THE LIMITS OF ENVIRONMENTAL CONTROL: THE SAGA OF DOW IN THE DELTA

RICHARD WALKER

MICHAEL STORPER

FLLEN GERSH

UNIVERSITY OF CALIFORNIA, BERKELEY

"I have long dreamed of buying an island owned by no nation, and of establishing the World Headquarters of the Dow Company on the truly neutral ground of such an island, beholden to no nation or society. If we were located on such truly neutral ground we could then really operate in the United States as U.S. citizens, in Japan as Japanese citizens and in Brazil as Brazilians rather than being governed in prime by the laws of the United States. ...We could even pay any natives handsomely to move elsewhere."

--Carl A. Gerstacker, Chairman of the Dow Chemical Company. (2)

On January 20, 1977, the Dow Chemical Company abandoned its plans to build a 500 million dollar petrochemical complex in Northern California's Sacramento River delta area. Dow's withdrawal appeared to be a victory for local opponents of the project who had fought Dow's plan for over two years. But the conflict did not end there. In the controversy which raged throughout the State of California -- and even reached as far as Wall Street -- Dow became industry's symbol of everything wrong with government red tape and environmental opposition to job-creating industrial progress. This symbol helped promote and legitimate a subsequent attack on state regulation which has resulted in a significant erosion of the ability of environmentalists, labor, and state officials to control further actions of industry.

This counterattack by big capital -supported by a powerful coalition of segments of labor, various politicians, and even
some naive environmentalists -- is symptomatic of a larger mobilization against progressive legislation underway throughout the
country in the 1970s. Environmental controls are an important target of this

movement, particularly in California, which is seen as a center for the environmentalist form of protest. Because of this, and because the highly-charged atmosphere surrounding the Dow case has vitiated any serious examination of what really happened, it is important for people to hear the story. Our purpose is not just to recount events; it is threefold: first, to strip away a veil of misrepresentation which frequently leads well-meaning people to be taken in by anti-regulatory ideology which proclaims government and obstructionist zealots to be the cause of our economic problems (and capital to be a servant of the people); second, to show that regulatory victory, while possible, is pyrrhic if the whole regulatory structure is recast to reduce the possibility of future victories (and to warn, moreover, against ready acceptance of seemingly "rational" solutions to the problems of regulatory failure); and, third, to subject the liberal faith in regulatory solutions to criticism which points out the limits to law and government as vehicles for social change.

The discussion is organized as follows:

Part I. The Effort to Regulate Part II. The Dow Backlash Part III. State and Regulation

The Effort to Regulate

A. The project and political alignments

Dow's petrochemical plant was supposed to be built on the north side of the Sacramento River, near the head of San Francisco Bay, in previously undeveloped farm land in the southern portion of Solano County. Dow wanted to manufacture plastic feedstocks such as styrene and vinyl chloride from naphtha barged in through the Bay. The ultimate source of the feedstock was Alaskan oil, soon to be available. The plant was to

be linked by underwater pipeline with an existing Dow chemical facility on the river's south shore, in the industrial belt of northern Contra Costa County.

Dow planned to build its complex in 13 separate segments, with a total investment of around \$500 million. Positions for about 500 permanent workers would have been created and five times that many construction jobs. Atlantic Richfield (ARCO) was close on Dow's heels with an even larger project. Chemical Week predicted that the two facilities would together produce some 90 percent of the West Coast's plastics. National Steel, Southern Pacific, and Pacific Gas and Electric all owned parcels of land nearby and expressed interest in development. (3) Furthermore, it is reasonable to assume that secondary fabricators, polymerization plants, and the like would have entered the region in large numbers to secure locational advantage, particularly to link into the continuous flow processing which is the hallmark of the petrochemical industry. (4) Altogether, they would very likely have formed one of the largest industrial complexes on the Pacific Coast, a virtual Houston Ship Channel for Northern California.

Because of the lure of jobs, support for Dow was readily forthcoming from Bay Area Building Trades Council and the California Building Industry Association. Local business, real estate, and related interests, which typically weigh heavily in the politics of local government, had Solano County solidly lined up behind industrial development. Most local workers, whatever their position on Dow, were not an organized force. (5) Big business, through the Bay Area Council and the Commonwealth Club, was generally supportive of Dow.

Arrayed against Dow was a loose coalition which included representatives of Bay Area and national environmental groups and local citizens concerned with the impacts of industrialization of their area. The coalition, leaning strongly at the outset toward traditional preservationist concerns with protecting open space and wetlands, was gradually pushed to realize the importance of the health, labor, and other issues involved in industrial growth. A critical alliance was formed along the way with local I-5 of the Oil, Chemical, and Atomic Workers Union, whose members would ultimately have attempted to organize the plants. (6) They opposed Dow both for its notorious open shop policy and its failure to comply with environmental standards on air pollution. Thus, the Union's concerns about working with vinyl chloride and other known and suspected carcinogens covered broad community exposure as well as direct hazards to workers. (7)

State government played an ambiguous role. The Brown administration entered the controversy late in the game, reflecting the usual hands-off attitude of Jerry Brown

himself. Ultimately, however, Brown became a wholehearted advocate of the "bad business climate" line put forth by business critics and eagerly backed post-Dow initiatives to ease state regulation.

B. The regulatory process

Industrial siting is neither heavily nor systematically regulated in this country, business protestations to the contrary. The process in the State of California is not particularly unique in being a hodge-podge of permit and planning require ments which companies and governmental units must meet. Most — but not all — of these are the products of legislation passed during the heyday of the environmental movement in the late 1960s and early 1970s. They fall into four categories:

