern day landfill precautions prove insufficient to prevent toxic emissions.²

Many hoped that incineration, which reduces the volume of waste through a

controlled combustion process, would alleviate the waste siting crises.³ Incineration, however, is not risk free. Hazards stem primarily from the polluting effects of incineration's air emissions and residual ash production (potentially hazardous to landfill because of its tendency towards a high metals content.)⁴

Recycling is the process of separating, collecting, and processing material from the waste stream and utilizing that waste material as the raw material for new products.⁵ Recycling possesses the potential to divert "large volumes of waste from landfills and combusters."⁶ Recycling, however, is energy and time intensive and possesses its own unique pollution problems. Recycling is most effective and efficient where the toxicity of the waste is low and the contents of the waste is homogenous. The chemical revolution and the dependence of American culture on composites, packaging, and throw away products make recycling energy intense, expensive, and unsafe.

The term Municipal Solid Waste (MSW) refers to a category of solid waste which can be traced to residential, commercial, institutional, and certain industrial sources. Though the term does not refer to municipal sludges, combustion ash, or industrial process wastes, municipal landfills often do accept such waste and dispose of that waste within the MSW landfills.⁷ The term "SW" refers to all categories of solid waste, including MSW. Hazardous waste is considered more dangerous and is, therefore, subject to guidelines stricter than that of (SW). The difference in toxicity, however, between (SW) and (HW) is questionable:

(w)e tend to think of local waste systems dealing primarily with relatively innocuous materials -household garbage and the like -with the presumption that hazardous wastes are specially treated in facilities regulated by the state and federal governments. But ... waste system planners have taken into account a much wider range of wastes than table scraps and yard clippings.⁸

Researchers at Texas A&M University conducted a study of 58 landfills in 1988 in which they compared leachate from MSW landfills with leachate from HW landfills. The study reveals that the leachate from MSW landfills contains toxic chemicals in sufficient concentration to be considered equally as harmful as the leachate from HW landfills.⁹ The EPA (1988) found that "(c)ommon discarded household products, such as household cleaners, automotive products, paint thinners, and pesticides, may contain hazardous wastes ... or exhibit one or more hazardous characteristics."¹⁰ Examples of Household Hazardous Waste (HHW) include:

...soldered cans (lead); rechargeable cordless appliances (nickel-cadmium); paper printed with inks containing heavy metals; textiles printed with dyes containing heavy metals; grass clippings sprayed with pesticides...¹¹

Further, the EPA reports that there are two MSW

... categories that meet the criteria for hazardous wastes to be managed under Subtitle C of the Resource Conservation and Recovery Act (RCRA)--household hazardous wastes (HHW) and very small quantity generator (VSQG) wastes. They are, however, treated as Subtitle D wastes. These wastes have generally been going to MSW landfills.¹²

The misconception that (MSW) is largely innocuous has created the perception that opposition to (MSW) facility siting is an aesthetic issue not a public safety issue. Municipal solid waste facilities, however, pose more than a nuisance, and opposition

to them should be taken seriously. Hence, for the purposes of this paper, conflicts arising over the disposal of HW and MSW will be treated similarly.

B. SCOPE AND SOURCE OF WASTE PROBLEM

The waste crisis, a problem intensified by our 'throw away' society, is rapidly assuming enormous proportions. Unfortunately, the long-term solutions articulated are of the 'cheerleading' type while the methods actually adopted are of the short-term 'fire-fighting' type.

The media coverage in the 1980s of the garbage and ash barges afloat at sea in futile search of ports which would 'house' the waste unmasked the absurdity of the entire waste siting dilemma. Michel Foucault's 'ship of fools' has become today's 'ship of trash.'¹³ Even the Federal government admits that "... whether we like it or not, our garbage is no longer 'out-of-sight out-of-mind.'"¹⁴

Some argue that the heart of the waste crisis is simply that we generate too much waste. The EPA reports that:

"(t)he generation of MSW (excluding municipal sludges, ash, industrial process wastes, construction, and demolition wastes) has grown from 87.5 million tons in 1960 to nearly 158 million tons in 1986 ... In the absence of drastic changes, this will increase by 25 percent, to nearly 193 million tons in the Year 2000."¹⁵

Rachel Carson (1962) sounded the first warning in her landmark book Silent Spring: improperly treated and handled toxins and wastes threaten human and environmental life in both the immediate present and long term future. The most common disposal techniques (landfilling and incineration) have proven ineffective in

both the short and long term in safely managing the increasing quantity and toxicity of waste. Landfilling and incineration merely serve to hide the problem. Wealthy and middle class communities of higher political and economic profile have been successful in this hide-and-seek game and have kept the waste outside of their communities. The non-existent waste is hidden in an equally invisible landscape of the poor, undereducated and minority communities. Foucault's social commentary may have more relevance today than ever before in history.

The current waste management approach focuses on short term waste management problems. Namely that not enough funds or acceptable are available to safely site waste. Each year more waste is generated and less land is available. The increasing scarcity of land translates into increasing purchase fees for dump sites.¹⁶ Both problems are exacerbated by the concurrent frequency and intensity of public opposition to waste facility siting.¹⁷ The material basis of the hardship behind public opposition to landfills is ignored -the opposition itself, not the waste, is targeted as the problem. In a 1989 report on the solid waste dilemma, the EPA called for aggressive source reduction planning at the local, state, and national level. Such planning "... calls for a 'systems' approach to managing municipal solid waste; that is, the complementary use of source reduction, recycling, combustion and landfills to comprehensively manage municipal solid waste. It also underscores the need for fundamental change in the nation's approach to producing, packaging and displaying consumer goods. In the past, 'business as usual' meant an accelerating trend toward

disposable products, convenience packaging, and an 'out-of-sight, out-of-mind' attitude toward solid waste. As a nation, we can no longer afford this kind of 'business as usual.' We must adopt a new solid waste management ethic that minimizes the amount and toxicity of waste created by the products we make and purchase..."¹⁸ Since 1976, the E.P.A has promoted a hierarchy of waste management in which source reduction and recycling are the preferred options. Landfilling and Combustion are to be used only as last resorts.¹⁹ Though federal and state regulations theoretically stress reduction, the production of more waste has become the driving force behind waste management. As of 1989 "... 80 percent of the nation's waste (was) still landfilled; only 10 percent is recycled and 10 percent combusted."²⁰

II. CASE STUDY IN COOPERATIVE APPROACHES TO WASTE MANAGEMENT

An Increase in the public's awareness over the seriousness of the waste problem led to increased public concern and, hence, increased public opposition to plans for waste facility siting. Protests against the siting of waste facilities proved costly to both the waste industry and local governments.

Where historically waste management decisions were made without the participation of the citizens, both the government and waste industry now see the utility of involving citizens in public decision making. The business community has discovered that community participation is "... preferred to the uncertainty and delay of more traditional administrative and judicial processes."²¹ For instance, three corporate executives told a Roanoke College seminar that "(c)operation -- rather than confrontation with citizens -- is an easier and more profitable way for companies to solve environmental problems ..."²² The participatory strategies generally involve "... collaboration among contending interest groups instead of adversarial relationships; they involve consensus decision making rather than judgements by authorities."²³ Waste corporations benefit tremendously from efforts at consensus building and negotiated/mediated dispute resolution in facility siting conflicts. Fortune magazine touted environmental mediation as "... a refreshing example of applied good sense."²⁴ Many corporations have even donated funds to help promote and foster citizen participation. For instance, Atlantic Richfield, provided seed

money to start RESOLVE -one of the first institutions set up for negotiating and mediating environmental disputes. Other corporations such as Dow Chemical, U.S. Steel, and Union Carbide have invested in the promotion of environmental mediation.²⁵

The dominant approach to participatory planning for waste management is primarily one of cooperation and/or negotiation. Though the waste industries are quick to praise themselves for their efforts at involving the citizens in the siting process, their motivations for doing so have little to do with fostering public choice. I will show that within the context of waste management, cooperative problem solving and negotiation aim not to involve citizens but to head off local opposition.

A. PARTICIPATION FOR WHO AND WHY?

The trend towards participatory planning in decisions to site waste facilities is directly related to the perception held by planners and local government officials that public resistance to siting, rather than being indicative of a problem, is itself the problem. In its 1989 report on the solid waste dilemma, the EPA complains that "(e)fforts to site new landfills, combusters, and recycling centers ... are met with mounting opposition."²⁶ The report blames unsuccessful sitings on local governments for failing to establish "... effective dispute resolution mechanisms."²⁷ The use of participation as a planning tool preventing public opposition is well documented.²⁸

The primary approach to participation in waste siting decision making became

negotiation over economic incentives. In fact, negotiation became so common that the concepts of public participation and economic incentives became interchangeable in the waste management literature. The wide use of economic compensation as a tool for fostering public acceptance is well documented.²⁹

Michael O'Hare, one of the first to advocate the use of economic compensation as an incentive for facility siting, argues that conflicts over waste facility siting stem from the fact that although great numbers of people benefit from the safe disposal of both hazardous and solid wastes, no person wants to live near a landfill. Waste facilities provide benefits to a large number of people, making that large number of people slightly better off, while they simultaneously impose costs to a small number of people, making that small group of people much worse off. Bord, as well, writes that:

(t)he negotiation-for-compensation approach emanates from the assumption that public opposition is a function of a violation of equity. It is reasoned that a disposal facility is a common good distributing benefits widely but concentrating costs locally. The key to public cooperation is viewed as some sort of concession which raises the reward value of the facility and thus makes the costs less onerous.³⁰

O'Hare argues that developers/government/industry can compensate local communities for the disproportionately high costs relative to benefits resulting from living near an unwanted land use. He suggests that local government officials should actively invite citizens to participate in the decision making process, but that the negotiations should remain limited to the type and amount of economic compensation/incentive the community would receive from the industry.

Though O'Hare was the first to promote economic compensation as an incentive for facility siting, the multinational waste corporations can be credited with making economic compensation the force behind efforts to site waste. The rapidly increasing siting expenses crippled municipality's and industry's attempts to transport, site and manage their own waste. Where public waste management was going bankrupt, private waste management flourished. The private waste sector is composed of waste corporations offering a range of waste management services including collection, transportation, recycling, treatment, and disposal. In the last two decades, waste corporations have branched into the ownership and operation of facilities and landfills.³¹ The services provided by waste corporations relieve industries, corporations and municipalities of the time and administrative investments involved in collecting, transporting, siting, and operating waste facilities. While the corporations and municipalities purchase the service of the waste corporation, the waste corporations purchase the acquiescence of the host community.

B. ECONOMIC COMPENSATION AS A PARTICIPATORY APPROACH: CO-OPTION OR PARTICIPATION?

1. Practical and Strategic Interests

Maslow points out that the relationship between conative (practical) and higher (strategic) interests is symbiotic. Both serve as pre-conditions for the satisfaction of the other. Molyneux is careful, however, to stress that while strategic plans can serve as a pre-condition for meeting basic interests, problems can develop if the strategic

goals intended to satisfy basic interests are not formulated directly out of those needs. She warns that there is a critical difference between attempts to articulate practical goals into strategic goals and attempts to articulate practical goals out of strategic goals. Molyneux's warning points to the difference between a co-optive and a participatory plan. A co-optive plan is one in which the practical goals are made subordinate to or are created in the likeness of the strategic goals.

The relationship between practical and strategic interests discussed within a broader analysis of the distinction between persuasive and participatory interests sheds light on how an organization with persuasive interests can act to co-opt a community. In the likeness of the Molyneux's warning, the waste corporation defines the community's basic goals out of a strategic goal.

The private waste corporations prevent the possibility for communities to define their own strategic waste management and economic development goals.³² Waste corporations graft cooperative decision making onto a pre-existing waste siting plan. Bingham and Miller write that a fair participatory approach is one in which the

(p)arties address the problem of the unequal cost and benefit distribution associated with siting hazardous waste facilities ... and the community is given the power to affect the nature of the mitigation and compensation that might be provided.³³

The citizens have only the power to determine how the waste is placed, and sometimes if it's placed in their community, but not over whether or how much waste is produced. The possibilities for citizens to define and address the systemic roots to the problem are limited by the context of the debate. Amy points out that it is

(i)mportant to emphasize that this process of narrowing the issues is not a random one -but one that tends to selectively filter out the more basic and systemic issues (value issues) involved in a dispute ... the tendency ... to depoliticize disputes -to ignore the underlying systemic issues involved -can discourage the processes of identifying and coming to grips with wide scale social problems ... often mediation encourages us to see environmental problems as unique, isolated, local phenomena, because these kinds of problems are the easiest to mediate. The local environmental problems such as toxic waste, however, are often only symptoms of larger and more systemic environmental problems. Moreover, if one addresses environmental problems one by one, on the local level, industry gains considerable political advantage. Industry would much rather confront environmentalists on a local level, where industry's power advantage is maximized. On the national level environmentalists are able to band together and coordinate their activities and resources to put up a much more effective fight.³⁴

The odds are more in the waste industry's favor if they are able to define the issues as purely local issues (siting issues) and thus have only to confront a small and poorly funded local citizens' group -if one at all.

