

Real People – Real Stories

Afton, NC (Warren County)



Exchange Project
BECAUSE OUR ENVIRONMENT AFFECTS OUR HEALTH

Published: September 2006

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Published September 2006

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Significance of Case

After the illegal disposal of PCBs¹ along North Carolina highways in 1978, state officials selected the predominately Black community of Afton for a landfill despite the site's incompatibility with EPA guidelines. Community residents fought the initial placement of the landfill, often placing themselves in harm's way by physically blocking trucks. Over twenty years after the landfill was constructed, persistent activism by community residents caused the state to complete on-site decontamination of the PCB-contaminated soil. Warren County is widely recognized as the birthplace of the environmental justice movement.

Community History

State officials, including Governor Jim Hunt, selected Warren County as the disposal site for PCB-contaminated soil in June 1979. According to the 1980 U.S. Census, the population of Warren County was estimated to be 16,232 and 60% Black (the state-wide percentage is 22%) (General Accounting Office, 1983). State officials denied that the racial makeup of Warren County influenced the decision to place the landfill in Afton. District Court Judge W. Earl Britt stated, "There is not one shred of evidence that race has at any time been a motivating factor for any decision taken by any official—state, federal or local—in this long saga" (Labalme, 1987).

Warren County ranked 97th of 100 counties in per capita income with most residents subsisting on about two-thirds of the per capita income of the rest of the state (Bullard, 1990). In an effort to address the economic depression, a development called Soul City was conceived in the 1970s as a well-planned combination of housing and commercial space. A \$14 million Department of Housing and

"Warren County has been labeled as 'the poorest county in North Carolina' but I see it as full of resources. But we have to look for those resources, cultivate it."
—Community Member

Urban Development (HUD) guarantee and Environmental Protection Agency (EPA) funds for water/sewer infrastructure² enabled the construction of Soul City as a "viable alternative to disorderly urban growth"³ (Department of Housing and Urban Development, 1972). The project initially struggled to attract industry, but a proposed \$20 million Perdue (poultry) facility offered an opportunity to combat the unemployment rates of 13.3% in Warren County. After the purchase of the land, however, the plant relocated to a nearby county⁴

¹ PCB stands for Polychlorinated biphenyl. Its uses and health-related effects are described in the "hazards" section of this paper.

² EPA contributed to Soul City's infrastructure connection to Warrenton, but also approved the PCB landfill site.

³ Soul City is located approximately seven miles northwest of Afton (*Yahoo! maps, driving directions, and traffic*, 2005).

⁴ The source did not specify the "nearby county"; however, there are six Perdue facilities in North Carolina: Concord, Fayetteville, Lewiston, Robersonville, Rockingham and Statesville (Perdue Farms, 2005).

"[The] Farmers' Home Administration wouldn't approve a loan for people who lived within a certain radius of that landfill. So that meant that your property value was not even good enough for the government to build on."
—Community Member

(McGurty, 1995). Opponents of the landfill believe the relocation of this plant was, in part, the result of the landfill siting, though officials would not substantiate this claim (Kaplan, 1997). This relocation illustrated concerns about the downstream economic effects of the landfill. Many residents worried that in the future Warren County would only be attractive to hazardous

waste industries.

Opposition to the landfill created a foundation for voter registration efforts, which in 1982 resulted in Warren County being the first county in North Carolina to have a majority of Black members on the Board of County Commissioners.⁵ Though the opposition did not succeed in barring the landfill construction, the opposition did have a positive effect on the political power of Black residents in Warren Co (ibid).

Hazard

Polychlorinated biphenyl, or PCB, is a chemical used in coolants and lubricants for transformers (Agency for Toxic Substances and Disease Registry, 2001). Research into the possible health consequences of PCBs began shortly after a 1968 PCB spill in Japan, which contaminated rice. Over 1,000 people suffered from neurological, stomach, liver and reproductive disorders, as well as severe skin disruptions (Labalme, 1987). Studies completed in 1975 found elevated stomach and liver cancer rates as a result of PCB exposure, and the Toxic Substance Control Act of 1976 banned the manufacture of PCBs in the United States (Environmental Protection Agency, 2003a; Labalme, 1987). The 1976 Resource Conservation and Recovery Act (RCRA) guides the disposal of already existing PCBs. It is expensive to comply with these regulations, which creates an incentive for illegal dumping (Environmental Protection Agency, 2003b).

In the same year that RCRA passed, the Raleigh-based Ward Transformer Company hired a trucking company from Jamestown, New York to dispose of transformer oil tainted with PCBs. This trucking company, owned by Robert Burns and his sons, purchased a 750-gallon tank and sprayed 31,000 gallons of PCB-tainted oil along approximately 240 miles of rural roads in 14 North Carolina counties. The PCB spill was discovered on Aug. 9, 1978, just days after the first coverage of Love Canal.⁶ Both NBC and CBS news linked updates of

⁵ There were no elected Black officials in Warren County prior to 1980.

