Collaboratively Addressing the Growth of the Port Industry to Ensure Environmental Justice

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Presented to the Faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements for the Degree of Master of Environmental Studies 2008.

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Abstract
The activities involved in the operation of the U.S. ports industry provide an enormous boost to the local and national economy. At the same time, however, they can have profound adverse impacts on public health and the environment. Moreover, these impacts disproportionately affect local communities, many of which are poor and minority. Due to the Supreme Court’s limitations to Title VI of the Civil Rights Act of 1964 and the fact that ports are one of the most poorly regulated sources of pollution in the U.S., the need for new strategies to address this environmental injustice is as important as ever. One of the most promising avenues to address this growth and its’ accompanied adverse impacts is the use of collaborative problem solving. Collaborative problem solving allows for greater investment on the part of the various participants involved in the program and, most importantly, achieves the dual objectives of allowing for both industry growth and improved environmental quality.

Disciplines
Environmental Sciences | Physical Sciences and Mathematics

Comments
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Master of Environmental Studies 2008
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Executive Summary

The activities involved in the operation of the U.S. ports industry provide an enormous boost to the local and national economy. At the same time, however, they can have profound adverse impacts on public health and the environment. Moreover, these impacts disproportionately affect local communities, many of which are poor and minority. Due to the Supreme Court’s limitations to Title VI of the Civil Rights Act of 1964 and the fact that ports are one of the most poorly regulated sources of pollution in the U.S., the need for new strategies to address this environmental injustice is as important as ever. One of the most promising avenues to address this growth and its accompanied adverse impacts is the use of collaborative problem solving. Collaborative problem solving allows for greater investment on the part of the various participants involved in the program and, most importantly, achieves the dual objectives of allowing for both industry growth and improved environmental quality.
Introduction

Every year more than two billion tons of cargo are imported and exported through U.S. ports.\(^1\) That number is expected to double by 2020.\(^2\) Certainly, the economic benefits of port activities are enormous and provide a solid foundation for a robust economy. In 2006, over eight million Americans worked in port-related jobs which generated $107.1 billion in annual personal income and $35 billion in federal, state and local taxes.\(^3\) It would not be an exaggeration to say that the U.S. economy would cripple without its ports.

At the same time, however, port activities can have devastating effects on the health of surrounding communities and local environments. Air toxins haze the sky, water discharges pollute rivers and bays, and hazardous wastes contaminate entire areas. Moreover, it is predominately low-income communities of color who bear the majority of these negative effects.\(^4\)

As the port industry continues to grow, issues of environmental justice will continue to emerge around our nation’s ports because of their disproportionate impact on local communities. Environmental justice covers a vast array of topics including such diverse matters as the siting of industrial and waste facilities, subsistence fish consumption, and brownfield redevelopment. There is not, however, a concomitant range of statutes and regulations available to address its varied issues. The Supreme Court has severely limited the role environmental justice advocates can have in the court room, and U.S. EPA’s own Title VI regulations lack teeth. Moreover, ports are historically one of the most poorly regulated sources of pollution world-wide, so it is not surprising that the surrounding communities are heavily impacted by negligible enforcement of existing laws or the lack of meaningful regulations altogether.

Accordingly, the need for new innovative strategies to address environmental injustice are as important as ever, especially given the projected growth of the port industry and its continued impact on the surrounding communities. One promising

\(^{2}\) Ibid at n.1
\(^{3}\) Ibid at n.1
strategy is the use of collaborative problem solving. This initiative brings all affected stakeholders to the planning table and allows for various viewpoints to be heard and considered in the decision making process.

As an example, the San Pedro Bay Clean Air Action Plan has striven to address these very concerns. However, it has fallen short in one very important area. It has left the community out of the planning processes of their programs. Leaving out those who are the most affected can unintentionally lead to ill-suited and only partially effective solutions, despite the best of motives. The strategies put in place must ensure the genuine involvement and investment of all concerned. The U.S. EPA’s Environmental Justice Collaborative Problem Solving Model serves as a guide to help stakeholders ensure environmental justice.

**Ports**

**Basic Information**

Ports are our gateways to the world. Through them flows cargo providing us with the commodities that shape our lives. Every year more than two billion tons of cargo are imported and exported through U.S. ports, and it is projected that that figure will double by 2020.\(^5\) The growth is principally attributable to the ever increasing global market place in which the seamless transport of good is a cornerstone of international trade. The role of shipping in the world market is undeniable; as an example, “ocean-going ships move more than 99 percent of U.S. overseas trade (by weight).”\(^6\)

Clearly, there are many activities involved in the transport of goods at ports. First, ships, sometimes loaded with tens of thousands of pounds of cargo, sail into port and “hotel” at the dock. Then massive cranes empty the ships of their goods and transport them either to holding facilities or directly onto trucks or trains. The trucks and trains then deliver the goods throughout the U.S. These activities occur continuously, twenty-four hours a day, seven days a week.

It can require thousands of workers to run and monitor these activities which provides for an enormous boost to the local and national economy. In 2006, over eight

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\(^5\) Ibid at n.1
million Americans worked in port-related jobs which generated $107.1 billion in annual personal income and $35 billion in federal, state and local taxes. The ports along the Delaware River alone, which make up the largest freshwater port system in the world, employ over 30,000 workers generating $1 billion in wages and $3.5 billion in revenues a year. The ports’ role in the local as well as national economy is decisive and is a key factor that must also be considered when examining the environmental impact of ports on the surrounding community.

Adverse Impacts of Ports

Yet, while the port system is crucial to a thriving economy, the health and environmental impacts of the port industry can have devastating effects on local communities and their environment effectively negating the economic benefits. The consequences of the detrimental impact of the port industry on the local community must also be examined carefully in assessing future growth and development. Ports negatively impact the environment and the people who live near them in three principal ways: through air pollution, water pollution, and bad land use decisions. While interconnected the specifics of each are discussed below.