2. Social, Economic, and Livelihood Crisis

The plight of the impoverished communities posed with offers to host waste facilities points to the material basis of the waste crisis. The waste crisis is far more than an environmental crisis. The roots of the crisis lie deep in the material reality of each person's daily life. The waste crises is a class crises in which those who have the least power over the processes of production suffer the most consequences. Co-operative decision making in waste facility siting serves only to foster the continuation of this crises. Where participation is defined as a "people centered" approach, participation becomes important as an end as well as a means. As an end,

participation has the potential to create a forum in which citizens are able to define the systemic roots of the problem and address strategic goals out of fighting for basic interests. Co-operative decision making, as played out in the context of waste management, prevents this critical participatory process.

The employment base of many rural areas has, in recent years, been in decline. The accelerating loss of the manufacturing base has narrowed the economic choices for rural residents and weakened their political muscle relative to economically stronger regions. Such political weakness facilitates the further weakening of the physical and institutional infrastructure of rural government and public services.³⁵

The waste corporations take advantage of the relative economic and political weakness of such communities to make seemingly 'sweet deals.' Waste corporations have made aggressive moves to advertise themselves as providers of employment and economic development.³⁶ Poor communities and Indian reservations already struggling to survive, must shoulder another burden -to become the dumping ground for the rest of the nation's waste. Economic compensation exacerbates the inequitable distribution of waste sites on the American landscape.

Though economic compensation fulfills some of the basic needs of the community it also creates a dependence on the part of the citizens for the employment and funds and hence for more waste to be generated and shipped to the site. Hence, the strategic interests (reduction of waste) and practical interests (generation of

employment for the town) are placed at odds.

Economic compensation provides for the temporary satisfaction of the citizens' basic interests in economic development while preventing the satisfaction of their strategic interest in clean groundwater and air.

The articulation of the community's basic interests out of the corporations own goals further endangers the basic economic development and employment interests of the citizens. Once the waste facility reaches capacity, the revenues from the corporations operations end. Further, any employment generated by the facility also ends. Even further, the existence of the facility in their community may serve to prevent other more long term and reliable industries from moving to the community. While it would be pure conjecture to state that the citizens, had they been permitted to directly develop strategic waste management goals out of practical interests, would have proposed a much different system of waste management -the case study of grass root activism in waste facility siting disputes provides examples of efforts on the part of the citizens to do just that. Grassroots level activists are

...changing the (environmental) movement's language from one of pollution control and regulation to one of justice and economic development; they are changing the movement's focus from animals and pristine environments to urban areas and disenfranchised communities; and they are changing the structure of the environmental movement itself, from a top-down, centralized organization run by experts and professionals to a loosely structured, grassroots organization, run by ordinary people and democratically accountable to its constituents ... The movement reminds us that as with virtually all pressing social problems, long-lasting solutions require coalition building, uncovering the structural roots of the problem, and creating democratic structures to control corporate power.³⁷

Where cooperative approaches to waste siting serve only to facilitate the continuation of a trend in which rural communities more marginalized, activism aims to stop it.

3. Intentions

The purposeful intent with which waste was placed in disadvantaged communities first came to light in 1984 when the California Waste Management Board commissioned Cerell Associates to advise the state on how to overcome political obstacles to siting incinerators. The report published by Cerell Associates concluded that: "(t)he state is less likely to meet resistance in a community of low-income, blue collar workers with a high school education or less."³⁸

The existence and extent of environmental racism is strongly debated. Numerous studies, however, document the trend in which waste facilities are located in minority and impoverished communities. For instance, Bullard found that in "... Houston, more than 75 percent of the municipal landfills were located in predominantly Black communities, although the city's population is only 25 percent Black."³⁹ Reza Najem and Donald Luria studied changes in the cancer rates and income levels of the populations of New Jersey communities as the number of dumps per 100 square miles increases. They found that as the number of dumps per 100 square miles increases the cancer deaths from 8 studied cancers also increases and the income level decreases.⁴⁰

An article on waste management in Virginia, reported that "(o)f eight counties in which the regional landfills and the Buckingham incinerator are proposed or operating, six have minority populations exceeding the state average. All have below-average income levels."⁴¹

The Highlander researchers reported similar trends. In a survey of the relationship between race and waste placement, the Highlander report found that the communities which housed large black populations of Charles City County Virginia, Hancock County Georgia, Fowlstown Georgia, Greene County MS, Haywood Tennessee, Rapides Parish LA, and Caswell County, North Carolina, were communities which also housed large solid waste landfills.⁴²

The dispute over the Kim-Stan dump of Selma Virginia raised awareness of the waste burden born by impoverished communities to the national level. The Kim-Stan dump "symbolizes a national garbage crisis that has sent many northeastern cities with brimming dumps in a desperate search for rural landfills."⁴³ Selma Virginia became famous in its fight to close a privately operated 48-acre dump which accepted out of state waste from New York, New Jersey, and other northeastern states. The article points out that though

(s)ome small communities welcome the income from contracts to accept out-of-state waste. For most people in Selma ... such additional refuse is a noisy, smelly nuisance, and many call it an indignity imposed on them by northerners." (Cohn, D'Veira, "The fierce politics of Yankee garbage in Virginia Mountains,"⁴⁴

Increasing numbers of indian nations have also become targets by commercial

waste corporations attempting to locate waste facilities. The Indian nations are

(f)orced to rely on federal funds to develop programs and pressured by outside forces to consider such economic ventures as hazardous waste dumps, Indian nations are fighting a battle of priorities with insufficient money, technical help or successful models, and little federal or state cooperation.⁴⁵

The waste industry has found that "... doing business with the Indians can mean less red tape and lower taxes. Reservation land is jointly controlled by the federal government and the tribes, and not subject to state business or environmental regulations."⁴⁶ Over the past few years, over 100 tribes have considered offers to host waste facilities. In 1991 leaders of the Rosebud Sioux tribe accepted an offer to host a privately owned and run solid waste landfill. In the same year, Indians on the Cabazon reservation near Palm Springs, California, began testing an incinerator. Again, in the same year: Native Americans near San Diego were preparing to host three waste facilities; and the Mississippi Choctaws (per capita income \$3,011) were pursuing a contract for a toxic-waste site.⁴⁷ In 1992, a waste disposal company, attempted to place 50,000 cubic yards of asbestos waste on what is held to be sacred land (near Huerfano Mountain in northwestern New Mexico) by the Navajo people.⁴⁸ While the term "environmental racism" is hotly contested, the purposeful abuse by waste managers, polluters and government officials of the weak state (relative to non-minority, middle and upper income areas) of the social, political, and economic power of impoverished and minority communities to further their own objectives is well documented.⁴⁹

In final testament to the non-participatory intentions behind cooperative approaches to waste facility siting -waste corporations have gone so far as to sue activists for opposing proposed waste sites. In Alabama, a citizen was sued by the company Waste Away for writing a letter to the newspaper which opposed the intentions of the Waste Away.⁵⁰ Many reports have surfaced which indicate that the waste industry actively engages in intimidation tactics to scare protesters. For instance, the Martinsburg Journal reported that a guard working for LCS Services Inc., builders of the North Mountain Landfill, was arrested in connection with the shooting of two citizens with shotgun pellets near the landfill. Berkeley County Sheriff, Preston Gordon, said "the shooting was related to ongoing protests involving the landfill ..."⁵¹ In another incident, The chair of Save Our Cumberland Mountains (SOCM), in Castle Bunch West Virginia, was beaten by a group of men after a Town Council meeting in which he charged Chambers Development Corporation with serious environmental violations in other states. The group of men were reported to have worn shirts and hats bearing the Chamber's Development Corporation insignia.⁵²

It is clear that the waste industry does not engage in participatory planning to empower or involve the citizens. Rather, the waste corporations seek out the easily co-opted politically and economically weak communities.

4. Mainstream Critique of Participation in Waste Management

In many respects, efforts to induce communities to accept waste facility sites have failed. Many articles have been written exploring the roots of that failure. The failure is argued to result from a fault in the participatory process itself. In an attempt to find the weak link in participatory planning, standard participatory techniques have been critiqued in numerous case studies. However, this critique is taking place within a context in which there is no clear definition of "citizen participation." Often such research 'assumes' a definition in which "citizen participation" is a means for reaching a specified goal. The distinction between participation as a means and an end has important implications for how one evaluates and implements a participatory approach. Where participation is interpreted as a means, it is valued as a tool to get things done.⁵³ Depending on the goals of the parties involved, successful participation would depend on whether an 'agreement' is reached, or a plan is implemented. In the case of waste facility siting, and along the lines of the current instrumental argument for participatory planning, the overriding goal is to reach a negotiated 'agreement' between a waste corporation and a community. As such, participation in planning for waste facility siting has largely failed.

Where participation is interpreted as an end, it is valued as an empowering and a learning process. As such, the growth of the oppositional movement against waste facility has proven fairly successful as a form of participation.

1. Stephen Lester, Reduction of Hazardous Waste: The Only Serious Management Option (Falls Church: Citizens Clearing House for Hazardous Waste, 1986), 29.

2. Stephen U. Lester, and Barbara Sullivan, Land Disposal: The Dinosaur of Disposal Methods (Falls Church: Citizens Clearinghouse for Hazardous Wastes, 1986), 29.

3. U.S. Environmental Protection Agency, introduction to The Solid Waste Dilemma: An Agenda for Action. Final Report of the Municipal Solid Waste Task Force Office of Solid Waste (Washington, D.C.: Government Printing Office, 1989).

4. Ibid., 19.

5. Ibid., introduction.

6. Ibid., 49.

7. World Wildlife Fund and Conservation Foundation, Getting at the Source: Strategies for Reducing Municipal Solid Waste (Baltimore: WWF Publications, 1991), 3.

8. Summary to Dismantling the Barriers: Rural Communities, Public Participation, and the Solid Waste Policy Dilemma, ed. Janice Morrisey, Lachell Norris, and John Gaventa (Tennessee: Highlander Research and Education Center, 1993).

9. Kirk Brown, "An Estimation of the Risk Associated with the Organic Constituents of Hazardous and Municipal Waste Landfill Leachates," Hazardous Waste and Hazardous Materials 5, No. 1 (Spring 1988): 1-30.

10. Environmental Protection Agency, "Part III, Environmental Protection Agency: 40 CFR 257 and 258, Solid Waste Disposal Facility Criteria; Proposed Rule," Federal Register 53, no. 168 (Tuesday, August 1988):33318, microfiche.

11. Environmental Protection Agency, The Solid Waste Dilemma: An Agenda for Action. Draft Report of the Municipal Solid Waste Task Force Office of Solid Waste (Washington, D.C.: Government Printing Office, 1988) 1-26.

12. Ibid., 1-3.

13. Michel Foucault presented a social analysis of the history of Europe's approach to the problem of insanity. Before institutionalization gained popularity as a discrete way to remove the 'untouchables' from civilized society, the 'solution' to the

problem of insanity was to round up the insane street people and ship them off to sea in abandoned boats. The ships would drift from port to port in futile attempts to dock. Diseased and emaciated, the inhabitants would eventually starve or drown at sea. Michel Foucault, Madness and Civilization: A history of Insanity in the Age of Reason (New York: Vintage Books, 1988, c 1965).

14. Environmental Protection Agency, Action Agenda Draft, 70.

15. Ibid., 1-5.

16. Paul Dellinger, "Localities Put Heads Together on Ways to Handle Garbage," Roanoke Times and World News, 28 June 1992, sec. New River Journal; Mary Eva Cassadra, "Board Wont Commit to Binding Landfill Vote," Danville Register, 22 October 1991; and Sandra Brown Kelly, "Who Will Move the Trash: A Fortune 500 Co. Challenges Local Firms and Governments," Roanoke Times and World News, 8 March 8 1992, sec. 1B.