- (1) County zoning and planning regulations. Solano County's zoning authority (in this case the Board of Supervisors) had to rezone the Dow site from Agricultural to Manufacturing use. Also, in keeping with the State Planning and Zoning Law of 1965, all counties are required to have a General Plan to guide their zoning decisions, and this must include certain functional "elements" dealing with topics such as housing and transportation.
- (2) The Williamson Act contract. Under the California Land Conservation Act of 1967 (as amended), popularly known as the Williamson Act, owners of rural land can lower their tax assessments by contracting with the local government for ten years to keep the land in agricultural use (Mariole, ms). Dow had such a contract on its property. Breaking this agreement requires the permission of the County Board of Supervisors, following a two-part test: the cancellation must be in the public interest and must not be for a more profitable use of the land.
- (3) Environmental Impact Assessment.
 Designated "lead agencies" were entrusted with writing (or having written) an appropriate Environmental Impact Statement (EIS) and Environmental Impact Report (EIR) on the Dow project, in keeping with the National Environmental Policy Act of 1969 (NEPA) and California's Environmental Quality Act (CEQN) of 1970. The two lead agencies were the Army Corps of Engineers and Solano County Board of Supervisors, respectively.
- (4) Various permits required by state and federal regulatory agencies concerning resource use and pollution discharge. Figuring most prominently in the Dow case were the air permits sought from the Bay Area Air Pollution Control District (BAAPCD), (8) operating under authority of the Clean Air Act Amendments of 1970. Other important permits involved the State Water Resources Control Board, the State Lands Commission, and the Department of Water Resources. In order to facilitate the hearing process by which permits were

to be issued, the various state agencies agreed, belatedly and under pressure, to hold joint hearings in December 1976 on Dow's several permit applications.

C. The irresponsibility of local government

The Board of Supervisors and government agencies of Solano County had three responsibilities: (1) to draw up a General Plan and zone land in accordance with it; (2) to make and break Williamson Act contracts; and (3) to initiate and certify the EIR under CEQA. They clearly abdicated responsibility in all three areas out of eagerness to have Dow locate in their county. Following nominal completion of these tasks in Fall 1975, opponents of the project brought a class action suit against the Board to protest its failure to meet even the most perfunctory legal obligations before it. (9)

The rezoning of Dow's property was carried out without regard for pious declarations in the County General Plan as to the virtues of agricultural preservation and orderly growth. In fact, the county plan-ning office had not even completed all of the mandatory elements of the plan and its director was consistently unsure about which sections were or were not finished. response to criticism of the General Plan and well after certifying the Dow EIR, the county completed arrangements for a further land use study of the targeted area, for which corporate contributions were accepted. As expected, this document offered a restricted vision of the possibilities -- and did not consider the alternative of no industrial development at all.

Solano's action comes as no surprise, of course, to those familiar with local government land use control practices. The reality is that localities compete for growth and that zoning had never had any relation to the grand ideals of comprehensive planning (Downie, 1974; Babcock, 1966; Clawson, 1971; Walker, 1950). The county's leadership had neither the wisdom nor the reason to look beyond its narrow perception of the gains to be had from industrial development and to consider the implications of industrial pollution and rapid urbanization for the people of Solano and neighboring counties in the Delta region. The naiveté of local officials about the issues was appalling. For example, when the county planning director was questioned on whether an influx of workers seeking jobs might not worsen local unemployment, he was completely confused: "What I am saying, when you create jobs, people follow, and they will exceed the number of jobs that they provide, and your unemployment might remain about the same." (10) Equally amusing was the reaction at a local hearing of the chairman of the Solano Board of Supervisors, a strong advocate of Dow, to unfavorable testimony being given on the health dangers of vinyl chloride and other petrochemicals. Evidently under

impression that VC was a pesticide, he asked the witness irascibly: "Young lady, have you ever seen a field destroyed by nematodes? Well, it's a horrible thing to behold." (11) This, after the Board had already approved Dow's rezoning.

The Williamson Act contract cancellation was also quite perfunctory, despite the fact that Dow certainly had a more profit-able use in mind. (12) Naturally, industrial development was seen as serving "the public interest" in the minds of the county Supervisors. The frailty of this sort of preservation mechanism is obvious. Besides, the real objective of the Williamson Act was never to protect farmland from profitable development; it was passed primarily at the urging of large farmers and cattlemen looking for a handy tax reduction (Mariolle, ms). Despite illusions to the contrary among environmentalists and planners, it has never been very successful in halting rural-urban land conversion.

The Dow EIR was prepared and reviewed under rather suspect circumstances involving clear conflict of interest: Solano County allowed Dow directly to hire a private consultant to write up the necessary document. Furthermore, during the County review process, environmentalists were the only ones to raise substantive questions about its contents. Subsequently, the Army Corps of Engineers, the federal agency empowered to write and/or review an EIS on the project, simply took over the State EIR intact, adding only a short and insubstantial appendix of its own. This sort of uncritical fulfillment of the legislative mandate to prepare Environmental Impact studies is quite common, however (cf. Kreith, 1973; Carter, 1976; L. A. Times, 1977); the effectiveness of these documents has principally been through the ability of environmentalists to use them as legal points of leverage to slow down projects and raise questions in public.

D. Inadequacy of the EIR

The Environmental Impact Report bears an enormous burden as an information document and source of analysis for evaluating major development projects such as Dow. The lead agencies also bear the great responsibility of critically reviewing prepared reports. Neither can ordinarily sustain its burden. Probably the EIR process should not and was not intended to provide a full and fair account of all physical and social consequences of individual projects, but the glaring absence of any substantive planning and debate over the major issues of industrial and urban development forces people to turn to the EIR/EIS process out of desperation. In the Dow case, as might be expected from the cozy authorship relation, only those firmly convinced of the virtues of petrochemical development were satisfied with the document:

The evaluation of physical impacts alone left much to be desired. The EIR treated air quality effects -- the ultimate Achilles Heel of Dow -- as inconsequential, although there was considerable evidence to the contrary. For example, official hydrocarbon emission figures from Texas, where Dow operates a similar petrochemical complex, were 100 times higher than those used in the EIR. The report virtually ignored the special problem of regulating toxic emissions, the deadly trademark of this industry. Water diversions, pollution load, and effects of tanker spills were also treated lightly, despite the presence nearby of the Suisun marsh -- the single most important area for fish and wildlife conservation in the State, according to the State Fish and Game Department -- and the long history of political struggle to protect water quality in the Delta and San Francisco Bay in the face of huge withdrawals for agriculture from the Sacramento system.

A major problem in assessing environmental impacts is that of scope. First of all, the EIR is supposed to deal with every project in isolation. Yet it was clearly the case that Dow's plant was only the first of thirteen, that its facility was only the first of several related factories planned for Solano County's shoreline, and that this sort of industrial development would inevitably generate complementary urbanization of the region -- with all the vast and intricate impacts of that process. Second, the impacts were to be judged by a local government, with its narrow concerns, although they would ultimately affect a much larger region.