Air Pollution

By far, local communities are impacted most by air pollution. The ships, trucks, trains which haul the cargo all burn extremely dirty diesel fuel. Moreover, the burning never stops. “Hoteling” ships never fully shut down their engines and idling trucks sometimes wait for hours before loading up. Lines can literally stretch to the point where trucks are idling on neighborhood streets.

Burning diesel fuel emits such major air pollutants as nitrogen oxides (NOx), ozone, particulate matter, sulfur oxides (SOx), and volatile organic compounds. These chemicals have been found to aggravate respiratory diseases, decrease lung function,
cause respiratory distress, and even increase cancer risks. Moreover, in neighborhoods around the Port of Long Beach, CA, for example, the emissions are so concentrated that these “invisible pollutants” actually create a layer of black soot on the surfaces of cars and homes. The elevated concentrations of air pollution surrounding port areas clearly point to the detrimental effects of the industry.

Water Pollution

Water pollution from ports creates other environmental problems. Wastes and bilge are emptied directly into the water and stormwater runoff carries with it the residuals of port operations. This can cause an overload of chemicals in a water body and lead to eutrophication. The decrease in oxygen then causes fish and other marine life to suffer. Moreover, many of the chemicals in the water bioaccumulate in fish raising significant health concerns for humans, especially those involved in sustenance fishing.

As a consequence of this chemical contamination, there are numerous fish species with consumption advisories around ports. Among others, they include sought after fish such as Largemouth Bass, Channel Catfish, and Striped Bass. The advisories range from “One Meal a Week” to “Do Not Eat” and vary by location. Mercury and PCB contamination are the primary causes of the advisories. Studies have shown that high levels of these chemicals can cause birth defects, cancer, and problems with immune functions. Communities which may partially rely on subsistence fishing to stretch a meager pay check may suffer more acutely from this residual contamination.

Bad Land-Use Decisions

Finally, bad land-use decisions affect communities in yet other ways. Land use decisions, or LUDs, from decades ago have not clearly demarcated port areas from residential communities. The dramatic growth of the port industry has only exacerbated this problem. This unplanned proximity increases the nuisances experienced by

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residents, especially from noise and lighting. Additionally, ports have historically ignored their neighbors, excluding them from the decisions that may have profound effects on their daily lives. In fact, of the ten largest ports in the U.S., only one, Savannah, GA, received a grade of “B-“ or better for their efforts in community relations.11 Moreover, it is predominantly low-income communities of color who bear the majority of these negative effects.12 The environmental justice movement seeks to systemically address and redress the disproportionate burden placed on lower income and minority communities.

The Environmental Justice Movement

Environmental justice is defined by the EPA as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.”13 “Fair treatment means that no group of people, including any racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations…”14

The movement seeks to specifically protect those who are politically disenfranchised and/or economically incapable of making significant changes in their neighborhood. It strives to end the environmental racism arising from the abuse and neglect of the local environment, especially with regard to the siting of industrial facilities and disposal sites.

One of the cornerstones of the movement is the meaningful involvement of the people in the local community. “Meaningful involvement means that: (1) people have an opportunity to participate in decisions about activities that may affect their environment and/or health; (2) the public’s contribution can influence the regulatory agency's decision;

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11 ibid at n.19
12 ibid at n.4
14 Ibid at n.13
(3) their concerns will be considered in the decision making process; and (4) the decision makers seek out and facilitate the involvement of those potentially affected.”

Only by truly understanding the communities’ views, desires, and needs, can a successful local environmental justice movement thrive. Indeed, it was the lack of community involvement in the decision making processes of a facility siting that spurred the movement in the early eighties. People sought to have a say in what goes on in their communities regardless of their race or income level. The Environmental Justice Movement effectively changed NIMBY (Not In My Back Yard) to NIABY (Not In Anyone’s Back Yard).

History of the Environmental Justice Movement

The Environmental Justice Movement was officially founded in 1982 in Warren County, North Carolina when then State Governor, James B. Hunt, authorized the siting of a PCB disposal facility in a predominately African American neighborhood. Although the site was ultimately developed, protesters gathered the attention of the national media and brought environmental justice to the forefront of environmental issues.

A year later, the United States General Accounting Office conducted a survey of several Southern states and found that three of every four waste sites were located near predominately minority neighborhoods. Then in 1987, the Commission on Racial Justice reported that the most significant factor in the siting of hazardous waste dumps was race. However, governmental action did not follow until many years after the movement gained wings. In fact, in the case of environmental justice significant governmental action lagged for almost a decade.

One of the most politically influential findings was by the National Law Journal which alleged that U.S. EPA engaged in “environmental racism.” They found three significant facts;

15 Ibid at n.13
1) federal fines were not as strict for industries operating in communities of color, 
2) clean-up of environmental disasters in these communities was slower than in 
wealthier, white communities, and 
3) the standards for clean-up in communities of color were not as high.  

In response, U.S. EPA immediately established the Office of Environmental 
Justice in 1992. Two years later, in 1994, President Bill Clinton issued Executive Order 
12898 “directing federal agencies to develop environmental justice strategies to … 
address disproportionately high and adverse human health or environmental effects of 
their programs on minority and low-income populations.” This marked the first time 
regulations were to be established to specifically address environmental justice. 
Previously, environmental justice advocates had almost exclusively relied on Title VI of 
the Civil Rights Act of 1964 to address environmental justice issues in the Court 
system.

Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 prohibits discrimination in federally 
assisted programs. The specific sections of Title VI state:

Section 601- No person in the United States shall, on the ground of race, color, or 
national origin, be excluded from participation in, be denied the benefits of, or be 
subjected to discrimination under any program or activity receiving Federal 
financial assistance. 

