

Corporation, People, and Government: A Look at the Rise of the Waste Management  
Corporation from Rural California to the Rest of the World

By

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Abstract

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This research project is a study of Kettleman City, California, home to the largest Class I toxic waste dump in the western United States, owned and operated by the public corporation Waste Management Inc. (WMI). The story of Kettleman City is a cautionary tale of hubris that warns of the consequences of the complete disregard for the natural environment and the tolerance for corporation's profit-generating schemes that harm human health and the ecosystem. Divided into three parts, the project expands scholarship on the anthropology of disaster, the study of corporations in the United States within a framework of environmental justice, and the controlling processes underlying the dominant paradigms.

The first part of the dissertation examines government and corporate neglect and acquiescence to the incremental degradation and devastation of California's environment since the mid-nineteenth century involving the displacement and extermination of Native Americans and the Tulare Lake Basin, the killing and contamination of migratory birds in the Kesterson Wildlife Refuge, and the corruption and power of the agricultural industry. This history lays the groundwork for WMI selecting Kettleman City as the site for the largest toxic waste dump west of the Mississippi. Since the 1990s, the town's largely Latino population has been fighting against the dump and for the environmental safety of its residents, and many credit them for launching the environment justice movement in the western United States. Using ethnographic and archival methods, I examine the history of Kettleman City and the opposition of its residents to the waste facility and the recent discovery of elevated rates of birth defects and infant deaths since 2007.

In the second part of this study I examine how our corporatized, industrial society has made landfills and other environmental injustices permanent fixtures in our society and how, as consumers, we have become conditioned to disregard waste as anything but normal. This research complicates the categorization of what constitutes a "disaster" and finds that not only are landfills certain to cause serious future catastrophes, but that unlike other disasters that are

abrupt and uncontrollable, landfill disasters are avoidable “ticking time bombs.” We accept them because of ideological convictions supported by science, technology, and government oversight that evidently accepts accidents, spills, and site contaminations as natural, inevitable or necessary byproducts. I document the long list of serious violations at the WMI facility in Kettleman City and the subsequent fines levied by regulators and out-of-court settlement deals. In short, I argue that our history and culture has created a society with a high tolerance for corporate environmental degradation for the perceived benefit of economic progress.

In the final part of this study I unveil the socio-historical, political, and economic processes responsible for a culture of wastefulness. In the nineteenth century, Americans were aware of what they used and purchased. Americans valued thrift, and since recycling was very common, people produced little waste. The Industrial Revolution led to the rise of corporations by the twentieth century and to a growing advertising industry that promoted hyper-consumption. This, in turn, created demand for the waste hauling and disposal industry. I document how WMI, a multibillion dollar transnational corporation, by the 1980s and 1990s had grown into a powerful institution, and now maintains a monopoly over the American waste industry and beyond. I explore the history of WMI and examine how the company has successfully influenced political, economic, and cultural spheres of American society to build and sustain its empire. WMI’s success lies in its power to influence public perceptions of waste and waste services: a power that has gone unquestioned for far too long.

Dedicated to

Prof. Sayed Askar Mousavi

and to

My father

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## List of Abbreviations

Waste Management Inc. (WMI)

Chemical Waste Management Inc. (CWM) (Chem Waste)

California Department of Public Health (CDPH)

Environmental Protection Agency (EPA)

Central Valley Project (CVP)

California State Water Project (CSWP)

Bureau of Reclamation (BoR)

Environmental Impact Report (EIR)

Polychlorinated Biphenyls (PCBs)

El Pueblo para el Aire y Agua Limpio (People for Clean Air and Water) (El Pueblo)

Kids Protecting Our Planet (KPOP)

California Department of Toxic Substances Control (DTSC)

Solid Waste Disposal Act (SWDA)

Department of Health, Education, and Welfare (DHEW)

Office of Solid Waste Management Programs (OSWMP)

Resource Conservation and Recovery Act (RCRA)

Toxic Substances Control Act (TSCA)

Department of Health Services (DHS)

Government Accounting Office (GAO)

Southern California Hazardous Waste Management Project (SCHWMP)

Office of Appropriate Technology (OAT)

Securities and Exchange Commission (SEC)

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## **Chapter 1: Introduction**

### ***The Human Predicament of Our Time in Perspective***

On a sweltering hot summer day in the Central Valley, I met with Eleanor\*, a longtime resident of Kings County, California. She suggested we stay cool by enjoy a lunch together at the historic Superior Dairy located in the city of Hanford, just over thirty miles away from Kettleman City. After talking for some time, Eleanor looked down at her ice cream sundae and began to nod her head in disappointment:

“I’ve read all the papers and watched all the television coverage about what’s happening in Kettleman City. People around the county talk, but most of the time all they do is talk. We know it’s happening and we just can’t deny this. But you know, I’m puzzled that we don’t hear more about the town. I mean after all, its got such an extraordinary history. I can’t find an answer as to how this oil rich town became the garbage can for the rest of America? In our county, in this state, and in this country, we still haven’t figured out how to get rid of our trash. Turning communities like the one in Kettleman City into the garbage capitals of the world is inexcusable. I bet most people in the country, let alone here in the county, have any idea that before the largest toxic waste dump came to Kettleman, we had oil and natural gas. Come to think of it, I bet most Californians have any clue of this legacy. You know, we once had the largest fresh body of water with that Tulare Lake—in the Kettleman area—just go ask the Indians that are still alive in the area, one of ‘em will tell you so. Consult the history books even. And the thing that most upsets me is how do you go from having all of this natural wealth, all this boom and excitement beginning in the 1920s and end up with such a depressing, broken town and a county that prefers to take in toxic waste and prisoners before addressing the needs of its own people?”

This conversation with Eleanor, early on in my fieldwork, encouraged me to look deeper into the history of the region before examining the current health and environmental crisis in Kettleman City. In the first part of this dissertation, I describe the incremental changes affecting the residents and natural environment in Kettleman City, located in the heart of California’s agricultural Central Valley. The region, once home to one of the largest Native American populations in the state and a lake that could have made Kettleman City a lake-front community today, was systematically destroyed by a human desire, both economic and political, to transform the region into an agricultural industrial powerhouse. By the late 1920s, when the Great Depression first gripped the nation, the discovery of oil and natural gas in the Kettleman Hills area stimulated economic optimism and development in the region. The federal government considered the discovery to be the single largest finding of petroleum and natural gas in all of the United States. The oil boom motivated migration and settlement to the area and facilitated the establishment of the town of Kettleman City. As production decreased in the 1940s, oil families moved out of the town and in their place agricultural migrant workers moved in. Maria, a former

Kettleman City resident whose daughter is one of the casualties of the current crisis in town, describes how when she woke up the morning after she arrived in the town for the first time, she felt disappointed in what America has to offer its citizens:

“I got here in 1990. I was born in Mexico City and I came here when I was 21 years old. I came here to Kettleman City, well supposedly it was very easy to come here from Mexico, right, to the United States. A cousin and I came looking for work, for a better life, right. Then, um, an uncle who lived here in Kettleman City brought us here. My sadness was that I thought that the United States was something different. I came here at nighttime and when it was day, I came out of the house and I couldn’t help myself from wondering where I was, where had my uncle brought me because this Kettleman City, it was the ugliest place I had ever seen in my life. But even so, I still lived here for so many years, out of necessity. Then, one sad day, my baby died here.”

Like Maria, Joseph, an unemployed native of Kettleman City, wonders why Kettleman City was never developed. He has a desire to move out:

“In most cases, as towns and cities develop, they tend to develop from nothing into something. The government, planners, county administrations, local businesses, and educators create a place where people want to live and perhaps, if they are lucky, people can plant their roots, settle and have a family, and eventually die and be buried in, in their own town. But that’s not the case here in Kettleman City. You want to leave, but you can’t. It’s not the kind of place you want to raise your children in, especially after you have endured the loss of one child already. We all know about this town now. It’s in the papers. The fact that it’s in the papers says something. Right? It’s a town that doesn’t offer you life, but instead, it slowly kills you. I mean I crossed the border. I came out alive, unlike others. But look at where I am. You gotta wonder, late in the evenings like tonight, if it was worth it. This isn’t the America I thought I was coming to. It’s all around here too. This unemployment. These kind of environmental issues. It’s like this place, I’m sure, though I don’t know for certain, was beautiful at one time. It must’ve been. It was all land and grass before. Now it’s full of pesticides, death, and disaster.”

In 1979, the town became the permanent location of the largest Class I<sup>1</sup> toxic waste dump in the western United States, owned and operated by the leading waste services corporation in the world, Waste Management Inc. (WMI). Residents like MaryLou, who has lived in Kettleman City for over 40 years, describes how they learned about the facility in their backyard:

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<sup>1</sup> Class I is waste that is deemed hazardous as opposed to Class II (designated waste which is hazardous material and/or is nonhazardous waste that under particular environmental conditions can be released into the water source) and Class III (nonhazardous solid waste).

“For ten years, I didn’t know my neighbors. I wasn’t into socializing. I was really living the ranch life inside of my house where you just keep to yourself, that is until one day we came from Hanford and we found this flyer on the door. It was 1987 and that flyer was about an incinerator project and a meeting was going to be held about it. That’s how we learned about the toxic facility in our community. We never knew there was a toxic waste facility in our town. We had no idea until we went to that meeting. Sure there had been a strong odor especially at night and everyone complained of hives, but if you had grown up on a ranch, this kinda came with the territory, you know. You, you blame that, the time of the year, you blame uh the weather, you know. You blame the spraying over the foods and cotton. You get very sick from respiratory things or you figure it’s uh pollen time cuz the trees are pollinating, flowering or something. You always blame something that was in nature. You don’t think about something unnatural, being brought close to your home, to, to hurt you, you know.”

Although only two of the town’s residents currently work at the facility (there are 90 employees and most of them live in surrounding cities and town in Kings County), the dump is the largest business in Kings County, contributing as much as \$3 million annually in taxes and fees and giving financial support to local, state, and national politicians. Within its first year of operating in Kettleman City, WMI reported revenues of \$49.7 million. By the end of 1980, revenues had nearly doubled, reaching \$84.9 million; by 1981, company profits rose to \$119.1 million. Although Class I sites are prohibited from receiving radioactive waste, archival records from the 1980s indicate that known nuclear waste was illegally deposited at WMI’s Class I site in Kettleman City (Green 8/2/1985). The facility continues to remain profitable because by law, it is the only place in the western United States where Class I toxic waste can be treated and deposited. This classification enables the site to receive municipal solid waste from local counties and towns and highly dangerous chemical waste products including, but not limited to, pesticides, insecticides, chemical hazards, and refinery residues.

Since learning about the existence of the toxic dump two decades ago, residents have organized themselves against the ever-increasing presence of the facility over their lives. In 1993, their efforts paid off when WMI withdrew its proposal to develop a toxic waste incinerator at the Kettleman City site. More recently however, in December 2009, in spite of heavy community opposition, the Kings County Board of Supervisors, of which Kettleman City is represented by one official, unanimously approved the expansion of the landfill site and its waste capacity through the year 2042.

In 2008, Greenaction for Health and Environmental Justice (Greenaction), a San Francisco based non-profit organization that campaigns to support community-based struggles concerning environmental justice, conducted a grassroots survey in Kettleman City. The survey revealed that of the 20 babies born in the town between 2007 and 2008, 6 were born with birth deformities such as cleft palate/lip, chromosomal problems, heart murmurs, and still births (Greenaction). Three of these babies died before their second birthday and one was a stillborn. Subsequent to the survey, seven additional babies reportedly have been born with deformities. According to data from the California Department of Public Health (CDPH), the standard rate of occurrence of cleft palate/lip is less than 1 in 800 (0.125%). In Kettleman City the cleft palate/lip occurrence rate is 1 in 4 (25%).

This public health cluster was essential to a 2010 government investigation ordered by former Governor Arnold Schwarzenegger and conducted by the CDPH and the Environmental Protection Agency (EPA). During the investigation the landfill operators' bid to secure permits for site expansion was deferred. The investigation included a study of Kettleman City's air, water, and soil, and sought to confirm the alleged correlation between these findings and the alarmingly high rates of birth defects among babies born in Kettleman City. According to the final report released by state officials in January 2011, investigators could not confirm that mothers who gave birth to babies with birth defects had been exposed to particular pesticides or were impacted by the toxic waste facility located 3.5 miles away from where they lived. What was responsible for the abnormal rates of birth defects in Kettleman City remains a mystery. Nonetheless, officials reiterated what had already been well documented for years—Kettleman City's primary water source was contaminated with arsenic and benzene at levels far exceeding federal regulatory standards and required immediate attention.

In addition to the government investigation, Chemical Waste Management Inc. (CWM), a subsidiary of WMI that operates the Kettleman City facility, spent \$800,000 on a study that EPA officials helped design and oversee. The company self-monitored samples of air, soil, and vegetation that were collected over the course of a year to determine potential exposure of toxins to soil, animals, and people living nearby. They concluded that chemicals such as PCBs (polychlorinated biphenyls) stored in the ground at the facility were too low to harm nearby residents' health. The collaborative environmental and health investigation thus acquitted WMI from blame and responsibility, and gave WMI formidable defense that cleared the way for it to acquire landfill expansion permits.

It is important to note that during the entire investigation, the town's surrounding small farmers, corporate farmers, and/or other industries were not included in the investigation. Many of the residents do not blame themselves for what has transpired in their community and instead look to the physical environment as a source that has been illegally contaminated by other humans. They hesitate to blame the corporate farms on which most of them make a living by working on the fields, though they do acknowledge that they are exposed to pesticides both at work and from planes flying low to spray pesticides over the fields. Although some of the residents know about the history of the town going back to the 1920s and 1930s when oil and natural gas was discovered in the region, they are slow to blame the multibillion dollar petroleum corporations such as Shell and Chevron which continue to use the rusted and aged pipelines. The Hollywood film *Erin Brockovich* (2000) featuring Julia Roberts is based on the real-life story of one woman's crusade against the massive utility corporation Pacific Gas & Electric (PG&E) for toxic dumping in the California small town of Hinkley. This case was settled in 1996 and the company was forced to pay \$333 million in damages for exposing residents to contaminated groundwater with chromium 6 after it dumped the chemical, which was used to fight corrosion, into unlined ponds. In a similar class-action lawsuit, over 1,200 Kettleman City residents sought \$500 million in damages for contamination at the PG&E Kettleman Compressor Station located just a few miles north of the town. Many of the town's residents were employees at the station and they brought their family members with them to live in cottages and dorms provided by PG&E at the site. This station, which is still in operation, sends natural gas after it has been cooled down to cities like San Francisco and even El Paso, Texas. Yet what was exposed in the lawsuit was that between 1959 and 1979 the company mixed a powder form of chromium with water in its cooling system to prevent pipes and towers from rusting, except in

the process the runoff from the cooling towers ended up in five unlined ponds which eventually seeped into the ground contaminating nearby wells and almost an acre of soil. By the 1980s, chromium was found in a well near the ponds and they soon found that another well that provided water to a swimming pool used by residents at the station used for recreation was contaminated with hexavalent chromium which is linked to cause lung cancer. Eventually the soil was dug up and taken to a landfill (more than likely the Kettleman Hills facility). In 2006, PG&E agreed to pay \$335 million to settle claims in Kettleman City and other areas where the water supply had been contaminated by chromium 6. Many of the residents I talked to knew little about this case, but those who did say that the people who received money from the settlement moved out of town soon after. Even so, residents today do not directly blame PG&E for the birth defects in their town.

From a historical point of view, although there have been other cases of birth defects and deaths in California communities documented by the state, health policies have not changed. According to the California Birth Defects Monitoring Program between 1975 and 1995, childhood cancers occurred more frequently than expected in the city of McFarland. State investigators compared the findings from McFarland with that from Kern County and the registry-wide data (based on data from the birth defects registry between 1987 and 1993) and found nothing noteworthy about birth defects rates or occurrence patterns in McFarland. Between 1992 and 1993, in the Kern County towns of Buttonwillow and Wasco, three babies were born with neural tube defects. Although the community suspected a link to the nearby Laidlaw hazardous waste site, investigators found no environmental exposures that explained the excess, no evidence linking the cases to the facility or the trucking of toxic waste to the dump site.

The 2010 Kettleman City investigation failed to determine responsibility and to resolve why and how this happened. Greenaction and many of the residents in town demand a thorough investigation using the technique of biomonitoring. According to the Center for Disease Control and Prevention (CDC), “biomonitoring measurements are the most health-relevant assessments of exposure because they measure the amount of the chemical that actually gets into people, not the amount they may get into people” (Center for Disease Control and Prevention). Mary Lou Mares explains that investigators “check the air and soil, but check our hair, our skin. Check our bodies, look inside of us, but maybe they do not want to look inside of us because they will find something.” Their constant protest for a better life and environment is the subject of the first part of this dissertation as it examines the experiences of current residents in the small town and gives voice to similar environmental justice struggles taking place throughout this country and the rest of the world.

The WMI Kettleman Hills facility is not the only polluter in town, but it is certainly one of the leading contributors. According to long-time Kettleman City resident Mary Lou Mares, residents blame the facility for two reasons:

“We believe this company, which sits on top of the hill like an untouchable castle conducts business in such a way as to avoid the rules. For them waste is money and any compromises that must take place for the sake of profit is well worth it in their business practice. And we know their history. Some of us have lived here long enough, if not longer than them. They claim they are good neighbors who provide this and that, but truth be told, they have a poor performance record at this dump site. That, in and of itself, is enough of a reason to point the finger at

them because it has already been documented by the government. The local and state governments seem to work for this company because anything they want they get, while we are consistently pushed aside and are pushed to feel inferior, to feel less than other humans. Anyone who makes you feel like this must be wrong in what they are doing. It's like the bully in the school courtyard. It can only go on for so long.”

As an anthropologist I explored residents' perceptions and sentiments regarding the facility. The more I learned about its history, the more it became clear to me that the opposition to WMI required a critical assessment of the status quo—that is, corporate power and corporate negligence in the face of recurring illegal behavior. A comprehensive review of the company's history revealed an overarching problem with the continued operation of American landfills in spite of incessant violations.

Part two of this dissertation explores contemporary issues of environmental injustice in Kettleman City, connecting it to far-reaching systemic abuses sanctioned in national toxic waste legislation, government agency regulatory efforts, and in public controversies over the use of landfills to discard unwanted waste. In this section I complicate the category of what constitutes a “disaster” and I argue that landfills, by their very nature as storage units do not present a viable solution for this waste dilemma. They leak, and they have not and will not solve the toxic waste crisis. They are ticking time bombs that permeate into water sources, into peoples' homes, and into their bodies. I examine the use of these landfills and siting patterns that have mobilized communities throughout America in opposition to polluters in their backyards. Inequitable landfill siting in overwhelmingly poor communities of color gave way to the rise of an environmental justice movement in the 1980s and 1990s, in which Kettleman City is often credited for serving as an impetus and model for the environmental justice movement on the West Coast.

Because there were few toxic waste landfills in the 1980s Kettleman City easily became the single largest Class I dump in the western United States. Beginning in the 1980s, government agencies permitted WMI and CWM to breach laws, making people and the environment vulnerable to contamination, and the laxity increased when WMI began expanding its empire just as federal toxic waste regulations were introduced. Government officials, lacking the technical expertise to draft policy regulations and mistakenly assuming that the private sector, despite its own self-interests, could effectively self-regulate itself, allowed the waste industry to help draft the very policies and laws that they would be expected to operate by.

In the third part of this dissertation, I document the significant socio-historical, political, and economic processes that replaced nineteenth-century American values, lifestyles, and vocations with a national “culture of waste.” Since waste hauling is today accepted as a hard necessity, the centralized power of the waste industry has prevailed as a dominant social institution extending far beyond the waste itself. In this section I investigate how Waste Management Inc., a multibillion dollar, transnational corporation, maintains a monopoly over the American waste industry and how as the largest waste services corporation in the world it has evolved into a powerful social institution, leveraging an inelastic demand for its services to sway and control economic, cultural, and political spheres of American society. During the 1980s and 1990s, WMI was notorious for cutting corners and illegal day-to-day activities (Miller 1992). Fines for EPA violations amounted to very little in light of incredible operating profits so WMI

simply disregarded them as part of the consequence of servicing waste. In the early 1980s, the Kettleman facility was cited by the EPA for over 130 violations of federal laws including failure to monitor groundwater. In 1986, it was fined \$7.6 million for various violations including failure to keep proper inspection and operating records. In 1988, it was fined over \$300,000 for 11 administrative and operational violations. By the 1980s and 1990s, California found itself in a bind when many of its landfills were forced to shut down. Despite numerous violations at the Kettleman Hills facility, political and industry pressures ensured the dump would stay open for many years to come. In fact, between 2000 and 2003, the facility failed to perform monthly monitoring of one its leachate detection systems for PCBs. In 2010, the EPA levied a \$300,000 fine for failing to properly manage PCBs. Even after the birth defects investigation, in 2011, the EPA issued a penalty of \$1 million for violations at the facility's lab which compromised the company's ability to accurately analyze the toxic waste.

Despite this egregious record, WMI was recognized in 2008 as the Climate Action Leader by the California Climate Action Registry, a non-profit private organization established by the state of California to serve as a voluntary greenhouse gas registry that encourages the reduction of greenhouse gas emissions (WMI 5/21/08). In 2009, WMI was recognized as the Clean Air Circle Honoree by the American Lung Association for "keeping San Diego's air clean and ongoing efforts to protect the environment and promote sustainability" (WMI 4/20/09). In November 2010, WMI received the California Governor's Environmental and Economic Leadership Award, "California's highest environmental honor" for "exceptional leadership in conserving California's precious resources, protecting and enhancing the environment, building public-private partnerships and strengthening the state's economy" (WMI 11/16/10). One month later, the EPA's toxic inventory report (TIR) which lists the largest locations of toxic materials in the state, reported that the Kettleman City facility "held far and away the biggest concentration of toxic materials" and "dominated the list with 14.7 million pounds of toxics, including everything from medical waste to material from military facilities outside the lower 48 states" (Nidever 12/18/10).

As a corporation, WMI has manufactured its public image as a responsible and resourceful neighborhood company that exceeds industry and regulatory standards. In this section of the dissertation I explain how WMI has successfully distorted and influenced the public's conception of what waste is and its impact on the environment. I examine this manufactured waste culture that normalizes excessive production, consumption, and wasting by people and industries to sustain the status quo and WMI's stronghold on the industry.

Together the three parts of this dissertation tell a grim story of the consequences of an industrial civilization's total disregard of the environment. While this project puts three centuries of the state, county, and town's socio-political history into context, it also captures the life experiences of ordinary Americans who are forced to endure the long-term consequences of industrialization. The story of Kettleman City then is a cautionary tale of hubris. The underlying emphasis of this research serves as a warning for all of humanity, documenting how the way our world and our everyday lives may be shaped by poor government oversight and the domination of industrial corporations.

This work also contributes to the anthropological study of California and Native Americans throughout the late nineteenth and twentieth century by American anthropologists such as Alfred Kroeber, Anna Hadwick Gayton, Robert Heizer, and John Peabody Harrington. These anthropologists enthusiastically salvaged the history and culture of the Native peoples in

the region. Their fieldwork produced ethnographies, kinship and linguistic charts, and recorded acoustic songs and stories based on the peoples' cosmology. This research project is unique because anthropologists abandoned this field site by the mid-twentieth century, failing to follow up the arrival of missionaries and settlers into the region, and the transformations that ensued as a direct result of industrial development. After Native Americans were exterminated, enslaved and forced onto reservations, anthropologists turned their interests abroad.

Little has been written by anthropologists about this region in the last twenty to thirty years that documents the incremental changes this region has experienced since the nineteenth century. More recently, graduate students and other social scientists have studied issues related to environmental justice in the region. Hal Aronson's sociology dissertation examined how race was used to bring communities together in their struggle against California polluters (Aronson 1997). One chapter of his work examined the 1990's environmental justice movement in Kettleman City and emphasized the social and racial dimensions of how residents organized themselves against the toxic waste facility. In 2008, sociologist Tracy Perkins wrote her master's thesis on women's involvement in the Central Valley's environmental justice movement (Perkins). Yet these research projects fall short of providing a holistic context of Kettleman City and the surrounding region. Instead this work is a contribution to the development of research produced by Carolina Balazs's work on drinking water inequality in the Central Valley. As a student in the Energy Resources Group at U.C. Berkeley, Balazs's doctoral research (2012) examined how historical regulatory and financial factors exacerbate the burdens faced by low income communities of color to access safe water in the valley. My research extends beyond these works, contributing to the literature on environmental justice beyond a reference to corporate polluters as a mere footnote in the research. Instead, this dissertation project contributes to a lack of anthropological literature produced on the Central Valley of California in the twenty-first century by emphasizing environmental justice in a broader context of global changes and processes that have come to dominate peoples' lives as a direct result of corporate capitalism that thrives on a relentless consumer culture committed to the notion of progress. Bronislaw Malinowski (1922) wrote that "an ethnographer who sets out to study only religion, or only technology, or only social organization, cuts out an artificial field for inquiry, and he will be seriously handicapped in his work" (p.11). Using the anthropological method of ethnography and conducting extensive archival research, this project broadens the micro-level historical and socio-economic changes of this region to an understanding of the macro-level processes that control and manipulate the way we live our lives.

This project complements and further develops at least three areas of anthropological and social science studies, including research on environmental injustice, disasters and hazards, and the controlling processes undergirding the dominant paradigms.

### ***Environmental Justice***

Rachel Carson's *Silent Spring* set off piercing alarm sirens when it appeared in 1962 inspiring generations of people to (re)evaluate their relationship to the environment. Carson believed that human health would ultimately reflect the ills present in the natural environment. Activists and ordinary public citizens began to question what was happening, and some even went so far as to risk their lives in order to demonstrate their opposition to the powerful

industries that had already begun transforming their way of life. Before Carson died, she testified in Congress and made a compelling case about the effects of chemicals on humans, animals, and the earth—that modern science had not been able to explain and/or industry refused to disclose. Carson exposed the extent to which the chemical industry and the military industrial complex manufactured and controlled chemicals that spearheaded the American post-World War II industrial boom and at the same time asserted American power in the world. The Manhattan Project developed the first American atomic bomb, tested on American soil and Americans. The unprecedented thirst for energy transformed our way of life. Black coal replaced wood, which enabled industrialists to process steel, propel steamships, and energize machines. Petroleum and natural gas were exploited, and later, uranium would be used to fuel nuclear reactors and provide atomic energy. The production of synthetic chemicals was a result of the chemical industry shifting from coal-tar derivatives to compounds made from petroleum, and in turn produced commodities such as synthetic fabrics, plastics, paints, and pesticides. In this way a cultural revolution took place, transforming people, lifestyles, cultures, and industries.

The degree to which our world has become contaminated has become a mundane fact in our lives. We don't need to look far to observe the consequences of relying on nonrenewable resources like coal, oil, natural gas, and uranium to supply our growing energy demands. From nuclear meltdowns to landfill leaks and oil spills, each of these resources has left a permanent and dirty mark in and on the natural landscape and in the lives of all animals. Reporter Hal Rubin put the blame where it belonged:

As a society we leaped before we looked. There are something like 63,000 chemicals in commercial use today, many of which never had adequate research to determine their effects on human beings and the environment prior to their introduction in the marketplace. We realized late that we had a tremendous problem on our hands as a society and as a species, because no country in the world has dealt adequately with these problems (1980, p.241).

As numerous contaminated sites throughout the country were discovered, people became more aware of the connection between human health, the environment, and our consumption and dependence on goods. Ordinary people became environmental activists and began to organize themselves into a movement demanding environmental justice. Much of the environmental justice paradigm emphasizes a justice frame (Taylor 2000; Capek 1993; Cole and Foster 2001; Pellow and Brulle 2005; Pellow 2000; Agyeman 2005; Gottlieb 1993) ideologically expanding the concept of the environment to include public and human health concerns, in addition to natural resources such as air, water, and land (Di Chiro 1998). Around the same time that the environmental justice movement began to gain steam in America, activists and scholars were calling attention to the rapidly deteriorating environmental predicament in California. William Bronson's *How to Kill a Golden State: A Graphic Report on the Crisis of Ugly California with Over 300 Photographs* (1968), described the decaying circumstances in the state:

This California is a hell of a mess and getting worse. We live in Ugly California. And despite the valiant struggling by those who know and care about what is happening, the ugliness grows at a rate that outraces all our present efforts to control it [and] in the old days we had such abundant land and the land was so

rich that waste didn't seem to matter. But millions of acres of our prime agricultural land has fallen to the tract builders and much more is doomed. Litter, endless billboards, honky-tonk commercialism, and banal slurb construction line the highways. Poisons and sewage pollute our bays, lakes and river [and] the ruination of California is the result of population impact on limited resources of land, air and water in the absence of adequate public policy, planning and controls (pp. 9-10).

Warning Americans about the severity of changes taking shape in California, ecologist and environmental activist Raymond Dasmann wrote in 1966 that such a crisis would eventually grip all of America:

It has been said that the problems that face California today, America must meet tomorrow. The waves of the future break first on the rocky California coast; change comes most rapidly. There is truth in this. It misses the point a little, because no place is like any other place, and California is in many ways unique. Yet no one can afford to be unaware of the changes and difficulties that confront California. They are too likely to be the problems of all the civilized world (p. 15).

By the 1990s, what began as ordinary residents in Kettleman City complaining about their health and the toxic odors that filled the air late into the evenings culminated into a full-scale protest against the toxic waste dump. Working together, environmental activists and political leaders from throughout the country transformed the town into the bedrock that launched the environmental justice movement in the western United States. What makes this dissertation project significant is the emphasis on the culture of power that influences and structures corporate and government agendas, and acts as environmental racism that works to expose some communities over others (B. Johnston 1994). In much of the academic literature and analytic frameworks, race and class are explicitly linked to the siting of toxic waste facilities (Bullard 1994; United Church of Christ 1987; Mohai and Bryant 1992). Nobody fancies hosting a landfill in their own backyard, let alone one that receives toxic waste. Exposure to such waste and toxins inescapably impacts the environment and the communities. Anthropologists, other social scientists, and activists have documented such community struggles and protests (Allen 2003; Checker 2005; Sze 2007; Gibbs 1998). Geographer David Harvey (1996) argues that "one of the best predictors of the location of toxic waste dumps in the United States is a geographical concentration of people of low-income and color" (368). It is no surprise that in Kettleman City, 95% of the population is Latino, mostly Spanish-speaking, mostly migrant workers living at or below the poverty line. Sociologist Robert Bullard (1993) sees this strategic pattern of landfill siting in America is a prime example of environmental racism. Bullard (1990) argues that the disproportionate burden borne by communities of color is due to institutional racism and the fact that corporations and governments find them to be the "paths of least resistance" when siting "lulus" (locally unwanted land uses). The 1987 Report Commissioned by the United Church of Christ, the first national study to analyze the demographic composition of communities surrounding such facilities, concluded that race was consistently the most prominent factor in determining the location of commercial hazardous waste facilities (Lee 1993). Professors of

natural resources, Mohai and Bryant, in an examination of sixteen cases of environmental racism in the United States between the years 1971 and 1992, concluded that there was “clear and unequivocal class and racial biases in the distribution of environmental hazards” (Mohai and Bryant 1992, p. 927). In the 1980s, California’s hazardous waste problem required the state to identify new lands for future legal dump sites. The California Waste Management Board (known now as CalRecycle) hired the Los Angeles based consulting firm of Cerrell Associates, Inc. Their advice was revealing:

Certain types of people are likely to participate in politics, either by virtue of their issue awareness or their financial resources, or both. Members of middle or higher-socioeconomic strata (a composite index of level of education, occupational prestige, and income) are more likely to organize into effective groups to express their political interests and views. All socioeconomic groupings tend to resent the nearby siting of major facilities, but the middle and upper-socioeconomic strata possess better resources to effectuate their opposition. Middle and higher-socioeconomic strata neighborhoods should not fall at least within the one-mile and five-mile radii of the proposed site. [And] older people, people with a high school education or less, and those who adhere to a free market orientation are least likely to oppose a facility (Powell 1984).