The issue of scope of the EIR only begins to suggest the unmanageable character of taking social and economic impacts as well as the physical ones into consideration. But even an adequate physical assessment depends on some judgement of economic processes, such as urban growth and the behavior of industry with regard to the use of natural resources and labor. As might be expected, the only economic matters in the Dow EIR were those characteristic of local growth-promotion ideology, e.g., "tax revenues will increase." Yes, but at what cost? Some of the questions which might have been addressed but were not are the following: (13) What are the dynamics of urban-industrial growth set in motion by a major petrochemical facility? What are the costrevenue impacts of such growth on local governments in the region? What are the ultimate employment impacts of such growth, given associated in-migration? What are the social implications of capital-intensive industrialization? What are the health impacts of petrochemicals on workers and community? What are the problems of longterm economic stability and democratic control of local government and social affairs? What sort of alternatives are there for undeveloped counties such as Solano looking to improve their lot -- must they turn to big industry?(14)

It is clear enough that Solano County had no special interest in addressing these kinds of questions about Dow, given its need to compete for growth from a position of weakness and its political domination by a local pro-growth alliance, large multinational corporations, and statewide building trades organizations. But it is even questionable whether under the existing rule of law EIRs and EISs can be made to encom-pass all that should be known and discussed before industrialization takes place. In response to suits initiated by environmentalists, the scope of CEQA was expanded in Friends of Mammoth(15) to take account of more than the immediate project. But such expansion eventually runs into longstanding "due process" principles which hold that individual companies cannot be liable for the "indirect" effects of their actions. As for the inclusion of social and economic considerations in a systematic way, the intent of CEQA and NEPA remains a matter of controversy -- with little headway having been made towards greater inclusiveness. Finally, there is the whole presumption of "scientific neutrality" which pervades the EIR/EIS system and makes it well nigh impossible to meet the law and still take on subjects which are intensely political by their nature -- requiring of open conflict rather than technical "solutions" for their best and most democratic resolution (cf. Walker, 1973; Hanke and Walker, 1974).

E. State regulatory agencies and the joint hearings

The number of different state agencies requiring permits of Dow most clearly illustrates both the problems and the opportunities created by fragmentation of government. (16) Dow would later protest vehemently against the "red tape" it allegedly encountered in the permit process, but one should not presume from this that fragmentation necessarily worked to the company's disadvantage. In the first place, Dow's well-publicized claim that it was hamstrung by having to secure 65 permits is grossly misleading, since 34 of these were air permits made necessary by Dow's insistence on applying for each of Dow's 13 units separately. From a contrary point of view, one could object just as mightily against the weakness of fragmented control: lack of systematic investigation, application of focus on only one narrow aspect of the problem at a time, varying standards, and loss of many significant factors in the fragmented review process as a whole. These weaknesses worked to the advantage of Dow, as company officials well understood. In fact, when Dow was asked by state officials in 1975 whether it would

like consolidated state permit hearings, the company refused.

Eventually, the state agencies moved to hold joint hearings in response to the fragmentation problem, fully two years after Dow had initiated its application and a year after local government had made its substantive decision and the EIR and EIS had been prepared. Moreover, such hearings were probably prompted less by considerations of thoroughness than by political pressures building over the Dow issue, which no one agency wanted to answer to alone and which the Brown administration wanted to ease by expediting Dow's case.

Those hearings proved a great revelation. Dow officials had not done their homework, accustomed as they were to bowling over local and state government officials in less critical and less public circumstances. They failed to convince by dint of a glaring lack of useful information about their plans and gross failures of logical consistency. Local officials were shown to know or care little about the broader questions being broached by the hearing officers and the opposition. And opponents had had time to prepare a solid critique of Dow across a broad front. If the latter sounds selfserving, it is in fact meant to indicate the rare circumstances of the event: an organized and prepared opposition, a feeling of genuine concern and search for answers to their questions among the hearing officers, and a large corporation caught with its pants down. The issue could easily have gone the other way without this successful confrontation.

We must warn, moreover, that the initial fragmentation of the permit process also helped Dow's opponents. It gave them time to coalesce into an organized force, provided them opportunity to learn from experience and publicize their criticisms, and allowed them greater access to the regulatory process through lawsuits and hearings. Were the agencies to have moved faster and centralized hearings to have occurred early on, before the opposition had formed and the issue become politicized, the chance of embarrassing Dow would have been much less. Yet this sort of "streamlining" of the regulatory process is what is now being pushed in California in response to Dow's comeuppance.

F. Dow's behavior and pullout

As might be expected, Dow tried to take advantage of the weaknesses of the regulatory process to further its ends, often showing a rather low regard for veracity. While we cannot be sure of all that went on behind the scenes, it appears that as concerns local government, all Dow had to do was be cooperative -- to show itself as benefactor of Solano

County -- and let the pro-development predilections of county officials do the rest. Dow willingly paid for the EIR, a land use study, and compensation for cancellation of the Williamson Act. The only information anyone at this level seemed interested in unveiling was how many jobs and how much tax revenue the project would generate, and here Dow was more than willing to speak expansively of growth to come. The unpleasant consequences of petrochemical processing and industrial development were little discussed, and the dark threat of locating elsewhere, were local government to be unreceptive, always hovered in the background.

This cavalier approach to the future beyond permit approval continued in Dow's dealings with state agencies. The company was always very vague about the specifics of its investment and production plans, using the trump card of "trade secret" whenever precise information was requested. Dow's attitude was: first give us a permit, then we'll divulge our plans. Promises of performance were supposed to be taken on faith, not independently evaluated in light of actual blueprints. That such faith was very likely misguided, however, is illustrated by the disparity between Dow's air pollution emission figures and Texas Air Board measurements from a similar petrochemical complex, as noted previously. For obvious reasons, moreover, Dow chose to present its facility before the BAAPCD as 13 individual plants, each of which would have a limited impact on air quality -- quite the opposite of the glowing picture of employment, tax revenues, and so forth from the 13 units collectively which Dow was promoting before local government and in the press. Because only Dow had access to its investment plans, as is its legal right, the company could have its feedstock and eat it too.

Government fragmentation made such manipulation easier, as Dow glibly told one story to this agency and another story to that one. They tried to use dual standards between agencies in a similar way, claiming that less stringent OSHA air quality standards be used within the plant's gates, rather than BAAPCD air standards developed under the Clean Air

When at last Dow consented to joint hearings it was out of fear of defeat. At the hearings, Dow's refusal to divulge information became a liability and contradictory stories became untenable. Their bluff had been called, and it became apparent Dow had no concrete ideas about how to reduce emissions of hydrocarbons and toxic substances or how to deal with other problems associated with its plant.