Section 602 - Each Federal department and agency which is empowered to extend 
Federal financial assistance to any program or activity… is authorized and 
directed to effectuate the provisions of section 2000d (Section 601)… by issuing 
rules, regulations, or orders of general applicability.

Limitations to Use of Title VI

20 ibid at n.13 
21 42 U.S.C § 2000d et seq. 
22 42 U.S.C § 2000d 
23 42 U.S.C § 2000d-1
Despite the seemingly noble intentions of Title VI of the Civil Rights Act of 1964, the Supreme Court has severely limited the use of Title VI as a meaningful way to address environmental justice issues. In 1983 the Supreme Court ruled that Section 601 prohibits only intentional discrimination.24 This decision significantly reduced the scope of the Act. As Gerrad points out in *Private Lawyers and Environmental Justice*, “no plaintiff ever has succeeded, after the conclusion of all appeals, in proving discriminatory intent in an environmental justice case.”25 It is nearly impossible to prove, for example, that an agency issued a permit for a new industrial facility with the intent of discriminating against those who live near by. Additionally, in 2001, the Supreme Court ruled there is no freestanding private right of action to enforce regulations promulgated under Section 602 of Title VI. This means that citizens can no longer sue to enforce U.S. EPA’s Title VI regulations which do not require discriminatory intent. (To be discussed below.)

The cumulative effect of the Supreme Court’s rulings pertaining to Title VI of the Civil Rights Act of 1964 has severely limited its scope related to environmental justice issues. Effectively, the right to sue to enforce discriminatory effect regulations has been taken out of the hands of able citizens and put into the shallow hands of administrative agencies. The only avenue for a private citizen to pursue litigation to address environmental injustices would be to sue under Section 601 and try to prove discriminatory intent. However, no private litigant has ever been successful in doing so. Depriving citizens of a private right of action to sue left only administrative remedies. These remedies, however, are ill-suited in ineffective.

**U.S. EPA’s Title VI Regulations**

Pursuant to Section 602 of the Civil Rights Act of 1964 and Executive Order 12898, U.S. EPA issued the following regulations:

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25 Gerrard, Private Lawyers and Environmental Justice, Hum.Rts. Mag. (ABA, Section of Individuals Rights and Responsibilities, Fall 2003) http://www.abanet.org/irr/hr/fall03/private.html
40 CFR § 7.35(b)

A recipient shall not use criteria or methods of administering its program which have the effect of subjecting individuals to discrimination because of their race, color, national origin, or sex, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program with respect to individuals of a particular race, color, national origin, or sex.

40 CFR § 7.35

A recipient shall not choose a site or location of a facility that has the purpose or effect of excluding individuals from, denying them benefits of, or subjecting them to discrimination under any program to which this part applies on the grounds of race, color or national origin or sex....

Implications

Any agency receiving financial assistance from a federal agency must state that they will comply with these regulations. They are also encouraged to develop their own strategies to ensure their programs or activities do not have a discriminatory purpose or intent.

Pursuant to the regulations community members do have the option of issuing Title VI complaints to U.S. EPA if they believe agency programs have engaged in discriminatory programs. Yet, very few have any success in pursing litigation. Many complaints allege that the issuance of an environmental permit had a discriminatory purpose or effect, but the burden of proof was not satisfied. As of December 20, 2005, 172 Title VI complaints had been filed with U.S. EPA. 133 of those have already been closed. The majority, 94, were rejected for investigation. In fact, only ten have been informally resolved. Of the 39 complaints still pending, 19 are still being evaluated and 20 have been accepted for investigation.²⁶

Limitations to Regulations

While these regulations have laudable intention and have had some overall impact, they lack teeth. Specifically, “the primary means of enforcing compliance is through voluntary compliance agreements.”²⁷ This leaves agencies in charge of

²⁶ Isales, D., Title VI of the Civil Rights Act. 25 Sept., 2006
developing their own compliance strategies. While this flexibility allows them to mold strategies to specific environmental problems in different communities, it also allows them to be as restrictive or lenient as they seem fit. Moreover, because U.S.EPA has never truly enforced its Title VI regulations there is no incentive for other agencies to develop restrictive programs or policies.

In fact, the only real remedy U.S. EPA has for noncompliance its Title VI regulations to withdraw funding from the recipient. This has never happened with regard to Title VI because U.S. EPA would have to take over the responsibilities of the particular agency program(s). Many times that would create more harm than good because U.S. EPA simply does not have the manpower or funding to take on additional responsibilities.

The limitations both set of regulations pose on community members trying to address environmental justice in the legal system are severe. The Supreme Court has eliminated the community’s role in enforcing Title VI, and U.S. EPA’s remedies can do little to adequately address state agency decisions with discriminatory purpose or intent.

These remedies also seem to undermine the entire concept of environmental justice. Environmental justice is “the fair treatment and meaningful involvement”\(^{28}\) of the people. (emphasis added) Limiting the ability of citizens to pursue private actions provides fewer alternatives for citizens to utilize in addressing their concerns. Furthermore, rescinding federal funds from agencies that participate in discriminatory programs does nothing for the people who experience the discrimination. Damages are never recovered, and injunctions are never issued. This, in essence, takes away the “fair treatment” component of environmental justice as well. Communities are therefore left with very few avenues to address environmental injustices. Many times, they are simply left reliant on regulatory agencies to enforce the laws that are designed to protect them by restricting port operations.

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28 ibid n.13

Environmental Enforcement
Enforcement is essential to achieving compliance with the regulations that are
designed to protect human health and the environment. It ensures fairness by holding
those who are out of compliance accountable which, in turn, “reinforces the credibility of
environmental protection efforts and the legal systems that support them.” In addition,
 enforcement achieves the desired effect of significantly improving the air quality and
health of communities located near polluting facilities.