17. For Documentation of the rise of citizen opposition to waste facility siting, see D. Wahl and R. L. Bancroft, "Solid Waste Management Today Bringing About Municipal Change," Nation's Cities 13, no. 8 (1975): 17-32; S. Burk, "Garbage and Regionalism," Nation's Cities 15, no. 5 (1977): 22-23; Michael O'Hare, Lawrence Bacow, and Debra Sanderson, Facility Siting and Public Opposition (New York: Van Nostrand Reinhold Company, 1983); Lawrence Bakow and James Milkey, "Overcoming Local Opposition to Hazardous Waste Facilities: The Massachusetts Approach," Harvard Environmental Law Review 6 (1982): 266; Michael L. P. Elliot, "Improving Community Acceptance of Hazardous Waste Facilities Through Alternative Systems for Mitigating and Managing Risk," Hazardous Waste 1, no. 3 (1984): 397; Owen J. Furuseth and Mark S. Johnson "Neighborhood Attitudes Towards a Sanitary Landfill: a North Carolina Study," Applied Geography 8 (1988): 135-136; Robin Gregory et al., "Incentives Policies to Site hazardous Waste Facilities," Risk Analysis 11, no. 4 (1991): 667, Michael Heiman "From 'Not in My Backyard!' to 'Not in Anybody's Backyard!': Grassroots challenge to Hazardous Waste Facility Siting," APA Journal, Summer 1990, 359; Herbert Inhaber "Of LULUs, NIMBYs, and NIMTOOs," Public Interest 107 (1992): 16; Patrick G. Marshall "Not in My Backyard!" Editorial Research Reports, June 1989, 306; Robert C. Mitchell and Richard T. Carson "Property Rights, Protest, and the Siting of Hazardous Waste Facilities," American Economic Review 76 (1986): 6; Kent Portney "Allaying the NIMBY Syndrome: The Potential for Compensation in Hazardous Waste Treatment Facility Siting," Hazardous Waste 1, no. 3 (1984): 411; Kent Portney, "The Potential of the Theory of Compensation for Mitigating Public Opposition to Hazardous Waste Treatment Facility Siting: Some Evidence From Five Massachusetts Communities," Policy Studies Journal 14, no. 1 (1985): 81; Barry B.

Rabe "When Siting Works, Canada Style," Journal of Health Politics, Policy and Law 17, no. 1 (1992): 119; and Daniel Swartzman, Kevin Croke, and Sheri Swibel, "Reducing Aversion to Living Near Hazardous Waste Facilities Through Compensation and Risk Reduction," Journal of Environmental Management 20 (1985): 43.

18. Environmental Protection Agency, introduction to Action Agenda (1989).

19. Environmental Protection Agency, Action Agenda (1989): 15.

20. Ibid.

21. James E. Crowfoot and Julia M. Wondelleck, introduction to Environmental Disputes: Community Involvement in Conflict Resolution (Washington, D.C.: Island Press, 1990).

22. George Kegley, "Unity's the Key to Clean Planet, Executives Say," Roanoke Times and World News, 22 March 1992.

23. Crowfoot, Environmental Disputes, 1.

24. Tom Alexander, "A Promising Try at Environmental Detente For Coal," Fortune, 13 February 1978, 94-102.

25. Geoffrey O'Gara, "Should This Marriage Be Saved?," Environmental Action, 11 March 1978, 10-13.

26. Environmental Protection Agency, Action Agenda, 14.

27. Ibid., 14.

28. For documentation, see Richard Andrews and Terrence Pierson, "Local Control or State Override: Experiences and Lessons to Date," Policy Studies Journal 14, no. 1 (1985): 90; Bacow, "Overcoming Local Opposition," 267; Howard Bellman, "Siting for a Sanitary Landfill for Eau Claire, Wisconsin," The Environmental Professional 2 (1980): 57; Gail Bingham and Daniel S. Miller, "Prospects for Resolving Hazardous Waste Siting Disputes Through Negotiation," Natural Resources Lawyer, 17, no. 3 (1984): 473-474; Richard J. Bord, "Judgements of Policies Designed to Elicit Local Cooperation on LLRW Disposal Siting: Comparing the Public and Decision Makers," Nuclear and Chemical Waste Management 7 (1987): 99; Robert C. Mitchell and Richard T. Carson, "Property Rights, Protest, and the Siting of Hazardous Waste Facilities," American Economic Review 76 (1986): 285; Charles Davis and James Lester, "Alternative Levels of Analysis in Hazardous Waste Regulatory Policy," Policy Studies Journal 14, no. 1 (1985): 47; Gregory, "Incentives Policies to Site

Hazardous Waste Facilities," 667; Bernd Holznagel "Negotiation and Mediation: the Newest Approach to Hazardous Waste Facility Siting," Boston College Environmental Affairs Law Review 13, no. 3 (1986): 329; Inhaber, "Of LULUs, NIMBYs, and NIMTOOs," 52; Michael E. Kraft and Bruce B. Clary "Citizen Participation and the NIMBY Syndrome: Public Response to Radioactive Waste Disposal," The Western Political Quarterly 44, no. 2 (1991): 299-300; Michael Kraft and Ruth Kraut, "The Impact of Citizen Participation on Hazardous Waste Policy Implementation: the Case of Clermont County, Ohio," Policy Studies Journal 14, no. 1 (1985): 52-61; Jennifer McQuaid-Cook and Kenneth J. Simpson, "Siting a Fully Integrated Waste Management Facility," Journal of the Air Pollution Control Association 36, no. 9 (1986): 1031; Elizabeth Peelle and Richard Ellis, "Beyond the 'Not-In-My-Backyard' Impasse," Forum For Applied Research and Public Policy 2 (Fall 1987): 68-69; Portney, "Allaying the NIMBY Syndrome," 411; and Barry B. Rabe, "When Siting Works, Canada-Style," Journal of Health Politics, Policy and Law 17, no. 1 (1992): 120-121.

29. For documentation, see Bacow, "Overcoming Local Opposition," 275; Bingham, "Prospects for Resolving Hazardous," 478-479; Bord, "Judgements of Policies," 99; David Morell and Christopher Magorian, Siting Hazardous Waste Facilities: Local Opposition and the Myth of Preemption (Cambridge: Billinger Publishing Company, 1982); O'Hare, Bacow and Sanderson, Facility Siting and Public Opposition; Gregory, "Incentives Policies," 674; Michael O'Hare, "'Not on my Block You Don't": Facility Siting and the Strategic Importance of Compensation," Public Policy 25, no. 4 (1977): 456; Barry Rabe, "Beyond the NIMBY Syndrome in Hazardous Waste Facility Siting: The Albertan Breakthrough and the Prospects for Cooperation in Canada and the United States," Governance 4, no. 2 (1991): 192-194; Rabe, "When Siting Works," 119-142; Swartzman, Croke and Swibel, "Reducing Aversion to Living Near Hazardous Waste Facilities," 43-50; and Chaitanya E. York and Dottie Laber, "Two C's Overcome 'NIMBY'," BioCycle 29, no. 9 (1988): 60-61.

30. Bord, "Judgements of Policies," 99.

31. David Conn, Municipal Solid Waste Management (Guidebook for Virginia Localities): One in a Set of Guidebooks Prepared for Local Government Officials and Concerned Citizens (Blacksburg: University Center for Environmental and Hazardous Materials Studies, Virginia Polytechnic Institute and State University, 1990).

32. For several detailed case studies on how this occurs, see Janice Morrisey, "Citizen Participation in Solid Waste Disposal Decisions: Landfill Siting in two Rural Communities," Dismantling the Barriers: Rural Communities, Public Participation, and the Solid Waste Dilemma, ed. Janice Morrisey, Lachell Norris, and John

Gaventa (Tennessee: Highlander Research and Education Center, 1993), 3.1 - 3.77.

33. Bingham, "Prospects for Resolving Hazardous," 489.

34. Douglas J. Amy, The Politics of Environmental Mediation (New York: Columbia University Press, 1987), 193-194.

35. Highlander Center Staff, "Overview of Rural Solid Waste Issues- Extent of the Problem, Barriers to Solutions," Dismantling the Barriers, 1.1.

36. For documentation, see Pamela Stallsmith and Lawrence Latane III, "Landfills: Economic Cure-All or Pollution Threat?," Richmond Times Dispatch, Sunday, 22 December 1991, sec. A1 and E8; Overton McGehee, "In Bruising Waste Management Field, Adept State Newcomer Stresses Trust," Richmond Times-Dispatch, Sunday, 18 March 1990, sec. 1F and 5F; Bently Boyd, "Landfill Turns Trash into Cash," Virginia Daily Press, 9 September 1992, sec. 5A; Rabe, "Beyond the NIMBY," 192-194; Rabe, "When Siting Works," 119-142; Howard Raiffa, "Creative Compensation: 'Maybe in My Backyard'," Negotiation Journal 1, no. 3 (1985) 197-203; and York, "Two C's," 60-61.

37. Brian Bloom, "Pollution Prevention and Grassroots Activism," Race Poverty and the Environment: A Newsletter for Social and Environmental Justice 1, no. 2 (Summer 1990): 10.

38. Truax Hawley, "Minorities at Risk," Environmental Action, January/February 1990, 20.

39. Daniel Suman, "Fighting LULUs: Effective Community Organizing," Race Poverty and the Environment: A Newsletter for Social and Environmental Justice I, no. 2 (July 1990), 6.

40. Reza G. Najem and Donald B. Luria, "Clusters of Cancer Mortality in New Jersey Municipalities: With Special Reference to Chemical Toxic Waste Disposal Sites and Per Capita Income," International Journal of Epidemiology 14, no. 4 (1985), 528-537.

41. Rex Springston, "'Environmental Racism?' Landfills Tend to Find Way To Mostly Black Areas," Richmond Times-Dispatch, Sunday, 27 June 1993, sec. 1A and 8A.

42. Highlander Center Staff, "Overview of Rural Solid Waste Issues," 1.13. For further documentation on environmental racism, see Roberto Suro, "West Texas Desert Town Debates Taking Fertilizer From That City," New York Times, January 1993; Bradley Angel, "The Toxic Threat to Indian Lands," Greenpeace (June 1991), Bill Farrar, "Speakers Push Ward Elections," Martinsville Bulletin, 15 July

1992, sec. A1, A11 and A12; and Jonathon Shepherd and Anna Marie Stenberg, "Citizens Fight Laidlaw Expansion in California," Everyone's Backyard: The Journal of the Grassroots Movement for Environmental Justice 11, no. 4 (1993): 5.

43. D'Vera Cohn, "The Fierce Politics of Yankee Garbage in Virginia Mountains," The Washington Post, 11 April 1989, sec. 1B, 4B.

44. Ibid.

45. Gail E. Chehak and Suzan Shown Harjo, "Protection Quandary in Indian Country," Environmental Action, January/February 1990, 21.

46. Mary Hager et al., "'Dances With Garbage': Reservations as Toxic Dumping Grounds," Newsweek, 29 April 1991, 36.

47. Ibid., 36.

48. "'Hush-Hush' at Huerfano Mountain- Government Permits Another Time Bomb," Rachel's Hazardous Waste News no. 278 (Washington, D.C.: Environmental Research Foundation, 25 March 1992).

49. For more documentation and discussion of environmental classism and discrimination, see Karl Linn, "Inner Cities Join Ecology Debate," Race, Poverty and Environmental Justice: A Newsletter for Social and Environmental Justice I, no. 2 (Summer 1990): 1 and 11; Julian McCaull, "Discriminatory Air Pollution: If Poor Don't Breathe," Environment 19 (1975): 26; Robert Bullard, "Endangered Environs: The Price of Unplanned Growth in Boomtown Houston," California Sociologist (Summer 1984): 85-101; Robert Bullard and Beverly Wright, "The Politics of Pollution: Implications for the Black Community," Phylon 47 (1986): 71; and Robert Bullard and Beverly Wright, "Blacks and the Environment," Humboldt Journal of Social Relations 14 (1987): 165; Robert Bullard and Beverly Wright, "The Quest for Environmental Equity: Mobilizing the Black Community for Social Change," Race, Poverty and the Environment I, no. 2 (1990): 3, 14; and Robert Gottlieb and Helen Ingram, "The New Environmentalists," The Progressive (1988): 14-15.

