

# *Seeking Good Neighbor Agreements in California*

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## Part I.

### “The Piecemeal Agreement”

The Chevron agreement is interesting because it’s basically pieced together from so many different pieces of paper, you’ve got the city council and the air district and the planning commission so it’s a peculiar thing. Because it’s on so many different pieces of paper, it’s hard to enforce – Richard Drury, Managing Attorney, Communities for a Better Environment

*Background.* Rarely has environmental regulation necessitated such an infusion of capital funds or the need for timely public participation as the Clean Air Act’s (CAA) motor gasoline requirements. The regulations, along with the California Air Resources Board’s (CARB) Phase 2 reformulated gasoline rules, required changes in the composition of motor fuels, which in turn forced modifications to the petroleum refineries that produced them.<sup>1</sup> Industry estimates for the capital costs of complying with the CAA Amendments ranged initially from \$35-40 billion.<sup>2</sup> In some cases, it made sense for certain refineries to close down rather than upgrade their facilities at considerable risk to the company. This potential wave of refinery closings came at the tail end of a period of steady decline in the number of refineries operating in the United States. The Department of Energy counted 176 such facilities in 1994, compared to 301 in 1982.<sup>3</sup> Most of the refineries involved in this wave of closings were small, 50,000 barrel per day plants that could not justify the high cost of meeting the new product standards. At the same time, demand for refined petroleum products continued to rise, a trend that was met by increased capacity and utilization rates at existing plants and through a heavier reliance on imported finished products.<sup>4</sup>

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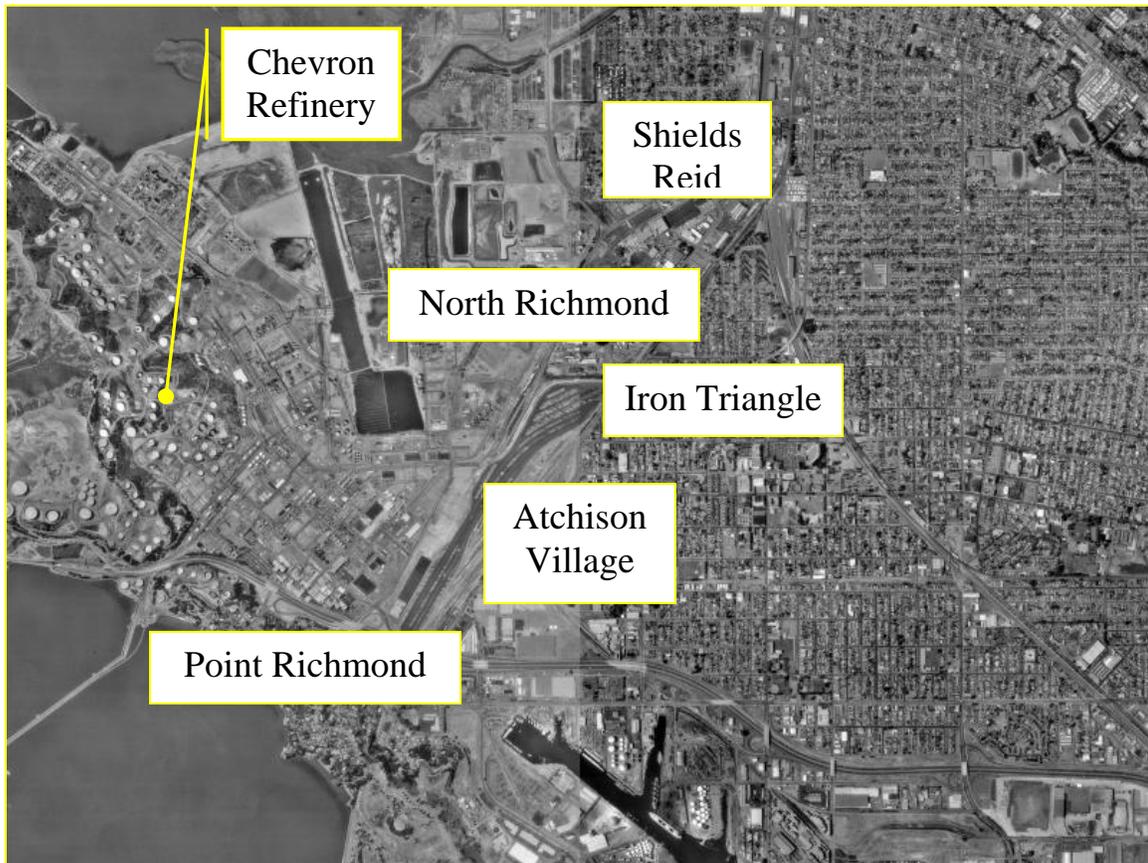
<sup>1</sup> Scherr, R.C., Smalley, G.A., & Norman, M.E. (1989). Clean Air Amendments put big burden on refinery planners. *Oil and Gas Journal*, 89(23): 35-38; Hadder, G.R. (1992). Future refining impacts of the Clean Air Act Amendments. *Energy*, 17(9): 857-868.

<sup>2</sup> Cheremisinoff, N.P. (2001). *Handbook of Pollution Prevention Practices*. New York: Marcel Dekker, Inc.

<sup>3</sup> *Ibid.*

<sup>4</sup> Khadimally, R.A. (1990). Job losses, refinery cuts. *Oil and Gas Journal*, 90(10): 8.

Figure 1. Select Richmond Communities and the Chevron Refinery.



The new regulations affected the operations of large-scale refiners as well as smaller, independent (no upstream production capability) firms. Prior to 1990, when the CAA Amendments were passed, Chevron Corporation ranked 11<sup>th</sup> on the Fortune 500's list of America's largest industrial companies, with annual sales of over \$25 billion.<sup>5</sup> The corporation owned and operated a massive infrastructure, including five refineries and a network of service stations on the West Coast alone.<sup>6</sup> Other companies relied on this network for their very survival. For instance, when Chevron decided to construct a cogeneration plant that would provide electricity for its Richmond refinery, Pacific Gas and Electric stood to lose more than \$60 million annually.<sup>7</sup> The city of Richmond, host to the sprawling, 2,900 acre facility occupying almost an entire peninsula near San Francisco Bay, received its share of benefits from the refinery. Twenty percent of the city's general fund revenues and 44% of the jobs were made possible, directly or indirectly, through the operation of Chevron's Richmond refinery.<sup>8</sup>

<sup>5</sup> Los Angeles Times (1989). List of Top 500 Industrial Firms. *Los Angeles Times*, April 5, 1989, p. B6.

<sup>6</sup> Lee, P. (1989). Pumping Life into Chevron. *Los Angeles Times*, December 4, 1989, p. D1.

<sup>7</sup> Pelline, J. (1990). Chevron Modernization Outlay Put at \$13 Billion. *San Francisco Chronicle*, March 9, 1990, p. C1; Chevron (1992). Chevron's Largest Cogen Plant Comes to Life After Super Start-up. *Dialogue*, 44 (November 1992), p. 1.

<sup>8</sup> Hannan, M.D. (1994). Letter to City of Richmond Festival by the Bay from M.D. Hannan, General Manager, Chevron U.S.A. Products Company Richmond Refinery, January 13, 1994.

The City of Richmond, chosen as the terminus for the Santa Fe Railroad, was incorporated in 1905.<sup>9</sup> The region's transportation networks encouraged many companies to locate in the city, including Standard Oil, which purchased 85 acres along the shoreline for \$15,000 and built the world's second largest refinery in the area in 1902.<sup>10</sup> Standard Oil was followed by Western Pipe and Steel Company shortly thereafter. The residential population of Richmond did not see a substantial increase until World War II, when the Kaiser Permanente Shipyard was transformed into a facility capable of producing one ship per day.<sup>11</sup> The wartime production efforts in Richmond encouraged southern black farmers to migrate to the region. Richmond's population expanded from 23,642 before the war to over 100,000.<sup>12</sup> Following the war, African-Americans remained in the city. By 1990, they accounted for roughly 50% of the population, while Latino and Asian populations encompassed 15 and 8 percent of the city, respectively.<sup>13</sup> The city is divided into roughly 40 neighborhoods, each of which maintains a neighborhood council that functions as an advisory body to the city council and mayor.<sup>14</sup> Of the fourteen neighborhoods located closest to industrial corridors, the population is between 72 and 94% African-American.<sup>15</sup> The comparative location of industry and minority residential neighborhoods encouraged an environmental organization to draft one of the first empirical studies of environmental inequity, entitled *Richmond at Risk*, in 1989.<sup>16</sup>

Despite its contributions to the fiscal health of the city, the presence of one of the most profitable companies in the world was not well-received by all in Richmond. By 1982, Chevron's Richmond refinery was considered the San Francisco Bay area's largest single polluter.<sup>17</sup> This distinction was garnered in a city that played host to a cluster of roughly 350 petrochemical facilities, including the refinery, Chevron Ortho pesticide plant (now General Chemical), Witco Chemical, Airco Industrial Gases, and ICI pesticide plant (formerly Stauffer Chemical).<sup>18</sup> Each of these facilities handled hazardous waste, with Chevron Ortho alone accounting for over 40% of the hazardous waste in Richmond. Despite its efforts to reduce toxic wastewater discharges and air emissions, Chevron remained among the top five emitters of toxic waste in Contra Costa County in the early

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<sup>9</sup> National History Day (2000). A Case Study of War and the Transformation of Communities: Richmond, California. [www.nationalhistoryday.org/03\\_educators/2000/richmond.htm](http://www.nationalhistoryday.org/03_educators/2000/richmond.htm), accessed October 1, 2002.

<sup>10</sup> Diring, E. (1992). Big Industry Under Fire in East Bay: Contra Costa County homeowners live in fear of toxic disaster. *San Francisco Chronicle*, July 6, 1992, p. A1.

<sup>11</sup> Citizens for a Better Environment (1989). *Richmond at Risk: Community Demographics and Toxic Hazards from Industrial Polluters*. Oakland, CA: CBE.

<sup>12</sup> *Ibid.*

<sup>13</sup> Bureau of the Census (1990). Census data for zip code 94801.

<sup>14</sup> City of Richmond (2002). Richmond Active Neighborhood Councils and Groups. [www.kcrt.com/specialfeatures/neighbor/index.html](http://www.kcrt.com/specialfeatures/neighbor/index.html), accessed October 1, 2002.

<sup>15</sup> Reich, P.L. (1992). Greening the ghetto: A theory of environmental race discrimination. *University of Kansas Law Review*, 41: 271.

<sup>16</sup> *Supra* note 11.

<sup>17</sup> Wildermuth, J. (1990). Conservationists Sue to Force US to Set Bay Water Standards: Groups Say State has Failed to Take. *San Francisco Chronicle*, April 18, 1990, p. A4.

<sup>18</sup> Bullard, R. (1993). Anatomy of environmental racism and the environmental justice movement. In R. Bullard (Ed.), *Confronting Environmental Racism: Voices from the Grassroots*. Boston: South End Press.

1990's.<sup>19</sup> In addition to emitting over 300,000 pounds of toxic waste per year, the Chevron refinery experienced numerous accidental releases in the early 1990's. From 1992-1994, the facility averaged 45 "episodes," or accidental releases and spills, per year.<sup>20</sup> These accidents included some high-profile events. Table 1 outlines the episodes and regulatory violations at the Chevron Richmond refinery to receive media attention in the late 1980's and early 1990's:

Table 1. Refinery Episodes and Events to Receive Media Coverage, 1988-1992.

Media Coverage Date	Episode/Event
Sept. 2, 1988	Agrees to pay \$550,000 to settle hazardous waste handling violations from 1986-1988
Apr. 11, 1989	Fire and explosion in hydrogen cracking unit send seven workers to area hospitals
Sept. 27, 1989	Labor Department to fine Chevron \$877,000 for 114 safety violations during April fire
Dec. 28, 1989	Scientists puzzled by deaths of rainbow trout used to test toxicity of 6 million gallons of wastewater daily at refinery
Jan. 29, 1990	Fireball ignites atop 120 foot flare stack at the refinery due to a compressor shutdown
Jan. 31, 1990	Toxic compounds found in mussels near refinery; highest levels of polyaromatic hydrocarbons ever to be found in coastal waters off of the US
Apr. 11, 1990	Two thousand residents mark anniversary of fire that sent asbestos, nickel and other toxics into the air with a lawsuit for physical and property damages
Apr. 15, 1990	Union officials say 70 fires recorded in one unit at the refinery in the past five years, some linked to contract workers
June 21, 1990	Chevron ordered to clean up underground pool of crude oil that has leaked from its refinery
Aug. 2, 1990	AQMD releases list of region's toxic air pollution "hot spots"; Chevron refinery tops list
Oct. 5, 1990	EPA gives refinery three years to reduce emissions of selenium
Nov. 12, 1990	Serious violation of Petroleum Safety Orders affirmed with a \$600 penalty for employee injured in a sulfuric acid spill during the change of rusted flange bolts
Mar. 16, 1991	Will pay \$275,000 fine to OSHA for safety violations at refinery for April 1989 fire
Oct. 31, 1991	Fire sends black clouds over Bay Area, forces evacuation of toll collectors
Dec. 7, 1991	Cleanup crews sweep through Richmond, washing away fine gray dust from refinery; 60 tons of potentially toxic powder sent across 10-square block neighborhood
Dec. 21, 1991	Sulfur dioxide leak causes rotten-egg smell across surrounding neighborhoods; residents demand detailed disaster plans and air quality officials call for intensified monitoring
Jan. 31, 1992	Fumes released from refinery that stop Bay Area Rapid Transit trains
Mar. 13, 1992	Residents plan protest march on refinery to demand compensation for ailments and property damage from Dec. 1991 fire and release
June 24, 1992	Residents told to stay indoors after broken pump at refinery sends oily plume over San Pablo Bay; computer virus incapacitates emergency notification system
Jul. 26, 1992	311 complaints by residents against refinery from 1990-1992; 8 citations
Sept. 10, 1992	Twenty-five residents of Point Richmond sue in small claims court for damages to health from Dec. 1991 fire and release

Source: Lexis-Nexis search, California newspapers, 1988-1992.

Figure 2 provides an historical account of plant violations and fines assessed for violations at the refinery by the Bay Area Air Quality Management District. As the number of violations recorded for the facility rose from three in 1989 to 83 in 1997, the value of fines assessed fell from an average of over \$10,000 to \$400 in the same period. It was at a peak of agency scrutiny, in 1993, when Chevron began to publicly discuss desired modifications for the refinery. These improvements including a project designed to meet the requirements of state and federal "clean fuels" regulations.

<sup>19</sup> *Supra* note 10.

<sup>20</sup> Personal communication, Bay Area Air Quality Management District, July 20, 2001.

The Chevron facility was part of a network of competing refineries located in areas surrounding the East Bay, including Exxon, Tosco, and Pacific Refining.<sup>21</sup>

Shell operated an additional refinery in neighboring Martinez.<sup>22</sup> Chevron was not the first facility to move ahead with plans to comply with the Reformulated Fuel Project (RFP).

Pacific Refining Company and Shell Oil Company advanced plans for the RFP in 1993. These proposed projects gave a regional environmental organization, Citizens for a Better Environment (CBE), significant experience in investigating and commenting on project impacts stemming from the Clean Fuels program. A non-profit environmental advocacy group composed of organizers, scientists, and attorneys, CBE became aware of the nexus between race and environmental quality issues through its research of the Richmond community in the late 1980's. Its scientists analyzed each of the environmental impact reports issued for the RFP, starting with Shell Oil.

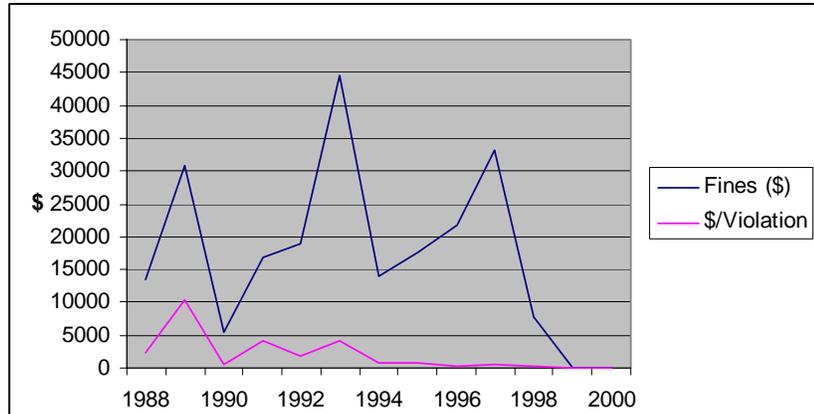


Figure 2. Fines Collected by AQMD for Violations at Chevron Refinery, 1988-2000.

Shell was our first good neighbor agreement and it was fairly easy. Although Shell's got a really bad reputation in Nigeria and I'm sure that they are doing terrible things. But here in Martinez where they have the refinery, they have historically hired from the local community, supported local community organizations and have really positive relationships with the community there, largely. And they came, they agreed to settle this thing I'd say within a month or two. I was really surprised.<sup>23</sup>

CBE found it difficult to mobilize opposition to the project, although it was ultimately successful in encouraging Shell to agree to a set of conditions for its receipt of a construction permit. It relied on a limited group of residents who lived along the fenceline of the facility, as well as citizen groups such as Communities for a Safe Environment.

In the case of Shell, because they have better relations with the community, there are less people who want to take them on. There is a group of folks who live right up next to the fenceline that we work with, and they are understandably concerned about emissions and odors that come out, but it's a much smaller group than say the folks who live next to Tosco, where they have had four

<sup>21</sup> Pelline, J. (1989). Chevron's Richmond Plan May Hurt PG&E. *San Francisco Chronicle*, October 5, 1989, p. B1.

<sup>22</sup> Nolte, C. (1990). Tosco Ordered to Clean Up Leak: East Bay Refinery Admits it has Huge Underground Pool of Crude Oil. *San Francisco Chronicle*, June 21, 1990, p. A6.

<sup>23</sup> Interview of Attorney, Communities for a Better Environment (formerly called Citizens for a Better Environment), June 6, 2002, in Oakland.

fatalities at that plant over the last two years. Huge explosions, workers literally dying and communities getting exposed to all kinds of nasty stuff. So around Tosco, it's easy, around Shell, it's harder, and there are other refineries in between. Chevron's in between.<sup>24</sup>

Communities for a Safe Environment (CSE), a citizen group based in Martinez, brought prior experience with community-corporate negotiation to the dispute with Shell Oil. Their first attempt to secure a good neighbor agreement occurred under conditions that mirrored those in Manchester, TX. As in Manchester, Rhone Poulenc sought to build a commercial industrial incinerator at its Martinez plant, one of five in operation at the time.

They're a sulfur recycling plant. You're really talking about a new use, and you're talking about transporting hazardous materials to be burned in their furnace and that got a lot of people upset. Rhone Poulenc ended up having an explosion. Killed one person, severely injured another. But as a result of that, they made an agreement with the community and the city council that they would not attempt to bring up the issue again of putting the incinerator there. And they also agreed as part of this to a settlement with the community and the city where they would provide a million dollar settlement and of that \$500,000 would be cash and the rest would be in various types of services. A foundation was established as a result of that and money given through that foundation to various groups that applied for grants from there. The other \$500,000 was in-kind donations. Maybe buying computers for the school, doing some work on the marsh for rehabilitation. They changed all the valves that had that potential. What else did they do? I believe there was some relocation because they had to rebuild, there was some relocation of where part of the plant was that blew up. There was also as a result of that, a reformulation of the type of acid that was coming over from Shell. They actually reformulated that so it had a lower explosive point.<sup>25</sup>

The good neighbor agreement with Shell, by contrast, focused almost exclusively on pollution reduction and monitoring capabilities. In a 77-page response to Shell's EIR, CBE outlined the focus of its objections to the project: Its failure to consider alternative approaches that would minimize or eliminate further emissions of volatile organic compounds, selenium, coke dust, and other hazardous materials.<sup>26</sup> CBE advanced several solutions to project impacts, including use of cleaner crude oil, use of bellows valves to reduce fugitive emissions, recycling selenium on-site, reduction of hazardous substances on-site, use of early warning systems, finding an alternative to MTBE (a gasoline additive), use of sensitive infra-red monitoring equipment to identify air pollutants, and hiring a community technical advisor to monitor implementation. After talks with a CBE attorney and CSE, Shell agreed to purchase and sit on \$390,000 worth of air pollution credits from nearby San Jose.<sup>27</sup> They also agreed to install a fence-line monitoring system, the utility of which has been questioned by CSE members.

They had a monitor set up at somebody's house. A single beam stretching across and it was very primitive and there was an argument as to whether that was the best technology and Shell won and the environmental groups lost. For what they were testing for, they said it was the best, because they said that you can't test for certain types of the chemicals crossing it and that a lot of them weren't what you were looking for in the first place. So there would be no point to that. And they were supposed to provide information to the community group and to CBE on an ongoing basis.

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<sup>24</sup> *Ibid.*

<sup>25</sup> Interview of Board Member, Communities for a Safe Environment, June 5, 2002, in Martinez.

<sup>26</sup> Citizens for a Better Environment (1993). Comments on Shell Oil Company Clean Fuels Project DEIR, June 21, 1993.

<sup>27</sup> *Supra* note 25.

And if that happened it didn't happen with the group. If CBE was provided the information, I doubt that they provided much for any extended period of time. Possibly after it was first set up and then it sort of fell by the wayside. As far as I know, the monitor is still there.<sup>28</sup>

The Rhone Poulenc and Shell agreements led to the establishment of community advisory panels, which in the case of Shell was dominated by former Shell employees. Still, Martinez residents and Shell were able to agree to further improvements that were not a part of their good neighbor agreement, including trucking routes and hours of operation and the location of a coke storage unit on Shell's property.

CBE's next intervention occurred in the city of Hercules, where the Pacific Refinery issued a draft EIR for its version of the RFP. The project, according to CBE, represented a major risk to nearby residents, as it called for the construction of a number of refining units previously not in existence at the site: an alkylation complex, an isomerization unit, a fluid catalytic cracking complex, a hydrogen plant, and a sulfuric acid reclamation complex.<sup>29</sup> CBE argued that as these units were put in operation and run in different combinations over the course of three years, a growing threat of accidents would accrue. The new units were to be placed in close proximity to residences. Some of the proposed units had been implicated in major accidents in the Bay Area, including a sulfuric acid reclamation plant model that was responsible for the Rhone Poulenc accident in Martinez and a General Chemical release that sent more than 20,000 people to area hospitals.<sup>30</sup>

A final experience with community-corporate negotiations before the Chevron project occurred between CBE, residents of Crockett, and C&H Sugar Company, which sought to construct a cogeneration unit for the world's second-largest sugar refinery.

So when we started hearing about how they were going to site this powerplant virtually across the street from some of our neighbors, we were appalled. We couldn't believe that it could happen. So I became involved that way more through, I was concerned with I had one child and I was pregnant at the time, and we were concerned about the chemical fallout. We were also concerned about the chemicals that they used in the process because they were using an ammonia and it was going to be in a tank that was gonna be situated right on the curve of the railroad track. There were several items about the powerplant they were proposing that we thought were crazy to be putting so close to a neighborhood of 3200 people... And then as I got into the process I was even more upset. Because it was even more reckless in the way that they were trying to put this thing

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<sup>28</sup> *Supra* note 25. See also J. May (1993). Memorandum to Keith Howard, representing Shell Oil from Julia May, Citizens for a Better Environment, September 9, 1993 ("The remote sensor fence-line monitor pilot project will evaluate either odors, accidental releases, cancer-causing or other toxic ongoing releases, VOC emissions, or some combination of these. A work plan for the pilot project will be provided by Shell to CSE and CBE by March of 1994. The pilot project will be installed by October of 1994. The length of the pilot project will be mutually agreed upon through discussions by Shell, CSE, and CBE. Shell will share the data from this project with CSE and CBE.")

<sup>29</sup> Alkylation is used to produce high octane gasoline from the isobutene formed during catalytic cracking. Alkylation joins compounds using either sulfuric acid or hydrofluoric acid catalysts. When sulfuric acid is used, the sulfuric acid must be regenerated in a sulfuric acid reclamation plant. An isomerization unit is used to alter the arrangement of a molecule without adding or removing anything from the original molecule. Fluid catalytic cracking uses heat, pressure, and catalyst to break larger hydrocarbon molecules into smaller, lighter molecules. It can produce more gasoline with a higher octane than previous methods.

<sup>30</sup> Citizens for a Better Environment (1993). Comments on Draft EIR for Pacific Refinery, September 24, 1993, submitted to Community Development Department, City of Hercules.

up and the return to the community was practically nil. It was for C&H Sugar, and also PG&E liked it, because they were going to be sold the excess power. And the state of CA liked it because it would be what they considered a co-generation plant, and therefore generating cleaner and less expensive energy. We didn't believe it and we proved it time and time again in front of all kinds of people.<sup>31</sup>

After ten years of opposition by the town and a citizen group called the Crockett Power Plant Committee, the applicants agreed to compensate Crockett residents for the effects of the new facility. Compensation came in the form of development of a portion of the Carquinez Strait for public access, various community improvements, and the establishment of a foundation.<sup>32</sup> While the plant was only sited *near* the town of Crockett, the town received a share of the company's property tax payments. An agreement between the companies, Contra Costa County, and Crockett ensured a stream of \$25 million in corporate donations and property taxes would be available to pay for community and public works projects.<sup>33</sup> The Crockett Power Plant Committee secured the agreement after C&H received approval from the state Energy Commission for its building permit in April, 1993. Opposition was dropped as C&H went before the state Lands Commission in July, 1993.<sup>34</sup> CBE would model the improvement package that it submitted to Chevron in part after the C&H Sugar community fund agreement.<sup>35</sup>

*The Problem.* The above interactions between CBE, residents, and industrial companies marked the formative stages of CBE's efforts to negotiate terms of continued operation with each oil refinery in the Bay Area, through a combination of good neighbor agreements and consent orders following litigation. Chevron offered the next proving ground for this model of citizen-driven environmental regulation. On August 11, 1993, a Draft Environmental Impact Report (DEIR) was distributed for public review.<sup>36</sup> The document, prepared by Environmental Science Associates for the City of Richmond, outlined the scope of the proposed Chevron Reformulated Gasoline and FCC Plant Upgrade Project. The project was announced at a moment of heightened scrutiny of petrochemical plants in the Bay Area. In addition to the accidents listed in Table 1, a defining event took place less than two weeks before the DEIR was issued. The General Chemical Company, collocated on the Chevron property, was involved in an accident similar to what was experienced in the Swansea-Elyria communities in North Denver: a safety valve on a railroad car manufactured by GATX Corporation ruptured, sending a cloud of sulfuric acid over parts of Richmond and thirteen other communities.<sup>37</sup> The effects of the accident were felt on a far greater scale than during the incident in Colorado:

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<sup>31</sup> Interview of Member, Shoreline Environmental Alliance, May 31, 2002, via telephone.

<sup>32</sup> Burrell, C. (1993). Crockett Power Gets Panel Approval. *San Francisco Chronicle*, July 30, 1993, p. A22.

<sup>33</sup> *Ibid.*

<sup>34</sup> Bancroft, A. (1993). Crockett Power Plant Approved: Foes say they will Appeal State Energy Commission's Decision. *San Francisco Chronicle*, April 27, 1993, p. A16.

<sup>35</sup> Kay, J. (1993). "Victim" to bill Chevron for Fuels Project: Richmond Requires \$60 Million for City Development. *San Francisco Chronicle*, December 18, 1993, p. A4.

<sup>36</sup> Environmental Science Associates (1993). Chevron Reformulated Gasoline and FCC Plant Upgrade Project, Draft Environmental Impact Report. Prepared for City of Richmond, August, 1993.

<sup>37</sup> Kisliuk, B. (1993). Toxic Cloud Looks Like a Rainmaker. *The Recorder*, July 28, 1993, p. 1; San Francisco Chronicle (1993). Richmond Chemical Spill. *San Francisco Chronicle*, July 27, 1993, p. A8.

the plume extend fifteen miles, sending more than 24,000 to hospitals and clinics.<sup>38</sup> After the accident, a study conducted by Rosemarie Bowler, a professor at San Francisco State University, compared Richmond residents with a control group from East Oakland. Nearly 90 percent of those in the Richmond sample exhibited symptoms of either respiratory or skin-related diseases along with numerous emotional problems. Forty-five percent of the Richmond residents also suffered from post-traumatic stress disorder.<sup>39</sup> The accident led to the formation of the Toxic Cloud Task Force, composed of victims of the release. It raised numerous questions about the adequacy of the region's early warning systems and accident prevention plans. And it encouraged numerous lawsuits by victims and environmental groups.<sup>40</sup>

As AQMD and other agencies' fines against the Chevron refinery and General Chemical peaked, and environmental groups such as CBE honed their skills at extracting concessions from area industries, Richmond began to experience a renaissance of activity that heightened tensions between heavy industry, commercial activities, and residential communities.<sup>41</sup> Traffic congestion in Marin County increased the attractiveness of the city as a bedroom community. The opening of the I-580 connected the I-80, approaching the city from Sacramento, with the Richmond-San Rafael Bridge. The planned Richmond Parkway (Highway 93) offered improved access to North Richmond. High profile companies such as Pixar and United Parcel Service began to locate facilities in Richmond.<sup>42</sup> The city sought to recapture its potential for becoming a vibrant commercial and residential center. Yet its major landowner, Chevron, continued to dominate the landscape. And the city's geography, including vacant lots, boarded up storefronts, numerous rail crossings, and heavy truck traffic, belied attempts at revitalization.

In a County known for having one of the nation's highest mortality rates for various forms of cancer,<sup>43</sup> any proposed facility expansion would likely raise the concerns of multiple constituencies. Chevron's project attracted particularly acute opposition, given the company's record, high-profile events, forced agency responses, and a growing confidence among environmental groups that had worked closely with several of Chevron's competitors. Early good neighbor agreements with Rhone Poulenc, Shell, and C&H Sugar began to accumulate a sense of what should constitute "standard industry

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<sup>38</sup> Rosen, R. (1993). Toxic Racism: Disaster in the Works: The Fight Moves from Saving Wilderness to Saving Low-Income, Minority Communities. *Los Angeles Times*, September 5, 1993, p. M5.

<sup>39</sup> Hallissy, E. (1993). New Study Details Injuries from Spill: Richmond Residents Suffered Stress, Physical Ailments. *San Francisco Chronicle*, December 4, 1993, p. A21.

<sup>40</sup> Kay, J. (1996). Richmond Plant Safety Pact OK'd: General Chemical, Environmentalists Sign Agreement on Safeguards at a New Sulfuric Acid Factory. *San Francisco Examiner*, February 7, 1996, p. A5.

<sup>41</sup> Diring, E. (1992). Big Industry Under Fire in East Bay: Contra Costa Homeowners Live in Fear of Toxic Disaster. *San Francisco Chronicle*, July 6, 1992, p. A1.

<sup>42</sup> Hall, C.T. (1990). Sun Starting to Shine on Richmond. More Firms Calling East Bay City Home. *San Francisco Chronicle*, March 10, 1990, p. B1.

<sup>43</sup> Austin, F., Nelson, V., Swain, B., Johnson, L., Lum, S. and Flessel, P. (1984). Epidemiological study of the incidence of cancer as related to industrial emissions in Contra Costa County, California. *United States Environmental Protection Agency Project Summary*, EPA-600/S1-84-008. Cincinnati: Center for Environmental Research, July, 1984.

practices” for dealing with the concerns of fence-line communities. These practices were evoked almost immediately when the Chevron RFP, one of the largest capital projects in the history of California,<sup>44</sup> was proposed.

From the title of Chevron’s DEIR, it should be clear that the project encompassed more than a response to new state and federal clean fuels regulations. Indeed, Chevron had been discussing plans for a major plant modernization program as early as 1989.<sup>45</sup> The project, slated to cost over \$1 billion, was vaunted as an effort to improve efficiency, cut costs, and widen profit margins.<sup>46</sup> Chevron even took a special charge against its earnings in the fourth quarter of 1989 for future work at the Richmond refinery.<sup>47</sup> Estimated costs of the project ballooned to \$1.3 billion by March 1990, as Chevron was cutting over 800 jobs in the United States alone.<sup>48</sup> The city of Richmond was told that the project would generate 3,500 construction jobs and increase Chevron’s property tax bill from \$14 million to \$32 million.<sup>49</sup> One year later, however, Chevron began to scale back the scope of plant modernization, citing industry uncertainty caused by clean fuels and anticipated pollution regulations.<sup>50</sup> The DEIR submitted for Chevron’s RFP included one of the smaller projects that the company had indicated it would pursue to secure some of the improved yields anticipated through the original modernization concept.<sup>51</sup> An upgrade to the refinery’s fluid catalytic cracking (FCC) unit<sup>52</sup> was proposed along with improvements required to conform with CAA and CARB regulations, in an effort to “improve the reliability and safety as well as to increase the efficiency of the FCC Plant.”<sup>53</sup> The FCC Plant upgrade was not required to produce reformulated gasoline.