Where to dispose waste continues to be a challenge both in this country and throughout the world. In a 1992 leaked internal memo, the former chief economist of the World Bank and recent United States Treasury Secretary Lawrence Summers, encouraged the migration of dirty industries to the vulnerably poor third world countries. Research has documented how toxic waste has become part of a lucrative global export and trade industry (K. O’Neill 2000; Pellow 2007). Regrettably, this strategy, of either sending waste abroad and/or dumping it in disenfranchised communities in America, has prevailed as the dominate mind-set in getting rid of our waste.

This research project develops this multi-disciplinary environmental justice paradigm to incorporate anthropological methods of inquiry into power relations at play in the distribution of toxic waste within communities (Allen 2003; Checker 2005; Johnston 1994). Ethnography in environmental justice discourse provides a complementary framework in understanding the constructions of race, gender, land use, and pollution emphasizing individual and communal experiences of people enduring disproportionate environmental burdens—in their own spaces, in their own words. In this dissertation the voices of residents who currently live in Kettleman City tell a gloomy story about what it feels like to be there worrying about their health amid the everyday struggle to protest the presence of the toxic waste facility in their backyard. In this way, this research develops the admonition described by Carson, Dasmann, and Bronson by examining the environmental injustices and human health crisis that we humans find ourselves in today in California and elsewhere. And this project also goes one step further and contributes to the environmental justice literature by studying the inner workings of a multinational corporation such as a Waste Management Inc. that maintains a record of illegal behavior and contaminating the environment not only in Kettleman City but throughout the country.

## *Disasters*

The crisis that we find ourselves in today is rooted in an uncompromising addiction to natural resources such as oil, natural gas, minerals, and coal. Our dependency has caused the depletion of many reserves throughout the world and it has become the illegal basis to justify endless wars and occupation of sovereign countries so as to control the source and flow of the remaining resources and to further penetrate an Empire's reach. It is also used to rationalize human exploitation, torture, and foreign government coups. These harsh realities on the ground endured by people of this world are a result of a lifestyle dominated by the idea of progress and manipulated by corporations and public relations campaigns, and exacerbated by mass-consumption and globalization which generate millions of tons of solid and toxic waste each year.

In 1973, anthropologist James Anderson made the case that "a crisis of monumental proportions is taking shape, the consequence of unparalleled rates of demographic, technological, economic, organizational, ideological, and ecological change. Anthropology is one of the many disciplines that can contribute to possible solutions of the crisis in which nothing less than man's survival is at stake" (p.181). This dissertation project is in part a response to Anderson's alarm forty years ago and to the increasing frequency of human-environment disasters and hazards not just in the United States but elsewhere. Rather than understand these disasters as apertures to better understand the human condition and the infrastructure we have created, Americans seem to suffer from an inexhaustible case of amnesia, forgetting about the people, places, and events of the past as they relate to the present day.

In 1956, the Wenner-Gren Foundation for Anthropological Research hosted an international, multi-disciplinary symposium entitled "Man's Role in Changing the Face of the Earth." Anthropologist William Thomas (1956) explained:

The story of man's role in changing the face of the earth begins with the invention of fire-making and the domestication of plants and animals; continues through his trade, warfare, migrations, and the spread of transportation facilities, fields, and settlements; and culminates in the development of modern mining and manufacturing. Every human group has had to evaluate the potential of the area it inhabits and to organize its life about its environment in terms of available techniques and the values accepted as desirable. The identification, use, and care of resources are in the end a problem of human values and behavior (p. xxxvi).

Many people separate in their minds air, water, plants, and other animals in the world and treat humans as a distinct entity altogether. This way of thinking, accepting disasters and hazards as isolated events in time, free of human misbehavior, serves to liberate humans from accountability despite years of killing, mining, drilling, and fracking, pumping, and/or dumping waste into human-created sacrifice zones. The devastation of yesterday is still very much a part of our lives. Nature does not make humans; rather humans make nature, and the human quest for control over the environment has come, in many cases, with an enormous price.

Thomas explains: "nature has always contained man, but all the while is being changed by man in the course of his own self-transformation. The dichotomy of man and nature is thus seen as an intellectual device and as such should not be confused with reality; no longer can

man's physical-biological environment be treated, except in theory, as "natural" (p. xxxvii). This research builds on existing literature in anthropology on disasters and hazards (Thomas 1956; Torry 1979; Oliver-Smith 1986, 1992, 1996; Oliver-Smith and Hoffman 1999; Hewitt 1983; Douglas and Wildavsky 1982). Anthropologists do not look upon disasters and hazards as unpredictable "natural" events (Hewitt 1983) that occur as part of the "normal" functioning of ecosystems (Torry 1979); rather they recognize the relationship and participation of humans with their environment. In this way, the fundamental features of a society are laid bare before, during, and after a disaster and expose the large-scale and complex interactions between humans and their environment. Disasters and hazards disclose in their unfolding the linkages and the interpenetrations of natural forces or agents, power structures and social arrangements, and cultural values and belief systems (Oliver-Smith 2002). When a disaster is revealed, as in a drought, exposure to hidden toxic waste or chemical leakage, or the sudden impact of an earthquake or hurricane, it disrupts and impacts all aspects of daily life, social services, institutional structures, and even foreign and economic policies (Oliver-Smith 1996, Scheper-Hughes 2005) and as they unfold disasters reveal the American social order and its' institutions of power as apertures that demand scrutiny into the inner workings of an industrialized civilization.

Anthropologist Susanna Hoffman (2010) observes that "almost every region of the globe is undergoing urbanization, coastalization, Westernization, and the first effects of global warming on top of the usual sort of cataclysms. The concomitant effects and costs on the human communities, already enormous, are exploding" (4). My study intends to contribute to the study of global processes involved in the production of human disasters. This research complicates the categorization of what constitutes a disaster and by whom, and makes the case that catastrophes are not isolated events, but rather are processes that are not always abrupt and widespread, but are rather concentrated and permeate into water sources, into peoples' homes and into their bodies' overtime. Natural disasters and wars do their damage dramatically and swiftly—shaking, crushing, burning, ripping, smothering, or drowning. The devastation is plain, victims and survivors are clearly distinguished, causes and effects easily connected. Human-made disasters are seldom abrupt and obvious. They can build up over a long period of time and produce uncertainties and fears as to what happened, why it happened or is happening, and who is to blame. What makes toxic waste landfills so important to analyze within the paradigm of disasters is that, unlike huge catastrophic disasters that occur within minutes such as Bhopal in 1984 (Das 2000) or Chernobyl in 1986 (Petryna 2002), this crisis is built up slowly, affecting large numbers of people over a long period of time, as in the case of Love Canal in New York and Native American exposure to radiation and nuclear and chemical weapons (Hiesinger 1999; La Duke 1981; Johnston et al 2008). In other words, the devastation becomes normalized and invisible (Scheper-Hughes 1992).

The incremental crisis regarding toxic waste landfills can have immediate as well as long term effects on both people and the natural environment. How people respond to toxicity and contamination can differ greatly based on how they prepare for, recover, or (re)construct their lives, and how they adjust to the actual or potential calamity in regard to their social, cultural, political, and economic systems. Anthropologists have studied the human response to disasters and hazards, the impact on human health and how people make sense of what has happened. Palinkas et al. (1993) examined the socio-psychological stress in a post-disaster. The traumatic uprooting of entire communities due to a hazard or disaster has left people feeling victimized

(Dudasik 1980), searching for explanation and meaning for their loss, oftentimes resulting in radical changes in their beliefs, symbols, and rituals (Oliver-Smith 1992).

Searching for explanations is also part of a collective grieving process wherein people who have lost their homes and loved ones try to make sense of themselves in relationship to their surroundings (Wallace 1956). Auyero and Swistun (2009) write about uncertainty and unpredictability in how people understand their environment, their livelihoods, and their struggle survive when catastrophe occurs. But to the contrary, I did not find this in Kettleman City; in fact, I found just the opposite. Residents in Kettleman City are extremely confident that something is wrong in their town and because they have a long-term perspective of their crisis, they are able to connect the dots between the past, present, and future. They protest today because they are conscious of the fact that if state regulators grant WMI expansion permits, this can only bring more toxicity into the region.

In his work on the Buffalo Creek flood of 1972, Sociologist Kai Erikson explains that a catastrophe leaves scars not only on the landscape but on the minds and bodies of everyone who experienced it, producing simultaneously individual and collective traumas (Erikson 1976). These disasters are also acts of violence on the body and mind, and exist within the social fabric. The anthropology of violence literature draws linkages between forms of violence by contextualizing it in relationship to macro and micro level systems and structures. As a form of structural violence, the violence in disasters is embedded within social institutions and cultural conceptions that are reproduced locally and revealed daily yet remains generally invisible because it is normalized and seen as part of the fabric the everyday lives of people (Scheper-Hughes and Bourgois 2004, p. 4). The siting of hazardous waste facilities (Bullard 1993; 1990; Goldman 1991) in peripheral regions has resulted in particular communities becoming “selective victims” (Johnston 1994) in a “sacrifice zone” (Bryant 1993; Lerner 2010) signifying that traumas of this sort are structurally produced and maintained.

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In a rather short period of time, humans have transitioned from being hunters and gatherers to agriculturalists and more recently, industrialists. We pride ourselves in the technology that we create and advertise them as markers of progress. Yet despite this, the human animal maintains an unsophisticated way of getting rid of what he/she calls “waste.” When dumping on top of the ground did not help to get rid of the trash, humans buried, burned, or threw it into the sea. “Modern” humans, despite their claims of scientific and technological superiority, have not progressed beyond this point and remain by all accounts a primitive people. In 1991, Laura Nader wrote:

Historians of the late 21<sup>st</sup> century call 20<sup>th</sup> century Western peoples the flat-earth people because of the garbage problem. They thought of the world as flat and thought they could just bulldoze the garbage over the edge. By the mid-21<sup>st</sup> century there are no more empty spaces and toxic waste dumps are in everybody’s backyard. People can see what had been unseen (p. 10).

The flat-earth people in the twenty-first century have not learned from the past and there has been little reflection as to the behavior of humans on this planet. Without so much as knowing

the consequences of what we put into the earth, we continue to dump the potent, noxious, disease-causing waste of our chemical industrial world into landfills despite all the evidence available that landfills are not secure storage units. What's more, in a hyper consuming society, most humans do not think twice about the way they consume, why they consume what they do, and more specifically, what happens to the garbage that is picked up on their behalf and taken out of sight, out of mind. Not-in-my-backyard environmental justice protests in towns, cities, governments, and nations have been made for decades now, but the waste dumps are still here. This study forces us to question how we think of waste and how we live as humans and to ultimately shift the paradigm in the face of widespread evidence against the use of landfills and its consequences to humans and the environment. This project examines the waste disposal industry and the health and environmental damage related to using landfills and asks the fundamental question: Should this be the price our society pays in order to achieve the world's loftiest economic and commercial goals?

Because wasting is not questioned, the disasters around landfills are rarely discussed in politic company. One resident in Kettleman City explained:

“No one talks about how much we waste and because we don't want to address this fundamental problem that we humans are at fault for, we don't really want to hear about how a landfill leaked and killed babies. We don't want to talk about what is invisible. We talk about God and we stress the importance in believing in the Book. But landfills are treated like the weather—it is what it is.”

Yet landfills have the hallmark of human design and human negligence—that is so grand in magnitude, that has the potential of inflicting harm on humans, and threatens the water supply of tens of millions of people—and is the real, human-made, national security, weapon-of-mass-destruction. The truth is that landfills are used not because they are safe and effective but because these are the cheapest way of getting rid of what is not wanted. Our lives are much more convenient because our waste is picked up in front of our place of residence, every week, on schedule, by a private waste-hauling company. We do not have to think twice about it. This is the mind-set of most Americans and many American corporations, and the waste hauling industry is happy to do all it can to influence and maintain this way of thinking. As the world's population increases, as people everywhere adopt Western lifestyles and patterns of economic growth, this way of thinking influences the standard of living; the more we produce, the more there is to become the waste of tomorrow. Waste becomes a commodity for the industry. It is precisely this mind-set that maintains the amnesia that is truly an epidemic in America regarding issues of waste and toxic landfills.

This dissertation is an exercise in shock and outrage. It is a description of human and environmental calamities, not to make us feel despair but to remind us once again of the lifestyles we subscribe to and the waste we generate as a result. Although it is apparent throughout the world, the relentless production of toxic waste intensifies the “ticking time bomb” of toxic waste landfills that will surely bring to surface the destruction we have manufactured and deposited into the earth. The EPA report (1980) *Everybody's Problem: Hazardous Waste*, described “ticking time bombs” as “abandoned or uncontrolled sites where wastes have been dumped indiscriminately” (p. 11). I apply this description to include all toxic waste and extend it

to include toxic waste landfills that are the legal sanctuary for trash and are supposedly regulated by industry and government officials.

### *Controlling Processes*

In just the first twelve years of the twenty-first century, there have been widespread environmental disasters producing substantial amounts of devastation throughout the world. These disasters threaten not just the natural ecological landscape but the existence of humanity. Much to the surprise of governments, regulatory agencies, and corporate executives, the very notion that a disaster is a natural phenomenon continues to be questioned by environmental activists and ordinary public citizens. They argue that some of these disasters are far from being natural and are a consequence of human design and human negligence brought on by super-powerful corporations of the world.

Corporations are arguably the most powerful social institution of our day. “Corporate Machiavellianism”<sup>2</sup> continues to predominate as the acceptable standard industrial formula of twenty-first century corporate capitalism. Over time, these corporations have been able to grow to unprecedented proportions. Michael Zara’s essay (2005) examines how American industrialism, through the private capitalistic sector, sought to become legitimated through law so as to favor its expansion of power over human-individuals and how incremental development of a corporation came to be legally recognized as a person with the same legal rights of human beings: corporations are “thus, a fictitious person, as opposed to a ‘natural’ human person; existing only on paper and in concept, it cannot be injured, killed, imprisoned, etc., nor has it a mind, will, or soul” (p. 231). This powerful political and economic institution continues to be a force to reckon with.

In the 2010 *Citizens United* ruling by the United States Supreme Court, campaign contributions by corporations and unions have been deregulated—further legitimizing corporate-personhood. The power of corporations in the twenty-first century is out of control. Their unprecedented power has already reached the echelons of government and corporate government and is a major disturbance in the foundation of what it means to be (and to live in) an independent, free-thinking, democratic society. This corporate influence will persist free of accountability and trial for as long as laws are in place that enable it to extend its reach deep into the pockets of politicians and regulatory agencies. The study of corporations and their relationship with governing agencies is all the more relevant today for anthropologists to analyze and scrutinize. Many corporations that profess to be in the business of “protecting our environment” must especially be scrutinized for the very fact that many of them maintain records of recurrent violations because their corporate ethos is contradictory with the marketplace.

Consider the examples of Love Canal, Hurricane Katrina, the BP Oil Spill in the Gulf, the Massey Coal Mine, PG&E in Hinkley, California—what do they all have in common? They are simultaneously environmental and human catastrophes, but they are also explicitly connected to

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<sup>2</sup> Ida Tarbell’s *The History of the Standard Oil Company* (1966) exposed and eventually caused the collapse of the largest corporate monopoly in the United States. Years earlier, in an article in *McClure’s Magazine* (1906) entitled “Commercial Machiavellianism” Tarbell had alerted the readers to the growing concentration of wealth in the hands of a few and their increasing influence over American lives.

transnational corporations, billions of dollars, and legal disputes. One after another, each set precedent that was ignored by industry, government regulators, and health departments. In almost all cases warning signs were disregarded by corporate executives and their management teams for the sake of profit. In many instances these catastrophes produced double-whammies. A civil engineer who specializes in solid waste engineering, Charlotte Brown (2011), found that the waste quantity estimates from nine recent disasters, varying from 2 million metric tons for Hurricane Charley (2004) in the U.S, to 76 million cubic meters (or 100 million cubic yards) for Hurricane Katrina in 2005, and 23-60 million tons from the earthquake in Haiti, generate up to 15 years worth of additional waste in just a matter of hours and days. This waste, along with the municipal and industrial waste that already exists, creates double-whammies that overwhelm regulatory systems and cause additional health and environmental catastrophes. Noting the extent of the current problem, sociologist Robert Bullard (1993) has cautioned that “the nation is faced with a garbage and hazardous waste crisis. States are grappling with the question of what to do with their mounting wastes” (p. 12).

Left unresolved by government and corporate experts, the issue of tolerance for repeated corporate (mis)management and (un)accountability is something that “We the People” can address. There is low tolerance for a six-year-old kindergartener to act up in the classroom (handcuffed at school before being sent home), yet Americans are willing to put up with government officials caught lying or regulatory agencies that fail to do their job and corporate executives who bend the rules and create loopholes in regulations to mask their illegal behavior.

In the last few years, Americans have tolerated environmental and human devastation as a direct result of corporate negligence and irresponsibility alongside poor government regulatory enforcement—the British Petroleum (BP) Gulf of Mexico oil spill, the Exxon Mobile pipeline rupture into the Yellowstone River in Montana, and the mining giant Massey Coal Company, responsible for the April 2010 explosion that killed 29 underground coal mining workers in West Virginia. The frequency of these disasters alone is cause for alarm, yet the Massey Coal Company with a record of 60,000 violations, was still allowed to remain in business. An independent state investigation into what is now considered the worst coal mining disaster ever documented in U.S. history:

The story of Upper Big Branch is a cautionary tale of hubris. A company that was a towering presence in the Appalachian coal fields operated its mines in a profoundly reckless manner, and 29 coal miners paid with their lives for the corporate risk taking. The April 5, 2010, explosion was not something that happened out of the blue, an event that could not have been anticipated or prevented. It was, to the contrary, a completely predictable result for a company that ignored basic safety standards and put too much faith in its own mythology (McAteer et al; Conclusion).

Why are some corporations able to get away with acts of violence that remain with us for years to come? Sociologist Diane Vaughan challenged the theory that the 1986 explosion of the Space Shuttle Challenger was merely a technological failure. She examined the political and managerial culture of NASA to understand why the agency, though aware of technological problems, risked the launch. In *The Challenger Launch Decision* (1996), she suggests that the organization normalized deviance—a gradual process through which deviant behavior is

repeated, without catastrophic results, and thus becomes the acceptable, social norm for the organization; while any attempts to challenge the norm, from within the organization or outside it, are considered nuisances or even threats to the organization.

Still, little has been done to prevent and to reduce contamination to the environment and to people. In 1981, Ralph Nader pointed out the problem: “generally, fines have been the harshest measure used to deal with corporate crimes. The fines generally have been trifling, the financial equivalent of a mosquito stinging an elephant” (p. 346). Several years on, addressing the issue of corporate crime and violence, *Corporate Crime Reporter* Russell Mokhiber (1988) asked:

Sometimes, even with well-defined crimes, the extent of the victimization and the costs thereof will be literally impossible to measure. A chemical company dumps toxic wastes illegally into a river that provides drinking water for local residents. How are the effects of this crime to be measured? How many cancers will these toxics cause twenty years from now? Were the cancers caused from drinking the water, or from smoking cigarettes, or breathing polluted air...It may prove difficult to measure the direct costs of chemical crime, auto crime, oil crime, and other corporate crimes to consumers, employees, neighbors, citizens, and society as a whole, but the evidence points to a problem of a magnitude that dwarfs the costs associated with much more highly publicized street crime. (pp. 15-16)

Millions of dollars will be needed to clean up toxic waste sites, but no dollar amount can come close to the price humans and animals will pay for this neglect. But the frequency of these corporate-induced disasters and the court settlements financed by corporations enable these businesses to continue conducting *business as usual*. The sort of irresponsible, deviant behavior that Vaughn, Nader, and Mokhiber describe is not limited to NASA and/or any one corporation. In fact, we are witnessing how prevalent this kind of corporate deviance is in towns all across America.

What began as a simple business of owning a truck to pick up waste has transformed in as little as sixty years into a multibillion dollar industry. Today waste services companies don't just haul waste away; they also control the only legal spaces to get rid of the waste (landfills). Of the numerous waste companies in America, Waste Management Inc. (WMI) is the largest waste services corporation in the world. As custodians of waste, WMI generates mounting profits through the exploitation of an expanding, hyper-consuming population, dependent on waste services. WMI and its hundreds of subsidiaries own and operate the only legal space available to discard and store the US's waste—over 270 landfills, 134 recycling plants, 367 collection operations, over 350 transfer stations, and 6 power production plants. Serving over 20 million residential, industrial, municipal, and commercial customers, WMI recorded revenues of \$12.52 billion in 2010 and employs 45,000 Americans. Yet to say WMI is a powerful, profit-generating machine is only part of the story. Studying the hegemony (i.e. power) of this multibillion dollar transnational corporation that provides what is deemed a basic necessity that Americans have adopted, nurtured, and grown dependent on, enabling and empowering an outside entity to deal with the waste produced daily, serves as a contemporary example of corporate power over our lives and how over time, we as Americans, are complicit in this domination.

Central to this study is Laura Nader's (1995) theory and methodology of controlling processes, which traces the dynamics of power that guide and shape peoples' behavior, actions, and political and cultural ways of seeing, knowing, and experiencing the world. As a mixed methodology for studying power, controlling processes enable us to examine how and why power is constructed and used, how central dogmas are configured and how they work in multiple sites, and how individuals and groups are influenced and subtly persuaded to participate in their own domination and/or to resist it (p. 712). Controlling processes operate not as isolated individual events and practices, but rather as a coherent and shifting structure of social organization. Social controls are overt, abrupt, and coerce, striving to control groups of people and/or their relationships. Cultural controls on the other hand are pervasive, and indirectly influence peoples' behaviors and thoughts. Nader explains: "Increasingly control moved from a social to a cultural mode; social control or overt coercion is culturally less acceptable in a democratic society, and in the late 20<sup>th</sup> century cultural control is more effective... controlling processes work to change behavior without force and violence or the unmasking of power but also in the recognition of how quickly they can do so" (pp. 719, 723). Controlling processes help us to identify how, without violence, force, or the unmasking of their enormous power, corporations such as WMI have been able to manufacture and shape the very meaning of waste in this country.

WMI's corporate ethos embodies a philosophy antithetical to democracy wherein deviant behavior and denial have become the cultural norm that make "waste management" an oxymoron altogether. Its history is marred with extensive violations cited by state and federal regulators, out-of-court settlement deals, anti-trust and civil penalties. When the ENRON and Arthur Anderson scandal made headlines in the 1990s, omitted from the headlines—despite cooking their accounting books for years to appease shareholder interests—was WMI. In Kettleman City the company seems to maintain a policy of cutting corners and conducting illegal day-to-day activities, only to absorb the cost from fines in the face of extensive environmental and health consequences. In the early 1980s, the facility was cited by the EPA for over 130 violations of federal laws including failure to monitor groundwater. In 1986, it was fined \$7.6 million for various violations including failure to keep proper inspection and operating records; and in 1988, it was fined over \$300,000 for eleven administrative and operational violations. Between 2000 and 2003, the facility failed to perform monthly monitoring of one its leachate detection systems for PCB. In 2010, the EPA levied a \$300,000 fine for failing to properly manage PCBs and in 2011, it issued a penalty of \$1 million for violations at the facility's lab that compromised the company's ability to accurately analyze the toxic waste.

A corporation like WMI often evades deficient performance records because corporations are treated as legal entities with personal, human-like, rights. Such unchecked power serves as a cautionary tale of hegemony threatening freedom and sweeping a record of repeated criminal misbehavior out of our public consciousness. The control "by means of culture is often implicit and not dramatic and is related to the creation of social categories and expectations and to ideological construction [it is] the result of incremental, not abrupt change, and when it is achieved incrementally it is powerful indeed because it slides in rather unnoticed and comes to be considered natural" (pp. 719, 722). People are frequently unaware of how they are controlled because the control is silent, covert, and cautious. Nader explains the process:

Cultural control when it is hegemonic is impersonal, embedded, and often invisible, and even those who in fact exercise it may not understand its extent, thinking of it as only marketing...those who study video games, sexual preoccupations, standardized testing, television programming and advertising have been aware of the presence of such forces, which channel our time, our behavior, our values, and our notions of what it is to be old, beautiful, sexy, or clever. These forces are often non-ideological or anti-ideological, although they are defended in terms of ideological constructs such as free market competition, free and open science, meritocracy or self-realization. (p. 720)

After years of internal and economic turmoil coupled with their appalling record as a company, WMI set out on a crusade at the start of the twenty-first century to restore its name and to win over the hearts and minds of the American public. Making waste and the behavior of wasting convenient, WMI has successfully advanced a culture of waste that makes producing waste routine while convincing people that garbage is an inevitable consequence of our existence in the modern world. This conception of waste, coupled with a \$20 million public relations green-washing campaign, is part of the façade; WMI is a responsible and resourceful, environmentally sustainable, green, neighborhood company that protects the environment and human health by exceeding industry and regulatory standards. It is a *green* company—painting everything green—garbage trucks, trash bins, logo, and trademarking the slogan “*Think Green: Think Waste Management.*” Such corporate strategies if taken at face value are viewed as simply good marketing tactics, but as a “controlling process” its’ power lies in its methods of concealment: it warps, distorts, and neutralizes information about who they are and what they do. WMI’s successful distortion and control of how people understand waste and its impact on the environment is just one aspect of my dissertation research. With our waste out of sight and out of mind, WMI’s manufactured culture of waste sustains the status quo—its power, its profits, and the normalcy of our excessive waste within an ideology of progress.

## ***Methods***

I came into the doctoral program interested in pursuing research on the Middle East and specifically the country of my birth, Afghanistan. After my father’s passing in Kabul, I decided to find something to study in my own backyard. As an immigrant to this country, studying the United States presented a unique opportunity. As an outsider I was able to challenge assumptions, ask questions, and engage in conversations with people who would not have talked to anyone else because like me, they had come to this country from elsewhere. As an insider, despite having been raised in California, I knew little about the history of the state, Kettleman City, and the environmental justice movements. And it surely never dawned on me to study a powerful corporation. One cold December day in 2009, I opened up the *San Francisco Chronicle* newspaper and read about what was happening in Kettleman City and decided immediately that I would pursue this for my dissertation. Taking on this project forced me to learn about subjects I had little to no knowledge of, and it quickly became an exercise in building my researching capabilities.

When I began my fieldwork in December 2009, I bought a Lonely Planet travel book on California to see how California was depicted to tourists. The first page caught my attention:

California could not possibly have been more aptly named the ‘Golden State.’ Of course, it was the 19<sup>th</sup> century gold rush that gave it this moniker, but even today there’s ‘gold’ in so many aspects of California. The sunlight, the beaches, the gods and goddesses of cinema: these are the images that play their siren song to the world from screens large and small. But ‘golden opportunity’ is truly the spine, fuel, and spirit of what makes California the singular power that it is. Imagine something on a Monday and by Tuesday it may well be a reality here where the American ‘can-do’ spirit shines brightest and the boundaries of the possible are without limits...Life in California is like living in the future. It’s an intellectual playground; a petri-dish where ideas, cultures and trends take hold, thrive, multiply, morph and spread at dazzling speed. Dreamers run the show but the ‘brick and mortar’ aspects of the state are no less dazzling...Perhaps in California, as with nowhere else does the rule, ‘Change is the only constant’ apply. Perhaps the best advice to travelers in general is ‘surrender’.” (Peevers et al., pp. 13-14)

In the process of researching for this dissertation, I drove throughout the Central Valley to get a pulse of the people and the landscape. I found myself far removed from California’s beautiful beaches, breathtaking coastline, and diverse urban sprawl and what I observed was far different from the one illustrated in the 736 pages of the guidebook.

I began my review of the anthropology of disasters and the environmental justice movement in January 2010. My research was historical in nature in that it centered on understanding the complex history of the state, region, county, and Kettleman City more specifically. I collected documents, conducted archival work, structured interviews, informal conversations, and participation observation. When I entered the field site, the state investigation on the birth defects in town was under way. I took my first trip to Kettleman City in February 2010 and attended a local community meeting regarding the residents health concerns. Sitting at the meeting, I realized that in order to understand the situation at hand, I had to get a better sense of everyone in town including the toxic waste facility.

For the next two months, starting in December 2009 until May 2011, I attended public meetings in Kettleman City and in the neighboring city of Hanford, the county seat, as well as elsewhere in the San Joaquin Valley. Though I had obtained institutional review board (IRB) approval from the university, many people in the valley were hesitant to talk to me. Some were skeptical of how their words would be used, others knew people who worked for the landfill operators, and because the company has a stronghold over the county, some people were not willing to speak out against them. Some residents simply refused to talk to me, saying that they “did not have papers,” or that they were undocumented immigrants. With the state investigations under way, lawyers from throughout the country began flocking to Kettleman City hoping to get clients signed up for potentially major legal settlements. Also since the only visitors in town seemed to be journalists, government officials, and lawyers, many people assumed that I was working with a legal team on the birth defects issue. I had to constantly clarify the nature of my research project. Fortunately I was able to establish relations with the community through the

support of Greenaction, the San Francisco-based environmental justice organization. Bradley Angel, the executive director, provided a major break-through in my research by putting me in touch with many of the activists inside Kettleman City and letting me search through a box of newspaper articles and government agency reports which his organization had collected over the years regarding the town. Angel had been working on issues relating to Kettleman City since the early 1990s and many people in the community trust him and so they trusted me.

During the course of my fieldwork I developed a form of cancer and skin disorder. Whether this was connected to my field site, I do not know, but at least it made it easier to live inside the community and observe their everyday lives. Conducting participant observation become challenging and my fieldwork turned out to be altogether different from what I had set out to do. Instead of embedding myself within the community, I stayed in the nearby hotels, often coming back home with skin rashes on my back and neck. Except for the first few visits to Kettleman City, I never used the water in the hotel nor did I drink the local tap water. Before leaving home, I would stock up on gallons of water to use not only for drinking purposes but for bathing. At times the air was so bad that my nose and eyes burned from allergy-like symptoms. Occasionally I had to deal with nose bleeds. These physical conditions also took a toll on my psyche, compelling me reconsider my research altogether. As an anthropologist you go into the field knowing you will be tested physically, mentally, and emotionally. Yet ethically what do you do when your health is compromised while you are in the field? What do you do when the people around you tell you that you should not underestimate the connection between your health and the environment you are studying?

I did not stop going into the field site. The consequences of my fieldwork hindered the complete immersion into the community, but they did enable me to get closer to some people I interviewed, people who might otherwise not have wanted to talk to me. I openly shared my academic and personal life, answering any questions they asked. It's like I came to the field seeking answers for my own condition and in some way similar to the way the mothers and residents of Kettleman City wanted answers—there was a connection there. Engaging with people throughout the county gave me an outlet to speak about my own health and to connect with people in a very intimate way, recognizing that regardless of race/ethnicity and/or socio-economic status, something like health and the health of children can serve as a common denominator to bring people together. Oftentimes the discussions that began with health concerns provided the means to further discuss issues that some people hesitated to talk about in the presence of a stranger. I should note that it was clear both to me and to the residents and other people in Kings County whom I interviewed, that my credentials as a doctoral student at University of California, Berkeley, brought with it both envy and distrust—all too often the people in Kettleman City welcome strangers like me so as to set things straight about what is happening in their town, but all too often these people leave without really helping. This dissertation is my way of bringing to paper their struggle and history.