In the case of ports, however, the regulatory framework simply is not in place to
significantly change the adverse health and environmental impacts caused by port
operations. In fact, ports are one of the most poorly regulated sources of pollution in the
United States. The international nature of the goods movement only further
complicates the issue. Ships may leave harbor with one set of regulations and sail into a
port with completely different ordinances.

Enforcement can also unwittingly lead to negative relations between federal and
state regulatory agencies and the facilities they inspect. Maintaining positive
relationships is extremely important in addressing the negative externalities of ports.
Tainted relationships and mistrust among stakeholders can effectively eliminate the
chance of meaningful change in the future. Thus care must be taken to strengthen and
build relationships rather than undermine them.

Additionally, there may simply not be an enforcement mechanism available to
address some of the communities’ biggest concerns. For example, trucks waiting to
unload cargo can create lines that stretch directly onto residential streets. Their idling
creates not only pollution, but noise and safety hazards as well. Unfortunately, many
times the trucks are not breaking any laws. That is where they must wait. Enforcement
is simply not an option.

Therefore, as the port industry continues to grow, new strategies must be
developed to meaningfully involve the communities surrounding ports and adequately
address their genuine needs. Currently, the most comprehensive way of addressing these
issues is the use of collaborative problem solving.

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29 International Network for Environmental Compliance and Enforcement. “Principles of Environmental
Enforcement.”
**Collaborative Problem Solving**

Collaborative problem solving brings all affected stakeholders together to allow for various viewpoints to be heard. It is “a process through which parties who see different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible.”

Collaborative problem solving involves representatives from federal, state, and local governmental agencies, quasi-governmental agencies, like Port Authorities, community and environmental groups, and industry. Typically, these representatives are included in the effort.

There are many benefits to engaging in collaborative problem solving. Bringing all stakeholders together allows for the open exchange of information and a broader range of expertise to help address the issues that arise. This is extremely important because many times issues of environmental justice are multi-faceted. The engagement of stakeholders from various backgrounds and perspectives can lead to new, innovative strategies of improved quality. This hopefully leads to mutually acceptable, comprehensive solutions that enhance environmental quality while also allowing for growth.

Additionally, by engaging in constructive, mediated dialogue, relationships among stakeholders are improved. Increased communication leads to greater confidence among stakeholders and improved trust. The involvement of all stakeholders in the development of possible solutions creates more acceptance of and willingness to implement the solutions. Moreover, pooling resources can allow for more issues to be addressed in greater detail. For example, different stakeholders may be eligible for different grant programs. While a single $50,000 grant from the EPA may only support one small issue, the combined grants of multiple stakeholders can address a more comprehensive range of concerns. Stakeholders may also have a variety of specialized skills that may serve to better and more comprehensively address concerns or needs.

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33 ibid at n.31
The use of collaborative problem solving to address the growth of the port industry is paramount to adequately addressing the wide array of environmental justice issues at stake. More meaningful programs are implemented and relationships among stakeholders improve, and there is greater investment on the part of the various participants in the programs’ success. Most importantly, collaboratively addressing these issues can achieve the dual objectives of allowing for both industry growth and improved environmental quality.

**Current Efforts**

At present, there are few examples of the use of collaborative problem solving to ensure environmental justice at ports. One of the largest and most promising is the San Pedro Bay Ports Clean Air Action Plan.

**San Pedro Bay Ports Clean Air Action Plan**

Collectively known as the San Pedro Bay Ports, southern California’s Port of Long Beach and Port of Los Angeles are the two busiest container ports in the U.S. More than $260 billion of goods are traded every year at the ports. The prospects for growth are enormous as the amount of cargo handled at the Ports is expected to double by 2020.34

The ships and harbor craft, trucks and trains, and cargo-handling equipment needed to operate port activities are all significant sources of pollution. In fact, “port-related vessels and vehicles account for 12 percent of the region’s particulate matter, 9 percent of the NOx and 45 percent of the SOx.”35 The area around the San Pedro Bay Ports is also the second largest urban area in the U.S.36 These two factors contribute to some of the highest levels of air contaminants in the nation.

Moreover, the communities that are impacted most directly by the pollution generated by the ports are mainly comprised of poor, minority residents. The community of Wilmington, CA, for example, which directly abuts the Port of Long Beach, is 85%

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36 Ibid at n. 35
Latino with 24% of families living below the poverty line. The median family income is roughly half of the national average. The City of Commerce, which quite literally lies in between the main hub of the rails coming from the Ports, is 93% Latino with a median family income of $36,500. Clearly, these are disadvantaged populations with little opportunity or power to address the contamination of their home communities.

Recognizing the need to clean up their operations, both ports, the South Coast Air Quality Management District, California Air Resources Board, and U.S. EPA created the San Pedro Bay Ports Clean Air Action Plan in 2006. The plan takes a comprehensive, collaborative approach to reducing the adverse environmental and public health impacts caused by ports while allowing for growth. Specifically the Plan calls for:

- Replacement of all trucks with clean-burning or retrofitted vehicles
- Installation of shore-side electricity at all terminals
- Replacement of all cargo-handling equipment with new, cleaner equipment
- Use of cleaner fuels and exhaust treatment and devices on trains
- Continual research on the cleanest vessels, engines and equipment

These strategies are estimated to reduce 1,200 tons a year of diesel PM emissions, 12,000 tons a year of NOx emissions, and 8,900 tons a year of SOx emissions. To accomplish these goals hundreds of millions of dollars were invested by the Ports, local and state governmental agencies, and other port-related industries.