Thus, the first concern of local and regional environmental groups centered on the project’s scope. The project contained elements unrelated to the federally-mandated RFP, which were validated in the DEIR by reference to the benefits of the RFP: the use of reformulated gasoline would decrease emissions of carbon monoxide, hydrocarbons, nitrogen oxide, and sulfur oxide within the County.<sup>54</sup> It was further argued that County-wide reductions of these chemicals, which are the precursor emissions to particulate matter (PM10), would offset an *increase* in refinery emissions of PM10 caused by project

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<sup>44</sup> *Supra* note 21.

<sup>45</sup> *Ibid.*

<sup>46</sup> Lee, P. (1989). Pumping Life into Chevron. *Los Angeles Times*, December 4, 1989, p. D1.

<sup>47</sup> Peline, J. (1990). Chevron Loses \$883 Million: Huge Write-Down is Taken. *San Francisco Chronicle*, January 25, 1990, p. C1.

<sup>48</sup> Peline, J. (1990). Chevron Modernization Outlay Put at \$13 Billion. *San Francisco Chronicle*, March 9, 1990, p. C1; Peline, J. (1990). Chevron to Cut Jobs, Sell More Properties. *San Francisco Chronicle*, February 21, 1990, p. C1.

<sup>49</sup> *Ibid.*; Peline, J. (1990). Chevron Refinery Overhaul to Create up to 3,500 jobs. *San Francisco Chronicle*, June 9, 1990, p. B1.

<sup>50</sup> Peline, J. (1991). Chevron Cuts Back Big East Bay Project. *San Francisco Chronicle*, March 8, 1991, p. C1.

<sup>51</sup> *Ibid.*

<sup>52</sup> Catalytic cracking uses heat, pressure, and a catalyst to break larger hydrocarbon molecules into smaller, lighter molecules. It is able to produce more gasoline at a higher octane and with less heavy fuel oils and light gases.

<sup>53</sup> *Supra* note 36, p. I.1.

<sup>54</sup> *Supra* note 36, p. I.16.



neighborhood groups. Table 5 lists the concerns of individuals, expressed in writing or at an Environmental Assessment Panel meeting. These tables exclude the concerns of three organizations that would later negotiate the final terms of project approval with Chevron: The West County Toxics Coalition, People Do!, and Citizens for a Better Environment.

Table 3. Primary Concerns Expressed During EIR Process by Public Agencies.

Agency	Concerns
Bay Area Air Quality Management District	<ul style="list-style-type: none"> <li>• Best available control technology not being applied for certain project components such as pumps and seals</li> <li>• FCC combustion emissions (i.e., NOx emissions calculated at 8247 lbs/day vs. 7900)</li> <li>• Emissions calculations have not been finalized for health risk assessment</li> <li>• Offsets that satisfy permit requirements do not necessarily satisfy CEQA requirements</li> </ul>
State Department of Transportation	<ul style="list-style-type: none"> <li>• Traffic study data is inadequate</li> </ul>
East Bay Municipal Utility District	<ul style="list-style-type: none"> <li>• Project should be designed to maximize water conservation and use of reclaimed wastewater</li> </ul>
East Bay Regional Park District (EBRPD)	<ul style="list-style-type: none"> <li>• Land use discussion should describe the Trails Plan of the EBRPD Master Plan</li> </ul>
San Francisco Bay Conservation and Development Commission (BCDC)	<ul style="list-style-type: none"> <li>• Anchors for wires stabilizing a flare may be constructed in BCDC jurisdiction</li> <li>• Project will contribute additional contaminants to storm water runoff system</li> </ul>
Alameda-Contra Costa Transit District	<ul style="list-style-type: none"> <li>• Recommends a reduction in supply of on-site permanent parking spaces; transit service should be identified in the traffic element of the DEIR; pedestrian access should be established to minimize travel distances for transit patrons</li> </ul>
Contra Costa County Community Development Department	<ul style="list-style-type: none"> <li>• Need more information on impacts on Congestion Management Program roadways</li> <li>• Need more information on impacts to area pedestrian and bicycle circulation</li> <li>• Traffic analysis needed for post-construction impacts</li> </ul>
Contra Costa County Public Works Department	<ul style="list-style-type: none"> <li>• DEIR should designate construction traffic routes that do not impact local streets</li> </ul>
Contra Costa County Flood Control and Water Conservation District	<ul style="list-style-type: none"> <li>• Project may be subject to Department of Fish and Game, Army Corps of Engineers, and National Pollutant Discharge Elimination System</li> </ul>
West Contra Costa County Unified School District	<ul style="list-style-type: none"> <li>• Increased health risks from increased emissions</li> <li>• Increased public safety risk from fires, explosions, or accidental releases</li> <li>• Increased odors, noise, traffic, possibility of accidents involving tanker trucks, and hazardous waste</li> </ul>

Table 4. Primary Concerns Expressed During EIR Process by Organizations.

Organization	Concerns
Richmond Annex Neighborhood Council	<ul style="list-style-type: none"> <li>• Needs corrective mitigation for use of Richmond Annex segment of Carlson Boulevard for project-related truck, tanker, and other heavy vehicles.</li> <li>• Traffic impacts on Richmond surface streets warrant complete discussion and planning</li> </ul>
California Rural Legal Assistance	<ul style="list-style-type: none"> <li>• Chevron plans to dispose of certain hazardous wastes from project in landfills in Kettleman Hills, Buttonwillow, and Anderson</li> <li>• Transporting hazardous wastes and asbestos through Kettleman City and Buttonwillow will significantly impact their environments; these communities should have received public notice</li> </ul>
Point Richmond Neighborhood Council	<ul style="list-style-type: none"> <li>• No assessment of mental health, physical well-being, or quality of life for residents living near refinery</li> <li>• Mitigations should include reduction of pollutants, hazardous emissions, and noise levels; use of state-of-the-art technology; dollar contribution to offset effects on neighbors</li> <li>• Cumulative effects of air toxics in “toxic corridor” from Richmond to Martinez should be studied</li> <li>• Report should list all emissions credits and their source</li> <li>• “Sacrificial pocket” around the refinery cannot be ignored because of promised area-wide air quality improvements</li> <li>• Appropriate baseline criteria for health risk assessment not used</li> <li>• Project’s “distance” from residential areas ignores Point San Pablo Yacht Harbor and recreational areas</li> <li>• Point Richmond neighbors already extremely affected by noise</li> <li>• Chevron should relocate the city and County telecommunications installations onto its property as part of mitigations</li> </ul>
Sierra Club San Francisco Bay Chapter	<ul style="list-style-type: none"> <li>• Are there alternatives to using MTBE and TAME compounds?</li> <li>• Greater use of best available control technologies (such as low leak valves) needed</li> <li>• Need more specific breakdown of increased hydrocarbon emissions from project</li> <li>• Local levels of pollutants will increase in area that is overburdened</li> <li>• Need commitment from Chevron to use of fence-line monitoring of chemicals produced/stored at facility</li> <li>• Increased discharges to San Pablo Bay</li> <li>• What species were observed in area effected by project?</li> <li>• Need an effective Community Alert System</li> </ul>
Southwest Richmond Annex Neighborhood Council and Crimewatch	<ul style="list-style-type: none"> <li>• Scope of area covered regarding traffic flow and impacts is too small</li> <li>• Many items under Public Services are really Emergency Services that will see increased demand</li> <li>• No mention of impacts from transporting waste materials</li> <li>• Railcar transportation estimates are flawed</li> <li>• Hazardous waste transport by rail along I-580 through Southwest Richmond Annex increases potential spills and evacuation needs</li> <li>• Recent General Chemical incident suggests that certain presumptions as to wind direction, chemical concentrations, and effects of an incident are wrong</li> <li>• Richmond Fire Department staffing is inadequate</li> <li>• Recent General Chemical incident suggests that County Community Notification Network is flawed</li> <li>• Project will result in new sources of light and glare</li> </ul>

Table 5. Primary Concerns Expressed During EIR Process by Hearing Attendants and Individuals.

Individual	Concerns
William Collins, Environmental Association	<ul style="list-style-type: none"> <li>Better technology needed to address safety</li> </ul>
Steven Friedman, Environmental Health Network	<ul style="list-style-type: none"> <li>Against the project and reformulated gasoline; He had a central nervous system reaction to oxygenated fuels; oxygenates have an affect on the olfactory system</li> </ul>
Richard Katz, Point Richmond Neighborhood	<ul style="list-style-type: none"> <li>Astonished that projected emissions would be so high</li> </ul>
Robert Coleman, North Richmond	<ul style="list-style-type: none"> <li>CFC's need to be recycled completely; facility goes into "overproduction" at night, needs to be inspected at night; should learn lessons from the General Chemical release</li> </ul>
Robert Carlson, Toxic Cloud Task Force	<ul style="list-style-type: none"> <li>Many of the emissions come from burning natural gas for energy; solar panels could be used for at least the first 100 degrees</li> </ul>
Michele Jackson, Neighborhood House of North Richmond	<ul style="list-style-type: none"> <li>Project is an opportunity to develop a partnership in jobs and an evacuation plan; Chevron has consistently provided resources to the community</li> </ul>
Kwasi Harris, Richmond	<ul style="list-style-type: none"> <li>Opposed to the project; local impacts for regional benefits; lower life expectancy for African-Americans due to heavy industry</li> </ul>
Greg Freere, Contra Costa Building Trades Council	<ul style="list-style-type: none"> <li>Project will result in significant number of jobs; need a community outreach program; labor is available to facilitate discussions between environmentalists and Chevron</li> </ul>
Sharon Sims, Richmond	<ul style="list-style-type: none"> <li>Concerned with increased long-term risk to the community; need a community inspector; property values will suffer</li> </ul>
Judy Morgan, Richmond Chamber of Commerce	<ul style="list-style-type: none"> <li>Four ways in which Chevron supports the community: supports local and small businesses, supplies lists to contractors, sends purchasing agents to Chamber events, and participates in community programs</li> </ul>
Dennis Spaniol, Council of Industries	<ul style="list-style-type: none"> <li>A lot of building trades out of work and this project will give them work; half of Council membership works at Refinery</li> </ul>
Ron Deziel, Richmond Annex Neighborhood Council	<ul style="list-style-type: none"> <li>Traffic increases on Carlson Blvd. near Annex not addressed</li> </ul>
Jeffrey Dodge, Oil, Chemical, and Atomic Workers	<ul style="list-style-type: none"> <li>Most impacts less than significant</li> </ul>
Jay Vincent, Richmond	<ul style="list-style-type: none"> <li>Project should provide monitoring stations along the fenceline with wind detection as an early warning system; need a more aggressive attitude toward development of an emergency system</li> </ul>
Sara Eeles, Point Richmond Neighborhood Council	<ul style="list-style-type: none"> <li>Health study needed for those already affected by contaminants or those who are sensitive receptors</li> </ul>
Margaret Hollingsworth	<ul style="list-style-type: none"> <li>Richmond already has 400 per million excess cancer cases – how can any increase in carcinogenic pollutants be less than significant; City does not require industries to carry catastrophic insurance policies; inspection is inadequate; emergency response network is inadequate; how does the City decide of impacts constitute acceptable risks; what would be an adequate buffer zone; what are transportation routes for hazardous substances; will project increase the chance of accidents; do ratings of hazardous waste storage, transport, handling, and disposal, and the effects of pollutants on the public take into account cumulative and synergistic effects; given 67% chance of magnitude 7 earthquake, how can the City approve the project; who will monitor noise levels</li> </ul>

While a broad array of concerns encouraged individuals, representatives of neighborhood councils, and citizen groups to question various aspects of the project, systematic opposition to the RFP was mobilized by the coalition of three environmental organizations mentioned above. The West County Toxics Coalition is a local, member-driven environmental justice organization established in 1980 over concerns stemming from the Chevron refinery and other industrial land uses.<sup>56</sup> Members hail from the City of Richmond, while the organization serves Richmond and the adjacent cities of San Pablo and El Cerrito. Henry Clark, himself born and raised in North Richmond, formed the organization as a complement to the predominantly social service groups operating in the neighborhood. WCTC was founded as an environmental organization, specifically focused on the unique concerns of environmental justice communities. Having heard about the permit process, Clark contacted his allies, CBE and People Do! People Do! was composed of residents of Point Richmond, a white, middle-class neighborhood that constituted one of the four most proximate communities to the Chevron refinery. People Do! described itself as a “community coalition dedicated to working with Chevron to achieve an equitable share of public improvements and adverse impact mitigations for the continued operation and upgrading of the Chevron Refinery.”<sup>57</sup> Its president, Tom Butt, was the first to accuse Chevron of “piecemealing” its modernization efforts – seeking approval of small segments of the originally intended project – in order to avoid an evaluation of the cumulative impact of plant changes.<sup>58</sup> The two groups joined CBE in offering extensive commentary on the DEIR and working with various neighborhood councils to incorporate their interests into a “Community/Environment Improvement Package,” proposed to Chevron and then the Richmond Planning Commission. CBE’s lead community organizer for the project describes the organizing process:

The process started with making all of the neighborhood councils and existing groups that we thought might be interested aware of this project coming through and the opportunity for a good neighbor agreement. There were a bunch of meetings with those groups to get them involved including the Chevron Community Advisory Panel, and then those groups participated in these meetings with Chevron to understand the project better and give them our ideas of what they needed to do to make the project acceptable. These are meetings between the groups and the company. There were public meetings as the outreach started, to the neighborhood councils, saying this is happening, this is what Chevron is proposing, these groups are joining together to negotiate with Chevron to try and improve the project, we want to be involved, here’s how you can be involved, and again you tend to get a self-selected group out of that. Who represents their neighborhood council, their CAP, their organization, that becomes part of essentially like a steering committee and you proceed with the company. Generally [the companies] will make some changes. I think in Chevron’s case there were little or none that they agreed to.<sup>59</sup>

Organization representatives differed slightly in their depiction of the extent of community-corporate interaction before the hearing process began. Yet it is clear that discussions with Chevron did not yield concessions. CBE, WCTC, and People Do! were left to meet with members of the Richmond Planning Commission, charged with

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<sup>56</sup> Interview of Member, West County Toxics Coalition, June 5, 2002, in Richmond.

<sup>57</sup> People Do! (1993). Response to the Draft Environmental Impact Report for the Chevron Reformulated Gasoline and FCC Upgrade Project. September 23, 1993.

<sup>58</sup> Ibid, p. 7.

<sup>59</sup> Interview of former Organizer, Communities for a Better Environment (formerly Citizens for a Better Environment), June 4, 2002, in Point Richmond.

approving a conditional use permit for the project. A letter from these organizations to the General Manager of the refinery on November 29, 1993 expresses their frustration with the extent to which their concerns had been considered.<sup>60</sup> The groups cancelled a scheduled meeting with Chevron and requested a written response to their demands, which focused on community development, accident prevention, air and water pollution prevention, and improved environmental assessment and monitoring. No further communications occurred.

Before we consider the permitting process which led to an agreement between environmental groups and Chevron, let us contrast the concerns of these organizations with those expressed during the DEIR public comment period. This will give us a sense of the extent to which broader interests of Richmond stakeholders were incorporated into the Improvement Package, Commission and Council decisions, and a Memorandum of Understanding signed between Chevron, CBE, WCTC, and People Do! at the final stage of the permitting process. Agencies that commented on the project expressed relatively isolated concerns linked to organizational mandates and limited jurisdictions. These included an array of traffic and transit issues as well as land use considerations. Only the Air Quality Management District and West Contra Costa County School District raised specific concerns regarding the project's potential to increase emissions, with the former concentrating on the DEIR's failure to adequately consider best available control technologies (BACT). By contrast, organizations, including neighborhood councils and regional environmental groups, broadened the scope of environmental impacts that they considered important and inadequately addressed. Traffic and other nuisance concerns predominated in some councils, while others joined environmental groups in characterizing the project's disproportionate impacts on a "sacrificial pocket" of residents near the site.<sup>61</sup> The inadequacies of public services, including police, fire, and emergency response capabilities, were also priorities of commenting organizations. Individuals who commented on the DEIR offered a better cross-section of the city that would be mobilized by both sides for subsequent commission and council hearings. Here, we get the first sense of outright opposition to the project, in addition to accounts of residents' experience with the facility (e.g., "overproduction at night"). A number of individuals represented organizations with an interest in the construction and permanent jobs promised by the project. Finally, several North Richmond social service organizations spoke in favor of the project. The Neighborhood House, for instance, characterized the project as "an opportunity to develop a partnership" with the company.<sup>62</sup>

By contrast, the three major environmental groups offered lengthy, extremely detailed responses to the DEIR, outlining their rationale for specific mitigations to refinery equipment and processes (CBE/WCTC) and for general and site planning considerations to improve public access, scenic routes, conservation, transportation, and recreation

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<sup>60</sup> Leedie, M., Clark, H., Eels, S., & Butt, T. (1993). Letter to Michael Hannan, General Manager, Chevron USA, Inc. from Michael Leedie, West County Toxics Coalition and CBE, Henry Clark, West County Toxics Coalition, Sarah Eels, Chevron CAP, and Tom Butt, People Do!, November 29, 1993.

<sup>61</sup> Eeles, S. (1993). Comments – Chevron Reformulated Gasoline and FCC Plant Upgrade Project. Submitted to Jim Farah, Director, Planning Department, City of Richmond, September 27, 1993.

<sup>62</sup> *Supra* note 55.

opportunities (People Do!). CBE/WCTC provided an account of “significant impacts omitted from or underestimated in the current DEIR.”<sup>63</sup> These included:

- The assumption that crude oil high in selenium and sulfur will not be used in the future, when no such commitment has been made
- An improper characterization of the site’s accident history, rendering the DEIR’s depiction of the project’s “environmental setting” inaccurate
- An underestimation of existing health risks posed by the presence of other hazardous facilities in the area, which constitute a “toxic soup” in the city
- A portrayal of baseline emissions at the existing facility that resulted in an underestimation of the impacts of the proposed project
- An inaccurate assumption that a CO boiler will be in place to reduce emissions when Chevron planned to remove the boiler from the site
- Failure to propose mitigation measures that would reduce an expected increase in VOC and NOx emissions, each by over 150 tons per year
- Failure to consider the impacts of toxic air emissions by considering the project’s impacts together with other sources of emissions in the area
- Failure to account for emissions resulting from the refinery’s increased production levels
- Failure to consider the true scope of impacts on water quality in the Bay, particularly through selenium discharges
- An underestimation of the risk of accidents
- Failure to consider the effects of the project on urban deterioration in the city (decreased property values, residential flight, and decreased quality of life)
- Lack of an adequate mitigation monitoring program to ensure that mitigations are properly implemented

In response to these deficiencies in the DEIR, CBE/WCTC proposed a series of mitigation measures for the proposed project:

- The use of bellows valves in both the proposed project and the existing refinery would mitigate VOC emissions increases from the new project. Low-leakage bellows valves, hermetically-sealed control valves, and relief valves vented to a gas recovery system are all feasible technologies in use at area facilities such as Shell Oil in Martinez. Bellows valves are particularly useful in reducing fugitive emissions
- Control technology such as those listed above will reduce or prevent flaring, and the visual, noise, and emission impacts of the practice
- Replacement of perchloroethylene with hydrogen chloride to avoid the risk of phosgene (nerve gas) formation in the event of a fire
- Revised methodology for risk of upset calculations is needed
- Creation of a community development fund, a job training program, a guarantee for construction jobs, and an environmental fund to improve Richmond’s environment would mitigate the urban degradation experienced due to the proposed project
- A mitigation monitoring program that includes a community technical advisor and fence-line monitoring (remote sensors using infrared or laser technologies to measure refinery emissions including VOC’s)
- WCTC added a separate list of mitigations, including use of best available control technology, long-term health assessment, increased recycling and reuse of materials, a community alert

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<sup>63</sup> Citizens for a Better Environment (1993). Chevron Reformulated Gasoline and FCC Plant Upgrade Project – Comments on Draft EIR. Submitted to James Farrah, Planning Director, Richmond Planning Department, September 27, 1993; *See also* West County Toxics Coalition (1993). Chevron Reformulated Fuels and FCC Plant Upgrade Project Draft EIR Written Public Comments. Submitted to Jim Farrah, Planning Director, City of Richmond, September 24, 1993.

network including sirens and public education, a community development fund, and upgraded evacuation plans.

People Do! focused on the power of the city of Richmond to impose conditions on the project beyond what would be allowed under the California Environmental Policy Act. The first such power was the ability to issue a conditional use permit (CUP). The Chevron refinery required a CUP because its use was considered one of the uses “which may be obnoxious or offensive by reason of emission of odor, dust, smoke, gas, noise, vibration, and the like.”<sup>64</sup> The Planning Commission has the power to

Impose such conditions, including but not limited to, a time limitation on the effectiveness of the use permit, as it deems necessary to protect the best interests of the neighborhood property or neighborhood and to carry out the purposes of the Zoning Ordinance and the Richmond General Plan.<sup>65</sup>

The interests of Point Richmond, the Iron Triangle, and North Richmond are evoked as those most directly tied to the conditions that People Do! asked the city to levy on the proposed project. In addition, People Do! suggested that the project would have to undergo a Site Development Review, the purpose of which is to

Promote orderly, attractive, and harmonious development, recognize environmental limitations on development, stabilize land values and investments, and promote the general welfare by preventing establishment of uses or erection of structures having qualities which would not meet the specific intent clauses or performance standards of this Chapter or which are not properly related to their sites, surroundings, traffic circulation, or their environmental setting.<sup>66</sup>

People Do! proceeded to link general categories of the Richmond General Plan and Shoreline Conservation and Development Strategy with proposals for improved:

**Public Access:** Focused on developing the recreation potential of Point Molate beach, improving a series of shoreline parks and scenic routes, requiring public access to regional trails and the Bay.

**Public Use Facilities:** Focused on the need to acquire, develop, and manage trails, fishing sites, beaches, parks, viewpoints, and public recreation areas.

**Scenic Routes, Appearances, and Views:** Focused on the Scenic Routes element of the General Plan and its policies toward maintaining rights-of-way and coordinating improvements of scenic routes, with specific proposals for the coastline near the refinery.

**Shoreline and Wildlife Conservation:** Focused on how the enforcement of existing ordinances and conditions of approval for refinery expansion could encourage wildlife preservation, weed abatement, landscaping and vegetation to improve the appearance of the area, and hillside conservation strategies to mitigate the appearance of hillside tank farms.

**Transportation:** Focused on recreational corridors, bikeways, trails, and the encouragement of alternative ways for the public to reach the shoreline.

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<sup>64</sup> RMC 15.04.140.A.39h.

<sup>65</sup> RMC 15.04.190.C.5.

<sup>66</sup> RMC 15.04.205.A.

Recreation: Focused on the above access issues as well as the establishment of shoreline sites or piers for public fishing.

In general, People Do!'s proposals were aimed at improving appearance, access, and use issues for the peninsula on which the refinery was located and surrounding areas. A pictorial account of Chevron's property and its effects on its vicinity depicts "no trespassing" signage, piping in need of concealment, enforcement problems (particularly as they related to shoreline access), overhead power lines, and other nuisances in need of abatement.

The interests expressed by CBE/WCTC and People Do!, including reduced emissions and improved appearance and access, factored heavily into two versions of a Community/Environment Improvement Package that were used to frame discussions with Chevron (Fall, 1993), presented to Richmond's Environmental Assessment Panel (December 8, 1993), and then rewritten and submitted to the Planning Commission (proposal 2).<sup>67</sup> Here, we find the first evidence of a push to commit Chevron to a community development fund, modeled after Crockett's settlement with C&H Sugar. The idea of a fund also came from California statutes, which permitted cities and counties to levy up to a 10% tax on gross receipts of hazardous waste facilities.<sup>68</sup> Below is a comparison of the proposals, which received the support of the Toxic Cloud Task Force, the Richmond Neighborhood Coordinating Council, a majority of the Chevron Community Advisory Panel, the Point Richmond Neighborhood Council, and the May Valley Neighborhood Council, in addition to the above three organizations.

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<sup>67</sup> West County Toxics Coalition, Citizens for a Better Environment, & People Do! (1993). Media Release: Richmond Neighborhood Coordinating Council Unanimously Endorses Grassroots Effort to Clean-up Chevron Fuels Project. December 7, 1993 (proposal 1); Citizens for a Better Environment (1993). Additional Conditions of Approval, Final Draft, December 15, 1993 (proposal 2).

<sup>68</sup> Kirk, M.A. & Wade, C.L. (1997). A taxing problem for environmental justice: The tax money from Hazardous Waste Facilities. *Stanford Environmental Law Journal*, 16: 201-255. In California, general law cities or counties are able to levy up to a 10% tax on the gross receipts of hazardous waste facilities. The first tax, effective since 1981, allows a city or County to impose a license tax of not more than 10% on a Class I hazardous waste incinerator. The second, effective since 1986, authorizes cities and counties to levy a tax on offsite, multiuser hazardous waste facilities.

Table 6. Comparison of Proposed Conditions of Approval Submitted by Coalition.

	Proposal 1	Proposal 2
Community Development	Independently managed community development foundation; clinic to serve residents of North Richmond and to conduct long-term health assessment of fenceline communities; physical cleanup, landscaping program, and tree planting program including Point San Pablo, Castro Street Corridor, Gertrude Avenue and the tank farms; relocate telecommunications complex on Nicholl Knob Hill to Chevron	Design and fund clean-up program for open space, shoreline, and roadways surrounding refinery which will conform to applicable abatement and nuisance ordinances; fund a community foundation independently managed by residents and limited to public safety, educational, health, and economic programs; yearly contribution to equal 9% of construction cost divided by 30 years; relocate telecommunications facility from Nicholl Knob provided the city would pay market value
Accident Prevention	Ensure that all relief valves vent to containment; install sirens to notify residents and fund public education for disaster notification; eliminate the threat of phosgene formation; re-evaluate accident potential from the project to account for serious past releases	Vent all relief valves to containment to prevent releases; eliminate the threat of phosgene gas
Air Pollution Prevention	Eliminate 150 ton per year increase in VOC's by using bellows valves, hermetically sealed control valves, and other means; correct baselines used to calculate air emissions; publish a schedule of voluntary emissions reductions; eliminate routine flaring; identify clean alternative energy sources	Correct baselines used to compute air emissions; implement all available means throughout the refinery to achieve no net increase in emissions; eliminate routine flaring; commit to no net increase in air emissions if a different crude is processed in the future; study of clean alternative energy sources
Assessment and Project Monitoring	Conduct a study of cumulative impacts; establish a mitigation monitoring program in consultation with surrounding communities; install a remote sensing fenceline monitor; fund a technical advisor from the community; evaluate the impacts of different crudes on emissions; correct the EIR to address all analytical errors	Install a fenceline remote sensing monitor prior to project completion; make data available to public;
Water Pollution	Commit to no increase in selenium discharges to the Bay	Commit to no net increase in waterborne emissions if a different crude is processed

*Permit Approval.* A flurry of activity preceded the Richmond Planning Commission's hearing on the RFP on December 16, 1993. The coalition of environmental and civic organizations submitted proposal 2 to the Commission, which came as a surprise to the city's planning staff:

The company had applied for a conditional use permit and they went before the Planning Commission in December 1993 and we were having a public hearing. I had been doing planning for maybe 25 years at that point. So nothing shocked me anymore. But this came out for the Commission proposed by someone in the audience, it was maybe 10-15 pages long, for a community development program that was going to cost 85 million dollars. And my jaw dropped at the time. I was speechless. So we tried to argue with the Commission, you can't adopt that because there is no nexus.<sup>69</sup>

<sup>69</sup> Interview of former Planning Director, City of Richmond, June 5, 2002, in Richmond.

In fact, no fewer than six proposals and agreements were exchanged between Chevron, the Commission, the Fire Department, and the coalition on the day of the CUP hearing. The refinery reached agreement with the Fire Department to address training and equipment that the project would require.<sup>70</sup> Chevron provided legal arguments to the city as to Richmond's compliance with CEQA, which had been called into question by CBE.<sup>71</sup> An Alliance Agreement was reached between Chevron and the city to give priority for materials purchasing for local and minority owned businesses.<sup>72</sup> The company responded to allegations of increased hydrocarbon emissions by citing previous emissions reductions banked with the AQMD and proposing to add a condition to the CUP offering additional voluntary reductions.<sup>73</sup> Most importantly, Chevron responded to proposal 1, which the coalition had presented at the Environmental Assessment Panel.

A look at Chevron's response to the coalition's demands as well as the city planning staff's report on the project and its proposed mitigations suggests that the company made numerous concessions (or reaffirmations of steps that were already underway) before the hearing. Here are a few of those concessions:

Chevron will agree, as outlined in the City staff's proposed additional condition II.1 for the CUP, to keep abreast of progress made in the remote sensor fenceline pilot project which will be undertaken at the Shell Martinez Refinery. If something successful is developed, we will adapt it to the Richmond Refinery.

Chevron is a member of the Contra Costa County Community Notification Committee. The committee has recommended, and the County Board of Supervisors has approved, a phased program for installation of a County-wide emergency notification system which includes installation of sirens. Chevron will fund its fair share of the cost of implementing the plan for community notification.

[Planning] staff has recommended that we be required to landscape several different areas within the Refinery and along the refinery perimeter. The perimeter landscaping will serve to screen views of refinery equipment from public view... We agree to do this landscaping as recommended by City Staff as conditions for CUP approval.

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<sup>70</sup> Chevron Richmond Refinery Plant Protection (1993). Fax to John Walker, Richmond Fire Department, Re: Agreement, December 16, 1993.

<sup>71</sup> Buskirk, R.E. (1993). Letter to Malcolm Hunter, Esq., from R.E. Buskirk, Re: Chevron Richmond Refinery Reformulated Gasoline and FCC Plant Upgrade Project, December 16, 1993.

<sup>72</sup> Williams, P.S. (1993). Letter to Planning Commission, City of Richmond from P.S. Williams, Manager, Environment and Safety, Chevron, December 16, 1993.

<sup>73</sup> Hannan, M.D. (1993). Letter to Jim Farah, Planning Director, City of Richmond, from M.D. Hannan, General Manager, Chevron U.S.A. Products Company Richmond Refinery, December 16, 1993. Chevron's proposed efforts to reduce emissions included a commitment to take "one or more of the following actions": a. Limit FCC Unit Combustion hydrocarbon emissions to their current level by designing and operating combustion equipment in the modernized FCC Unit to provide operating conditions such as temperature and residence time to maximize thermal destruction of hydrocarbons; b. Permanently shut down and surrender the operating permits for any refinery facilities which were included in the EIR 1992 Inventory and for which the resulting emission reductions have not previously been banked with AQMD; c. Retrofit tanks built prior to 1979 with low emission fittings; and d. Reduce fugitive hydrocarbon emissions from certain tanks, valves, pumps, and/or compressors to a level below that required by current regulations. A combination of the above measures, it was claimed, would reduce the project's net hydrocarbon emission increase from 830 lbs/day to zero or less prior to project startup.

There has been much debate about the City's authority to require mitigations from within the existing refinery. The debate has principally focused on demands to mitigate the 150 tons per year (or 830 lbs/day as stated in the EIR) hydrocarbon emissions increase due to the project. To eliminate community concern on this matter, even though we agree that mitigations outside the project are not within the City's jurisdiction for this project permit, Chevron has shown good faith to the City and community and voluntarily agreed to fully mitigate the 150 tons per year hydrocarbon emissions increase before project start-up.<sup>74</sup>

The RFG project itself will be mitigated to the maximum extent feasible by application of best available control technology by the Bay Area Air Quality Management District and other measures (such as bellows valves) imposed on the project by the city. Staff Report, Attach. A, pp. 3-4.<sup>75</sup>

Some of these concessions were presented to planning staff in the form of language for changes to the Planning Department's proposed Conditions of CUP Approval and Mitigation Monitoring Program.<sup>76</sup> Taken collectively, Chevron's concessions and the wide-ranging mitigation measures proposed by planning staff were responsive to many of the demands made by citizens and organizations throughout the EIR process. Examples include landscaping the tank farm area and Castro Street, improvements to Point San Pablo, contributions to the city's Urban Forest Management Program, experimentation with fence-line monitoring, job creation, installation of a community alert system, use of best available control technology, traffic reductions, prohibited use of Carlson Boulevard by construction traffic, dust abatement for fugitive dust emissions, truck coverage, minimized exhaust emissions, and the reduction of hydrocarbon emissions through a variety of measures.<sup>77</sup> Still, the planning staff rejected important elements of the coalition's demands (found in proposal 1), on the basis of the need for a "nexus" between conditions of approval and the project's impacts. This argument was based on the case of *Nollan v. California Coastal Commission*, which established the following analysis for determining the reasonableness of a permit condition:

1. Is the purpose of the regulatory/conditioning action a "legitimate government purpose?" and
2. Do the means used to achieve the objective "substantially advance" the intended purpose?
  - a. Does the type of condition imposed address the same type of impact caused by the development?
  - b. Is the condition reasonable and fair relative to the burden created by the development?<sup>78</sup>

Regardless of whether the project contributed a disproportionate burden to the residents of North Richmond, the city argued that it was not allowed to impose conditions that would shift public benefits to those who could only "speculatively" benefit from them. Thus, conditions such as the community development fund, improvements to areas not impacted by project elements, or relocation of electronic facilities unrelated to the project

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<sup>74</sup> *Supra* note 72.