Not only did Dow look bad publicly at the joint hearings, it failed to convince the BAAPCD that it could meet emission standards, and the District subsequently refused to grant an air permit. As a final nail in Dow's coffin, a crucial Attorney General's opinion came down on the day of the hearing indicating that any permits issued on the basis of the inadequate EIR might be invalid. Dow appealed the BAAPCD decision but had clearly lost the game -- this time around.

II. The Dow Backlash

A. Counter attack and reform

If Dow lost the battle, business in general appears to have won the war. Dow timed its pullout for the maximum political value, withdrawing its permit applications before final rejection.(17) This was accompanied by a campaign of bitter protest against "unnecessary government red tape" which allegedly made locating in California an impossibly long and obstructed process. This was the opportunity that the conservative forces of business, event- and sloganconscious news media, and pro-growth unions had been waiting for after chafing under regulations backed by the environmental and no-growth movements.(18) They unleashed a barrage of attacks on environmentalists and government regulations, making "Dow" into a symbol of everything bad about government control of investment and indicative of the supposedly "bad business climate" of the State of California. (19)

It is quite beside the point that such "bad business climate" as exists is due primarily to an international economic crisis or that California has continued to have, by several accounts, the largest and strongest economy of any state in the country. (20) The arrow fired by Dow struck home. Propelled by a capitalist class lashing out against all forms of social control in its desperate search for a path to revival of the economy, and guided by a dominant ideo-logy (accepted by liberals and conservatives alike) which holds that the state bears primary responsibility for success and failure of capital accumulation, the campaign reached the heart of the Brown administration. Given Jerry Brown's need to run for re-election and well-known aspirations for the Presidency, he was already beginning a move to the right in order to capture the "mood of the country" and to avoid alienating business by his image as liberal and oddball. He has been drifting this way for some time, at least since the smashing 1976 defeat of the Farmworkers' Initiative that he supported. Brown's Proposition 13 turnabout is the most obvious example of his shifting political stance. (21) One can imagine, then, the impact of Brown's having been almost personally blamed by business for the defeat of Dow, as well as the impression made on him by special meetings arranged with representatives of the leading financial houses of Wall Street to discuss the climate for investment in California. The Governor and the legislature were soon tripping over each other in the rush to placate conservative opinion and modify regulations. (22)

Most politicians in California have bought the ideology of California's bad business climate and the need to "streamline" regulations. Their concrete actions since January 1977 include the following:

- * Assembly Bill 884. This act narrows the scope of review of permit-issuing agencies and specifies time limits on the permit process for new industry. If agencies are late in acting, applications are automatically approved this, despite the evidence from the Dow case that the company was as much to blame for delay as the state by its reluctance to cooperate. (23)
- * Office of Permit Assistance in the State Office of Planning and Research (OPR). Governor Brown moved quickly to create a state "ombudsperson" or clearinghouse, to help guide industry through the regulatory process.
- * Facilitating an LNG terminal. The administration approved a special "one-stop" approval process for a huge LNG (Liquified Natural Gas) unloading facility in Southern California, over intense environmental protest. Brown signed Senate Bill 1081 exempting this project from the routine siting procedures of the State Energy Commission and California Coastal Commission, and vesting all authority in the Public Utilities Commission, the agency favored by the terminal's developers. All local regulations were also superceded.
- * Planning for industrial and commercial siting. Through the State Office of Planning and Research (OPR), the Brown administration hopes to give industry advance indication of where they can and cannot locate. Under this scheme regional Council of Government (COG) plans would provide advance consideration of whether industry was appropriate or not; if a project were in compliance with the plan, it would be deemed approved for permits. This misguided effort is stillborn at present.
- * Air tradeoffs or "emissions off-sets". The State of California, beginning with BAAPCD and then the State Air Resources Board, initiated the national trend toward an "air tradeoffs" policy, which was incorporated into the Clear Air Act Amendments of 1977. Under this scheme new industry can locate in polluted air basins by buying up and eliminating the emission of existing industry. It is a scheme fraught with loopholes, however. (24)
- * Limiting access of opposition groups. The Warren-Alquist Act, supported by many naive environmentalists, requires professional intervention early in the power plant siting process. (25) This undermines popular mobilization, which is always slow to develop. An attempt to require opponents to post bond in order to sue to enjoin construction projects was nearly signed by the

Governor, until environmental groups lobbied intensely for a veto.

- * Appointments. Brown has increasingly courted the powerful organized voices of "moderation" in environmental control, such as the Council on Environmental and Economic Balance (CEEB) and Committee on Labor and Business (COLAB), through appointments to key environmental regulatory boards, such as the Coastal Commission and Water Quality Control Board.
- * Streamlining local regulation. At the urging of OPR and its former director, some city governments, particularly San Jose, are also adopting procedures for "one-stop" permit approval for developers.

B. The implications of reform

The above "reforms" are of two kinds: substantive and procedural. It is important not to accept the legalistic separation of the two aspects of the regulatory process, however, since in practice it does not consist of a set of adopted rules which are then perfunctorily applied. Procedural rules affect access to decisions, which in the struggle over implementation of laws has a decisive role in determining real outcomes. Efforts to "streamline" or effect "one-stop shopping," as the current jargon has it, must be seen not in terms of government efficiency but as ways of limiting public access to government decisions. Reforms which try to eliminate controversy from the permit phase are ways of suppressing political struggle in the interests of facilitating industrial siting and hence in the interests of capi-

Such "reform" movements are not new. They have occurred throughout American history every time social and economic crisis has significantly threatened capital accumulation. A process of mobilization of class and state to promote the system-conscious interests of capital-ingeneral eventually gets underway, generating an appropriate ideology as to the need for change and promoting specific reform programs. Then, typically, a dramatic event triggers a chain of political maneuvers in which reform ideology and programs are used to catalyze change. If the "rationalization" of government and society is successful, the crisis may be transcended and capital accumulation can proceed accordingly (See Walker, 1977; Harvey, 1976).