The Plan exemplifies some of the considerable benefits to using collaborative problem solving. By combining expertise the stakeholders were able to develop new, innovative technologies to address the poor air quality in the region. By combining resources the stakeholders were able to implement the technologies. The leveraging of so many funds alone allowed for the enhancement of certain strategies. The Ports and the South Coast Air Quality Management District, for example, generated over $200 million just to replace older trucks with cleaner, new or retrofitted vehicles.

The San Pedro Bay Ports Clean Air Action Plan is indeed an example of a successful collaborative problem solving program. Acting alone, none of the

38 ibid at n.37
39 ibid at n.35
40 ibid at n.35
41 ibid at n.35
stakeholders could have achieved the successes of the Plan. Together they were able to comprehensively analyze the air quality problem in the region and collaboratively engage in developing mechanisms to solve the problem. The solutions laid out in the Plan are well-suited and will have a profound effect in improving the region’s air quality.

Failures

While it should be recognized that the Clean Air Action Plan exceeded the initiatives of most projects to engage the community, greater efforts could have been made to enhance the community’s involvement from the beginning. The Plan’s representatives, for example, only sought community input after the Plan had been developed.

The Plan was released for the required 30 day public review period in June, 2006. Four meetings, attended by representatives of the Ports, EPA, California Air Resources Board and the South Coast Air Quality Management District, were held during this time. The meetings served to explain the Plan and answer any questions related to it. Copies of the Plan were made available to the public at these meetings and also at both Ports’ offices, local public libraries and on-line. Specifically, the on-line version was posted in six different languages: English, Spanish, Cambodian, Chinese, Korean, and Japanese.42

At the request of five organizations, the representatives of the Plan extended the public review period to 60 days. Comments on the Plan were accepted in writing and verbally at the four meetings and by email to both Ports. The comments were published in the San Pedro Bay Ports Clean Air Action Plan Comments Compendium. The Plan was then revised to reflect the comments and reissued in late 2006.43

Not surprisingly, the Plan was met with opposition from many organizations who simply felt left out of the planning process. In fact, one of the most frequent responses from the public was that the “[w]riting of the [Plan] failed to include the Public, Stakeholders, Medical, and Scientific experts.”44 This obviously led to mistrust by the community as to whether the Plan adequately addressed their concerns.

42 ibid at n.35
43 ibid at n.35
If the community had been involved during the development of the Plan many of the issues that arouse down the road could have been avoided. Community participation would have led to greater acceptance of the chosen solutions. This could have decreased the amount of public comments and possibly made the need for the extension of the public review period unnecessary.

Additionally, had the community been given a stakeholder role from the beginning, the Plan’s representatives would have realized that they indeed shared common goals and visions and they could have capitalized on these commonalities. As mentioned above, the majority of the negative comments received from community organizations reflected concerns about the lack of their involvement, not the actual solutions themselves. They actually supported many of the strategies designed to reduce the air pollution caused by the Ports.45

The San Pedro Bay Ports Clean Air Action Plan is a noteworthy example of comprehensive strategies developed by various stakeholders to improve their environmental footprint while allowing for growth. It is also a noteworthy example, however, of the costs of not involving all affected stakeholders. Specifically, leaving those who the Plan was designed to protect out of its development led to the inefficient use of time and money. Representatives may have even spent more time responding to comments about the lack of community involvement than they would have had they included them in the first place. Moreover, early involvement would have addressed specific community concerns and ideas and presumably insured greater overall investment in the Plan.

Without the community’s meaningful involvement, as called for in the very definition of environmental justice, solutions to community concerns may be ill-suited and ultimately less effective. Additionally, more time and effort may need to be spent reassuring the community that the solutions developed in their absence are indeed in their interest. Seeking community involvement is paramount to the overall success of a collaborative program designed to help the given community.

Barriers to Progress

One of the reasons communities are commonly left out of the planning process is because they themselves represent one of the largest potential barriers to collaboratively addressing the adverse environmental impacts of ports. Unfortunately, many of the communities who bear the majority of these impacts are comprised of citizens who simply do not have the financial means, nor political clout to adequately address them. Moreover, more pressing issues like drugs and violence or severe unemployment usually take precedent to environmental concerns. Fostering their participation in seemingly unrelated programs may be very difficult. Language barriers and work schedule conflicts only add to the difficulty.

Communities and the ports that are located near have also historically been unfriendly neighbors. Their conflicting views have lead to adversarial relationships and sometimes the two groups are simply unwilling to work with each other. Communities may also be unwelcoming of governmental agencies. They can be viewed as untrustworthy and friends of the ports. At the same time, however, the ports and governmental agencies may view each other as adversaries. Their longstanding regulator/regulatee relationships have left the two very wary of the other’s actions.

Moreover, due to the vast array of activities at ports and the large number of affected parties, there can be dozens of stakeholders representing competing interests. Hearing everyone’s voice is difficult and as stakeholder numbers rise, so do transaction costs. Nonetheless, careful planning with an eye toward community involvement and buy-in can potentially overcome these genuine hurdles and significantly address issues of environmental justice at ports.

EPA’s Environmental Justice Collaborative Problem-Solving Model

The U.S. EPA’s Environmental Justice Collaborative Problem-Solving Model serves as a guide to help stakeholders ensure environmental justice. Addressing the Model’s seven elements inclusively can successfully lead to a collaborative stakeholder agreement. While the Model is specifically intended to help residents address issues of environmental justice in their community, it can easily be adapted for use by other
stakeholders interested in eliminating the adverse environmental impacts of port activities. The elements of the Model are as follows:

1. Issue Identification, Visioning & Strategic Goal Setting
2. Community Capacity-Building & Leadership Development
3. Multi-Stakeholder Partnerships & Leveraging of Resources
4. Consensus Building and Dispute Resolution
5. Constructive Engagement by Relevant Stakeholders
6. Sound Management and Implementation
7. Evaluation, Lessons Learned & Replication of Best Practices

The ReGenesis Partnership

The ReGenesis Partnership serves as an example of a collaborative effort of over 200 community groups, governmental agencies, and industry representatives that successfully used the EPA Model to ensure environmental justice. Although not located near a port, the Spartanburg example offers valuable insight that could be used to address environmental injustices at ports.