<sup>75</sup> *Supra* note 71.

<sup>76</sup> Boertz, M. (1993). Fax to N. Kaufman, Richmond Planning Department from M. Boertz, Chevron Richmond Refinery, December 16, 1993.

<sup>77</sup> Richmond Planning Department (1993). Staff Report to Richmond Planning Commission, Re: Conditional Use Permit Application CU 93-40. December 16, 1993.

<sup>78</sup> *Nollan v. California Coastal Commission*, 483 U.S. 825 (1987).

from Nicholl Knob were not offered by staff. In addition, it was not clear to staff how a community inspector could be chosen and the Department assured of their qualifications vis-à-vis the areas of expertise required to deal with a complex refinery. That condition was also excluded from the planning staff's recommendations.

By the time the Planning Commission hearing was held on December 16, 1993, it was clear that the planning staff had addressed a broad range of concerns for the RFP. It was also apparent that the most vocal members of the opposition, including CBE, WCTC, and People Do!, had succeeded in encouraging Chevron to make several important concessions, some of which they were in the process of making prior to the issuance of the coalition's first proposal. The hearing marked another opportunity for give and take between the applicant and the permitting body, which occurred after 19 people spoke in favor of the project and 20 spoke in favor with additional conditions. Proponents included local businesses with good relationships with Chevron, social service organizations reliant on the company for donations, equipment, and expertise, and union representatives satisfied with the mitigations or interested in jobs that the project would create. Those in favor with additional conditions, led by Henry Clark of WCTC, reiterated the ten point program (proposal 2) that had been sent to the Commission that day. They also placed the proposed community development fund in the broader context of Chevron's County-wide annual giving. More importantly, they evoked linkages between local increases in air pollution and the conditions of urban blight. These connections, in addition to case law established after *Nollan*, were used to argue for a nexus between the community development fund and the proposed project. It was also suggested that the fund would help the city avoid the appearance of adopting only mitigations that promised to add to the general fund (such as tree planting and other public works efforts). The second group of speakers had no knowledge of the new measures proposed by Chevron to reduce hydrocarbon emissions or attempt fence-line monitoring, issued that day as well.

A final exchange between planning commissioners and the applicant was used to refine the mitigations proposed in the planning staff report.<sup>79</sup> Commissioner Edwards asked the applicant if Chevron was willing to meet with opponents again. The refinery's environment and safety manager responded by stating that numerous meetings had led to the concessions under consideration. The commissioners proceeded to question the manager on the coalition's ten point program and the extent to which the refinery "could live with" each point. The primary point of contention concerned whether Chevron could meet its proposed emissions reductions, which Chevron staff claimed was a task for the city's mitigation verification plan as well as AQMD monitoring staff. Pete Williams, representing Chevron, explained the efforts underway for topics addressed by most of the ten points, evidencing particular opposition to the community development fund and coalition efforts to hold the refinery to "no net increases" in emissions, regardless of crude oil type used at the facility.

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<sup>79</sup> City of Richmond (1993). Conditional Use Permit Application CU 93-40 CPC Meeting of December 16, 1993 Proceedings. Prepared by Deborah Neville, CSR No. 9703.

It was clear from commissioner responses that several disagreed with the planning staff's interpretation of the nexus between some of the coalition's proposals and the project. One commissioner argued:

Much of the community fund decision is obviously an idea that is very dear to the citizens' hearts. And I think that to say that a project of this magnitude does not affect the community around it, I can't agree with that. I can understand the legal argument, but I can't agree with it. I can also understand and agree with the legal argument which in fact calls for a direct relationship between the two. I could suggest to my other commissioners on the board that perhaps 9 percent is an onerous figure, that it might be reduced to five percent. That would be 30 million dollars at a million dollars a year. Although I know that Chevron would – may not want to involve itself in that kind of funding, I would suggest to Chevron that perhaps it would be in their best interest to consider it for the community who has been with you and by you and supported you for the past 80 years and will do so for the next 30 to 50 years. That it might be something that you might want to acquiesce.<sup>80</sup>

A motion was made several minutes after public testimony ended. It called for approval of the staff report along with additional conditions, which constituted all of the coalition's demands (proposal 2) with the exception of site relocation of the telecommunications facility from Nicholl Knob. Commissioners were in agreement that it would be most difficult to establish a nexus argument for that provision. A provision relating to job training for Richmond residents taking jobs at the facility was added. While some of the commissioners believed that the community development fund and the proposed study of clean alternative energy sources also failed the nexus test, the motion passed by a vote of 6-3 and the CUP was approved.<sup>81</sup>

The refinery appealed the Commission's decision to the City Council. The appeal called for modification of the CUP by deleting "unlawful, arbitrary, and capricious" conditions added with "no substantial evidence" that they would mitigate elements of the RFP project<sup>82</sup>:

- Independent expert chosen by Chevron's community advisory panel
- CAP consents to the selection of an independent consulting firm that will prepare periodic reports of Chevron's compliance with the CUP
- \$50,000 per year contribution to city's Urban Forest Program
- Use of a different baseline to compute air emissions
- Use of "all available means throughout the refinery" to achieve no net increase in emissions
- Elimination of routine flaring and utilization of the quietest flare system available to reduce noise from flaring
- Installation of fenceline remote laser or infrared monitoring system for detection of chemical releases (Chevron argued that this system was not yet in existence for application at the refinery and reiterated its intentions to pursue a system "adequately tied to the developing nature of the technology")
- Achievement of "no net increase" in air or waterborne emissions should different types of crude be used at the refinery

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<sup>80</sup> *Ibid*, p. 130.

<sup>81</sup> Kaufman, N. (1993). Memorandum to Mayor Corbin and Members of the City Council, Re: Conditional Use Permit for the Chevron Refinery Reformulated Gasoline and FCC Plant Upgrade Project, December 23, 1993.

<sup>82</sup> Chevron U.S.A. Products Co. (1993). Conditional Use Permit Appeal, December 27, 1993.

- All relief valves in the refinery vent to containment
- Development of a fund for cleanup of open space, shoreline, and roadways surrounding the refinery complex
- Annual contribution based on 9% of annual construction costs to a community foundation independently managed by residents for general educational, health, economic and public safety programs
- Refinery-wide study of clean alternative energy sources and a study of technical and economic feasibility of future voluntary emission reductions

Intense lobbying of the City Council ensued. The Chevron community advisory panel, which had endorsed proposal 1 by majority vote, agreed to unanimously back proposal 2 and urged Chevron and the Council to “recognize the full impact of the project on business, schools, housing, property values, health, and overall quality of life.”<sup>83</sup> Subsequent correspondence suggests that it was at this point that the Mitigation Task Force began to operate independent of the broad array of citizen and environmental groups involved at various points of the permitting process. Below is a summary of the activities of major stakeholders prior to the City Council meeting:

**Mitigation Task Force (People Do!, WCTC, CBE):** Reaffirmed the coalition’s backing of the actions of the Planning Commission; requested a continuance of the public hearing for 45 days to allow additional study and review of Planning Commission’s approval of additional conditions; requested that planning staff carry out additional research to support the additional conditions by the Commission; asked the City Council to adopt a resolution encouraging Chevron and the coalition to “enter into negotiations to find a mutually acceptable resolution which will avoid a confrontational vote by the City Council and the virtually certain prolonged litigation that would follow such a vote; prepared a detailed response to the Chevron appeal arguing for a rational nexus between the CUP conditions and the RFP;<sup>84</sup> mobilized residents and neighborhood council representatives in order to lobby City Council members;<sup>85</sup> promoted a common understanding of the links between the Commission-accepted community foundation and conditions in North Richmond;<sup>86</sup> and answered Chevron’s legal arguments against the Commission’s decision in letters to the City Attorney.<sup>87</sup>

<sup>83</sup> Chevron Community Advisory Panel (1993). Letter to Mike Hannan, General Manager, Richmond Refinery from The Community Advisory Panel, December 30, 1993.

<sup>84</sup> Butt, T. (1994). Letter from Mitigation Task Force to Mayor Corbin and Members of the City Council, January 19, 1994; Butt, T. (1994). Response to Chevron Appeal of Planning Commission CUP 93-40, January 18, 1994.

<sup>85</sup> West County Toxics Coalition (1994). \$60 Million Dollars for Improving Education, Jobs, and Health in Richmond. Flier published by the West County Toxics Coalition, January 10, 1994.

<sup>86</sup> Mitigation Task Force (1994). Chevron Funded Richmond Community Foundation (no date). Argues the area downwind from the refinery is characterized by “schools with the lowest test scores in the West Contra Costa Unified School District and some of the lowest test scores in California; families with some of the lowest income levels in Contra Costa County, particularly among ethnic minorities; highest crime rate in the City of Richmond; highest level of health problems in the City of Richmond, including AIDS; and some of the lowest property values in the Bay Area” (p. 1). It was argued that “the concentration of myriad social, economic, and health problems in north and west Richmond would not exist were it not for the Chevron Refinery and associated industries” (*Ibid.*, emphasis in original).

<sup>87</sup> Drury, R.T. (1994). Letter to Malcolm Hunter, Esq., City Attorney from R.T. Drury, Staff Attorney, Citizens for a Better Environment, Re: Chevron Richmond Refinery Reformulated Gasoline and FCC Plant Upgrade Project Appeal (CUP 93-40), January 21, 1994 (Counters arguments against the “rational nexus” between the approved mitigations and the RFP project: mitigations for harms not specified as significant in an EIR can be included as long as they bear a rational relationship to a harm posed; state and federal law stands as no obstacle to creation of a community fund; city’s nuisance powers allow for

**Richmond Planning Staff:** Prepared findings relating to the Planning Commission's vote to approve the CUP, noting inconsistencies in the Commission's approval of the project with the added conditions. The staff maintained its original recommendations. Inconsistencies were noted between the Commission's emphasis on hiring Richmond residents and the Alliance Agreement between the city and Chevron, requirements to use an appropriate emissions baseline without specification of how baselines should be corrected, requirements to install a "non-proven [fenceline monitoring] system prior to project completion" (borrowing the language of Chevron's appeal), requiring "no net increase" irrespective of crude oil type when the EIR stated that crude type is "not a factor," and requiring that relief valves be vented to containment when certain venting was viewed as illegal.<sup>88</sup>

**Chevron:** Advanced rational nexus (particularly for the proposed foundation), unlawful delegation of municipal authority (e.g, the city's requirement that Chevron fund an independent monitor of compliance with the CUP), illegal special tax (fees levied to replace revenues for general public services are suspect as disguised taxes), and other legal arguments for overturning the Planning Commission's conditions of approval;<sup>89</sup> advanced commitments Chevron would agree to make regarding on-going refinery operations and a five point program "responding to other concerns of the community in general";<sup>90</sup> and mobilized residents and organizations to lobby the City Council prior to the scheduled hearing.<sup>91</sup>

**AQMD:** Expressed concern about the delay that the planning process would have on Chevron's timely compliance with CAA and CARB requirements; commented to Planning Department on the appropriateness of the Community Inspector proposal made by the coalition; urged caution in requiring that Chevron install remote sensing technology; explained that some flaring is necessary to minimize pressure build-up in some refinery vessels; explained that AQMD regulations already required "no net increase" in facility-wide emissions in connection with refinery modification, regardless of the type of crude used; discussed comparison of the Chevron project and Shell's RFP project in terms of scope and mitigations.<sup>92</sup>

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mitigations that supplement use of broader police powers; monetary exactions are not special taxes; health, education, and safety impacts clearly supported by the factual record).

<sup>88</sup> Richmond City Planning Department (1994). City Council/Committee Agenda Request. Prepared by Nancy Kaufman/Jim Farah for Committee Review on January 19-20, 1994.

<sup>89</sup> Buskirk, R.E. (1994). Letter to Malcolm Hunter, Esq., City Attorney from Ronald E. Van Buskirk, Re: Chevron Richmond Refinery Reformulated Gasoline and FCC Plant Upgrade Project – Appeal to City Council (CUP 93-40), January 18, 1994; Buskirk, R.E. (1994). Letter to Mayor Rosemary Corbin and Members of City Council from Ronald E. Van Buskirk, Re: Chevron Richmond Refinery Reformulated Gasoline and FCC Plant Upgrade Project – CU 93-40 – Appeal to City Council, January 24, 1994.

<sup>90</sup> Hannan, M.D. (1994). Letter to Rosemary Corbin, Mayor, from M.D. Hannan, General Manager, Chevron U.S.A. Products Company Richmond Refinery, January 24, 1994.

<sup>91</sup> An example of Chevron's mobilization tactics can be found in Hannan, M.D. (1994). Letter to City of Richmond Festival By the Bay from M.D. Hannan, General Manager, Chevron U.S.A. Products Company Richmond Refinery, January 13, 1994 (urging members to contact the mayor or City Council in support of Chevron's appeal and providing "sample letter instructions" for a letter writing campaign); See also Chevron Corporation (1993). Press Release: Chevron Asks Richmond City Council to Reject Conditions for Richmond Refinery Cleaner Fuels Project, December 27, 1993 ("One condition alone would extract \$54 million in cash payments unrelated to the project, putting Richmond at a competitive disadvantage with other Bay Area refineries undertaking similar work").

<sup>92</sup> Feldstein, M. (1994). Letter to Jim Farah, Planning Director, City of Richmond from M. Feldstein, Air Pollution Control Officer, Bay Area Air Quality Management District, January 13, 1994; Feldstein, M. (1994). Fax to James Farah, Planning Director, City of Richmond from M. Feldstein, Air Pollution Control Officer, Bay Area Air Quality Management District, January 1, 1994; Bragden, H. (1994). Memorandum to Tom Powers, Bay Area Air Quality Management District from Harvey Bragden, Contra Costa County Community Development Department, December 22, 1993.

**City Manager:** Presented the mayor and City Council with a summary of Chevron's recent involvement in city-related activities, including direct impact on the economy, construction assistance with the Richmond Parkway, employment by Chevron contractors, and the company's philanthropic and volunteer programs.<sup>93</sup>

**Lawyers' Committee for Civil Rights:** Urged the City Attorney to uphold the Commission's mitigation measures; presented findings in support of the measures.<sup>94</sup>

As the City Council hearing date approached, the deadline for compliance with federal reformulated gasoline standards drew near (January 1, 1995, less than one year away). The deadline for gasoline sold in California to meet state standards was March 1, 1996.<sup>95</sup> Most interesting among the pre-hearing activities listed above was Chevron's proposal for a "binding, legally enforceable agreement between the City and Chevron," to include general commitments as well as a five point plan tailored to some of the concerns raised during the EIR process (the last five bullets below constitute the five point program):

- Manage refinery operations to minimize flaring and flare noise
- Keep track of fence-line monitoring pilot program at Shell refinery and install a similar pilot system if Shell's proves successful
- Maintain emission goals should a change in crude type processed at the refinery be made in the future
- Vent all hydrocarbon relief valves to the refinery relief system as long as AQMD cost-effectiveness requirements are met
- Maintain adequate weed control and trash pick-up on all refinery properties in Richmond
- Prepare a report for the City Council on energy conservation strategies for the refinery
- Improve the existing community alert and notification system through installation of hardware and infrastructure to activate the emergency notification system through the Community Awareness Emergency Response group (Chevron contribution: \$1.7 million)
- Based on recommendations of the Martin Luther King Health Center Board of Directors, a fund will be created to establish the Martin Luther King Health Center, located in Richmond as an ongoing immediate care/health maintenance facility (Chevron contribution: \$2,100,000 if certain milestones are met)
- Expand the scope of the Alliance Agreement to the entire Chevron Richmond Refinery for application to ongoing operations
- Establish a mentoring program through a joint effort between the Police Activity League and West Contra Costa Unified School District aimed at youth, grades 4-12, focused on ensuring completion of each student's full educational potential (Chevron contribution: \$400,000)
- Develop a comprehensive program aimed at improving communications between residential and industrial citizens in Richmond<sup>96</sup>

While the above proposal was being developed, Chevron, the media, and even the environmental groups focused the public's attention on what seemed to be a battle over "60 million dollars," rather than a consideration of how best to advance the interests of

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<sup>93</sup> Johnson, F.T. (1994). Memorandum to Mayor Corbin and Members of City Council from Floyd Johnson, City Manager, January 21, 1994.

<sup>94</sup> Wang, T.H. (1994). Letter to Malcolm Hunter, Esq. from Theodore Hsien Want, Staff Attorney, Lawyers' Committee for Civil Rights of the San Francisco Bay Area, Re: Conditional Use Permit Application, CU 93-40, for the Richmond Chevron Refinery Reformulated Gasoline and FCC Plan Upgrade Project, January 24, 1994.

<sup>95</sup> *Supra* note 79.

<sup>96</sup> *Supra* note 90.

numerous civic groups and organizations in greater Richmond and to ensure that the true scope of project impacts was agreed to and mitigated. The enormity of the dollar amount at issue discouraged public debate over the project and the refinery's relationship with residential communities and local businesses.

By that time, there were newspaper articles and the whole discussion or controversy around town was about the 60 million dollars. The 60 million dollars became the focus. Word was that the WCTC was trying to extort 60 million out of Chevron, so all of the safety issues were lost in the discussion and the fund became the primary focus. Chevron appealed and we came before the City Council in January. At that time the Council had hired a new City Manager named Floyd Johnson. There was a lot of controversy around that because due to the political maneuverings this guy who was the president of the Richmond Fire Fighters' union, Darryl Reeves who had been a known lobbyist in the city of Richmond and the Fire Fighters have had considerable influence on political decisions here in the city so Darryl helped to get Floyd hired as the new manager and one of Floyd's tasks was to prove himself on his first days on the job to overthrow the Planning Commission's decision. So as the project came before the Council, Chevron was also lobbying the members. When it came before the Council there were some deals on the table and through discussions with the City Council we presented our proposals and requests and Chevron presented theirs and the Council then discussed it and made a final determination and the \$60 million fund was scaled back to \$4.5 million.<sup>97</sup>

Each side sought to garner as much support as possible for either the Commission's decision or Chevron's proposed program (for which Chevron received over 475 letters of support).<sup>98</sup> Despite the coalition's efforts to the contrary, the City Council voted to overturn the Planning Commission's decision by a vote of 8-0 with one abstention on January 24, 1994.<sup>99</sup> The meeting was attended by over 2,000 individuals and had to be moved to a nearby auditorium.<sup>100</sup> Each side offered various documents for the public record, but while Chevron focused on evidence of the utility of their new proposal, the coalition offered a sprawling array of documents related to everything from health effects from exposure to emissions to examples of previous development agreements (such as the good neighbor agreement between Crockett and C&H Sugar). Without considering these documents, the Council motioned to consider Chevron's proposed agreement. The Council passed the planning staff's initial recommendations as well as the Chevron program.<sup>101</sup>

*Dispute Resolution.* Interestingly, the coalition claimed victory immediately following the Council's decision, citing similarities between some of their demands and elements of the Chevron proposal. The groups released a comparison of their goals with concessions that were approved by the Council.<sup>102</sup> When viewed together, the recommendations of planning staff and Chevron's five point plan did appear to address many of the coalition's concerns. Still, the concessions, either encouraged through private correspondence

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<sup>97</sup> Interview of Member, West County Toxics Coalition, June 5, 2002, in Richmond.

<sup>98</sup> City of Richmond (1994). Minutes to Richmond City Council meeting, January 24, 1994.

<sup>99</sup> *Ibid.*

<sup>100</sup> Interview of former Planner, City of Richmond, June 5, 2002, in Richmond.

<sup>101</sup> City of Richmond (1994). CU 93-40 Conditions of Approval Per City Council Decision of January 24, 1994.

<sup>102</sup> Citizens for a Better Environment (1994). Comparison of Conditions Requested by People Do!, CBE, and West County Toxics Coalition and Conditions Imposed by the Richmond City Council (no date).

between the company and planning staff or offered in order to influence the City Council, did not go as far as to satisfy some of the interests underlying the coalition's ten point plan (proposal 2). The coalition itself suggested that Chevron was merely "taking credit for shutting down units and surrendering operating permits it already planned to terminate," conditioning flaring changes to AQMD approval and fence-line monitoring to the success or failure of the Shell pilot project, and using vague language such as "consistent with acceptable engineering practices."<sup>103</sup> In addition, some members of the coalition accused Chevron of offering projects that catered to the constituencies of certain City Council members, such as the Health Center.<sup>104</sup> Other components of the Council decision concerned efforts that Chevron had already begun to engage, such as development of a community alert system. These concessions clearly represented a marked improvement over the initial project as discussed in the EIR. However, the give and take of proposals and concessions that occurred incrementally throughout the EIR, Planning Commission, and City Council stages of the permitting process left much of the final conditions of approval to the dynamics of interest group pluralism. Certain groups were able to translate their needs into complex legal arguments or to rally public support for carefully worded concessions. In either case, the proposals were unilaterally developed and offered, at times in a flurry of activity before a crucial vote sifted through the proposals with competing or no objective means of establishing relevance, learning about project impacts of most concern to various groups and individuals, or optimizing impact mitigation from the perspective of those most affected (communities in North Richmond). The process highlighted both the flexibility and limits of the permitting process as it was played out.

After months of indirect negotiation and lobbying of government permitting bodies, Chevron and the three leading organizations of the Mitigation Task Force met to discuss the final conditions for project approval. The first period of face-to-face negotiation since initial meetings in the Fall of 1993 was encouraged by CBE's decision to block the project's final permit:

Where you see most of the CEQA wins is where the company refuses to an EIR altogether and they do a negative declaration or exemption where they just don't do anything at all. That's where you see a lot of the plaintiff victories under CEQA. Here, they did an EIR and it was a decent EIR. It wasn't perfect and certainly there would have been some colorable arguments to make but we felt on balance it would have been a hard case to make in Contra Costa Superior Court which is where it would have gone. So we decided not to sue. And at that point, Chevron thought that it was all over, that they were ready to roll with the project. Instead, one of our lawyers, who used to be legal director here, he came up with the idea of appealing their air permit at the AQMD, arguing that the permit didn't require best available control technology. Obviously it's a new source, all of the new components were new sources subject to new source review under the CAA which at the time was in existence and not being undermined by the Bush administration. And the requirement was that for any new or significantly modified source you have to install best available control technology (BACT) on the whole facility. And Chevron wasn't proposing to do that or we thought that there was a technology that didn't meet the BACT requirements. We did the BACT analysis. The EPA had a BACT handbook. One of our scientists did a bunch of

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<sup>103</sup> *Ibid.*

<sup>104</sup> Interviews with representatives of each of the major organizations in the Mitigation Task force suggested links between projects included and the needs of City Council member constituents.

research and we thought that we had some pretty solid arguments that they weren't installing BACT.<sup>105</sup>

The AQMD hearing board is an obscure body appointed by Air District board members, established to hear variance applications. CBE believes that their appeal was the second community permit appeal heard by the hearing board in its history.

In March 1994, CBE initiated a final letter writing campaign focused on the hearing board's lack of requirements for use of leakless valves, reducing and monitoring of odors, and for the proper use of relief valves.<sup>106</sup> CBE focused the public's attention on the AQMD permit's allowance of additional pollution ("4,150 tons per year") in the North Richmond area.<sup>107</sup> The hearing process went only as far as the scheduling conference, where according to coalition members, a substantial process was to be offered (5-6 months with allowance of public testimony). Chevron contacted coalition leaders and agreed to discuss the project. The negotiating group included Henry Clark, Tom Butt from People Do!, a staff scientist from CBE, Chevron's general manager, and several other representatives of the refinery. Attorneys, while absent from the initial discussions, provided assistance in drafting language and attended subsequent meetings. The substance of the discussions was not revealed during interviews, as attorneys considered them privileged and community members did not recall the specific order of proposals made and rejected. One attorney assisting the coalition commented on his experience in dealing with Chevron as a representative of community interests.

To some degree all of these efforts are dominated by fact-specific situations. So there have certainly been times that Chevron has been very insistent on its position and does not merely cave or compromise just to get rid of a nuisance case and I've been involved in cases where Chevron has fought very hard against positions taken by my clients but I have been involved in other situations where Chevron has shown that when it perceives a pollution problem and sees that community groups are involved, has been willing to think through and problem solve and do it on a professional basis and I think that's what happened here.<sup>108</sup>

As the discussions took place in the Bay Area, it was not difficult to have Chevron's national corporate representatives involved or able to agree to certain agreement elements. Some participants found the top decision makers more willing to take risks in discussing a potential agreement, although they conceded that this is not always true. The sophistication of the coalition leaders made it possible to exclude the attorneys from certain conversations, giving Chevron the opportunity to present numerous ideas, in addition to the mitigation measures developed by the coalition. The conversations also benefited from a lack of intrusion by either the AQMD or outside officials. AQMD's attorneys made it clear that they supported the talks and any mutually accepted outcome that did not contradict the District's regulations.

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<sup>105</sup> Interview of Attorney, Communities for a Better Environment, June 6, 2002, in Oakland.

<sup>106</sup> Communities for a Better Environment (1994). Action Alert, March 3, 1994.

<sup>107</sup> *Ibid*; San Francisco Chronicle (1994). Groups Move to Block Chevron Fuel Project. *San Francisco Chronicle*, April 6, 1994, p. A15.

<sup>108</sup> Interview of Attorney for Mitigation Task Force, June 12, 2002, via telephone.

Negotiators describe the coalition as having the right combination of skills and knowledge about refinery processes to engage in the discussions.

What really was effective in this situation was you had a group like CBE which brings together lawyers, organizers, and science/technical people and having negotiations can be very time consuming and very difficult for community groups that don't have those kinds of resources. It can be unequal. If it's unequal, negotiations will likely fail, because the result will not be good for one side and either they will not accept the result or they will accept it and then hate themselves for doing it and then being discredited, so it's real important that the outcome be determined not by who has the most resources but what's the best solution for the problem for both sides. So having a group like that meant that if we were talking just theoretically, let's put in better valves in the refinery, having someone on our side saying hey, you know, there's this valve that doesn't leak, that's real helpful and to be able to say to a company you know there are these valves and in fact companies in their industry are using them and to get into at least that level of discussion. They could come back and say yeah, but there is something really weird about that facility and that's why they were able to use it or it's a brand new facility and ours is 100 years old, then you're into a real discussion, you're problem solving. Then your technical people can say well, that's not exactly true, here's this other 50 year old facility and we know how it can be engineered, then you're into problem solving and that's how you work things out together.

Problem solving took on a division of labor that mirrored the initial demands of the three environmental organizations during the EIR process. Tom Butt, who now sits on the Richmond City Council, worked on drafting "Section 1" of a Memorandum of Understanding with the refinery, which included various elements of People Do!'s initial demands.<sup>109</sup> There came a point where the People Do! representative had to scale back his demands, under pressure from the other coalition members. Henry Clark, working closely with CBE, focused primarily on Section 2 of the MOU, concerning job training, a health clinic, and other social services. CBE encouraged Chevron to agree to a start date for a fence line monitoring pilot system (Section 3), so that the project would not be contingent upon the success of Shell's system. Section 4 dealt with low emission valves, a common element of CBE-initiated agreements. Chevron agreed to evaluate the success of current valves in reducing fugitive emissions and to install at least an additional 350 valves. Section 5 reiterates Chevron's commitment to the EPA's 33/50 program, for which the company had agreed to reduce company-wide emissions of 17 designated toxic chemicals by 33% by the end of 1992 and 50% by the end of 1995 compared with 1988 emissions). Chevron agreed to make information about the program available to the coalition, including future refinery reports of 33/50 chemical emissions. Below are the elements to the MOU, signed on May 31, 1994.

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<sup>109</sup> Interview of Tom Butt, Richmond City Councilmember, June 6, 2002, in Richmond.

Table 7. Elements of Memorandum of Understanding between Refinery and Coalition.

<p><b>Section 1. Environmental Quality, Open Space, and Visual Quality</b></p> <ol style="list-style-type: none"> <li>1. Chevron will work with East Bay Regional Parks Division to complete feasibility study for extending the existing bike trail connecting Point Richmond to Point San Pablo (by June 1995)</li> <li>2. Will remove 1,000 feet of fence along Western Drive; work to minimize illegal dumping</li> <li>3. Will complete demolition of structures on the former site of Blake Brothers Quarry by end of 1995</li> <li>4. Will complete removal of abandoned pipelines along Western Drive by end of 1995</li> <li>5. Will spend \$100,000 over 1994-1996 to remove non-native hillside vegetation and install hillside landscaping; will utilize the Mayor's Summer Youth Hiring Program where feasible</li> <li>6. Will upgrade property in the Office Hill Tank Field adjacent to Point Richmond through removal of all but one tank; fences will be replaced with redwood and vinyl fencing without barbed wire</li> </ol>
<p><b>Section 2. Commitment to the Enterprise Community</b></p> <ol style="list-style-type: none"> <li>1. Will support non-profit agencies providing services to residents within a six census tract Enterprise Community around the refinery through donations through the United Way of at least \$1.5 million in 1994 and an expected total of \$5,000,000 over the five year period ending in 1998 (compared to \$330,000 in 1993). Five year figure dependent on corporate budget approval. Quarterly report to Chevron CAP</li> <li>2. Will aggressively seek residents from community to fill open jobs at refinery; will supplement city staff with two full-time employees to assist in locating qualified residents</li> <li>3. Will provide skilled job training to around 50 people each year from the community on a priority basis for at least the next two years</li> <li>4. Will participate in establishing a Health Clinic in North Richmond; is investigating how the company can help with the future site.</li> <li>5. Will help bring an existing County building up to code for housing a Head Start building</li> </ol>
<p><b>Section 3. Experimental Fenceline Monitoring</b></p> <ol style="list-style-type: none"> <li>1. An experimental, remote sensing fenceline monitoring pilot system will be installed at the refinery and ready for a six month test by June 1, 1995</li> <li>2. Will evaluate the practicality of monitoring several different materials during test period (including VOC's, odorous sulfur and nitrogen compounds, and other chemicals suggested by parties)</li> <li>3. Will prepare a report on the pilot study's results and will share the report with the community groups; will include monitoring data from pilot system and practicality of longer term operation</li> </ol>
<p><b>Section 4. Low Emission Valves</b></p> <ol style="list-style-type: none"> <li>1. Refinery has about 500 valves packed with new low-emission valve packings. Chevron will review emission data for these valves and share results with the community groups (data available December 1, 1994)</li> <li>2. Will complete a report by June 1995 outlining the effectiveness of new packing at reducing fugitive emissions</li> <li>3. As existing refinery valves in hydrocarbon gas and light liquid service are replaced, will use bellows sealed valves where appropriate (200 installed by January 1, 1997)</li> <li>4. An additional 200 will be installed by January 1, 1999 (if previous installations successful)</li> <li>5. Chevron does not seek air pollution credits through the AQMD emissions banking program for reductions achieved by using bellows valves as part of this MOU</li> <li>6. Will use bellows valves for at least 20% of all valves that are two inches or less, amounting to at least 350 valves</li> </ol>
<p><b>Section 5. Emission Reductions</b></p> <ol style="list-style-type: none"> <li>1. Will make available 1992 information previously reported to EPA for air emissions of 33/50 program chemicals</li> <li>2. Future refinery reports of 33/50 chemical emissions submitted to EPA on Form R will be made available</li> </ol>

Source: Memorandum of Understanding Between The Community Groups, West County Toxics Coalition, People Do!, and Citizens for a Better Environment, and Chevron Richmond Refinery, May 31, 1994.

In return for the above concessions, the coalition agreed to withdraw Appeal Number 2869 before the Hearing Board, and to release all rights to challenge the RFP, either administratively or judicially under CEQA.