In this cas: Dow provided the main event, but a movement for reform of industrial siting procedures, land use controls, and government regulation in general has been in the wings since about 1970. The story of that movement has not yet been adequately told nor its dangers clearly recognized. (26) We shall not venture to

do so here. But it is important to point out that even the seemingly "rational" solutions of liberal reform (as opposed to clearcut solutions of conservative reaction) such as "planning," "regionalism," "streamlining," are by and large false gods for protest groups. Frustrated with the way things are and their inability to bring about change through the avenues of democratic participation in government -- who, for example, has not despaired over the state of local government in this country? -- progressive people often hope for better results through government reform. But when such reforms are promoted by and tailored to the interests of capital, chances are good that opposition groups stand to lose -for capital would not have been so moved had it not regarded the existing state of affairs as a barrier to its own development. Moreover, the goal of progressive forces should not be to construct a more perfect government to preside over an irrational society, but to create a structure which can be used successfully for political struggle -- from which source social progress ultimately comes.

We have too often seen environmentalists taken in by misquided hopes for rational planning, regulatory commissions, and the force of laws on the books, while neglecting the more important, if mundame, business of the organization and political mobilization of the mass of working people. This, of course, reflects environmentalists' predominately middle class base (Marcuse, 1974) and their inability to break with most of the main ideological strains of American capitalism in the 20th century: faith in interest group politics instead of class conflict, in technocratic rather than democratic decision-making, in the power of law and government over civil society, in the middle class as the main progressive force in society, and in individualistic solutions. But environmentalists are not simply all class-bound, unprogressive, or irrelevant; quite the contrary. They -- we -- have frequently enunciated important social issues, challenged the rule of capital, and formed alliances across narrow boundaries. It is precisely because of this progressive potential that it is so important to be educated about the regulatory process, the process of reform and change under capitalism, and the limits of environmental regulation under that system.

It is to the last topic that we now turn.

III. State and Regulation(27)

Although the regulatory system that is so popular in the United States as a means of controlling the worst excesses of capital has undoubtedly been an instrument of progress, it has inherent limits. Regulation of the kind initiated by the environmental movement in the field of pollution control can only go so far because it changes neither the basic structure of government,

the alignment of political power in society, the dominant ideology, nor, most important, the basic structure of capitalist production relations on which American society is based. Gains in the social control of capital are therefore subject to erosion if they are not compatible with the continued successful accumulation of capital and reproduction of capitalist social relations.

Since this is not the place for an abstract discussion of the role of the state in capitalist society, we will confine ourselves to a few summary points. The weaknesses of government regulation are only partly problems of substance of the law and mainly ones of procedure -or, to put it more accurately, the weaknesses are revealed in the way the process of implementing legal initiatives unfolds. (28) Given that regulation is a process, the chief shortcoming of this form of social control of capital lies in the limits to what any one initiative can change or control. While one law or institution is altered, the rest of the political and economic system rolls on untouched. That structure is not, moreover, a mere sum of its constitutive parts -people, institutions, and laws -- but a whole system in motion, which shapes the parts even as the parts shape it (Harvey, 1973, 1978a). That is, the political economy of capitalism in America has powers of self-reproduction as a coherent social system, or if you will, an internal system of checks and balances against untoward change. This does not mean that change is not possible; indeed, such a system is in constant historical motion, forming and reforming itself. But change which threatens to alter the basic rules of the game -- which challenges class power, interferes with the accumulation of capital, and so forth -- comes up against powerful barriers. These bariers are not obvious, however, and tend to be overlooked in the flush of legislative victory and the thick of specific political conflicts, in part precisely because they do not preclude all political success. But they do tend to structure the nature of political issues and to assert themselves over the long run and in response to increasing pressure. In fact, we discover the limits to change within capitalism in practice by pushing for change. (29)

There are six principal barriers to successful regulation, all of which played a role in the Dow case:

immediate decisions over production and investment; these things remain the province of capital. While this may seem obvious enough, even "natural," it is good to remind ourselves that this situation is not universal across all societies, and that it poses the general problem of regulation as we know it: capital proposes and government disposes. It is government's place to set certain limits on the excesses of capital, not to deny capital the ability to invest, to produce

what it wants and how it chooses, or the right to a "fair" profit (30) -- much less to supplant capital as captain of industry.(31)

In the case before us, Dow took the initiative and government had to decide either yes or no -- not a very satisfactory choice in most instances. Dow could use this power as a club to threaten local and state government with locating elsewhere. The company always held the cards as regards its plans for investment, plant blueprints, substances to be produced, etc., which it would reveal or not reveal as it chose. one outside the company had any right to know the substance of Dow's plans, regardless of how important it was to judge the effects of building and operating the proposed petrochemical plant. Dow also helped turn defeat to its best advantage by choosing the correct moment to withdraw. Finally, had Dow been granted permits to build, actual control of the plant and its emissions would lie with the company and require constant vigilance by the regulators to secure compliance with the conditions of the permit. (32)

(2) The substance of regulatory laws is typically partial and inadequate. The actual processes of induatrial siting, urban growth, and production are complex and unified phenomena, which merit ongoing consideration and political conflict between those of opposing views so that we, as a people, may make the wisest decision possible about how to proceed. But the general condition that the state remain outside the production process, and limit itself to providing specific guidelines on the behavior of capital, makes this impossible. Regulation must take the form of particular interventions around definite topics, such as checking water pollution or assessing environmental impacts. Quite apart from the problem of weak individual laws, owing to compromise and error at the legislative end of things, those who try to use regulations to oppose the plans of corporations find the compass of their criticism and of the tools at hand restricted to a few topics.

In the Dow case, vital issues such as the impact of toxic substances, the course of subsequent urbanization and industrial growth, and the social need for plastics were quite outside the official regulatory process. Industrial location itself is not even something which is regulated; only certain aspects of location and production are subject to permits, and these are confined chiefly to physical impacts. Where environmental impacts or planning as a whole are involved, the laws have shied away from matters of substance to matters of procedure: writing an assessment or having a general plan on hand. But procedural requirements are not sufficient by themselves -even when they are not circumvented in practice, as they were in Dow's case.