I also spoke to Kettleman City residents, Kings County residents (in the cities of Hanford, Lemoore, and Avenal), current and former county officials, state health officials, law enforcement, local businesses and libraries throughout Kings County. I found that people were initially skeptical about disclosing what they knew and how they felt. Many times I found myself leaving someone's house only to be called up again to schedule another time to meet. Sometimes my own personal background became a topic of discussion and enabled me to strike up a conversation over a meal. Many people in the valley had never met someone born in

Afghanistan. One resident who found it interesting that an Afghan woman was “turning the page on California’s toxic web,” he called me the “California Wikileaks, exposing the dark side of the state.”

In her article “Up the Anthropologist” (1969) Laura Nader suggested a radical shift from the top-down ethnographic focus:

If we look at the literature based on fieldwork in the United States, we find a relatively abundant literature on the poor, the ethnic groups, the disadvantaged; there is comparatively little field research on the middle class and very little firsthand work on the upper classes. Anthropologists might indeed ask themselves whether the entirety of field work does not depend upon a certain power relationship in favor of the anthropologist, and whether indeed such dominant-subordinate relationships may not be affecting the kinds of theories we are weaving. What if, in reinventing anthropology, anthropologists were to study the colonizers rather than the colonized, the culture of power rather than the culture of the powerless, the culture of affluence rather than the culture of poverty? Studying “up” as well as “down” would lead us to ask many “common sense” questions in reverse.” (p. 289)

I found that studying a corporation presented challenges. While environmental groups and activists did not hesitate to direct their focus on potential culprits, researchers in the academia hesitated to take the same initiative and instead tip-toed around the issue. This silence is most prevalent in the environmental justice literature regardless of discipline. A principal reason for this is the agenda of funding sources on university campuses and/or conflicts of interests. I found that WMI is a financial sponsor for a sustainability program at the Haas School of Business and most all of the University of California campuses send their hazardous waste to the landfill in Kettleman City. Studying this corporation may create problems for the university and legal and personal complications too. A colleague explained how after she completed her research and it was published into a book, she was sued by the corporation she wrote about.

Access to people and data regarding a powerful corporation proved to be difficult. For example, although I was able to interview a few current and former WMI employees, I was not able to access the site so that I could observe the daily operations. Some of the employees informed me that they were told “by the higher ups” never to speak about the site to anyone outside of work. I left phone messages and sent emails to the facility operators—all to no avail. On one occasion a former Kings County official called on my behalf to arrange an interview with the manager, but he returned the call. Landfill operators are supposed to give tours of the facility to the public, but my calls were never returned.

Conducting research with people and institutions where there is an enormous amount of censorship requires one to come up with alternative ways to get access to information. Hugh Gusterson in his article “Studying Up Revisited” (1997) explained that “it may be that anthropologists who want to study up will have to abandon, or at least subordinate, the research technique that has defined anthropology as a discipline and served as our own parochial rite of passage into maturity since Malinowski” (p.116). Instead he called for a “polymorphous engagement” that encourages a researcher to “interact with informants across a number of dispersed sites, not just in local communities, and sometimes in virtual form; and it means

collecting data eclectically from a disparate array of sources in many different ways” (p. 116). In his recent article in *Anthropology Today* (2012), Roberto Gonzalez describes the methodological challenges he faced when he began studying the Pentagon program known as the Human Terrain System. This program actively recruits social scientists to be embedded with the military in war-zone areas to gain access into local knowledge and cultures. Gonzalez turned his attention to collecting printed documents as, “it was the most important in the early stages of research, for the simple reason that I had a very difficult time getting anyone within the Department of Defense to talk with me” (p. 23).

In a similar fashion, I found myself pouring over secondary sources and the more time I spent doing this, the more essential it was for understanding the larger processes of what was unfolding in the state, county, town, and in large extent—the world in regard to WMI. Between February 2010 until June 2011 (although this part of the project has not stopped because much of what is happening in the Valley is constantly changing so staying on top of these issues requires reading the papers daily), I completed my archival research. I used the San Francisco based environmental organization Greenaction’s archival collection of print and film material which included newspaper clippings on the city and valley going back to the late 1980s. Simultaneously, I completed my own newspaper search, looking through news publications such as the *Hanford Sentinel*, *Fresno Bee*, *Sacramento Bee*, *Los Angeles Times*, *San Francisco Chronicle*, *New York Times*, and *Mother Jones* magazine—searching key words such as Kettleman City, Kings County, toxic waste, landfills, dumps, Superfund, Chemical Waste Management Inc, Waste Management Inc, California toxic waste, and San Joaquin Valley. I also looked at other publications such as online blogs, official websites, and the social networking site of Facebook. I spent two weeks at the National Archives at San Francisco examining federal legal records involving Chemical Waste Management in Kettleman City. I spent three weeks reviewing records at the California Historical Society, locating historical records on Kings County. I established contact with Dr. Richard Walker, a geographer at U.C. Berkeley who has written extensively on California. He introduced me to books and articles regarding the history of the valley and pertinent environmental issues that have long plagued the state. I also began to trace WMI’s corporate history, its track record of violations, and its “Think Green” public relations campaign, exploring their company website and reading their press releases and also looking at magazine and newspaper archives on the company’s history beginning in the 1950s.

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Each chapter of this dissertation exposes a history that has long been forgotten, ignored, and erased. Together they disclose the extent of the brutal human conquest over land, hearts, and minds. The general narrative about Kettleman City begins with the discovery of oil in the 1920s, the settlement of the area by the 1940s, to the more recent State investigation as to what is causing babies to die in the small town Yet what journalists and activists who have been reporting on the recent developments have failed to do is to unearth and connect the history of the area more broadly and more specifically, so as to articulate a holistic narrative about the town, county, and region and to set into context the incremental changes over time that people and the natural environment have been forced to endure.

Chapter 2 provides a snapshot of the ethno-historical events that involved the government and big business interests who together transformed the Central Valley of California into the agricultural powerhouse it is today. The transformation of the state of California beginning in the

middle of the nineteenth century, when it joined the Union, reveals a darker side in its history and development. In this chapter I examine how the desire for land, wealth, and power, coupled with the belief in technology and progress, completely and systematically altered a way of life—displacing and/or killing off Native Americans, destroying an organic lake, and producing one of the worst environmental disasters in California’s history. Why? How?

Chapter 3 expands the history of the state by examining Kings County, in which Kettleman City is an unincorporated town. I look into the development of Kings County going back to the earliest descriptions of the area in the nineteenth century. I explore the significance of how the Kettleman Hills oil boom just before the start of the Great Depression transformed the area. The oil discovery in 1928 led to the establishment of the town of Kettleman City and ultimately gave rise to the prominence of Kings County throughout the state and nation. The boom offered the government a unique opportunity to exercise conservation of the natural resource between oil drillers (though favoring the Standard Oil Company), but ultimately they failed to completely alter human dependence on fossil fuels.

Chapters 4 and 5 bring together the voices of residents in the town. Their disheartening story is about what it feels like to live in Kettleman City today, but the story of this town is really a larger national story told by ordinary Americans—a 21<sup>st</sup> century story of David and Goliath, of a small-town community’s struggle against everything believed to be “modern—progressive—advanced” including science, technology, waste culture, and corporate power. Though the town is isolated and situated in the shadow of the thriving agricultural valley, its overwhelmingly Latino population has been fighting for their lives and their environment since at least the 1990s and their struggles are credited with initiating the environmental justice movement in the western United States. Chapter 5 ends with a look into the more recent crisis regarding birth defects that galvanized government officials to investigate the situation.

Chapter 6 begins with an examination of national toxic waste regulations and the controversy around the usage of landfills as a means to get rid of toxic poisons in this country. In chapter 7, I examine the siting of these toxic waste landfills, to reveal a disturbing truth—poor, disenfranchised, communities of color are targeted to host these unwanted facilities. The disproportionate pattern of siting and the consequences of living next to these sites led communities to stand up against what they believed was an injustice, and, subsequently to the creation of the environmental justice movement in the 1980s and 1990s. This chapter 7 also examines how the crisis around toxic waste landfills in California beginning in the 1980s culminated in the Kettleman Hills facility becoming the largest dump in the state and in the western United States. The facility owned and operated by WMI became a textbook example of mismanagement, negligence, and multi-million dollar violations and fines imposed by government regulators. And still, the facility continued to operate.

Chapter 8 traces significant socio-historical, political, and economic processes that over time sought to make a culture of wastefulness the predominant culture in America. With the increase in the demand for replaceable goods, the culture of waste was cultivated by corporate capitalists who sought to exploit and influence the social and cultural elements that had defined nineteenth-century American values, lifestyles, and vocations. The origin of the waste industry has deep roots in this social and cultural transformation in America. I discuss exactly how this came about as a prologue to the emergence of WMI as the single largest and most powerful waste services corporation in the world.

Chapter 9 documents the rise of a waste industry in the United States that by the late 1990s has been transformed into a monopoly, with WMI emerging as the leader. As custodians of waste, WMI generates mounting profits through the exploitation of an expanding, hyper-consuming population, dependent on waste services. Chapter 10 is a study of the corporation's \$20 million public relations green-washing campaign that facilitates the façade that WMI is a responsible and resourceful, environmentally sustainable, green, neighborhood company that protects the environment and human health by exceeding industry and regulatory standards. Also this chapter documents just how WMI warps, distorts, and neutralizes information about waste, waste technology, who they are, and what they do. With our waste out of sight and out of mind, this chapter highlights how WMI's manufactured culture of waste operates to sustain the status quo—WMI's power and profits, and the normalcy of our excessive waste.

Note: So as to protect the privacy of informants, those who have asked to remain anonymous have had their names changed followed by an asterisk.

## **PART I: *Incremental Changes***

## **Chapter 2: Snapshot: The Demise of a Golden State**

Ecologist and environmental activist Raymond Dasmann's observations of California in the 1960s are more relevant today than ever before. Dasmann was baffled by the rapid changes taking place all around him in what was hailed as the golden state of America:

The threat to California...comes essentially from all who do not know what California was, cannot see what it is, cannot dream of what it could be. The enemies are those who have looked so long into the blast furnaces of civilization that they can no longer appreciate a sunset—those to whom growth is progress and progress is good, regardless of its direction—those to whom money is the single standard against which all else must be measured, California has been hacked and battered by the forces of ignorance and greed, and is today being forced in a direction that few would want to travel if they could see what lay ahead. So it is that in California one sees now only the consequences of unplanned, careless, or deliberately destructive past activity; one also gets the feeling that the worst is yet to come. (1966, pp. 27-28)

This chapter sets into motion a history of those “forces of ignorance and greed” and the shortsightedness of government projects with the rise of powerful industries in the state. The lives of the native Yokut tribes was systematically destroyed as was the natural landscape including the Tulare Lake Basin, once the largest bodies of fresh natural water in the western United States. It was drained by the beginning of the twentieth century and eventually replaced by mega corporate farms. These farms supply more than 12% of agricultural output and one-third of the table food consumed by Americans and their value has increased from \$50 million in 1870 to \$87 million in 1925 to well over \$24.6 billion in 2000, nearly doubling the output of the state of Texas (Walker 2004, p.1). The San Joaquin Valley boasts five of the nation's top counties in farm-production value and they account for almost three-quarters of the state's \$36 billion in annual agricultural revenues derived from the sale of 400 commodities.

The agricultural businesses and the powerful landowners largely control local politics and decisions at both the state and the federal government levels. I illustrate this by scrutinizing the Central Valley Project and the Westlands Water District (the nation's largest water district which was formed in 1952 encompassing more than 600,000 acres of farmland in western Fresno and Kings Counties) and issues of water and the millions of dollars worth of subsidies that these farmers receive annually from the government. The power of these farms is a significant factor to better understand the current plight of residents in Kettleman City, who do not directly blame the hand that feeds them for their livelihoods. These corporate farmers evade the contested political and scientific scrutiny regarding the recent health problems in the small town, and they benefit from the important role of the Waste Management Kettleman Hills Facility in the state and agribusiness. The relationship between the two is mutually interdependent. In 2009, when the expansion of the facility was debated in the county, the local *Hanford Sentinel* published a guest commentary piece by Roger Isom from the Western Agricultural Processors Association. He made the case for why expansion of the site was important:

As the president/CEO of the Western Agricultural Processors Association, our membership has a vested interest in the future of WM's Kettleman Hills facility. As we all know too well, California growers are subject to tremendous environmental oversight and regulation -- more than any other state in the union. It's the same when it comes to waste -- California law is much stricter than federal law. Here in the Golden State, the majority of waste accepted at the Kettleman Hills Facility is not considered "hazardous" under federal regulations, and in most states, would just be disposed of in a standard local landfill. The effect of the California Hazardous Waste Regulations is that ag in this state must send hazardous materials to a facility built specifically to accept it, like Kettleman Hills. For the agricultural operations that form the backbone of our San Joaquin Valley economy to operate, they have to have a place to send the non-recyclable containers and waste we generate. We can't afford to export these materials out of the Valley -- it will simply add more costs to the bottom line for growers who can ill afford it. Agribusiness is already struggling amid a weak economy and water shortages and any increase to our costs could result in job losses or even business failures. With unemployment in the Central Valley hovering around 15 percent, this is a result we can hardly afford. The bottom line: agribusiness must have WM's Kettleman Hills Facility available to us. We can't afford to increase costs for the Central Valley's agribusinesses. WM's local waste disposal infrastructure is already here and is affordable. Let's keep it that way. (Isom 2009)

The concentration of power and wealth of these mega farms in relationship to politics and the environment reveals a significant story of how in the Central Valley of California, destruction to the natural landscape has brought with it government support and economic bailouts (directly or indirectly), while burdening citizens with failed policies and taxes used to maintain the status quo. This chapter describes a long-gone history. What persists in the twenty-first century is an entrenched system, structure, and relationship (subtle and/or obvious) between corporations and the government.

Another example of this routine big-business practice is illustrated with federal and state water projects and subsidies that by the mid-twentieth century completely altered the California landscape, while an inefficient drainage system of wastewater resulted in the toxic contamination of the Kesterson National Wildlife Refuge. The Kettleman City today is sadly reminiscent of the 1980s crisis at the Kesterson National Wildlife Refuge. Both of these crises are located in the Central Valley, in an area polluted by industrial toxic waste, followed by death and devastation and still at risk as multimillion dollar industries continue to trump the law of the land and violate environmental, human, and animal rights. Kesterson is one of the state's worst environmental disasters (unknown, forgotten, and/or ignored), but an important historical, environmental event that must be considered in the context of Kettleman City today. It illustrates the degree to which people and the ecosystem are put at risk by industries that continue to produce disasters of epic proportion. Moreover, in Kettleman City, WMI's long record of violations is yet another example of deviant behavior and a business-as-usual culture that puts profit over the health and well-being of people and the environment. By chronicling Kesterson's history, this chapter exposes the truth of the daily life, realities and struggles of people and the environment—the kinds of threats that Dasmann took note of in the 1960s.

## *The Untold Story about a People and Their Lake*

“The tragedy of [my] people is one of the greatest untold stories in California history. Just like the Jews and their holocaust, Armenians and their holocaust, right here in California from 1853 to 1903 my people were hunted, killed, and forcefully displaced. Why don’t they teach that in school?” (Raymond “Koodie” Jeff; Tachi Yokut Historian)

“Legend has it that although the lake was shallow, boats were used all the time. Just imagine this—a boat sailing from present day Bakersfield all the way to San Francisco! How incredible! Imagine this—Kettleman City would have been a lake front community! I sometimes drive back to these areas and just sit in a complete daze as to how this all changed, overnight.” (Kerry Arroues, USDA Natural Resources Conservation Service, Supervisory Soil Scientist)

Long before California’s Central Valley was converted into one of the world’s largest agricultural centers with the development of some of the biggest cotton fields, subsidized and protected by the federal government with an elaborate multimillion dollar flood control system, and before the area hosted the largest toxic waste dump in the western United States, the area was known for two things: it was home to the largest concentration of Native Indians in North America and the Tulare Lake. In the early part of the nineteenth century the lake was regarded as the largest natural fresh body of water west of the Great Lakes, but by the beginning of the twentieth century when the Tulare Lake disappeared, so did the Yokut tribes.

Before the arrival of the first Spanish expeditions in 1769, approximately 100,000 to 300,000 Native Indians lived in the area that would later be known as the state of California (Cook 1955; Castillo 1978). For centuries, the native populations lived throughout the state undisturbed by European power or influence in these areas. Despite the diversity into over hundreds of separate and distinct bands or tribes, they coexisted (Kroeber 1925). For centuries, the Yokut Indians lived along the shores of the Tulare Lake. They lived throughout the entire San Joaquin Valley in the central part of the state, from the opening of the San Joaquin River to the base of the Tehachapi Mountains and on the foothills of the Sierra Nevada range. Were sixty separate tribes, each with a name, a language, and a territory, yet they communicated and understood each other regardless of tribal affiliation because they could speak the language of the other Yokut tribes (*ibid.*). The population of the Yokuts in 1770 was estimated at 18,000, but by 1910, Alfred Kroeber projected the population at 600 (*ibid.*).

Anna Hadwick Gayton, the first woman to receive a doctorate degree in anthropology at U.C. Berkeley, produced an ethnography on the Yokut (1928) documenting the intricacies of their daily lives, how they built their homes and interacted with one another. She was influenced by Kroeber’s research on California Indians but she came to the field with a particular interest to observe and document the changes that were occurring in the Yokut lifestyle and habitat. She observed their uniqueness and argued against generalizations of the Yokut that labeled them as “seed-gatherers” or “seed-eaters”, as though their diet were preponderantly vegetarian” (1948, p. 6). She understood the Indian tribes in direct relationship to the natural environment which was the basis of their livelihood. They were surrounded by the Tulare Lake and the vegetation that brought with it fish, water fowl, ducks, birds, squirrels, rabbits, tule elk, antelope, and even

bears. Though the Yokut tribes had one of the highest density populations of any Native American group anywhere else in the country, their food was reliable and plentiful: they did not need to go to war with one another. There was enough food and space to allow the tribes to coexist. Gayton explained that the Yokut were a self-sufficient people who depended on the soil, water, and the 15-20 feet tall tule or bulrushes (from which the lake drew its name) that enclosed much of the lake. The thick tule around the lake was an ideal habitat for ducks, geese, plover, snipe, and curlew. The Yokut used the tule to build their homes, in canoes for transportation, baskets for cooking and carrying, and even as barter with other tribes. Gayton also studied the ceremonies and dances that adorned and characterized the Yokut culture, including the Rattlesnake ceremony, the annual mourning ceremony, and the Ghost Dance (see James Mooney 1896).

In a similar way, anthropologist John Peabody Harrington was inspired by the work of Kroeber. Harrington met Kroeber while taking classes at Berkeley and began to immerse himself in studying the languages and culture of the Native Indians in California. He documented the Yokut history for the Smithsonian Institution, “interview[ing] many Tachi individuals between 1914 and 1920 and was responsible for preserving much Tachi history and culture that would otherwise have been lost” (Roberts 2008), such as Tachi Yokut music recordings from 1921 (Harrington). Stephen Powers, journalist, historian and ethnographer, also is credited for documenting the language of the Yokut peoples (Powers 1873).

The lake and the rest of the natural environment nurtured the Yokut way of life. Geographer William Preston in his book *Vanishing Landscapes* (1981) says: “the relationship of the Yokuts to the land was far deeper and more complex than mere subsistence required: life was tied not only economically but also socially and spiritually to the basin and to its natural order. The processes of nature served as continuous reminders of the story of the world, and of the Yokuts’ place within it” (p. 32). The Yokut story of creation was directly linked to their natural environment. Alfred Kroeber salvaged Indian history, society, and culture by mapping the linguistic affinity of various groups of Indians. He studied the mythology of the Yokut tribes, collecting early legends that were passed down. One story, *The Beginning of the World*, tells how the peoples’ lives, their survival, and spirituality in relationship to the earth are all deeply connected and respected:

Everything was water except a very small piece of ground. On this were the eagle and coyote. Then the turtle swam to them. They sent it to dive for the earth at the bottom of the water. The turtle barely succeeded in reaching the bottom and touching it with its foot. When it came up again, all the earth seemed washed out. Coyote looked closely at its nails. At last he found a grain of earth. Then he and the eagle took this and laid it down. From it they made the earth as large as it is. From the earth they also made six men and six women. They sent these out in pairs in different directions and the people separated. After a time the eagle sent the coyote to see what the people were doing. Coyote came back and said: “They are doing something bad. They are eating the earth. One side is already gone.” The eagle said: “That is bad. Let us make something for them to eat. Let us send the dove to find something.” The dove went out. It found a single grain of meal. The eagle and Coyote put this down on the ground. Then the earth became covered with seeds and fruit. Now they told the people to eat these. When the

seeds were dry and ripe the people gathered them. Then the people increased and spread all over. But the water is still under the world. (1907, pp. 218-219)

Likely a direct reference to the Lake Tulare, their relationship to the earth is reinforced by Tachi Yokut Chief Clarence Atwell: “The mother earth is the provider of water, food, our minerals and all the other things that we need. So when you take something, you give it back.” In 1873, Stephen Powers observed that “in the Yokut nation there appears to be more political solidarity, more capacity in the petty tribes of being grouped into great and coherent masses, than in any other family of the true California Indians” (p. 105). This solidarity was facilitated by an abundance of resources and, as Kroeber observed, intergroup trade alliances (1939). The sheer size of the Tulare Lake allowed these tribes to coexist along its banks. The lake was supplied from waters brought from the Sierra Nevada by the Kings, Kaweah, Tule, and Kern Rivers. In its wettest years, Tulare Lake covered over 700 square miles—four times the size of Lake Tahoe.

A *New York Times* headline article in 1884, “Rapid Disappearance of a Lake,” described what was happening: “The rapid drying up of Tulare Lake, in California, is one of the most remarkable geographical changes of this country within historical times. A few years ago the lake was 33 miles long by 21 miles wide, and now it is but 15 miles long and has an average width of less than 8 miles. This result is attributed largely to human agency.” Fourteen years later (August 15, 1898) the *New York Times* report was grim: “The Tulare Lake has passed out of existence. Where once there was a body of water in Central Southern California over a thousand square miles in area, now there is only a barren desert of mud. The lands can be reclaimed and used for farming. Already surveyors are out with their instruments running lines across the mud. They say the land will grow any kind of crop with very little irrigation.”

The Tulare Lake had been gradually drained. The destruction of terrestrial wetland and the lake ecosystem habitats killed terrestrial animals, plants, aquatic animals, water plants, and migrating birds. The arrival of foreigners into the valley did more harm than good for both the people and the natural environment. The foreign settlers and the drained lake resulted in the Yokut tribes enduring “warfare, massacre, diseases, forced removals, habitat destruction” (Preston 1981, p. 57). To survive, many Yokut fled to the coastal areas, raiding Mexican settlements to the west. Once the lake was gone, the Yokut way of life too was gone. The extinction of the Yokut was a direct consequence of unnatural draining, and what was once a lake is now a sacred site where ceremonies are even now conducted. The Yokut tribes and other native populations lost their ancestral homes and their way of life, everlastingly marking a time in the history of the state of California and the nation of the systematic injustices inflicted on the indigenous populations.

### ***Arrival of the Outsiders: Disruption and Extermination***

Gayton’s ethnography is a testament to her detailed observations that emphasized, the increasing presence of outsiders in the valley, with the arrival of settlers, missionaries, and explorers. The early settlers referred to the area as the “Valle de los Tulares” or Valley of the Tules. The arrival of Spaniards in 1769 had not seriously disrupted the Natives in the San Joaquin Valley though there was some trouble over missions. But in 1850 “the stimulus of gold-seeking and land-seeking brought white settlers into the valley to stay, and for the first time the

foothill peoples experienced the dismay previously suffered by the lake tribes as the intruders increased in numbers” (Gayton 1948, p.1). Lieutenant George H. Derby, traveling around the valley for military exploration observed: “The Kings River is the largest stream in the valley, at this time of spring floods about three hundred yards wide, with a rapid current and water cold as ice. It is about sixty miles in length, rising in two branches high up in the Sierra, which uniting about forty miles from its north flow in a southwest direction through the hills and valley, and empty into the Tache [Tulare] Lake at its northeast extremity” (1948, p. 3; Farquhar 1932).

Until the late eighteenth century, the Yokut lived along the shores of the lake undisturbed. Preston observed the severity of change that gripped the Yokut:

The most immediate and dramatic consequence of foreign visits to the Tulare Lake Basin was the decimation of Yokuts population and the restricting of Yokuts settlement and livelihood...foreign contacts were most frequent in the western basin, and direct pressures caused slow eastward migration of the more exposed tribes...crowding intensified the already-bitter feuds among Yokuts groups and those between Yokuts and renegades from more rapidly settled parts of California. In at least one instance, a Yokut chief saw the arrival of a Spanish army as an opportunity to wipe out his neighbors... Intertribal fighting brought many fatalities, but even battle deaths were few in comparison with those from disease, starvation, and exposure. Malaria and cholera epidemics in 1832 and 1833 killed nearly three-fourths of the San Joaquin Valley aborigines [Engelhardt 1912; p.322 in Preston], and measles, dysentery, and syphilis were rampant. The Yokuts’ stored foods and tools they needed for hunting and cooking were deliberately destroyed by Spanish, Mexican, and Anglo settlers and soldiers [Cook 1976; p.286 in Preston]. The vast herds of feral livestock that escaped to this isolated part of California from ranchos and missions grazed so heavily in the basin prairies that native wildlife diminished, and overgrazing permanently altered many basin habitats.” (pp. 57-58)

The Spanish had arrived in late sixteenth century accompanied by Franciscan missionaries to build missions and pueblos along the California coast (Cook 1978). As part of their conquest of the New World, they set up twenty-one missions with the primary purpose of colonizing the Indians and converting them into an obedient, Catholic, working class through a process of coercive religious and forced labor camps. They confiscated land for the missions and many of the immigrants were granted large tracts of land by the Spanish rulers. The coastal Indians revolted against these injustices. By 1775, Indians burned down the San Diego Mission and by the early part of the nineteenth century they burned and raided the missions which led to the draconian laws to restrict their movement.

Achieving independence from Spain in 1821, Mexico suffered terribly from the struggle and had a difficult time rebounding. Though unstable, Indians were subjected to a new foreign and unfamiliar reign, subjected to imprisonment on their own land, “restricted to the rancho” under the new rule. The Yokut “did not consent to become pacified wards of the missions” and they “quickly developed an aggressive temperament and a new set of subsistence strategies. Once a predominantly vegetarian people in tune with seasonal variations in local resources, they became a reckless and hard-riding band of horse thieves who preyed upon foreigners’ livestock.

Yokuts aggression retarded foreign settlement in some distant regions as well as in the basin itself” (Preston 1981, pp. 58-59). The colonial land policies of the Spanish and, later, Mexico, “had promoted, through grants of massive tracts of land to favored individuals and families, conditions under which the ownership and control of much of the best land rested with a relatively small colonial aristocracy” (C. Daniel, p. 18). Heizer wrote “the last great block of territory to come under American control was the Far West which was the chief spoil of the U.S.-Mexican War of 1846-38. The northwesternmost sector of this territory was California which in 1846 contained about 100,000 Indians and a few hundred Mexicans and Europeans” (1974, p. xiv).

By the start of the American-Mexican Invasion in 1846, 26 million acres were controlled by just 813 ranchers. As the original thirteen American colonies grew and the economy developed, the desire to own land increased. By the 1840s, white settlers began to expand into the western frontier hoping to obtain land and wealth. Many came with the staunch belief in Manifest Destiny—the ideology that Anglos were a destined people to extend the “boundaries of freedom” to others by imparting their idealism to Native Indians and other people of non-European origin who they believed were incapable of self-government. The war was the most decisive event of the mid-nineteenth century, establishing the southern border that separates the two countries today. The end of the war was marked by the 1848 Treaty of Guadalupe Hidalgo whereby the United States acquired half of the Mexican territory. The United States gained miles of valuable territory and emerged as a world power. Under the agreements of the Treaty, the United States was to recognize the land grants made under the previous rule of Spain and later Mexico. California Indians were to become citizens of the U.S. with their liberty and property rights given full protection under U.S. laws.

Yet, after California was admitted to the Union, hostility between the settlers and Indians increased. Settlers flocked to the Western United States, lured by land, gold, and prosperity which had begun in 1848. “All parts of California were explored and the more favored parts settled, and in this process the native population of Indians suffered a severe decline in numbers. It is believed that between 1848 and 1870 about 50,000 California Indians died. Many of these deaths were the result of simple and direct homicide; some were due to starvation and others to disease” (Heizer 1970, p. xiv).

As the population in California increased, so did anti-Indian sentiments. In 1850, just months after California received statehood, Congress passed a bill asking the President to appoint three commissioners to study the situation in California and to negotiate treaties with the various tribes. The Indians had original title to over 75,000,000 acres of the newly formed state yet the eighteen negotiated treaties between the United States government and the various tribes relinquished all Native Indian land to the government with the promise of nine million acres of reservations, goods, supplies, livestock, and clothing. These treaties were opposed by the state of California and were never ratified (*ibid.*, p. 101). Heizer also documented how the indigenous populations were forced onto reservations, meager land parcels, “so useless that no white man would find it of the least value” (*ibid.*, p. xv). The desire for land ownership and wealth continued to provoke hostilities against Indians by the newly arrived Anglo settlers. Indians were not considered citizens and thus were denied the right to vote by the California Constitutional Convention because they were not “white”. Indians were completely denied the right to hold office, own property, drink alcohol, carry a gun, attend public schools, testify in court, serve on juries or intermarry with someone non-Indian. In essence, Native Indians in

California were considered sub-human: “The general stereotype of Indians as ignorant, treacherous, bestial savages who deserved no rights, sympathy or consideration” (ibid., p. xiv). The ideological belief of a God-given right to expand its frontiers brought with it the ethnocentric conviction by settlers that, as Anglos, they were the chosen, superior race to civilize the earth. This belief was institutionalized for the sake of rationalizing the plundering of land and resources, and the hunting, killing, and lynching of Indians. The arrival of Anglos overwhelmed the Indians and created anxiety that eventually led to brutal, inconceivable violence. In the span of just ten years, the legal genocidal campaign decreased the population of Indians to less than half and left an entire indigenous people without land or resources, and with disease and starvation.