*Implementation.* Both sides issued press releases shortly after the MOU signing. Chevron framed the MOU as confirming “certain voluntary actions the refinery was taking in the areas of environmental quality, local charitable contributions, emissions monitoring, and emissions reporting. Specific actions to assure continued progress include *confirmation of efforts already underway and added detail to requirements that were a part of previously approved permits.*”<sup>110</sup> When the MOU is compared to previous concessions made during the Planning Commission and City Council phases of the permitting process, these “efforts already underway” become apparent. The concessions made by Chevron suggest a willingness by the company to meet some of the coalition’s demands, particularly when the mechanics of complying with the terms are left to the refinery’s discretion (e.g., contributions through the refinery’s existing United Way program, not a board composed of residents; installation of valves according to refinery determinations; continuation of remote sensing only if the refinery determines that it is useful). The employment offerings, which amounted to only a guarantee of 100 jobs over two years, paled in comparison to the coalition’s initial demands. The health center and other concessions for the Enterprise Community were already offered, in large part, by the company prior to the City Council’s decision. Community right-to-inspect, CAP technical assistance, reduced flaring, and other demands were not met. Emissions reductions were recounted more than required. Even the language for open space and visual quality items suggests that most of the concessions were already underway. More importantly, the MOU does not include any provisions envisioning a change in the direction, quality, or means of post-agreement community-corporate relationships.

While CUP reviews were carried out annually (1995 and 1996) and then once every five years (starting in 2001), provisions of the MOU were only loosely linked to the monitoring capabilities of the Chevron CAP. The Planning Commission found the refinery in compliance with its permit conditions on all three occasions. By 2001, all requirements specified by the CUP for project facilities that had been constructed were met, according to Richmond’s Planning Department.<sup>111</sup> By contrast, members of the coalition and the broader community found Chevron’s commitment to North Richmond’s environmental quality lacking.

One key provision requires Chevron to put in state-of-the-art fenceline monitoring system like they have in Rodeo. And Chevron is supposed to put that in if another company puts it in and it works. Which has happened and they haven’t done anything...There’s an example of where we didn’t get our bottom line, which was some kind of decent, better air monitoring at Chevron, we didn’t win it there, and that’s still a battle that’s going on.<sup>112</sup>

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<sup>110</sup> Chevron Richmond Refinery (1994). Press Release: Chevron Richmond Refinery Cleaner Fuels Project Permit Appeal Withdrawn, June 2, 1994, emphasis added.

<sup>111</sup> City of Richmond Community and Economic Development Agency (2001). Five-year Status Report on Reformulated Gasoline Project – Chevron Richmond Refinery, December 6, 2001.

<sup>112</sup> *Supra* note 59.

Item one, in my opinion, they really showed poor faith. They never really did it, they just essentially said that they didn't understand it or that they had made an offer and East Bay Park never showed up or whatever. However, now, seven years later, they are actually showing some cooperation with the study that's being done there but I'm not real excited about what they did. They did move some fencing. They did do the demolition. Maybe they were going to do this anyway, I don't know. They did move some pipelines. They said they did [the \$100,000 worth of improvements], but they never provided any proof of it and I'm not sure they really did it.<sup>113</sup>

What we're focusing on right now is children and women being exposed to mercury from contaminated fish in the Bay. So that's sort of our main focus. And so one of the things is to identify the source, which has not been easy to do. The second thing we're doing, we have a lot of subsistence fishing along our shoreline. It's just educating folks of the risk associated with eating contaminated fish on a daily basis, especially women and children. And that's what our high school students have been really involved in, is sort of educating the public and conducting surveys. Now, we take the information we learn and we discuss it with our local elected officials, letting them know whatever efforts that you've done so far, they're not working, because people are still unaware of the risk. In our area we have the Richmond Marina, which is an EPA superfund site, and folks are fishing there every day. The entire Richmond Harbor is an EPA superfund site, and at the end of the Richmond harbor is a pier, where folks go and fish.<sup>114</sup>

The solution here unfortunately is to just shelter in place. We're talking about a lot of folks who are low-income living next to these facilities and in substandard housing, so you have places without windows, you have places where doors are not going to be air sealed, you have lots of places where these emissions are going to seep in, and not only in the homes, but the schools are in such poor condition. Nystrom Elementary, the school I talked about earlier, was built in the 1940's... They're close to the other facilities where whenever an accident happens, they're usually right in the line of it, and what they are told to do is shelter in place. Well, if you go into these schools, you see windows broken. And so we have been pressuring our local officials to include part of the mitigation funds or the fines that they are assessing to the folks responsible for the accidents, to put that aside, to earmark some of that for home improvement and for school improvement... We are also trying to get the school administrators to actually think about the true causes for the absenteeism in the district. What we find is that a lot of the students that we work with, you'd go into a classroom where practically 90% of the students were using inhalers. And they thought that was perfectly normal. They had a process where they would identify the inhalers and they'd put them in a bag. OK, this is not normal.<sup>115</sup>

General Chemical used to be called Chevron Ortho. Then they wanted to take Chevron's name off of it, but the production at the plant has never changed, and basically what they do is produce, a lot of the product that they produce is for Chevron's refining process. General Chemical is viewed by most people as being still an arm of Chevron although it doesn't show that on paper as much. Both Chevron and General Chemical would have a series of releases from time to time... I think the whole city is kind of an uproar to clean the air up. And they know that Chevron and General Chemical are major threats to air quality. The other thing, the city has established a Safety Review Panel to look at safety culture at General Chemical.<sup>116</sup>

These are but a few of the concerns raised during interviews with Richmond residents, that point to linkages between refinery operations and health, education, and quality of life. As the environmental coalition had decided to focus on neighborhood councils, which several interviewees suggested represent a biased sample of resident concerns

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<sup>113</sup> Interview of Richmond City Council representative, June 6, 2001, in Richmond.

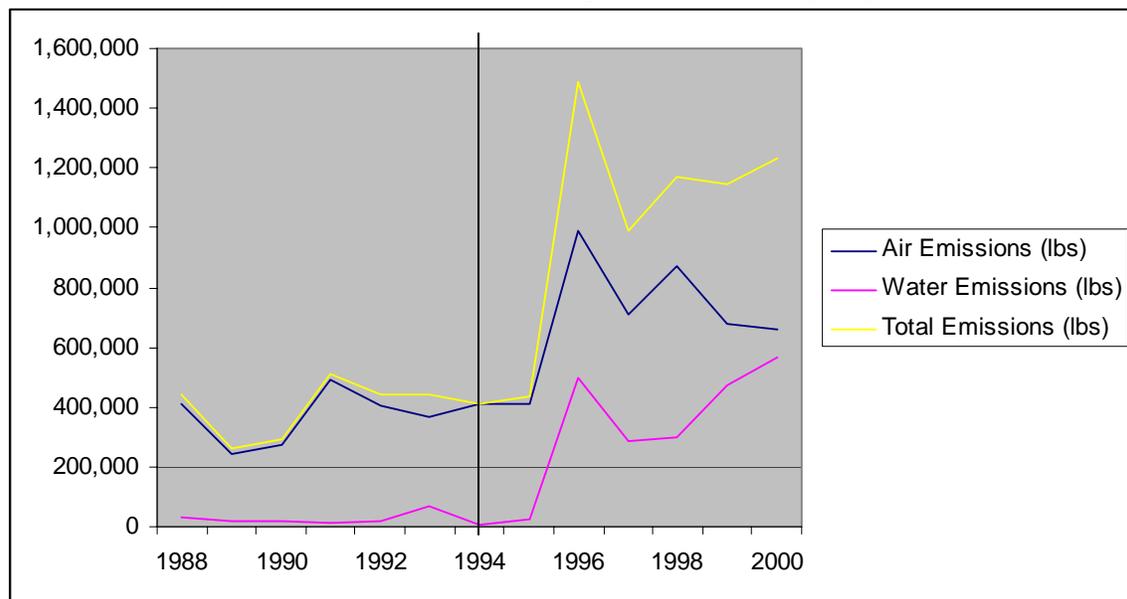
<sup>114</sup> Interview of Richmond resident, October 8, 2002, via telephone.

<sup>115</sup> Interview of Richmond resident, October 8, 2002, via telephone.

<sup>116</sup> Interview of Richmond resident, October 7, 2002, via telephone.

(neighborhood councils are often formed around a single public works or social service concern), the above interests and many expressed during the public comment process were not addressed. Nor was an understanding that the refinery and other major facilities were not going to relocate converted into the kinds of discussions with Chevron and the city that could have yielded needed improvements, including reduced emissions *and* emergency planning activities (such as securing housing stock and schools against releases). It would be unfair to hold the coalition accountable for this, as they went far beyond the call of duty in winning public support and concessions. But a focus on high-tech experiments and visual and open space improvements did very little to stem the tide of refinery emissions (as suggested by Figure 3) or to improve the emergency response capabilities of local residents beyond what the company had already committed to. High-profile accidents continue to occur at the Chevron refinery, and public distrust of facility practices remains intact.<sup>117</sup>

Figure 3. Total Air and Water Releases of Toxic Chemicals to the Environment from Chevron Refinery, 1988-2000 (vertical line represents MOU signing).



Source: Environmental Defense's Scorecard, [www.scorecard.org/env-releases/facility.tcl?tri\\_id=94802CHVRN841ST](http://www.scorecard.org/env-releases/facility.tcl?tri_id=94802CHVRN841ST), accessed October 15, 2002.

<sup>117</sup> See Standen, A. (2002). Chevron's Spheres of Influence Activists accuse Richmond oil refinery of illegally thwarting environmental reviews, and a beholden city of passing the buck. *East Bay Express*, September 25, 2002; Kay, J. (2002). Refineries top polluters on EPA list in Bay Area: Discharges taint air, water and land. *San Francisco Chronicle*, May 24, 2002, p. A11; San Francisco Chronicle (2002). Lawsuit says Chevron permit violates law. *San Francisco Chronicle*, August 20, 2002, p. A19; Associated Press (2002). Chemical Leak Forces Local Residents Indoors for Several Hours. *Associated Press State and Local Wire*, February 1, 2002, BC Cycle; Koopman, J. & Kim, R. (2001). Gas leak at General Chemical in Richmond: Residents Warned Belatedly to Stay Indoors. *San Francisco Chronicle*, November 30, 2001, p. A30; Sarkar, P. (2001). Chevron Refinery Fined \$300,000: 52 violations from 1998 to May. *San Francisco Chronicle*, July 10, 2001, p. A12; Kay, J. (2001). Chevron plant hit with fine: Six-digit Penalty for Richmond Refinery's Late Response to Leaks. *San Francisco Chronicle*, March 27, 2001, p. A14.

*Discussion.* The primary obstacle to meeting some of the community's broader interests through permitting processes was summed up by a coalition member's assessment of their litigation strategy.

One of the problems was that even CBE acknowledged that while they agreed that you could probably make a case that there was a nexus between some of these things that the [proposed] foundation would address like poverty and education and jobs, that there was not a sufficient record of that to make a legal challenge of it and so they were not willing to front the lawsuit on the EIR based on that particular area, the nexus issue.

Because the various parties to the permitting process were not involved in direct negotiations until the AQMD hearing, they were left to craft proposals and present them to the various decision-making bodies through public comment or private correspondence. The administrative boards then had to consider complex questions relating to the appropriateness of each proposed mitigation or concession, decisions that relied on a combination of legal reasoning, technical assessment, and politics. Most of the resulting permit changes designed to mitigate the refinery's impacts on surrounding communities were established by the Planning Department's report to the Commission. These changes were found to have a clear nexus to project impacts. Most of the remaining changes agreed to by Chevron and endorsed by the City Council came in the form of the company's five point plan, which in large part reiterated certain concessions or alliances that the company had already made. These changes were designed to encourage City Council approval and to win popular support for the RFP project. It is also clear that certain provisions proposed by Chevron at this stage were initially advanced by the environmental coalition. But after this point, the dynamics shifted: the company, seeking to de-link its own proposals from the permitting process (so as to avoid nexus challenges as well as unpopular precedents for the refining industry), focused not on meeting the broader interests of the community but on securing the support of the permitting body AND the groups most likely to offer administrative or judicial challenge. After the EIR process was over and certain resident concerns were incorporated into the CUP by planning staff (approved by the Commission), the company shied away from ideas that could have more directly addressed the questions of poverty, education, employment, and long-term health that were commonly raised in North Richmond. Negotiations leading to the MOU were focused on comparatively small, incremental steps toward satisfying the well-organized demands of three groups, who had determined that broader questions at the heart of resident concerns would prove difficult to uphold in court.

It would be inaccurate to consider the CUP provisions, Chevron's five point plan, and the MOU as part of an overarching "good neighbor agreement." In fact, each of these stages increasingly constricted consideration of the broader terms of the facility's continued existence in a given locale, which is the cornerstone of a community-corporate compact. By the time the MOU was signed, commitments were linked to *existing* institutions and modes of communication. Still, the coalition should be commended for its dedication of thousands of hours to the permitting process, and for securing needed resources for the community. Each stage of the permitting process illustrated how community representatives can effectively bargain with corporate entities. But by doing so, they

have given us a window into the limits of the permitting process, even when the monetary scope of a project lies in the hundreds of millions, to include broader interests and invent means of addressing them. And the implementation phase suggests that even the results of incremental bargaining can be difficult to enforce, if the mechanisms for improved monitoring, verification, communication, enforcement, and broader relationships are not adequately addressed.

## *Seeking Good Neighbor Agreements in California*

### Part II.

#### “From Catacarb to Committees”

My biggest concern was always how do we avoid another Catacarb and how do we report it, how do we notify people, and what do we do after it happens? – Douglas Tubb, Crockett resident

*Background.* Researchers have attempted to establish a link between industry location and high disease rates in Contra Costa County since the late 1970's. The first concern of note, lung cancer, was investigated through comparison of age-adjusted lung cancer incidence rates in industrial and non-industrial census tracts throughout the County.<sup>118</sup> As methodologies for epidemiological research improved, researchers began to estimate actual exposure to air emissions from petroleum and chemical plants, and to correlate these results with cancer incidence and mortality.<sup>119</sup> Relying on a model developed by the Bay Area Air Quality Management District (AQMD), one study found a positive relationship between estimated residential exposure to petroleum refinery and chemical plant emissions and incidence rates for several cancers between 1966 and 1977.<sup>120</sup> Such findings were disputed by industry and government officials. For instance, a study funded by the EPA's Health Effects Research Laboratory found that a relationship between ambient air SO<sub>4</sub> and lung cancer in males could be controlled for by including a “blue collar” worker variable.<sup>121</sup> It was also suggested that a major contribution to lung cancer in the area was cigarette smoking.<sup>122</sup>

We are right in the cancer belt, with many other refineries, and I remember reading in the mid-1980's the fact that between Richmond and Pittsburg, California, people living between Richmond and Pittsburg had a 38% higher cancer rate on several different types of cancers. I was chair of the Crockett Power Plant Committee that fought the power plant in Crockett from 1984-1989. And of course the amusing thing was when we presented all of this, which was of course public data, the consultants hired by then Pacific Corps from Oregon, as their paid scientific experts, responded to this information by saying that well, the people die off along the river because they're all blue collar and they all smoke. And this is why they die off; it has nothing to do with being so close to a series of refineries. And I said to him, are you telling me that the people in Arinda, which is an upper class place far away from all of these refineries, don't smoke?<sup>123</sup>

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<sup>118</sup> State of California Department of Health Services (1981). Lung cancer in Contra Costa County, 1969-1979. Prepared by the Resource for Cancer Epidemiology Section, October 21, 1981.

<sup>119</sup> Kaldor, J., Harris, J.A., Glazer, E., Glaser, S., Neutra, R., Mayberry, R., Nelson, V., Robinson, L., & Reed, D. (1984). Statistical association between cancer incidence and major-cause mortality, and estimated residential exposure to air emissions from petroleum and chemical plants. *Environmental Health Perspectives*, 54: 319-322.

<sup>120</sup> *Ibid.*

<sup>121</sup> Austin, D.F. (1984). Epidemiological study of the incidence of cancer as related to industrial emissions in Contra Costa County, California. United States Environmental Protection Agency, Health Effects Research Laboratory, July 1984.

<sup>122</sup> *Ibid.*

<sup>123</sup> Interview of Crockett Resident, October 31, 2002, via telephone.

In a County so inextricably linked to heavy industry, Contra Costa residents and officials have struggled for decades to balance economic development with public health and safety. Occasionally, that balance was severely disrupted, opening a window on the roles and responsibilities of refinery management and monitoring agencies, and the unique concerns of local residents. As with the General Chemical accident that influenced residents' concerns with Chevron's reformulated fuels project (RFP), another major release shaped Unocal Corporation's Reformulated Gas Project (RGP) into one of the most complex community-corporate environmental agreements to date.

The Unocal Corporation, which operated a petroleum refinery sandwiched between the communities of Crockett and Rodeo in northern California, has disrupted the delicate balance on more than one occasion in California. Unocal is perhaps most noted for its ownership of a six-square-mile oil field 30 miles south of San Luis Obispo, in Central California. Over a period of 38 years, Unocal allowed its operations to contaminate the Guadalupe Dunes with approximately 20 million gallons of petroleum thinner (diluent). This accident remains the largest petroleum spill in United States history.<sup>124</sup> The Unocal organization evidenced a number of characteristics that contributed to a sense among its employees that a daily loss of up to 200 barrels of diluent was within the realm of acceptability. A strictly hierarchical seniority system, in-house hiring, and operating procedures that at times included purposeful petroleum spillage reinforced this sense over time.<sup>125</sup> By the mid-1980's, some workers began to report the spilled diluent to their foreman, who did not pass the information along with the exception of an immediate supervisor. After a worker on disability brought the spill to the attention of authorities, California Fish and Game wardens raided Unocal's offices and found substantial evidence of unreported spills and plume maps tracking the plume for several years. Subsequent investigations revealed an organization capable of perpetuating accidents and encouraging a "culture of silence" about their true origin and extent.<sup>126</sup> By the end of 1998, Unocal had spent \$40 million on emergency remedial actions at Guadalupe as well as \$43.8 million to settle a civil case with the state of California.<sup>127</sup> Cleanup, it was estimated, would continue for 20 years.

One element of the Guadalupe Dunes spill to receive less attention in the media was the inability of government agencies to identify or properly respond to the spill. Administrators failed to act until known aspects of the spill fit their criteria for what constituted an "emergency."<sup>128</sup> The sight and smell of petroleum on site visits by Fish and Game warden was part and parcel of their routine inspections of the operation. Spills of more than one barrel were within the company's purview for reporting responsibility. And acute spills fell under the Federal Oil Pollution and Lempert-Keene-Seastrant Acts

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<sup>124</sup> Beamish, T.D. (2002). *Silent Spill: The Organization of an Industrial Crisis*. Cambridge, MA: MIT Press.

<sup>125</sup> Beamish, T.D. (2000). Accumulating trouble: Complex organization, a culture of silence, and a secret spill. *Social Problems*, 47(4): 473-498.

<sup>126</sup> *Supra* note 124.

<sup>127</sup> Cone, M. (1998). Unocal to pay 43.8 million fine in spill. *The Los Angeles Times*, July 22, 1998, p. A3.

<sup>128</sup> Beamish, T.D. (2002). Waiting for crisis: Regulatory inaction and ineptitude and the Guadalupe Dunes oil spill. *Social Problems*, 49(2): 150-177.

of 1990, pieces of legislation designed to ensure response to *tanker spills*.<sup>129</sup> Once agencies did react to the situation at Guadalupe Dunes, other problems such as staff rotation, conflicts over jurisdiction, and fluctuation of regulatory agency involvement prolonged a lack of effective governmental response.<sup>130</sup>

Unocal's contribution to large-scale, high-profile accidents, and problems with agency response, neither started nor ended with the above crisis. A lawsuit filed by the Sierra Club alleged that the company committed 2,300 discharge violations at its Rodeo refinery between 1977 and 1989, bypassing its wastewater treatment plant in Contra Costa County and dumping hundreds of millions of gallons of toxic waste into San Francisco Bay.<sup>131</sup> While it was estimated that the company saved between \$20 and \$30 million through rerouting, Unocal settled the case for \$4.2 million in civil penalties in 1990.<sup>132</sup> The lawsuit encouraged the drafting of legislation to allow for surprise inspection of companies that disposed of waste in California waters. The proposed legislation was vetoed by Governor Deukmejian, who cited similar existing authority within the Regional Water Quality Control Board.<sup>133</sup> As with the "silent spill" that occurred in Central California, a foreman was told by his superiors not to report the above practices.<sup>134</sup> Yet the United States Attorney's office in San Francisco declined to prosecute Unocal for its discharges into San Pablo Bay.<sup>135</sup>

It seemed a healthy balance between economic development and environmental quality was not always encouraged by regulatory enforcement of Unocal's water discharge violations. The same could be argued for the facility's air emissions, which have been most closely scrutinized for links to County public health concerns. Immediately following the Sierra Club's suit in the matter of Unocal's wastewater discharges, the AQMD released a report documenting the region's air pollution "hot spots." Unocal ranked 9<sup>th</sup> on a list of the region's air toxics emitters.<sup>136</sup> Yet agency records suggest that fines for air emissions violations and accidental releases, particularly on a per violation unit basis, were negligible from 1988 through 1994 (See Figure 4) for the company's refinery in Rodeo, an unincorporated town in Contra Costa County.<sup>137</sup>

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<sup>129</sup> *Ibid.*

<sup>130</sup> *Supra* note 124.

<sup>131</sup> Los Angeles Times (1987). The state. *Los Angeles Times*, April 6, 1987, p. 2; Los Angeles Times (1988). Appeals court reinstates decision that Unocal Oil violated clean water laws. *Los Angeles Times*, July 26, 1988, p. 21; Sward, S. (1990). Los Angeles Times (1989). Unocal faces possible fines in pollution case. *Los Angeles Times*, May 20, 1989, p. 28; Settlement over toxics dumped in Bay. *San Francisco Chronicle*, February 23, 1990, p. A1.

<sup>132</sup> Sward, S. (1990). Settlement over toxics dumped in Bay. *San Francisco Chronicle*, February 23, 1990, p. A1.

<sup>133</sup> Lucas, G. (1990). Deukmejian vetoes waste dump inspections. *San Francisco Chronicle*, June 2, 1990, p. A4.

<sup>134</sup> *Supra* note 132.

<sup>135</sup> Holding, R. (1993). Environmental cases get short shrift from federal prosecutors. *San Francisco Chronicle*, July 6, 1993, p. A6.

<sup>136</sup> Nolte, C. (1990). Bay's air-polluting "hot spots": Agency finds that most of the worst toxic offenders are refineries. *San Francisco Chronicle*, August 2, 1990, p. A5.

<sup>137</sup> Personal communication with Bay Area Air Quality Management District, July, 2001.

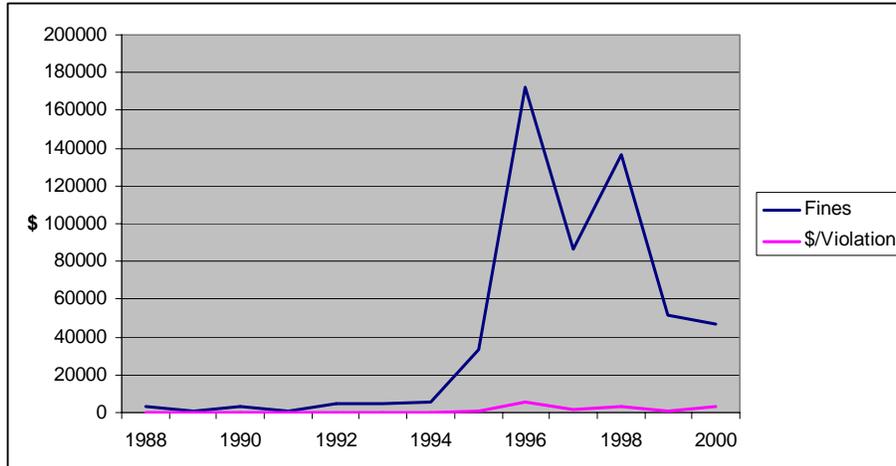


Figure 4. Fines Collected by AQMD for Unocal Refinery Violations, 1988-2000.

*The Problem.* A swift rise in agency fines against Unocal for air violations in Rodeo can be traced to a major release that occurred around Labor Day weekend in 1994. As with the spills at Guadalupe Dunes and into San Francisco Bay, this air release departed from traditional industrial accidents in a number of ways. The problem was “slow to manifest,” leading to “gradual, rather than sudden disruption.”<sup>138</sup> It was not readily identified as a serious accident by some residents of nearby Crockett, Rodeo, and the fenceline communities of Tormey and Bayo Vista (a public housing authority that borders the refinery to the south). And it set in motion a variety of internal and agency responses aimed at downplaying the seriousness of the release to employees, inspectors, and eventually the public. Residents recall the release, which took place between August 22 and September 6, 1994:

We woke up one morning, it was Labor Day weekend, 1994, and there was, we had a house that was on a hill, it's like the poor man's San Francisco. It's kind of like a town on the Mediterranean that comes up from the sea and all the houses are built terrace-like. And our house had a commanding view of the valleys and we faced, with the back of the house with huge banks of windows faced the refinery which was west. And we woke up and I looked at the windows and they were covered with a sap-like substance like from a pinetree and I went, oh, God, what did those kids do now? And then I thought well, what is this, is this from the trees? We had a lot of acacia trees around us that exuded kind of a sticky thing after they flower but it was the wrong time of year so I was really stumped. What was going on? And then I started getting a call from a gal who I worked with on the powerplant committee. She lived farther up the hill from me, and she was a real estate agent, and she had gotten a call from one of her clients saying, there's crap all over the cars, there's stuff all over the garden, the house, everything, up and down the streets, they were trying to sell their house at the time, and they were a little upset.<sup>139</sup>

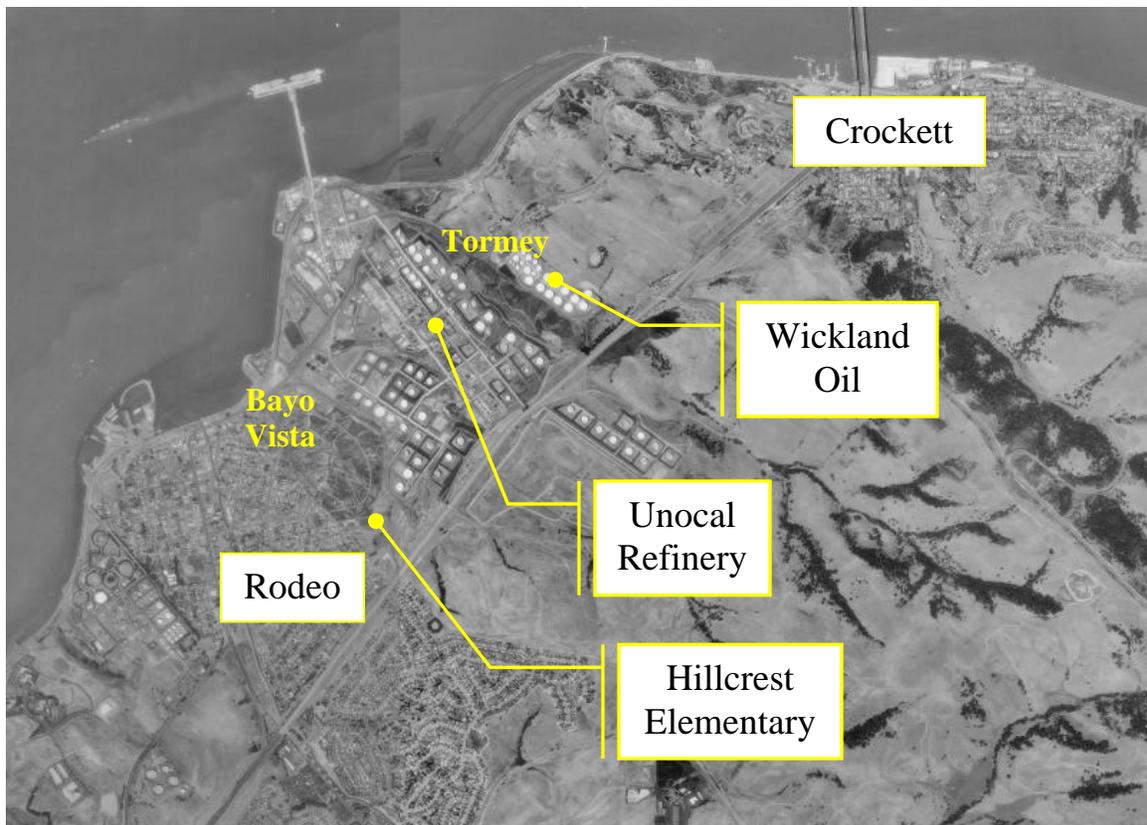
It was a 16 day release. I was here for the first half of it and was gone the last half which was a good half to be gone from because it got steadily worse all the time as the hole got bigger in the [refinery] unit. But my wife was here during that timeframe and she became very ill from it and still suffers today from it. There's about 50 or 100 people I'm estimating who suffered physically from that, many of them, my wife included, that cannot work anymore...[I did not learn about the

<sup>138</sup> *Supra* note 127, p. 151.

<sup>139</sup> Interview of Member, Shoreline Environmental Alliance, May 31, 2002, via telephone.

release] until we read about it in the paper. Again, I was gone that timeframe but when I came back there were these brown, goopy spots all over my house, and windows that would not clean off. And so it was really the last two days that it was heavy enough, the release was heavy enough and the meteorology was just right so that it all just came over the town and dropped down in a fog bank. Coalesced in a fog drop and some dropped out. And so people started calling the health department for two days saying we've got this stuff everywhere and they said it might be pine pollen. They'd never come across anything like this before so they didn't know what it was. Finally, the company that was right next door to Unocal, at the time it was Wickland Oil, the manager called over and said we've got this crap just all over our units and people are getting sick, you've got this brown stain just trickling down the sides of the tanks. They were a little storage facility just on the East side of the refinery. You may have driven by it. If they hadn't spoken up I don't know what would have happened. It's likely it would have gone on. So they said what is this stuff? and shut it down. They could see the plume coming out horizontally out of the pipes. And the workers were trying to get the company to shut it down, too. It wouldn't happen.<sup>140</sup>

Figure 5. Unocal Refinery and Adjacent Communities.



The “brown, goopy spots” that rained down on communities both down- and upwind of the refinery contained a solution called Catacarb. A Unocal Material Safety Data Sheet describes Catacarb as follows:

Health hazards: Harmful if swallowed. Causes severe eye and skin irritation. Overexposure may cause damage to kidneys and liver. Avoid breathing vapor or mist. Liquid. Brown-black. Odor: None. Exposure guideline only available for diethanolamine (3 ppm OSHA, CalOSHA; .46 ppm ACGIH). Target organs include the central nervous system. Accidental release measures: Isolate

<sup>140</sup> Interview of Crockett Resident, June 8, 2002, in Crockett.

danger area, immediate cleanup of any spill recommended. In California this is a non-RCRA hazardous waste due to the vanadium content. Diethanolamine is subject to SARA 313 and 40 CFR 372 reporting requirements.<sup>141</sup>

Catacarb was used to strip sulfur from refined gasoline in the Unocal refinery's unicracker unit.<sup>142</sup> The process by which well over 100 tons of the solution were released into surrounding communities began with a slow release of a "chemical mist" from the top of a 140-foot processing tower at 6:55 a.m., August 6.<sup>143</sup> Media investigations uncovered an "initial flurry of concern" which led to the declaration of a refinery-wide emergency and notification of the County Health Department.<sup>144</sup> Unocal workers started to shut down the tower, but the order to cease operations in the unit was countermanded by the refinery's second-in-command. Hastily called meetings between supervisors and engineers (without the consultation of environmental and health and safety workers) yielded the conclusion that there was a "very slim" chance that the leaking tower would explode. Management decided to keep the unit running until its next scheduled maintenance on October 8. County health officials were told that the emergency was under control. Meanwhile, refinery workers were noticing sticky brown spots on their cars and on equipment near the unicracker. Operator Diane Wang described the leak, which by early September was noticeable from nearby roadways, as a "giant troll and it was becoming monstrous."<sup>145</sup> The unicracker chief repeatedly told his workers that "we can make it." General Manager Stephen Plesh left for the Labor Day weekend with orders to keep the unit running. By September 4, workers began to notice Catacarb residue on the storage tanks of neighboring Wickland Oil. Residents started to complain to the company and to health officials.<sup>146</sup> Workers noticed a massive loss of Catacarb as they began to run out of potassium hydroxide. Then, Wickland Oil notified the refinery that their property was covered in Catacarb and that their employees had been ordered to take shelter. The unit was finally shut down, on September 6.<sup>147</sup>

Evidence for why Unocal officials were so reluctant to tend to the leaking tower can be found in the plant's safety record. In 1989, the refinery posted the longest safety record in the country: 6 million hours without a serious accident to cause anyone to miss work.<sup>148</sup> Plant management, according to many interviewed, operated under an incentive structure that included performance bonuses, which discouraged such simple procedures as routine equipment overhauls (the hydrogen processing tower's overhaul was delayed from February to October 1994).<sup>149</sup> And refinery maintenance staff acknowledged that

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<sup>141</sup> Unocal Corporation (1995). Unocal Material Safety Data Sheet: Catacarb. February 6, 1995.