(3) The form of the state and its rules of operation are generally consistent with

the reproduction of capital.(33) The Dow case points our some of the organizational and procedural obstructions to controlling capital. For example, competition among local governments to attract industry for its jobs, tax revenues, and other spinoffs, puts local officials in a suppliant position, regardless of their personal politics. Corporations use their mobility as a source of leverage on localities to secure favorable treatment. (34) This leveraging was ultimately used on the State of California as a whole.(35) Agency fragmentation within and between levels of government was also used to advantage by Dow. (36) The regulatory left hand frequently knew not what the right hand did -- a weakness which compounds the substantial limitations to regulatory laws mentioned previously. Another important example of deep-seated barriers to change is the judicial rule of due process which prevents, in cases such as this, regulators from assigning the burden of the ultimate effects of, say, urban growth, on a specific act such as Dow's decision to build -- even though their connection is economically certain. This, too, fragments regulation, keeping the state and the people from a full con-sideration of the implications of capitalist development.

(4) The direct exercise of class power in the form of political influence continues regardless of what laws have been passed. The state is more than an organization or a set of rules; it is staffed by people who can be influenced by persuasion, bribery, appeals to ambition, fear, and so forth. Resistance to such blandishments is never perfect, and declines as one approaches the local level. Successful regulation requires some sort of sustained political commitment throughout the ranks of government and can be subverted by a failure of commitment at any of several locations: state agencies, elected officials, local officials, the judiciary, etc. Laws can be bent through interpretation and practice. (36)

We should add, of course, that quite apart from direct political pressure, influence can be exercised through a variety of methods, from media manipulation to outright lying. Dow had enormous power by virtue of its money, commanding economic presence, and knowledge of its real intentions, and it made little pretense about using the powers at its disposal to secure a favorable result.

sources as a class, capitalists can fall back on ideology and the political alignments of other classes as resources to the lermine regulation. Neither laws nor fall commitments of government officials nor the structure of the state are permanent, and they can be altered by

political mobilization. This is how environmental regulations are passed in the first place. But those victories will be pyrrhic if they are not founded on a solid foundation of political, social and ideological realignment. The environmental movement never achieved such a sweeping victory; it struck quickly and from the top. When its laws began to cause certain economic dislocations or simply appeared to cause the problems which have plagued the American economy in the 1970s, the reaction has been marked. This is nowhere more apparent than in the Dow backlash.

Mobilizing the forces of reaction has been made easier by a number of things. Economically, a crisis has struck which people do not comprehend and which they are not prepared to attribute to capital, given the dominant ideology (much nurtured in the 20th century) that capitalist growth can and should be crisis-free.(37) Ideologically, this tenet of the faith dovetails nicely with the prevailing bourgeois view of government, which, in its conservative form, looks askance at all government interference in the private sector and, in its liberal Keynesian form, believes that government can manage the economy properly and if something goes wrong, it must be the government's fault. Furthermore, environmental protection has its particular ideological millstone in the shape of the belief that growth (or jobs) and environmental quality are diametrically opposed, demanding a kind of Hobson's choice on the part of society in order to climb out of a recession.

Such ideas are by no means the sole province of anti-environmental forces, and are nurtured within the movement itself by naive forms of economic analysis and by middle-class obliviousness to problems of production and the working class (cf. Marcuse, 1973). These characteristics have led, politically, to a failure by the environmental movement to ally itself with labor and, as a consequence, to the exclusion of workers and working-class participation in most of the regulatory process in environmental matters. For their part, many workers weigh the actual and apparent negative results of environmental controls on their immediate source of livelihood, see themselves as having no part in the decisions and no stake in the process, and regard the environmental movement as a middle-class preoccupation; hence they have been susceptible to strident antienvironmentalist propaganda issuing forth from business, as the Dow fight and its aftermath illustrate.

At the same time, Dow also showed the potential power of a labor-environmentalist alliance and the possibility of learning and compromise on both sides. We do not believe that the real obstructions to collaboration are by any means insurmountable. Indeed, the symbol which Dow became to busi-

ness was much more than a reference to government regulation and red-tape; business saw red because of its fear of a broadbased alliance of the forces arrayed against it.

(6) Finally, the state and regulatory laws do not control the movements of capitalin-general which trigger regulatory battles and political backlash. Dow's plans were not an isolated decision by that company to build, but part of larger movements: part of the life cycle of the petrochemical industry; part of a readjustment in energybased industries owing to the changing energy situation (especially Alaskan oil coming on line); and part of a massive wave of industrial decentralization to metropolitan fringes and to the Sunbelt. Similarly, the backlash to Dow's defeat was not an isolated or unique event, any more than, for instance, Proposition 13. Such events are just triggers to explosions waiting to happen in combustible political environments. Conditions were ripe for an anti-environmental reaction because of the economic downturn of the business cycle in the 1970s. Construction workers are out of jobs, businesses are experiencing poor sales and profits, homeowners are finding it difficult to pay taxes. Pruning regulations and government seem like ready solutions to these problems, and to some extent this __ is true. But the real culprit, the instability and inequality of the capitalist form of economic growth, is never addressed.

The struggle against Dow offers a measure of hope in that it shows that sometime-antagonists, labor and environ-mentalists, can work together and that corporations can be caught off guard, owing to their own arrogance and complacence. Small victories cannot be scoffed at as irrelevant. But the overall picture we have drawn of post-Dow backlash and of the self-regulating aspects of capitalism are meant to be sobering -- as the experience was to us at the time. The point is not to generate despair, however. It is to help mobilize protest against anti-regulatory "reforms" and to puncture the prevailing faith among environmentalists that government regulation is a solution to social problems. That faith must be restored to its proper object: people, democratic and collective action, and a constant struggle for human betterment.

FOOTNOTES

- 1. For a more detailed discussion of the matters covered in this paper, see Widess and Storper, 1977 and ms.
- Quoted in Barnet and Muller, 1975,
 p. 16.