One year after California entered the Union as a non-slave state, state legislators legalized slavery. In 1851, Governor Peter Burnett declared, “a war of extermination will continue to be waged between the two races until the Indian race becomes extinct.” (Burnett 1851) In 1853, legislation was passed in California making the killing, kidnapping, enslaving, and selling of Indians legal. “Securing Indian children for indenture or outright sale was common in California from 1850 to 1863, when the Act was repealed in conformity with federal emancipation procedures...It has been estimated that about 10,000 Indians may have been indentured or sold between 1850 and 1863.” (Heizer 1974, p. 219)

The law allowed white settlers to enslave Indian children either by permission of the parents and/or because the children were orphans. Since Indians had no legal rights, they could not go to court and testify against the settlers in these or any other matters. Heizer (1974) documented that “Indians were prohibited from giving testimony for or against whites in Section 394 of the California Civil Practice Act of 1850 and were, therefore, deprived of the ordinary means of legal protection” (p. 293). In fact, the law allowed, on the word of any white settler, that Indians be declared vagrants, thrown in jail, and his/her labor sold to whites. This process of enslavement destroyed entire families and tribes, and according to the law, children could be indentured until the age of eighteen for boys and fifteen girls (Johnston-Dodds 2002). The official position of the federal and state government was the (criminal) authorization to kill California Indians and even going so far as to subsidize their murder. Massacres or “mass killings of Indians, were common events.” (Heizer, p. 243) Across the state, Anglo men formed volunteer armies to “cleanse” the land of the Indians and were compensated by the government for doing so. Throughout the state, Indians were hunted down like animals in the valley and foothills. The bounty on Indian scalps rose from 25 cents to upwards of \$5.00 each. Atrocities such as the scalping, attacking, and killing of innocent women, men, and children, and the wholesale massacre of tribes resulted in a systematic extermination of the Indian people. Heizer located a newspaper article from 1860 that described the arbitrary killing of women and children:

The perpetrators seem to have acted with a deliberate design to exterminate the Indian race...The attack was made in the night, when they were collected in their little settlements or villages at some sort of merry-making. The men were known to be absent—they had possibly fled on suspicion of danger. Under these circumstances, bands of white men, armed with hatchets—small bands but sufficiently numerous for the purpose—fell on the women and children, and deliberately slaughtered them, one and all. (pp. 254-255)

Years before in 1851, California Commissioner of Indian Affairs, T.J. Henly encouraged relocating Indians onto reservations:

The Indians (their number is not known, but certainly fifty to one hundred thousand) are scattered in small tribes over its entire area. The reluctance of the Indian to remove far from his old home, is well known; whilst he will go willingly to a reserve within the region whereupon he has hunted and fished, nothing but force can take him beyond that...The expenses too, of removing the Indians to five instead of three reservations would be greatly diminished, and the whole work of colonizing the Indians of California would be completed in a much shorter period...to which place it should, in my opinion, be the ultimate object of the government to remove all the tribes, and thus finally to rid the State entirely of this class of population, and place them in a country where it is probably that even the restless spirit of immigration would not soon reach or disturb them” (1851, pp. 3-4).

By 1864, reservations were created, totaling over 600,000 acres of land. The reservations and rancherias (they have the same legal status as reservations, though they cover a smaller area) were established in remote areas away from white settlements on desolate, rural, desert, and mountainous areas which were isolated, not conducive to agriculture because it was largely without water, and little or no economic potential. Alfred Kroeber observed that “the reservations were founded on the principle, not of attempting to do something for the native, but of getting them out of the white man’s way as cheaply and hurriedly as possible” (1925, p. 890).

The Indian Gaming Regulatory Act (IGRA) of 1988 acknowledges the rights of American Indians to make gaming compacts with the states where their reservations are located. In 1934, the Santa Rosa Rancheria was established on about 40 acres of desolate farmland in Lemoore, California. By the 1980s, the Rancheria had a population growth and acquired 170 acres of land. They opened up the Southgate Bingo Palace and much to the tribe’s surprise hundreds of people came to the hall on a daily basis. Like other tribes in California, they too entered the casino industry. In 1994, the Tachi converted the bingo hall into the current Tachi Palace Hotel and Casino in Kings County, not too far from Kettleman City.

### ***The Curse of the Lake: If You Destroy It, You Are Really Destroying Yourself***

“There once was a lake. But it doesn’t exist anymore. It is like a curse, no I mean to say is that the lake has a curse! The curse of the lake is that if you destroy it, you destroy yourself. That’s probably what happened to California in a nutshell. It’s living its own nightmare.” (Lisa\*, a Kings County resident)

The area, and specifically the Tulare Lake, had a picturesque appeal to travelers and potential settlers, but it wasn’t until the discovery of gold that people from throughout the country began flocking to the Sierra Nevada. Soon after, change to the natural ecosystem came

about quite abruptly. At first, the Tulare Lake Basin served only as a passageway for people and goods en route to the goldfields in the northern half of the state. Soon after, vast herds of cattle were brought to the basin to graze. The lake had access to markets in the mining towns of the Sierras and the booming cities of Stockton, Sacramento, and San Francisco (Preston 1981). The fish in the lake became a commodity and gave way to a full-scale fish industry that connected the San Francisco Bay Area to the southern central valley. Local historian Martha Bentley explained that “the commercial fishermen that came to the area developed an entire industry by using huge nets to catch perch, mackerel, lake trout, and even salmon...claiming to have caught up to eight tons of fish from the lake with only one haul of a horse-drawn seine” (Bentley 1994, personal communication). Settlers sold the fish and the turtles to restaurants throughout the Bay Area. The area and the lake became a center for commerce within the state, serving also as a tourist destination considering that the lake was in the middle of a desolate valley.

The construction of the transcontinental railroad at the end of the nineteenth century initiated a new pattern of settlement in the area (Preston 1981) and it further homogenized the cultural and physical attributes of the basin by improving access to markets, ending its regional isolation and introducing potential national economic interests and cultures. Land uses of the surrounding lake changed rapidly in response to market conditions, technological innovations, and rising property values. These changes were accompanied by renewed experimentation and concern for the diversity of the basin environment.

The 1852 Swamp and Overflowed Lands Act permitted states to claim title to federal lands identified by the state as swamp and overflowed lands, parcels of land that did not have natural drainage for areas that were bound to get flooded. This Act permitted the state to design and build levees and embankments to keep the water out and render the land suitable for cultivation. Settlers reclaimed the unproductive land by draining wetland habitats, further reducing native flora and fauna dependent on the lake’s ecology; livestock grazing, farming, and the introduction of various grasses added to the change in the original ecosystem. In the Tulare Lake area reclamation districts were formed and each district built levees to protect their holdings. By the 1860s settlers began diverting the Kings River for irrigation purposes. By the early 1870s much of the water had been diverted into irrigation canals. Prior to settlement in the area, the water and basin nurtured over one million acres of tule marshes and maintained the survival of the indigenous Yokut tribes. By the beginning of the twentieth century, the draining of a naturally occurring water basin, and the total diversion of naturally flowing rivers from the Sierras for agricultural, and later for urbanization purposes, completely altered the landscape in an unprecedented way. In their *History of Kings County* (1940) Robert R. Brown and J.E. Richmond (editor and supervising editor of the *Hanford Morning Journal*), stated that “diversion of water for irrigation has during recent years practically prevented a flow into the lake...the effect of irrigation upon the lake is too obvious to need substantiating by statistics...engineers have shown evidence that nearly all of the water of Kings River flowed into the lake before man interfered. Dams were constructed, channels were opened, and the annual flow into the lake was greatly reduced” (p. 112).

The former Tulare Lake Basin is now dry and gone with it are the birds and fish that made the waters and its shoreline their natural habitat. While the lake has been physically diverted, its fertile soil bed has been transformed to become the most productive agricultural basin in all of the United States. But keeping the water out of the natural basin has not always worked. During high rainfall and snowmelt, the lake naturally reappears, but never in its original

size, depth, and form (Kerry Arroues, personal communication). In the 1930s, the flood water forced the return of the lake and lasted through the duration of World War II, conveniently providing a landing base for flying boats when the conditions were unsafe in San Francisco (R. Roberts, p. 76).

What was once considered “ineffective” land susceptible to flooding owing to no natural drainage produced the contamination of the Kesterson National Wildlife Refuge. Nonetheless, though this was known all along by the government, it was treated as a footnote to the plans to build by design well into the future.

### *A Product of Human Design: Maintaining a Cornucopia Powerhouse*

One day early on in my fieldwork Lisa\*, a Kings County resident, explained her opinions:

“Any study of California must include a study of water. The two go together like this cup of Joe I have in front of me—milk and coffee, with a touch of sweetness. But here’s the thing, Mark Twain may have been right. You ever heard the saying ‘whiskey is for drinking, water is for fighting over?’ Well, that’s California for yah in a nutshell. Water, water, water. It’s the state’s only lifeline. It brings people to its coastline. It enables commerce. Its bridges are exciting to cross...And water, well, it’s like the air we breathe, it hydrates us, and provides the food we consume. It makes everything possible. Water is God in California...Water is for fighting for, but the sweetness—well, it has caused more bitterness, but you can’t ask the birds and fishes about it, because they got killed in the process of maintaining this cornucopia we humans made. By human design, by human neglect, with the support of the almighty government of this very United States of America, we have destroyed the environment to the point that there isn’t much left to destroy. Just look around ya. Go ahead, look. Why can’t you see it? That’s my big burden I carry. I see it all. I’ve lived through it all. This is not the America I remember as a child.”

By the beginning of the twentieth century, facilitating the development of agriculture all over the western United States, water had become what gold was in the mid-nineteenth century. Subsidized and protected by the federal government with an elaborate multi-million dollar flood control system to keep water out of the natural Tulare Lake Basin, the San Joaquin Valley is the world’s most productive agricultural region. The agricultural boom in California uses almost 85% of the water in the state, which must be channeled into the Valley from the north. Before water was available, agriculture in the region consisted mostly of cattle ranching and dry farming of small grains such as wheat and barley. Later, the intensified irrigation techniques converted agriculture into a realm of specialized crop production. The combination of water irrigating the fertile valley along with its structure of agriculture and land ownership radically altered the landscape.

The Dust Bowl, floods, and the Depression of the 1930s, brought with it government sponsored flood control projects. These projects, costing billions of federal dollars, converted vast tracts of arid, marginal land in California into profitable ventures. The federal government began in earnest to build and develop, with a steadfast belief in progress to demonstrate its power and the triumph of science and technology, to dominate the environment. The result was a sprawling, intricate, and dynamic system that sent the water from the north down south for hundreds of miles, completely altering the once-barren, desert-like land in the Central Valley. The technological advances that brought about these dramatic changes were the Central Valley Project (CVP) and the California State Water Project (CSWP) which turned the area commonly known as the West Side farmland into some of the world's most fertile and productive acreage.

The federal government's construction of dams, canals, and reservoirs brought substantial benefits—electricity, jobs, flood control, irrigated farmland—and for the political sponsors provided imposing monuments such as the Governor Edmund G. Brown California Aqueduct. In 1933, the federal Bureau of Reclamation (BoR) began the Central Valley Project (CVP)—one of the largest water storage and transport systems in the world. This system was designed to provide irrigation and municipal water to the valley by regulating the water in reservoirs in the northern half of the state and through a series of canals, aqueducts, and pump plants releasing the water into the Central Valley. This system allowed major cities to grow along the rivers and ultimately transformed the San Joaquin Valley from an arid desert into a vast cornucopia that has 22 reservoirs and irrigates more than 3 million acres of farmland besides providing drinking water to nearly 2 million consumers (see California Department of Water Resources). In the 1950s, the California State Water Project (CSWP), operated by the California Department of Water Resources, designed a structure to provide water for the southern half of the state. Today, this system includes 20 reservoirs and provides water to farmland in the Central Valley and drinking water to the southern part of the state. Touted as one of the greatest achievements of modern engineering, the elaborate water distribution system in California has major economic and environmental significance. However the water system that was designed to promote industrial farming has polluted rivers and groundwater. Fish and other marine life have declined in numbers, and other natural river environments have completely disappeared.

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By the twentieth century, the concentration of land ownership had become a major problem. In 1902, Congress passed the Reclamation Act, which was designed to carve out farmland from vast, rich, but desert-like areas of the West to encourage settlement around the area. Land ownership was limited to 160 acres or 320 acres of shared land between a husband and wife. Inconsistently enforced by the government, unregulated land ownership along with the accessibility and benefits of federally subsidized irrigation water created empires in California. By the mid-twentieth century, outside investors and agribusinesses had begun accumulating large holdings of profitable farming acreage.

The federal BoR supplied water, at a cost, to the Westlands Water District through the CVP. By the 1980s, the subsidized water program allowed farmers to pay just 10% of the actual cost of supplying water to the region. The difference in cost was paid by taxpayers. Although subsidies were initially created to benefit the family farmer, land ownership was concentrated in the hands of just a few in the Westlands and by huge tracts of land were now owned by foreign

and domestic corporations such as J.G. Boswell, Tenneco, Chevron, and Superior Oil Co., Del Monte Corp., as well as the railroad. This made the enterprise of farming quite a successful business for the powerful few, at the expense of small farmers and the taxpaying citizens. Author and journalist Marc Reisner in his book *Cadillac Desert* (1986) describes the political and bureaucratic “boondoggles” that made taxpayers shell out millions of dollars for water projects in the state, while large farmers wasted water and reaped the benefits.

In 1975, National Land for People, Inc. filed a lawsuit protesting the poor enforcement of the 1902 legislation. The lawsuit alleged that landownership was consolidated in the hands of a few (many of them absentee owners who never lived on the land) and that reservoirs built with federal tax money provided farmers with abundant, cheap water from which they generated considerable profits, and since 1976, farmers had been taking advantage of over \$5 billion dollars in federal subsidies. The lawsuit contested that owning one million acres of irrigated land was excessive and demanded that land owners either sell the land or stop using federally financed water. President Jimmy Carter’s administration, under pressure from the federal court to enforce the law more firmly, began supporting a liberal rewriting of the law to increase acreage limitations to small farmers. In 1977, President Carter recognized the crisis large landownership in the western United States had created: “Seventy-five years ago, 320 acres for a husband and wife for irrigated land was all they could handle. Now, with massive development and large machinery, a larger acreage is necessary for an economically viable farm operation. So the law needs to be changed. We don’t have any alternative but to enforce the law” (B. Peterson, 10/2/1977).

The Interior Department then unveiled a sweeping plan that required giant corporations, absentee investors, and large-scale farmers in California to sell more than half a million acres of their land to small farmers and required that landowners live within fifty miles of their land. Large landholders such as the Southern Pacific Railroad which leased out over 109,000 acres, immediately challenged these proposals. The agribusiness tycoons organized themselves by pouring money into congressional campaigns and hiring high-profile lawyers to lobby politicians to represent their interests.

President Carter also outlined an ambitious environmental justice project by cutting funding allocation for the planned construction of eighteen dams, river channelization, and irrigation projects to create a comprehensive reform policy for the country’s water resource. But the lobbying power of the agribusiness during an election year successfully secured the support of members of Congress to request an environmental impact report (EIR)—a tool commonly used by environmentalist groups to oppose and postpone industries. This stalled the enforcement of reforms and the battle in the West continued on Capitol Hill through the late 1970s and centered around the unresolved issues of a fair price for water, an acceptable size limit on the irrigated farms, residency, and the distribution of excess land.

The lawsuit by National Land for People, Inc., was more or less ignored. In 1982, Republican President Ronald Reagan’s reforms to the Reclamation Act abolished the proposed reforms under the Carter administration. Reagan was the former Governor of California and his administration gave into the power and persuasion of the agribusiness industry. The new reforms permitted the ownership of rich agricultural land by a few families, individuals, and corporations, who of course were to benefit from the annual subsidy; Reagan’s reforms also removed the requirements that farmers live on the land they owned and at the same time increased the limit of land ownership from 160 acres to 960 acres, farmers were given five years

to divest themselves of acreage above the 960 acre limit and were required to pay the full price of irrigation water supplied by the CVP.

Protestors throughout California and the nation described this as the “most anti-American, anti-capitalist, anti-entrepreneurial and anti-competitive piece of legislation ever foisted on the American public.” (C.Peterson, 5/9/1987) Not one to hold back his thoughts, Representative George Miller described the reforms under Reagan as “fraud being perpetuated on the Congress and the taxpayers.” (ibid., 4/10/1987) “I’m sickened” he cried, “after all the effort that was put into reforming this program, now you see the administration just capitulate to the people who have a history of violating the law for their own personal gain...It’s an outrage.” (Diringer 4/10/1987) He went on to point out that if Reagan had enforced the 1982 reforms, that would have “added revenue [which] is especially crucial in California, where the bureau’s Central Valley Project is running annual operating deficits and still owes \$1.2 billion in construction debt. Each year, the giant irrigation system delivers 2.4 trillion gallons of water to 3 million acres of valley farmland” (ibid.).

The farmers were pleased with the Reagan Administration because they had achieved their goal of increasing their acreage of land, but they did not want to be required to pay more for water. Instead, the Westlands farmers opted to go after a loophole in the law by manufacturing “paper farms”, wherein they put much of the land in trusts and/or they distributed the land among family members or other holders to discretely “own” 960 acres of parcels on paper. They also set up farm management companies to operate the land parcels. Essentially, nothing changed: the farmers continued receiving the cheap water at a discounted rate for the hundreds of acres of lands that they directly or indirectly owned. These events would prove not to be the last time the government favored the agribusiness in California.

A few years later, in 1985, the deep-seated corrupt relationship between the Westlands farmers and the government was revealed again. A report by the Natural Resources Defense Council entitled *Turning off the Tap on Federal Water Subsidies, the Central Valley Project: The \$3.5 Billion Giveaway* (LeVeen and King 1985) alleged that the Bureau of Reclamation (BoR) had illegally provided massive subsidies to the Central Valley Project and the Westlands Water District for over 40 years. Although the primary goal of the irrigation projects and the water subsidies was designed with the family farms and small landholders in mind, it was revealed just how massive the Westlands really were:

The principal beneficiaries of the subsidized water are large farming operations, frequently owned by absentee corporations or wealthy individuals [91% of the land in Westlands was farmed in operations greater than 960 acres]...over half the land in the Westlands Water District, the largest single beneficiary of subsidized water from the CVP, is used to grow crops that are already in surplus and the target of other government programs intended to reduce production and an increasing body of evidence indicates that a principal byproduct of the current system, both unanticipated and undesired, is toxic agricultural waste water, presenting a serious and potentially devastating threat to the California environment. (ibid., p.1)

The BoR charged farmers prices so low that farmers repaid only \$50 million of the \$931 million that Congress had required when passing legislation for the Central Valley Project (Lindsey

1985). Taxpayers were left to foot the bill and interest costs that Congress failed to account for. The report drew attention to the deceitful practices by both parties. It uncovered that “about one-third of the total \$3.5 billion subsidy—\$2 billion of which has congressional mandate—goes to Westlands where growers pay an average \$9.45 per acre-foot for water compared with the unsubsidized cost of \$97. Westlands received an annual unintended subsidy of \$400 million with each farm receiving an average of \$500,000 each year.” (Associated Press 8/22/1985) Since large farms and their corporate counterparts in the Central Valley heavily discounted rates, they avoided incurring the infrastructural capital costs that got the water flowing onto their lands in the first place. The true cost for irrigating the Westlands was paid by taxpayers.

The report also revealed that for years, the dispute over land and water in the Westlands remained unaddressed. In 1978, attorneys for the federal Interior Department had argued that in 1965, Westlands farmers had illegally expanded their acreage by 150,000 acres of first-rate farm land without ever consulting the government. This land was adjacent to 500,000 acres of federally sponsored land that received federally subsidized water and the farmers had increased the acreage of land so that over 650,000 acres received subsidies illegally. Eventually the government settled the issue, only to reverse their 1978 claim regarding the illegal annexation of land:

Under the proposed settlement, the Interior Department’s Bureau of Reclamation will continue to deliver water for irrigation of cotton, barley, wheat and other crops in the Westlands Water District, chiefly at rates established in 1963. The water comes from the Sacramento River through the federal Central Valley Project. By undoing an opinion written by the department’s solicitor in the Carter Administration, the agreement would also include in the Westlands Water District 156,000 acres of land that Congress did not authorize as eligible for the subsidized water. (Shabecoff, 7/25/1986)

Though the entire predicament was rooted in California agribusinesses’ corrupt, fraudulent, and undemocratic business strategies, the government would continue to support industries.

### ***Bailout: Government-Subsidized Destruction of the Environment***

The construction of the Central Valley Project (CVP) never addressed the issue of water runoff. Water was a subsidized commodity and farmers helped themselves to more than their share. By the mid-1980s, the irrigated land sold for a few thousand dollars per acre producing up to three times the yield of non-irrigated lands elsewhere. The western slope of the San Joaquin Valley enjoys a benign climate and fertile ground, but excessive use of the land led to water drainage problems. The Valley was once a seabed and its soil was laced with salts and minerals. Impermeable clay lies beneath the flat fields and as the irrigation water made the land bloom, the water eventually pooled above the clay, saturating the soil and pushing salt to the surface in white patches (Kerry Arroues personal communication). Arsenic, boron, cadmium, chromium, mercury, nickel, and selenium wash into the soils from deposits left in a forgotten ocean floor (Ibid.). This poisonous combination of pesticides and water had become a national environmental crisis. Diverting natural water sources across the state for agriculture and profit exposed the appalling consequences of modern human engineering.

In the 1960s, federal and state government officials and Westside farmers persuaded Congress to approve \$700 million for the San Luis Drain (or the California Aqueduct—the actual price tag was reported to be nearly \$5 billion) project that would follow a 200 mile canal from the southern end of the valley to the Delta. The drain water was supposed to be diluted before being released into San Francisco Bay. The BoR began construction of the drain in 1970. After just five years, the construction money ran out with only 82 miles of the drain from Kettleman City to Kesterson developed. Without proper funding, the project was terminated. Intense opposition from Bay Area environmental activists against draining the water into the Bay waters terminated the remaining extension of the drain.

To address the issues of water drainage, the federal BoR permitted the waste water from the farms to run, at least temporarily, into the evaporation ponds in the middle of the Kesterson National Wildlife Refuge, a regulatory reservoir along the San Luis Drain's path to the Delta. Officials assumed that the contaminated water would evaporate from the ponds. Instead, Kesterson turned into a dumping ground that absorbed nearly 2.9 billion gallons of water polluted by selenium and other chemicals used by farmers for food and land each year. Although selenium is considered a harmless non-metallic element of the sulfur family, the selenium in the water evaporation ponds in Kesterson was so concentrated that it became toxic.

The toxic problem was discovered in 1983 when the U.S. Fish and Wildlife Service, which operated the refuge under an agreement with the BoR who owned the land, decided to check on the health of wildlife because they were interested in possibly expanding the drainage system to other refuges throughout the state. To their dismay, they discovered that the drainage had destroyed the refuge. Extensive testing revealed that sediments from the reservoir were contaminated with concentrations of selenium more than twice the amount that would qualify it as hazardous waste under federal law—levels up to 4,200 parts per billion, more than 400 times the level considered safe for drinking (Kerry Arroues, personal communication). They documented the biological consequences on waterfowl whose eggs had deformed embryos. Deformities in the tiny birds included deformed hearts, twisted spines, and brains pushed through their skulls. Other birds were missing feet and beaks. Fish too died and suffered mutations too. The devastation was so horrific that the magazine *Sports Illustrated* brought to life the degree of this devastation on its front cover page (Kerry Arroues).

The discovery of the environmental devastation at Kesterson produced a public outcry from farmers, residents, environmental activists, and people throughout the country. National media coverage included headline stories in newspapers and magazines and on television all of which asked, “Who is to blame? Who will pay for the cleanup of the toxic contamination at Kesterson? What would become of Kesterson, even if it were cleaned up? What would happen to the runoff waste water by farmers who relied on government subsidized irrigation? Was the federal government in violation of the Migratory Bird Treaty Act of 1918? What impact did this have on the public and their well-being?”

Farmers claimed that had no prior knowledge of what was happening in Kesterson and were unaware of the implications of the water drainage, since they were simply it as provided by the federal government; the Westlands agribusinesses lobbied the California State Water Resources Control Board to favor in their interests. In their initial draft order, the Board recommended the closure of Kesterson and/or required that the BoR spend millions of dollars to develop of double-liners for the 1,280 acre evaporation pond site, with clay to prevent seepage of polluted water into groundwater. The federal government threatened to go to court over the draft

order; the farmers countered that if the refuge was shut down their waste water would not be able to drain and would obstruct agribusinesses and the country's essential food source. In opposition, the Westlands called people in positions of power, launched a letter-writing campaign, bussed supporters to public hearings, contributed funds to political re-election campaigns—and ultimately forced the Board to come up with additional alternatives to address the Kesterson crisis and the problem of drainage beyond the stipulations drafted in the order. Month of this, the Board made a surprisingly unanimous decision that declared Kesterson a toxic dump and a threat to public health. They ordered the federal BoR to submit a cleanup plan within five months and to complete the entire cleanup within three years Kesterson was to be shut down indefinitely if they failed to do so. The Board's decision did not specify how the drainage was to be disposed.

William Kahrl, a journalist and author, wrote about this period as a defining moment in American history because it exposed the degree to which, by government and industry, chronic, short-sighted planning led to detrimental consequences:

In some respects, an analogy between the crisis of Kesterson and the sorry state of America's nuclear industry is inescapable. As with atomic power, the federal government promoted the development of a vast agricultural industry within the Central Valley knowing full well that it had no means of disposing of the hazardous wastes that industry produces. Today, the largest and richest of California's agricultural districts, Westlands, is facing the consequences of that short-sightedness. (1985)

Contamination continued to generate attention throughout the country. Kesterson was a wetland area for nearly 10 million migratory waterfowl that traveled north to Canada and south to Mexico. Because the water was polluted at the Kesterson Wildlife Refuge, the federal Interior Department was concerned that it might be criminally prosecuted under the Migratory Bird Treaty Act of 1918, an agreement between the United States, Canada, and Mexico to prevent the massive slaughter of birds. Somebody in the government had the idea of scaring the birds away from contaminated evaporation ponds “using human scarecrows armed with noisemakers and wearing air filtering masks and protective clothing” (Carter, 2/19/1985). When this expensive (some \$250,000) tactic proved ineffective, the U.S. Department of the Interior announced that it would close down Kesterson and in thirty days it would halt irrigation water to the Westlands because their toxic runoff was responsible for poisoning the sanctuary. Interior Secretary Donald Hodel “took the action, expected to cost several hundred millions of dollars, after receiving legal advice contending that continued drainage might constitute criminal violation of the Migratory Bird Treaty Act” (Soiffer and Fogarty 1985). California Democratic representative George Miller called the move “an effort to make people take their eyes off the real issue, the health and safety of California residents, by shifting attention to international agreements on waterfowl” (Associated Press Knight-Ridder 3/18/1985).

Farmers were becoming worried and the Interior Department began to retreat under pressure. Farmers warned that the elimination of a drainage system would multiply Kesterson-like ponds and further intensify the existing disaster; they were of course worried about potential crop loss and the millions of dollars the harvest would bring with it. Assistant Interior Secretary Robert Broadbent said “the loss to the local economy could amount to as much as \$70 million

and 1,450 jobs if large numbers of farms close because they are without irrigation water and drainage... [the] estimated that the cost of cleaning up the refuge will range from \$40 million to \$100 million” (ibid.). Representative Tony Coelho (Democrat, California) who made the case on behalf of the farmers, was reported saying, “I realize that the decision to close Kesterson and the drain are final, but the farmers of the San Joaquin Valley should have some options to salvage their livelihoods in a situation that is not their fault” (ibid.). He presented a proposal that enabled farmers to continue receiving water for the rest of the year while solutions were sought for the problem. The decision by the federal government “prompted threats of lawsuits and congressional investigations, as well as predictions of a multi-million dollar economic disaster and creation of a modern dust bowl” (ibid.). “With their assets collapsing about them, farmers panicked, as did their lenders, who warned that they might not extend credit to a bunch of farmers who seemed destined to go bankrupt.” (J. Johnson, 3/29/1985)

Representative George Miller accused the federal government of covering up the toxic pollution for years. Representative Coelho further warned that he would investigate allegations by environmental groups that the BoR had covered up the contamination: “Interior officials, with the blessing of the Reagan administration, sought to wash their hands of the controversy by dumping it into the courts and Congress” (AP Knight-Ridder News Service 3/18/1985). Three days later, negotiations began in the state capital between the attorneys for growers, the federal government (Justice Department and Department of Interior), and the affected water district. Each side sought to exonerate themselves from responsibility in the Kesterson disaster. William Kahrl described the contested deliberations:

According to participants in those negotiations, both sides were primarily interested in hammering out a settlement that would serve their own very limited and most immediate interests. The feds concerned with shutting off the drain into Kesterson, and, under the agreement, the flow of waste water will stop June 30, 1986. Westlands, meanwhile, wanted most of all to keep its irrigation supplies coming, and it, too, got its wish. But the price for that assurance is that Westlands now has 12 months to conceive, design, finance, and construct a solution to a problem which has so far stymied the best minds in the federal bureaucracy with spectacularly lethal results. (1985)

Subsequently an agreement between the government and the farmers was finally reached—positioning the Reagan administration again as a friend rather than foe to the state’s agribusinesses while exonerating the government from potential lawsuits for the contamination of federal lands and violation of the Migration Bird Treaty Act. Though both parties agreed to a gradual elimination of the poisonous runoff flow into Kesterson, they did not agree to shut down the refuge. Farmers were expected to reduce the amount of runoff waste water into Kesterson by 20% every two months. The Westlands Water District was required to purchase 5,000 acres of land in one year’s time, to use for runoff waste water that would be collected and mixed with clean water and then used to grow salt-resistant crops. The farmers thus received the water they wanted for their land and the Department of Justice “agreed to grant limited immunity to Secretary Hodel’s top lieutenants from prosecution under the Migratory Bird Treaty Act” (Johnson, 3/29/1985). Moreover, although there was no long-term solution for the selenium contamination problem in the Valley, Secretary Hodel admitted that “his unilateral closing of

Kesterson would have been tied up in court by farmers, possibly for years” (Johnson, 3/30/1985). A few days later, Secretary Hodel’s original proposition for the amendment of the Migratory law to allow for more flexibility in enforcement was denounced by Representative Miller: “Ludicrous. We need a cleanup, not a cover-up. I think the odds against weakening the law are zero and dropping fast” (Fogarty 1985).

With the June 30, 1986, deadline looming for the alternative runoff plan and with no resolution in place, the contamination intensified as pollutants in Kesterson migrated from the original site. Local and national discontent continued to strengthen as Kesterson became California’s latest worst environmental catastrophe. The deadline did not achieve its intended demands. By 1988 the Department of the Interior was forced to abandon the Kesterson waste water drainage project. The government would clean up the contamination, and Westlands farmers would incur the costs of doing so. Not surprisingly, the farmers never paid. By the mid-1990s, farmers sued the federal government, claiming government officials failed to uphold their obligation to provide a drainage system for their run-off water. The farmers stood firm on their defense that they were only responsible for following the orders issued to them by the BoR. As cases continue to travel slowly through the courts, the BoR remains under a federal court order to dispose the waste water. In 2007 the BoR announced a multi-billion dollar cleanup plan.

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The controversy in the Westlands Water District presents the challenge of weighing immediate economic gains against long-term environmental and human health protection. The legal settlement between the government and Westlands produced an up-for-grabs giveaway of money, land, and resources, while the issue of contamination at Kesterson refuge was sidelined and out-right ignored. Eventually, and to no avail, the existing drain was plugged and millions of dollars were spent exploring alternatives to rid the waste water of selenium. Government officials and industry leaders blamed one another, deflecting responsibility and fighting to exonerate themselves from paying the *real* price to clean up the mess they had created.

Nearly four decades since the disaster, the devastation that gripped Kesterson has become a widespread phenomenon for the very same place where large landowners received cheap federal subsidized water. Although Kesterson provided Americans in California with a valuable lesson to learn from, this history has been largely forgotten, reduced to a minor footnote in California history.