The City of Spartanburg is partially composed of two small neighborhoods in the northwest part of South Carolina. Arkwright and Forest Park are located just “across the tracks” from a prosperous city center. These communities are called home by mostly low-income, African-Americans. In fact, while the City is approximately 50% African American and 50% Caucasian, Arkwright and Forest Park are 96% African American.

Dating back almost one hundred years, community residents have had to endure the harmful effects of two hazardous waste dumps, a fertilizer plant, and a chemical manufacturing plant. Few zoning restrictions and bad land-use decisions pinned these unwanted neighbors together. In fact, one of the hazardous waste sites, of over 30 acres, was located within 20 yards of private housing and the fertilizer plant was literally in the back yard of some residents’ homes.

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48 ibid at n.47
After realizing that 62 community residents died in a single year of lung cancer and other respiratory diseases, a concerned citizen, Harold Mitchell, contacted U.S. EPA in Atlanta, GA and requested environmental testing in the neighborhood. Significant monitoring eventually led the EPA to designate two Superfund sites and seven brownfield sites in the community. Such harmful chemicals as Mercury, Lead, and Cadmium were found at levels so high that the land was designated unsuitable for residential use. Mitchell organized a community meeting to report these findings and began the long road towards achieving environmental justice.

The following guide tracts the strategies different stakeholders from the ReGenesis Partnership and other collaborative partnerships used to satisfy the seven elements of EPA’s Environmental Justice Collaborative Problem Solving Model.

Ensuring Environmental Justice Using the U.S. EPA’s Environmental Justice Collaborative Problem Solving Model

1. Issue Identification, Visioning & Strategic Goal Setting

The first element consists of “identifying the problem and envisioning solutions, then figuring out how to make solutions happen by setting goals.” The most important part of this component is to involve the community early. Whether it is a community member or a company representative that initiates the involvement, only by identifying the concerns of those specifically impacted, can meaningful strategies be developed in the future. It is then important to address these concerns through a series of workshops or forums. This allows for all involved to know the multifaceted issues facing the community.

In Spartanburg, for example, after contacting U.S. EPA with concerns about the health of his community, Harold Mitchell organized a community meeting at his local church. Over one hundred citizens attended the meeting, including the City’s Mayor, and residents began to understand the connection between their unusually high amounts of illness and the proximity of the facilities and waste dumps. Unfortunately, many times communities simply do not understand the harmful substances they are exposed to, nor

49 ibid at n.47
50 ibid at n.46
do they know or recognize the adverse effects after those exposures. Educating the community toward an understanding of the issues and hazards at stake creates a more knowledgeable group of citizens who are more likely to work together to bring about change.

Mitchell further organized several workshops related to toxic wastes and the possibilities of community redevelopment. During these sessions common goals began to emerge along with the strategies to achieve them.

Community participation doesn’t need to start with the efforts of a concerned citizen, however. Representatives from all stakeholder groups can actively seek community involvement in the same way Harold Mitchell did. In fact, stakeholders who view the community as a welcome partner usually experience greater community by-in and increased collaboration in meeting collective goals. Conversely, hiding information from the community only leads to more mistrust and additional problems.

2. **Community Capacity-Building & Leadership Development**

Mitchell founded ReGenesis, a non-profit organization, to address the environmental injustices occurring in his community and build their capacity to make change. Through a series of meetings and workshops, ReGenesis educated the community and also sent some of its members to Washington D.C. for specialized training.

This type of education and training helps break the communication barrier that can exist between stakeholders. The ability to use common terminology and communicate effectively is vital to reaching a collaborative problem solving agreement. Many times specialized stakeholders are unwilling or simply do not know how to explain the technical issues in their most basic form. An informed community allows for more time to be dedicated to developing and implementing actual solutions rather than explaining individual procedures. This reduces transaction costs for all stakeholders by allowing for the more efficient use of time and resources.

Building the community’s capacity to be involved in facilitating change is crucial. It leads to more community buy-in to selected strategies and lessens the chance of disputes in the future. However, few communities have the capacity to educate
themselves and be a part of the planning process. Resources must become available from other stakeholders.

3. Multi-Stakeholder Partnerships & Leveraging of Resources

Realizing that significant change would take resources the community alone simply did not have; Mitchell invited several other parties to the community redevelopment planning process. In fact, since the inception of the ReGenesis, over 200 federal, state and local governmental agencies, businesses and industries, and community organizations have committed resources.\(^{51}\) Among them are U.S. EPA, South Carolina’s Department of Health and Environmental Control, various county and city departments such as the Spartanburg Housing Authority, and industry representatives.

Partnerships between communities, government, and industries allow the stakeholders “to examine problems together, develop action plans, and harness the resources necessary to achieve everyone’s goals.”\(^{52}\) They enable stakeholders to come together and constructively address each others’ issues. This can improve existing relationships and even help create new ones. Partnerships between government agencies, industry groups and the communities they operate in can serve to enhance the overall quality of the collaborative program.