⁶ From 1920 to 1952, Love Canal was used as a chemical and toxic waste disposal site. Shortly after the landfill closed, homes were built on adjacent land and residents began to notice alarming rates of cancer and birth defects in the area. On August 7, 1978, President Jimmy Carter declared Love Canal a federal emergency area (Love Canal, 2005).

the PCB spill to Love Canal coverage (Labalme, 1987). This illegal disposal of PCBs in the summer of 1978 was the largest PCB spill in American history and resulted in concentrations in some areas that were 200 times the EPA criterion for contamination⁷ (ibid).

During the four-year period between discovery and landfill internment (August 1978 through September 1982), the contaminated soil remained along roadsides with potential health consequences for those living near dumping sites. The NC Department of

“[There] was a time at the school where the kids wouldn’t go on the playground because they thought it was unsafe ... [They had] portioned it off [as if to say,] ‘Don’t go over this way.’ . . . [There] was a lot of fear. And I had a grandson up there at the time. . . It was just frightening . . . [there] was nobody . . . coming to our rescue. Nobody was going to help us and we [were] out here by ourselves.”
–Community Member

Transportation (DOT) covered the area with sand to suppress odors and, later, activated charcoal solution and asphalt to keep the material in place⁸ (McGurty, 1995). The state government coupled these physical measures with strong cautions to avoid the areas contaminated with PCBs. The state advised residents

not to walk close to roadways where PCBs were dumped or to eat produce grown nearby. However, it was difficult to follow these advisories, especially for children who had to wait for their school buses along these rural roads. Both state and EPA officials appeared frustrated with residents who expressed doubt that they were at “zero risk” given the actions taken by DOT to mitigate the harm and warnings to limit contact with potentially contaminated soil (McGurty, 1995).

“I feel like I was probably one of the first in this county to come in contact with the PCB dump. I was moving a piece of my equipment, and. . . I had a flat tire. And I was actually all in it changing that tire. It was still wet to the point that it got all over me. But I had no clue what it was.”
–Community Member

The population living along the contaminated roads reported an increase in miscarriages and birth defects, and a local physician, Dr. Brenda Armstrong, reported an increase in congenital illness among her patients (Kaplan, 1997). Further, testing of twelve women’s breast milk found contamination with the exact form of PCB spilled along the roadways (ibid).

Roadside collection resulted in about 40,000 cubic yards of PCB contaminated soil, and the state transported the soil to a 142-acre landfill near Afton in Warren County. Approximately 22 acres of this site were used for the hazardous waste landfill, with the rest acting as a buffer (McGurty, 1995).

⁷ EPA criterion for contamination is 50 parts per million (ppm) (Labalme, 1987).

⁸ Dr. Jerome Weber of North Carolina State University recommended these actions (Weber, 2003).

Landfill Siting Process

After the completion of tests on a sample of the soil collected from the NC highways, the state needed a place to temporarily store the contaminated soil. The first proposed storage site for the soil was at the Department of Transportation maintenance yard in Warrenton, the county seat. An injunction prevented this site from being used based on proximity to population and water supply. Residents were unsuccessful when they attempted to utilize these same arguments in Afton, which is about six miles south of Warrenton. In late 1978 Monroe Gardner, a Warren County resident and Governor Hunt's campaign manager, offered to lease a piece of his 600 acres to the state for temporary storage of the contaminated soil (McGurty, 1995). When the initial lease expired in 1979, Gardner did not renew it because of pressure from community members and county commissioners; however, the contaminated soil was not removed from his property until the landfill was built (ibid).

The initial financial burden of cleanup fell to the state of North Carolina although both the state and federal government successfully sued the Ward Transformer Company⁹ (North Carolina Department of Environment and Natural Resources, 2003). Uncertainty concerning clean-up financing coupled with an unrefined remediation procedure plagued the clean up efforts. The passage of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund) in 1980 shifted about 90% of the clean-up cost to the federal government and also added structure to the remediation process (Environmental Protection Agency, 2003a).

In 1979, the state proposed a number of options to deal with the tainted soil.

- In-state burial of waste: \$2.5 million
- Truck waste to out-of-state disposal site: \$6.85 million
- In-state burial within each affected county: cost/logistics prohibitive (no cost estimated)
- Transport to EPA approved incinerators: cost prohibitive (no cost estimated)
- Extract PCB from soil and detoxify chemical: not EPA approved
- Treat PCB by roadside: not EPA approved

(Labalme, 1987)

⁹ Robert Burns and his sons, owners of the trucking company, pled guilty for violations to the Toxic Substances Control Act and the Clean Water Act. Robert Burns received a five year sentence, and his sons received suspended sentences in return for their testimony against the Ward Transformer Company. Robert "Buck" Ward served nine months in a federal prison (Rawlins, 2003b). A U.S. Department of Justice settlement with Ward Transformer totaled \$570,000 (North Carolina Department of Environment and Natural Resources, 2003).

After the decision to pursue an in-state burial at a single site, there was a review of state owned lands to determine the location. Governor Hunt also issued an appeal to North Carolina residents and local governments to “volunteer tracts of land for landfill”¹⁰ (McGurty, 1995). The combination of these recruitment efforts resulted in 90 potential sites, but EPA

“I don't think that the majority of community leaders, health workers, politicians really understood the significance of what was happening because if they did, they would not have done it.”