- 3. PG & E has subsequently applied for a permit to build two 800-megawatt coal-fired generating plants at their site near Collins-ville, as one of four sites proposed by the company to the state. As of December 1, 1978, this project is still in the initial stages of the regulatory process.
- 4. On petrochemical processing, see Commoner, 1976.
- 5. It was sad, however, to see black workers and community leaders brought in from Richmond, a distant and declining industrial center, to speak in favor of Dow by virtue of the need for new jobs in the East Bay. Given the skill levels required and the inevitable importation of petrochemical workers from outside the retion, it is hard to imagine many residents of Richmond who would have benefitted from the plant.
- 6. Nationally, OCAW is well known for its leadership in the labor movement over health and safety issues.
- 7. Contra Costa County is identified on the National Cancer Institute's Atlas of Cancer Mortality in the U.S. as a high-cancer-incidence area.
- 8. Now the Bay Area Air Quality Management District.
- The suit was filed by Friends of the Earth, Sierra Club, and People for Open Space.
- 10. The planning director also proposed a solution to the impact of industrial development on the public: a green-belt a few hundred yards wide. This was the level at which local officials seemed to understand the problems of industrialization's impact on the region and of controlling toxic substances.
- 11. He was apparently confusing VC with DBCP, a pesticide manufactured at another Dow plant in California, which achieved notoriety recently for rendering workers sterile.
- 12. Dow was more than happy to pay a cancellation penalty and even offered to set up a fund for research on agricultural land preservation at the University of California, Davis.
- 13. It should be said that these "global" questions are quite the heart of the matter of industrial siting decisions, and that a good deal of attention was given to them in the course of the Dow hearings. Although it is altogether beyond the scope of this paper to pursue them in depth, it should be evident that the opposition to Dow was in large part motivated by the view that this development was by no means a blessing to the region on human and economic grounds -- not some abstract fear for "environmental quality".
- 14. The issue here is, again, not one of growth versus non-growth, but of the kind

- of development and its meaning for the welfare of working people and the local community, and susceptibility to public control as opposed to its meaning for the profit ledger of capital.
- 15. Friends of Mammoth v. Mono County Board of Supervisors. 8 Cal. 3d247, 104 Cal. Rptr. 761 (1972).
- 16. Fragmentation at all levels: among local governments, among state agencies, and between levels of government.
- 17. See San Francisco Chronicle, January 26, 1977, p. 2. This timing also allowed Dow to reapply at some later date without having the black mark on its record of a final permit refusal. It appeared as if the decision not to build was a voluntary one. After some preliminary skirmishwith regulatory agencies, ARCO also pulled out a few weeks after Dow.
- 18. Our criticism of the backlash does not mean that we are in agreement with all of the goals or consequences of these movements, however.
- 19. This description appeared widely in the press, but is best characterized in a Forbes article entitled "California: The Golden State is Tarnished" (Jan. 15, 1977).
- 20. The bad business climate myth has subsequently come in for criticism from many sources, including Wells Fargo Bank's economists: See "California to 1990: State Economic Forecast," San Francisco, March 1978.
- 21. Such a rightward shift by a liberal politician is by no means inevitable or a matter of realpolitik. As Alan Wolfe has argued (In These Times, Nov. 22-28, p. 4), this tactic on the part of majority party leaders actually backfires by unnecessarily legitimizing the right and incapacitating the left.
- 22. On the rush to attract industry in other states, at cost to the public welfare and purse, see, e.g., Chernow, 1978, and Harrison & Kanter, 1978.
- 23. In fact, Dow had not even applied for the majority of its 65 required permits at the time it withdrew.
- 24. For further discussion of air tradeoffs policy, its context and implications, see Walker and Storper, forthcoming. Air quality controls have generally been under attack in the state recently.
- 25. Power plant siting had already been streamlined by the creation of a State Energy Commission, which preempts local government land use controls.

- 26. The only good critical views of land use and siting reforms we know of are Popper, 1974 and Heyman, 1973. A good unpublished critique is Heyman, ms. The number of publications urging land use control/environmental permit reform is too large to cite here, but see, e.g., Bosselman et al. 1976; ABA, 1973; Healy, 1976; Reilly, 1973; Leonard et al., 1977.
- 27. Some of the arguments in this section are made at greater length in Walker and Storper, forthcoming. See also Mumy, 1974 and in this issue; Walker and Large, 1975.
- 28. This emphasis on process is similar to that of several critics of the ideology of regulation within the mainstream of political science, e.g., Theodore Lowi, 1969; Bachrach and Baratz, 1970; and Marver Bernstein, (1955). Where we differ is in pushing the origin of the problem of the failure of law beyond such purely political phenomena as poor legislative drafting or "capture" of regulatory boards by interest groups.
- 29. Our approach here is somewhat different than that of many Marxist theorists of the capitalist state. It is one thing to assert that the capitalist state "must" perform certain functions for the reproduction of capitalism; it is quite another to say explicitly what it is in the organization of the state and in its relations to the rest of society that keep it playing its reproductive function. Since the state is a site and a product of class struggle, and not reducible to an instrument of the capitalist class, it is constantly subject to pressures and limits set by the market, class action, ideology, etc.

We also, therefore, prefer to think of the "reform" process by which new state institutions, laws, etc., come into being as a process of social experimentation, in which the participants discover what is an what is not possible in the way of change, given the structural characteristics and requirements of capitalist production. (Cf. Walker and Storper, forthcoming.)

- 30. This is clearest in the field of public utility regulation because that is the most complete form of government regulation.
- 31. Besides having control over the crucial decisions in investment and production, Dow has control over the disposal of the profits of its production, which can be used to advantage in purchasing EIRs, land use studies and occasional politicians.
- 32. As Davies and Davies (1975, p. 213) put it: "No law of any kind can be enforced successfully if there is not a high degree of voluntary compliance."
- 33. This is not an absolute, functionalist

statement. The form of the state can and does come into conflict with the changing needs of capital. (See, e.g., the article on reclamation by LeVeen in this issue.) The state is a social construct of laws, institutions, rules of behavior, and real people, which arises through an historical process of class action within common conditions of culture and economy. It is not something that can be defined apart from history and social conflict. Nonetheless, the checks and balances of capitalism, such as those described here, have resulted in a predominantly functional state -- else American capitalism would not long survive. The accumulated state structure in place tends to play a stabilizing role, itself becoming a barrier to change (often a barrier for capital as well as labor).

Indeed, the fact of Dow's defeat shows the possiblity of dysfunction. But such dysfunction tends to set in motion forces for reform of the state so that such problems will not arise in the future. This is the major thrust of our discussion of the Dow backlash and of point (5), of Part III.

- Cf. Daives and Davies, 1975, pp. 162-34. 164. On mobility as a strategic advantage to capital, see Walker, forthcoming.
- See above, Note 22.
- On the functional role of agency fragmentation, see Piven et al., 1977. On this bending of laws in specific cases, see LeVeen, in this issue; Wlaker and Storper, forthcoming; Moorman, 1974; Davies and Davies, 1975; Lowi,
- The element of appearance, or ideology, is important here. Capitalism will generate more opposition to environmental controls than is "objectively" necessary precisely because the fetishism (ideology) of capital prevents recognition of capital itself as a barrier to economic prosperity; so the recession must be blamed on something, and environmental controls are an obvious target. (Cf. Mumy, in this issue.)