**Governmental Partnerships**

Partnerships with federal, state, and local government agencies are also extremely important. By initially requesting the expertise of U.S. EPA, Mitchell was able to back his suspicions and claims with scientific evidence. Governmental agencies also have the ability to pool resources from different sources. Additionally, though no two communities, or their issues, are the same, the experience governmental agencies bring to the planning process is invaluable. U.S. EPA’s Office of Environmental Justice (OEJ), for example, has successfully facilitated positive change in many communities that were adversely impacted by the facilities located near them.\(^{53}\) Their involvement has helped

\(^{51}\) ibid at n.47
\(^{52}\) ibid at n.46
\(^{53}\) See for example: Barrio Logan Partnership, Bridges to Friendship Partnership, Metlakatla Peninsula Cleanup Partnership, Metro East Lead Collaborative, New Madrid Partnership, ReGenesis Partnership
coordination with other stakeholders and enhanced the overall credibility of the projects.\(^{54}\)

State and other local government agencies can offer additional support. By partnering with the local housing authority Mitchell was able to secure additional funds for infrastructure development, and South Carolina’s Department of Health and Environmental Control provided $490,000 for brownfield redevelopment. Combined, the government agencies involved have provided millions of dollars for Spartanburg’s revitalization.\(^{55}\) Had these partnerships not been established, a much more fragmented approach would have yielded less effective results.

**Industry Partnerships**

Partnerships with industry are also imperative. Their expertise related to the operations and processes involved in business activities is unmatched. They are aware of the cutting edge technologies and ideas and whether they are applicable in a given project. Most of the strategies utilized in the San Pedro Bay Ports Clean Air Action Plan, for example, were developed and implemented by the ports themselves.

Industries also have the ability to tap funds that are unavailable to the other stakeholders. In Spartanburg, for example, Vigindustries earmarked over $2,000,000 for the assessment and remediation of the abandoned fertilizer plant.\(^ {56}\) Often, it is these investments that have the most profound effect on the health of the local community and environment.

Though many times industry and community groups act as adversaries, their cooperation is essential. By engaging in constructive dialogue these two groups can overcome their historical mistrust of each other and facilitate positive change. As one Spartanburg community resident acknowledged, the days of walking out on your adversaries in acts of defiance are over. “Sitting down at a table”, “working it out”, “compromising” are the ways of the future.\(^ {57}\) Ozzie Morris, president of Vigindustries

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\(^{55}\) ibid at n.47

\(^{56}\) ibid at n.47

who owns the abandoned fertilizer plant in Spartanburg, agrees. “Industries within communities must be in touch with those communities. They must be actively involved in those communities. They need to be good neighbors.”\textsuperscript{58} These collaborations ultimately lay the foundations for concerted action and remediation.

4. Consensus Building and Dispute Resolution

While building partnerships is essential, working together to make group decisions can surely be an arduous task. Inevitably, disputes will arise. Commonly, stakeholders with contrasting positions simply speak at each other rather than focusing on goal and actions. They cannot seem to see beyond their differences and engage in constructive conversation. Fortunately, the use of alternative dispute resolution (ADR) can help overcome these issues.

ADR is defined as “any procedure that is used to resolve issues in controversy, including but not limited to, conciliation, facilitation, mediation, fact finding, minitrials, arbitration, and the use of ombuds…”\textsuperscript{59} These techniques utilize a neutral third party who has no stake in the ultimate outcome of collaborative program.

In Spartanburg hostility arose between the community and Rhodia, the chemical manufacturing plant neighboring the community. The community wanted Rhodia to vacate, and Rhodia felt it had no reason to leave. After several failed meetings, both groups and the U.S. EPA agreed to enter into facilitated dialogue. Facilitated dialogue is a form of ADR that utilizes an independent, third party facilitator to mediate the discussions. This can help resolve conflicts and avoid unnecessary legal expenses.

The facilitator in Spartanburg listed two aspects that are necessary for facilitated dialogue to be successful. First, at least one of the parties must have the power to speak for the community.\textsuperscript{60} Though other stakeholders may have the community’s best interest in mind, most actions they take will be met with skepticism. ReGenesis not only acted on behalf of the community, it was more credible because it was made up of the community. This insured the community’s needs were expressed and considered.


\textsuperscript{59} U.S.C. 571(3). Administrative Dispute Resolution Act of 1996 (ADRA)

Second, industry representatives must be willing to meet at least some of the needs of the community.\textsuperscript{61} While relocating was not a viable option, Rhodia did in fact meet several of the community’s requests. They improved noise and odor control, enhanced health and safety procedures and added new air and groundwater monitoring units. Additionally, they created new jobs for members of the community.\textsuperscript{62} These conciliatory measures work toward building the trust needed in collaborative ventures.

While the community and Rhodia may still not agree on many issues, their partnership enabled the exchange of constructive dialogue and effectuated important change. The former adversaries now understand each others’ needs and are willing to try to meet them, due to the facilitated dialogue intervention.

ADR is a necessary component in almost every collaborative program. The use of a neutral facilitator ensures that all stakeholders’ concerns are voiced and adequately addressed. Ultimately, the use of ADR can lead to the faster resolution of issues, the development of innovative, long lasting solutions, greater satisfaction among the parties, and improved working relationships.\textsuperscript{63,64}

5. Constructive Engagement by Other Relevant Stakeholders

While communities, government agencies, and industries make up the core stakeholder groups, other parties can play integral roles in the success of a collaborative program as well. Local businesses, universities, environmental organizations and other public interest groups can provide additional expertise and resources that can help address other aspects of community redevelopment.

In Spartanburg, key partnerships with the University of South Carolina Upstate and the Spartanburg Regional Healthcare system enabled redevelopment in areas beyond environmental remediation. “USC Upstate will contribute to… outreach programs that will include tutoring and mentoring programs, art and theatre initiatives, technology education workshops, health screenings, education programs, workforce development

\textsuperscript{61} ibid at n.60
\textsuperscript{62} ibid at n.47
seminars, professional development classes and applied research efforts." Additionally, the state-of-the-art community health center provided by the Spartanburg Regional Healthcare system has increased the availability of health services to the former medically underserved community. The Center is now three times larger allowing for more patient visits and services.