Devastation should come as no surprise considering that the use of chemical pesticides and fertilizers has been so prevalent and the affects to human and animal health so widely unknown. Tulare and Kings County (Kettleman City is located here) planned an amnesty day, a voluntary and anonymous event designed to encourage farmers to “turn in old toxic agricultural chemicals” (Griswold, 5/31/1989). Farmers, without “fines, penalties, or other repercussions,” turned in chemicals like DBCP and DDT that had for years been banned because of high levels of toxicity. Why the farmers in the Central Valley still had these illegal chemicals in the late 1980s was never questioned. The farmers claimed that getting rid of the toxics was expensive and they were “reluctant to fork over the nearly \$600 a waste hauler would charge to pick up the chemicals and ship them to a special incinerator” (ibid.). Fortunately for the farmers and the counties “Chemical Waste Management, Inc., [would] pick up the chemicals and truck them to

incinerators in Illinois” (ibid.). The company donated their time and equipment to help the farmers.

### **Chapter 3: In the Shadow of the Valley**

Today “progress” too often outruns planning, and the bulldozer’s work is done before the preservationist and the planner arrive on the scene. (Stewart L. Udall 1963)

A thousand antelope in Avenal! Elk grazing in large bands over the Kettleman Hills and plains. Ducks, cranes, and geese flying overhead in large flocks that resembled a cloud between earth and sun. Fantastic? No, just history. The history of the west side of Kings County before the white man came, before the cattle and sheep men appropriated the best grass lands, before oil was known or dreamed of. (Kings County Centennials Committee, 1948)

Timing is everything. In the 1920s, California had already begun to plunder its natural resources. Gold had long been discovered and mines were in operation, but it was the discovery of oil and a booming agricultural industry in the valley that ultimately transformed the state and encouraged further settlement. While the rest of the nation dealt with the trials and tribulations of the Great Depression, one small town in a rather small county, in a fairly new state, stimulated economic optimism and development. Throughout the nation, the number of unemployed Americans increased at an astonishing rate. The jobless and those without land to work, particularly those who fled the Dust Bowl, turned west for employment in the thriving agricultural fields of California. A legal guest worker program between the United States and Mexico, the Bracero Program, brought Mexican labor from south of the border to tend the bustling fields and orchards of California. As natural resources were excavated and local workers were replaced by cheaper Mexican labor, the power and influence of corporations began to grow in the state.

Visitors and settlers in the early twentieth century described Kings County, California, as “God’s Heaven on Earth” and christened it as “The Little Kingdom of Kings”. It was depicted in brochures as a tranquil, picture-perfect place of endless acres of rich flora and fauna, promising an exciting opportunity for a modern life in America. The small-town ambiance was promoted as an open and welcoming place for anyone to settle on. Though established in 1893, it actually wasn’t until the late 1920s that oil and natural gas were discovered in the Kettleman Hills and Kings County was put on the map overnight, increasing the county’s wealth and its strategic place in state and national political and economic affairs.

The discovery of oil by wildcatting and newspaper advertisements promoting settlement in the area created an oil boom not just in the state but throughout the nation. Yet unlike the gold rush, wildcatting required capital and investment in technology and resources. Journalist muckraker Ida Tarbell described wildcatting as “putting down experimental wells” and it was done “by following superstitions in locating wells, such as the witch-hazel stick, or the spiritualistic medium, quite as much as by studying the position of wells in existence and calculating how oil belts probably ran” (Tarbell 1904, p. 12). The federal government believed that the oil discovered in the Kettleman Hills was the single largest finding of petroleum and natural gas in all of the United States. Production peaked there in 1936 with over 29 million barrels of crude gasoline production making it one of the most productive fields in the country, so large that the federal government halted production to prevent depleting the reserve, and to

protect the supply, demand, price, and profit of oil. The government intended to hang on to it in order to safeguard naval bases in the case of any potential threats in the Pacific. By the 1930s, the demand for oil began increasing throughout the world. Although the government promoted conservation, growing industry increased the demand for petroleum.

That a prosperous location regarded as “God’s Heaven on Earth” became the host to the largest toxic waste dump in the western United States is disheartening. In July 2010, Marina\*, a longtime resident of Kings County, peered out her kitchen window, staring at a tree just beyond her front lawn. Without ever taking her eyes off the tree, she began to tell me:

“I still try to figure this out, but I end up feeling stuck. The dump was put here in Kettleman City because trash is equivalent to money, probably not so much to Jose who walks on the street, but for the corporations and the politicians—money talks. You don’t have to be an economist or even know your math to know this is how the world works. It’s what makes the world go round, that’s what my father always said to me. That’s why the toxic dump is located here and not in Beverly Hills. After all, this isn’t the same place where my folks and their folks settled. The town was abandoned once most of the white folks moved out and then the Latinos settled here. Was that the reason why? Because we are brown and not white? We work on the fields, we are relatively poor. But we are human too, like the generations before. There was a time when most of the state depended on us. If I’m not mistaken, there was so much of oil and natural gas when it was discovered that the government forced drillers to stop drilling it. But look at what we have now.

It’s like you have a balloon and while it has air in it, it looks so beautiful to see it sway from side to side with the wind. Natural as can be. But then all of a sudden it gets popped and then inside of the balloon, all you have is invisible poison. Honestly what hurts the most about all of this when I sit back on days like today and think about it, knowing all that I know, is that all I can feel is anger and the nerve, the audacity, of the criminal toxic waste that popped that balloon, well, well, it gets inside of me. I don’t want to have such a balloon filled with poison around my kids.”

### *Setting the Stage: Demographics and Geography*

(See Appendix 1 for map of Kettleman City)

Prior to its official formation as a county in California in 1893, Kings County was a part of Tulare County which before 1852 was part of Mariposa County. The county is located midway between San Francisco and Los Angeles, in the heart of the south central San Joaquin Valley. It covers approximately 1,391 square miles, most of which is part of the San Joaquin Valley with a southwest portion of the county covering the eastern slope of the California Coast Ranges. The majority of the county within the valley floor is bound by Fresno County on the

north and west, Tulare County on the east, and Kern County on the south—all of which make up the southern end of the San Joaquin Valley.

Major access routes to Kings County include Interstate 5 and state highway routes 198, 43 and 41. Freight railroad transport is served by the Burlington Northern Santa Fe Railroad (BNSF) and the Union Pacific (UP) Railroads. The San Joaquin Valley Railroad provides shorter-distance services between the cities of Huron and Visalia, while the Amtrak passenger train has stations in Hanford and Corcoran. The city of Hanford has a municipal public airport and there is also the Corcoran Airport in Corcoran which is open to general aviation. Other private airports and airstrips exist throughout the county, but these are primarily used for agriculture related crop dusters.

Most of the county is relatively flat though elevation ranges from 175 feet above sea level in the Tulare Lake Basin to 3,500 feet above sea level in the southwest along the Coast Ranges. The county is located in the Tulare Lake hydrologic region that makes up the most southern portion of the Central Valley. The rivers in this region—the Kings, Kaweah, Tule, and Kern—had all drained into the Tulare Lake. The lake had been very large during wet periods, but over time, levees were constructed and the 200,000 acre lakebed, as noted earlier, was reclaimed for agricultural purposes. The four rivers were diverted upstream and canals now transfer water to other locations.

The climate in Kings County can be classified as Mediterranean—dry and mild in the winter, dry and hot in the summer. Average rainfall rates of 7.6 inches occur primarily between the months of November and April. The average annual temperature is 62 degrees Fahrenheit, although it is not unusual for summer temperatures to reach well over 100 degrees Fahrenheit. On rare occasions, extremely low winter temperatures can fall into the teens. Fog is common during the winter months and settles for periods of up to two weeks. The dense Tule fog makes it nearly impossible to see beyond a few feet, and is blamed for causing deadly accidents.

In the summer of 2006, record heat throughout the Central Valley killed a significant number of dairy cattle. The United States Department of Agriculture (USDA) designated Kings County as a natural disaster area. The following year, in many of the same areas there was an unrelenting drought, coupled with a devastating freeze of crops. So that by the summer of 2007 emergencies were declared in two agricultural irrigation districts because pumps supplying water to the California Aqueduct had to be shut down when the water flows were diverted to sustain the Delta Smelt, a designated endangered species. A statewide drought was declared in the summer of 2008 and was lifted following the record breaking rainfall in the winter of 2009-2010.

Those who live in Kettleman City are familiar with earthquakes. The greatest threat to geologic disaster in Kings County is posed by the San Andreas Fault, located approximately four miles west of the Kings County-Monterey County boundary line. The San Andreas Fault marks the divide between the North American and the Pacific Tectonic Plates. The White Wolf Fault located south of the county near Arvin and Bakersfield may pose another geologic hazard for Kings County. In 1982 (5.4 quake) and 1983 (6.5 quake), two earthquakes occurred approximately 20 miles from the western border of the county. In 1985, Kettleman Hills endured an earthquake that measured 6.1 on the Richter scale, with an epicenter located four miles west of the county.

The county's economy is almost entirely dependent on the agricultural industry. The seasonal nature of agriculture employment leads to high unemployment rates. According to the 2010 *Kings County Comprehensive Economic Development Strategy* (in this report, only the four

incorporated cities are included in the analysis, Kettleman City was left out), the largest employment sectors included government (37%; state; local government—city, county, Indian tribal), agriculture (13%), and trade, transportation and utilities (12%). The annual average county unemployment rate was 14.6% in 2009, significantly higher than California’s 11.4% unemployment rate over the same period. From 2002 to 2009, the unemployment rate in Kings County averaged 125% to over 200% of California’s rate, a pattern consistent with agricultural-based economies. The current nationwide recession has heavily impacted various industries including agriculture, construction, and retail sales.

The county is considered one of the richest agricultural regions in the world. Agricultural products generated a gross production value of \$1.3 billion in 2009, representing a 25% decrease from 2008 values. Production in 2010, however, was \$1.72 billion, just short of the 2007 record of \$1.76 billion. Milk, cotton, and tomatoes account for more than half of the total value of Kings County agriculture, milk rebounded in 2010, generating \$556 million in revenue, a 35% increase over the \$411 million recorded in 2009. The Kings County Farm Bureau boasts that five counties—Tulare, Merced, Stanislaus, San Bernardino, and Kings—account for 67% of all milk produced in California. Fifteen creameries are located within 30 miles of Kings County (Official Hanford Visitor Guide 2011). Some of the largest corporations in the county include J.G. Boswell, Del Monte Food, Leprino Foods, the Tachi Palace Hotel and Casino, Shell Company, Chevron Corporation, and Chemical Waste Management Inc. According to the *Kings County Economic Development Corporation* (2010), Hanford, Lemoore, Avenal, and Corcoran are home to the largest employers in Kings County:

<b>COMPANY</b>	<b>BUSINESS DESCRIPTION</b>	<b>EMPLOYEES</b>
ADVENTIST HEALTH	General medical & surgical hospital	890
AVENAL STATE PRISON	Prison	1300
CORCORAN STATE PRISON	Prison	1500
CHEMICAL WASTE MANG. INC.	Toxic waste facility	120
CENTRAL VALLEY MEAT CO.	Slaughter house	270
CONAGRA FOODS INC.	Garlic dehydration	250
DEL MONTE FOOD	Tomato paste: cans, jars, salsa	1400
EXOPACK (multi-wall)	Hanford Flexible packaging - bags	181
INTERNATIONAL PAPER (Container Division)	Corrugated products	112
JG BOSWELL COMPANY	Production & processing of cotton & cottonseed, alfalfa, hay & vegetables	1200
KEENAN FARMS	Cattle feed from milk Bio-products	100

LEPRINO FOODS-EAST	Mozzarella cheese	291
LEPRINO FOODS-WEST	Mozzarella cheese	327
MARQUEZ BROTHERS	Cheese/milk products	306
MT. WHITNEY PACKING	Crop preparation services for market	3 Regular & 120 Seasonal
NETTO AG INC.	Custom harvesting	25 Regular & 111 seasonal
SK FOODS	Tomato paste: cans & jars	120-500 Seasonal
WARMERDAM PACKING	Crop preparation services for market	250

The Kings County Board of Supervisors is the governing body consisting of five board members, each representing one of the county’s five districts, elected to serve one four-year term. The official county website states: “Board members begin their terms at the first meeting in January, at which time they choose a new chairman. The Board has a status similar to a board of directors of a large corporation in that it sets policies and depends on the County Administrator, county officials, and department heads to carry out its wishes” (County of Kings Official website). Considering the county’s economic dependence on the agricultural sector, the Board of Supervisors has maintained close ties to the industry by serving their special interests.

The county has four incorporated cities (Hanford—the county seat, Avenal, Lemoore, Corcoran) and three unincorporated towns (Armona, Kettleman City, and Stratford). According to the United States Bureau of Census, the population of Kings County grew from 35,168 in 1940 to 49,954 in 1960, and 73,738 in 1980 and 152,982 in 2010. Almost half of the population is either White or Hispanic/Latino; the other half are African-Americans, Asians, multi-race, American Indian, and Pacific Islander (U.S. Census 2010). About 95% of the land in Kings County is under private ownership. The remaining land is administered by the city, county, or federal governments. The land administered by the federal government consists of the Lemoore Naval Air Station and land under the administration of the Bureau of Land Management.

Although most people are familiar with the Central Valley because of its agricultural industries, the region is also known as “Prison Valley” because several of the nation’s prisons are located within the county’s rural communities. Kings County hosts two prisons, neither of which has had any particular effect on development. Half of the population of Avenal in 2010, 15,505, was the prisoner population incarcerated at the Avenal State Prison. When someone says they are from Avenal, county residents often jokingly ask “What crime did you commit?” The prison is a low-medium security complex and was one of the first prisons in the state to be actively solicited by city residents and the county in the 1980s with the hope of bringing development to the area. The facility opened in 1987 on 640 acres of land, with a designated capacity of 2,320. Now, a prisoner population of over 6,500 inmates makes it one of the largest, most overcrowded prisons in the state. The number of staff at the facility is 1,517 and the prison has an annual budget of \$144 million (California Department of Corrections and Rehabilitation website). Avenal also hosts a municipal solid waste landfill operated by Waste Connections Inc., a full-service solid waste disposal company.

The city of Corcoran is known as the “farming capital of California.” It has some of the richest and largest farms in the world (particularly cotton) in the very same area that was once home to the Tulare Lake Basin. Here too, as in Avenal, a state prison doubles the city’s population. The California Substance Abuse Treatment Facility is also located here. The prison facility was built in 1988 and is one of the toughest and highest security facilities in the state. In 2010, the population for the city was 24,813 with a prison population exceeding 13,000 inmates.

In 1956, “President Eisenhower signed the Military Construction bill for \$81 million to build the Lemoore Naval Air Station. The site was near the old abandoned army air field about five miles west of Lemoore” (Kings County Centennial Committee 1992, p.184). Today the population of Lemoore is 24,531 with the station comprising nearly 3,000 active duty personnel and 4,000 family members, “offering sailors, Marines, and civilians a small hometown atmosphere of rural America” (ibid.). The station hosts the Navy’s entire West Coast fighter-attack capabilities and in 1998, Lemoore became home to the Navy’s newest-strike fighter aircraft, the F/A=18E/F Super Hornet. During 2001-2004, the Navy brought four new fleet squadron and many of their personnel work at the Aircraft Intermediate Maintenance Department, Strike Fighter Weapons School Pacific, and Center for Naval Aviation Technical Training Unit to Lemoore.

The World Health Organization (WHO) issued a recent report that measured air quality in 1,100 cities (capital cities and cities with more than 100,000 residents) across 91 countries. Of the 375 U.S. cities included in the list, 36 exceed the air quality standard set by WHO of twenty micrograms of particulates per cubic meter, on average. Of the ten worst performing cities in the U.S., five are located in the Central Valley (Berg 2011). According to Keith Winkler, Director of Kings County Environmental Health Services, “It’s no real surprise that the San Joaquin Valley is one of the nation’s smoggiest regions and home to some of the highest childhood asthma rates. Consider the geographical location of the county within the valley, right smack down in agriculture country, waste, industries, major highways and interstate. There are a lot of reasons for this problem” (personal communication). The *Kings County Community Health Status Report 2008-2009* cites the following:

- Approximately 85% of pregnancies are unintended in Kings County.
- The County has one of the highest levels of teen pregnancies in the state.
- According to 2005 data, the prevalence rate of asthma in children 17 and under in the County is 24.7% –the the second highest in the state.
- Obesity and diabetes is a common condition that is responsible for a significant number of deaths and disabilities in the County. There are more than 11,000 residents living with diabetes. The County ranks first for deaths related to diabetes among eight valley counties.
- Valley Fever is a disease caused by a soil-growing fungus that becomes infectious when a person inhales the spores, though it cannot be spread from person to person, and can be fatal. This is a growing problem in the County, especially among 20-54 year olds, with men and African Americans being more disproportionately affected.

The unincorporated communities in the county lack basic infrastructure, services, and amenities that are commonly associated with healthy living. Obesity in Kings County and the San Joaquin Valley has reached epidemic proportions. Adult obesity is defined as a Body Mass Index (BMI)

of 30 or higher. The 2003 *California Health Interview Survey* (CHIS) revealed that 16.1% of adolescents, 67.5% of non-senior adults, and 59.2% of seniors were considered overweight and obese in Kings County (Jhawar and Wallace 2005) making them vulnerable not only to diabetes but also to high blood pressure, high blood lipids, asthma, sleep apnea, and orthopedic problems.

The county suffers from lower educational attainment rates than the rest of the state as a whole. Thirty percent of Kings County residents have not graduated from high school.

### ***Kingdom of Kings***

Kings County was named after the Kings River, considered the region's most precious resource that sustains the agricultural economy. Early accounts of the region described it as a desert with little value except for water streams and the naturally watered areas along the Kings River (recall, the Tulare Lake). On January 6, 1805, Lieutenant Gabriel Moraga leading the first Spanish expedition to the Central Valley region, noted in his diary that on that particular day, a previously unknown stream of water was discovered and christened in praise of the Feast of the Epiphany. The name served as a tribute to the biblical story of the "Three Wise Men" or the "Three Kings from the East," a story mentioned in the Gospel of Matthew wherein a group of men from the East, upon hearing of the birth of Jesus Christ, followed the star of Bethlehem to find Christ and worship him. They came bearing gifts of gold, frankincense, and myrrh. Though the Kings River was named the Rio de los Santos Reyes (River of the Holy Kings) (Farquhar 1926), the divine designation did nothing to boost the first impression of most travelers and settlers who came to the area later. In 1850, Lieutenant George H. Derby, a U.S. Army topographical engineer who surveyed the southern region of the San Joaquin Valley, described the land as "barren, decomposed, (with) no trace of vegetation but a few straggling artemisias, scorpions, centipedes and a small but extremely poisonous rattlesnake about 18 inches long which, with the gophers and ground rats, are the only denizens of this unpleasant and uninhabited spot" (Gayton 1948).

One enthusiast was Pastor Edward Martinus Stensrud of the Trinity English Evangelical Lutheran Church, who arrived in California at the end of the nineteenth century. In response to inquiries about land and agricultural conditions by American Lutherans Stensrud researched and developed a nearly 300 page document (1916) to provide comprehensive records of the church in California and its leaders and followers. Believing that it was his "Christian duty" to document the resources and development of the state and its counties he intended to "give authentic information regarding the potentialities of soil and climate in California...to benefit those of our brethren in other parts who contemplate going out in search of a home in this distant land" (Stensrud, preface). He likened the potential of the region to the Islamic pilgrimage to Mecca, and encouraged Lutheran followers to migrate and build communities with a Biblical credence:

There is but one California, and it is rapidly becoming the "Mecca" of countless thousands, where they can regain their lost health, delve in the soil and occupy the position that God intended they should, surrounded by comforts and reaping the rewards of honest labor intelligently applied. Our beloved church and the institutions we love so dearly have plenty of room for growth in this great expanse

of the West, where God had, in His wisdom, seen fit to give His people an almost ideal condition for their advancement and happiness. If this great State can be populated with a good, wide-awake, God-fearing and Christian people, our children, and our children's children can here build their homes where for generations to come, surrounded by kindred spirits and institutions, they can become a power in the land. (pp. 111, 116, 261)

By 1911, the *California Blue Book* took note of developments in Kings County: "It is one of the smallest, one of the youngest, but withal one of the richest and most resourceful counties of the State...the days of pioneering are long since past and the county is in the highest state of cultivation throughout most of the area. Climatic and other conditions are such that failure of crops is almost an impossibility" (Jordan 1913, p.651).

A 1920s brochure that encouraged migration to the area is one of the earliest records to capture the county's pulse at the time (see Appendix 2 for examples). Similar brochures were printed throughout the state, describing counties, their resources, and their potential for development alongside the nation's economy. These documents sought to promote settlement and development but also emphasized religious values, "a spirit of progress", and appealed to those who desired living a "modern" lifestyle. *The Little Kingdom of Kings Brochure* described the opportunities in glowing terms: "Kings County, or the Little Kingdom of Kings, invites you to become a part of it, where a livelihood may be had with sufficient time to enjoy your home and some of the finest things of life" (p.14) and

"Little Kingdom of Kings", "the great inland empire", "one of the favored spots of the Golden State", "the richest and most productive fruit, dairying, and general farming districts" and the people as "men with a vision, who looked to the future, could see the possibilities of a home, the great bulwark of our American nation," "the residents are a prosperous and happy folk, enjoying themselves to the utmost" "one person out of every five owns an automobile, which means that practically every family has a machine. (pp. 2,14)

Kings County was to be a sacred place, chosen place with a loyal people who believed in the land and its potential: "The same spirit which guided these pioneers to their chosen land (the Spirit of Progress) manifested itself in the formation of Kings County nearly a third of a century ago, at which time the county made its bow to its sister counties of the Golden State, appearing on the stage of progress on its own merits" (ibid., p. 2).

The brochure also emphasized the location and accessibility of the county in relationship to other parts of the state, further appealing to peoples' desire for the most ideal, picture-perfect, place to live:

Only a four-hour automobile drive to the westward takes one to the sandy beaches of the Pacific Ocean, while in still less time one can, by traveling to the eastward, reach the snow-capped peaks of the High Sierra Nevadas...From these mountain resorts the more venturesome may take to the saddle-horse or pack-mule and lose themselves in the great wilds, scaling Mt. Whitney, the highest mountain in the United States, or exploring Kern River Canyon, one of the wonders of the Pacific.

Here, the man with gun or rod may enjoy himself, the forests abounding with game such as quail, grouse, deer and brown and black bears, while the streams of the Sierra Nevadas fairly teem with all kinds of fish, such as bass, rainbow, and brook trout (pp. 2, 14).

Pastor Stensrud's report on the region's transformation was similarly glowing:

The spirit of the West is one of optimism and progress... it is this spirit that has made Southern California accomplish the wonders it has done in changing what was practically a desert waste into thousands of acres of beautiful golden orange and lemon groves... nowhere has this spirit of progress been more manifest than in the great central valleys of the State. Cities, populous and great, attractive and prosperous have sprung up, broad vistas of fertile fields have been cultivated, and blossoming orchards have been planted whose yields are prolific beyond comparison (1916, p. 111).

The Central Valley was a place comparable to some other parts of the world and so fertile and beautiful that it seemed to have God-like significance:

The deciduous varieties of fruits common to northern, semi-frigid climates grow side by side with such subtropical varieties as the orange, grape fruit, and lemon, the fig of Smyrna and the olive of Palestine. Vines from Spain, France and Italy find a home environment together with those native to our northern states. Cereal crops of Egypt and our native Indian corn thrive in adjoining fields." (p. 123)

### ***Spoiling the Landscape in Just a Matter of Time***

When California was admitted to the Union in 1850, most of the land in the state became public domain under the ownership of the federal government and the jurisdiction of the General Land Office. To encourage settlement of the West the federal government in 1862 passed the Homestead Act, which quickly transferred the land from the public domain into private hands. The government also encouraged the rapid construction of the railroads by offering large tracts of land to railroad companies. By 1871, the Swamp and Overflow Land Act of 1850 had turned land over from the federal to the California state government, but it was the state that permitted the land to become concentrated in the hands of a few owners.

Development by the mid-nineteenth century brought people from all over the country to the newly formed state in hot pursuit of gold. Around this time, the Central Valley was mainly a vast expanse of bare land that people crossed en route to the Sierra Nevada. In his book *Vanishing Landscapes* (1981), geographer William L. Preston documented what he called the "colonization of the land," which shifted the settlement patterns and land use in the former Tulare Lake Basin. The period between 1857 through 1871 "brought the introduction of nearly all of the processes and general modes of organization of land and life that would ultimately direct the intensive settlement of the basin by American farmers and townspeople." (ibid., p.

118) Preston believed that humans were responsible for the rapid devastation and dominance of both the natural ecosystem and cultural landscape by “reordering its natural landscapes into cultural landscapes of geometrical forms”: “Native flora were cleared away and replaced with crops in rectangular fields; native animals were killed and replaced by tame livestock; standing water was drained, and flowing water was rechanneled into geometrically arranged canals.” (ibid.)

As more people migrated to California, especially during the period of the Gold Rush, the demand for food increased, and Preston notes how the rapid urbanization of the San Francisco Bay Area and the Sacramento-San Joaquin Delta further intensified settlement into the region. Many of the former gold miners tried ranching to supply the increasing demand for food. Much of the idle land in the valley was perfect for grazing, and with bands of sheep and cattle to graze the fertile plains, herdsmen arrived in the region by the late 1850s and began buying large tracts of land. However, “the ranchers had been encouraged by a healthy market to increase their herds without regard for the capacity of the rangelands or the quality of the stock, and large numbers of cattle starved to death during the droughts of the late 1850s and 1860s.” (ibid., p. 89) What would otherwise be considered a natural disaster became an opportunity for farmers to capitalize on drought and floods for increased production of the land. After the period of flooding, farmers “discovered that soils that supported good stands of introduced pasture grasses would also grow wheat and barley, and soon an influx of hopeful homesteaders arrived” (ibid.). Many of the herdsmen left the region during these years of drought and flooding, and were replaced by homesteaders.

Soon, social tensions began to flare between ranchers and farmers. The settlers were upset with the animals roaming freely on the land and destroying their crops. The tension eventually forced the California legislature to take action in 1874 by passing the “No-Fence” law. In 1850 the new state had passed the Trespass Act which required farmers to build fences to protect their crops. These poorly constructed fences then became the focus of disputes regarding responsibility for damages caused by the animals. In 1874 a “No-Fence” law retracted the legislation of 1850, making ranchers solely responsible for keeping their animals in. The cost of fence building ultimately led to the demise of the cattle business throughout the state, shifting the development of the San Joaquin Valley from cattle to grain farming, and eventually to fruit and crop fields (Ludeke 1980). In 1880, social tensions peaked during the Mussel Slough Tragedy, a gun battle between federal Marshals and settlers in which seven men died and eight were injured. The dispute centered on issues of land, the settlers questioning the prices the railroad company had set on the land; this in time led to land reform regarding land railroad companies owned and the settlement policies of the state.

The railroad in the 1870s had further stimulated settlement in the region, but as settlement increased, the isolated character of the valley that had attracted people in the first place began to change. Rains, droughts, and frost elsewhere in the world helped to create a wheat farming bonanza. The railroad capitalized on this opportunity. From the mid-1870s to the 1890s, California was the premier wheat state in all of the Union (Preston 1981, p. 130). Charles Nordhoff, in his book for travelers and settlers in California (1872) declared, “Truth is, that much of this great valley is so fit for a garden that it is wasteful to use it for a cattle or sheep range, or for field crop. Wherever the farmer can have water for irrigation, the careful culture of small tracts will pay, for many years to come, extraordinary profits” (p. 200).

The railroad connected the valley and its farmers to national trade and large markets with major cities like San Francisco. The railroads increased land taxes and enabled an exchange of commodities between regions of the country that, for much would not have been possible or would have taken so much more time to do. Though the price for wool was dwindling around this time, sheep raising developed into a lucrative commodity. Unlike cattle, sheep survived during the dry year. By 1897, the development of the second railroad company, the San Francisco and San Joaquin Valley Railroads, increased demand for sheep throughout the country. The three industries that dominated Kings County included cattle-beef, hog-raising, and sheep herding and benefited from the railroad expansion:

Modern transportation has placed Chicago and other eastern markets at our door. Special trains, making passenger time, leave Kings County on Thursday and are in Chicago on Tuesday of the following week, thus making it possible for Easter Sunday dinners to feast upon spring roast lamb which roamed the grass carpeted plains of Kings County less than 2 weeks before. Each season approximately 40,000 Kings County spring lambs are shipped, topping the markets throughout the United States. (The Little Kingdom of Kings Brochure, p. 10)

Railroads also introduced a new era of technological advancement in Kings County. Large machines brought in by rail made farming more efficient and altered farming methods and the relationship between farmers and their land. Farmers became dependent on large-scale, far-distant, urban markets that required mass production of produce (Saunders 1960). In his epic novel *Grapes of Wrath* (1939) John Steinbeck describes how farmers groomed themselves into businessmen: “Crops were reckoned in dollars, and the land was valued by principal plus interest, and crops were bought and sold before they were planted. Then crop failure, drought, and flood were no longer little deaths within life, but simple losses of money...they were no longer farmers at all, but little shopkeepers of crops, little manufacturers who must sell before they can make” (p. 316).

Farmers intensively cultivated their most profitable crops. Preston observed that “as the agricultural frontier expanded, grain (like ranching before it) was pushed from recent alluvial lands by more gainful land uses, and stock raising was in turn pushed farther toward the margins of the basin” (1981, p. 135). Large tracts of land proved to be some of the best and most lucrative land in all the country. Farmers shifted from dry land grains to more diversified orchards, vineyards, and alfalfa fields. By the beginning of the twentieth century, as Preston shows, there was a radical transformation of the region by human design with little long-term consideration to the natural environment:

By 1890, settlement had resulted in an overall population density equal to that achieved by the Yokuts. Yokut population, however, had increased mostly through cultural adaptation to the environment, whereas American expansion was based upon conquest of the natural environment. Settlement proceeded not as an outgrowth of the discovery of the basin’s natural capabilities, but as a product of settlers’ tireless efforts to divorce their lives and their livelihoods from natural processes and controls. (p. 160)

As farms expanded, a farming boom transpired. Steinbeck describes what happened: “As time went on, the businessmen had the farms, and the farms grew larger, there were fewer of them. And all the time the farms grew larger and the owners fewer. And there were pitifully few farmers on the land anymore...They no longer worked on their farms. They farmed on paper, and they forgot the land, the smell, the feel of it, and remembered only that they gained and lost by it” (pp. 316, 317).