50. Katherine Bouma, "Waste Away Success Frightens Some Groups," Montgomery Advertiser, 13 April, 1992. For more examples of 'Slap Suits,' see "McMinn Landfill Operators Sue Citizen's Group," Knoxville News-Sentinel, 25 March 1993; "BFI seeks to penalize community for opposition to landfill," East Knox Advertiser, 29 April 1991; and Balancing the Scales (BtS): Newsletter of Kentuckians for the Commonwealth, June 1991, 7.

51. Richard Belisle, "LCS Guard, One Other, Face Charges," Martinsburg Journal, 17 September 1990, sec. 1A, 2A.

52. "SOCM member beaten after council meeting," The Appalachian Reader, Winter 1992, 6.

53. Caroline Moser, "Evaluating Community Participation in Urban Development Projects," Proceedings of the Workshop Held at the Development Planning Unit: Working Paper no. 14, ed. Caroline Moser (1983): 3.

SECTION THREE

TOWARDS A 'PEOPLE CENTERED' APPROACH TO PARTICIPATORY PLANNING: LESSONS FROM THE GRASSROOTS MOVEMENT AGAINST TOXINS

Throughout the rest of this paper I use the phrase "movement against toxins" in place of the more specific phrase "movement against waste facility siting." The movement's reach is broader than the single issue of facility siting. The phrase exemplifies how the movement demanding the clean up of waste facility sites grew into a movement opposing the siting of waste facilities, and further grew into a movement calling for waste reduction at the source of production. The phrase expresses the potentials within participation to transform the personal lives of the members themselves and transform the goals of the movement as a whole.

Where the economic compensation approach to citizen involvement largely fails to provide citizens the opportunity to participate, grassroots level activism largely succeeds. The grassroots movement against toxins has successfully demanded the clean up of contaminated sites and prevented the siting of waste facilities and polluting industries in numerous communities.¹

In this section, I will examine citizen opposition to waste facility siting as a function of the two questions "why" and "who."

While the movement serves as a means to oppose waste facility and chemical plant sitings, it also serves as an end. As an end, the fragmented, localized spurts of

activism against toxins evolved into what is now a cohesive, organized movement challenging the production process of a capitalist oriented industrial based society.

The dominant perspective views local opposition to waste facility siting as a means to exercise selfish parochialism against which the waste industry and local government must struggle to locate regionally necessary but locally unwanted land uses.² Analysis of grassroots activism against waste facility siting from the perspective that participation is important as a process (as an end itself) provides a richer picture of grassroots activism in which normally non-political citizens become empowered as political actors and in which locally based and fragmented efforts at public resistance evolve into a progressive and organized movement for systemic social change.

I. PARTICIPATION AS AN END

The grassroots movement against waste facility siting illustrates two important functions of participation as an end: as an empowering process and as an evolutionary process through which citizens are able to formulate strategic goals out of efforts to meet basic interests. Though these two concepts are more related than not, they will be discussed separately for the purpose of clarity.

II. EMPOWERMENT

Strategic issue development at the grassroots level occurs on both a public and personal level. On a personal level, many women have found that the social roles which they had previously accepted are no longer appropriate for their beliefs. In order to protect their families these women are forced to demand that their interests be addressed and their problems be solved; they are forced to adopt an aggressive stance as protesters and picketers. For instance, one woman involved as an activist in the movement declares that

(a)ll of our lives we are taught to believe certain things about ourselves as women, about democracy and justice, and about people in authority. Once we become involved with a toxic waste problem, we need to confront some of our old beliefs and change the way we view things. In the process, we're doing things we never dreamed we'd do.³

Another women active in the fight against toxins states that

(o)ur thinking about the world changes as a result of our negative experiences with the government and industry. We see how corporate influence is used by the government against the health of the people, and we see injustice being done in other parts of society. As a result, we may think about and take on other issues that we haven't been socialized to deal with -- like racism and sexism.⁴

III. EVOLUTION: FROM PRACTICAL TO STRATEGIC

The waste crisis provides numerous examples of non-political citizens becoming politically active as a result of their fight to protect and meet basic interests. For example, Celene Krauss describes the process by which Frank Kahler and his family became involved in a political fight against a toxic waste dump. The Kahler family's involvement began with the practical desire to secure survival and safety for the family. Involvement in protest activities against a threatening toxic waste dump in their own community led the family to learn more about the roots of the national waste crises. The Kahler family is now fighting for source reduction at the local, state and national levels. Krauss argues that

(t)hrough such protests ... ordinary people construct a broader analysis of politics: they shift from a non-ideological stance to an ideological stance, from defining themselves as non-political to defining themselves as political, from having a deep faith in the established political system to developing a critical political analysis. This critical perspective ... creates the potential for grass-root activists to play a more active and militant role within environmental politics, and possibly in movements for social change.⁵

The waste crisis affects people's lives at the most basic level of human existence - survival. Precisely because the crisis is foremost a health and safety crisis, women make up the major proportion of members and leaders of grassroots level movements. The writers of Empowering Ourselves: Women and Toxins Organizing, report that in the fight against toxins "70%-80% of the local leaders, the ones calling the meetings, bringing in new members, trouble shooting, and motivating in the communities are

women."⁶ They go on to write that

(m)ost of the grassroots groups against toxic waste around the country started because one woman -- usually a housewife and mother -- felt compelled to do something to protect her family from the tragic health effects of chemical contaminants in her community. That lone woman reached out to her family, friends, and neighbors to work with her, and together they built a local organization.⁷

Penny Newman writes that

(a) new social justice movement has arisen in the U.S. to confront the environmental hazards. The Movement for Environmental Justice, comprised of the people who have suffered most - the women and children, the poor and people of color - are stepping forward to demand a change. These women, often ridiculed as 'hysterical housewives,' recognize that environmental hazards are health hazards, and those hazards are killing our people. It is no longer a question of how much pollution is acceptable, the demand is that there be no more pollution. The battle is for survival.⁸

The women of the movement against toxins became involved as activists not because of an idealized notion that as child bearers women are natural nurturers and hence are driven to nurture and care for the earth, but out of a more basic desire to protect themselves and their families. One woman involved in the movement declared that

(t)he environmental justice movement would not exist today were we not concerned about the devastating health effects on our families from exposure to toxic wastes ... (w)e're concerned about protecting families against future harm from incinerators, leaking landfills and other sources of hazardous waste contamination.⁹

The women of the movement against toxins started out fighting for the health of their families and ended up fighting for global environmental responsibility and women's

and minority's rights. Penny Newman writes that

(t)he 'environment' for the women in our communities is the place we live, and that means everything that impacts our lives ... For someone having to drink polluted water, the ramifications of ozone depletion is not an issue which ranks high on their list of concerns. For mothers of children dying from cancer, global warming is a non-issue.¹⁰

The women and men who became involved in the fight against waste facilities did so not out of an altruistic choice to serve the community. Rather, as the acronyms they choose to name their organizations indicate (SAVE, RESCUE) they did it to survive. For instance, Luella Kerry, who believes her son's death is directly related to chemical exposure at the Love Canal site, writes that she is "... ashamed that the only thing that got me involved was because my son died ... Otherwise I was just as complacent as the next person and didn't pay attention to what was going on."¹¹

McCall's magazine (1989), chronicled the following series of events that led to the involvement of activist Cathy Hinds of East Gray Maine in the fight against toxins:

Cathy suffered a miscarriage, the death of a new born son, and a sickness in her own body that caused her to lose feeling in her extremities. Cathy also watched as her husband began to suffer severe asthma attacks and her daughters began to suffer dizzy spells which caused them to fall off their chairs. Cathy began to suspect that these incidences were related to the hazardous waste dump located 5 houses down from her house.¹²

This suspicion led Cathy to research the composition of the landfill. Cathy then

... other residents suffering from such conditions as dizziness, rashes, and respiratory problems, and demanded from local, state, and federal authorities that the health threat caused by the chemical waste dump be

removed."¹³

Cathy began as a woman fighting for her life. Now, Cathy is "... a 7-day-a-week field representative for the National Toxins Campaign, which helps people fight against hazardous substances in their communities."¹⁴

Penny Newman became involved when she learned that

... 800,000 gallons of toxic chemicals had been released from a storage pit and had collected around the elementary school her sons attended. Thinking the puddles were rainwater, the school children played in them. It wasn't till tennis-shoe soles had disintegrated and jeans had been eaten up that anyone got suspicious.¹⁵

Jessie DeerInWater, founder of the grassroots group Native Americans for a Clean Environment (NACE) considers her activism as an effort to "protect my family, my family's family and myself from death and cancer."¹⁶

In the 1991 April issue of McCall's magazine, Patricia Nonnan tells her story of how and why she became involved in a fight to close a toxic waste site. Nonnan tells the interviewer that "(t)his is a massive hazardous waste dump. It's a half mile from where my family lives. It has made dozens of my neighbors sick ... because of this dump, my little girl is dead."¹⁷ Hundreds of thousands of illegal wastes had been deposited along with regular garbage into the Pelham Bay landfill of Nonnan's Bronx, New York community. The motivations behind Nonnan's activism are highlighted when she declares that "(w)e've got at least twice the national average of leukemia in the neighborhoods within the shadow of Mount Trashmore ... in the neighborhoods near the dump, there are 12 kids with childhood leukemia that we

know about."¹⁸

Lois Gibbs writes that "(w)hen I first started out at Love Canal, I didn't know that what I was doing was 'organizing' ... (w)e called it ... taking action -- for the survival of our children and ourselves."¹⁹

IV. EVOLUTION: FROM LOCAL TO GLOBAL

The waste crisis is global in its impact. The issue involves a complex array of elements and players. Citizens; environmentalists; local, state, national, and international governments; chemical corporations; and waste industries are among some of the most visible players. Should not the crises, then, be addressed from the national and global level? Yes, but not in a top down manner. The solutions to the problem must come from the bottom up. The grassroots movement against toxins shows that strategic solutions to national and global problems can be formulated at the community level.

Madelyn Hoffman explains that her activities at the local level transformed the scope of her political interests when she realized that "what we were facing in our own home town was not limited to our own home town."²⁰ Madelyn organized the local group in her Ironbound community of Newark, New Jersey, in 1980 when she discovered that toxins had been illegally stored within a mile of her home. Now she is the director of the Grass Root Environmental Organization (GREO) which serves, works with, and connects 100 citizen groups statewide.²¹

While the environmental crisis is complex, action at the local level can effect powerful change at the global level. Crooks writes that:

(e)verywhere groups have sprouted up in response to some specific waste industry-related issue, and then, once assembled, have recognized that the price of vigilance is a permanent presence. Thus, in 1982, citizens formed People Against Hazardous Landfill Sites Incorporated (PAHLS) as an act of self-defense when WMI began accepting

hazardous wastes in Wheeler, Indiana. Since then, it has taken wing, growing into a multi-faceted grass roots' resource, linking citizens' groups and providing skills-training and technical assistance to communities with concerns about landfills, incinerators and water quality. Twice monthly, from its presses in Valparaiso, Indiana, the PAHLS Journal reaches out beyond the American to readers in forty-five U.S. states, Europe and Asia.²²

Local groups working on waste management issues can access financial and technical support from organizations at the regional and national levels. The "antitoxics campaigns (are) coordinated nationwide, (and) chemical manufacturers and waste handlers are consequently finding it harder to arrange for dump sites or toxic waste incinerators ... Not only has industry been forced to change its dumping habits, but ultimately it may also have to redesign its manufacturing techniques to produce without toxic by-products..."²³ These national organizations were created by the local grassroots groups themselves. The grassroots groups have succeeded in remaining autonomous on a local level allowing citizens' control over their own communities while at the same time forging connections to each other at the national and local level. This connection allows the otherwise powerless and disorganized local groups to reap the technical and economic advantages of operating at a state, national, and global level.