–Community Member

regulations disqualified the majority of the sites. Specifically, many of these sites did not meet two of the EPA requirements: the bottom of the landfill must be at least 50 feet above the groundwater and the site must have “thick, relatively impermeable formations such as large-area clay pans” (Labalme, 1987).

Further reviews resulted in two sites: land owned by Warren County residents Carter and Linda Pope and a Chatham County sanitary landfill. The Chatham County sanitary landfill was publicly owned, so a change in the site’s use was subject to input from county residents. During a public hearing held on Dec. 11, 1978, Chatham County residents voiced strong opposition. Consequently, county commissioners withdrew the offer to sell portions of the landfill for PCB burial (ibid).

The state inquired into purchase of the Pope land tract, and residents and commissioners learned about the state’s intention to construct the landfill near Afton on the land purchased from the Popes in a local paper on Dec. 20, 1978 (McGurty, 1995). State officials held a required public meeting to discuss the potential landfill on Jan. 4, 1979. Between 600 and 1000 of the county’s approximately 16,000 residents attended this meeting. During this meeting, the state asked EPA officials for three waivers of EPA regulations:

- Elimination of the requirement for at least 50 feet between landfill and groundwater (Groundwater at the Pope site was located at 7 feet)
- Elimination of an artificial liner,¹¹ arguing that soil compaction would be sufficient to prevent leakage
- Elimination of an underliner leachate collection system¹²

(Labalme, 1987)

Displeased by Governor Hunt’s absence at the meeting, a group of residents, including Ken and Debra Ferruccio, organized a meeting with the governor on Jan. 19, 1979. At this meeting, Governor Hunt insisted that landfill construction would proceed

¹⁰ Sources did not mention if Governor Hunt offered any incentives.

¹¹ A 1981 report completed by the head of a research program at Princeton University investigated four state-of-the-art landfills in New Jersey. Even landfills with the best liners developed leaks within a year of being put into operation (Montague, 1981).

¹² Leachate is liquid (e.g., rainwater) that comes in contact with garbage and takes on the pollutant characteristics of the garbage (Catawba County Government, n.d.).

safely. These concerned citizens went on to meet with EPA representatives on Feb. 9, 1979 in Washington, D.C. to voice their concerns about the request for waivers. An EPA scientific advisor responded that the landfill design would be zero discharge (meaning nothing would leak from the landfill) so distance to groundwater was irrelevant (Labalme, 1987). This group of citizens eventually helped to establish the Warren County Citizens Concerned with PCBs.

Warren County residents eventually hired their own soil expert, Charles Mulchi, an associate professor at the Department of Agronomy, University of Maryland-College Park. Dr. Mulchi assessed the proposed site and concluded that the soil did not meet compaction criteria, nor was it able to be compressed to

"I think a lot of people just have total trust in government. But the same government you trust sometimes will deceive you."
-Community Member

create a protective layer. Further, Mulchi stated that the compaction issue was not as important as the type of soil at the Warren County site. The soil/clay at the Afton site (kaolinite) had high chemical exchange capacity. He believed that engineering and design

"I knew that when Hunt said to us that this was going to be a 'Cadillac,' I knew he was trying to fool us because black folk don't ever drive Cadillacs, but Hunt knew that that's black folks' goal, is to own a Cadillac. And I think that was a racist comment within itself, that [Hunt thought,] 'I can go in there and tell those black folks this is a Cadillac, they're going to forget, you know, they're not going to be worried about their health because this is the Cadillac'...if he ever came in here and said 'This is a Pinto,' we would have been really worried"

-Community Member

considerations could not make the site safe and that Chatham County soil was more appropriate (Labalme, 1987; McGunty, 1995; McGurty, 1995).

Despite the shortcomings of the site, the state maintained that the Warren County site was appropriate. State officials, particularly Governor Hunt, repeatedly argued that the landfill placement in Warren County served the "public good" and argued that it would safeguard the health of Carolinians in "the finest manner possible" (Labalme, 1987). Further, the

site would benefit from the best landfill technology. State and EPA officials repeatedly referred to the site design as the "Cadillac of landfills" (Stocking, 1993). William Sanjour, then chief of the EPA's federal Hazardous Waste Implementation branch, spoke in opposition of his organization's predictions about the safety of the landfill. He said, "I have watched for many years to see the EPA and landfill operators try one technology after another to make landfills work and none of them ever has" (ibid). Sanjour also stated that, "Basically, hazardous waste landfills don't work, and the decision to build them is purely political and not based on technology" ("EPA official criticizes landfill," 1982).

Response

Legal Action – The county board and the county manager found out about the EPA’s approval of the landfill permit application when reporters called them for comment. The county retained the Greensboro law firm Smith, Patterson, Follin, Curtis, Lames and Harkay, and filed a federal suit on Aug. 16, 1979. The suit (*Warren County v. State of North Carolina*, 528 F. Supp. 276 [1981]) sought a preliminary injunction against the land purchase and the construction of a landfill. Though the court granted an injunction against construction, it also allowed the state to purchase the land.