Kings County, at the turn of the century, was one of the most transformed landscapes in the country. The family dairy cow was still needed, but the dairy and creamery sector was growing. Leprino Foods in the city of Lemoore remains “one of the important customers of county dairymen. Today’s Leprino’s quality control lab assures pizza makers all over the country of cheese that is up to standard-or-above” (Kings County Centennial Committee 1992, p. 105). Later, in 1923, the introduction of cotton as a crop brought about the largest development in agriculture, using the land in the lake bed of the former Tulare Lake. But as the east side of the Tulare Lake region thrived, the west side of the lake, where Kettleman City is located, lagged behind. Most of the land was taken up under the Swamp and Overflow Land Act. The soil was thought to be underproductive and because it was classified as flood land and covered by tule marshes it required a constant irrigated water supply. The state government which had acquired ownership of the land from the federal government under the Act, allowed the land to be monopolized. Preston noted the significance of the 1920s as a turning point for this part of the region:

As the west side communities wrestled with these problems, new developments helped sustain them and promised a better future: artesian wells in the Alpaugh area, which produced large amounts of natural gas, were brought into commercial production by 1920, and oil deposits were found to underlie portions of the western basin. As the remaining vast, un-subdivided tracts of land on the west side began to attract the attention of farm corporations, west side settlements gradually came to serve as company towns of sorts. (p. 167)

### ***The Sleeping Giant is Awake***

One of the pioneer sheep and cattle herders who grazed his animals in Kings County in the boom years of the 1850s was a young man named Dave Kettelman who was born in the Kingdom of Prussia in 1826. To avoid being forced into military service, he emigrated to America in 1838. He arrived in New York like so many other immigrants at the time and eventually journeyed westward in search of gold. He left “New York in April of 1849, on the vessel Panama, rounded the perilous Cape Horn on the 149 day voyage and arrived in San Francisco on August 3, 1849” (O. Kettelman 1971). Kettelman went to the gold mines, but was disappointed, and left. In *Black Gold in the Joaquin* (1949) Frank Latta describes how Kettelman formed a partnership with S.V. and James P. Tredway to operate numerous stores and transport supplies and equipment from Stockton to the mine fields; by 1852, the partners had made enough money to buy a 740 acre ranch west of Lodi and stock to graze the land. Their partnership produced a successful business of raising, buying, and selling cattle, and “within the

next few years made them the wealthiest cattle barons of their time in California” (O. Kettelman 1971). The increasing migration to the state produced a demand for more food and so “many miners, such as the Mehrtens, moved down into the San Joaquin Valley to produce grain for bread, hogs for pork, and cattle for beef to supply the need” (ibid.). Recognizing the demand for additional food, Kettelman and his partners traveled east, bought cattle and horses, and hired other pioneers to help them drive the new stock back to California. The cattle were left to graze the rich plains of the Central Valley that were covered “with the finest possible strand of dry alfileria, remaining from the extremely wet winter of 1852. The cattle waxed fat on the plains and the surrounding hills, both to the west and the east. Each of the creeks to the west had flowed to the plains all summer, and here was an abundance of water” (Latta, pp. 333-334). For twelve years they sold cattle and hogs around the area, often shipping them by boat to potential customers in San Francisco and Benicia using the Tulare Lake, and sold grains kept in a warehouse in Stockton. As their wealth increased, they bought more land. By the 1860s, Kettelman and his partners owned about 400 acres throughout the San Joaquin and Fresno counties. When the San Joaquin River flooded in 1871, Kettelman and his wife escaped by boat and settled in Lodi near Stockton. The partnership between the men eventually fell apart and their assets in mining, land, cattle, and butcher shops that supplied meat from their ranches were divided.

John Chedister was left in charge of the cattle stock. One day government surveyors visited the area and asked Chedister the name of the cattle ranch. He “told them it was Kettelman’s. They wrote the name in a notebook, and that is quite likely the manner in which the name was preserved to that locality” (Latta, p.334). The city, albeit misspelled, was named after David Kettelman. In the early 1900s, the Kettleman Hills served as a crossing for people who would travel from Lemoore to Kettleman City by ferry. Later Kettleman Lane, a twelve mile long road south of Lodi, intersecting the 99 freeway (it was made a state highway in 1942) was named after him.

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Just ten years after the beginning of the Gold Rush, petroleum was discovered on the other side of the country, in Titusville, Pennsylvania. The discovery of oil and natural gas in the region—black gold—produced hysteria very similar to the Gold Rush. Between 1890 and 1898, oil production in the United States increased by 1,400%, growing an additional 750% in the following five years (Quam-Wickham 1994, p. 8). By 1900, California was producing about 6% of U.S. oil. In 1902, John D. Rockefeller’s Standard Oil Company completed a 280-mile pipeline from the Bakersfield wells to a deep-water port in Richmond, California, that later became one of the world’s largest refineries. By 1911, California produced an astounding 63% of the nation’s petroleum. In his novel *Oil!* (1926) Upton Sinclair describes the commotion:

Suddenly the news had spread, in an explosion of excitement: an oil derrick! A deputation called upon the owner, to find out what it meant. It was pure “wild-cattling”, he assured them; he happened to have a hundred thousand dollars to play with, and this was his idea of play...The bargain signs came down from the cabbage fields, and were replaced by “Oil Lot for Sale”...The whole hill began to blossom with advertisements, and real estate agents swarmed to the “field”. A

magic word now—no longer cabbage field or sugar-beet field, but “*the field!*” Speculators set themselves up in tents, or did business from automobiles drawn up by the roadside, with canvas signs on them. There was coming and going all day long, and crowds of people gathered to stare up at the derrick, and listen to the monotonous grinding of the heavy drill that went round and round all day.... But suddenly there was no possibility of secrecy; literally all the world knew—for telegraph and cable carried the news to the farthest corners of civilization...the inside of the earth seemed to burst out through that hold; a roaring and rushing, as Niagara, and a black column shot up to the air, two hundred feet, two hundred and fifty—no one could say for sure—and came thundering down to earth as a mass of thick, black, slimy, slippery fluid. It hurled tools and other heavy objects this way and that, so the men had to run for their lives. It filled the sump-hole, and poured over, like a sauce-pan boiling too fast, and went streaming down the hillside. ... Black Gold! (pp. 24-25)

The geology of the oil discovered in the Kettleman Hills was divided into three areas. The Kettleman north dome is in the northernmost part of the hills, paralleling the San Andreas Fault line in the west, where the hills divide the San Joaquin Valley to the east from the much smaller Kettleman plain to the west. The range consists of two extended domes—the north dome and the middle dome; a part of the middle dome is often called the south dome (Gester and Galloway 1933). The north dome is considered one of the longest Californian oil fields. Northwest of the Kettleman Hills is the large Coalinga oil field. Southeast of the Kettleman Hills are the Lost Hills, Cymric, McKittrick, N. Belridge, S. Belridge, Elk Hills, Buena Vista, and, the largest, the Midway-Sunset field in the southwestern corner of the San Joaquin Valley.

During the process of drilling, after the Tulare Lake had dried up from diverting water for irrigation, wells for water and oil were discovered. Henry Oeschner, a professor who was vigilantly studying the geology of the area, believed that an abundance of oil lay below the surface of the Tulare Lake. Brown and Richmond in their *History of Kings County* (1940) describe how “Oeschner probed about in the sea shells that were exposed in strata of sandstone that had been thrust to the surface by some mighty cataclysm of eons past and determined that the area was potentially a rich oil field. He acquired holdings there through filings under the Placer Act of February 11, 1897, which permitted public acquisition of the public domain that could be proven valuable for petroleum, but was never able to finance or promote a consistent prospecting venture” (p. 125).

Though Oeschner unsuccessfully tapped the oil in this region, others shared his appetite for black gold. The Kettleman Hills, “for many years deemed worthless,” became during that period “the burial ground of the hopes and resources of some of California’s hardy drilling pioneers” (Beebe 1932). The first well was drilled in the Kettleman Hills around 1900. A dozen more drills followed but none produced much oil because the wells were relatively shallow and the oil-bearing strata could not be reached (*ibid.*). Many of these initial attempts proved unproductive because the soil stratum in the area required expensive machinery that could

penetrate below 1,000 feet or more. This shortfall led to debt, wasted time, and the agony of failing to tap into the black gold and its riches that lay hidden deep within the earth.

In March 21, 1927, the Milham Exploration Company set out to work on their Elliott No.1 well. In desperate search to strike it big with oil, the men worked throughout the summer in the hot valley conditions. Their efforts paid off when on October 5, 1928, the Milham Exploration Company and their Elliott No. 1 well in the Kettleman Hills area became the first major oil-producing well. The *Hanford Journal* (10/7/1928), the local newspaper, printed a story in its Sunday morning edition with the headline: “Wildcat Well in Kings is Big Gas Producer: Twenty Million Feet of Gas Daily Roars from Exploration Company’s Well in the Kettleman Hills: Considerable Excitement over Strike; Much Gasoline in Product.” The article went on to describe the extraordinary development:

There was not a little excitement yesterday among local people who are interested in Kings County oil projects, when it became known that the exploration well of the Milham company in Kettleman Hills had come in as a giant gasser with a flow estimated at a probable twenty million cubic feet a day. Latest reports received in Hanford were that efforts to control the gas flow had met no success.... Carl Milligan, drilling superintendent, immediately ordered all fire and electricity turned off to prevent the gasser from taking fire. All automobiles of employees today were being halted half a mile from the well. No flashlights or cigarettes were permitted within half a mile.

The significance of the oil discovery was reported in nearly every major news source in the country. The *New York Times* covered the story: “Within the past twenty-four hours the Kettleman well has developed into one of the most important discoveries in California in recent years. It is flowing 100,000,000 cubic feet of gas and running more than 1,000 barrels of high gravity oil daily” (10/10/1928).

The *Los Angeles Times* reported: “With a roar that can be heard for fifteen miles and spouting sand that was visible for approximately twenty miles today, the Milham Exploration Company’s well which blew in a gasser...there is but a very small quantity of sand in the discharge, which is going high over the top of the derrick, and the wind is carrying the liquid content for half a mile down the canyon in a steady cloud” (10/7/1928).

On October 12, 1928, a week after its debut, the *Hanford Journal* reported that the oil coming out of the well could not be stopped: “The giant gasser of the Milham Oil company. [It] continues unharnessed, still spouting gas at the rate of 30 million feet per day.” Four days later the headline read “Kings County’s Great Gas Well Continues to Flow Unchecked” stating “the phenomenal Elliott No. 1 gasser of the Milham Co., which is attracting attention of all oil men to the Kettleman Hills area of Kings and Fresno counties, still flows unchecked.” Though the gasser remained uncontrollable, the report on the following day was: “Many lease scouts are chasing around with options for the surrounding lands. Rumors of big bonuses, as high as \$1,500 per acre, are heard. [The] offers are known to have been made, and are being considered, on acreages a short distance from the gasser at \$1,000 per acre and one-eighth royalty” (ibid., 10/17/1928). Nine months later, the gasser continued to spew out uncontrollable amounts of oil. By the following May, the field “was established as the busiest spot in the West.” “Never had a California oil field called for six-figure expenditures such as Kettleman demanded of those who

would capitalize its vast treasure house of black gold. The whistling fumes of the discovery well as they steamed almost pure gasoline and millions of cubic feet of ‘wet’ gas into the atmosphere daily challenged the best brains and the most modern machinery of the oil industry not only to harness them but also to tap the reservoir from which they flowed in costly abandon.” (Brown and Richmond, pp. 125-126)

The *San Francisco Chronicle* explained that the oil field was “considered by oil producers as among the greatest finds in the history of the world. Its crude product averages 90% gasoline and one discovery well has been producing 71,000,000 cubic feet of gas a day, or more than the entire gas consumption of Northern California” (8/6/1929). Brown and Richmond described the sleeping giant that was to bring riches to the region: “Two miles deep in the rocky caverns under Kettleman Hills a sleeping giant felt the sting of probing steel, arose grumblingly and struck in fury at the intruder who dared to disturb his sleep of centuries. Screaming and spewing fumes, he routed the crew of puny men who had guided their own tamed steel monster into his vitals and roared out to the world the golden secret they had guarded assiduously for weeks. Thus Kettleman Hills giant was loosed on the world, to make men rich and happy or poor and covetous” (p. 123).

The comment of Jas Beebe, a reporter for the *Hanford Journal*: For over twenty years the [Kettleman Hills was] the graveyard of the hopes of those who prospect for oil in unproven fields, has developed into one of the most, if not the most unique fields in the world. The sleeping giant of Kettleman Hills has awakened, but has been chained by voluntary curtailment. (1932)

### ***Vital to National Defense: Kettleman Hills is the Richest Oil Field Ever Found in This Country***

Wildcatting in California, specifically in the San Joaquin Valley, the Los Angeles basin, and the coastal waters off Southern California, encouraged a chaotic escalation in oil drilling because the oil was trapped in “large reserves underneath subsurface geological structures, oil pools freely crossed surfaced property lines. This boundary-crossing mobility disrupted management strategies and intensified conflicts over ownership between neighboring oil producers” (Sabin 2005, pp. 4-5). Once oil was discovered by drillers in a particular area, other drillers quickly rushed to drill and capitalize on the discovery.

Because much of the Kettleman Hills was owned by the federal government and oil giant Standard Oil Company (initially owned by the Southern Pacific Railroad Company, the company owned at this time approximately half of the oil field), wildcatting presented many problems. The federal government had distributed public domain lands according to nineteenth century laws to stimulate economic growth and private ownership of land. Private ownership created a competitive race to drill for oil multiple fields to capture as much of the common oil pool as possible. This competition created a boom-to-bust cycle in the oil market. The excessive overproduction of oil saturated the market, failing to account for demand and driving its price down. In 1926 (before the Kettleman Hills boom) John Ise, an economics professor, wrote cautiously about the rapid development of the oil industry in California:

The rapid exploitation of all these fields raised the production of the state from a little over two and a half million barrels in 1899 to over 24 million barrels in 1903—nearly 1,000 percent in four years. Such a prodigious increase was disastrous in many ways. The price of oil declined, before the close of 1903, to 20 cents a barrel, and even as low as 10 cents. This unfortunate cheapness of oil, of course, led to very great waste, for oil was hardly worth saving. At the close of 1904, 3,500,000 barrels were stored in earthen reservoirs or sumps, and the loss through seepage and evaporation was very heavy. (Ise, p. 89)

California generated nationwide boom-to-bust cycles that fluctuated the price per barrel of oil so much that it ruined investments and bankrupted companies. When oil was discovered it often produced gushers or gas blowouts that lasted anywhere from days and weeks to years on end. Lax regulatory oil standards impacted not only the market, but air, land, and water quality. These environmental and economic concerns drew a lot of attention from the federal government.

Gray Brechin, writing on this period, describes how, although consumption for oil was steadily increasing throughout the world, it was difficult to keep up with “the swelling supply from the wellheads, which drove the price of oil down to a mere sixty cents per barrel in 1906” (2006, p. 261). This overproduction of oil needed new markets so that oil could retain its value and not go to waste. By the 1930s, some new markets had emerged for California oil, asphalt, and cement with the construction of roads and availability of automobiles and the surge in highways and cars developed industries throughout the United States and helped link communities, resources, and businesses. The addition of petroleum by-products also created vast, lucrative outlets that transformed the American way of life. And while new markets were developed for the overproduction of oil, its reserves fostered a political and economic edge.

In *Crude Politics* (2005) historian Paul Sabin examined how changes in state and federal political, legal, and economic interests impacted the regulations of the California oil market. The San Joaquin Valley was thought to have some of the richest oil reserves in the country, but because these oil rich fields lay beneath federal public lands, the government was under intense pressure to deregulate policy so that private lease holders could capitalize on the opportunity to profit from the production of oil and oil waste.

Within six months after the Kettleman Hills discovery, government officials, including George Otis Smith, chief of the U.S. Geological Survey, and Secretary of the Interior Ray Lyman Wilbur, “wanted to figure out how the federal government could help resolve the problem of split ownership of oil pools, which caused neighboring operators to maximize their share of production... and Kettleman Hills offered an unique opportunity to exercise conservation leadership” (Sabin 2005, p. 124). In order to regulate the oil industry in California and its unrestricted production of oil, rapid depletion of oil reserves and oil waste, the federal government needed to swiftly control private owners and big businesses. Sabin explained that:

Within the framework of property law and antitrust regulation, industry, state, and federal leaders searched for ways to control production. Their efforts ranged from voluntary cutbacks to state-imposed natural gas conservation and state and federal production mandates. Although oil operators fought over which form of legal or economic coercion to embrace, practically no one in or out of the oil industry

called for a “free market” solution that would leave oil prices solely to the forces of supply and demand.” (pp. 4-5)

By mid-1929, Smith, chief of the U.S. Geological Survey, meeting with local drillers in the region, described Kettleman as a “menace to the country’s oil situation” that “occupied a larger position on the oil horizon than any other field. If drilling was allowed to go on unrestricted [it] could well become a second Seminole” (SFC 4/30/1929). The federal government sought to do everything they could to prevent Kettleman Hills from turning into a Seminole, Oklahoma, the place where in 1923 and 1924, oil was discovered. On July 16, 1926, the Independent Oil and Gas Company’s No 1 Fixico created an oil bonanza never before seen in the history of the country. It was said that the Seminole oilfields would become the largest supplier of oil in the world, and at its peak it accounted for 2.6% of the world’s oil production. It also created havoc in the oil markets, resulting in a price collapse to as low as fifteen cents a barrel. The government had acted quickly to bring the field under control.

In the Kettleman Hills, the government sought a voluntary curtailment on the part of the oil companies because it did not have the authority to dictate oil production “practices, shut down oil wells in the name of conservation, or regulate gas production. These police powers rested with the state government alone in the late 1920s” (Sabin, p. 123). In May 1929, the state director overseeing the situation issued an order to curtail California crude production by 10% (SFC 5/1/1929). By the end of the month, the *Chronicle* reported that: “Reaching of a satisfactory conservation program at Kettleman Hills [was] one of the major problems confronting the California oil industry” (5/30/1929). After several weeks of negotiation, the government and six oil companies who held permits on the government-owned middle dome in Kettleman, agreed to curtail drilling and “defer development” (6/6/1929). The government sought conservation agreements with the other two domes as well. On a visit to the region in June 1929, Secretary Wilbur declared that “the Department of the Interior hopes to make producers see the wastefulness of drilling when oil is not needed. It is all the oil and gas we are ever going to get, and yet in some fields wastage runs as high as 85%. Gas is allowed to run out, and only 15% of the oil is ever brought to the surface” (SFC 6/25/1929). The oil is considered waste when it is brought to the surface out of control, when it evaporates into the air, and when fierce competition creates a rush to pump the oil. Another contentious issue for the government was the substantial amount of natural gas found in the region. Brown and Richmond (1940) explained the situation:

The heavy gas yield of the field necessitated early development of absorption plants, storage reservoirs, etc., and the eventual building of hundreds of miles of pipe lines for the delivery of natural gas, from which the gasoline line had been “squeezed,” to the urban centers of the valley, thence to the metropolitan districts of the San Francisco bay area and to the Sacramento valley. These developments were rushed at an amazing pace and completed before the citizens of the districts they were to serve had become aware of the innovations they brought... every cubic foot of gas that belched from the field was saturated with gasoline. (pp. 126-127)

The Dudley Ridge, as it was known, located west and southwest of the Kettleman Hills, for some time at least, was one of the only known natural gas areas not entirely owned by major companies. These companies controlled approximately 85% of the total quantity of natural gas available in the United States, extending its reach beyond the valley into the San Francisco Bay Area, supplying more than six times the energy produced by the electric power and light industry (Beebe 1932).

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The government, concerned about the waste of “black gold” from unregulated and competitive oil drilling that threatened to deplete oil fields without even capturing the majority of the valuable oil, acted quickly, drafting a voluntary agreement plan among the drillers to eliminate the surplus by reducing the supply to meet current demand: “The California measure [was] intended to prevent the wastage of the gas which ordinarily drives petroleum to the surface” (SFC 8/4/1929). A plan was drawn whereby the north dome would control the Elliott No. 1 well, allowing at least three wells in the area to decrease gas pressure with the Elliott No. 1 well in control, and distributing 10% of oil to operators in the region. Operators objected to putting into service three wells: it would impact profits from depleted gas and oil, and they doubted that a 10% distribution completely compensated them for this potential loss. Despite these concerns, they reached an agreement: it limited production of natural gas for three months successfully alleviated the pressure from the Elliot No. 1 well, drilling would be stopped and the 10% distribution would be increased to 15%. The companies operating in the north dome included the General Petroleum Company, Milham Exploration Company, Standard Oil Company, Shell Oil Company, and Marland Oil Company. To legitimize the agreement the government sought to obtain signatures from the various operators, but made an exception for Standard Oil: “Standard Oil Company might not sign the agreement but would abide by it. In the event it did not sign, [the government] indicated they expected the company to submit a letter of assurance that everything possible would be done to further the conservation program” (SFC 8/22/1929).

Within a month, Secretary Wilbur formally announced that a conservation agreement plan would stop production in the Kettleman Hills until January 1, 1931, or until market demand necessitated an increased supply. He praised the achievement: “The outstanding piece of conservation work done in the country in the history of the oil industry. The Kettleman field is the newest and largest oil discovery in recent years...two wells now operating on the north dome have been running approximately 3,000 barrels each of oil daily, 90% of which was pure gasoline. In addition to oil the two wells have produced approximately 180,000,000 cubic feet of gas a day... San Francisco used about 55,000,000 cubic feet of gas a day and based on that consumption it is believed that the field could supply natural gas for the entire Pacific coast” (SFC 9/24/1929).

Before the end of the year, the agreement was jeopardized when a company drilled the Felix No. 1 well and discovered oil. Operators in the region organized and immediately voted to uphold the agreement plan, except that what was at stake was no different from what the operators had initially cautioned against. With the threat looming, newspapers warned that the additional oil “would raise another problem in connection with another well located some distance away. Thus a drilling race and disruption of the present conservation plan in force are

threatened” (SFC 12/12/1929). Urging the state to recognize the seriousness of what was unfolding in the Kettleman Hills, Secretary Wilbur warned: “Much of San Francisco’s future industrial progress lies in the Kettleman Hills development and the city should keep its eye on that district. Natural gas means cheap fuel for industrial purposes” (SFC 1/19/1930). Although the state had the power to intervene more directly than the federal government, Secretary Wilbur sought immediate action. An editorial in the *San Francisco Chronicle* echoed the urgency for a negotiated agreement in Kettleman Hills, and described the impending impact on the rest of the state and nation:

Immensely important to San Francisco are the negotiations looking to restriction or closing of production in the Kettleman Hills. It is a vital matter that this huge reservoir of natural gas be not waste. In it are untold industrial possibilities for this region...It is a tremendous field, by far the largest ever discovered in California. Its gas content, to say nothing of its gasoline, runs to figures beyond comprehension...Most of this gas is going to waste in the atmosphere. So far it has been impossible to shut off this well...But twenty-eight wells are drilling. Half of these are off-set wells. Their owners do not want to drill. They realize the imminent wastage and the danger of swamping the gasoline market. They are forced to drill by the activities of neighbors eager to get at the gasoline regardless. This eagerness to dip into the Kettelman gasoline—makes the danger of wasting this immensely valuable gas supply. The Kettleman field ought not to be opened up except as the gas can be utilized. Otherwise a vast potential source of wealth will be lost. This bay region, which has in this natural gas field its outstanding opportunity for industrial development based on cheap fuel, will be the chief loser. The government is making every effort to bring the Kettleman owners into agreement to restrict production...San Francisco hardly realized the case, but on the securing of such an agreement hangs a great opportunity for this city. (7/22/1929)

The state and federal governments leveraged the California Natural Gas Conservation Law to advance a voluntary conservation agreement on operations at the north dome (Sabin). The state then filed a lawsuit in the Kings County Superior Court for an injunction to restrain all the oil operators on the north dome from wasting gas. The lawsuit specifically targeted “the Felix Oil Company, because its stockholders insisted that the Petroleum Securities Company bring to production and allow the Felix No. 1 well, drilled by the Petroleum Securities, to produce” (SFC 1/23/1930). Although the injunction was accepted and even later extended, the federal government continued to encourage out-of-court voluntary agreements. In June 1930, the state appeal to the courts calling attention to the amount of gas blown into the air (and wasted) had actually increased because “the Standard Oil Company has unnecessarily increased production by bringing into production two more wells since the last hearing. The Standard Oil Company should cut at least 20,000,000 feet a day before other companies are asked to further strip their production” (SFC 6/3/1930).

Secretary Wilbur sought congressional authority to establish a mutually beneficial cooperative plan with private oil firms to prevent wasteful oil competition. A *San Francisco*

*Chronicle* editorial warned of anti-trust law violations: “It is universally granted, we think, that control of oil production is an urgent necessity at this time to stop a vast waste” (7/11/1930). Wilbur and Smith continued to argue that voluntary conservation would help avoid a “disaster” as “it was vital to national defense because of the great store of motor fuel within its depth” and “the gas production of Kettleman Hills alone would serve two or three Chicagos and without the cooperative production agreement, we are throwing the industrial future of the West into the air” (SFC 10/14/1930; 1/16/1931). The agreement that was eventually established almost two years after the Elliott No. 1 oil well discovery consisted of two units, each controlling about half of the productive acreage in the north dome area. One unit was controlled by the Standard Oil Company, which owned half of the field. The second unit was managed by Kettleman North Dome Association (KNDA), an association of operators (10/18/1930). Sanctioned by both state and federal governments, the agreement limited competitive drilling and insured orderly development of the field. The association was designed to “provide, without profit to the corporation, for the unified development and production of oil, gas, etc., under an agreement between the Secretary of the Interior of the United States and the various land owners and operators of lands for the production of oil and gas within the North Dome of Kettleman Hills, with the aim that ultimately each and every member shall have received his just share of products derived or revenues received from production” (12/31/1930; 1/31/1931; 1/16/1931).

The major companies that dominated the KNDA sought to eliminate natural gas waste because the deep Kettleman Hills oil wells depended on gas pressure to lift petroleum more than seventy-five hundred feet. Though it had taken two years to achieve, the government finally established federally sponsored unit agreements in Kettleman Hills. The government leveraged its ownership rights to significant tracts of land to get lease holders to commit to a conservation plan. The government approved the cooperative plan and Secretary Wilbur declared:

Kettleman Hills is the richest oil field ever found in this country. The oil is so rich in gasoline that other fields would be unable to compete with it. The result, if it were produced competitively, would cause great waste and result in destroying much of the value of other fields. Its production would be a menace to that industry which has now passed steel and taken first place in the activities of the nation. (SFC 2/1/1931)

Oil continues to be drilled in the region today, but without the fervor of the 1920s and 1930s. By the early 1940s only a few companies remained in the area and many of the workers and their families moved away, leaving the town open for other kinds of business. But the remnants of the oil boom’s legacy remain with street sign names and pipelines that run through the town owned and operated by companies like Shell and Chevron.

In many ways, the United States federal government and the oil industries in setting a precedent for conservationism and environmentalism raised the potential for humans to cultivate a paradigm shift in their use of and dependence on fossil fuels. Conservation intended to control the oil markets and economic profits, rather than address American dependence on oil. The overproduction of oil and the lack of regulatory control further intensified and stimulated markets of oil-based byproducts. Today, countries and governments throughout the world are overthrown and occupied, and their natural resources plundered to maintain particular lifestyles.

### ***“Like Manna from Heaven”: Establishing a Town***

(See Appendix 2 for newspaper advertisements regarding the oil boom in the 1920s)  
(See Appendix 3 for photograph of the monument marking the location of the oil discovery)

We may thank a Divine Providence for this great treasure-house of wealth, for Kettleman Hills (Frank Buckner, Secretary of Hanford Chamber of Commerce, 1932).

As the oil fields in Kings County grew into one of the country’s most prolific producers of crude oil and natural gas, so did Kettleman City and Avenal. Oil companies raced to invest in the oil fields, camps were established, and roads were paved so that the operators could transport the oil more quickly and efficiently. Oil companies spent lavishly to exploit what were believed to be the largest reserves of oil and natural gas in the country. Land was sold and leases were made at low prices to encourage investment. The Standard Oil Company surveyed a town site and constructed a sewer system, a small airport, a hospital, and various bars and a cinema theater to create the oil boomtown of Avenal. The new town was described in a 1930s brochure:

Avenal, on the west side of California’s San Joaquin Valley, is a strip of green set in a barren, dust-colored land. It is an oil town that, twenty years ago, wasn’t there at all. Where the town now spreads, at the foot of the Kettleman Hills, there was only sagebrush and sand, inhabited by horned toads and jack rabbits. Then in October, 1928, oil was discovered. Milham Exploration Company’s discovery well, Elliott No. 1, came in with a tremendous rush of natural gas which blew a spray of crude oil high into the air, to gush uncontrolled for 23 days. Thus was the town of Avenal born, and baptized in the stream of crude petroleum which followed the tapping of one of the world’s richest fields—the Kettleman North Dome Structure. (Brochure Avenal, p. 10)

A. Manford Brown, a real estate developer, founded the town of Kettleman City on the west side of the Kettleman Hills in 1929 and donated land for a school and community church. He saw “that the Kettleman Hills oil boom of 1929 would bring a demand for a quiet and spacious community, free of the hustle and bustle of a company town such as Avenal. He purchased a quarter-section of land from homesteader and early day settler Claud Friend and laid out a town of residences, Kettleman City” (Hanford Journal 2/24/1968).

Though Kings County had been established thirty-five years before the oil discovery, the discovery of oil increased the county’s allure and wealth. Overnight the county received a much needed economic boost and an entirely new identity and image: “Kettleman Hills [is] an oilfield of outstanding richness, where crude oil comes from the ground as gasoline, and natural gas wells of great depth are tapped for the needs of industry” (D’Rury 1935, p. 397). The new industrial boom roused interests throughout the county:

All these years on the very edge of the San Joaquin Valley had been hidden away a treasure we little dreamed we had—petroleum oil... We were mostly farmers and we did not look deeper than the fertile surface for our opportunities. Again, new men and new ideas made themselves known. Prospect wells were drilled and oil was struck. Almost like magic a forest of towers sprang upon the several districts where oil has been discovered. A fever of excitement almost as great as that caused by the discovery of gold now took hold of the people and the development of the oil industry of this valley was so rapid that those who took an active part could scarcely realize the rapidity with which this business grew. The discovery of oil came at an opportune time. The population was growing, capital was accumulating, and there was need of some outlet for surplus energy the fuel of the valley was growing scarce. Industries were growing rapidly. (Brown and Richmond, pp. 225-26)

Frank Buckner, secretary of the Hanford Chamber of Commerce, described the changes: “overnight the value of Kings County resources was doubled. Oil was like the barber business when women suddenly decided to bob their hair...Kings County had overnight become the controlling factor in the oil business of the world.”

“The oil was being collected in storage tanks on top of the hill, and a fleet of tank trucks was working day and night hauling it to the railroad at Coalinga... Permanent buildings were in course of construction. New roads were under construction and a steady stream of machinery, derricks, casing and tools was pouring into Kettleman Hills on great trucks from Los Angeles and San Francisco. Power lines were under construction and the Texaco Company was building a \$2,000,000 absorption plant to take the gas from the discovery well.” (Buckner, 1932)

Brown and Richmond wrote about the sudden growth and its impact at the county level:

Amazed and bewildered at the development that raised land values overnight from a few dollars per acre to a million, Kings county folk, officially and individually, awoke to the realization that the field meant much to them whether or not they owned or controlled a foot of land in it. Consequently the county took an early lead in the development of roads within the field and leading to it.

With the transformations came an increase in population throughout the County. In 1900, there were 9,871 people. In 1910, there were 16,230 and by 1923 there were 25,000. To Buckner, the oil boom promised a good future for Kings County:

Like manna from heaven, the Kettleman Oil Field came to Kings County. It could not have come at a more opportune time. Agricultural values were on the decline,

the great world-wide depression was in the offing, and here out of a clear sky was wealth to suddenly double the valuation of our county.

As wildcatting ended and oil production stabilized, families began to settle in the newly established town. A water supply, telephone lines, grocery store, post office, and elementary school were established by March 1929. By the early 1930s, oil-field workers and their families lived in tents until homes were constructed. In 1932, twenty-nine mobile homes moved into the town, nine homes were built, and fourteen families registered to live in the town (Beebe). Around this same time, the county welcomed new residents and encouraged community relationships. The Kings County Chamber of Commerce organized caravan tours to Kettleman City and Hanford merchants planned a “series of goodwill entertainment evenings for the residents of the Kettleman oil field towns” (Los Angeles Times 3/8/1932).