<sup>142</sup> Director of Enforcement, Bay Area Air Quality Management District (1994). Unocal refinery 8/22/94-9/6/94 Catacarb Release Office Memorandum to Air Pollution Control Officer, September 23, 1994.

<sup>143</sup> Woody, T. (1995). Sixteen long days of delay and indifference. *The Recorder*, October 4, 1995, p. 17.

<sup>144</sup> *Ibid.*

<sup>145</sup> *Ibid.*

<sup>146</sup> Bay Area Air Quality Management District (1994). Incident Report Number Three: Unocal Corporatino – Refinery. September 9, 1994.

<sup>147</sup> West County Times (1994). Anger over leak. *West County Times*, September 23, 1994, p. 1.

<sup>148</sup> Stein, G. (1989). Two refineries win awards for job safety. *Los Angeles Times*, April 30, 1989, p. 12.

<sup>149</sup> Hunt, K. (1995). Why leak went unchecked: Bay decisions, fearful employees added up to leeting release of toxic mist go on for 16 days. *San Francisco Examiner*, April 16, 1995, p. C-5.

an early shutdown would cost nearly \$1 million.<sup>150</sup> Yet as the facility struggled to continue its operations, residents started to get sick. Health problems mentioned by residents during interviews included gastrointestinal problems, skin reactions, eye dysfunction, nerve damage (including some which led to root canals), memory loss, numbness, loss of feeling in fingers, post-traumatic stress, and chronic fatigue.<sup>151</sup> Indeed, a study released in March 1996 suggested that residents of Crockett suffered nearly double the rates of eye problems, memory loss, and anxiety as a control community.<sup>152</sup> Those who didn't manifest any symptoms simply became angry:

I heard of a meeting being set that was going to involve a huge amount of different parties that were going to be in attendance to explain the accident, a public meeting... There was a lot of discussion throughout the panel, the company, some of the community groups speaking. Predominantly it was a presentation by the company followed up by the County's explanation and health concerns. I was angered that regardless of whether it was soapy water or exhaust or what have you, that the term "no offsite impact" was used so often and continues to be used and obviously before we woke up it was used for decades and I didn't care for that. I realized that if they would tell you that at this [event], then it's possible that other things happened that we weren't aware of. So I was angered at the fact that it seemed that someone was telling us that we were not impacted.<sup>153</sup>

This resident is recounting a number of community meetings that were held once the Catacarb spill was made public. The meetings featured panel discussions with representatives of the company and County officials. In addition, Unocal communicated with residents through a letter describing a "harmless" potassium carbonate solution as the culprit.<sup>154</sup> Residents also approached the County Health Department for an explanation shortly after the release ended. Residents recall being told that the mixture of chemicals was only a threat when airborne. Since the Department had only learned of the release after the Catacarb had settled on neighborhood homes, yards, and streets, there was no "need for alarm." A series of equally frustrating recommendations were made to residents during the community meetings. For instance, residents were instructed not to

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<sup>150</sup> *Supra* note 145.

<sup>151</sup> These ailments were mentioned in interviews with residents of Crockett, Rodeo, Tormey, and Bayo Vista. See also Hunt, K. (1994). Hundreds suffer after toxic gas leak. *San Francisco Examiner*, December 18, 1994, p. C-7 ("Jane Strike went blind. Vickie Wood will give birth to a stillborn child and doesn't know if the twin she also carries will be healthy. Leanna Devy has had fainting spells for two months. All three are convinced their problems began with a toxic chemical leak at a nearby Unocal refinery that went unabated for more than two weeks last summer.").

<sup>152</sup> Bowler, R. (1996). Health study of a community exposed to a chemical spill: Final report of the Crockett Health Study. San Francisco State University, March 29, 1996.

<sup>153</sup> Interview of Tormey resident, October 24, 2002, via telephone.

<sup>154</sup> Interview of Crockett resident, May 28, 2002, via telephone.

clean their cars or homes but to call Unocal and ask for professional assistance.<sup>155</sup> At the same time, they were told that garden vegetables were safe to eat.<sup>156</sup>

At this moment, it is instructive to consider what was about to happen: between mid-September and December 1994, a group of several dozen residents, many suffering from ailments stemming from the Catacarb release, negotiated a wide-ranging, multi-million-dollar good neighbor agreement with the refinery. The 21-page agreement between Unocal, Crockett, Rodeo, Tormey, Bayo Vista, the Shoreline Environmental Alliance, and Citizens for a Better Environment (CBE) was fashioned by 10 committees of between 2 and 10 residents operating with varying degrees of technical assistance, wide-ranging backgrounds and objectives, and uncertainty as to whether regulatory agencies would improve the emergency management, pollution monitoring, or enforcement services that they had the authority to provide. Under the circumstances, the most surprising aspect of this process is that it resulted in any agreement at all. But after numerous calls, informal gatherings, and 14 formal negotiation meetings with refinery management, an agreement was reached in principle in December 1994. It provides an unprecedented opportunity to consider the opportunities and limits to the use of negotiation to address the complexities of industrial accidents and their effects on local residents.

Long before the Catacarb accident, Unocal had begun to seek County approval for a land use permit for its reformulated fuels project. As we will see, the release heightened awareness of the project and substantially broadened the scope of resident and organizational involvement. Prior to the spill, only a few constituents expressed concerns over the project, which would be

located on approximately 25 acres of the 1,100 acres Unocal San Francisco Refinery, in the Rodeo area. This project also includes a 3.7 acres off-site parking area on two contiguous parcels located south of and adjacent to the Unocal refinery property between San Pablo Avenue and the Southern Pacific Railroad right-of-way. If approved, the project would involve the construction of two new refinery components (a Hydrogen Plant and a Steam Boiler Plant) and the modification of three existing processing units (the Pentane Handlin/Benzene Saturation equipment, the Gasoline Blender, and the Steam/Power Plant). In addition, the project includes the construction of a maximum of 10 new storage tanks, an increase in shipping in order to transport reformulated gasoline components between Unocal's San Francisco and Los Angeles refineries, additional pipelines for transferring intermediate streams and feeds between processing units and tanks, additional drain systems needed to connect project components to the existing refinery process

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<sup>155</sup> All interviewees who were residents of Crockett or Rodeo at the time of the incident reported receiving these instructions. In an October letter to the County Community Development Department from Unocal states that "Unocal's efforts to clean cars, windows and other personal property are still under way. Approximately 60 clean-up professionals are responding to property damage claims. We expect clean-up efforts in the community to be completed shortly. Plesh, S. (1994). Letter to Dennis Barry, Contra Costa County Community Development Department from Stephen Plesh, General Manager, Unocal San Francisco Refinery, October 12, 1994.

<sup>156</sup> Interview of Crockett resident, May 31, 2002, via telephone; *See also* Contra Costa County Health Services Department (1994). Letter to Contra Costa Residents from Public Health Division, County Health Services Department, October 12, 1994 ("Is food from the garden safe to eat? It is prudent to thoroughly wash and peel garden produce in the Tormey and Crockett area before eating it.").

drain system, and changes to utility systems to support project needs for water, electricity, natural gas, and hydrogen.<sup>157</sup>

A draft Environmental Impact Report for the Unocal Reformulated Gas Project was prepared in June 1994, following a process that included a scoping session on December 29, 1993.<sup>158</sup> Following a 45-day review and public comment period that was extended to July 25, 1994, a final EIR was prepared to respond to significant environmental issues of agencies and residents.<sup>159</sup> The final EIR was prepared by September 1994, and does not reflect concerns raised by the Catacarb incident. Figure 8 provides an overview of project impacts described in the DEIR.<sup>160</sup> Figures 9-12 summarize the concerns of public agencies, labor unions, citizen organizations, and individuals expressed throughout the public comment period, which included a public hearing held at Hillcrest Elementary School in July, 1994. There were few public comments on this project, which can be explained in part by resident claims of inadequate notice given to potentially impacted communities.

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<sup>157</sup> Contra Costa County Planning Commission (1994). Agenda, Tuesday, October 4, 1994 – 7:30 p.m.

<sup>158</sup> Contra Costa County Community Development Department (1993). Notice of Preparation: Notice of Scoping Session, Environmental Impact Report for the Proposed Unocal Reformulated Gasoline Project, December 9, 1993.

<sup>159</sup> Contra Costa County (1994). Response to Comments Document for the Unocal Corporation Reformulated Gasoline Project, Land Use Permit 2038-93, September, 1994.

<sup>160</sup> Contra Costa County (1994). Draft Environmental Impact Report for the Unocal Corporation Reformulated Gasoline Project, Land Use Permit 2038-93, June 1994.

Table 8. Potential Impacts of the Unocal Reformulated Gasoline Project and Reported Significance Levels.

		Significance Before and After Proposed Mitigations	
	Increased emissions of criteria pollutants; carbon monoxide concentrations at four key intersections would exceed state ambient air quality standards during construction; increased emissions of VOCs, nitrogen oxides, sulfur dioxide, and particulate matter during project operation		
	Construction truck traffic will contribute to deterioration of pavement on Parker and San Pablo Avenues		
	Resources of prehistoric/protohistoric or historic age may be encountered during subsurface construction/earthmoving		
	Surface runoff into nearby freshwater emergent wetlands; releases during offloading and transfer could reach wetlands		
			B

LS = less than significant; S = significant; B = beneficial

Table 9. Primary Concerns Expressed During EIR Process by Agencies.

Agency	Concerns
Bay Area Air Quality Management District	<ul style="list-style-type: none"> <li>• Best available control technology is required for any pollutant emissions exceeding the threshold limits set by the AQMD for new or modified stationary sources; the threshold for regulated pollutants is 10 pounds per day per pollutant</li> <li>• Emission offsets required for new or modified sources of nitrogen oxides, precursor organic compounds, particulate matter, and sulfur dioxide</li> <li>• Modelling is required for CO, NOx, and SO2</li> </ul>
California Department of Transportation (Caltrans)	<ul style="list-style-type: none"> <li>• A Caltrans Encroachment Permit will be required for any work done within the State right-of-way, including work due to mitigation</li> </ul>
East Bay Municipal Utility District	<ul style="list-style-type: none"> <li>• Proposes a variety of factual corrections regarding reclaimed water use for the proposed project</li> <li>• Unocal should continue to explore for other means to reduce potable water consumption</li> </ul>
John Swett Unified School District	<ul style="list-style-type: none"> <li>• Hillcrest Elementary School is indicated as a sensitive receptor; enrollment of approximately 1,100 students with an age range of 5-12 years of age and 70 staff members will be in close proximity to the facility and the additional tank(s)</li> <li>• Request an infrared fence line monitoring system with notification/ warning of possible unsafe emissions</li> <li>• All tanks in proximity to the school should have pressure relief valves and should be vented to a vapor recovery system</li> <li>• Bellows valves need to be installed on all hydrocarbon service lines two inches and smaller</li> <li>• Assistance in developing an evacuation plan is needed</li> <li>• Need to commit to a five to ten year plan of tree planting in the buffer zone between the tanks and Hillcrest</li> <li>• Hope that Unocal will increase support of District programs (i.e., additional donation of \$25,000 for science equipment at three schools)</li> </ul>
West Contra Costa Unified School District	<ul style="list-style-type: none"> <li>• Currently two elementary school sites southeast of the refinery (Hercules and Ohlone); an additional school is in the construction stage</li> <li>• Concerned about increased emissions of pollutants, increased public safety risk from fires, explosions, or accidental release of toxic gases or vapors, increased odors, noise, traffic, transfer of hazardous waste, cumulative health hazards and risk of upset</li> </ul>
State Lands Commission	<ul style="list-style-type: none"> <li>• Must modify Risk of Upset analysis to include the marine terminal facilities at Unocal and Wickland; analysis should situate a vessel at the terminal fully loaded with gasoline in the process of unloading its cargo</li> </ul>
San Francisco Bay Conservation and Development Commission	<ul style="list-style-type: none"> <li>• Any construction on or over the water or within 100 feet of the line of the highest tidal action of the Bay would require permit approval</li> <li>• Project must meet National Pollution Discharge Elimination System standards</li> <li>• Should include a risk analysis of the increased potential for oil spills as a result of the project and analysis of preventive measures</li> <li>• Report indicates a high likelihood of accidental spill every 12 years resulting in significant impact; should be analyzed relative to other marine terminals.</li> </ul>

Table 10. Primary Concerns Expressed During EIR Process by Labor Organizations.

Labor Organization	Concerns
<p>Contra Costa Building and Construction Trades Council</p>	<ul style="list-style-type: none"> <li>• Research given to socio-economic issues related to jobs, health care, etc. is inadequate</li> <li>• Will local workers be utilized?</li> <li>• What type of job skills and training will be required?</li> <li>• Will there be adequate safety training?</li> <li>• Will there be a community outreach program for the employment of local women, minorities, disadvantaged?</li> <li>• Will work force be provided with health care benefits?</li> <li>• What will impact be on 2.5 secondary jobs affected for every one construction job?</li> <li>• Should review the Contra Costa Board of Supervisors’ study, “The Impact of Out-of-Area Workers on Non-residential construction in Contra Costa County” to determine areas of impact</li> </ul>
<p>Attorney for the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada</p>	<ul style="list-style-type: none"> <li>• There will be an increase in selenium discharges</li> <li>• Large increases in criteria pollutants resulting from increased shipments of materials; future ship traffic appears to be four times greater than considered in DEIR</li> <li>• Expansion of Wickland Oil Terminal DEIR found significant impacts on air quality; project not considered in County’s quantitative cumulative impact analysis for Unocal</li> <li>• Certain air and water quality and risk analysis documents not appended</li> <li>• Unocal not planning to start construction until Fall; requirements don’t take effect until March 1996; extension of 15 days would not prejudice Unocal</li> <li>• Function and impacts of new hydrogen plant should be fully described</li> <li>• Not clear how Unocal will comply with reduced sulfur content rules</li> <li>• Effects of increased steam production not taken into account</li> <li>• Effects of diversion of some products to diesel/jet fuel production not discussed</li> <li>• Information on criteria air pollutants, health risk assessment, ship emissions, and construction waste missing to various degrees</li> <li>• DEIR underestimates NOx and SO2 emissions, ship emissions, VOC emissions from tanks, emissions from pressure relief valves, fugitive emissions from soil excavation</li> <li>• DEIR failed to recommend feasible mitigation for significant air quality impacts</li> <li>• Best available control technologies, particularly with respect to tanks, flanges, pumps, and pressure relief valves would lower emissions</li> <li>• Standard closed loop sampling of process operations could reduce VOC emissions</li> <li>• AQMD requires best available control technology for toxics when cancer risk of a project exceeds one in a million. Project risk is as high as 1.33 in a million. Thus, lower leak detection limits, more frequent inspections, and shorter repair periods are required</li> <li>• Project underestimates toxic releases</li> <li>• Odor impacts due to increased use of oxygenates</li> <li>• Project could result in health impacts due to use of MTBE, which is listed as a hazardous air pollutant under the Clean Air Act</li> <li>• Increased selenium discharges will reduce water quality</li> <li>• DEIR did not evaluate impacts of handling and transporting hazardous wastes</li> <li>• DEIR did not evaluate impacts of the project on workers at the refinery</li> <li>• DEIR did not evaluate cumulative ship accidents</li> <li>• DEIR should be recirculated</li> </ul>

Table 11. Primary Concerns Expressed During EIR Process by Community Organizations.

Organization	Concerns
Rodeo Citizens Association	<ul style="list-style-type: none"> <li>• Haven't had the proper amount of time to review this document; Rodeo and Crockett are located in unincorporated areas where citizens cannot rely on elected officials to review DEIRs for them.</li> <li>• Within less than a year, we have had four EIR processes to review and comment on; ask for a 45 day extension</li> <li>• Request that the County provide an advisor for unincorporated citizenry impacted by the project (Rodeo, Crockett, Tormey)</li> <li>• Unocal is already in violation of the Clean Water Act for selenium discharges; project will produce further selenium</li> <li>• Unocal should restore native grasses to Bay shore similarly to what Chevron is doing in Richmond</li> <li>• Field survey for vegetation and wildlife insufficient; conducted on one day in December</li> <li>• Inventory of wildlife species, especially birds of prey, is incomplete</li> <li>• No heavy metal ecological risk assessment has been conducted</li> <li>• Should enclose flare to reduce emissions and noise</li> <li>• Must not be allowed to increase VOC emissions, similar to Shell EIR conditions</li> <li>• Emission of particulates is over the state limit; construction will add to it</li> <li>• A NE wind could blow nitrogen oxide and sulfur dioxide over Rodeo from the main terminal stations and contribute to acid rain</li> <li>• Provide the Sheriff's department with noise monitoring equipment to enforce noise ordinances</li> <li>• Truck traffic will increase; must compensate Rodeo for increased traffic through the main roadway or get to I-80 at the Crockett on-ramp</li> <li>• Comprehensive landscaping on hill tops needed to compensate for visual impacts</li> <li>• Should hire workers from Rodeo/West County.</li> <li>• Remote sensor fence line monitoring with either infrared or pulsed laser system with results open to citizens</li> <li>• Use of bellows valves, double mechanical seals</li> <li>• Tree planting plan should be funded for at least 5 years (estimated cost between \$39-46 thousand)</li> <li>• DEIR should include discussion of financial impact on County revenues</li> <li>• Community fund similar to the C&amp;H Sugar fund in Crockett must be set up for the benefit of Rodeo</li> </ul>
Rodeo Municipal Advisory Council	<ul style="list-style-type: none"> <li>• Did not have sufficient time to review the document. Do not recognize any overriding impacts at this time.</li> </ul>

Table 12. Primary Concerns Expressed During EIR Process by Individuals.

Individual	Concerns
Howard Adams, Crockett Improvement Association	<ul style="list-style-type: none"> <li>• Crockett is surrounded by many sources of air emissions; project emissions are insignificant compared with Interstate 80; more carbon monoxide and hydrocarbons from that source than from any industry</li> <li>• Project will hopefully reduce pollutants on I-80 if traffic levels off</li> <li>• Growing problem of particulates; already out of compliance with state level many days of the year</li> <li>• Construction phase will generate 400 pounds of particulates per day and Crockett anticipates receiving most of that</li> <li>• Increasing watering down of the construction site to reduce the plume of particulates</li> <li>• Use reclaimed water rather than East Bay Municipal Utility District water</li> </ul>
Lynn Cherry, Rodeo resident	<ul style="list-style-type: none"> <li>• Comment period should be lengthened for 45 days because Rodeo was not adequately advised or notified of this project; no mass mailing or publicity</li> <li>• No discussion of Unocal plans for selling all California oil fields; would mean larger amount of ship traffic and greater sulfur dioxide emissions</li> <li>• Unocal should not be allowed to purchase offsite offsets</li> <li>• Proximity of project to Hillcrest Elementary School is troublesome; should be an infrared fence line monitoring system installed between Unocal and the community</li> <li>• There should be state-of-the-art leakless valves, pumps, and compressors installed throughout the facility</li> <li>• This project has for some reason remained outside of the Rodeo Redevelopment Project boundaries; this needs to be rectified and any additional tax dollars need to be credited to the Rodeo Redevelopment Budget</li> <li>• If the above cannot be done, the tax dollars should be returned to the Rodeo Municipal Advisory Panel.</li> <li>• Financial gains should go to Rodeo, not Central County</li> </ul>
Norma Clerici, Crockett resident	<ul style="list-style-type: none"> <li>• County should not allow this project</li> <li>• We have been in regular contact with AQMD regarding foul odors we are forced to breathe thanks to Unocal</li> <li>• Project will increase air and water pollution and cancer risk to residents</li> <li>• County should not add to air pollution burden of Crockett at a time when the Crockett Cogeneration Plant is being constructed</li> <li>• Article referring to this project was in the West County Times on Friday, July 15th</li> <li>• Approach to inviting public comment does not foster trust in the County or its relationships with large business interests</li> </ul>

Comments did not reflect the sense of urgency or inherent unfairness perceived by Richmond residents during the Chevron RFP process. Agencies focused on relatively minor analytical concerns or jurisdictional questions, with the exception of the AQMD (which highlighted BACT concerns) and two impacted school districts. The districts, particularly John Swett Unified, advanced many of the ideas introduced by CBE and other activists during previous negotiations with Shell and Chevron. Fence line monitoring, use of bellows valves, and other technologies were suggested by the districts. Labor organizations were most concerned with the accuracy of DEIR estimates and analyses, and the document’s omission of socio-economic indicators pertaining to the region’s workforce and project effects on employment. They shared the school districts’ desire to include BACT in project implementation, particularly with respect to tanks, flanges, pumps, and valves that can contribute to fugitive emissions on-site. Community organizations, such as the Rodeo Citizens Association and the Crockett Improvement Association, included members who had been instrumental in negotiating facility siting or expansion agreements with C&H Sugar, Pacific Refinery, and other firms. Their comments focused on proposed mitigations similar to those incorporated in previous agreements, such as “no net increase” in VOC emissions, use of technological

innovations (i.e., fence-line monitoring, bellows valves), landscaping/ restoration of native vegetation, and the establishment of a community fund. The proximity of Hillcrest Elementary School was viewed as particularly troublesome. While very few representatives from Rodeo or Crockett commented on the DEIR, one can find hints of divergent perspectives on the refinery's impacts and town entitlement to mitigation or community development funds. These rifts inevitably emerged between the two unincorporated towns, which at times regarded each other in less than amiable ways.

Rodeo is where the plant is and Crockett is just downwind of it, adjacent to it. It's about a mile away but the topography and the prevalent wind direction means that Crockett is often impacted more than the town that the plant's located in. Most of Crockett cannot even see the refinery. There's only a few houses on the hill that can even see it. But they smell it, they feel it...Rodeo and Crockett have always been rival towns, they're unincorporated, they fight over all sorts of things, money from the County coffers, and on and on. Bayo Vista being the only housing project in both areas and concentration of low-income people of color is basically an island that Rodeo and Crockett don't even recognize or want to say even exists so it was a very difficult situation.<sup>161</sup>

While the Catacarb spill held the potential to magnify differences between the towns, the circumstances of the ensuing negotiations encouraged residents to present a united front to Unocal management.

*Dispute Resolution.* Interviewees suggest that early town meetings immediately following the spill were instrumental in aligning residents' sense of what went wrong and helped them to prioritize community interests. The first such meeting was held by the Crockett Improvement Association (CIA) one week after the catalyst regeneration unit was finally shut down.<sup>162</sup> Approximately 80 residents attended the meeting, which also included a large group of Unocal managers, scientists, and public relations officials, a representative of Supervisor Jeff Smith's office, and members of the County Health Department and the AQMD. The September 13 meeting offered the first chance for local residents to voice their concerns about the accident, less than three weeks before a scheduled County Planning Commission hearing where the County would be asked by the Zoning Administrator to certify the FEIR and approve Unocal's land use permit. That and subsequent meetings<sup>163</sup> also gave Unocal and regulatory agencies a chance to explain the conditions leading to the two week release. Their answers to dozens of questions, which residents perceived as evasive or contradictory, further encouraged the towns to mobilize support for opposition to the permit and for good neighbor negotiations, again promoted by CBE.

The key was several public meetings with the first bunch of managers and science people and technicians and PR people and Crockett to quote, "explain" that this was really nothing bad for you, that things were just fine and not to worry, and we were just mad as hell. And it snowballed. After about two or three meetings, we were about ready to lynch those guys. That's when Unocal

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<sup>161</sup> Interview of former Organizer, Communities for a Better Environment, June 4, 2002, in Point Richmond.

<sup>162</sup> Crockett-Rodeo Coalition (1994). Report on Community Activities Relative to Unocal, November 13, 1994.

<sup>163</sup> Other early meetings included a CIA business meeting that drew 100 people, the Planning Commission's meeting at Hillcrest Elementary School attended by approximately 200 people (October 4), a County Health Department town meeting attended by approximately 100 people (October 5), a meeting between Crockett residents and State Assemblyman Bob Campbell (October 14).

sent in the smoothies. But smoothies with authority, too. They weren't, "gee, I don't know if I can do this," or "no, that's too much," or "no, we can't do that, there's no scientific proof, why do we need this?" Or "that's the County's job, why bring this up?" We had some bad answers from the first bunch.<sup>164</sup>

There was broad agreement among interviewees that these early meetings also shifted the response of certain County governing bodies from ambivalence or denial to strong support for residents' concerns.

The County Supervisor who had authority over Unocal, it was within his district, Jeff Smith, he calls up the president of Unocal down in southern California shortly after the incident occurs, and he says I'd like you to come up and address the Board of Supervisors, which had been the precedent that had been established by other companies in the aftermath of an incident, and if there's one thing that I have had in my career it has been associated with a number of spectacular industrial incidents, and basically the President of Unocal said to him why the hell should I come up there? You can't force me to come before the Board of Supervisors. And it was that antipathy for the community that I think was reflective of Unocal's demise within the community and ultimately their economic demise within the United States...So it wasn't that they recognized that they had done something wrong or that they were trying to assuage the problems that they had caused, it was because they said OK, we're gonna jettison these resources anyway. When they sold to Tosco, they basically sold it for the value of the refinery for pennies on the dollar.<sup>165</sup>

County support for resident concerns was manifest in the following actions by permitting bodies:

- The County Board of Supervisors voted on a proposal by Jeff Smith and authorized the creation of a Citizen's Advisory Panel to serve as a refinery oversight committee on September 20;<sup>166</sup>
- The County Planning Commission delayed action on the reformulated fuels project from October 4 to October 18;<sup>167</sup>
- The County Planning Commission delayed approval of the project on October 18, and requested that Unocal and community representatives work toward a settlement agreement; and
- On November 15, the County Planning Commission approved the project and staff-proposed conditions of approval, with the addition of four conditions, including:

78. Within three months of the effective date of the land use permit and every three months thereafter, the applicant shall submit to the Zoning Administrator, for review and approval, a written report outlining the progress of negotiations of a Good Neighbor Agreement. Good faith negotiations toward a Good Neighbor Agreement, as determined by the Zoning Administrator, shall be a condition of approval of the land use permit. If the Zoning Administrator finds that the applicant has not facilitated good faith negotiations, the Zoning administrator shall notify the applicant of noncompliance with the conditions of approval and shall commence revocation proceedings for the land use permit.<sup>168</sup>

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<sup>164</sup> Interview of Crockett resident, October 31, 2002, via telephone.

<sup>165</sup> Interview of CAP facilitator, August 29, 2002, via telephone.

<sup>166</sup> Crockett-Rodeo Coalition (1994). Activities since the Catacarb release on September 6, 1994. November 13, 1994.

<sup>167</sup> Contra Costa County Planning Commission (1994). Agenda Item #7, Tuesday, October 18, 1994, Unocal Corporation (Applicant and Owner).

<sup>168</sup> Contra Costa County Planning Commission (1994). Agenda Item #6, Tuesday, November 15, 1994, Unocal Corporation (Applicant and Owner); *Supra* note 162.

Board of Supervisor actions to encourage investigation and greater scrutiny of the Rodeo refinery would continue after its approval of Unocal's land use permit.<sup>169</sup> Interviewees agreed that Board assistance came after initial resistance to residents' concerns. Some even suggested that it was this initial period of denial that led residents to replace Jeff Smith as their representative on the Board in the next election.

Thus, residents, who with few exceptions were absent from the early stages of the permitting process, were galvanized by the Catacarb incident, further angered by agency and corporate response, mobilized by CBE, and encouraged to some degree by the County Planning Commission to engage Unocal in settlement talks. Interviewees mentioned four other points of leverage that fueled subsequent community-corporate negotiations. First, Unocal replaced some of their refinery management, including the refinery General Manager. New management was quicker to engage Crockett and Rodeo residents in the aftermath of minor refinery incidents that followed.<sup>170</sup> Management also corresponded regularly with County agencies concerning their activities following the Catacarb release.<sup>171</sup> Residents were able to discuss the Catacarb incident more readily with the new employees, who were not complicit in the 16-day release. A ninety minute release of hydrogen sulfide near the Hillcrest Elementary School on September 15 shifted even more of the community's focus toward the school's proximity to refinery storage tanks.<sup>172</sup> A growing tide of litigation, though unrelated to the demands of residents negotiating directly with Unocal, crested on September 23 with the announcement of a \$1 billion toxic tort claim involving over 1,000 claimants.<sup>173</sup> While settlement of the case for \$80 million with what would become 6,000 plaintiffs did not occur until April 1997,

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<sup>169</sup> For example, following a tank fire at the refinery in June 1995, Supervisor Jeff Smith requested a "thorough report to the Board of Supervisors by June 27<sup>th</sup> on the recent Unocal tank fire and related non-compliance issues from the Health Services Department, County Counsel, and Community Development." The report was to include "all options to the Board of Supervisors to stop this pattern of repeated violations at Unocal, including an emergency shutdown of the plant while corrective measures are put in place." Smith, J. (1995). Recent Incidents at Unocal Refinery in Rodeo, to Board of Supervisors, June 20, 1995; Jeff Smith also joined two other supervisors in passing the "Good Neighbor Ordinance," which required refineries to meet stringent environmental standards and undergo public hearings before undertaking maintenance projects valued at more than one million dollars. Hallissy, E. (1996). Strict new rules for three Bay refineries. *San Francisco Chronicle*, December 31, 1996, p. A1.

<sup>170</sup> Three local managers were placed on administrative leave and new managers were brought in from Los Angeles. For example, Acting General Manager sent a letter to the general public on December 15, 1994 regarding a malfunction on a compressor at the unicracker unit that resulted in an emergency shutdown, flaring, and odor complaints. The letter outlines Unocal's steps following the accident, which occurred the day before, including notification of their Emergency Response Team, the Rodeo-Hercules Fire Department, the Crockett-Carquinez Fire Department, and members of the Community Advisory Panel.

<sup>171</sup> See Thatcher, H. (1994). Letter to Catherine Kutsuris, Contra Costa County Community Development Department from Henry Thatcher, Superintendent, Human Resources, Unocal San Francisco Refinery; Plesh, S. (1994). Letter to Dennis Barry, Contra Costa County Community Development Department from Stephen Plesh, General Manager, Unocal San Francisco Refinery, October 12, 1994; Plesh, S. (1994). Letter to Planning Commission members from Stephen Plesh, General Manager, Unocal San Francisco Refinery, November 9, 1994.

<sup>172</sup> Collins, J. & Lewis, D. (2000). Hydrogen Sulfide: Evaluation of Current California Air Quality Standards with Respect to Protection of Children. Prepared for California Air Resources Board, September 1, 2000.

<sup>173</sup> Burnson, R. (1994). Residents sue Unocal for \$1 billion over leaks. *Contra Costa Times*, September 23, 1994, p. 1.

the company was encouraged to limit liability by working directly with a comparably small number of residents through direct negotiation.<sup>174</sup> It would also prove cost-effective to address certain concerns through a GNA, which included many long-range commitments that could be transferred along with general liability to the Tosco Corporation upon its purchase of the refinery in November 1996.<sup>175</sup> An early community demand to develop an alternative dispute resolution process for claims related to the Catacarb release further enhanced the benefits to negotiation perceived by Unocal. Finally, Unocal's relatively late start in pursuing permits for its reformulated fuels project meant that it could not afford the kinds of delays that protracted litigation or administrative processes would require.

Negotiations commenced after a final town meeting (convened by the County Health Department) on October 5 and the Planning Commission's refusal to grant the land use permit on October 18. By then, Crockett leaders had organized the Crockett Group, composed of Douglas Tubb, Howard Adams, Kent Peterson, Alica Anderson, Kasha Kessler, and Dave Hicks. Three Crockett leaders (Salli Spoon, President of the Chamber of Commerce, Alica Anderson, President of the Crockett Improvement Association (CIA), and Jay Gunkelman, member of the CIA) asked outgoing refinery manager, Steve Plesh, to meet with members of Crockett and Rodeo at the Commission meeting. Their offer was accepted. A town strategy meeting was then called for Crockett, Rodeo, CBE, and union representatives for October 27 at the Crockett Community Center. By October 26, members from Crockett and Rodeo (Lynn Cherry, Leonard Miglio, and Janet Callaghan) had solicited the support of Supervisor Jeff Smith and discussed their planned negotiations with Unocal with him. The strategy meeting yielded a list of community wants, which were presented to Unocal at the first GNA meeting on October 28. Community concerns included the following:

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<sup>174</sup> Hallissy, E. (1997). Unocal will settle suits for \$80 million. *San Francisco Chronicle*, April 15, 1997, p. A-1.