“This will make other people realize if companies make chemicals...if you make them, you find a way to detoxify them right on your spot. And if people get together and environmental justice reigns true, they’ll have to do that. If they get a permit to make these types of things, first of all you’re going to have to be sure you can clean it up right where you are.”
–Community Member

The county did not address race as a possible factor in the case, and did not attempt to gather evidence to support this claim from their residents. Therefore, the state did not directly dispute claims that race played a part in site selection but maintained that the site was chosen because of low population density, compliance with environmental standards, and land availability. As a part of unincorporated Shocco Township, Afton residents lacked local elected officials to politically represent their concerns. County level officials were the closest form of local government.

On Nov. 25, 1981, Judge Britt, who had granted the injunction, ruled against the county, stating that the design for the site was safe and the process of site selection was sound. The county appealed this decision and the state had to complete a full environmental impact statement (McGurty, 1995). The newly proposed design included a liner and leachate collections. To quell concerns about future landfill expansion, the state deeded the remaining 120 acres to the county in an out-of-court settlement. Both the county suit and a second suit filed by local landowners (*Twitty v. North Carolina*, 527 F. Supp. 778 [12 ELR 20336](E.D.N.C. 1981)) were withdrawn on May 26, 1982, and the injunction on construction was lifted (ibid).

Black residents were frustrated with the county’s out-of-court settlement with the state. The local chapter of the National Association for the Advancement of Colored People (NAACP) filed a suit in July 1982 in district court making the following observations:

- Waivers were sought for three out of five EPA requirements for landfills, indicating that the site was not suitable.
- Warren County was located on the outskirts of the area where the PCB was dumped, thus transportation to the site would result in substantial costs.

- There are an estimated 800,000 acres of soil less permeable than Warren County soil in other parts of North Carolina that would be more appropriate for a landfill.
- The state should utilize eminent domain powers in Chatham County where soil was more suitable¹³

(General Accounting Office, 1983)

The failure of the Pope land to meet several EPA regulations and the possibility that other sites were more suitable raised questions about the selection of Warren County as the site. The NAACP suit alleged that the poor, rural, and predominately Black residency of Afton and Warren County was a driving force in the state's decision. The injunction was denied on Aug. 10, 1982, by Judge Britt who noted that previous cases did not make mention of race as a factor.

A 1983 report from the General Accounting Office (GAO) used 1980 census data to substantiate claims that race appeared to correlate with hazardous waste siting across the southeastern United States. This report examined the populations living within 4 miles of the four hazardous waste landfills located in eight southeastern states including the Warren

"[People] were up in arms and protesting and blocking the roads and lying down in the highway. My wife was in it. But I couldn't join her. We were on opposite sides. She was protesting. I was with the Department of Corrections. I had to come and pick her up and take her to jail..."
- Community Member

County site. The populations living within 4 miles of each site were at least 38% Black and three communities had a Black population of more than 50 percent. Further, Blacks in each community had a lower average family income when compared to all races (General Accounting Office, 1983).

Community Response - The protest against and aftermath of the PCB landfill involved a number of Warren County residents. Dollie Burwell is a community activist who later served as register of deeds.¹⁴ Massenburg and Betty Kearney are activists living in close proximity to the landfill, and protestors knelt in front of their home during protests. Media helicopters landed in their garden during their haste to cover the protest. Reverend Luther Brown held regular protest meetings at the Coley Springs Baptist Church where he was pastor. A number of civil rights leaders were visible presences at the Warren County PCB landfill protest, including Reverend Benjamin (Chavis) Muhammad, Floyd McKissick, Reverend Leon

¹³ Eminent domain refers to the right of a government or municipal quasi-public body to acquire property for public use through a court action called condemnation, in which the court decides that the use is a public use and determines the compensation to be paid to the owner (*Eminent domain*, n.d.). The State Attorney General addressed this issue by saying that the state did not have this power.

¹⁴ Dollie Burwell stated that she wanted to make sure that future land transfers did not occur under suspicious circumstances (Kaplan, 1997, p66). She later became chairwoman of the Citizens Advisory Board for Warren County, which monitored the landfill for the community. It is unclear whether this is the same organization as the Joint Warren County/State PCB Working Group.

White, and Golden Frinks.¹⁵ Ken and Debra Ferruccio were founding members of Warren County Citizens Concerned About PCBs (The Concerned Citizens), a community group established in 1979.¹⁶ The original membership of this organization mainly consisted of White residents.

"I didn't salute [state troopers]. . . I didn't grin at them. So one made a remark one day to my husband. . . . [The trooper] said, 'When the lady comes through here, she doesn't even smile at me.' So [my husband] asked him, what did I have to smile about? We were living right next door to that dump."
-Community Member

Media and academic articles concerning the protest focus their attention on the aforementioned Warren County residents and civil rights leaders. However, given that the protest continued for six weeks with an average attendance of 75 people, many unnamed Warren County residents also played a key role in the protests.

"I walked to the landfill in the front with my mom. And when havoc started, we got separated. And I was just screaming, 'Don't bring the trucks in. I don't want to die from cancer.' And they picked me up, and they picked my mom up and at that point in time I was still screaming. I was the only child actually on the adult paddy wagon to go to jail that day."
-Community Member

Some of these residents were seasoned protesters with experience in the use of civil disobedience techniques.