Oil fields sheltered Kettleman City from the economic hardship of the Great Depression. During World War II, the fields were over-pumped, reducing production. Kettleman City was initially settled almost entirely by petroleum workers and their families. Most of Avenal was owned by the Standard Oil Company. Houses were available for rent but not for permanent ownership. In Kettleman City, a person had the opportunity to buy the land and a house, and in some cases, if a house was going to be built on a piece of land, the land itself would be given to the home owner. This appealed to workers and their families until the 1950s. During the oil boom, much of the land, used for dry farming, required very little irrigation and did not provide much employment. The population dropped during World War II when automation and declining production of oil reduced the need for oil workers, gasoline rationing made urban living more convenient and desirable than rural living, and the town’s isolation was further exacerbated by housing shortages. When people moved they took their mobile homes and everything with them.

By the end of the war, Kettleman City had become a ghost town. By the 1950s, the population in the town began to change from primarily English-speaking oil-field workers to Spanish-speaking farm workers. As the oil-field workers left town they sold their homes to the farm workers, many of whom once worked and lived in the camps or ranchos. The first Mexican-American family moved into a Kettleman City home in 1957. Many of the white residents who stayed in town welcomed the arrival of farm workers.

## **Chapter 4: Kettleman City from Boom to Bust**

After the oil boom and once the oil-field workers and their families moved out and Latinos moved in, Kettleman City left alone, isolated within the shadow of the valley and county, neglected in every single aspect of development from infrastructure to educational and social resources. But by the early 1970s, two substantial projects in the state had made a significant impact on the town. The construction of Interstate 5 linked the state with neighboring Mexico and Canada and transformed Kettleman City into a west-side crossroads town. In addition, the construction of the California Aqueduct provided the necessary water supply to cultivate the land into a major agricultural area. Many workers who helped build the aqueduct sought temporary housing in Kettleman City and after they left, agricultural laborers moved in. Many of the townspeople found jobs in the developing farm fields in the region. By the 1980s, 70% of the population was native Spanish speakers.

The town was to explode onto the national public scene once again, but this time for far different reasons. Once corporations and investors had flocked to town with enthusiasm, now, environmental activists from around the country assembled together protesting the presence of environmental injustices in Kettleman City. In 1979, Chemical Waste Management Inc., a subsidiary of the multinational waste disposal corporation, Waste Management Inc., established a toxic waste dump just three and a half miles from where the residents lived. Upon learning about the landfill in their own backyard, residents of the town, with the help of environmental activists and organizations, confronted the large corporation and brought attention to what they believed were environmental injustices. These residents are credited for having launched the environmental justice movement in the western United States that had already begun to gain steam elsewhere in the nation. And what's more, their efforts proved to be successful.

## *Welcome to 21<sup>st</sup> Century Kettleman City, USA*

Maria Saucedo migrated from Mexico to California in the 1990s. In what she calls a “rude awakening,” she describes how as a little girl she grew up watching Hollywood films and American music videos:

“Those images on television that I used to watch left an impression on me. I came to believe that everything America had to offer was depicted in those images: Clean streets, fresh air, lots of food, healthy people, and jobs for anyone who wanted to work. America was beautiful. And there were legal rights too, courts, and officers who stood by your side.”

Maria explains how when she woke up the morning after she arrived in Kettleman City, the America she observed was far different from what she had seen on television:

“I lived here for 17 years. I got here in 1990. I was born in Mexico City and I came here when I was 21 years old. I came here to Kettleman City, well supposedly it was very easy to come here from Mexico, right, to the United States. A cousin and I came looking for work, for a better life, right. Then, um, an uncle who lived here in Kettleman City brought us here. My sadness was that I thought that the United States was something different. I came here at nighttime and when it was day, I came out of the house and I couldn’t help myself from wondering where I was, where had my uncle brought me because this Kettleman City, it was the ugliest place I had ever seen in my life. But even so, I still lived here for so many years, out of necessity. Then, one sad day, my baby died here.”

Maria’s story sets the tempo for this chapter wherein the life experiences of Kettleman City residents are captured in their own words.

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According to the 2010 census, Kettleman City is considered a census-designated place (CDP) with a population of 1,439 people with the majority of people identifying as Hispanic or Latino. There are 350 households out of which 232 have children under the age of 18 living in them with the average family size being 4-5 people. Although some families have lived in the town for more than thirty years, most of the residents have been here for a shorter period of time; others are temporary dwellers, seasonal laborers who follow the crop harvests and seasons. Almost all of the residents work in nearby orchards, fields, and canning facilities. Others work at the junction and two to three men are employees at the toxic waste facility (most of the employees live elsewhere in the country or in neighboring counties). A few residents work in the prisons located in Corcoran and Avenal. Nearly half of the residents live below federal poverty levels.

Photographs (see Appendix 3) provide a glimpse into what Kettleman City looks like in the twenty-first century. They serve as the backdrop for residents when they speak of

disappointment and frustration—these images, like the voices of the residents, bear witness to their unrelenting call to protest their degraded environment.

There are no sidewalks here. The houses are old, some boarded up. Many of the homes are surrounded by orchards and fields, with no barriers between them, reinforcing the concern over pesticide spraying. There are a few liquor stores that serve as grocery stores, but there is no supermarket; the closest grocery store is more than thirty miles away in Hanford. There are a few auto parts and towing shops along the main Highway 41. The water is contaminated. Two municipal wells in town far exceed federal regulatory levels of arsenic and benzene. The air is contaminated, like much of the Central Valley. There is only one elementary school in town and no middle or high schools; students are bused to nearby Avenal. Occasional heavy valley fog in the area can make the roads hazardous even for walking so many parents prefer to drive their children to school (that is, if they don't have to work in the fields that particular day) or the kids just never make it to school.

Many teenagers work in the fields alongside their family. There is no movie theatre or other entertainment venues for children and young adults. A small park in the center of town has a swing set, and the town has a small branch of the county library, but it is far different from the one located in Hanford. Though most residents attend one of three churches in town (Evangelical, Pentecostal, and Catholic), church officials are not involved in the protests in town. A family resource clinic operates on certain days of the week/month providing basic reproductive and vaccination care, but for severe health complications residents have to drive to Hanford or even farther away to the city of Madera in Fresno County. There is no pharmacy in town.

The California Aqueduct runs just past the town's border. Highway 41 runs right through the town, and residents have to cross the highway with no crosswalks, pathways, or lights. Caltrans (the state agency that is responsible for highway, bridge and rail transportation planning, construction, and maintenance) says there are too few residents and/or schoolchildren crossing Highway 41 on a daily basis to require any safety precautions. One Caltrans official has stated that "even if Caltrans counted enough pedestrians, traffic would have to be slowed down to allow the installation of either roadbed flashing lights or other types of flashers; although the speed limit is 45 mph, most cars drive at a speed of 55 mph" (Nidever 11/1/2011). Closing down or creating delays along Highway 41 is a particular problem for the numerous trucks (some residents say that between 200 and 300 trucks pass through the town daily) which use the route to transport industrial goods throughout the entire region. These trucks also take waste to the landfill site. Alongside the 41, there is an AAA Emergency Road Service shop, also a tow company, a Napa auto parts shop, and tire repair shops. There is one corner market, the HLA HLA Market. A Con-Way Freight station transports goods throughout America. Just up the road, where Highway 41 meets Interstate 5, is "the junction"—a stopover for travelers on the road to grab something to eat (McDonalds, In-n-Out Burger, Carl's Junior, Wendy's, Subway, Jack in the Box, Pizza Hut, Taco Bell, Starbucks, Mike's Roadhouse Café, Denny's Restaurant), gas stations (Chevron, Shell, Mobil, 76, Valero, Spirit), and a hotel/ motel (Best Western, Super 8 Motel).

Most commuters on the highway or interstate have no idea that the largest toxic waste dump west of the Mississippi is located just near where they stop to fill up and grab a bite to eat. Most of these people have no idea that a town even exists there.

## *Sentiments of Disappointment and Frustration*

Among all the residents I spoke to there is a sense of disappointment and frustration. One evening after a community organizing workshop, I sat down with Mary Lou Mares. She had a lot on her mind that particular evening and before I could ask her a question, she began to talk without ever taking her eyes off me, except for the moment when she had to wipe the tears on her face:

“I was born in Hanford. My mother was born in California, my grandmother was born in El Paso, Texas, and all the men were from Mexico. I grew up on a little ranch around here. I never lived in the town itself. We were the only family there on the ranches, and then uh, the harvest would come, and then the, the ranch would get full with all the laborers, and we’d have more people to talk with, but most of the time it was just us. Once a year we would go to a bigger town, like Fresno or Hanford, so it wasn’t like I didn’t know there was a life outside of the ranch life, but in general we lived a sheltered life, but we were very happy in that setting. We had family and uh, yes, we just had everything that was important to us. We’d sit down to eat dinner and then go out and walk around the fields, and uh go to farm and play with tadpoles and frogs and stuff like that. We had chickens, pigs, animals and so, it was a very idyllic, nice life. A kind of little house on the prairie feel and it was the only way of life we were familiar with. Life then was simple, that’s how I was raised and that’s why Kettleman City appealed to me. It was a simple place, with simple people, living simple lives. But everyone worked to have this life. I mean, when we moved to Kettleman, we had saved up, bought our own home, had a daughter and wanted to raise her with the kind of life I had. We were American after all and Mexican too. We spoke Spanish, we eat Mexican foods, but we ate burgers too. It was like living the best parts of two worlds simultaneously.

“Well, you know, once I was up at one of the restaurants up here at the junction. Some people sat near me, having lunch, talking amongst themselves, and one asked what’s over there, pointing in the direction of our town Kettleman City. One of the other guys in the group had the nerve to say ‘over there, there are little houses with little people living in them.’ Can you imagine the nerve of this man! I mean, it made me, it made me laugh. It made me laugh like, you know, I wanted to say: “Hey! We’re real! We are regular sized people just like all of you and by the way, we are forced to live next to largest toxic waste dump in the Western United States, which you have no knowledge of. Because all you do is waste, waste and waste. And your waste turns up in my backyard, and in my grandchildren’s backyard, and into their small bodies.

“We are American too, you know, but this isn’t the American life or the so-called American dream I was raised with here in America. It made me sad and angry all at the same time. I mean, gosh, what does it mean to be an American? Don’t we all have the same values? I mean, I want an education for my grandchildren. I

want to eat fresh food without pesticides. I don't want the air or the soil or even my water to be contaminated. I am an American too. But the difference between me and those people at the junction, who stop over there to grab a bite to eat on their way north or south in the state, well, for me and my family, this is our daily lives. And there is nothing normal about this. I don't need to know any science at all to know something is wrong here. Something is very, very wrong here. Everything we touch is contaminated. Everything we eat is contaminated. Our Earth, our part of the earth has deliberately been contaminated. And I have to ask, is this the American thing to do? I am an American, with an American Dream, but all I have seen is a bunch of nightmares. And these nightmares are as real as it gets because I am never asleep when I smell, when I hear the loud trucks passing by with waste everyday when I take a shower and get rashes all over my body. This is everyday Kettleman City. This is not a third world country, where perhaps you would expect this kind of place. But this here, is the United States of America."

Residents were often interested in my background. I would explain to them that I was born in Afghanistan and later raised in this state. One afternoon, upon hearing me say "Afghanistan," a resident by the name of Angela\* said to me, "Well, Kettleman isn't exactly a war zone like your homeland. But I'll tell you what. This is far worse than a ghetto. This is more like a shanty town, but though people live in houses and not tents or makeshift housing units, this place is very disgusting."

Marelena expressed both her pleasure and her dislike of the town:

"Well I like the small town because it is a quiet town. I can walk on the streets in peace, without any fear. The only thing that I don't like is that, well, I can go out and walk without fear, but the place is very ugly. I mean there aren't sidewalks, streets need improvement, and there's very little light and the air sometimes smells very bad too."

A young resident who was raised in the town and currently works for the toxic waste facility described the setting of the town along Interstate 5 and Highway 41 where people from all across the country stop over to eat or fill up for gas:

"It's located halfway between Los Angeles and Sacramento. Small, small, community. You wouldn't even know we were here unless you drove further along and stopped to see human beings walking around here. I've never seen much growth in this town. It is unincorporated and for that fact alone, it remains under-developed. That's my two cents on all of this. Bunch of farming, some big companies around the area. Look, if you happen to get lost and need a place to stop over, Kettleman might not be the place for you. And make sure to bring a DVD player with you because it can get pretty boring around here, I mean pretty boring really fast."

Like many of the residents in town, Carmen described the small-town feel in the area, but was quick to emphasize the limitations that come with it in terms of growth and prosperity:

“We lived in Mexico. We came directly from there to Kettleman. My husband had been here for years. He came and got us to live with him. We’ve been living here for about ten years now...it is small, everyone knows each other, everyone says hello. It’s a place that because it’s small, doesn’t have much employment, only in the fields, this is where people work, aside from the businesses that we have here on the 5. In reality, there is very little access to the people because it’s a small place.”

Sitting outside his porch on a warm summer evening, Joseph\*, an unemployed 27-year-old man and a native of the town, expressed his frustration:

“In most cases, as towns and cities develop, they tend to develop from nothing into something. The government, planners, county administrations, local businesses, and educators create a place where people want to live and perhaps, if they are lucky, people can plant their roots, settle and have a family, and eventually die and be buried in, their own town. But that’s not the case here in Kettleman City. You want to leave, but you can’t. It’s not the kind of place you want to raise your children in, especially after you have endured the loss of one child already. We all know about this town now. It’s in the papers. The fact that it’s in the papers says something. Right? It’s a city that doesn’t offer you life, but instead, it slowly kills you. I mean I crossed the border. I came out alive, unlike others. But look at where I am. You gotta wonder, late in the evenings like tonight, if it was worth it. This isn’t the America I thought I was coming to. It’s all around here too. This unemployment. This kind of environmental issues. It’s like this place, I’m sure, though I don’t know for certain, was beautiful at one time. It must’ve been. It was all land and grass before. Now it’s full of pesticides, death, and disaster. I miss my family in Mexico. I miss ‘em. But I gotta provide too.”

Lupe, a longtime resident of forty years, described the unemployment rate that plagues the area:

“I’ve been living here for more than forty years, I would say. Cuz I was eight years old when I came to this town. My mom brought us here, as she was a farm worker. We are from Mexico and today there’s no work. Everything’s ending cuz machines is taking over. The new method of using farm labor is, is controlling mankind and their jobs. But also, it’s to me, just not healthy...it’s all about more food, as quick as you can...I work in the fields for like twenty five years. I had to find a job in the restaurant because of the machines. What will all these people do when there are more machines than they need human hands. We sacrifice our bodies for that food. What will we be able to offer for the machines? Our lives? Kettleman teaches you that this shouldn’t be happening.”

Though residents recognized the disappointments in the town, Lupe compared her upbringing in Kettleman City to that of young people in today's larger towns. She pointed out the benefits of growing up in a rural town:

"I love Kettleman. This is a small town where I had a lot of um, um, good things happen to me, and uh, my childhood was so good, I have any problems cuz I was growing up, um, like now there's a lot of problems, the youth that's growing up in places, in environments, full of hate and uh, gangs, and a lot of drugs and that. Not here, I never knew what hate was. Still don't think I know what it is. But I look at TV in the news, how the youth is growing up and its bad! It's really bad. Where um, they're just like walking bodies. I mean no more feelings, no more nothing, who cares? And that's sad. We're losing all that because we don't care. And I don't want to be that way. I do not. Kettleman reminds you to have a voice. For everyone else that doesn't have one, and for all those that passed away. I want, I want people to know that they existed and that they were here, and that there were good people, good, hardworking people. We may be a poor town, just look around here. We have nothing to offer really. Except there was oil here, see those pipelines around the school? See trucking company across the way? See the fields? See Chem Waste? If we look around, there is more here than we can see. I love Kettleman, it made me who I am."

Although they expressed disappointment in the environmental conditions surrounding their town, some residents like Ramon sought to describe the beauty that he still sees:

"Ay, yeah, Kettleman City is very beautiful because there is a lot of agriculture and the people here live off of it. Unfortunately we are surrounded, all around us, with agriculture and when they spray poisons, well, they also spray poison on us. We don't have sidewalks as you see. Many big holes in the streets, mostly dirty. Lots of dust. At least we have street signs with corporation names. Ay, stupid names. But aside from that, it is a very tranquil life, very beautiful. You can be your own person here. You make Kettleman what you want it to be, for yourselves. We've learned now, you gotta be willing to fight for this too. The environment is all we have, so we organize ourselves around it."

### ***The 1990s: Moving Against the Unwanted Intruder in Our Backyard***

Residents claim that they only became aware of the facility in the late 1980s and early 1990s though it had been in operation since 1979. In retrospect they explain that they had a sense that something was wrong in their neighborhood once people began to complain of an awful stench late at night, especially during the warm valley summer evenings when people left their windows and front doors open. Mary Lou described how change came:

“We bought a house in 1977 here in the town. They were building homes then, not like today where there is a moratorium in place that prevents building of new homes because of the water situation. For ten years, I didn’t know my neighbors. I didn’t, I wasn’t very social. I was really living the ranch life inside of my house where you just keep to yourselves that is until one day we came from Hanford and we find this uh flyer on the, on the door. It was 1987 and that flyer was about an incinerator project and a meeting was going to be held about it. We never knew there was a toxic waste facility in our town. We had no idea until we went to that meeting. Sure there had been a strong odor especially at night and everyone complained of hives, but if you had grown up on a ranch, this kinda came with the territory, you know. You, you blame that, the time of the year, you blame uh the weather, you know. You blame the spraying over the foods and cotton. You get very sick from respiratory things or you figure it’s uh pollen time cuz the trees are pollinating, flowering or something. You always blame something that was in nature. You don’t think about something unnatural, being brought close to your home, to, to hurt you, you know. Cuz I always thought government is there for the people to protect the people. I mean all of a sudden, everyone began to realize something was wrong. Seriously wrong because while everything seemed okay on the surface, what was happening deep inside the earth could only be blamed by exterior motives, like a facility that put chemicals into the ground. A lot of people complained of asthma and having troubles breathing. The water smelled different too. We didn’t realize something was wrong with the water until one of us went out of town and brought water from out of town, and we compared it. No science involved. It was easy to see, easy to taste the difference. Since I have grown up so happy on the ranch, I was raised to never question anything, especially authority. I mean, government and agencies were there to protect people. They wouldn’t, couldn’t put people in harm’s way, right? At least so I thought. You know. I didn’t know any better. I was happy. Then all of a sudden, all these people are so upset and talking about this incinerator and I thought wow. I’m not stupid. You know. I went to school and anything you put in the air is going to, gonna eventually make its way down into my body, in the bodies of my family. Uh, right away, you know, flags started flying and I said no this cannot be right! And I began to wonder and it made me mad, why no one ever thought of telling us about this facility in the first place? And the more I learned about this place and our town, the more I learned we had to move against the unwanted intruder in our backyard.”

Ramon described being unaware of the existence of the facility when he and his family bought a house in town and settled down. Though his anger dates back a few decades now, when he spoke to me, he spoke with a zealous conviction against everything that went wrong after he bought the house. Frustrated and angry, Ramon longs for answers as to how and why this happened to his family, since all he ever wanted to do was to provide for his family:

“I came to America in 1965 from Mexico. Jalisco. We used to rent homes and when we heard of the opportunity to buy houses, that there were houses on sale,

we applied, and we got this house in Kettleman. But we never knew, we were never told by anyone about so many dangers that existed. The other day I was thinking about people who live in the lower towns, in the lower cities, where there are floods and disasters and all that, and I bet most people who move into these kinds of area around the country are never told about the potential dangers. Ay, I mean, how would we have known about the toxic dump. It is away from us and it doesn't sit in the middle of town for all to see. In fact you can't even see it because it's tucked away into the hills, and the only visibility it really has are the hundreds of trucks that pass through our town to get to the facility. Once we moved here, we began having respiratory issues, but when you work on the fields, you don't really think much about this. It comes with the work, with the land. But sometimes the smells got really bad, so bad. Joe Maya, a former resident of the town, complained too. And later, when we learned about the facility, my frustration turned into anger. I felt like I had been deceived. I just wanted a better life for my family. Owning a house was a big deal, I think it still is. Imagine getting a house and then finding out its next door to everyone's waste. And now, now we try to get people to understand that we deserve to live, we deserve to live in peace, and not be worried about when all this stuff, stuff that we don't even know about. Scientists don't even know about this stuff, but the funders, the corporations they know. Why don't they take all of this, all this toxic stuff, into their own homes? They wouldn't do that, right? No because they don't want it either."

Abigail\* settled in town more recently and she quickly noticed the change in her health:

"Ten months after I got here, I started having allergies and I had never had them before. I blame the environment. I don't know what to tell you I feel I felt like I was contaminated without even knowing about it, like, like, without telling us. If you go and see the doctor they tell you things like its seasonal, tests are normal. You drive all the way there only to be told, like, like, it is nothing serious. But that's what they want us to believe. How can it all be safe? Why would they call it a toxic dump then? But it is there in our skin, in our bodies, inside of us right now. I feel it. I can see it. Sometimes I think they just don't want to say it to us. You know. Like, like, what they know. I am frustrated about this. I am mad. I didn't ask for this. I'm still young too."

What began as ordinary residents living in a community, complaining about their health and the odors that filled the air late into the evenings, eventually culminated into Kettleman City serving as the bedrock for the environmental justice movement in the western United States. Maricela Mares-Alatorre was born into the movement and activism was happening all around her; her parents are activists, Ramon and Mary Lou Mares. As a longtime resident of the town and a leading activist in the Central Valley, Maricela is now raising her own two kids in Kettleman City. She described how the movement began back in the late 1980s when a local resident went into the landfill facilities and reported his findings to county officials:

“Legend has it that one night in the 1980s, John Turner, a longtime resident of Kettleman City, a white resident and former chemist for Standard Oil Company went with his flashlight in hand, went to the Chemical Waste Management facility and copied down the chemical names on containers. The only illegal thing he did was break into the facility, but the ingredients on the stuff, that was plain to see and read by anyone, even the County officials if they so wanted to. He found out that some of the names for the chemicals were so new that they one couldn’t even find information about them in books! Imagine that! He went to the County officials and questioned them. Really, he embarrassed the County by calling the supervisors out about regulations of chemicals that weren’t even in the books. He blamed them for allowing the facility to operate in this County in the first place, and secondly, he accused them of being totally ignorant of what was being hauled into the facility because there was no reference for most of these chemicals, how could they even claim the stuff was being regulated.”

Around the same time, Bradley Angel, currently the director of Greenaction, was then the southwest toxics campaigner for Greenpeace USA. In his work with Greenpeace, Angel worked to identify and build a movement that included communities that were being targeted by an onslaught of proposals for toxic waste and garbage incinerators throughout the country. He described how he was invited by some local residents to a meeting regarding an incinerator proposal by the toxic waste facility:

“In my very preliminary research I quickly discovered that Chemical Waste was you know, like many companies proposing or about to propose an incinerator somewhere, and I saw that it was happening in Kettleman City. In fact, around the same time, I was invited by a couple of Kettleman City residents and one from Avenal, to come to a meeting down there about the Chem Waste facility’s interests to expand their landfill. So I went, and at the end of the meeting, which many of the residents were never informed about in the first place. I was able to testify in support and on behalf of the residents, although mind you, the community wasn’t organized at this point. But I testified that Chem Waste was in fact applying for a hazardous waste incinerator permit and naturally the facility denied this. Shortly after the meeting, the application for the permit was submitted. That’s really how I got involved in the town, and as I was leaving the meeting, a woman in the audience, Esperanza Maya, who I didn’t know, stood up and thanked me for coming and asked what an incinerator was. And I told her and she was outraged and asked what residents could begin doing. I encouraged her to get some residents together, and that I would return to the town again to meet and talk to them. A few weeks later, that was the beginning of the new Kettleman City organization El Pueblo, over twenty years ago.”

Maricela commented that “the whole grass roots environmental justice movement was barely starting at the time and a lot of people cite Kettleman City as the birth of the environmental justice movement.” Angel concurred:

“Kettleman played a very key role in the building of the environmental justice movement in the west and even for providing nationally, a momentum for people to protest in California. At the time I was working with various communities throughout the state on issues of waste and related issues. It served to persuade people that change was possible after the community and the movement was able to defeat Chem Waste.”

The environment was adopted as an organizing goal to serve as a tangible common denominator in a community that requires so many resources that it does not have. Ramon pointed out that it created alliances because “it was something we could all agree on, regardless of how much money we had in our pockets because the earth was for all of us.” Anna, a longtime organizer in the valley, made the case that:

“The environment means you fight to have the right for healthier air and to be healthy and to have that right, you have to fight. To be able to live and not worry about if you are going to be effected with cancer or asthma or any other stuff. To not become pregnant and fear that your child might be born with birth defects or die. That is not the environment.”

Similarly, Mary Lou explained that “while I do not think we should go back to the horse and buggy times, what we can do is to take a step back, if we want to continue to have an earth to live on.”

Maricela continues:

“Immediately after residents found out about the incinerator proposal and the expansion of the landfill, and with the outside support of activists, lawyers, and all their resources, the community became conscious to the fact that not only had they never known about the facility, but that it was established without their knowledge and consent. And that disappointment, that frustration, eventually resulted in protests—to this day. This was the community’s initial awareness about what they believed to be illegal siting of the waste dump.”

Like other residents, Ramon explained that he was never aware that the facility existed in their town:

“We weren’t blindfolded when we bought the house. I admit that. But we didn’t know about the dump. If I had known, you think I’d move here? Never. If there were meetings, they held them behind closed doors since they never let the town know about them. We had absolutely no knowledge whatsoever that this dump was located there. No knowledge. If it hadn’t been for Greenpeace, we wouldn’t have known anything and the situation would’ve gotten worse. I’m certain of this. They would have brought that incinerator. But our eyes were opened. Our ears were opened. Our hearts and souls were opened. We knew what was right and what was wrong. And so began to fight.”

The environmental justice movement that began in the 1990s in town played a central role not only in fostering a national momentum demanding for attention and change to the injustices occurring in various communities, but specifically in Kettleman City, it helped residents to establish their own community-based organizations which had not existed before and continue to be a major force to the present day. Residents like Mary Lou got involved and helped start the group El Pueblo para el Aire y Agua Limpio (People for Clean Air and Water) (hereafter written as El Pueblo) and began to host meetings in their homes to become more informed and to decide what steps to take. Mary Lou described this earlier period:

“I found myself getting mad a lot with the people around me. They would say things to me like, if Kettleman is so bad, why don’t you move out? And I wanted to yell back and educate them about Chem Waste, about evaporation ponds and how pesticides and chemicals can be transported by air. All my interests were and continue to be, to keep the air clean, to keep our bodies clean. I’m trying to make the world a better, clean place for all of us. I don’t live here alone. Don’t people get that? We learned about incinerators and we wanted to run around town and tell people to get ready to take on a big company because what they were proposing to do what to make us human beings extinct. They wanted to burn hundreds of thousands of pounds of the toxic waste each year and increase the number of trucks passing through our town. And so El Pueblo had a mission and it became my way of strengthening the ties in the community and to get people educated about all of this stuff, starting with myself of course.”

Maricela pointed out that the California state environmental laws and government agencies were required to provide public notice in three ways to the community, so as to alert them of what was happening in their town. According to two lawyers, Luke Cole and Sheila R. Foster (2001), this never happened in Kettleman City. They describe the potential methods that could have been used:

1) Through notices printed in a newspaper of general circulation, which in Kettleman City means a small box in the classified ads in the *Hanford Sentinel*, published forty miles away; 2) by posting signs on and off the site, which means on a fence post 3.5 miles from Kettleman City; and 3) by sending notices through the mail to adjacent landowners. The adjacent landowners to the Chem Waste facility are large agribusiness and oil companies such as Chevron. (p.2)

Just as residents began to learn about how the state and local governments did not notify them regarding the existence of the facility, Mary Lou described how they came to realize that they were being systematically targeted:

“We found out from somebody that worked at the Chem Waste facility that they had this document called the Cerrell Report. We learned it was commissioned by the state waste authority in 1984 and it actually said, it gave the characteristics for what kind of community to look for to site controversial land use projects like the incinerator and what it said, it totally described Kettleman City almost word for

word. It said to look for a place with a lot of immigrants, with little to no education, a lot of people that don't speak English, and specifically target Catholics. It was like word for word Kettleman City. That, I know, for certain, rallied a lot of people because they saw it was definitely a case where we were intentionally targeted because we were a small, poor, Latino farm working community and like I said, there was a lot of unity in the town at the time, so having this knowledge, well, rest assure, it actually worked us up even more."

The California Waste Management Board (known now as CalRecycle) had hired the Los Angeles based consulting firm of Cerrell Associates, Inc. to assess how best to identify potential sites for toxic waste facilities in the state. In the controversial 1984 report, Cerrell Associates, Inc. advised the state that the communities least likely to mount opposition to hosting such dump sites were rural communities made up of poor farming residents who have little education and/or do not get involved in social issues. They emphasized that such communities were likely to be most receptive to promises of economic benefits:

Certain types of people are likely to participate in politics, either by virtue of their issue awareness or their financial resources, or both. Members of middle or higher-socioeconomic strata (a composite index of level of education, occupational prestige, and income) are more likely to organize into effective groups to express their political interests and views. All socioeconomic groupings tend to resent the nearby siting of major facilities, but the middle and upper-socioeconomic strata possess better resources to effectuate their opposition. Middle and higher-socioeconomic strata neighborhoods should not fall at least within the one-mile and five-mile radii of the proposed site... Older people, people with a high school education or less, and those who adhere to a free market orientation are least likely to oppose a facility. (Powell 1984)

Bradley Angel was working with various communities around the state at this time and he brought his knowledge of what was happening elsewhere in other communities of color to the residents in Kettleman:

"I was working in Casmalia, a small town next to Santa Maria located between Santa Barbara and San Louis Obispo and it had a gigantic Class I hazardous waste landfill, very similar to the Chem Waste facility in Kettleman. The Casmalia dump was run by a company called Casmalia Resources and was one of the worst toxic dumps fully licensed by the government despite countless massive violations and it was a community where, small community where a lot of people were dying, a lot of people were getting sick, rare diseases, rare cancers, and so I was working through Green Peace at the time with people there. And I linked them up with the people in Kettleman, and linked them up with the folks in Richmond who were fighting the Chevron refinery and chemical plant, and linked them to the East Los Angeles where an incinerator was being proposed in Vernon, like one mile from the Santa Isabelle Church. The Madres of East Los Angeles area knew about it and it turned into a huge fight. I hooked them up with the

Martinez town folks who were a working class community in the Bay Area where they were working with chemicals. In the valley, in MacFarland there was an outbreak, a cluster of birth defects that many suspected was directly related to the pesticide dumping or pesticide use. I brought all these communities together to help them realize they could fight, not only in their own specific towns, but together, as a big body, helping one another against environmental injustices.”

During this massive state-wide mobilization movement, many of the residents including Mary Lou had never heard of the other communities that Angel told them about:

“We knew all along that we couldn’t have been alone in this. That if Chem Waste was able to come into our town, establish themselves here without us knowing, they must’ve been able to do this elsewhere. And soon enough, we learned about all the towns in California dealing with some kind of injustice. But specific to Chem Waste and Waste Management, we began to learn about them some more. And the more we learned, the more we realized this company was anything but safe, state of the art, and good neighbors. They were and continue to be horrific polluters in communities of color. Strategically placed. God as my witness, this company gets away with murder. We learned about toxic waste facilities in California and the other ones that Chem Waste operates in the country. We learned we weren’t alone, anymore.”