<sup>175</sup> San Francisco Examiner (1996). Off the ticker. *San Francisco Examiner*, November 19, 1996, p. C-1.

Table 13. Community Concerns Presented to Unocal.

Issue Area	Community Concerns
Response and Notification	Fenceline Monitoring; Community Advisory Panel; Independent Audits; Fire Department Training; Fire/Emergency Radio Channels; Data Base/Information Distribution Center; Community Warning System; Warning Sirens; Crockett-Carquinez Fire Department; Neighborhood Watch Network
Health	Health Risk Assessment; Bayo Vista Health Concerns; Funding for Health Services; Medical Monitoring; Health Care Provider Access; Fund for Medical Needs
Environment	Chlorine; Hydrogen Sulfide; Hydrocarbons; Wastewater Discharge and Disclosure; Emission Offsets; Worker Training; Flare/Noise Advance Warning; Tank Leak Monitoring
Financial	Long-term Financial Contributions; Fund Disbursal; Fund to Assist Community; Fund for Legal Assistance; Property Taxes
Transportation	Construction/Ongoing Traffic Mitigation; Parker Avenue; Anhydrous Ammonia; Cummings Skyway Funds; Bicycle/Pedestrian Walkway
Vegetation and Parks	Vegetation Buffer Zone; Bicycle and Walking Path; Lindsay Museum Donation
Safety	Relocate Hillcrest School; School Protection; Bayo Vista Safety
Vocational Training	John Swett High School; Apprenticeship Programs
Legal	Agreement to Negotiate; Conflict Resolution Process; Remedies for Breach of Contract; Refinery Name change; Drop Appeals of Reformulated Fuels Project Permit

Three early developments should be noted before we consider how these demands were translated into provisions of the GNA. A small number of issues were effectively declared “off the table” by Unocal after the third GNA meeting on November 7:

- funding to enhance community-wide neighborhood watch programs
- wastewater discharges and disclosure, particularly methods for reducing selenium discharges at the refinery
- establishment of a \$2 million trust fund to create a Tree Management District for Rodeo and Crockett to expand landscaping plans
- replacement of Unocal’s flare system with “ground-style” facilities
- relocation of Hillcrest Elementary School to an alternative site (Unocal estimated that the cost of relocation would be roughly \$28 million)<sup>176</sup>

Changing the refinery name from the “San Francisco” to the “Rodeo” Refinery was also tabled at a later date. Some residents consider the tabling of certain issues to have been a mistake in judgment early on. For instance, several negotiators considered the location of Hillcrest Elementary to be the single most important issue at the time. Tabling this issue was interpreted as either an effort by Unocal to anchor talks around an anticipated figure below the projected cost of relocation, or to deny any proposal that either lacked a nexus to the project or amounted to even a symbolic admission of Unocal’s contribution to risks to human health and safety at the school.

Tabling the above items also delayed community efforts to commit Unocal to a binding legal agreement to negotiate their concerns to conclusion. Residents suggested this agreement as a means of facilitating permit approval while the community ironed out its

<sup>176</sup> Plesh, S. (1994). Letter to Alica Anderson and Lynn Cherry from Stephen Plesh, General Manager, Unocal San Francisco Refinery, November 9, 1994.

disagreements with Unocal and produced a final single text agreement. A CBE representative explains the genesis of the proposed agreement:

Very shortly on, we presented Unocal with an agreement to negotiate which was another thing that we learned from the unions which is how they start contract negotiations. Which is to sign a simple agreement saying we agree to bargain in good faith the following issues to resolution. It's not really groundrules, it's a legally binding pre-agreement, a contract which binds the company to negotiate in good faith first.<sup>177</sup>

Unocal reiterated its “commitment to reaching consensus with the Crockett and Rodeo communities,” but did not draft the agreement to negotiate promised at the November 7 meeting.<sup>178</sup> Its letter of commitment included Unocal’s interpretation of community concerns that the company would continue to discuss, including CAP formation, enhanced emergency response, emergency warning concerns at Hillcrest, a fence-line monitoring pilot program, reduced air emissions, evaluation of methods to reduce use of extremely hazardous chemicals, responding to Catacarb-related health concerns, making available alternative dispute resolution to manage Catacarb claims, establishing a community funding program, helping to fund Cummings Skyway, participating in vocational training programs, and implementing a program to enhance local hiring. A final early development was the formalization of the community’s negotiating capacity. On November 6, co-chairs of the newly formed Crockett-Rodeo Coalition, Alica Anderson (Crockett) and Lynn Cherry (Rodeo), were elected by community group volunteers. At a November 9 meeting at the Crockett Community Center, Crockett, Rodeo, and Bayo Vista residents developed committees and working groups and gave each tasks designed to clarify the initial negotiating list. By November 13, the committees had made considerable progress<sup>179</sup>:

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<sup>177</sup> *Supra* note 161.

<sup>178</sup> Cherry, L. & Gunkelman, J. (1994). Letter to Members of the Planning Commission from Lynn Cherry, Co-Chair, Rodeo and Jay Gunkelman, Assistant Co-Chair, Crockett, November 13, 1994.

<sup>179</sup> Taken from Crockett-Rodeo Coalition (1994). Reports from Committees in Crockett-Rodeo Coalition Negotiation Packet, November 13, 1994.

Table 14. Committees Developed by November 13, 1994 by Residents.

Committee	Issues for Negotiation	Items for Consideration
Legal Issues	Agreement to negotiate; funding for legal review of Agreement; GNA must be written for signature by representatives of Rodeo, Crockett, and Unocal; Create a conflict resolution process and panel to handle legal claims from Crockett and Rodeo	Authorization to submit invoices for legal review to Unocal for payment; Provision of funds to Crockett-Rodeo Coalition for legal review expenses
Health Risk and Medical Monitoring	Funding for independent health risk assessment study to be conducted by Montgomery Watson, using analysis methodology verified acceptable by State and County Health Departments; report to be issued in January addressing short- and long-term health effects of environmental impacts of Catacarb; address Bayo Vista's concerns regarding health risks due to proximity to refinery; fund permanent health services to communities adjacent to refinery; fund long-term medical monitoring of Rodeo/Crockett residents; provide access to independent toxicologists, occupational health and other specialists to address concerns from current and future spills and emissions; establish trust fund to underwrite medical needs of Rodeo/Crockett residents from current and future spills and emissions	Release of medical information; evaluation/possible replacement of Environmed medical group; payment for independent medical exams, testing, treatment; adequate medical-related data on refinery chemicals; health care funding for low-income residents adjacent to refinery; notification of all residents of these issues; payment of health survey; tree program proposed by Stephen Batchelder; monitoring for Bayo Vista; evaluation of lead levels in local residents; funding for Lindsay Museum animal rescue activities; information on toxicologist availability; funding for local medical facility for treatment of chemical exposure; reduction of airborne particulates; creation of emergency health care directory; continued education of area physicians on chemical treatments; trust fund for treatment
Emergency Response and Community Warning	Install remote fenceline monitoring system directly wired to community fire departments and other agencies for immediate alerting of releases; designed to ensure maximum level of public safety and air quality possible through early detection and control of the release source of any hazardous, aromatic, or odorous materials; all data to be available to the public via a phone link to computers at community libraries and schools; link sent to AQMD; on-site audits by neighbors, environmentalists, and workers; funding for fire departments to provide training for emergency response and community safety; workable evacuation plan practiced regularly; create and maintain compatible radio channels of the fire/emergency units at Unocal with such units from County, Crockett, and Rodeo, with back-up communication in the event of total power loss; create computerized database with information on the effects of known hazardous materials associated with refinery components accompanied by recommended medical treatments, public safety and health measures; ensure rapid medical provision and agency employment of procedures following detection of a release source or contents; establish and fund operation of community access public health and safety information distribution center serving Bayo Vista, Crockett, and Rodeo; contribute remainder of \$250,000 previously committed to the Community Warning System; fund warning sirens; enhance neighborhood watch programs	Funding for on-site, paid professional monitors of community choice on a 24-hour basis; funding for community odor and spill patrol teams under the control of community groups; install surveillance cameras at major refinery units, flares, and fencelines operated and monitored on a 24-hour bases by community and government agencies; facilitate the presence of citizen monitors inside refinery property to participate in activation of public notification and warning systems in the event of chemical spills and releases

Committee	Issues for Negotiation	Items for Consideration
Vegetation and Parks	Mitigation for direct, local air quality impacts of project through air quality maintenance zone and implementation of long-term strategy for property acquisition and vegetation maintenance in that zone; include community representatives in discussions with agencies toward implementation; provision for safe bicycle and pedestrian access around and through Unocal property; financial commitment to fund Lindsey Museum rescue activities in the surrounding areas	Commitment to fund vegetation management district; purchase of the Hagar tract adjacent to eastern boundary of refinery for dedication to Park District; planting and maintenance of buffer of trees in zone between Unocal and Hillcrest; financial and right-of-way commitment to develop safe path for bicycle and pedestrian traffic along San Pablo Avenue through Unocal property; safe trail crossing of I-80 in the vicinity of Cummings Skyway
School Safety	Funding for relocation of Hillcrest school; environmental protections for student and faculty population at Hillcrest School, inside and outside school buildings; recognition of safety concerns of Bayo Vista for pre-school children and commitment to address those concerns	Funding to establish separate community schools (K-8) in Crockett and Rodeo (\$200,000 per year for each school for 30 years); fenceline monitors at multiple locations around Hillcrest; planting and maintenance of buffer of trees in zone between Unocal and refinery; funding for pressurized, new multi-purpose room at Hillcrest; funding new ventilation system for classrooms at Hillcrest to provide level of safety when shelter in place measures advised; continual maintenance of double paned windows and weatherstripping whenever damaged; every classroom with water, radios, televisions, new exterior doors and windows, automatic window coverings, and gas masks for all students; each wing of the school with a telephone
Vocational Training	Long-term commitment of significant funding for vocational training at John Swett High School (\$100,000 per year); assistance with getting John Swett students into apprenticeship programs	n/a
Transportation	Mitigation for construction traffic impacts on Crockett; recognition of on-going traffic impacts on Rodeo and financial commitment to develop and use alternative route (Cummings extension) for truck transport of coke from refinery; removal of anhydrous ammonia transport vehicles from Crockett and I-80/Carquinez Bridge ramps; commitment to fund the engineering and construction of Cummings Extension as an industrial access road designated to provide industrial traffic direct access to I-80; include community representatives in discussions; provision for safe bicycle and pedestrian access through and around Unocal property	Staggered shift times so that construction workers and employees do not depart Unocal at the same hour; traffic control personnel on Pomona at bridge ramps when needed to maintain Level of Service E conditions or better from the time of each PM shift change at Unocal to one hour later; requiring the prime contractor to negotiate the avoidance of Vista del Rio as a bypass route from Unocal to Carquinez Bridge; electronic speed monitors with digital display of vehicle speed on Vista del Rio during PM commute hours; assistance in obtaining highway patrol presence in Crockett; responsiveness to complaints of traffic impacts; commitment to scheduled phaseout of transport and use of anhydrous ammonia; safe trail crossing of I-80

Committee	Issues for Negotiation	Items for Consideration
Environmental	Reduction in risks associated with chlorine and hydrogen sulfide; reduction in emissions of hydrocarbons and hydrogen sulfide; full public disclosure of chemicals contained in wastewater discharges; offset for emission of particulate matter through tree planting; training and competence of workers; all Unocal jobs held by union workers, especially maintenance positions; advance warning when flare noise expected; underground monitoring equipment for all new tanks	Enclosed loading and unloading facilities for hazardous materials transfers; reduce quantities of acutely hazardous materials used at refinery and frequency of deliveries and transfers; increase flare gas recovery systems capacity to prevent flaring during major upsets; use cascading ground flares to reduce emissions; vent all pressure relief valves into containment; retrofit with bellows valves on all services 2 inches or less; install bellows valves on all new project services; utilize cone roof design; drop lawsuit against release of water discharge permit data; fund independent audit for pollution prevention; meet selenium discharge limits on a per barrel basis
Financial Issues	\$100,000 annually to Rodeo, Crockett; 30 year term; allocation of funds should not include Unocal representatives; change name from San Francisco to Rodeo Refinery; \$2,000 for clerical support; \$1,000 for legal expenditures; support for return to source agreement with County to dedicate Unocal property taxes for use in Rodeo and Crockett	Permanent funding to sustain libraries; funding for Lindsay Museum project in Crockett

By this time, a small group of predominantly Crockett residents had also formed the Shoreline Environmental Alliance (SEA), which focused on environmental health and was the strongest proponent of Hillcrest school relocation. SEA members advanced their own negotiation proposal that focused on medical testing and treatment, health surveys, pollution monitoring, lead testing, additive and synergistic effects of exposure to Catacarb to those already with elevated blood lead levels, and medical staff training for treatment of chemical exposure. Interestingly, the group also focused on relieving the burdens borne by residents of Bayo Vista, the housing authority located along the refinery's fence line in Rodeo. Elements of their negotiation proposal that encompassed the concerns of Bayo Vista included:

- Funding for immediate and continued local health care and concerns for low-income citizens exposed to chemical release. Bayo Vista area as defined by its physical relationship to the refinery and its shared facilities increase vulnerability to chemical exposure. The citizens living or utilizing facilities in this area generally have no or limited health care programs to respond to their health needs.
- Include Bayo Vista's Tiny Tot School in monitor installation program. Provide report and/or explanation of Federal Government participation for health, safety, testing, and other issues related to exposure to chemical releases for community residents living in or frequenting this area.
- An endorsement of Stephen Batchelder's Tree Maintenance District proposal that would absorb .03-.2 pounds of particulates per tree per day (the project would add 165 lbs/day of particulate emissions, requiring 1,650 trees to absorb particulate matter from the new project). Bayo Vista residents continue to express concerns over particulates.<sup>180</sup>

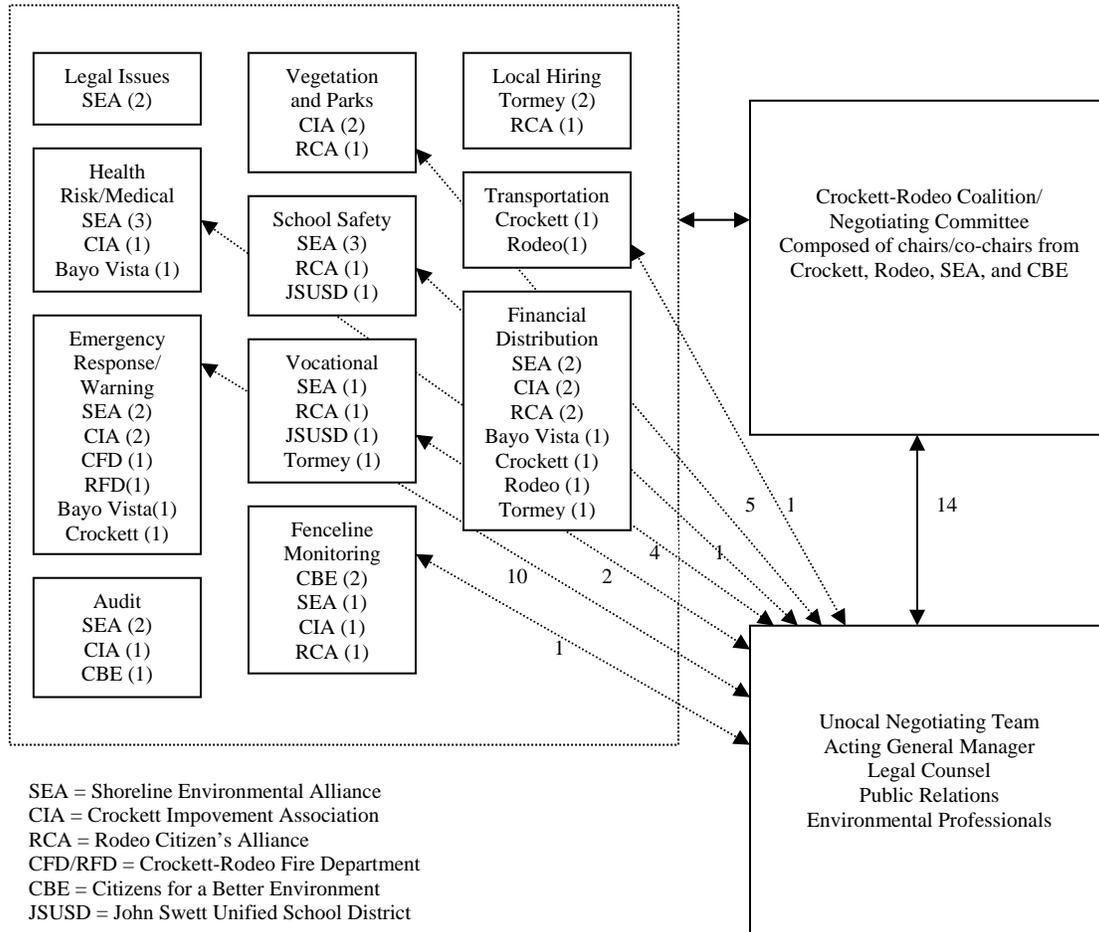
<sup>180</sup> Shoreline Environmental Alliance (1994). Health Sub-Committee Health Issues Negotiation Proposal, November 11, 1994.

The committee structure described above was viewed as helpful to residents for a number of reasons. First, they solidified a number of important issue areas that were initially presented to Unocal *en masse*. By allowing small groups of highly dedicated and qualified people (for instance, the health committee included a chemistry Ph.D.; the vegetation and parks committee included an arborist) to further explore these issues, the committee structure made it more difficult for Unocal to ignore or postpone consideration of certain proposals. Interviewees credit the committees for ensuring that most of their initial demands were accounted for in the final agreement, even though residents, who in some cases had just completed ten years' worth of negotiations with other companies, gradually dropped out of the process. Committees also met on separate occasions with Unocal, allowing for more focused discussions, and reported back to the broader negotiating committee, chaired jointly by Crockett and Rodeo residents. At the same time, the committees did provide their own set of challenges. Representation on the committees was inherently lopsided due to self-selection. This meant that after mid-November 1994, access to decision-making and the ability of certain affected areas to influence policy was limited. As shown below, the committees, by virtue of self-selection, did not encourage equal consideration of the issues by representatives of each community. Finally, the presence of committees, and their direct negotiations with Unocal, constituted an implicit concession on the part of the community: there was a limit to which any particular issue could be addressed without crowding out the interests of other committees. For example, certain committees were adamant that demands for school relocation be dropped so as not to affect other concerns. Similarly, efforts to commit Unocal to fund all or part of the Cummings Skyway road extension were viewed by some as a misuse of money that should have been appropriated for school relocation or other projects. Figure 5 provides a sketch of the committees, their membership, and the frequency with which they met with Unocal before development of an initial draft of the GNA.<sup>181</sup>

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<sup>181</sup> Taken from Good Neighbor Agreement between Crockett-Rodeo Coalition, Shoreline Environmental Alliance, Citizens for a Better Environment, and the Unocal Corporation Attachment B, April 7, 1995; Crockett-Rodeo Coalition (1994). Report on Community Activities Relative to Unocal, November 13, 1994; Unocal Corporation (1994). Unocal Reformulated Gasoline Project Summary of Community Meetings, Presented to the Contra Costa County Board of Supervisors, December 20, 1994.

Figure 5. Negotiating Committee Membership/Meetings, November-December, 1994.



Does not include Unocal meetings with other individuals/agencies or informal meetings that have not been documented

The communities and Unocal made substantial progress on emergency response, health, and vegetation/parks issues within smaller meetings with committee representatives.<sup>182</sup> Other issues, particularly financial allotments, legal issues, audits, and school safety, were covered in the 14 broader GNA negotiations. Some of these issues were of concern to many or all committees, such as financial distribution. Others either elicited concessions early on by Unocal with little remaining bargaining room (e.g., environmental audits) or they were explored in part by Unocal through meetings with individuals that were not represented by the committees (for instance, school safety was explored through direct meetings with school officials and shelter-in-place drills run with the assistance of Unocal; the company further agreed by mid-October to contribute

<sup>182</sup> For example, a meeting between Unocal representatives and the Public Safety Committee of the CIA yielded proposals such as the use of a network of fax machines in critical locations in the community, to allow Unocal to disseminate information “regardless of the nature of the event or whether County systems (CAN, etc.) are activated.” Habinski, H. (1994). Notes of the Meeting Between Unocal Representatives and the Public Safety Committee of the Crockett Improvement Association, November 2, 1994.

\$378,000 to Hillcrest for weather stripping, door, and window improvements). It should also be noted that many elements of the GNA required a separate series of meetings after the initial agreement was reached in late December 1994. These included fenceline monitoring, medical treatment, health studies, and legal issues pertaining to the final draft of the document.

Unocal responded to community demands with a series of proposals that were either linked to some of the issues raised by committees, offered directly to the Community Development Department, or agreed to with the Rodeo Municipal Advisory Council (RMAC), a quasi-governmental body whose members were appointed by the Board of Supervisors.

September 21, 1994: Memorandum of Understanding with RMAC<sup>183</sup>

- Locate Tank 109 further from Hillcrest School
- Improve emergency notification plan to Hillcrest and St. Patrick's Schools and Bayo Vista
- Provide Rodeo with quarterly newsletters information community of project status
- Conduct two shelter in place workshops and distribute kits by June 1995
- Work with Rodeo licensed day care centers to request notification from Community Warning System; provide for any required access material and installation
- Continue participation in the Refinery/Petrochemical mutual aid system
- Appear before the RMAC quarterly during project construction
- Contribute \$50,000 in January 1995 and \$50,000 in January 1996 for community improvements in Rodeo, selected by RMAC
- Advise RMAC of future hiring plans
- Work with Contra Costa building trades to implement hiring outreach for apprentices from Crockett, Rodeo
- Work with County to develop a community advisory program
- Work with East Bay Regional Park District and State Lands Commission to develop bike and walking path along San Pablo Avenue
- Contribute \$25,000 per year for three years to John Swett Unified School District for specific student programs
- Contribute \$378,000 for facilities improvement project at Hillcrest Elementary School

October 12, 1994: Activities Summarized to Community Development Department<sup>184</sup>

- Reviewing notification procedures with regulatory agencies
- Will continue to work in conjunction with County's expanded emergency notification network
- Forming a Community Advisory Panel with representatives from Crockett, Rodeo, and Tormey
- About to begin educational program with schools, senior centers, day care facilities, and community groups on how to respond to emergency releases
- Making a contribution to Hillcrest (agreed to with RMAC)

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<sup>183</sup> Memorandum of Understanding Between the Rodeo Municipal Advisory Council and Unocal San Francisco Refinery, September 21, 1994.

<sup>184</sup> Plesh, S. (1994). Letter to Dennis Barry, Contra Costa County Community Development Department from Stephen Plesh, General Manager, Unocal San Francisco Refinery, October 12, 1994.

October 28, 1994: Activities Summarized to Community Development Department<sup>185</sup>

- Is investigating all property damage claims; efforts to clean cars, windows, and personal property will be completed soon
- Contribution has been presented to Hillcrest (October 20)
- Will install temporary on-site monitor at Hillcrest this week to allow school to be aware of airborne release
- Working with Community Awareness and Emergency Response (CAER) organization to educate community on sheltering in place and other ways of protecting themselves in the event of a release; developing videos to be mailed to each neighboring household
- Signed contract with CAER for installation of new community warning system, scheduled for completion in December 1995; would be capable of linking directly to all major local TV, radio, and cable stations, activating sirens audible to residents within one mile of each major industrial facility in County, including Unocal, initiating the current Community Alert Network, a computerized telephone system which delivers messages to businesses and residents during an emergency, and connecting to digital highway signs planned by State Department of Transportation.

November 8, 1994<sup>186</sup>

- Opened a temporary medical clinic in Crockett staffed by independent medical expert specializing in toxicology and environmental medicine
- Initiated a health risk assessment working group including representatives from the community and risk assessment experts selected by the community and Unocal

November 8, 1994: Unocal presents its Response to Community Concerns<sup>187</sup>

- Will work to form a CAP, the function and role of which will be defined in a separate agreement
- Will provide status reports on the project to the CAP
- Will request that land use permit conditions apply to Crockett as well as Rodeo Fire Department emergency response
- Will work with Community Awareness and Emergency Response organization to implement a new Community Warning System; has committed \$250,000 toward implementation of the system
- Will implement shelter-in-place education plan including two workshops and distribution of videos to 6,000 residents
- Will provide quarterly newsletters on project
- Will continue participation in Refinery/Petrochemical mutual aid system
- Will work with CAP to enhance emergency notification procedures
- Will continue to upgrade internal communications systems, including purchasing cellular phones, pagers, and other equipment
- Will develop system to provide timely notification to emergency rooms, health care providers, and pharmacies in the event of a release
- Will install experimental remote sensor fence-line monitor pilot program at refinery
- Will prepare report on pilot program and share with CAP and community groups
- Will install a set number of bellows valves on project facilities or by replacement of existing valves prior to March 1, 1996. Will replace other existing valves by 1998
- Will preferentially purchase local emission offsets
- Will install a permanent air monitoring device at Hillcrest School by end of November
- Will phase out anhydrous ammonia at refinery (replaced with aqueous ammonia)

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<sup>185</sup> Thatcher, H. (1994). Letter to Catherine Kutsuris, Contra Costa County Community Development Department from Henry Thatcher, Superintendent, Human Resources, Unocal San Francisco Refinery.

<sup>186</sup> Randle, A. (1994). Letter to Board of Supervisors from Allen Randle, Acting General Manager, Unocal Petroleum Products and Chemicals Division, December 5, 1994.

<sup>187</sup> Unocal Corporation (1994). Unocal's Response to Community Concerns, November 8, 1994.

- Will conduct human health risk assessment through a working group; will present results to include monitoring data and conclusions
- Will continue to have medical expert specializing in toxicology and environmental medicine available to residents to address health concerns related to recent releases
- Will agree to annual contributions to Rodeo and Crockett for general improvements
- Will work with Supervisors to develop a means of allowing Unocal to participate in partial funding of Cummings Skyway extension
- Has donated \$378,000 to Hillcrest School
- Will work with East Bay Regional Park District and State Lands Commission to develop a bike and walking path along San Pablo Avenue through refinery
- Will advise CAP of future hiring programs
- Will work with building trades to implement a hiring outreach program for apprentices
- Will contribute \$25,000 per year for three years to John Swett Unified School District
- Will develop an alternative dispute resolution process for claims related to Catacarb release

November 11, 1994<sup>188</sup>

Letter to Community Chairs regarding further proposals

- Willing to hire independent auditor selected jointly by the parties to perform an independent audit of the refinery's emergency response plan, notification procedures, and safety management program; results would be made public
- Willing to install 80 bellows valves between now and March 1, 1996; another 50 would be installed by January 1, 1997; assuming they meet performance standards, another 50 would be retro-fit by January 1, 1999
- Willing to contribute \$100,000 annually to each of the communities for 15 years; allocation to be determined by committees comprised of community members and Unocal representatives

Unocal's agreement with RMAC was not the first example of residents seeking to pursue their demands prior to the establishment of a more broad-based process.

Negotiation started before anything was organized. As usual, a few people get together, make demands on Unocal, people from the community, but not an organization, not an organized effort. Just the startup. People begin by making demands, and we even heard that Unocal had agreed to such and so before there was any real organization. And that's, it's that point I stepped in and helped organize the effort into a working entity. At which point, the key person who had jumped in at the beginning vanished, and that was important to me also. There might have been some early statement about paying money to the community. This is a person in the pocket of one of the county supervisors who did not represent us and we had to fight to get control for the community away from outside supervisors.<sup>189</sup>

Careful consideration of concessions that followed broader organization reveals that some of the most innovative and potentially cost-effective proposals linked to community warning and emergency response were either tabled or ignored. Recall that the Emergency Response and Community Warning Committee had produced the following proposals in order to assist the refinery in avoiding future Catacarb-type incidents:

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<sup>188</sup> Plesh, S. (1994). Letter to Alica Anderson and Lynn Cherry from Stephen Plesh, General Manager, Unocal San Francisco Refinery, November 11, 1994.

<sup>189</sup> Interview of Crockett Resident, November 11, 2002, via telephone.

- On-site, paid professional monitors of community choice at all times
- Funding for community odor and spill patrol teams under the control of community groups
- Surveillance cameras at major refinery units, flares, and fencelines operated and monitored at all times by community and government representatives
- Citizen monitors inside the refinery that would participate in activation of public notification and warning systems during spills and releases
- Fenceline monitors directly wired to community fire departments and other agencies for immediate alerting of releases, designed to ensure early detection and control of release source, all data available to public
- Funding for fire departments to design and provide training for emergency response
- Workable evacuation plan practiced regularly
- Create and maintain compatible radio channels of fire/emergency units at Unocal with such units from County, Crockett, and Rodeo
- Computerized database with information on effects of known hazardous materials and recommended medical treatments
- Ensure rapid medical provision and agency employment of recommended procedures following release detection
- Fund operation of a community access public health and safety information distribution center serving communities
- Contribute remainder of \$250,000 previously committed to Community Warning System
- Fund permanent installation and maintenance of warning systems
- Funding to enhance community-wide neighborhood watch programs<sup>190</sup>

Such proposals, which sought to alter roles and responsibilities, transfer some of the existing monitoring discretion from Unocal and agencies to local residents, and encourage the co-production of environmental safety by residents and the state, were “chipped away” by Unocal negotiators.<sup>191</sup> Elements of community-corporate agreement, that appeared first in a 17-page GNA (signed on December 20 pending legal review), often represented something “close to the bottom line” for many of the negotiating committees.<sup>192</sup> In the case of emergency response and warning, Unocal agreed only to fund a database of health effect information, participate in a working group to develop an information and notification system, and to fund purchase of a siren as part of the existing Community Warning System. A remote sensing air monitoring testing program was agreed to, as well as one independent audit of the refinery’s emergency notification procedures. The School Safety Committee offered similarly comprehensive proposals to ensure effective emergency planning at local schools and to facilitate school relocation through \$400,000 per year donations to fund two new schools in Crockett and Rodeo. The December version of the GNA only promises a permanent monitoring station at Hillcrest, further education and training, access to property for a bus turnaround at Hillcrest, and a study to identify risks “attributable” to Unocal vis-à-vis Hillcrest School (and funds not to exceed \$500,000 to perform mitigations should risks be found attributable). Similar examples of positional bargaining were noted in other committees as well.

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<sup>190</sup> Emergency Response and Community Warning Committee (1994). Emergency Response and Community Warning Issues for Negotiation, November 13, 1994.

<sup>191</sup> Interview of Tormey Resident, October 24, 2002, via telephone.

<sup>192</sup> Interview of former Organizer, Citizens for a Better Environment, June 4, 2002, in Point Richmond.

The most interesting dynamic to emerge following the creation of committees and solidification of their demands concerned the source of proposals. As evidenced by Table 14, residents, many who were suffering from the effects of Catacarb exposure, spent much of their time crafting proposals and investigating alternatives:

We met endlessly. And we designed things because of course they were clueless. We called phone companies, we called places to find out what to do about some sort of calling system and also to get information from the County. For instance, one of the things we proposed was that they would mail to every person in Crockett every six months or a year or less, a postcard and ask them if they were chemically sensitive or if they wanted notification of what would be considered kind of a “level two” incident which is not the highest but kind of a middle incident. And we did this because my wife is very chemically sensitive and she has allergies and when they have a release, it affects her more than others and many other people felt the same way so we filled out all these forms and we figured out a way that Unocal could actually call with an automated system so that the County wouldn’t have to wait until doomsday, because they, literally people could be dying by the thousands and the County could say well, there doesn’t seem to be scientific evidence, and we’re not sure there’s any cause and we don’t know where the source of this is, even though of course there are now detectors all over the place, they still won’t commit to all of that. So we were going to have Unocal determine if it was their release, with these new infrared detectors to notify us if it was this kind of middle-range release.<sup>193</sup>

While residents were clearly adept at creating options for meeting their most pressing concerns, their proposals were often rebuffed by Unocal. When this happened, community representatives sought additional resources from the company in return for their reluctance to address certain issues or proposals. A series of trades along these lines ensued. For example, Unocal was opposed to CBE’s participation in annual audits that the company traditionally conducted at the facility. CBE agreed to drop its demand for inclusion in exchange for an increase in funding for the communities. Interviewees agree that there was often pressure to “take some of the environmental and safety improvements away” in exchange for more money. Unfortunately, some of the residents admit that they were not as capable of estimating dollar values for their proposals as they were of envisioning them. Thus, it proved difficult at times to gauge whether the trades were fair from the community’s standpoint. But residents were able to help Unocal negotiators “sell” certain ideas to upper management, including the formation of a Good Neighbor Clinic, which was agreed to relatively early on. A final difficulty in reaching agreement concerned Unocal’s propensity to replace *proposals* that directly affected problems that had been identified with *processes* for considering resident concerns. The December and final (April) versions of the GNA include outlines for studies of health risk, assessment of school risk attributability, reports on the viability of fence-line monitoring, and reports on emergency response audits. Much of the work that followed the agreement in principle served to establish protocols for carrying out these investigations. The implementation phase of the GNA is riddled with moments of impasse before, during, and following issuance of these reports.