The first official truckload of soil was scheduled to arrive at the landfill on Sept. 15, 1982.¹⁷ An estimated four to five hundred protesters met the truck—the first of seven

"I thank God for what He did because it was through prayer. I had the system in the well. But I prayed. I prayed because every morning when I got up I got a fresh odor of that PCB stuff. And I had to keep praying. And I've lived to be 75 years old."
-Community Member

thousand trucks—at Coley Springs Baptist Church in Afton. State highway patrol in full riot gear arrested 55 people on the first day. The protests continued for the next six weeks, the time it took to transport all the PCB soil to the site. The protestors marched, carried picket signs and lay down in front of the dump trucks transporting the contaminated soil. During the protest, the State highway patrol arrested 523 citizens, including juveniles, senior citizens, and U.S. Congressman Walter Fauntroy. It was Congressman Fauntroy's arrest, despite his diplomatic immunity, that was the catalyst for the

¹⁵ Rev. Ben (Chavis) Muhammad was the director of the United Church of Christ Commission (UCC) on Racial Justice in 1982, and coined the term "environmental racism." Floyd McKissick was the former director of the Congress of Racial Equality (CORE) in 1982 and the visionary behind Soul City. Rev. Leon White was the field director of UCC Commission in Raleigh. Golden Frinks was an experienced civil rights organizer from Edenton, NC.

¹⁶ Warren County Citizens Concerned about PCBs is referenced in a number of resources including Robert Bullard's *Dumping in Dixie: Race Class and Environmental Quality*. The timeline provided in Ellen McGurty's doctoral dissertation references attempted contact with Sen. Helms and Pres. Reagan for help on Aug 14, 1982.

¹⁷ On Aug. 21, 1982, just before the landfill went into use, a vandal slashed the plastic liner for the landfill. Instead of replacing it, the liner was glued together, re-stretched and covered with five feet of clay.

1983 General Accounting Office report concerning hazardous waste facility locations.

A week after the last truckloads of contaminated soil reached the Warren County landfill, Governor Hunt issued a letter promising to detoxify the site when technology became available (Leavenworth, 1995). This letter became the basis for future pressure on the state to clean up the site. The last truck to deliver soil arrived on Oct. 27, 1982 and the workers capped the landfill in late November 1982. Already the landfill was showing signs of weak construction. First, heavy rains from a hurricane contributed to erosion at the site and allowed about 500,000 gallons of water to accumulate before the capping of the landfill. Three months after capping, gas from decomposing vegetation caused bubbles in the liner and gurgling sounds. The Southern Christian Leadership Conference and Warren County residents took pictures of these gas bubbles. The liner was vented, and the state proposed a drainage system to siphon off water to be tested and used to irrigate the site. Ken Ferruccio, Patricia Hubbard, and Ruffis Harris, founding members of the Concerned Citizens, protested the disposal of landfill leachate. Ferruccio was arrested, refused to post bail and then began a 19-day hunger strike.

Research

Site Decontamination- Dr. Jerome Weber, a professor at North Carolina State University, submitted a plan for in-place treatment of the PCB tainted soil on Aug. 31, 1978. He recommended the incorporation of activated carbon and fertilizer into the soil to reduce bioactivity to a no-effect level. The NC Department of Transportation did apply activated carbon to the site; however, they opted for an application of asphalt instead of soil incorporation. Weber states that these treatments eliminated the toxicity of the soil and these data presented to advisors of Governor Hunt, the Secretary of State (NC), and scientists at EPA in Washington, DC. Two pilot studies of Weber's proposed process were completed in two counties, and Weber stated that these studies were effective. He believed that this process would have nearly eliminated the bioactivity of the PCBs if completed on the entire area. Weber felt that newspaper reports ignored the findings and printed misinformation that "scared people into laying down in front of trucks" (Weber, 2003).

"I had to get rid of my cows. I didn't want nobody eating no beef that I had . . . coming off PCB water. And I got rid of them, chickens and everything. . . . I started all over again."
-Community Member

Water Studies- In 1993, Warren County health director Dennis Retzlaff had 55 area wells tested to allay community concerns about water contamination. A 1995 news article cites

that North Carolina Division of Solid waste technicians found trace amounts of dioxins in monitoring wells uphill and downhill from the landfill (Leavenworth, 1995). News articles did not cover the community's response to the testing results.

Air and Soil Studies- In 1997, Joel Hirschhorn, an independent advisor to the Joint Warren

"That's one of my regrets, that there was not someone in this community concerned enough about health to actually push as hard as those of us who knew that we had to clean it up before it got too far in our water table, that someone, the health director or somebody would have been documenting and pushing for some health studies. Because I do believe, you know, just as many people don't know about my children's health issues, we don't know about many other folks' health issues."