Lois Gibbs, who led the local effort to force the federal government to evacuate 900 families from the polluted Love Canal site in Niagara Falls, New York, started the Citizens' Clearinghouse for Hazardous Wastes. CCHW, which began in the basement of Lois Gibbs home, currently

... maintains a contact list of some 6,000 citizens' groups fighting to close leaking landfills, stop the siting of incinerators, and working on other antitoxins issues. Maintaining a thirteen-member staff with offices in Alabama, Texas, Virginia, West Virginia, Pennsylvania, California, and Ohio, CCHW's annual budget reached \$689,000 in 1989.²⁴

The National Toxins Campaign (NTC) is another example of a national organization created by a grassroots activist which still (as a national organization) is managed by and for the grassroots groups and operates on a grassroots level. John O'Connor, a locally-based environmental activist, started NTC out of his home. O'Connor

... began pushing for federal legislation that would require a stronger citizen's voice in the EPA's Superfund hazardous waste cleanup program. Today O'Connor's NTC and its Prevention Fund operate on a \$1.9-million budget, half generated from grants and half from about 10,000 memberships, with sixteen full-time staff and offices in Massachusetts, Maine, Texas, Washington, D.C., Colorado, California, Oklahoma, Alabama, and North Carolina.²⁵

One of the great achievements of the above outlined national groups is that they have been successful in bringing about the "... amalgamation of isolated antitoxins struggles into a nationwide network."²⁶ For instance, CCHW holds a conference each year which has been known to draw over 1,000 activists from over forty states. The different factions of the grassroots movement is further kept abreast of current developments by newsletters and bulletins issued by such organizations as CCHW, NTC, the Environmental Research Foundation, and Tennessee's Highlander Center. Additionally, "(a) growing number of locally-based groups are becoming

powers in their own right."²⁷ For instance, "The Silicon Valley (California) Toxins Coalition, established to organize citizens around twenty-nine Superfund and about 150 groundwater contamination sites, now maintains two full-time staff, a mailing list 6,000, and has a \$100,000 annual budget."²⁸

Even the traditional national organizations are beginning to recognize the latent power behind a grassroots level network style of organizing. David Rappaport, a representative of Greenpeace, reports that the organization is making "... a very conscious effort over the last few years to base ourselves in the grass roots."²⁹

The above examples illustrate how systemic roots to locally experienced problems can be defined and met by grassroots level activists. Though the initial involvement of the citizens were for practical reasons, recognition of the systemic roots of their local problems led the local groups to define strategic goals and network with each other to ensure the meeting of those goals. For instance, members of CCHW formed the "McToxics" campaign and forced the McDonald's fast-food chain to initiate a \$16-million national program to replace recycle Styrofoam hamburger containers and other packages with alternative containers.³⁰ Lois Gibbs declares that

(w)e've moved beyond the NIMBY syndrome ... Now people are saying, 'Don't put that landfill or incinerator in ANYBODY's backyard.' There hasn't been a new hazardous waste landfill built in this country since 1978. Not because it's illegal, but because the people have changed the debate.³¹

Speaking on the McToxics campaign, Penny Newman writes that

(t)he fact that we won may not be as interesting as the approach to the

campaign. The McToxics campaign was a successful demonstration of how the movement can impact the 'big picture' without taking people out of their own communities. The movement learned that they can have a dramatic effect on public policy without leading a massive march on the McDonald's headquarters (a national event), but rather through a 'nationwide' campaign that focuses on the big picture from the perspective of a local community ... The nationwide campaign allowed groups to ... emphasize their own issue; groups working on a landfill could point to the company's excessive packaging and how it fills existing disposal space and adds to the crisis, incinerator foes could underscore the toxins released if styrofoam is burned. Everyone had an angle which rang true with the specific concerns of their community ... In addition the campaign initiated a ripple effect. Children started demanding that their schools stop using styrofoam. Cities passed ordinances against styro-packaging. It was happening locally, in our towns, by our own people, and constantly involving more and more people from all walks of life. It is that local pressure that has changed our lifestyle and made it socially unacceptable to use styrofoam ... As we've seen with the McToxics campaign, the energy spent locally can lead to major changes in public policy and societal norms.³²

Activist Lois Gibbs declares

I think we're winning. You see so much happening - incinerator after incinerator, landfill after landfill being beaten back. This fits into a long-range strategy, that you have to target the corporate board rooms- all they know is profit and loss. By stopping all these facilities and plugging up the drain, all the waste will end up back in industry's backyard. Then they have to pay an arm and a leg to get rid of it. So, we make industry pay more for waste disposal. Then you see the board rooms asking, how can we reduce those costs: The answer is, they have to change their processes, stop discharging the stuff and try to re-use it, pull it out of the waste stream. They have to change the chemicals so they're not toxic. I think companies, more and more, will start explaining to their stockholders that the up front cost might be more, but the long-term cost is much cheaper.³³

As the grassroots groups against the siting of waste facilities have begun to define their strategic goals, a fundamental distinction between the control of and the

prevention of wastes has begun to emerge. For instance, John O'Connor, director of the National Toxins Campaign (NTC), provided an example of how grassroots level activists began focusing their efforts on newly defined strategic goals. John O'Connor points out that these grassroots level groups have begun to demand control over the production process itself. Citizens as individuals have little access to control over much of the waste generation. Blumberg asks "(h)ow much real consumer discretion is there over the one-third of MSW that derives from product packaging?"³⁴ Organized, however, citizens can begin to effect such changes.

For instance,

(a)round the country, local groups are engaged in 'Good Neighbor Campaigns,' an attempt to exercise local control by negotiation with the local corporations to get them to prevent pollution at its source, even if that means going beyond what the law requires.³⁵

V. TOP DOWN VS. BOTTOM UP

Molyneux and Moser differentiate between practical and strategic interests to explain how citizens come to define strategic and comprehensive interests and goals out of activities at the practical and local level. This distinction also explains why the waste siting crisis cannot be evaluated merely as an environmental issue. It is a social, economic, political, and livelihood crisis which, though global in its causes and effects, must be addressed at the community level. The most well intentioned top down plans/policies are not adequate to address even the most complex global problems.

The problems associated with top down comprehensive environmental planning is fostered by the activities of national level mainstream environmental organizations. Penny Newman describes how top down mainstream environmental organizations have failed to meet the interests of communities at the local level. She writes that

(m)ainstream environmental organizations from the Sierra Club to the World Wildlife Fund and Environmental Defense Fund have become part of 'the system' where being 'reasonable' is the driving force, and there is little consideration of the impact on people. These organizations are staffed primarily by scientists, lawyers, economists and political lobbyists. Although many of these groups may have an adversarial relationship with agencies such as the EPA their differences are frequently of degree rather than substance, with an emphasis on tightening or enforcing existing laws rather than developing a new approach. The short-sighted focus of these environmental groups at 'controlling' rather than 'preventing' pollution has encouraged the earth's destruction ... With peoples' lives at stake, communities, led almost exclusively by women, have stepped forward to confront local environmental hazards. These women have refused to play the game by the rules of the old environmental movement and have been the

ones to insist that enough is enough. The issue is no longer how much pollution is acceptable, the demand is that there be no more pollution.³⁶

The grassroots groups protesting private waste facilities are filling a niche here-to-for ignored by the mainstream, national level environmental groups. The grassroots groups are concerned with getting at the source of the waste problem. Mark Dowie argues that mainstream environmental organizations need to look beyond pollution control and adopt, instead, a more sustainable approach that centers on pollution prevention. He points out that the national organizations (primarily represented by the middle and upper classes) are interested in preserving the status quo and have avoided the difficult issue of pollution prevention. The thousands of regional, local, and often ad hoc groups that abruptly spontaneously to confront specific environmental dangers, however, are primarily made up of low-income, blue collar citizens that suffer from the highest concentration of toxic pollution. Though these grassroots level groups have fewer economic and political resources to draw from, they have organized to challenge the source of the waste problem -the structure of the production system itself.³⁷

Plans, policies, and theories must be grounded in the source of the problems they are trying to address and that source is the material existence of each citizen's daily life. For instance, the reports of toxic waste disasters in communities across the country (recall the evacuation of the entire Niagara Falls Love Canal community) facilitated wide spread public outrage.³⁸ The national government found itself forced

to address waste siting regulations. Though Congress was alerted to the seriousness of the problem by the swelling of activism at the grassroots level, the problem itself was articulated and addressed at the national level.

In response to the public outcry, Congress tightened the E.P.A landfill regulations. Operation costs have increased dramatically with the new solid waste regulations issued by EPA in 1991. The new regulations require that all of the municipal landfills in the United States install expensive liners and leachate collection systems within two years.³⁹ Those sites which were not originally fitted with liners must be closed. These are mostly the older smaller locally run sites.⁴⁰ The regulations also mandate the installation of truck scales, monitoring of wells, inspections, and other safeguards.⁴¹ Small communities cannot afford the capital involved in fitting or retro-fitting a site to meet the new tougher regulations. The new regulations have posed communities with a difficult choice "... either host a regional dump and put up with the truck traffic and the fear of contamination, or pay a high price to have their garbage trucked to a remote regional landfill."⁴²

The increasing costs of siting and managing waste "... make the 'economies of scale' argument more salient for waste managers. To the extent that higher volumes bring lower costs per unit of waste disposed, communities are driven to pool their waste stream with other generators."⁴³ For instance, the State of Kentucky claims that while it costs a family \$1,800 each year to dispose of waste in a 5 ton per day capacity facility, it costs a family only \$150 each year to dispose of waste in a 200

ton per day capacity facility.⁴⁴ As a result, multi-county regional landfills have become one of the few affordable waste management options for many communities.⁴⁵

The waste corporations readily admit that the new regulations work in their favor. Dean Buntrock, manager of Waste Management, Inc. (WMX), states in an interview that "(e)very time regulations are tightened, the more difficult it is [to comply], the more expertise that has to be applied to solving the problem ... regulation has been very, very good for business."⁴⁶

No one would argue against efforts at safeguarding public and environmental health. The waste that is produced should be disposed of under the safest possible conditions. No one would want the system of waste management to regress to the:

... years before the public was aware of the serious health impact of toxic chemicals ... (in which there were) ... no regulations governing the disposal of chemicals, herbicides, heavy metals and other potentially dangerous wastes. Often manufactures simply dumped wastes into pits, known as chemical lagoons, buried them or put them into metal barrels, which usually rusted or rotted. Sometimes wastes were pumped directly into rivers and streams.⁴⁷

The regulations, however, exacerbate a situation in which communities have lost control over their land and waste management systems. Further, new laws in Ohio, Alabama, Kentucky, and Tennessee

... explicitly discourage single-community waste systems, instead calling on local governments to form regional planning units ... (a)s a result, some communities feel they should not and cannot take care of their own waste, except by regionalizing their programs through agreements with neighbors or private enterprise.⁴⁸

Though the intention was to make waste facility sites safer, the national regulations fostered the closing of locally run landfills and the spread of large privately run landfills.

Where the locally run landfills operate under a motive to provide the community a service, the privately operated landfills operate under the motive to earn a profit. That profit is directly proportional to the production of waste. Reduction in waste translates into reduction in profit. It is no coincidence that waste management is now referred to as the waste "industry." Because the people at the local level did not provide input into the development of federal waste policies, a waste market developed which is dependent upon poverty stricken, undereducated communities desperate to find a way to meet their basic needs even if it means hosting mega-landfills.

1. For examples, see Mary Sinclair, "'The Tongue of Angels,'" chap. 5 in Women Activists: Challenging the Abuse of Power, ed. Anne Witte Garland (New York: The Feminist Press at The City University of New York, 1988), 76-87; Cathy Hinds, "'Vociferous Residents,'" chap. 6 in Women Activists: Challenging the Abuse of Power, ed. Anne Witte Garland (New York: The Feminist Press at The City University of New York, 1988), 91-105; Millie Buchanan, "No Safe Haven For Mr. Foushee's Incinerator," Environmental Politics: Lessons From the Grassroots, ed. Bob Hall (Durham: Institute for Southern Studies, 1988), 85-91; Centaur Assoc., Siting of Hazardous Waste Facilities and Public Opposition, Report Prepared for the Office of Solid Waste, Environmental Protection Agency (November 1979), 9-16; Walter Rosenbaum, "The Politics of Public Participation in Hazardous Waste Management," The Politics of Hazardous Waste Management, ed. James P. Lester and Ann O.M. Bowman (Durham, N.C.: Duke University Press, 1983), 176-195; Michael O'Hare, Lawrence Bacow, and Debra Sanderson Facility Siting (New York: Van Nostrand, 1983); N. Tate, "RI to Ban Dumping From Out-Of-State," The Boston Herald, 24 June 1987, 15; Michael Heiman, "Siting Opposition: A History of Successes," APA Journal, Summer 1990, 360-362; Lois Gibbs, "The Movement on the Move," Everyone's Backyard: The Journal of the Grassroots Movement for Environmental Justice 7, no. 2 (1989): 1, 3; New York State Legislative Commission on Toxic Substances and Hazardous Wastes, Hazardous Waste Facility Siting: A National Survey (Albany, New York, 1987); Emile Schmeidler and Peter Sandman, Getting to Maybe: Decisions on the Road to Negotiation in Hazardous Waste Facility Siting (New Brunswick, NJ: Environmental Education Fund of the Environmental Communication Research Program, Rutgers University, 1988); Celene Krauss, "Grass-Root Consumer Protests and Toxic Wastes: Developing a Critical Political View," Community Development Journal 23, no. 4 (1988): 258-265; and Environmental Protection Agency, Hazardous Waste Facility Siting: A Critical Problem, SW-865 (Washington D.C.: Environmental Protection Agency, 1980).