Following the Planning Commission’s approval of the land use permit, appeals were made to the Board of Supervisors by the United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry, SEA, and Unocal. Interestingly,

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<sup>193</sup> Interview of Crockett Resident, October 31, 2002, via telephone.

the union’s appeal claimed that the EIR did not take into account Unocal’s management practices which could lead to further releases.<sup>194</sup> SEA also focused on issues of emergency response, citing inadequate protection for chemically sensitive individuals and calling for any fence-line monitoring system to offer direct and immediate public access to data.<sup>195</sup> An agreement in principle (the first agreed-to version of the GNA) was reached on December 20, 1994, just before the Board was to consider the appeals, which were subsequently dropped. This unprecedented agreement shocked some of the community representatives in terms of the financial resources involved:

Table 15. Good Neighbor Agreement (in Principle) Financial Commitments.<sup>196</sup>

Element	1994	1995	1996	1997	1998-2009
Health Risk Assessment		170,000	80,000		
Medical Clinic		120,000			
Epidemiological Study		238,000			
Health Database		50,000			
County HAZMAT Van		20,000			
Siren in Crockett		20,000			
Tree Planting		400,000	30,000	30,000	30,000/yr. until 2004
Bike Path		100,000			
Lindsay Museum		5,000			
Carquinez Strait Trust		5,000			
Hillcrest Monitor		90,000			
Hillcrest School	378,000	122,000			
Transportation		4,500,000			
Transportation Consultant		30,000			
Phase-out Anhydrous Ammonia		250,000	650,000		100,000 in 2000
Fence-line Monitoring		300,000	2,200,000		
Independent Safety Audit		50,000			
Reduce VOC Emissions		100,000	100,000	100,000	
John Swett Vocational Training		100,000	100,000	100,000	100,000/yr. until 2009
Rodeo/Bayo Vista Financial		100,000	100,000	100,000	100,000/yr. until 2009
Crockett/Tormey Financial		100,000	100,000	100,000	100,000/yr. until 2009
<b>TOTAL</b>	<b>378,000</b>	<b>6,870,000</b>	<b>3,360,000</b>	<b>430,000</b>	<b>3,910,000</b>

While monetary contributions are not the only means of gauging corporate responsiveness to community concerns, few commitments in the draft GNA were unattached to financial resources. Some interviewees expressed frustration with the proportion of Unocal’s initial \$14,948,000 financial commitment dedicated to certain

<sup>194</sup> Bragdon, H. (1994). Memorandum to Board of Supervisors from Harvey Bragdon, Director of Community Development regarding Hearing on Appeal of the Certification of the Final EIR and the Approval of Land Use Permit #2038-93 for the Unocal Corporation’s Reformulated Gasoline Project, December 7, 1994.

<sup>195</sup> Briley, C.D. (1994). Letter to Catherine Kutsuris, Senior Planner, Community Development Department from C. David Briley, Bar Certified Student, Golden Gate University Environmental Law and Justice Clinic, School of Law regarding Land Use Permit #2038-93 Certification of FEIR, November 22, 1994.

<sup>196</sup> Good Neighbor Agreement, Agreement in Principle between Crockett-Rodeo Coalition, Shoreline Environmental Alliance, Citizens for a Better Environment, and the Unocal Corporation, December 20, 1994.

activities. When viewed as a percentage of total commitment, financial commitments suggest an interesting set of priorities that emerged from committee-driven proposals, Unocal acceptance or denial of each, and subsequent trades:

Transportation improvements:	\$4,530,000 (30.3%)*
Financial contributions to four nearby communities:	3,000,000 (20.1%)++
Air monitoring:	2,500,000 (16.7%)*
John Swett vocational training:	1,500,000 (10.0%)++
Anhydrous ammonia phase-out:	1,000,000 (6.7%)*
Tree planting:	670,000 (4.5%)+
Hillcrest school improvements:	590,000 (3.9%)+
Health risk/epidemiological study:	488,000 (3.3%)
Reduce emissions:	300,000 (2.0%)*
Medical clinic:	120,000 (0.8%)
Bike path:	100,000 (0.7%)*
Emergency preparedness/community warning:	90,000 (0.6%)+
Safety audit:	50,000 (0.3%)
Miscellaneous:	10,000 (0.1%)

\* = condition of permit approval

++ = substantial improvement over permit condition

+ = improvement over permit condition

The committee structure that negotiated the GNA, composed of members of existing citizen and civic organizations, encouraged a relatively high level of financial support to be allocated annually by the Crockett Foundation and the Rodeo Municipal Advisory Council. Some proposals, by virtue of their “lumpiness” and strong support across the community and with the County, received a disproportionate share of Unocal’s allocation. Two of the Planning Commission’s conditions of approval were for Unocal to provide for a fence line monitor (condition 76), and for the company to contribute “\$4,500,000 or an alternate amount determined by the Board of Supervisors for the construction of the Cummings Skyway extension” (condition 77).<sup>197</sup> A resident explains how these conditions were added to the Commission’s permit approval:

We shared documents, draft documents for instance. We had a draft of the GNA that we gave to the Commission and asked them to put specific language into the permit from our document, to legalize under the permit things that we were getting Unocal to agree with. In some cases they did that, took language even verbatim. In other cases, they did not. But there was a parallel process and it worked to our advantage.<sup>198</sup>

In lieu of school relocation, Hillcrest received 3.9% of the allotted sum for necessary improvements. Again, community representatives had been able to convince the Planning Commission to require a \$378,000 contribution to Hillcrest for structural improvements (condition 75). Environmental concerns were translated into promised studies with limited consideration of how results would be interpreted or used to influence refinery operations. Emissions concerns received 2% of the total (or 6.5%

<sup>197</sup> Contra Costa County (1994). Community Development Department Approved Permit, Conditions of Approval for Land Use Permit #2038-93 (Unocal Corporation Reformulated Gasoline Project), December 20, 1994.

<sup>198</sup> Interview of Crockett resident, November 11, 1994, via telephone.

when particulate matter reductions from tree planting are factored in), predominantly for the replacement of valves to reduce fugitive emissions. Some of these valve replacements may have been required by the AQMD during its subsequent permitting process for Unocal's RGP (BACT for reformulated fuels projects included specifications for valve types).<sup>199</sup> They were also added to the County's conditions of approval (#79). Most disappointing to several representatives was the lack of commitment to "preventing future Catacarb's." Less than one percent of the GNA was dedicated to such efforts. The inventiveness of committee proposals, urgency of local residents, and number of meetings with Unocal management and experts were not sufficient to ensure adequate representation of emergency preparedness in the final agreement. Some argued that the two largest one-time expenditures, the Cummings Skyway extension and fenceline monitoring, shared a nexus to emergency response. Cummings Skyway would be built just in time for the destruction of Crockett's freeway ramps due to bridge construction. It therefore allowed for improved evacuation of the area. Fenceline monitoring was to contribute to these efforts through notification of offsite impacts of refinery releases. We will see that implementation severely limited its effectiveness in that regard.

*Implementation.* The following is an overview of primary activities that followed party approval of the initial GNA in December, 1994.

Legal Review. Both sides relied on attorneys and negotiating committee members to scrutinize the initial document and provide recommendations for changes to its language. For community representatives, this process began prior to the initial GNA and continued until a final draft was signed on April 7, 1995. Three primary issues for residents were (1) document specificity and use of "dates certain," (2) Section ten (legal issues), (3) and the status of signatories to the agreement. Examples of specificity added to the document over time included location and timing, direct recipients of certain commitments, prohibited expenditures, who should provide oversight, and enforcement mechanisms (e.g., which portions of the agreement are valid land use conditions requiring appeal through County administrative procedures). A second concern involved the GNA's breach clause in section ten, which initially entitled Unocal to damages (to be determined through either court action or disputes submitted to the Zoning Administrator).<sup>200</sup> Residents tried to get the section's language changed to eliminate money damages as a remedy or to assure that money damages would be deducted from Unocal's financial responsibility and not taken from their organizations. An alternative was to limit both sides to "specific performance" of the contract as a remedy.<sup>201</sup> The final document includes several clauses which sought to address the above concerns:

Section X(1)e. No party shall be liable in monetary damages for any breach of this Agreement. The sole remedy for any breach shall be an action for specific performance, and/or injunctive or declaratory relief to enforce the Agreement. No payment of attorney's fees shall be allowed pursuant to court order.

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<sup>199</sup> Bay Area Air Quality Management District (1993). Best Available Control Technology Guidelines for Fugitive Emission Sources for Refinery Clean Fuels Projects, April 16, 1993.

<sup>200</sup> Ramo, A. (1994). Letter to Ruth Blakeney, Shoreline Environmental Alliance and Denny Larson, Citizens for a Better Environment from Alan Ramo, December 20, 1994.

<sup>201</sup> *Ibid.*

**Section X(2).** If a final determination is made pursuant to paragraph 1 above that funds have been expended for an improper purpose as specified in Section VIII, paragraphs 4 and 5, Unocal shall be entitled to withhold future payments to the entity which has made the improper expenditure in an amount equal to the improper expenditure.

**Section X(6).** If any portion of the Good Neighbor Agreement is deemed invalid, the other portions shall remain in effect; if any portion is breached or declared illegal, the other portions shall remain enforceable and legal, except as specifically described herein.<sup>202</sup>

These clauses limited community organizational liability while ensuring that GNA implementation would continue even in the event of a breach of one or more sections. The final version of the legal section governed disputes according to a process that included notification of all parties, “good faith” discussions, and the submittal of a dispute for mediation by a qualified person. Court actions were reserved for situations where the above means of dispute resolution were exhausted. Equally important to issues of breach was the legal status of signatory organizations for purposes of GNA enforceability. Attorneys commenting for the community suggested that legally recognized entities should be involved for purposes of enforcement. Residents were warned that should they not be part of a legally recognized entity, they “would have to rely upon the other community entity’s continued viability and willingness to enforce community interests.”<sup>203</sup> In addition, attorneys questioned whether the Rodeo/Crockett Coalition was an operational organization, and suggested that ongoing organizations such as the RCA and CIA be substituted.<sup>204</sup> In the end, the Coalition, SEA, CBE, and Unocal were the signatories to the GNA, even though the two local groups had yet to obtain 501(c)3 status as formal non-profit organizations.

**Study Design and Results.** A common difficulty emerged during implementation of studies of health status, risks associated with the Catacarb release, and school safety, attributable to errors of omission in the design of the agreement:

We’re going through various drafts and watching the language fine-tuned and checking to see if something doesn’t vanish without our approval and so on and we’re getting tired. We really want to get to the end of this, get the document signed. And then in a few months or a year or two, we realize that there are loopholes or that we just don’t have all of the language that we needed. And it’s true in the GNA where one type of language that we don’t have is definitions. What does a word mean? And that was particularly bad when it came to the school issue of responsibility. We had something in the GNA about analyzing the grammar school building for its safety of the students, the defects in the building, windows, or whatever. And something about an analysis, a potential risk analysis. Something like that. We did not define this, exactly what we meant and exactly what was required in language that would allow us to stay in command of the situation. And they were able to go through the motions of offsite consequence analysis and bring something forward from some consultant and then to have Unocal say well, but we don’t agree, we don’t

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<sup>202</sup> Good Neighbor Agreement between Crockett-Rodeo Coalition, Shoreline Environmental Alliance, Citizens for a Better Environment, and the Unocal Corporation, April 7, 1995, Section 10.

<sup>203</sup> Montandon, A. (1995). Memorandum to Shoreline Environmental Alliance from Art Montandon, December 19, 1995.

<sup>204</sup> Weinberger, M. (1995). Memorandum to Lynn Cherry, RCA and Denny Larson, CBE from Mark Weinberger, January 27, 1995.

accept this, we're going to have another one done, and string it out, and in the end it went nowhere.<sup>205</sup>

By mid-February 1995, Unocal began to contract with researchers at San Francisco State University for the completion of an epidemiological study of residents exposed to Catacarb.<sup>206</sup> Residents were asked to attend a community forum in late February to hear from a panel of scientists and health professionals about the study.<sup>207</sup> The principle investigator, Rosemarie Bowler, as well as community representatives, were confronted with numerous obstacles in carrying out their work. First, the County Health Services Department sought to intervene early in the process, an effort which was rebuked by community negotiators.<sup>208</sup> Second, the County gave little assistance to the researcher or residents in terms of offering comments on study instruments or information on the makeup of Catacarb.<sup>209</sup> Unocal also hired a second researcher, Paul Fonteyn, to complete additional statistical analysis of the Bowler study, to determine "where there is a risk of over-interpretation, perform advanced statistical analysis of correlation structure of the data and determine if substantial internal correlation of the data is present."<sup>210</sup> The report was made available in draft in January 1996. Controlling for household cluster effects, gender, education, and race, the study found an increased reporting of symptoms among those exposed to Catacarb, including headaches, respiratory, visual, gastro-intestinal, and dermatologic problems. The study compared Crockett with a control community and did not consider Rodeo or Bayo Vista. The report found that adjusted odds ratios (or relative risk of developing a given condition compared to those who are not exposed to a given item) were elevated for people

Reporting sticky brown deposits on their cars (odds ratio of 3.0 for dermatological, headache, and chemical sensitivity symptoms)

Reporting sticky brown deposits on their house (significantly higher visual, cardiac, dermatological, headache, chemical sensitivity, and gastro-intestinal symptoms)

Reporting having gardened during the height of the release (significantly higher dermatologic and visual symptoms, possibly related to direct contact with Catacarb, which may have produced irritation of the mucous membranes of the eyes and skin)

Reporting additional time spent outdoors during Labor Day weekend (in five hour increments) (significantly higher visual, dermatological, and respiratory symptoms)<sup>211</sup>

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<sup>205</sup> Interview of Crockett resident, November 11, 2002, via telephone.

<sup>206</sup> Randle, A. (1995). Letter to Dr. Paul Fonteyn, Associate Vice President for Research, San Francisco State University from Allen Randle, Acting General Manager, Unocal San Francisco Refinery, February 9, 1995.

<sup>207</sup> Crockett Health Committee (1995). Announcement to Crockett, Rodeo, and Tormey residents regarding Community Forum, Thursday, February 23, 1995.

<sup>208</sup> Shoreline Environmental Alliance (1995). Letter to Wendel Brunner, M.D., Contra Costa County Health Services Department from SEA, February 2, 1995.

<sup>209</sup> Bowler, R. (1995). Memorandum to Dr. Wendel Brunner from Dr. Rosemary Bowler, February 9, 1995.

<sup>210</sup> Wilkes, J. (1995). Letter to Dr. Paul Fonteyn, Associate Vice President for Research, San Francisco State University from Jeffrey Wilkes, General Manager, Unocal San Francisco Refinery, June 12, 1995.

<sup>211</sup> Bowler, R. (1996). Health Study of a Community Exposed to a Chemical Spill. San Francisco State University, March 29, 1996.

These effects were found to be consistent with the effects of known constituents of Catacarb, including boron, vanadium, diethanolamine, and N-nitrosoethanolamine. Bowler's study would later be characterized by residents as "the only study that reflects injury to the community."<sup>212</sup>

The human health risk assessment, carried out by Montgomery Watson, was far more problematic. At first, a working group composed of representatives from the California Environmental Protection Agency, California Department of Human Services, County Department of Health, Unocal management, and community representatives and their consultant, met regularly and produced numerous suggestions for improvements of the risk assessment. A third iteration of the assessment was issued by the consulting firm in November 1995. The community's technical representative characterized the report as "poorly written, extremely difficult to understand, and makes no attempt to convey its finding in words or terms which could possibly be understood by the affected community."<sup>213</sup> More importantly, community representatives indicated that the report made use of air dispersion modeling that had not been approved or reviewed by the working group.<sup>214</sup> Residents also found that the report ignored evidence on the amount of Catacarb that had been deposited on surfaces in the community during the release.<sup>215</sup> Similar complaints were raised by state agencies represented on the working group. The State Department of Health Services found that changes in methodology, made without working group input, served to reduce health risks calculated for short-term exposure to Catacarb "by over an order of magnitude."<sup>216</sup> The agency discussed elements of uncertainty that meant that "definitive answers to the community regarding the presence or absence of health effects due to the Catacarb release cannot be inferred."<sup>217</sup> These included the modeling approach used to estimate how Catacarb released by the facility was dispersed through the air and deposited in various concentrations throughout the community. Further conditions of uncertainty included a lack of toxicological data for Catacarb, leading researchers to substitute related chemicals and assume that effects of constituent chemicals would be additive (rather than greater than additive, or synergistic), and the extrapolation of chemical toxicity data from laboratory animals to human beings to estimate health risks.

Community representatives spent countless hours commenting on and offering corrections to various versions of the risk assessment. In the end, the study failed to emerge from joint community-corporate investigation of modeling and statistical

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<sup>212</sup> Health Committee (1996). Memorandum to the Steering Committee regarding the Shoreline Environmental Alliance, February 20, 1996.

<sup>213</sup> Greenberg, A. (1995). Letter to Dr. Susan Mearns, Montgomery Watson from Dr. Alvin Greenberg, Community Technical Representative to the Work Group regarding Unocal Catacarb release: Final health risk assessment, December 15, 1995.

<sup>214</sup> Adams, H. (1996). Letter to Jeffrey Wilkes, General Manager, Unocal Corporation from Howard Adams regarding Catacarb Health Risk Assessment, February 1, 1996; Montgomery Watson (1995). Letter to Working Group Members from Montgomery Watson, November 17, 1995.

<sup>215</sup> Adams, H. (1995). Catacarb Health Risk Assessment Comments, November 11, 1995.

<sup>216</sup> Armstrong, M., McNeel, S., & Seidel, S. (1995). Letter to Dr. Susan Mearns, Montgomery Watson from Michael Armstrong, Research Scientist, Sandra McNeel, Research Scientist, and Sharon Seidel, Ph.D., IAI Toxicologist for the State Department of Health Services, December 11, 1995.

<sup>217</sup> *Ibid.*

methodologies, and of assumptions underlying various exposure estimates. This meant that the only study that could provide chemical analysis needed for proper symptom treatment guidance had to be disavowed by the working group and member agencies. Delays in finishing the assessment, which the GNA required to be completed by March 1995, meant that any toxicological data in the report could not be used by Good Neighbor Clinic physicians in diagnosing and treating their patients.<sup>218</sup>

Similarly, an assessment of school risk attributability, described below, yielded findings that were disavowed by Unocal and did not lead to recommended relocation or structural changes at area schools. Deviations from what were supposed to be iterative processes of data gathering, assumption testing, and agreement over interpretation of findings meant that little to no substantive changes were made to refinery operations or medical monitoring because of the above study findings.

Fenceline Monitoring/Emergency Preparedness. Equally important to area residents, who sought medical treatment and an understanding of the effects of Catacarb on their health, were efforts to prevent “future Catacarbs.” The primary means of meeting this objective was to win Planning Commission support for a fenceline monitoring system that could keep track of toxic air pollutants as they crossed refinery property. Local proponents of this technology included Andy Mechling, a camera specialist who developed unparalleled expertise in available monitoring models and their capabilities. CBE provided a great deal of support as well for inclusion of such a system in the GNA and permit, efforts that had been less than successful in previous attempts with Shell Oil and Chevron. The original signatory organizations entered into a memorandum of understanding (MOU) in November 1996 regarding installation of a fenceline monitoring system.<sup>219</sup> This agreement followed numerous meetings with Unocal during which such issues as detection time (short detection time was called for so that the equipment could be sensitive to “hazardous releases of emergency nature”), best available technology, and data sharing were discussed. Community representatives claimed that Unocal was out of compliance with each of these issues during the initial pilot testing period, called for in the company’s land use permit:

By January 31, 1995, the applicant shall submit to the Zoning Administrator for review and approval a monitoring test program for a fenceline monitoring system as specified below. The system, if approved by the Zoning Administrator, shall be in place and operating by November 1, 1996, and shall fully incorporate the best available technology. Unocal will test and install an improved air pollution monitoring system that is mutually agreeable to the signatories of its Good Neighbor Agreement and the County Zoning Administrator as outlined below: Unocal...will design a monitoring test program that will include infrared or other state-of-the-art remote sensing technology by January 31, 1995. The test program will be designed to determine the effective range of the monitoring instrument, the compounds that the instrument is able to detect, the accuracy of the instrument at different ranges for detectable compounds, the reliability of the monitoring instrument at different ranges and for detectable compounds, the suitability of siting options, including the effect of localized environmental conditions (i.e., highways, fog, rain, wind,

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<sup>218</sup> *Supra* note 213.

<sup>219</sup> Memorandum of Understanding between the Crockett-Rodeo Coalition, Shoreline Environmental Alliance, Communities for a Better Environment, and Union Oil Company of California dba Unocal, November 3, 1996 regarding fenceline monitoring.

etc.), identification of specialized operation and maintenance requirements, and the best means of recording the data collected.<sup>220</sup>

The MOU resolved some of the above issues, while implementation of the pilot program, system construction, and use of the monitors raised countless others. The most important issues resolved in the MOU included the kind and location of monitors, monitor spacing, compounds monitored by each kind of monitor, how data would be recorded, summarized, and made available to the public, system maintenance, and whether the system would be able to trigger various elements of the County's Community Warning System. While the monitoring system was still in the design stage, members of SEA began to seek grants from the EPA and other sources for studies to measure pollutant load in Crockett and to engage in epidemiologic studies using the data.<sup>221</sup> Such a study would have been unprecedented. Equally innovative were proposed efforts to incorporate the system into the County's existing emergency notification network. In addition, the technologies employed were relatively untested in the context of monitoring refinery emissions. They included "open path optical remote sensors," which send beams of light through the open air toward reflectors and gather "fingerprints" of the chemicals that pass by the light. Every time chemicals pass the light, a portion of the beam is absorbed, leaving a distortion in the beam of various wavelengths. These fingerprints are compared to fingerprints in the monitor's internal library to determine the chemical makeup of what has passed the beam. Three types of open path optical remote sensors were used as part of the refinery monitoring system:

Fourier Transform InfraRed (FTIR): uses an invisible beam of infra-red light reflected off of a mirror and returned to a detector, which looks for changes in light intensity at various wavelengths; chemicals monitored can be programmed into the system, which saves raw data for further analysis; over 300 chemicals can be detected by an FTIR during post-analysis.

Tunable Diode Laser System (TDLS): uses infra-red reflected off a mirror; looks for light intensity changes at specific wavelengths; can measure hydrogen sulfide and ammonia.

Ultra-violet (UV): uses UV light and scans various wavelengths; can measure benzene, toluene, xylene, carbon disulfide, and sulfur dioxide.<sup>222</sup>

Access to data from the above systems was limited in the MOU to video output for one recipient from a camera trained on the fence line monitoring computer screen in real time.<sup>223</sup> Residents were also allowed up to six requests for raw spectral data that were stored by the monitoring system.<sup>224</sup> By February 1997, the company reviewed means of accessing the data, including video transmission, internet, remote access and control software, and view-only supervisory software. It concluded that the latter was the only technology that could satisfy elements of the MOU pertaining to speed, image transfer,

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<sup>220</sup> *Supra* note 197.

<sup>221</sup> Mechling, A. (1996). Memorandum to Edward Masry, March 12, 1996.

<sup>222</sup> Communities for a Better Environment (no date). Refinery Fence Line Monitoring Using Light Beams to Detect Chemicals at the Fence Line of the Tosco, Rodeo Refinery.

<sup>223</sup> *Supra* note 219.

<sup>224</sup> *Ibid.*

and security.<sup>225</sup> Thus it was determined that a single resident of Crockett would receive software so that continuously updated levels of various chemicals could stream across their computer screen in real time. The usefulness of these data has depended in large part on the person receiving the data stream. Even in June 2002, Bill Concannon, who presently receives the data stream, has no means of recording the data.<sup>226</sup> Thus, he can only check the computer screen, showing concentrations of 36 chemicals as they cross beams of light beamed 1,000 meters across the north and south sides of the refinery.<sup>227</sup> Raw spectral data, received monthly by Andy Mechling, are converted by a company in Houston, TX into what is visible on the screen. The company, Petris Technology, uses an air dispersion modeling program that takes the monitoring data and real-time meteorological data in order to generate plumes and estimate concentrations downwind.<sup>228</sup> Unfortunately, it is difficult to compare concentrations on the screen to regulatory standards. It has also proven a challenge to link the system to existing emergency response networks.

Normally I first call the refinery because I figure if there's a problem I want the refinery to be alerted to it so that they can deal with it. Because the people in Houston, they're just basically interested in making sure that they do their job right which is to run the equipment right. And I'm mostly interested in impacts from the refinery. So that's my goal is to top that. And a couple of times I found stuff and sure enough there's been an open tank or they've had some problems or one thing or another. We had a hydrogen sulfide release that actually showed up on the refinery monitor, which is, that would be something we'd want to see... We call AQMD and they'll send somebody out, I mean you know it's not that bad, I don't expect them to just have somebody sitting outside Crockett standing by waiting for our calls, we don't call that often. But one of the reasons why we don't call more often is that by the time they show up, if there's no odor they're kind of going, well, and we go, well, and you know.<sup>229</sup>

At the time, Concannon did not have the capability of recording what had passed across his screen, meaning any proof of elevated levels of toxic chemicals would have to wait until receipt of the raw data.

In April 1999, members of the fenceline committee entered their grievances with the monitoring system into the public record through the Community Development Department. Concerns expressed by the committee included:

- FTIR equipment is operated so as to only detect higher levels of chemicals, without optimizing the detection limits readily achievable by the technology (contrary to the Planning Commission's suggestion that the system be designed to enable detection of ongoing, day-to-day, lower levels of pollutants in addition to higher levels)
- Raw data is not saved for UV or TDLS equipment (meaning some of the chemicals of greatest concern to the community, including BTEX (benzene, toluene, ethylene, and xylene) chemicals, could not be subjected to post-incident analysis by the community)
- FTIR will be prone to false negatives, false positives, and poor detection limits

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<sup>225</sup> Iverson, D. (1997). Letter to Virginia Bray from Dale Iverson, Advisor, Environmental Programs, Unocal San Francisco Refinery regarding fenceline monitoring, February 28, 1997.

<sup>226</sup> Interview of Crockett resident, June 7, 2002, in Crockett.

<sup>227</sup> *Supra* note 222.

<sup>228</sup> Petris Technology (1998). Saf-T-Net Innovative Data Access and Management. Houston, TX, January 31, 1998.

<sup>229</sup> *Supra* note 226.

- UV data are unreliable; there are repeated instances where the detector will swing from a large negative number to a large positive number; monthly reports only include positive portion of the swing, even though baseline levels of emissions are often recorded as far below zero
- TDLS data are problematic, and a quality assurance system needs to be in place for independent measurement to determine if the equipment is operating properly<sup>230</sup>

In an effort to further evaluate and improve the system, SEA, CBE, and the County Health Services Department formed a working group with Tosco (who by then owned the refinery), AQMD, California EPA, California Department of Health Services, and the EPA. Under an Environmental Monitoring for Public Access and Community Tracking Program (EMPACT) grant, members of SEA (and later the working group) conducted detailed analysis of the monthly raw data that had been collected.<sup>231</sup> Many of the same findings were noted in the working group's report, which recommended that data from the FTIR be released on a website for one compound – total hydrocarbons, reported as butane – as a pilot effort.<sup>232</sup> Efforts to minimize false positives and negatives were also proposed. To date, the data have not been posted in real time on a website.

The report also found that system alarm levels that were set before the monitors went online in 1997 had never been reached. It was noted that

The absence of an alarm level may not necessarily reflect the lack of potential threat to the public during a particular incident – it may simply mean that a release has not crossed the beam path, or not crossed it in a sufficient concentration to trigger an alarm. At times releases have come from high stacks and/or at high temperatures and have gone up and over nearby areas, rather than diffusing or blowing along the ground near the monitors. In some such cases, including some refinery fires that have occurred in the County, County Health Services has called a shelter-in-place since wind conditions are unpredictable and change rapidly. Levels reported by the fenceline system are also related to and may be affected by the length of the monitor's beam path.<sup>233</sup>

The report concluded that “information from the open-path monitors at Tosco Rodeo cannot at this time be relied on by itself for community emergency notification.” Other efforts to improve notification during industrial accidents, a primary concern expressed in negotiations, were of similar consequence. As those interviewed agreed that the County resisted efforts to monitor data from the fenceline monitors or make use of the data to improve enforcement, there is also a sense that the County was reluctant to address its community warning capabilities.

That's why I wanted a Level Two warning. I said that if we had another Catacarb incident tomorrow, the County would not pull the plug because Catacarb was not listed as a hazardous material, and Unocal would certainly never pull its plug by itself, push the button for the alarm. Never, never, never, especially with the first bunch of administrators over there. And they had no infrastructure working. The County system wasn't working. We would never be informed. And

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<sup>230</sup> Fenceline Monitoring Committee (1999). Letter to Debbie Sanderson, Contra Costa County Community Development Department, April 12, 1999.

<sup>231</sup> Shoreline Environmental Alliance, Communities for a Better Environment, Contra Costa County Health Services, & US EPA Region IX (2001). Optical Open Path Monitors at the Tosco San Francisco Refinery at Rodeo Fenceline, May 2001.

<sup>232</sup> *Ibid.*

<sup>233</sup> *Ibid.*, p. 34.

one of the things that we designed were whistles over here for the County early warning system and then of course there was this great debate, because the County said well, people don't like whistles, they don't like sounds, and we said bologna, people want to be notified. And then the question was when would they have the test and so it's tested once a month to make sure that it works. And then all they needed to do of course was to get one individual saying well, I don't want it over here, because it's next to my house. Then we have to go through all that. We had to deal with all the details. We essentially had to engineer and plan everything for Unocal and the County.<sup>234</sup>

We wanted the County to have [the fenceline monitoring data]. And the County said we really don't want that, after all, we rely on Unocal. Yeah, they call you three hours after an incident, that's terrific. You guys need us. Well, who's gonna watch it? Well, no one's watching. Well, maybe you could have an alarm on it, you know, there's software to put an alarm on it, so it could ring a bell, so someone over at public health, well, there's no one over there at night. Well, maybe it could ring somewhere else, like 911. On and on and on. There's always a reason not to do it. And my fear is that we are not prepared.<sup>235</sup>

Listen to this: When we were doing this EPA grant, we were sitting at the table. We're sitting at one of these meetings, we've got people from hazardous materials at the County there. We're talking to them about, they have a monitor themselves, and when they got this money for this grant, all of a sudden they hooked it up. They said but it doesn't work really well, it's really not reliable, that was their constant theme why they didn't use it. The County. They were hooked up to all of them, the FTIR, the UV, and the laser. Anyway, they could have been hooked up. At any time, they had the ability to be hooked up. Unocal agreed that would be fine. So they had this equipment. What did they do with it? They stuck it in a hallway being a door upstairs where nobody goes. And we didn't know this until I started questioning them in one of these meetings we were at with the EPA during this. Now this is years later. This thing's been up since 1997. And this is like 3, 4 years later. And I said well, why don't we plug it in and bring it out? Well, yeah, I guess we could do that. Then you need somebody to use it. Oh, my God, it was a nightmare.<sup>236</sup>

Of primary importance to residents was the fact that only "Level Three" incidents result in public alerting of any kind. Catacarb-type incidents, should they occur in the future, would be considered at most Level Two incidents, because of the lack of a major fire or explosion or the presence of an off-site impact suspected of causing health problems while the incident is ongoing.<sup>237</sup> Level Three incidents by definition also have to involve hazardous materials. For this reason, residents have tried to convince the County to develop an alert system that would notify sensitive receptors, or those who are most vulnerable to even low concentrations of certain chemicals, in the event of incidents that did not qualify for Level Three notification. Residents contend that such a system continues to fail to notify those in greatest need. Following a series of three incidents at the Rodeo refinery in April 1997, residents testified to the County's Hazardous Materials Commission that the existing Community Warning System *in general* could not work in the ten minutes that it took for releases to reach Crockett.<sup>238</sup> While the refinery had provided sirens and some technical support, notification capabilities continued to fall

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<sup>234</sup> Interview of Crockett resident, October 31, 2002, via telephone.