-Community Member

County/State PCB Working Group,¹⁸ stated that there was evidence that the landfill was leaking and contaminating air and soil. He stated, "we have hard evidence that there are cracks in the top liner of the landfill, which is why it's not surprising that we've found PCB air emissions" (Office of Minority Health,

1997, October). Craig Brown, an environmental engineer for EPA, said, "Monitoring data so far [are] insufficient to determine if the landfill is releasing toxic substances to the environment" (ibid). Both the EPA and the state of North Carolina maintained that the landfill was safe. Dr. Hirschhorn disagreed, saying that the landfill was "an unsafe situation." Tests detected dioxins in several monitoring wells.

Cancer studies- There is no research concerning cancer associated with possible PCB contamination. One newspaper article highlighted instances of cancer in two families living about three miles from the site (Stocking, 1993).

"I just thought we were doomed at one point in time. I really just thought we were doomed and that this community would be like another Love Canal, 'cause I had heard the stories and had seen the stories about Love Canal ... And that's all I knew at that time. That's all I knew at that time. But my pastor would always say, 'We've got to keep the faith.'"

-Community Member

¹⁸ The Current Status/Updates section includes more information about The Joint Warren County/State PCB Working group (The Warren County PCB Working Group).

Current Status/Updates

"When I moved here in June of 1999, one of the first things I was told I had to be at was a rally . . . in front of the courthouse downtown. And at that point I began to understand all that was going on. . . . I don't know if you could ever get the Governor (Jim Hunt) to admit this, but when he made that promise (to clean up the landfill when technology became available), I don't think he foresaw himself being back in office and the technology really ever being available to do this. You know, that was the politically expedient thing to say at the time he said it, never knowing that God was going to hold him to it. That points out that this had been a faith march the whole time."

-Community Member

By 1993, there were approximately 13 feet of water (about 1.5 million gallons) trapped in the Warren County PCB landfill (Leavenworth, 1993). Bill Meyer, the director of the state Division of Solid Waste Management, blamed the failure to detect the water accumulation on the landfill's monitoring system.¹⁹ He stated that the pump installed was "the cheapest thing we could put our hands on that would pump water" (Stocking, 1993). Meyer initially requested state funds in

1992 to address water accumulation, but the Department of Environment, Health and Natural Resources²⁰ (DEHNR), headed by William Cobey, ranked the project 42nd out of 61 for legislative funding (Leavenworth, 1993). The new DEHNR administration, headed by Jonathan Howes, proposed a \$200,000 project to install a new automated water pump to help relieve water pressure on the landfill liner. Water collected from the site would be filtered to remove any PCB-contaminated sediment, and the sediment would be shipped to an Alabama landfill²¹ or an Arkansas incinerator. Meyer maintained that the accumulated water had not leaked through the landfill's cap, and after draining, the protective liner would remain secure "forever" (ibid). The state also planned to test the wells of 50 families living near the landfill.

In 1993, Governor Hunt returned to office to serve two more terms, ending in 2001 (*Jim Hunt*, 2005). In response to the continued deterioration of the "Cadillac of landfills", Warren County residents returned to Governor

"But it was a true testament of how the state and community came together. And it wasn't an easy task. [There were] a lot of man-hours that went into that that will never probably be accurately recorded, people that came and really pushed the state to live up to their word. Because if it wasn't for that, [there] would still be PCBs in the landfill today. But because of people dedicated to the cause, it was done. And that was true perseverance."

-Community Member

¹⁹ A May 15, 1993 article suggested system had been faulty for at least two years, and that the water was trapped in the landfill during its capping in 1983 (Leavenworth, 1993).

²⁰ Department of Environment, Health, and Natural Resources (DEHNR) became the Department of Environment and Natural Resources (DENR) in 1997. Health-related functions moved to the Department of Health and Human Services (DHHS).

²¹ It is unclear whether the landfill in Alabama is the Emelle landfill, the largest hazardous waste landfill in the United States. This landfill was among initial options for disposal of the PCBs in 1982. Ninety percent of the residents living near the landfill are Black and this site receives hazardous waste from 42 states and oversees (*Emelle, Alabama: Home of the nation's largest hazardous waste landfill*, n.d.).

Hunt's 1982 promise to detoxify the site in order to pressure state officials into action. A group of community members and state officials established the Joint Warren County/State PCB Working group. The group's tasks included finding a solution to the water accumulation and considering the future of the landfill. In 1994, after a request from the Warren County PCB Working Group, the state Division of Solid Waste Management tested the landfill for the first time since its construction. Samples were taken at a depth of 35 ft to test for PCB levels and dioxin, a hazardous byproduct of PCBs²² (Stocking, 1994). Additionally, tests were conducted on four monitoring wells located around the landfill. The monitoring well tests found low levels of dioxins in monitoring wells up and downhill from the landfill site (Leavenworth, 1995). Warren County residents demanded a full detoxification and urged the state to test a process known as Base Catalyzed Decomposition.²³ However, Jonathan Howes, secretary of DEHNR, stated that, "It would not be financially prudent to spend taxpayers' dollars on any effort to remediate the landfill until we know that our efforts will work" (ibid).

The details of the events between the 1994 discovery of dioxins in the monitoring wells and the inclusion of cleanup funds in the 1998 state budget remain unclear.