2. Popper, "The Environmentalist and the LULU," Environment 27, no. 2 (1985): 37-40.

3. Jeff, Empowering Ourselves, 31.

4. Ibid., 32.

5. Krauss, "Grass-root Consumer Protests and Toxic Wastes: Developing a Critical Political View," 258.

6. Robbin Lee Jeff, Marsha Love and Karen Stulls, Empowering Ourselves: Women and Toxins Organizing (Arlington, VA: Citizens Clearinghouse for Hazardous Wastes, 1989), 25.

7. Ibid., 3.

8. Penny Newman, Women and the Environment in the United States of America: An Issue of Health, Safety, and Social Justice, Presented at a Conference in Bangalore, India (July 1991), 10.

9. Jeff, Empowering Ourselves, 7.

10. Newman, Women and the Environment, 8.

11. Ibid., 11.

12. Jeannie Ralston, "Women Against toxic Waste," McCall's, October 1989, 134.

13. Ibid., 134.

14. Ibid.

15. Ibid.

16. Claude Engle, "Profiles: Environmental Action in Minority Communities," Environmental Action (January/February 1990): 23.

17. Claudia Dreifus, "Battling Mount Trashmore," McCall's, April 1991, 80.

18. Ibid.

19. Jeff, Empowering Ourselves, 37.

20. Jeff, Empowering Ourselves, 35.

21. Ibid., 35.

22. Harold Crooks, Giants of Garbage: The Rise of the Global Waste Industry and the Politics of Pollution Control (Toronto: James Lorimer and Company, Publishers, 1993), 257-258.

23. Mark Dowie, "American Environmentalism: A Movement Courting Irrelevancy," World Policy Journal 9, no. 1 (1992): 68.

24. Dick Russel, "The Rise of the Grass-roots Toxins Movement," The Amicus Journal, Winter 1990, 18.

25. Ibid., 21.
26. Ibid., 21.
27. Ibid.
28. Ibid.
29. Ibid., 18.
30. Ibid., 19.
31. Ibid.
32. Newman, Women and the Environment, 13-14.
33. Russel, "The Rise of the Grass-roots," 62-63.
34. Lois Blumberg and Robert Gottlieb, War on Waste: Can America Win Its Battle with Garbage? (Washington, D.C.: Island Press, 1989), 13.
35. Brian Bloom, "Pollution Prevention and Grassroots Activism," Race, Poverty and the Environment: A Newsletter for Social and Environmental Justice I, no. 2 (1990): 8.
36. Newman, Women and Environment, 7.
37. Dowie, "American Environmentalism," 83-92.
38. For a brief outline covering 13 cases of reported site contamination, see Citizen's Clearinghouse for Hazardous Wastes Inc., Land Disposal...The Dinosaur of Disposal Methods (Falls Church, VA: Citizen's Clearinghouse for Hazardous Wastes Inc., April 1986), 6-14.
39. Rules and Regulations, "Solid Waste Disposal Facilities," Federal Register 56, no. 196 (9 October 1991): 50978-51119.
40. Rachel's Hazardous Waste News # 268 (Washington, D.C.: Environmental Research Foundation, January 1992).
41. Highlander Center Staff, "Overview of Rural Solid Waste Issues- Extent of the Problem, Barriers to Solutions," Dismantling the Barriers: Rural Communities, Public Participation, and the Solid Waste Dilemma (Tennessee: Highlander Research and Education Center, 1993), 1.3.
42. Rachel's Hazardous Waste News # 268.

43. Highlander Center Staff, "Overview of Rural Solid Waste Issues," 1.2.

44. Ibid., 3.

45. Mike Easterwood, Transfer Stations: A New Element in Alabama's Solid Waste Management (Auburn University: Center for Governmental Services, April 1992).

46. Chakravarty N. Subrata, "Dean Buntrick's Green Machine," Forbes, 2 August 1993, 98.

47. Rallston, "Women Against Toxic Waste," 134.

48. Ibid., 1.2.

SECTION IV

CONCLUSIONS

Individual community based battles against waste facility siting have been criticized as, and hence underestimated as, exclusionary and parochial. The EPA writes that "(t)hese siting disputes illustrate the fact that few of us are eager assume responsibility for either our neighbors' wastes or our own."¹ A reassessment of the waste siting conflict from a materialist perspective shows how impoverished, isolated communities have reached out to each other in solidarity along class as well as public safety and environmental lines and have challenged the very premise behind the entire waste management approach: that the waste disposal crisis is strictly a "siting" problem. By opposing waste facility siting at the local level, they are directly sabotaging the 'quick fix' management of the entire waste and toxics industries. Out of attempts to fight for basic needs, this bottom-up movement has evolved to articulate a set of comprehensive strategic goals -demanding that waste management planning adopt a long range strategy to address the source of the problem.

Where the cooperative approach to participation in the waste facility siting process maintains the status quo of the production system, the movement against toxins presents a progressive challenge to the system. The movement against toxins is pushing for systemic social change by forcing the public debate away from local siting issues and toward a critical reassessment of the propriety of an environmentally unstable and socially unjust system of private production and waste management.

The movement against toxins is not unique to environmental politics. Rather, it represents changes occurring in the fundamental structure of the entire environmental movement. The people most affected by environmental hazards (women and children, and the residents of poor, undereducated, and minority communities) have taken control of the environmental movement. Bullard and Wright declare that

(t)he middle class-dominated environmental movement of the 1960s and 1970s built an impressive political base for environmental reform and regulatory relief. This relief, however, did not address the disproportionate burden of pollution carried by the urban poor and minority residents ... Mainstream environmental organizations have been late in broadening their base of support to include blacks and other minorities, the poor, and working-class persons.²

Analysis of the material basis of the conflict over waste facility siting points to the need for a re-definition of the term "participation." A 'people centered' approach to participation clarifies the difference between co-optation and participation in terms of the questions "who" and "why" and in terms of whether an approach is top down or bottom up. In developing a 'people centered' conceptual framework for understanding participation, I have gone beyond both the conservative status quo rhetoric of "win-win" on the one side and the idealistic and utopian rhetoric of "citizen power" on the other.

Where participation is defined in terms of its use to the citizens as well as to the external agencies, the goals of participation expand to encompass its value as an end as well as a means. Participation as an end points to both the importance of the material basis of the motivation to participate and the material basis any effective solution. The source of even the most complex and comprehensive environmental problems can be

found in daily lives of each and every citizen. If the solutions to these problems are not articulated out of the source, the problems will go unsolved and challenges for progressive change unmet.

1. Environmental Protection Agency, The Solid Waste Dilemma: An Agenda For Action. Final Report of the Municipal Solid Waste Task Force Office of Solid Waste (Washington, D.C.: Government Printing Office, 1989), 15.

2. Robert D. Bullard and Beverly H. Wright, "The Quest for Environmental Equity: Mobilizing the Black Community for Social Change," Race Poverty and the Environment: A Newsletter for Social and Environmental Justice I, no. 2 (July 1990): 3.

APPENDIX A

DEFINITIONS¹

Ash: The residue which collects as a result of the process of burning solid waste or solid waste-derived fuels.

Composting: "The controlled degradation of organic materials by biological means into a humus-like substance that can be used as a soil amendment."

Incineration: "A controlled combustion process where municipal solid waste is burned to reduce volume and, commonly, to produce energy."

Municipal Solid Waste (MSW): The term is used to represent "the agglomeration that appears daily and relentlessly at the threshold of every municipal solid waste landfill, incinerator, and processing facility across the nation... Municipal solid waste includes wastes from household, institutional, commercial, municipal, and industrial sources."

Residential or Household Waste: "Wastes from single and multiple-family homes."

Institutional Waste: "Wastes from schools and colleges, hospitals, prisons, and similar public or quasi-public buildings."

Commercial Waste: "Wastes from retail stores, shopping centers, office buildings, restaurants, hotels, airports, wholesalers, auto garages (including tires and batteries) and other commercial establishments."

Municipal Waste: "Wastes generated by municipal public works, such as street sweepings and tree and brush trimmings."

Industrial Waste: "Wastes such as corrugated boxes and other packaging, cafeteria wastes, and paper towels from factories or other industrial buildings. The term does not include waste from industrial processes, whether hazardous or nonhazardous."

Recycling: "A process involving: separation of a material from the waste stream; collection (before or after separation); processing; marketing; and utilization of that waste material as the raw material for products which may or may not be similar to the original."

Residuals: "Materials remaining after processing, incineration, composting, or recycling."

Resource Recovery: The process of extracting useful materials (materials recovery) or energy (energy recovery) from municipal solid waste.

Reuse: "The use of a product more than once in its same form for the same purpose thereby reducing the amount of waste generated."

Sanitary Landfill: "A land disposal technique in which solid waste is disposed on the smallest practical working face of a series of cells. Daily or periodic application of cover material is required and the facility is designed and operated in such a manner so as to minimize environmental contamination."

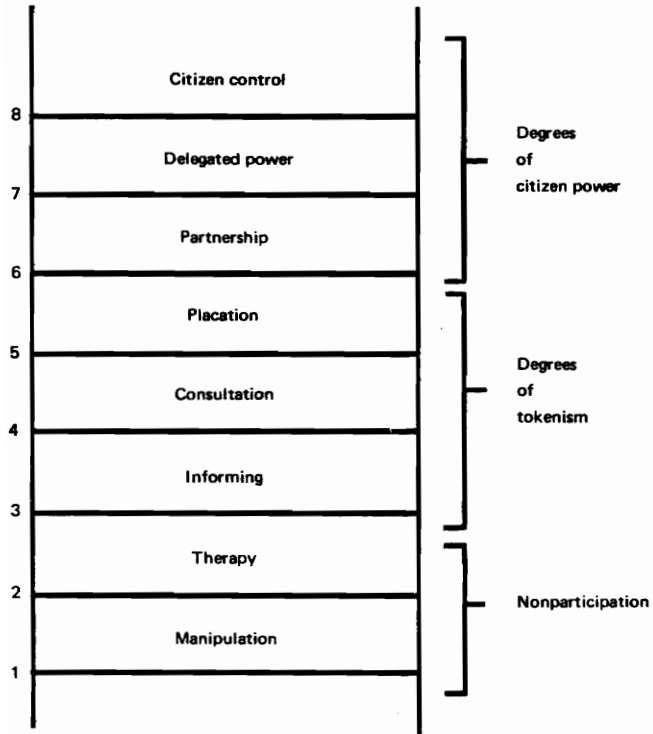
Sludge: "A semi-liquid residue remaining from the treatment of municipal and industrial water and waste water consisting of suspended solids combined with water and dissolved in varying amounts."

Solid Waste: "Any garbage, refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control plant facility and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. Solid waste does not include solid or dissolved materials in domestic sewage, solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended, or source nuclear, or by product material as defined by the Atomic Energy Act of 1954, as amended."

Source Reduction: "The design, manufacture, acquisition and reuse of materials including products and packaging, so as to minimize the quantity and/or toxicity of waste produced. Source reduction prevents waste either by redesigning products or by otherwise changing societal patterns of consumption, use, and waste generation."

1. These definitions are taken from the following source: Environmental Protection Agency, The Solid Waste Dilemma: An Agenda For Action. Draft Report of the Municipal Solid Waste Task Force Office of Solid Waste (Washington, D.C.: Government Printing Office, 1988), 1-2.