<sup>235</sup> *Ibid.*

<sup>236</sup> Interview of Rodeo resident October 30, 2002, via telephone.

<sup>237</sup> Contra Costa County (2001). Community Warning System Hazardous Materials Accidental Release Matrix, April 24, 2001.

<sup>238</sup> Contra Costa County Hazardous Materials Commission (1997). Draft minutes, April 24, 1997.

short of resident expectations. Community negotiators' hopes that millions of dollars worth of monitoring equipment, and a new desire to notify vulnerable populations made possible by awareness generated by the Catacarb spill, could be incorporated into an improved emergency response network had not been met.

Emissions Reductions. Unocal's approved land use permit included condition 79, which required the company to (a) begin monthly monitoring of valves and pumps subject to quarterly AQMD monitoring, (b) make results of leak testing available to the CAP and AQMD, (c) replace or upgrade repetitive leakers, and (d) continue these actions until fugitive emissions are reduced from 2,787 lbs/day to 2,000 lbs/day.<sup>239</sup> Unocal was also required to maintain that reduction. Specific replacements drafted during GNA negotiations were incorporated in the final permit, including:

- Replace 12 < 2 inch valves at Unit 228 with bellows valves by March 1, 1996
- Replace 40 valves at Unit 210 with bellows valves by March 1, 1996
- Replace an additional 28 < 2 inch valves leaking at 10,000 parts per million by March 1, 1996
- Install an additional 50 bellows valves (< 2 in.) by December 31, 1996
- Install an additional 50 bellows valves (< 2 in.) by December 31, 1998
- Reduce fugitive emissions on Unit 228 valves by nitrogen purging the valve stuffing boxes to vapor recovery for 25 specialized control valves by February 28, 1995
- Modify/replace seven pumps
- Do not seek emission reduction credits for any reductions in this agreement
- Unocal purchases of emission reduction credits for offsets associated with the Reformulated Gasoline Project will be from sources as close to the local area as are available.<sup>240</sup>

Residents are confident that these changes have been made. In early quarterly updates, Unocal indicated that it had increased its frequency of monitoring, hired a new fugitive emission contractor, and "continued an aggressive program to repair valves."<sup>241</sup> By February, 1996, Unocal reported that its fugitive monitoring suggested emissions of less than 2,000 lbs/day. Monthly monitoring on components with higher emissions was continued.<sup>242</sup> In 2000, the EPA reported that fugitive emissions at the refinery, then owned by the Tosco Corporation, totaled 67 pounds per day, suggesting that improvements encouraged by the GNA continued long after the initial installation of bellows valves.<sup>243</sup> However, overall releases of toxic chemicals increased substantially following the refinery's receipt of its clean fuels permit. Subsequently these releases fell by one third, between 1996 and 2000.

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<sup>239</sup> *Supra* note 197.

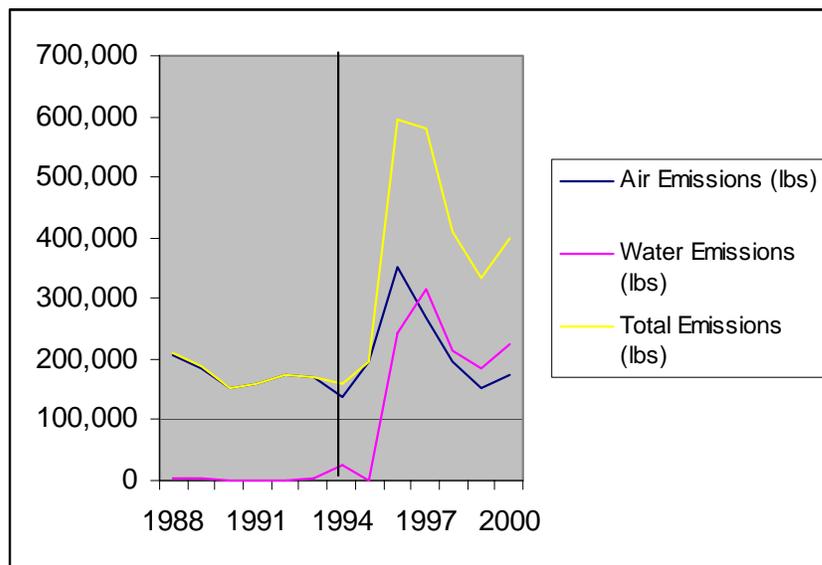
<sup>240</sup> *Ibid.*

<sup>241</sup> Wilkes, J. (1995). Letter to Community Advisory Panel Members from Jeffrey Wilkes, General Manager, Unocal San Francisco Refinery, November 1, 1995.

<sup>242</sup> Wilkes, J. (1996). Letter to Community Advisory Panel members from Jeffrey Wilkes, General Manager, Unocal San Francisco Refinery, February 1, 1996.

<sup>243</sup> Environmental Protection Agency (2002). Envirofacts data warehouse, Tosco San Francisco Refinery, Rodeo. [http://oaspub.epa.gov/enviro/multisys2.get\\_list?facility\\_uin=110000483487](http://oaspub.epa.gov/enviro/multisys2.get_list?facility_uin=110000483487), accessed November 13, 2002.

Figure 6. Total Air and Water Releases of Toxic Chemicals to the Environment from Unocal Refinery, 1988-2000 (vertical line represents initial GNA/permit approval)



Source: Environmental Defense's Scorecard, [http://www.scorecard.org/env-releases/facility.tcl?tri\\_id=94572NCLSNOLDHI](http://www.scorecard.org/env-releases/facility.tcl?tri_id=94572NCLSNOLDHI), accessed November 13, 2002.

Changes to refinery equipment did not come without conflict. By March 1997, community representatives had not seen documentation of promised valve replacements.<sup>244</sup> As with many issues touched by the GNA, oversight and enforcement proved particularly taxing to residents.

School Safety. Having settled for school improvements instead of relocation assistance, members of the school safety committee sought to ensure that Unocal followed through with its commitment to fund

An assessment of school facilities in the boundaries of the John Swett Unified School District...to identify the risks that the schools could reasonably be expected to be exposed to in the event of a chemical emergency. The assessment will be performed by an independent contractor with expertise including but not limited to industrial hygiene, mutually agreeable to the signatories to this agreement and the school district...The assessment will include a physical inspection of each school facility, the identification of potential exposures from nearby industrial facilities, and a review of current evacuation procedures in cooperation with local emergency response agencies...The contractor will recommend mitigation for identified risks. The mitigation of any risks attributed as part of this assessment at Hillcrest Scholl that are attributable to Unocal operations will be funded through the \$378,000 previously contributed by Unocal. If the cost of mitigating risks at Hillcrest School that are attributable to Unocal's operations at the refinery exceeds \$378,000, Unocal will provide additional funds up to \$122,000, for a total not to exceed \$500,000 to perform appropriate mitigation.<sup>245</sup>

<sup>244</sup> Bray, V. (1997). Letter to General Manager, Unocal-San Francisco Refinery, Wilbur McClaveill, General Counsel, Tosco Corporation, Mark Smith, Senior Counsel, Unocal Law Department, and Duane Borduick, Tosco Vice President from Virginia Bray and CBE regarding Good Neighbor Agreement, March 3, 1997.

<sup>245</sup> *Supra* note 202, Section Four.

In May, 1996, community signatories to the agreement met to discuss their grievances with Unocal. They reviewed the risk assessment findings, which suggested that Hillcrest should be relocated, and that the existing school should have fully pressurized shelter in place capability.<sup>246</sup> There were also concerns that Unocal had not provided sufficient evacuation/emergency response plans, shelter in place kits, medical staff, links to existing emergency warning systems, or heating and ventilation for local schools.<sup>247</sup> As with the epidemiological study, Unocal chose not to act on the school risk assessment's findings, and instead sought to hire another consultant to review the initial findings, according to residents. By 1997, the school safety committee announced that it had "reached an impasse with Unocal" with regards to compliance with school safety issues.<sup>248</sup> The committee noted that appropriate improvements to all assessed schools to mitigate risks identified as attributable to the refinery had not been made, and that shelter in place supplies and equipment had not been supplied to the school district or to private schools. Points of dispute were issued to Unocal after the company's manager of external affairs told the committee that Unocal was not in a position to commit to deadlines not expressly stated in the GNA.<sup>249</sup> The committee referenced the "intent by the negotiators at the negotiation table" to "have these studies, and risks, mitigated, and work completed, as soon as possible."<sup>250</sup> Work continues beyond the purview of the GNA to secure adequate funds to relocate Hillcrest Elementary.<sup>251</sup>

Good Neighbor Clinic. Prior to finalization of the GNA, Unocal opened and funded a Good Neighbor Clinic in Crockett. The purpose of the Clinic was to diagnose and treat people affected by the Catacarb release. Unocal agreed to pay "reasonable clinic overhead costs" for up to six months and for the assessment of "any individual who wishes to be evaluated at the clinic and believes he or she was affected by the incident."<sup>252</sup> The Clinic, in conjunction with proposed studies and funding of an Emergency Response Van to be run by County Health Services, was to give residents a clear sense of the extent of the damage caused by the Catacarb spill, to treat conditions and diseases caused or even "most probably related" to the spill, and to assist company and agency officials in responding to future accidents. Members of the community Health Committee who worked on the Clinic were also interested in finding out more about the Catacarb solution itself.

The Catacarb release was a situation where they had Material Safety Data Sheets of all the individual components that went into the mixture as they mixed it into a clear water white solution that goes into the process and then after it gets recirculated in the process for many months and even years it becomes something else altogether, it becomes a black, brown viscous liquid that is full of materials that bear very little relationship to what is in the original components because of

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<sup>246</sup> May, J. (1996). Memorandum to Virginia Bray from Julia May, Communities for a Better Environment regarding committee concerns, May 7, 1996.

<sup>247</sup> *Ibid.*

<sup>248</sup> Shoreline Environmental Alliance (1997). School Safety Committee Points of Dispute with Unocal.

<sup>249</sup> *Ibid.*

<sup>250</sup> *Ibid.*

<sup>251</sup> Bell, E. (1999). Crockett school bond may move students. *San Francisco Chronicle*, September 17, 1999, p. A-18.

<sup>252</sup> *Supra* note 202, Section One.

the high temperature conversion and so on. So that's what we got sprayed on us and we asked Unocal repeatedly for an analysis of the compounds that we had ingested and they in turn had to go to the vendor who supplied them with the chemicals and that vendor refused to cooperate under attorney-client privilege. So it's a case where you have the material that you're exposed to and yet you cannot find out what it is.<sup>253</sup>

The Clinic was run by a committee composed of a community representative, a physician representing the operator of the clinic, a university-affiliated independent physician selected by Unocal, a Unocal representative, and a local physician selected by the Crockett-Rodeo Coalition and SEA.<sup>254</sup> Work progressed at a feverish pace, so that by August 1995, the Clinic had served more than 600 residents of Crockett and Rodeo:

460 patient charts evaluated  
20% resolved  
50% need continued care  
209 new patients booked for initial intake visits and evaluation  
115 people on waiting list<sup>255</sup>

In addition the Clinic received an average of 10-15 calls per day from new individuals.<sup>256</sup> A request to extend Clinic operations was granted by Unocal, which agreed to a five-week extension. The Clinic ceased operations on November 15, 1995. Residents whose symptoms were determined to be "more likely than not related to Catacarb exposure" were promised continued treatment.<sup>257</sup> The health committee was disbanded, leaving communities with little ability to oversee patient treatment. By January 1997, a number of grievances were recorded by former health committee members.<sup>258</sup> For instance, GNA-approved patients were in some cases denied continuity of care, including retesting and further referrals to specialists. Medical protocol changes were noted, including discontinuation of vitamin supplements and certain kinds of therapy. And as the number of patients in the Clinic database reached 1,275, it was unclear whether progress was being made on identifying root causes of health problems.

It should have been continued longer because so many people were still being treated. And a lot of it may have been just placebo because they just really didn't find any cure for it. They were able to get all kinds of neurological testing done and saw aberrations and a lot of commonality of a lot of strange symptoms but they never came up with any way to treat it other than just time, there were mega-doses of vitamins, antioxidants, that some people responded to, but maybe that was just placebo effect, too. I don't know.<sup>259</sup>

Indeed, at least one member of the Clinic staff, Dr. Shames, expressed interest in providing biofeedback treatment for "chemically-induced cognitive and affective

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<sup>253</sup> Interview of Crockett resident, June 8, 2002, in Crockett.

<sup>254</sup> *Supra* note 251.

<sup>255</sup> Health Committee (1995). Crockett/Rodeo Communities' Proposal to Unocal Corporation Regarding Extended Operation of Good Neighbor Clinic, August, 1995.

<sup>256</sup> *Ibid.*

<sup>257</sup> Wilkes, J. (1995). Letter to Medical Clinic Committee from Jeffrey Wilkes, General Manager, Unocal San Francisco Refinery, December 21, 1995.

<sup>258</sup> Health Committee (1997). Health Committee Good Neighbor Agreement Noncompliance Issues, January 28, 1997.

<sup>259</sup> Interview of Crockett resident, June 8, 2002, in Crockett.

problems” in July 1995.<sup>260</sup> Some interviewees expressed doubt that adequate treatment was possible following closure of the clinic, given the lack of community oversight and the fluid nature of physician understanding of treatment options toward the end of official Clinic operations. Further, community representatives claim they were denied assistance from the County in analyzing samples of Catacarb, one of which continues to sit at the County Department of Health Services.

Vegetation/Parks. At least one Crockett resident had been requesting that Unocal plant trees to serve as a buffer and improve air quality since 1979, when Steve Batchelder’s daughter entered kindergarten at Hillcrest Elementary.<sup>261</sup> Requests for vegetation as mitigation for the RFG were also initially turned down, as was Batchelder’s proposal during GNA negotiations for Unocal to fund a Tree Management District. Elements of his proposal did make it into both the permit and the GNA. The permit called for a landscaping plan to improve the visual appearance of the refinery and the “visual character of the area.”<sup>262</sup> It called for the use of berms to provide greater screening, the planting of at least 350 15-gallon trees and 25 20-24 foot trees, the use of vines and shrubs, and prompt replacement of vegetation. The GNA adds that Unocal will spend an additional \$30,000 per year for nine years to further vegetate areas of its property, and calls for a detailed vegetation plan to address a variety of issues.<sup>263</sup> Oversight of this provision of the GNA was left to the CAP, which was to provide input on the vegetation plan. Both the GNA and the permit also called for Unocal to spend \$100,000 for a bike trail through the company’s property. In addition, Unocal agreed to minor commitments such as a promise to work with Crockett to facilitate a trail crossing of Interstate 80 and to make a \$5,000 donation to the Carquinez Strait Preservation Trust for use in developing a Tree Management District.<sup>264</sup> Implementation of the landscaping plan was initially problematic. The plan was presented to organizations such as the CIA (as required in the permit conditions), which approved the document. Following initial approval, significant changes were made and the altered landscape plan was kept from certain residents.<sup>265</sup> Questions were raised as to whether the proper species were being proposed, as well as whether Unocal would agree to prepare the soil to ensure that the trees would mature properly. Problems also emerged as new refinery management reinterpreted the portion of the GNA concerning the bike trail. In order to bring a trail through their property, pipes would have to be moved, leaving Unocal in a position to value the cost of such an effort and potentially deduct that cost from the funding commitment.<sup>266</sup> By January 1997, Batchelder submitted his grievances to the Board of Supervisors, claiming that the CAP had not been granted final right of inspection prior to

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<sup>260</sup> Ochs, L. (1995). Letter to Richard Shames, M.D. from Len Ochs, Psychologist, July 22, 1995.

<sup>261</sup> Interview of Crockett resident, November 7, 2002, via telephone.

<sup>262</sup> *Supra* note 197.

<sup>263</sup> *Supra* note 202, Section Three.

<sup>264</sup> *Ibid.*

<sup>265</sup> Peterson, K. (1996). Letter to Richard Belcher, RFG Project Manager, 76 Products Company from Kent Peterson, Chair, Planning Advisory Committee, Crockett Improvement Association regarding RFG Project Land Use Permit #2038-93, January 29, 1996.

<sup>266</sup> May, J. (1996). Memorandum to Virginia Bray from Julia May, Communities for a Better Environment regarding committee concerns, May 7, 1996.

approval and acceptance of the first round of tree planting.<sup>267</sup> He also claimed that Unocal refused to further discuss a Tree Management District. While residents agree that the tree planting has progressed and that certain concerns have been addressed, the staunchest supporters of the program have left the CAP and remain discouraged by the degree of difficulty that they faced in working to achieve the GNA's landscaping and parks commitments.

Transportation. Prior to the completion of the final GNA, Unocal hired a consultant and began to work with Caltrans, County staff, and community representatives to identify transportation projects and prioritize them according to the local preferences.<sup>268</sup> It was decided that Unocal should pursue the Cummings Skyway extension, to alleviate truck traffic through Rodeo (particularly for the transportation of coke) and to provide an efficient means of entering and exiting Crockett. The extension was built just prior to the destruction of on- and off-ramps for the Carquinez Bridge project. Also prior to completion of the GNA, the refinery consolidated its deliveries of anhydrous ammonia and scheduled them to avoid peak traffic periods. Plans were in place by the end of 1995 for the phased reduction of anhydrous ammonia by December 1996 and 2001.<sup>269</sup> By all accounts, this project has been completed. These projects shared broad support during negotiations and were comparatively easy to verify during and following implementation.

Financial Assistance. After the parties agreed to the terms of Unocal's financial contributions, community representatives had to establish mechanisms for allocating \$100,000 per year to Crockett/Tormey and Rodeo/Bayo Vista. The Crockett-Rodeo Coalition and SEA requested that initial funds be deposited with the East Bay Foundation, based in Oakland. They scheduled town workshops to gather input into the financial distribution process.<sup>270</sup> Crockett residents chose to channel the money through the Crockett Foundation, which had been created to receive property tax increments as a direct result of the community's negotiations with proponents of the cogeneration plant built in conjunction with C&H Sugar. Rodeo, which lacked an established foundation, chose to distribute the money through the RMAC. Some residents expressed concern that these arrangements limited access of groups such as SEA and the Bayo Vista Neighborhood Council to the funds. Records indicate that the Crockett Foundation has been amenable to funding small-scale assistance with SEA's air quality monitoring efforts.<sup>271</sup> The Foundation and the RMAC each developed their own criteria, within broader limits set by the GNA negotiators, for choosing among small grants applications or for pursuing their own initiatives (such as the provision of street lamps in Crockett).

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<sup>267</sup> Batchelder, S. (1997). COA 62 – Landscape Plan comments, January 31, 1997.

<sup>268</sup> Wilkes, J. (1995). Letter to Community Advisory Panel Members from Jeffrey Wilkes, General Manager, Unocal San Francisco Refinery, November 1, 1995.

<sup>269</sup> *Ibid.*

<sup>270</sup> Anderson, A., Cherry, L., & Blakeney, R. (1995). Letter to Jeff Wilkes, 76 Products Company from Alica Anderson, Lynn Cherry, and Ruth Blakeney, Crockett-Rodeo Coalition and SEA, April 19, 1995.

<sup>271</sup> Crockett Community Foundation (1999). Foundation News, June, 1999 (“In the past two years the Foundation Board, either by direct payments or by the grant process, has allocated \$22,000 for oversight purposes. The Board has concentrated its concerns primarily in the areas of Air Quality Testing and Sampling and accurate interpretation of data from the Fenceline Monitoring System at the Tosco Rodeo Refinery.”)

The Foundation went one step further and organized a committee for oversight over the entire GNA. The objective of the GNA negotiators was to write a funding agreement

so that the coalition could hand the money over to the foundation and walk away from it and hopefully not feel concerned about how it was going to be spent. The coalition said OK, we would like to hand you this money and these are the areas where we would like to see it spent: recreation, environment, and a few others. And the foundation was somewhat reluctant because we had local people that to this day deny that there was ever any impact from Catacarb. It's those people who don't belong here that are rabble rousers and we don't think that they should have anything to say about Crockett.<sup>272</sup>

The RMAC was slower to develop guidelines, objectives, or criteria for its disbursement. This led to the funding of several controversial projects, such as playground equipment for a Catholic school. Funding allocation for vocational education in the John Swett School District was even more problematic. Unocal and successive owners of the Rodeo refinery allocated the funds as promised. Yet there was initially a lack of transparency that made it difficult to ensure that funds were spent appropriately. Interviewees recall such projects as the purchasing of a forklift and hiring a person to administer the funds for much of the value of the yearly allotment. At present, the refinery CAP, with the assistance of an experienced facilitator, has worked to improve the vocational education program and to develop a curriculum for students who could one day work at the refinery.

We created an industrial survey course, since it is most closely related to the refinery and the idea that kids coming out of that could ultimately have jobs with the contractors or the refinery itself. What that has led to is a multifaceted careers academy where we're using the Philips money in conjunction with other money that we're trying to get, to develop a truly comprehensive careers academy that among other things will have an industrial survey course, a construction survey course, by industrial survey I mean exposure to the craft areas: electrical, plumbing, pipe fitting, welding, boiler making, steam fitting, sheet metal, all those different craft areas. Construction survey would be more related towards construction and their first project will be the reconstruction of the announcer's booth. Everything from blueprints and approvals to ultimately pouring forms and putting up foundations. ..The third area is a wastewater treatment component that as I mentioned earlier is potentially coming out of a NPDES enforcement action against C&H, and the final area is public safety with the possibility of a fire sciences course.<sup>273</sup>

Each of the funding streams from the GNA has been upheld by successive owners of the refinery, including the Tosco Corporation and Philips 66. Negotiating committee members who remain in the region share a concern that new owners will at some point claim that they are not obligated to continue to make payments. So far, refinery owners have upheld commitments to making these annual contributions to the communities.

Oversight/Enforcement. At various moments following the completion of the GNA, residents expressed concern or even formal grievances with the refinery for their lack of timely or proper completion of certain tasks. While these concerns have never led to legal action, there is always the possibility that they will. And as members of the negotiating committees move out of the area, committees disband, and initial CAP members resign, it becomes increasingly difficult to capture the original intent of the

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<sup>272</sup> *Supra* note 198.

<sup>273</sup> *Supra* note 165.

GNA and many of the unwritten understandings that were perceived prior to its signing. Residents describe current implementation as a series of attempts to link a “tenth-hand” interpretation of the GNA on the refinery’s side with a “third-hand” understanding on the community side. Yet when differences of interpretation mount, project design slows down, or data are not used for purposes previously agreed to, it is unclear how the community would even initiate a dispute resolution process. CAP members, originally charged with some degree of oversight, are unsure as to whether they “even have a right to be the people to opine on implementation.” Community negotiators ask, “Who from the agreement enforces the agreement?” More pointedly, residents are uncertain about how enforcement could play itself out, in the absence of resources to verify agreements or seek technical and legal assistance.

It’s been a tragedy with this one, because it was after all the hell and fire and brimstone we went through getting this thing, it was a pretty good agreement. But so what? You can’t enforce it. The way they got around it was they made it unenforceable. There’s nothing you can do if you don’t have a dedicated staff that has some kind of financial support. If you could have someone who could sit and badger and write back and forth and do all the things you have to do to even get the refinery’s attention and work with the County staff to say hey look, they’re not doing this, let’s see if we can get them this way. Unless you have that, somebody doing that, you just don’t have anything. And that’s the unfortunate tragedy of this GNA. Nobody’s doing anything with it. And we can’t because we have no time, money, or impetus anymore. I think that if there was another major release, all of a sudden you’d have people interested in it again and volunteers and so forth. But that’s the nature of the beast. It’s unfortunate but it’s just human nature.<sup>274</sup>

Interestingly, a transition of much of the advisory and oversight capacity from negotiation committees to the CAP has led to a number of benefits for Bayo Vista, the public housing authority that borders the refinery (now owned by Philips 66) in Rodeo. Initially the CAP was appointed by the Board of Supervisors. More recently, the CAP became a self-governing body that was able to appoint or select its own membership. Several interviewees noted a shift toward issues of refinery-community relations, jobs and vocational training, and small-scale community improvement projects. While it is true that such efforts do not address the underlying causes behind the Catacarb release, they do concern many of the interests shared by Bayo Vista residents, who are predominantly low-income people of color. Residents of Bayo Vista noted that certain oversights during GNA implementation, such as failure to provide transportation to the Clinic, consider particulate matter monitoring for Rodeo, or ensure that a fair portion of the GNA’s financial assistance be provided to address human services needs in the housing authority, were of far greater concern than the specifics of health study or air quality monitoring protocols (although leaders in Bayo Vista consider the location of the monitoring data hookup in Crockett a further unfair outcome of the GNA and are pursuing access to the data stream). Indeed, some residents in Bayo Vista have used a portion of their litigation settlement money to purchase air filtration systems for their homes to reduce particulate matter, which is suspected of contributing to the high rates of asthma among Bayo Vista children.<sup>275</sup> While they criticized the effectiveness of certain

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<sup>274</sup> Interview of Member, Shoreline Environmental Alliance, May 31, 2002, via telephone.

<sup>275</sup> A health study conducted jointly by Kids Against Environmental Pollution and Communities for a Better Environment found that asthma was reported in one or more children in 50.5% of households. Allergies were reported in one or more children in 56.9% of households. 87% of households reported

GNA elements, Bayo Vista residents most readily credited the refinery for its support of local efforts (i.e., scholarships, free lunch program) and for their willingness to work toward ensuring that remaining funds promised through the GNA are leveraged to the greatest benefit of the community possible. They also pointed out the history of the land upon which the housing units were built, to suggest that potentially greater environmental hazards have gone unaddressed:

It used to be the old projects. And my understanding is the cows, there was a pasture with cows in it down over here, and the cows started dying. Over in Celby years ago, they tore it down in 1960. There was a great big smokestack and I'm not sure what they did there. It's between Rodeo and Crockett. Celby is on one side of the road and Tormey is on the other side of the road, and if you go down San Pablo Avenue that way it's down at the bottom of the hill. And one is on one side, one is on the other side. They used to be rather large communities, they even had a school. Now they're just a little spot on the road. The cows were dying from the stack. There were slag piles. Somebody who grew up here tells me there were slag piles around the smokestack. It would burn the tread off their tennis shoes. They tore it down in 1960. Four or five years ago they decided that the most environmentally friendly thing that they could do was to cover it with pavement. And it's all paved out there now. If you go there and look, it's all paved. You can see from the top of the hill up here that they paved out there. And that was the best that they could do for the pollution.<sup>276</sup>

Residents expressed concern that their homes lie over lead slag deposited by ASARCO, which operated the smelter prior to it being torn down. While such challenges are beyond the scope of resident interaction with the refinery, the CAP gives residents a chance to voice these concerns and solicit the assistance of the refinery in getting the County's attention on such matters. The CAP's facilitator acknowledges that "nowhere more clearly have [Bayo Vista's] interests been articulated than through the CAP."<sup>277</sup>

### *Discussion.*

While the Unocal GNA represents a more advanced version of the MOU reached with Chevron, the two agreements share some important characteristics. First, the contours of each agreement grew out of the unique ways in which each impacted community became represented in settlement talks. Community negotiators during the Chevron RFP relied on input from resident councils and then increasingly on three environmental groups (People Do!, CBE, and West County Toxics Coalition). The resulting MOU focused on key elements of each of these organizations' proposed mitigations. Similarly, the Unocal GNA represents a crystallization of the disparate efforts of committees that in many cases held unique or even divergent interests. Entire sections of the GNA represent compromises or "something close to the bottom line" for the committees. While each approach to reaching agreement encouraged parties knowledgeable or concerned about certain issues to develop innovative mitigation packages, they also hindered broader problem solving and made it easier to table both costly (and arguably necessary) changes and discussions of root causes of environmental impacts or refinery accidents. The

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noticing smells of either sulfur or ammonia in their neighborhood. Kids Against Environmental Pollution (2001). State of the Neighborhood: Bayo Vista Youth Health Survey, December, 2001.

<sup>276</sup> Interview of President, Bayo Vista Resident Council, June 8, 2002, in Bayo Vista.

<sup>277</sup> *Supra* note 165.

agreements were reached in such fashion in large part because of the permitting processes that were leveraged to encourage negotiations in the first place. These processes begin with a call for public comments, which inform a comparatively small number of mitigations proposed by staff of permitting authorities (i.e., the Planning Commission). Parties try to make changes to these mitigations, often at the margins. The Chevron and Unocal agreements departed from past practice in that before they were reached, coalitions of resident councils or citizen committees were able to convince planning bodies to adopt (in some cases wholesale) a number of entirely new and innovative mitigation proposals. Some of these proposals had been offered for previous reformulated fuels projects. By the time Crockett and Rodeo residents sat down with Unocal management, they found themselves in a unique position to propose all of these mitigations (financial, monitoring, structural changes) at once. On one level, the Unocal GNA represents a high watermark in the evolution of community-corporate compacts, in that it incorporates much of what had been learned through previous negotiations.

It is without question that both agreements represent improvements over what would have been required by permitting bodies alone. But given the level of interaction and deal-making between the refineries and the permitting agencies prior to permit approval, it is difficult to tease out the extent to which improvements were in fact encouraged by the negotiations, political considerations, unilateral concessions, or other factors. Last-minute concessions by the companies or wording changes encouraged by community members meant that conditions of permit approval incrementally approached the language of proposed GNA's. GNA negotiations offered residents an additional forum in which to discuss issues that did not share a nexus with proposed project impacts. It would prove more difficult for such issues to be included in a land use permit and to survive legal challenges by the applicants. Still, this degree of flexibility did not yield some of the more important concessions (proposed by residents) that lacked a nexus to the clean fuels projects. These rejected proposals represented limits to which GNA negotiations could "outperform" the permitting process. They derived from both the structure of the negotiating coalitions and their demands, and the unspoken boundaries drawn by the companies in terms of precedents that they wanted to avoid or relationships that they did not want to encourage. Most readily excluded from negotiations were ideas relating to questioning "normal operating procedures" of both the refineries and their monitoring agencies and establishing new roles for local residents in plant inspection, pollution patrols and citizen monitoring, and early warning and notification. Resistance to these proposals, coupled with County readiness to push for certain projects (i.e., Cummings Skyway extension), encouraged negotiations to drift toward what in the end appeared to some to be lopsided agreements.

The timing of environmental permitting processes and their disjointed nature (one process ends as another is about to begin) pushed community organizers to seek efficient means of representing the interests of impacted communities. In both of the clean fuels processes, CBE and other organizations were quite successful in reaching out to diverse stakeholders and soliciting their ideas and approval of various proposals. Greater difficulty was experienced in trying to feed corporate response to proposals back to an equally diverse cross-section of impacted areas. And over time, requirements such as

standing (such as when three groups filed appeals to the Air Control Board in the Chevron case), organizational status (important for issues of funding and GNA oversight), and timing meant that some groups were not reached as often or lacked the same authority or mandate to comment on proposals or company actions. Hints of these excluded elements emerged during the implementation phase of each agreement.

Elements of the impacted communities that were successful in protecting their centrality until just prior to the hearing of final permit appeals by the Control Board or the Board of Supervisors faced another set of challenges. Particularly in the case of the Unocal GNA, reaching agreement can be viewed in hindsight as a comparatively straightforward process. While negotiations included a great deal of positional bargaining, implementation called for the parties to interpret and add considerable depth to each commitment, often with new faces and on several occasions new organizations. This process entailed steep learning curves and attention to excruciating detail, sometimes without the encouragement of fixed deadlines. Implementation also added a dimension of resistance by consultants and the County to certain efforts, findings, or interpretations that did not serve their interests or those of their employers. Establishing protocols for complex environmental studies or fence-line monitoring in such a context proved daunting. Enforcing side agreements or the recommendations of working groups or study authors proved nearly impossible in some cases.

But these agreements suggest that there is much that can be agreed to and achieved above and beyond the scope of traditional environmental permitting efforts. They certainly represent more inclusive and effective means of generating conditions of approval than standard notice and comment cycles. Yet the goal of environmental justice communities should not stop at merely outperforming existing administrative options. The Unocal agreement in particular points to stark limits to what an industry will be willing to consider, however constrained it is by timing, media attention, the threat of litigation, and the general knowledge that there are internal organizational changes needed to avoid similar high-profile disasters in the future. These limits, which only were suggested here by what was considered, resisted, tabled, or implemented ineffectively, point to a number of process considerations and questions for coalitions to consider before a community enters the fray over an environmental permit. They also suggest ways in which a permitting process can be augmented to enhance representation, integrative potential, and enforcement capabilities, which we will discuss in the conclusion. Bayo Vista, which in some ways has been able to meet its interests more effectively through its involvement on a CAP, hints at the diverse citizen participation needs of various elements of impacted communities.