In 1998, Governor Hunt included \$15 million of the state budget for the cleanup of the Warren County landfill. Approval of the proposal would begin a three-year clean up process (Roberts, 1998).²⁴ After several more years of searching for additional funds and negotiating details of the cleanup plans, the PCB removal process²⁵ was slated to begin in July 2002 and was estimated to last one year (Wallace, 2002).

A December 2002 issue of the Community News Wire included an update from a recent Citizen Advisory Board meeting. Approximately 12,300 tons of processed soil has been treated and most of this had met the National Institute of Occupational Safety and

"Yeah, it was about 1998 really, when we really got the wells and stuff put in and started monitoring ... that was one of the reasons why we were able to force the state to really live up to its promises. Because it was *supposed* to monitor the landfill and no monitoring had been done . . . and EPA issued a non-compliance to the state because they had not *complied* with what they told EPA they would do. . . . EPA really was just going to fine the state this big fine to pay. And we, sitting around that table . . . asked EPA not to fine the state but to work towards making the state live up to its agreement, which was to clean up. So, those of us who sat around that table, we fought for everything we got."
-Community Member

²² Both the state and an independent environmental consulting group hired by the Warren County PCB Working Group, ECO, conducted tests.

²³ The process of Base Catalyzed Decomposition uses heat to separate the PCBs from the soil and then destroys the PCBs separately.

²⁴ It is unclear whether the General Assembly approved all of these funds.

²⁵ The state hired Shaw E & I Inc. to dig up the contaminated soil and heat it to 800 degrees to remove PCBs.

Health (NIOSH) performance criteria. The clean up process was 17% completed, and the projected completion date was July 2003 (Warren Family Institute, 2002, December).

The General Assembly authorized up to \$2.5 million from the Inactive Hazardous Sites Cleanup and \$500,000 from the Water Permits Fund for the completion of the clean up efforts at the Warren County site. It was implied that additional funding would not be forthcoming. At this point, \$13.7 million had been spent on the cleanup project and the allocated monies would have covered the remaining costs assuming no major complications (Warren Family Institute, 2002, December).

In February 2003, the Department of Environment and Natural Resources reported additional contamination in the clay used to cap the landfill. The discovery added 5,000 tons of contaminated soil to the detoxification process. However, the onsite decontamination of the clay was uncertain because clay is both more difficult and more expensive to decontaminate (Rawlins, 2003a).

“Where the environment is not protected then not only does the birds of the air, the fish of the sea lose, but people lose because everything is turned into an opportunity, an *it*. . . [There is] no regard for humanity, no regard for the earth. If you’re not responsible to Mother Earth, most likely you’re not going to be responsible to the children of Mother Earth. . . . The impact that this movement has had on our nation, at many levels, not only in terms of racism but in terms of humanizing the environmental struggle, is significant.”
–Community Member

“And now that the PCB dump is cleaned up, that was one site looked at to revitalize and use and turn around something that was negative to be a positive, to put a good ending to what was considered a bad story. And I saw the potential of that. And I still think that what was meant for harm can be turned around and meant for good in the hands of God. But it will take the community and us being empowered by this movement. We could turn around something that’s negative and make it a positive and show others that just by working together and having a vision and being consistent and sacrificing, we can move mountains.”

- Community Member

By August 2003, the cost of clean-up efforts totaled \$16.2 million. Funding for cleanup came from the North Carolina General Assembly, U.S. Department of Justice²⁶ and various environmental projects that came in under budget (North Carolina Department of Environment and Natural Resources, 2003).

At the end of 2003, the Warren County PCB landfill closed after clean up efforts that cost \$18 million. At the insistence of community residents, the site was decontaminated to 10 times cleaner than federal standards. Dollie Burwell, a leading activist in the 21-year saga surrounding the PCB landfill, said, “The government can make a mistake just like an individual and come back and make up for that mistake with the right pressure from communities. You can right a wrong” (Rawlins, 2003c). Residents are

²⁶ The Ward Transformer Company paid a settlement of \$570,000.

currently rallying around efforts to remove the stigma associated with their community because of the PCB landfill.

“When God had brought Joshua and his people across the Jordan, they were told to take up stones and to build an altar. And when the kids asked, ‘What be these stones?’ the story is to be told. And what a wonderful, I know when I had an opportunity to attend, when they cleaned the dump up, and you had that wonderful time out there. You’re talking about a memorial, and I think it’s a story that needs to be told and continually told because there’s still some other issues in Warren County. There’s education, there’s drugs and crime and that we need to come together and use the same forces to bring about change, working together. And, from my perspective, we don’t have that coherence anymore. We’re just scared. We need to come together and work together to bring about change and turn Warren County around. So, what better way than a memorial to say, ‘What be these stones here?’ and the story can be told.”