APPENDIX B



Eight Rungs on a Ladder of Citizen Participation

Bibliography

- Amy, Douglas J. The Politics of Environmental Mediation. New York: Columbia University Press, 1987.
- Arnstein, Sherry. "A Ladder of Participation." AIP Journal (July 1969): 215-221.
- Bachrach, Kenneth M., and Alex J. Zautra. "Coping with a Community Stressor: The Threat of a Hazardous Waste Facility." Journal of Health and Social Behavior 26 (June 1985):127-141.
- Bacow, Lawrence S., and James R. Milkey. "Overcoming Local Opposition to Hazardous Waste Facilities: The Massachusetts Approach." Harvard Environmental Law Review 6 (1982): 265-305.
- Bacow, Lawrence S., and Michael Wheeler. Environmental Dispute Resolution. New York: Plenum Press, 1984.
- Baird, Brian N. R. "Tolerance for Environmental Health Risks: The Influence of Knowledge, Benefits, Voluntariness, and Environmental Attitudes." Risk Analysis 6, no. 4 (1986): 425- 435.
- Balancing the Scales (BtS): Newsletter of Kentuckians for the Commonwealth June 1991, 7.
- Belisle, Richard. "LCS Guard, One Other, Face Charges." Martinsburg Journal 17 September 1990, sec. 1A, 2A.
- Bella, David A., Charles D. Mosher, and Steven, N. Calvo. "Establishing Trust: Nuclear Waste Disposal." Journal of Professional Issues in Engineering 114, no. 1 (1988): 40-50.
- Bellman, Howard. "Siting for a Sanitary Landfill for Eau Claire, Wisconsin." The Environmental Professional 2 (1980): 56-57.
- "BFI Seeks to Penalize Community for Opposition to Landfill." East Knox Advertiser 29 April 1991.
- Bingham, Gail. Resolving Environmental Disputes: A Decade of Experience. Washington D.C.: The Conservation Foundation, 1986.

- Bingham, Gail, and Daniel S. Miller. "Prospects for Resolving Hazardous Waste Siting Disputes Through Negotiation." Natural Resources Lawyer 17, no. 3 (1984): 473-489.
- Bloom, Brian. "Pollution Prevention and Grassroots Activism." Race Poverty and the Environment: A Newsletter for Social and Environmental Justice 1, no. 2 (Summer 1990): 10.
- Blumeburg, Lois, and Robert Gottlieb. War on Waste: Can America Win Its Battle with Garbage? Washington, D.C: Island Press, 1989.
- Bord, Richard J. "Judgements of Policies Designed to Elicit Local Cooperation on LLRW Disposal Siting: Comparing the Public and Decision Makers." Nuclear and Chemical Waste Management 7 (1987): 99-105.
- Bouma, Katherine. "Waste Away Success Frightens some Groups." Montgomery Advertiser 13 April, 1992.
- Boyd, Bently. "Landfill Turns Trash into Cash." Virginia Daily Press September 1992, 9.
- Brown, Kirk. "An Estimation of the Risk Associated with the Organic Constituents of Hazardous and Municipal Waste Landfill Leachates." Hazardous Waste and Hazardous Materials 5, no. 1 (Spring 1988): 1-30.
- Buckle, Leonard, and Suzanne Thomas-Buckle. "Placing Environmental Mediation in Context: Lessons from "Failed" Mediations." Environmental Impact Assessment Review 6 (1985): 55-70.
- Bullard, Robert. "Endangered Environs: the Price of Unplanned Growth in Boomtown Houston." California Sociologist (Summer 1984): 85-101.
- Bullard, Robert, and Beverly Wright. "The Politics of Pollution: Implications for the Black Community." Phylon 47 (1986): 65-73.
- . "Blacks and the Environment." Humboldt Journal of Social Relations 14 (1987): 165-170.
- . "The Quest for Environmental Equity: Mobilizing the Black Community for Social Change." Race Poverty and the Environment I, no. 2 (1990): 3, 14.

- Burke, Edmund M. "Citizen Participation Strategies." AIP Journal (September 1968): 287-294.
- Callenbach, Ernest. Ecotopia. New York: Bantam Books, 1975.
- Canan, Penelope. "Citizen Participation: Protecting the Democratic Approach to Environmental Disputes." Environmental Impact Assessment Review 9 (1989): 333-335.
- Carpenter, Susan, and W.J.K. Kennedy. Managing Public Disputes. San Francisco and Oxford: Jossey-Bass Publishers, 1991.
- Cassadra, Mary Eva. "Board Won't Commit to Binding Landfill Vote." Danville Register 22 October 1991.
- Centaur Associates, Siting of Hazardous Waste Facilities and Public Opposition, Report prepared for the Office of Solid Waste, Environmental Protection Agency. November 1979.
- Citizen's Clearinghouse for Hazardous Wastes, Inc. Land Disposal...The Dinosaur of Disposal Methods Falls Church, VA: Citizen's Clearinghouse for Hazardous Wastes, Inc. April 1986.
- Chakravarty, Subrata N. "Dean Buntrick's Green Machine." Forbes 2 August 1993, 98.
- Chehak, Gail E., and Suzan Shown Harjo. "Protection Quandary in Indian Country." Environmental Action January/February 1990, 21.
- Colby, Michael. "Environmental Management in Development: the Evolution of Environmental Paradigms." World Bank Discussion Papers 80 (1989). This document can be obtained from The World Bank, Washington, D.C.
- Conn, David. Municipal Solid Waste Management (Guidebook for Virginia Localities): One in a Set of Guidebooks Prepared for Local Government Officials and Concerned Citizens, 1990. This document can be obtained from the University Center for Environmental and Hazardous Materials Studies, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Craig, Paul. "Siting a Liquid Hazardous Waste Incinerator: Experience with California's Tanner Act." Environmental Impact Assessment Review 12, no. 4 (1992): 363-386.

- Crim, Sarah. "The NIMBY Syndrome in the 1990s: Where Do You Go After Getting to 'No?'" The Environment Reporter. A special report prepared by The Bureau of National Affairs, Inc., Washington D.C.: Government Printing Office, 1990.
- Crooks, Harold. Giants of Garbage: The Rise of the Global Waste Industry and the Politics of Pollution Control. Toronto: James Lorner and Company, Publishers, 1993.
- Crosby, Ned, Janet M. Kelly, and Paul Schaefer. "Citizen Panels: A New Approach to Citizen Participation." Public Administration Review 46 (1986): 170-178.
- Crowfoot, James E., and Julia M. Wondolleck. Environmental Disputes: Community Involvement in Conflict Resolution. Washington D.C.: Island Press, 1990.
- Davis, Charles E. "Public Involvement in Hazardous Waste Siting Decisions." Polity 19 (Winter 1986): 296-304.
- Davis, Charles E., and James, Lester. "Alternative Levels of Analysis in Hazardous Waste Regulatory Policy." Policy Studies Journal 14, no. 1 (1985): 47-50.
- Dellinger, Paul. "Localities Put Heads Together on Ways to Handle Garbage." Roanoke Times and World News 28 June 1992, sec. New River Journal.
- Dowie, Mark. "American Environmentalism: A Movement Courting Irrelevance." World Policy Journal 9, no. 1 (winter 1992): 61- 70.
- Dreifus, Claudia. "Battling Mount Trashmore." McCall's April 1991, 80.
- D'Vera, Cohn. "The Fierce Politics of Yankee Garbage in Virginia Mountains." The Washington Post, 11 April 1989, sec. 1B, 4B.
- Easterwood, Mike. Transfer Stations: A New Element in Alabama's Solid Waste Management. Auburn: Auburn University, Center for Governmental Services, April 1992.
- Eckersley, Robyn. Environmentalism and Political Theory: Toward and Ecocentric Approach. Albany, New York: State University of New York Press, 1992.

- Elliott, Michael L. P. "Improving Community Acceptance of Hazardous Waste Facilities through Alternative Systems for Mitigating and Managing Risk." Hazardous Waste 1, no. 3 (1984): 397-410.
- Engle, Claude. "Profiles: Environmental Action in Minority Communities." Environmental Action (January/February 1990): 23.
- Fagence, Michael. Citizen Participation in Planning. New York: Pergamon Press, 1977.
- Farrar, Bill. "Speakers Push Ward Elections." Martinsville Bulletin 15 July 1992, sec. A1, All, A12.
- Fiorino, Daniel J. "Regulatory Negotiation as a Policy Process." Public Administration Review 48 (1988): 764-772.
- . "Environmental Risk and Democratic Process: A Critical Review." Columbia Journal of Environmental Law 14 (1989): 501-547.
- Fisher, Robert and William Ury. Getting to Yes: Negotiating Agreement Without Giving In. New York: Viking Penguin, 1983.
- Foucault, Michel. Madness and Civilization: A History of Insanity in the Age of Reason. New York: Vintage Books, 1988, c 1965.
- Furusest, Owen J., and Mark S. Johnson. "Neighbourhood Attitudes towards a Sanitary Landfill: A North Carolina Study." Applied Geography 8 (1988): 135-145.
- Garland, Anne Witte. Women Activists: Challenging the Abuse of Power. New York: The Feminist Press at The City University of New York, 1988.
- Gibbs, Lois. "The Movement on the Move." Everyone's Backyard: The Journal of the Grassroots Movement for Environmental Justice 7, no.2 (1989) 1, 3.
- Gottlieb, Robert and Helen Ingram. "The New Environmentalists." The Progressive (1988): 14-15.
- Gregory, Robin et al. "Incentives Policies to Site Hazardous Waste Facilities." Risk Analysis 11, no. 4 (1991): 667-675.
- Hager, Mary et al. "'Dances with Garbage': Reservations as Toxic Dumping Grounds." Newsweek 29 April 1991, 36.

- Hall, Bob. Environmental Politics: Lessons From the Grassroots. Durham: Institute for Southern Studies, 1988.
- Hawley, Truax. "Minorities at Risk." Environmental Action (January/February 1990): 20.
- Heiman, Michael. "From 'Not in my Backyard!' to 'Not in Anybody's Backyard!': Grassroots Challenge to Hazardous Waste Facility Siting." APA Journal (Summer 1990): 359-362.
- . "Siting Opposition: A History of Successes." APA Journal (Summer 1990): 360-362.
- Holznagel, Bernd. "Negotiation and Mediation: The Newest Approach to Hazardous Waste Facility Siting." Boston College Environmental Affairs Law Review 13, no. 3 (1986): 329-378.
- "'Hush-Hush' at Huerfano Mountain- Government Permits Another Time Bomb." Rachel's Hazardous Waste News no. 278. Washington, D.C.: Environmental Research Foundation, 25 March 1992.
- Inhaber, Herbert. "Of LULUs, NIMBYs, and NIMTOOs." Public Interest 107 (1992): 52-64.
- . "Yard Sale: Society should Bid for the Right to Sight its Prisons and its Dumps." The Sciences 32, no. 1 (1992): 16-21.
- Jeff, Robin Lee, Marsha Love, and Karen Stulls. Empowering Ourselves: Women and Toxins Organizing. Arlington, VA: Citizens Clearinghouse for Hazardous Wastes, 1989.
- Karetz, Jack D. "Rational Arguments and Irrational Audiences: Psychology, Planning, and Public Judgement." Journal of the American Planning Association 55, no. 4 (1989): 445-456.
- Kearns, Denise. "Cooperation Helps Build a Hi-Tech Landfill." The Management of World Wastes: The Independent voice of Industry, (July 1990).
- Kegley, George. "Unity's the Key to Clean Planet, Executives Say." Roanoke Times and World News 22 March 1992: sec. A1.

- Kelley, Sandra Brown. "Who Will Move the Trash: A Fortune 500 Co. Challenges Local Firms and Governments." Roanoke Times and World News 8 March 1992, sec. 1B.
- Kharbanda, O. P., and E.A. Stallworthy. Waste Management: Towards a Sustainable Society New York: Auburn House, 1990.
- Kline, Elizabeth, Nichole Cirillo, and Jodi Sugerman. Promising Techniques: Hazardous Waste Siting Process. Medford, MA: Center for Environmental Management, Tufts University, 1993.
- Kraft, Michael E., and Bruce B. Clary. "Citizen Participation and the NIMBY Syndrome: Public Response to Radioactive Waste Disposal." The Western Political Quarterly 44, no. 2 (1991): 299-328.
- Kraft, Michael, and Ruth Kraut. "The Impact of Citizen Participation on Hazardous Waste Policy Implementation: the Case of Clermont County, Ohio." Policy Studies Journal 14, no. 1 (1985): 52-61.
- Krauss, Celene. "Grass-Root Consumer Protests and Toxic Wastes: Developing a Critical Political View." Community Development Journal 23, no. 4 (1988): 258-265.
- Langton, Stuart. Citizen Participation in America: Essays on the State of the Art. Lexington: Lexington Books, 1978.
- Lester, James, P. and Ann O. M. Bowman. The Politics of Hazardous Waste Management. Durham, North Carolina: Duke University Press, 1983.
- Lester, Stephen. Reduction of Hazardous Waste: The Only Serious Management Option. Falls Church: Citizens Clearinghouse For Hazardous Waste, 1986.
- Lester, Stephen and Barbara Sullivan. Land Disposal: The Dinosaur of Disposal Methods. Falls Church: Citizens Clearinghouse For Hazardous Waste, 1986.
- Linn, Karl. "Inner Cities Join Ecology Debate." Race Poverty and Environmental Justice: A Newsletter for Social and Environmental Justice I, no. 2 (Summer 1990): 1, 11.
- Lyons, William, Michael R. Fitzgerald, and Amy McCabe. "Public Opinion and Hazardous Waste." Forum for Applied Research and Public Policy (Fall 1987): 89-97.