While initial efforts to redevelop the community centered around alleviating the environmental contamination in Spartanburg, the ReGenesis Partnership created an avenue for other stakeholders to provide their own expertise and resources. Effectively, the local environmental justice movement in Spartanburg acted as a catalyst that facilitated change in many other areas of community redevelopment.

6. Sound Management and Implementation

Creating working partnerships and developing common goals is only part of the battle toward achieving environmental justice. The goals must then be implemented and effectively managed for long term stability and sustained impact. One way to accomplish this is to solidify the partners’ relationships by signing formal agreements.

In Spartanburg, the City, County and ReGenesis signed a Memorandum of Understanding which formalized their relationships and ensured that their partnership remains intact. The Memorandum specified each groups’ roles and responsibilities related to the implementation of their goals.

When establishing responsibilities it is important to build upon the capabilities of each group. For example, while ReGenesis could effectively notify the community of upcoming events, the City and County were better equipped to take on the administrative tasks such as setting up an email database and contacting other stakeholders. Additionally, while industry groups may not be well-suited to solicit community involvement, they have the ability to make changes to their own industrial processes because of their technological expertise. By allowing each group to capitalize on its

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66 ibid at n.47
67 ibid at n.37
strengths and also avoid unnecessary duplication of services, transactions costs are minimized and time is spent more efficiently.

It can also be beneficial to break down the collaborative program into specific areas or work groups. Again, this smaller infrastructure allows each group to focus on the areas of strengths it can contribute to the project. With over 200 different groups involved in the ReGenesis Partnership, bringing everyone together at once would be a waste of time and resources. Breaking into specific work groups more effectively utilizes each stakeholder’s expertise and resources. The ReGenesis Partnership identified seven different project areas. They included68:

1. Creating a comprehensive redevelopment plan
2. Cleaning up contaminated sites
3. Providing for public safety, education, and life skills
4. Ensuring Public Health
5. Improving Transportation Access
6. Creating green space and greenway trails
7. Developing affordable and energy efficient housing

Though interconnected, it is easy to see that each area requires different sets of expertise from various stakeholders.

Defining clear goals and effectively implementing them requires sound organization and management. Solidifying relationships through formal agreements and breaking down overarching collaborative programs into specific work groups more efficiently utilizes the time and resources of all involved.

7. Evaluation, Lessons Learned & Replication of Best Practices

The ReGenesis Partnership continues to grow and evolve. As specific goals of the collaborative program are accomplished, efforts are made to pursue other avenues of change. Building upon their prior experiences, stakeholders develop fresh ideas and expand current initiatives. Everyone involved agrees that the ReGenesis Partnership is truly a success.69

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69 ibid at n.68
The ReGenesis Partnership is a unique example of U.S. EPA’s Environmental Justice Collaborative Problem Solving Model at work. Due to the efforts of one community leader and the commitment of a previously disenfranchised community, hundreds of other stakeholders felt compelled to help facilitate change. Through the cooperation of government at all levels, the willingness to participate by industry and additional support from other groups like academia and the health care sector the once dilapidated communities of Arkwright and Forest Park are now thriving. As Bill Barnett III, the Mayor of Spartanburg, described, the ReGenesis Partnership was about “not just fixing a Brownfields site or environmental problem but rather to open up an area to economic development and to create a new set of expectations for a community.”

A Best Practice for Ports

Though over 200 miles from the nearest port, the issues that the Arkwright and Forest Park communities addressed and overcame are very similar to the issues faced by many communities located near ports. The siting of industrial facilities and hazardous waste dumps within very close proximity to residences continues to plague port communities. Many Brownfield sites surrounding ports are also either left as eye sores or developed without community input. The increased health hazards arising from this contamination directly impacts on medically underserved communities.

Additionally, the demographic and economic composition of the contiguous areas is often similar, as they are largely comprised of lower income and minority residents whose concerns are easily ignored. As outlined above, the ReGenesis Partnership offers valuable insight that can easily apply to the amelioration of environmental conditions at ports, particularly as they affect the surrounding communities. The power and effectiveness of multiple collaborative partnerships between residents and industry, governmental agencies and environmental organization, community groups and local businesses, as well as other concerned stakeholders in pursuing common goals and outcomes provides the foundation for redressing historic injustices. Whether they are in

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semi-rural South Carolina or in the ports of urban Los Angeles, collaborative partnerships provide for the continued health and economic well being of the communities.

Clearly, environmental protection cannot be equated with the cessation of industrial activity, particularly in under resourced areas, as the surrounding communities depend on the industries for jobs and tax revenue at the same time that they are impacted environmentally. Indeed, this interdependence is particularly evident in port areas. The growth of the U.S. Port industry is an essential component of the continued development of both the local and national economy. That growth, however, must be matched with increased environmental and public health protection and monitored carefully to ensure responsible industrial development as well as minimized adverse impact on the contiguous communities. One of the most promising avenues to accomplish both these objectives is the use of collaborative problem solving, as shown in the U.S. Environmental Protection Agencies Collaborative Problem Solving Model. Bringing all affected parties to the planning table early in the decision making process allows for the more efficient use of time and resources. Additionally, meaningfully involving those who are most affected by these issues is the only way to ensure that their needs are addressed. Seeking the communities’ participation and building their capacity to make change also leads to more community buy-in of selected strategies and lessens the chance of disputes in the future. Collaborative problem solving allows for greater investment on the part of the various participants involved in the program and, most importantly, achieves the dual objectives of allowing for both industry growth and improved environmental quality.
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Cover Photo: Google Earth. Norfolk, VA. 2 March 2008


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42 U.S.C § 2000d. Title VI of the Civil Rights Act of 1964. Section 601.

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