– Community Member

References

- Agency for Toxic Substances and Disease Registry. (2001, February). *ToxFAQs for Polychlorinated Biphenyls*. Retrieved October 8, 2003 from the Agency for Toxic Substances and Disease Registry web site: <http://www.atsdr.cdc.gov/tfacts17.html>.
- Bullard, R. (1990). *Dumping in Dixie: Race, class, and environmental quality*. Boulder, CO: Westview. Retrieved October 16, 2003 from the Center of International Earth Science Information Network web site: <http://www.ciesin.org/docs/010-278/010-278chpt2.html>.
- Catawba County Government. (n.d.). *Catawba County utilities & engineering*. Retrieved July 13, 2005 from the Catawba County website: <http://www.catawbacountync.gov/depts/u&e/landfill.asp>.
- Department of Housing and Urban Development. (1972, February 14). *Proposed Soul City new community Warren County, North Carolina (EIS)*. Washington, D.C.: National Technical Information Service-U.S. Department of Commerce.
- Emelle, Alabama: Home of the nation’s largest hazardous waste landfill. (n.d.). Retrieved July 13, 2005 from <http://www.umich.edu/~snre492/Jones/emelle.htm>.
- Eminent domain. (n.d.). Retrieved July 13, 2005 from http://www.4554.com/Glossary/EMINENT_DOMAIN.html.
- Environmental Protection Agency. (2003a). *CERCLA Overview*. Retrieved October 13, 2003 from the Environmental Protection Agency web site: <http://www.epa.gov/superfund/action/law/cercla.htm>.
- Environmental Protection Agency. (2003b). *Resource Conservation and Recovery Act*. Retrieved October 13, 2003 from the Environmental Protection Agency website: <http://www.epa.gov/region5/defs/html/rcra.htm>.
- EPA official criticizes landfill. (1982, September 27). *Winston-Salem Journal*.
- General Accounting Office. (1983). *Siting of hazardous waste landfills and their correlation with racial and economic status of surrounding communities*. Washington, D.C.: U.S. Government Printing Office. Retrieved July 13, 2005 from the General Accounting Office website: <http://archive.gao.gov/d48t13/121648.pdf>.
- Jim Hunt. (2005). Retrieved July 12, 2005 from the Wikipedia website: http://en.wikipedia.org/wiki/James_B._Hunt,_Jr.

- Kaplan, T. (1997). *Crazy for democracy: Women in grassroots movements*. New York: Routledge.
- Labalme, J. (1987). *A road to walk: A struggle for environmental justice*. Durham, N.C.: Regulator Press.
- Leavenworth, S. (1993, May 15). State planning to drain water from toxic landfill. *The News & Observer*, pp. A6.
- Leavenworth, S. (1995, January 21). Cleanup of PCBs demanded. *The News & Observer*, pp. A3.
- Love Canal. (2005). Retrieved July 12, 2005 from the Wikipedia website: http://en.wikipedia.org/wiki/Love_Canal.
- McGuinty, E. (1995). *The Construction of environmental justice: Warren County North Carolina*. Unpublished Dissertation, University of Illinois, Urbana-Champaign, IL.
- McGurty, E. (1995). *The Construction of environmental justice: Warren County North Carolina*. Unpublished Dissertation, University of Illinois, Urbana-Champaign, IL.
- Montague, P. (1981). *Four secure landfills in New Jersey -- A study of the state of the art in shallow waste disposal technology*. [Manuscript in preparation, Princeton University].
- North Carolina Department of Environment and Natural Resources. (2003). *PCB detoxification at Warren County landfill nears completion*. Retrieved October 13, 2003 from Department of Environment and Natural Resources web site: http://www.enr.state.nc.us/newsrels/20030825_warrenpcb.html.
- Office of Minority Health. (1997, October). *Closing the gap: Landfill prompts concern in North Carolina*. Retrieved June 13, 2003 from the Office of Minority Health web site: <http://www.omhrc.gov/inetpub/wwwroot/ctg/ctg-env.htm>.
- Perdue Farms. (2005). *Welcome to Perdue Farms*. Retrieved July 13, 2005 from the Perdue Farms website: <http://www.perdue.com>.
- Rawlins, W. (2003a, February 20). Warren Co. landfill clay tainted, too. *The News & Observer*, pp. B1.
- Rawlins, W. (2003c, November 11). Dump's days fade. *The News & Observer*, pp. B5.
- Roberts, M. (1998). *New budget will provide for Warren Co. landfill cleanup*. Retrieved June 17, 2003 from WRAL web site: <http://www.wral.com/news/590766/index.html?type=print>.
- Stocking, B. (1993, July 11). Old landfill fears from buried Warren County residents fear that water inside PCB dump poses danger. *The News & Observer*, pp. A1.
- Stocking, B. (1994, July 28). Toxic level tested at landfill Warren County residents demand cleanup of dump. *The News & Observer*, pp. A3.
- Wallace, K. (2002). *State pledges to clean up toxic site in Warren County*. Retrieved June 17, 2003 from WRAL web site: <http://www.wral.com/NEWS?814746/detail.html?type=print>.
- Warren Family Institute. (2002, December). *Community news wire*.
- Weber, J. (2003). *Case studies: Toxic organic chemicals in the environment*. Retrieved July 21, 2003 from the North Carolina State University web site: <http://courses.cropsci.ncsu.edu/cs727/case3.htm>.
- Yahoo! maps, driving directions, and traffic. (2005). Retrieved July 13, 2005 from <http://maps.yahoo.com>.