BIBLIOGRAPHY

- American Bar Association (1973) Industrial Developments and the Environment: Legal reforms to improve the decisionmaking process in industrial site selection by the Special Committe on Environmental Law (Chicago: American Bar Association) August 1, 1973.
- Babcock, Richard (1966) The Zoning Game (Madison: University of Wisconsin Press).
- Bachrach, Peter & Morton Baratz (1970)
 Power and Poverty (New York: Oxford University Press).

- Barnet, Richard & Ronald Muller (1975). Global Reach (New York: Simon and Schuster).
- Bernstein, Marver (1955) Regulating Business by Independent Commission (Prince-Princeton University Press).
- Bosselman, Fred, Duane Fuerer & Charles Siemon (1976) The Permit Explosion (Washington, D.C.: The Urban Land Institute).
- Carter, Luter (1976) *National Environmental Policy Act: Critics Say Promise Unfulfilled" in Science, 193: 4248 (9 July 1976) 130-32.
- Chernow, Ron (1978) "The Rabbit that Ate Pennsylvania" Mother Jones (January 1978) 10-14.
- Clawson, Marion (1971) Suburban Land Conversion in the United States (Baltimore: Johns Hopkins Press for Resources for the Future).
- Commoner, Barry (1976) The Poverty of Power (New York: Alfred Knopf).
- Davies, Clarence and Barbara Davies (1975)
 The Politics of Pollution (Second Edition) (Indianopolis: Bobbs-Merrill).
- Downie, Leonard (1974) Mortgage on America (New York: Praeger).
- Friedland, Roger, Frances Fox Piven, and Robert Alford, "Political Conflict, urban structure, and the fiscal crisis* International Journal of Urban and Regional Research, 1:3 (October) 447-473.
- Hanke, Steve and Richard Walker (1974) *Benefit-Cost Reconsidered: An Evaluation of the Mid-State Project* Water Resources Research 10:5 (October) 898-908. Reprinted in R. Haveman and J. Margolis, Public Expenditure and Policy analysis (Second Edition) 1977 (Chicago: Rand McNally) 329-354.
- Harvey, David (1973) Social Justice and the City (London: Edward Arnold).
-(1978a) "Planning the Ideology of Planning* in Robert Burchell and David Listokin (eds) Planning Theory in the 1980s: (New Brunswick: Rutgers Center for Urban Policy Research) 213-233.
-(1978b) "The Urban Process under Capitalism International Journal of Urban and Regional Research, 2:1 (March) 101-131.

- Harrison, Bennett & Sandra Kanter (1978)

 "The Political Economy of State 'Job
 Creating', Business Incentives" in
 G. Sternlieb & J. Hughes (eds.) Revitalizing the Northeast (New Brunswick: Rutgers Center for Urban Policy
 Research).
- Healy, Robert (1976) Land Use and the States (Baltimore: Johns Hopkins Press for Resources for the Future).
- Heiman, Michael (ms) "The Quiet Revolution" in Capital Accumulation" unpublished manuscript, Department of Geography, University of California, Berkely. 1978.
- Heyman, Ira Michael (1973) "Legal Assaults on Municipal Land Use Regulation" in M. Clawson (ed) Modernizing Urban Land Policy (Baltimore: Johns Hopkins Press for Resources for the Future) 153-175.
- Leonard, H. Jeffrey, J. Clarence Davies & Gordon Binder (1977) Business and Environment: Toward Common Ground (Washington, D.C.: The Conservation Foundation).
- Los Angeles Times (1977) "An Industry Built on Paperwork" San Francisco Chronicle, January 26, 1977, p. 6.
- Lowi, Theodore (1969) The End of Liberalism (New York: W.W. Norton).
- Marcuse, Peter (1974) "Conservation for Whom?" in J.N. Smith (ed) Environmental Quality and Social Justice in Urban America (Washington, D.C.:
 The Conservation Foundation) 17-36.
- Mariolle, Elaine (ms) "A History and Analysis of Open Space and Agricultural Land Use Legislation: 1955 to 1978" unpublished manuscript, Department of Geography, University of California, Berkeley, 1978.
- Moorman, James "Bureaucracy versus the Law" Sierra Club Bulletin (October).
- Mumy, Gene (1974) "Law, Private Property, and Environment: a Provocation to a Debate on Solving the Problem of Environmental Pollution" Maryland Law Forum, 4:2 (Winter) 69-76.
- Popper, Frank, (1974) "Land Use Reforms: Illusion or Reality?" Planning --Journal of the American Society of Planning Officials, September 14, 1974.
- Reilly, William (1973) The Use of Land (New York: Thomas Y. Crowell for Rockefeller Brothers Fund).

- Walker, Robert A. (1950) The Planning Function in Urban Government (Chicago: University of Chicago Press) (Second Edition).
- Walker, Richard A. (1973) "Wetlands Preservation and Management on Chesapeake Bay: The Role of Science in Natural Resources Policy" Coastal Zone Management Journal, 1:1 (Fall) 75-102. See also: "Wetlands Preservation and Management: A Rejoinder -- Economics, Science and Beyond" CZMJ, 1:2 (Winter) 227-33.
- Geography and Urban Reform in the Capitalist Development of the United States.
 Unpublished Doctoral Dissertation,
 Johns Hopkins University, Baltimore,
 1977.
-(forthcoming) "Two Sources of Uneven
 Development under Advanced Capitalism"

 Review of Radical Political Economy
 (1979).
- Walker, Richard & Michael Storper (forthcoming)
 "Erosion of the Clean Air Act: A study
 in the failure of government to regulate
 and plan" Environmental Affairs Law Review, 1979.
- Widess, Ellen and Michael Storper (1977)

 "The Failure of Regulation: Industrialization on the Urban Fringe"
 paper presented to 60th Annual Conference, American Institute of Planners, Kansas City, October 10, 1977.
- Widess, Ellen and Michael Storper (ms) "The Failure of Regulation: unpublished manuscript, submitted to <u>Environmental</u> Affairs Law Review.