- MacDonnell, Lawrence. "Natural Resources Dispute Resolution: and Overview." Natural Resources Journal 28 (1988): 5-19.
- Maslow, Abraham H. Motivation and Personality New York: Harper & Brothers, 1954.
- Marshall, Patrick G. "Not in my Backyard!" Editorial Research Reports (June 1989): 306-318.
- McCaul, Julian. "Discriminatory Air Pollution: If Poor Don't Breathe." Environment 19 (1975): 26.
- McGehee, Overton. "In Bruising Waste Management Field, Adept State Newcomer Stresses Trust." Richmond Times-Dispatch Sunday, 18 March 1990, sec. 1F, 5F.
- "McMinn Landfill Operators Sue Citizen's Group." Knoxville News-Sentinel 25 March 1993.
- McQuaid-Cook, Jennifer, and Kenneth J. Simpson. "Siting a Fully Integrated Waste Management Facility." Journal of the Air Pollution Control Association 36, no. 9 (1986): 1031-1036.
- Merchant, Carolyn. Radical Ecology: The Search for a Livable World. New York: Rutledge, 1992.
- Milbrath, L.W. Political Participation. Chicago: Rand McNally, 1965.
- Miller, Alan and Will Cuff. "The Delphi Approach to the Mediation of Environmental Disputes." Environmental Management 10, no. 3 (1986): 321-330.
- Mitchell, Robert C., and Richard T. Carson. "Property Rights, Protest, and the Siting of Hazardous Waste Facilities." American Economic Review 76 (1986): 285-290.
- Mogulof, M.B. Citizen Participation. Washington D.C.: Urban Institute, 1970.
- Molyneux, Maxine. "Mobilization Without Emancipation? Women's Interests, the State, and Revolution in Nicaragua." Feminist Studies 112 (1985): 227-254.
- Morell, David, and Christopher Magorian. Siting Hazardous Waste Facilities: Local Opposition and the Myth of Preemption. Cambridge, MA: Ballinger Publishing Company, 1982.

- Morrisey, Janice, Lachell Norris, and John Gaventa. "Citizen Participation in Solid Waste Disposal Decisions: Landfill Siting in Two Rural Communities." Dismantling the Barriers: Rural Communities, Public Participation, and the Solid Waste Policy Dilemma. Tennessee: Highlander Research and Education Center, 1993.
- Moser, Caroline. "Evaluating Community Participation in Urban Development Projects." Development Planning Unit. London: Bartlett School of Architecture and Planning, 1983.
- . Women, Human Settlements, and Housing London: Tavistock, 1987.
- . "Community Participation in Urban Projects." Progress in Planning 32, part 2 (1989a).
- Najem, Reza, G., and Donald B. Luria. "Clusters of Cancer Mortality in New Jersey Municipalities: With Special Reference to Chemical Toxic Waste Disposal Sites and Per Capita Income." International Journal of Epidemiology 14, no. 4 (1985), 528-537.
- Nakamura, Robert, Thomas Church, and Phillip Cooper. "Environmental Dispute Resolution and Hazardous Waste Cleanups: a Cautionary Tale of Policy Implementation." Journal of Policy Analysis and Management 10, no. 2 (1991) 204-221.
- Newman, Penny. Women and the Environment in the United States of America: An Issue of Health, Safety, and Social Justice. Paper presented at a conference in Bangladore, India. July 1991.
- New York State Legislative Commission on Toxic Substances and Hazardous Wastes. Hazardous Waste Facility Siting: A National Survey. Albany, New York: 1987.
- O'Gara, Geoffrey. "Should This Marriage Be Saved?" Environmental Action (March 1978): 10-13.
- Patton, Leah. "Problems in Environmental Mediation: Human, Procedural, and Substantive." Environmental Comment (November 1981): 7-10.
- . "Settling Environmental Disputes: the Experience with and Future of Environmental Mediation." Environmental Law 14 (1984): 547-554.

- Peelle, Elizabeth and Richard Ellis. "Beyond the 'Not-In-My-Backyard' Impasse." Forum for Applied Research and Public Policy 2 (Fall 1987): 68-77.
- Popper. "The Environmentalist and the LULU." Environment 27, no. 2 (1985): 37-40.
- Portney, Kent. "Allaying the NIMBY Syndrome: The Potential for Compensation in Hazardous Waste Treatment Facility Siting." Hazardous Waste 1, no. 3 (1984): 411-421.
- . "The Potential of the Theory of Compensation for Mitigating Public Opposition to Hazardous Waste Treatment Facility Siting: Some Evidence from Five Massachusetts Communities." Policy Studies Journal 14, no. 1 (1985): 81-89.
- Rabe, Barry. "Beyond the NIMBY Syndrome in Hazardous Waste Facility Siting: The Albertan Breakthrough and the Prospects for Cooperation in Canada and the United States." Governance 4, no. 2 (1991): 184-206.
- . "When Siting Works, Canada-Style." Journal of Health Politics, Policy and Law 17, no. 1 (1992): 119-142.
- Rachel's Hazardous Waste News #268. Washington, D.C.: Environmental Research Foundation, January 1992.
- Ralston, Jeannie. "Women Against Toxic Waste." McCall's (October 1989): 134.
- Rules and Regulations, "Solid Waste Disposal Facilities." Federal Register 56, no. 196 (9 October 1991): 50978-51119.
- Russel, Dick. "The Rise of the Grass-Roots Toxins Movement." The Amicus Journal (Winter 1990): 18.
- Schmeidler, Emile, and Peter M. Sandman. Getting to Maybe: Decisions on the Road to Negotiation in Hazardous Facility Siting Washington, D.C.: Environmental Education Fund, 1988.
- Shepherd, Jonathon. "Citizens Fight LaidLaw Expansion in California." Everyone's Backyard: The Journal of the Grassroots Movement for Environmental Justice 11, no. 4 (1993): 5.
- "SOCM Member Beaten After Council Meeting." The Appalachian Reader Winter 1992, 6.

- Spiegel, H.B.C. Citizen Participation in Urban Development 1. Washington D.C.: National Institute for Applied Behavioral Science, 1968.
- Springston, Rex. "'Environmental Racism?' Landfills Tend to Find Way to Mostly Black Areas." Richmond Times-Dispatch Sunday, 27 June 1993, sec. 1A, 8A.
- Stallsmith, Pamela, and Lawrence Latane III. "Landfills: Economic Cure-All or Pollution Threat?" Richmond Times-Dispatch Sunday, 17 February 1991, sec. 1A.
- Strauss, Donald and Peter Clark. "Computer-Assisted Negotiations: Bigger Problems Need Better Tools." The Environmental Professional 2 (1980): 75-87.
- Suman, Daniel. "Fighting LULUs: Effective Community Organizing." Race, Poverty, and Environment: A Newsletter for Social and Environmental Justice I, no. 2 (July 1990): 6.
- Suro, Roberto. "West Texas Desert Town Debates Taking Fertilizer from that City." New York Times January 1993, 37.
- Susskind, Lawrence. "A Sharper Focus: Defining the Common Issues in Dispute Resolution." Environmental Impact Assessment Review 6 (1986): 51-53.
- Swartzman, Daniel, Kevin Croke, and Sheri Swibel. "Reducing Aversion to Living Near Hazardous Waste Facilities Through Compensation and Risk Reduction." Journal of Environmental Management 20 (1985): 43-50.
- Tate, N. "RI to Ban Dumping From Out-Of-State." The Boston Herald 24, June 1987, 15.
- U.S. Environmental Protection Agency. Hazardous Waste Facility Siting: A Critical Problem SW-865. Washington, D.C.: Environmental Protection Agency, 1980.
- . "Part III, Environmental Protection Agency: 40 CFR 257 and 258, Solid Waste Disposal Facility Criteria; Proposed Rule," Federal Register 53, no. 168 (Tuesday, August 1988): 33318, microfiche.
- U.S. Environmental Protection Agency, introduction to The Solid Waste Dilemma: An Agenda for Action. Draft Report of the Municipal Solid Waste Task Force Office of Solid Waste. Washington D.C.: Government Printing Office, 1988.

- U.S. Environmental Protection Agency, introduction to The Solid Waste Dilemma: An Agenda for Action. Final Report of the Municipal Solid Waste Task Force Office of Solid Waste. Washington D.C.: Government Printing Office, 1989.
- Wahl, D., and R. L. Bancroft. "Solid Waste Management Today Bringing About Municipal Change." Nation's Cities 13, no. 8 (1975): 17-32.
- World Wildlife Fund and Conservation Foundation. Getting at the Source: Strategies for Reducing Municipal Solid Waste. Baltimore: WWF Publications, 1991.
- York, Chaitanya E. and Dottie Laber. "Two C's Overcome 'NIMBY.'" BioCycle 29, no. 9 (1988): 60-61.
- Zimmerman, Michael E. "Quantum Theory, Intrinsic Value, and Panentheism." Environmental Ethics 10, no. 1 (1988): 3-30.
- . Environmental Philosophy: From Animal Rights to Radical Ecology. New Jersey: Prentice Hall, 1993.

VITA

Deborah A. McCarthy

1017 A Montgomery St.
Blacksburg, VA 24060
(703) 552-5293

EDUCATION

M.U.A., Urban Affairs, August 1993

Virginia Polytechnic Institute and State University,
Blacksburg, VA

GPA: 3.5/4.0

Thesis Title: Towards a "People Centered" Approach to
Participatory Planning: Analysis of the Grass Root Level
Conflict Over Waste Facility Siting

B.S., Psychology, August 1989

Virginia Polytechnic Institute and State University,
Blacksburg, VA

GPA: Major - 3.7/4.0 Overall - 3.2/4.0

RELATED EXPERIENCE

Graduate Assistant, Environmental Studies Committee of
Virginia Tech, Blacksburg, VA, 1992 - 1993

- Conducted assessment of Virginia Tech's strengths and needs in environmental education, research, service, and extension activities
- Compiled inventories of the university's environmentally interested faculty and environmentally related courses, research, service activities, and extension activities
- Assisted in the development and implementation of workshops for faculty, staff and students of the university
- Assisted in the preparation of the final report of the Environmental Studies Committee

Community Participation, Open Space Planning Project,
Virginia Tech, Blacksburg, VA, 1992

- Designed and planned public workshops for the citizens of Montgomery County to participate in open space planning
- Facilitated and mediated group discussion for the workshops
- Compiled workshop results and prepared final document

Graduate Assistant, College of Architecture and Urban Studies, Blacksburg, VA, 1991 - 1992

- Updated and organized the financial accounts for the College's research proposals and projects
- Assisted in the preparation of a portfolio for the College's accreditation process

ADDITIONAL EXPERIENCE

Assistant Teacher for Emotionally Disturbed Adolescents, Minnick Education Center, Salem, VA, 1989 - 1990

Researcher, Applied Behavior Analysis Lab of Virginia Tech, Blacksburg, VA, Summers 1989, 1988

COMPUTER SKILLS

WordPerfect Symphony
Quattro Pro Atlas Graphics

PUBLICATIONS/ PRESENTATIONS

Ribbe, P.D., Jones, R.T., and McCarthy, D.M. "The Effects of Active vs. Passive Training Strategies on Children's Acquisition of Emergency Skills and Fear of Fire." Presented at the annual meeting of the Association for the Advancement of Behavior Therapy, 1989.

Ribbe, P.D., Jones, R.T., and McCarthy, D.M. "The Effects of Active vs. Passive Training Strategies on Children's Acquisition of Emergency Skills and Fear of Fire." Behavior Therapy, 1989.

McCarthy, D.M., Drummond, C., and Gilmore, M.R. "Intervening to Promote Safety Belt Use Among Children and Adults at Montessori School." Presented at the Virginia Academy of Science, Charlottesville, 1988.

HONORS

- Urban Affairs and Planning Excellence in Learning Acknowledgment, Fall, 1992
- Bob Stuart Award, Spring, 1993
- Tau Sigma Delta, The Architecture and Urban Studies Honors Society, 1993