In time, these groups coalesced in what became known as an environmental justice movement.

### *An Epic Six Year Fight*

The Environmental Impact Report (EIR) was released to the public and although residents wanted to be included in the decision-making process over the siting of the incinerator near their home, the report (nearly a thousand pages in length) was produced only in English, preventing most of the Kettleman City residents from being included in the process. Angel explained:

“Look, the County didn’t want to translate that document for the people because if they did, they were putting themselves in a position to always have to translate documents. They argued that we live in America and thus everyone should speak English and all government work operated in the English language. The irony came when Chem Waste, the same facility the people were protesting, translated into Spanish just a few pages of the report, producing a kind of summary of the entire EIR for the residents. I mean, really. Thanks for the summary, but no thank you because the few pages do not include all the details that were included in at least one thousand pages. Can you imagine how much editing they did, trying to

make the proposal look better than it really was! They made sure to distribute those summaries to everyone in Kettleman. To make sure they got it so they couldn't complain about it later."

Feeling more frustrated and angry with the lack of inclusion in the matter, Mary Lou explained how residents turned to alternative methods to get the county officials to listen to them:

"We decided on a letter campaign. For a few days, we gathered together in each others' homes to write. We went door to door. Ramon helped too. Men and women came together. But in order to write a letter they had to understand why we were writing the letters so we spoke about the EIR process. Well, not so much me really, but people like Bradley helped us understand the permitting process. At one of our gatherings, someone that had not been involved and in fact, questioned our motives before, all of a sudden stood up, very upset and said these gringos, they want to pull a fast one on us! And just like that people wrote, demanding the EIR be translated in Spanish for us to read and understand. This was our fate really since we were the ones living next to the facility. Many of the letters were written in Spanish naturally. Later I realized, I mean after the fact, they must've, those officials, they must've thrown away those letters. I mean if they weren't going to translate the EIR, why would they translate our letters? But still, we didn't stop fighting. This angered us even more."

Maricela described the public hearing held in Hanford. It was held in the largest possible venue in the county as they expected many people to turn out for it:

"The County Fairgrounds building was where they held the hearing. Residents came together and there must have been about 200 or 250 of us in total. I will just say this right now, by the end of the meeting, everyone who came to the hearing, it became clear to us. We were considered second rate citizens in the County. And we left more angry than we came in."

Lawyers Cole and Foster (2001) describe the procedures of the meeting:

The hearing room was set up with a raised dais in the front, with a table at which sat the Planning Commission, looking down on the room. Then there was an open space; beyond that, two microphones set up for the public. Behind the microphones were about fifty rows of seats, and there were some bleacher seats at the back of the room. Behind the bleachers was empty concrete floor back to the very rear of the auditorium, about 300 feet from the Planning Commission. Kettleman City residents showed up at the meeting in force. About 200 people came by bus or carpool from Kettleman City, and, as one of their leaders made clear, "We're here, we want to testify on this project, and we brought our own translator." The chair of the Kings County Planning Commission looked down on the crowd and said, "That request has been denied. The translation is taking place in the back of the room and it won't happen up here." Residents looked at where

the Planning Commissioner was pointing: they looked from the Planning Commission up on their dais, they looked at the open space and the microphones, they looked at all the rows of chairs, and they looked at the bleachers. And then they looked way back behind the bleachers, nearly at the rear of the room, where there was one forlorn man sitting surrounded by a circle of about twenty-five empty chairs. The Planning Commission chair said again, “Why don’t you go back there? There are monitors back there. We are all in the same room.” The 200 people from Kettleman City looked around, and they looked at the back of the room at those twenty-five chairs, and they looked at the empty chairs up front, and they said, “Adelante, adelante” (forward, forward), and they moved up to the front of the room. Residents testified in Spanish, from the front of the room, that the last time they had heard about people being sent to the back of the room was when African Americans were sent to the back of the bus—a policy dumped in the dustpan of history a generation ago. They said they weren’t going to stand for that... The public hearing on the project brought to a close the public’s ability to comment on the incinerator. Subsequently, the Planning Commission voted to approve the incinerator, and El Pueblo appealed that decision to the Kings County Board of Supervisors. (pp. 6-7)

Maricela described how El Pueblo, though newly established, eventually was compelled to file a lawsuit especially after feeling “rejected” by county officials:

“So part of the process to obtain the permits necessary to build and use the incinerator required that the county produce what is called an EIR. The document was hundreds of pages long and nothing was in Spanish. We demanded this, but the County did nothing. Chem Waste translated a few pages, of the hundreds, and presented it to us. How generous of them huh? We eventually filed the first environmental racism law suit in the country.”

To truly understand the significance of what was unfolding in Kettleman City one has to put into context the implications of the movement within a larger nationwide scale. Katherine Ratcliffe, in an article in the *Christian Science Monitor*, explained the situation unfolding in Kettleman City:

Below the rolling, blue hills of the San Joaquin Valley, trucks laden with vegetables rush out, taking lettuce and asparagus to the nation’s dinner tables, as others rumble in carrying toxic waste... Here at the largest toxic waste landfill facility west of the Mississippi River, Hispanic residents contend they are victims of environmental racism. They have mounted a fight reminiscent of Cesar Chavez’s historic civil-rights battle for Mexican farm workers in the valley two decades ago. Their latest weapon is a legal suit marking the first time civil rights law had been used to challenge a toxic waste incinerator. The suit, filed in February [1991] on behalf of a community group, People for Clean Air and Water, charges that Chemical Waste Management Inc chose to locate a proposed incinerator at the landfill facility because it is near a community of mostly poor,

migrant workers from Mexico. The theory of environmental social justice is catching on nationwide. Poorer and less politically powerful communities are trying grass-roots activism to keep waste-treatment facilities out of their neighborhoods. Local coalitions have organized against toxic waste facilities in places like Emelle, Alabama, a predominately black community and home to the largest hazardous waste site in the United States, and East Los Angeles, which is mostly black and Hispanic. A different group in south-central Los Angeles stopped construction of an incinerator in 1988. But more typical are the long fights, such as the unresolved 10 year dispute over a toxic waste incinerator in rural East Liverpool, Ohio. If the Kettleman City, California residents win, grass-roots coalitions will gain leverage. “If we win this suit, it will enable other low income communities to fight back when they’re targeted by polluters,” Cole says. (1991)

Mary Lou explains:

“The entire environmental justice movement was like being in a classroom because we were constantly learning about the environment, classism, racism, and we learned that the legal system should be put to good use. After the EIR came out, after staging dozens of protests including a march from the park in the middle of town to the Chem Waste facility, after getting national and local media coverage, after learning to be quite honest with you to read and write for the first time—well, what can I say? We did something about this. We learned from the lawyers and other experts that a law had been violated. The California Environmental Quality Act (CEQA) requires public participation in the entire process of siting a toxic facility and as does the 1964 Civil Rights Act. But Kings County assumed they were above the law of the land. We learned about this and decided it was high time that we take them to task.”

The movement in Kettleman City brought together other well-known activists and politicians such as the Reverend Jesse Jackson, Congresswoman Maxine Waters, environmental groups and activists from not only California but throughout the nation. The marches and protests were also documented in newspapers and television news broadcasts. San Francisco-based KRON 4 (it was then an affiliate of NBC) carried a series on environmental racism in 1991, with the episode specifically on Kettleman City. Race became a common denominator linking the various communities together. People from various communities of color including residents from Kettleman City began to see themselves as victims, targeted by toxic waste, landfill, and incinerator siting projects. Furthermore, the Cerrell report confirmed the systematic siting of these facilities. People came together, united in their goals to fight back against what they believed was system-wide oppression. Angel recalls:

“People really supported each other so when there was a protest in Kettleman City a bus load came from East Los Angeles, a bus load and a school bus came from

Casmalia, people drove from Richmond, from Martinez, from the desert, from Arizona and Navajo communities, all to support Kettleman City. In fact in early 1989, I helped the Madres of East Los Angeles organize the first statewide protests around environmental justice issues, though it wasn't really called that then, but fourteen communities marched together, from throughout, in a historic march that was really, the first official united you know, what today we would call the environmental justice event."

In a large protest in October 1991 Jesse Jackson electrified the crowd when he declared: "We deserve the right to drink water. We deserve the right to see our children grow and develop, and not be poisoned. Nobody has the right to engage in chemical warfare on other people." Jackson also reinforced the opinion of many people in the movement when he said, "if a community is poor, or black, or brown, they put these agents of death in our communities." Congresswoman Maxine Waters said to the thousands of people, "I have come to be with you to fight and stop toxic racism."

Cole and Foster, in their book, describe the growing frustration among the residents:

Faced with this situation [EIR only in English, no translation at the public hearing, and the ill treatment of the residents], the residents felt they had no choice but to file a lawsuit. The lawsuit was successful when the judge ruled that the Environmental Impact Report had not sufficiently analyzed the toxic waste incinerators' impacts on air quality and on agriculture in the San Joaquin Valley and, most importantly, that the residents of Kettleman City had not been meaningfully included in the permitting process. As the Court eloquently stated: "The residents of Kettleman City, almost 40 percent of whom were monolingual in Spanish, expressed continuous and strong interest in participating in the CEQA [California Environmental Quality Act] review process for the incinerator project at [Chem Waste's] Kettleman Hills Facility, just four miles from their homes. Their meaningful involvement in the CEQA review process was effectively precluded by the absence of Spanish translation. Kings County decided not to appeal the lawsuit, largely because of the political pressure the Kings County Board of Supervisors was receiving from Kings County residents and from their supporters across California. A postcard campaign targeting the Board of Supervisors and the local Farm Bureau, orchestrated by El Pueblo and Greenpeace, generated more than 5,000 postcards to the Board and the Farm Bureau, while a petition campaign in the San Joaquin Valley by Citizen Action generated more than 17,000 signatures in opposition to the incinerator. Chemical Waste Management did not fold as easily, however, and appealed the judgment... But Kettleman City's struggle had become a national struggle. The residents of Kettleman City and their representatives were telling Kettleman City's story at meetings, conferences, symposia, and rallies across the country. (pp. 8-9)

Cole and Foster also looked at the larger environment in the County, paying close attention to the racial composition of various towns, and they examined the revenue from the facility that helped the county but not specifically Kettleman City:

Kings County, which is about 65 percent white, has five members on the Board of Supervisors. At the time of El Pueblo's appeal [against the incinerator], all the board members were white. Most white residents in Kings County live in one area, while most of the Latinos live in another part of the County. If this page were a map of Kings County, almost all the white people would live up in the upper right corner of the page, in and around the county seat of Hanford. And most of the Latino people would live at the bottom of the page—Kettleman City would be in the lower left of the page, and the Chem Waste dump would be next to it. Every single town in Kings County is majority white except for Kettleman City, which is 95 percent Latino, way down in the lower left of the page. Under the California law that provides for compensated siting, Kings County was receiving about \$7 million per year in revenue from Chem Waste's preexisting dump. That \$7 million was about 8 percent of the County's annual budget. Most of the money is spent up near Hanford (in the upper right of the page), in the white community, and very little of it trickles down to the people of Kettleman City (down in the lower left of the page). The incinerator promised to almost double that tax revenue from this single company. (p. 8)

The three toxic waste landfills in California (Kettleman City, Buttonwillow, and Westmorland) are all located in predominantly Latino communities. Waste Management Inc. operates the largest toxic waste facility in the United States in Emelle, Alabama which is home to 95% African Americans—a small, rural, poverty-stricken town. It also operates facilities in Chicago and Ohio. In fact, at the climax of the environmental justice movement during this time, residents of Kettleman learned about the consequences of the incinerator in Chicago when then-Illinois State Representative Clem Balanoff visited Kettleman City and warned the residents to protest against the incinerator because the one in Chicago had blown up and was forced to shut down by the state EPA offices. Mary Lou remembers this visit and shared:

“Oh when the Chicago politician came here, we learned so much. We learned that the company, the same one in our backyard had illegally, no surprise turned off its air monitoring devices on the incinerator even while black smoke went into the air. This is when we learned you can't trust anyone, especially a corporation that stands to profit from waste. And the officials in our County, they just viewed us as ignorant farm workers. We set out to teach them a lesson or two.”

Eventually the momentum in Kettleman City, in the state, and throughout the country turned out to work in favor of the local residents because, according to Angel:

“All this protest, all those hours, all that struggle helped to make the County look bad. It made Chem Waste look bad, especially since they were trying to get a permit for their incinerator. They pulled their application for consideration out in the early 1990s and we won. Just like that. It happened because there was really a

sense of community-wide solidarity and implementation of organizing tactics, and just the belief that change was possible.”

Then a major breakthrough occurred in the fall of 1993. Mary Lou explained:

“It was the beginning of September 1993, and I knew something was going to happen. I felt a break was going to happen in all of this. And then, just like that, I got a knock on the door and the General Manager of the Chem Waste facility handed me the news. I called Bradley to tell him the good news. Chem Waste announced that it was withdrawing its application to construct the toxic waste incinerator near Kettleman City. All of that work, it paid off.”

Bradley remembers the exact moment just as Mary Lou did:

“One day Mary Lou called me up and said Bradley there are rumors that something is going to break with the incinerator. Then the manager of the facility was standing just outside of her house and he had a piece of paper in his hand. I said well, call me back and she called me back a few minutes later crying with joy and she read me the letter. Basically it said Chem Waste was dropping their plans for the hazardous waste incinerator. It was an epic six year fight, one of the most significant in the history of the environmental justice movement at the time. David beat Goliath and wow, really, we had won.”

The day after the unprecedented victory announcement, a column by Jim Wasserman in the *Fresno Bee*, entitled “*Little Town Notches Win Over Big Money*” (9/9/1993) was printed. He described how the town of Kettleman City was able to beat, as Wasserman called it, the monster:

Some months it can be a reminder of hell on Earth, split in two by the most boring stretch of interstate 5 on the whole West side. East, you have the little town: bleak, sleepy, riddled full power lines. West are the blazing-hot parking lots of Shell and Exxon and clean bathrooms at Carl’s Jr. on the way to Cambria...and so here at the county government center Wednesday stood Mary Lou Mares facing three television cameras from Fresno. A town ringleader against the biggest corporate waste handler on Earth, she stood in a small knot of people and proclaimed: “There’s victory. There’s joy. There’s crying. There’s all kinds of emotions going on in this little town.” The “greatest news” she called it, such a miracle in such an unlikely barrio town: “Winning the big one! You grow up working in the irrigated furrows of other peoples’ farms, feeling apathetic, powerless and lacking much formal education or self-esteem, you don’t expect deep down you’re going to *beat them*, smart fancy Anglos in good suits, including a chairman and CEO paid \$1.8 million a year in a suburb in Chicago... Unbelievably, they’d driven the “monster,” the incinerator, the very bad *incinerator* away...they and their little town mucked things up pretty bad, publicity-wise and politically, for a company that ranks high in *Business Week’s*

Global 1000... As for the company, the official spin is that American industry is cutting down on toxic waste. Which is interesting, because during a tour of its K.C. plant a year ago, the official spin was about the overwhelming amount of toxic waste American industry produces. Whatever the spin, the San Joaquin Valley with its emergent Green Power has won another one. Add now an incinerator to the list. Even out in dusty old Kettleman City they showed you can rise up and win big!

The struggle and protest in Kettleman City would not stop. About a decade later, health disparities would mobilize the residents again, to fight for their lives and their environment.

## **Chapter 5: Si Se Puede! Yes We Can!**

Mary Lou read my mind as we sat across from each other at a table at the local Starbucks coffee shop:

“I know what you’re thinking. It’s what everyone is thinking. Why not just leave? After all this fighting for all these years. Why not just leave? It’s probably what every single person says after they read about a place like Kettleman. It’s not that easy for somebody that doesn’t have money. Yes, we have this house. But in this economy, the way it is right now and house prices and all that, really whose going to buy my house, here in this town, where they know it is totally contaminated? And whoever wants to buy my house, I would have to let them know, you know, that there is a toxic waste dump just over there and nobody told us about it when we bought the place. That would be the decent thing to do right? But then I think whose going to fight this fight? If I don’t, you don’t, and others leave, and while I am not trying to make myself feel important I gotta ask, who will fight this fight? “People read the headline story about Kettleman and say things like “I wouldn’t live there” but I would ask them if not here than where? This stuff is, by this stuff I really mean this environmental pollution because it’s everywhere in this country, in the world. It’s everywhere—above us, beneath us, inside of us now. We just don’t hear about it on the 6’o clock news broadcast. And if we do hear about it, it goes through one ear and out the other. It’s just like that. We are human, I know that. I mean, being in this movement for all these years, you see, it’s not just like that, you know, people, they sometimes forget about human beings, about being sensitive and uh because they want to do everything by the book. And they have to think about other things than the book. You know that this human side is just like this immigration thing that’s going on. They are just deporting away people and uh separating all these families and they’re not thinking about the families, where’s the humanity? What will be the long term consequences? They’re just thinking about doing laws, enforcing them conveniently by the book when it makes them look good or when they benefit from it. That’s like Chem Waste. The toxic stuff needs to go somewhere so they try to justify it for Kettleman. And like life is not like that, always by the book. People are people. The land is the land. Respect both. We have been fighting for years now, decades now. And we will continue to fight for what is right. It’s the only thing we can do. ”

## *Taking on a System Designed to Work Against Us*

Though residents feel they achieved a victory against the incinerator project in the 1990s, they continue to demand environmental justice in Kettleman City. The community-based organization, El Pueblo, continues to mobilize people in town. Bradley Angel eventually broke off his ties with Greenpeace and became director of Greenaction and continues to help organize residents and other activists throughout the state around issues in Kettleman City. More recently another community-based organization was formed by young people in Kettleman City called Kids Protecting Our Planet (KPOP) which strives to get teens and children involved in the community and teach them about the environment. The majority of these young activists including Maricela's son are the children who have been raised knowing the struggles in town that continue to plague them.

After the withdrawal of CWM's proposal in 1993 to build an incinerator at the toxic waste facility, Maricela explains what happened next:

“I know at the time the facility tried to offer us a community center in town in exchange for the goodwill of the incinerator, like a peace-making deal or rather a bribe to be quite honest. They offered to give us sidewalks, they came to us and said basically tell us whatever you guys want and we will do it for you. I knew what was going on but I, I thought that was it, you know, the incinerator. They still wanted the incinerator there and I thought that there couldn't be anything more nefarious than a toxic waste incinerator.

“But um, it started in 1997 when my son was probably three years old at the time, they proposed to do this new project and they had everything ready including the EIR and they were going to layer toxic waste with municipal waste because they got a municipal contract, a big one, and it was going to be the first time that, that kind of procedure was going to be used in a landfill. As part of their EIR, they reported that residents would not be disturbed by the extra truck traffic involved in shipping the new waste in because they claimed nobody lived along the east side of the Highway 41 which was totally false because there is a whole community on the east side of Highway 41. There is Front Street and Carter Street, neither of which was even mentioned in the EIR, as if they just didn't exist. Yet another example of how our lives didn't amount to much to folks in the County and Chem Waste.

“We filed a lawsuit against the faulty EIR and all this time you know now Bradley Angel wasn't with Greenpeace anymore. He had formed his own organization and my parents had helped him you know, form Greenaction so he left Greenpeace because they weren't going to focus on grassroots campaigns anymore, so we partnered up with Bradley and the Center for Race, Poverty, and Environment with Luke Cole, a lawyer. We decided to file the suit and we still had a lot of the original El Pueblo members get involved at this time. Luke advised us that we might not win this fight and that Chem Waste was offering a settlement. He asked us what we wanted to do and asked us what we most needed

in town. We all agreed we needed a community center because up until that point we really didn't have a place to meet up, to socialize, and to hold community events. The company proposed in their settlement that they would give us \$75,000 as seed money to start a center, except we were required to look for grants to help pay for the rest of it. They also agreed to pay us money for every ton of trash they received.”

The Kettleman City Foundation was created by CWM in 1998 to bring an end to the lawsuit that sought to block the company's plan to put municipal waste on top of a discontinued toxic waste landfill site. The Foundation was designed as a way to payoff the community in order to continue conducting business at the facility. El Pueblo eventually lost the case in Kings County Superior Court and was going to appeal to the state's Supreme Court when a settlement offer was agreed upon. The terms of the settlement included an annual contribution to the Foundation of about \$70,000 and 25 cents for every ton of waste and \$1.00 per ton of PCB waste.

Nearly fourteen years after the incinerator victory in 1993, the town residents found themselves confronting yet again a whole host of issues related to the toxic facility in their backyard. In March 2007, the EPA released a draft Environmental Justice Assessment Report (which is no longer available on the website because the information has been deemed out-of-date: <http://www.epa.gov/region9/kettleman/>) that examined potential environmental impact on local communities caused by the CWM facility. The EPA concluded there was no evidence that the landfill adversely impacted residents in either Kettleman City or Avenal. The report also concluded that it “couldn't find a greater concentration of cancer, asthma or other problems in Kettleman City than in the rest of Kings County” (Nidever 3/28/07). The study was done in conjunction with a proposed renewal of the facility's permit to receive PCBs. The stakes were high in potentially re-issuing the permit because Congress had banned the use of PCBs in 1976; the Kettleman facility remains the only one in the state permitted to receive this toxic waste. The EPA drafted a permit that required CWM to closely self-monitor the air for PCBs. Paula Bisson, a manager in the EPA's San Francisco office, was quoted as saying, “this represents a level of analysis never before seen for PCB in the country” (Lacayo 3/12/07). Responding to the EPA report, Maricela wrote an op-ed piece in the *Hanford Sentinel* urging the EPA to re-evaluate its findings:

As a Kettleman City resident, I was looking forward to reading the U.S. Environmental Protection Agency's draft Environmental Justice Assessment... I was disappointed to find that they had completely missed the point. The EPA claims that they could find no evidence that Kettleman City and Avenal residents experienced any ill-effects of living near a toxic waste landfill. We think they didn't look very hard. For example, instead of basing their conclusion on data coming primarily from Kettleman City and Avenal, they use data too broad to draw specific conclusions on our communities, and even use the self-serving data provided by Chem Waste as alleged proof that there is no problem living near one of the largest toxic waste facilities in the country. (Alatorre 3/17/07)

Later that month, the EPA hosted a public meeting in Kettleman City to receive input on the renewal of the PCB permit. Residents showed up chanting ““Si Se Puede!” “EPA: Shame on

You!” and some “wore white t-shirts stenciled with ‘KC is not your trash can’” (Nidever 3/28/07). They criticized the outcome of the draft report by demanding government agencies to conduct a more informed health assessment. Seth Nidever, a local reporter for the *Hanford Sentinel*, interviewed a government official: “An EPA official said after the meeting that no community health assessment was done. ‘We’re an environmental agency, not a health agency’ said Debbie Rowe an EPA environmental scientist. Rowe said the EPA had discussed with California Department of Health Services the possibility of doing a community health survey. ‘But a lot of communities want this, and (DHS) has limited resources’ she said. Rowe said EPA is still talking with DHS about the possibility” (ibid., 3/28/07).

The permit renewal was not issued and two years later the situation was still under consideration: “For 27 years, Chemical Waste Management has stored and buried waste contaminated with PCBs...Eleven years after the intended expiration of its permit, federal environmental officials are still trying to decide whether the facility should get a permit renewal to continue its management of the chemical for at least another decade” (Yamashita 2/6/09). Government officials reiterated that they would hold the company accountable by enforcing a policy that would require it to conduct its own reporting of potential PCB contamination of the air and/or soil:

Monitoring the air throughout the day as well as the soil, water, and vegetation around the facility more closely for PCBs to determine whether the chemical is released from the facility and if so, whether it’s bad enough to make people sick. The state has monitored PCBs in the air twice a month during the past few years but has found nothing... The agency will require monitoring of the air around the facility throughout the day looking for individual PCBs, or “congeners,” that are linked to birth defects and cancer. Bob Henry, Kettleman Hills operations manager, said...“The congener study the U.S. EPA is requiring the facility to do, I think, will have the finality to it as to whether the facility has any releasing of PCBs. If there are health conditions here in town, it’ll be good to demonstrate that it’s not coming from our facility. (ibid.)

A few weeks after the EPA report was released, CWM gave the Kettleman City Foundation a generous check in the amount of \$166,000 (more than twice the amount of previous donations). Bob Henry explained that “the surge was caused partly by more PCBs coming into the facility in 2006, as well as a growth in the amount of regular trash going into the landfill” (Nidever 3/28/07). But Henry warned that “the landfill is expected to operate until late next year. After that, it could continue taking trash if an experimental liquification process called a bioreactor gets approved for the site. The process, which involves adding wastewater to break down trash faster, could bring an additional \$100,000 to the Foundation” (ibid., 3/28/07). In a similar attempt the year before, Henry had made an offer “to contribute 35 cents per ton for municipal waste taken into a new, yet-to-be-built landfill, but the offer was rejected 5-1 by the Foundation board of directors, who said they didn’t want to receive more trash near the town in exchange for more money” (ibid.). The Foundation turned out to be a means by which CWM could use money to bribe the townspeople to get what they wanted at the dump site.

By the summer of 2007, CWM sought to secure the last approval for a permit from the California Department of Toxic Substances Control (DTSC) in order to experiment with what

the company called the “next generation of environmentally-friendly landfill technology.” The bioreactor, as it was known, was to be the first of its kind used to decompose solid waste at a much faster rate than the natural process of decomposition by injecting liquids into the landfill and speeding up the production of methane gas that the company suggested could be converted into electricity for the county and state. Company officials touted the technology as a way of increasing the landfill capacity and the life of the landfill because more waste could be eliminated more quickly—which of course would also mean more money for the corporation. Environmental activists drew attention to the use of the new technology over municipal waste that sat directly above a sealed toxic waste dump that contained PCBs. Nonetheless, CWM reassured government officials that the landfill was already double-lined and that the toxic dump was sealed with clay that would prevent potential discharge. To their advantage, CWM pointed to the project’s EIR that concluded no seepage would occur and they highlighted how the EPA report issued earlier that year found the facility was safe and would not pose a threat to the townspeople (Nidever 7/16/07).

Two months later DTSC approved the permit for the bioreactor to be used on 18 acres of a 30-acre landfill. Greenaction, KPOP, and El Pueblo quickly filed an appeal challenging the decision, stating that it would negatively affect the residents; the “DTSC’s decision was flawed” and would “violate the 1964 Civil Rights Act and California’s environmental justice mandates because the bioreactor would have a ‘significant, discriminatory and disproportionate impact’ on the mostly poor and Spanish-speaking communities” (Vang 12/9/07). Henry reinforced the “positive impact” on the town, emphasizing the company’s support for the “maintenance of sports fields, free oversize trash collection, and a donated fire engine for the fire department” (Yamashita 12/14/07). In January 2008, DTSC denied the appeal and eliminated the roadblock that was preventing CWM from going ahead with the project. The DTSC’s denial was, it appeared, on several grounds. The groups who filed the appeal:

Had no standing to appeal the DTSC decision because they didn’t raise issues during the designated public comment period...[and] the order “recognized that opinions differ whether creation of increased landfill capacity is a benefit of the proposed bioreactor” because of potential issues such as increased gas emissions, odors, and instability of waste mass and liner systems. But the DTSC also said these concerns have been addressed by the Waste Management project. The DTSC acknowledged a significant air quality impact, but concluded there was no evidence that either Kettleman City or Avenal would be disproportionately affected. (Yamashita 1/31/08)

Two months later, the company released a draft EIR for two more projects, including increasing the waste capacity by 11 acres at an existing toxic waste landfill known as the B-18, which would enable that landfill to continue operating until 2017, and the building of a new 64-acre toxic waste landfill to continue accepting toxins after the B-18 was shut down. This landfill, known as B-20, would be built in 2017 and provide capacity through 2042 (Vang 4/3/08). CWM had been working on the EIR since 2005 and made it available to the public in both English and Spanish. They sent out summaries of the report to local mailing addresses and to all county libraries and planned to hold “an informational meeting and picnic” in town (ibid.).

The Local Assessment Committee (LAC), as required under the Tanner Act (1986 AB 2948 which requires allowing for public participation around issues relating to developments in their area) is a seven-member committee appointed by the Kings County Board of Supervisors to represent community, industrial, and environmental interests surrounding the CWM facility. It was established under a state mandate in 2005 when the CWM filed its initial application for a permit to expand its landfills (Yamashita 3/17/08), but since it had taken many years for the EIR to be drafted, this was the first time the committee had convened. Activists argued that the LAC did not represent the majority interests in Kettleman City both in terms of members of any of the environmental organizations and/or someone to represent the Latino majority population in town. The committee included (ibid.):

- Chairman Vern Grewal, who was formerly an employee of a Silicon Valley-based Perkin Elmer Optoelectronics, which is listed by the U.S. EPA as a hazardous waste producer
- Kelley Deming of Kings County Citizens for Health and Environment
- Jim Verboon, a Hanford farmer
- Aletha Ware, a pro-Chem Waste member of the Kettleman City Community Service District
- Ceil Howe Jr., owner of Westlake Farms that spread sludge near Kettleman City

By August of the same year, “a coalition of five environmental justice groups called for the disbandment of the committee tasked to negotiate ways to make the Kettleman Hills landfills expansion more acceptable to the community, arguing its formation without any Latino representation is illegal. But King County officials insist the procedure was properly followed, and say there’s nothing illegal about the committee’s composition” (ibid., 8/8/08). Bradley Angel explains the situation in town at the time:

“Well it’s environmental racism, but it’s also social, political, and environmental injustice. Environmental racism is not just the disproportionate impact of pollution on people of color, but it’s systemic too. It’s the system that in the dump expansion process that the County, under state law had to set up a local assessment committee. The committee was rigged with Chem Waste supporters, no Latinos, the seats from the environmental group was actually a non-existent organization that supposedly worked out of Hanford and they refused to divulge their contact information when we asked for it. One of the community representatives, the sole African American in the entire town that since the time I have been working in Kettleman for over 24 years has always been a Chem Waste supporter and according to the local paper reports, she has received direct financial benefits. The other guy owns the large Westlake Farms who is trying to dump sewage sludge shipped up from Los Angeles onto Kettleman! So you know what we are talking about is a rigged process and we’re talking about racially discriminate actions and laws that are not being upheld. Around here, the Jim Crows laws of the 1950s and 1960s in the south are reminiscent of the kind of Ku Klux Klan. Literally I think the systematic racism in terms of hearing rules, rigged permit processes that exclude Latinos, police intimidation and police violence—

this is quite ordinary in America, believe it. Residents began to recognize that we weren't just taking on Chem Waste alone for what was happening in town, but instead, we were taking on a system designed to work against us."

Then the LAC "approved the hiring of an independent consultant who [would] be responsible for increased coordination and liaising with Kettleman City residents" and "once the consultant is hired, the Kings County Planning Agency [whose director was Bill Zumwalt] will step down as administrator of the LAC. The agency also administers the permitting process" (Yamashita 8/8/08). By November 2008, an independent consultant had been hired to function as a community liaison. Boogaert & Noll, LLC, lawyers based in Fresno was paid \$150,000 "to facilitate the public participation process and help the committee come up with recommendations to the board of supervisors by mid-January...the hiring of the firm by the county [was] a response to an ongoing complaint by opponents of the project that the committee meeting is not accessible enough for Kettleman City residents who live more than 30 miles away from Hanford" (ibid., 11/12/08).

Maricela continued to be an outspoken critic of the LAC and upon reading the news regarding the hiring of an outside consultant, she wrote another op-ed piece for the local paper:

"Mr. Noll is being paid \$150,000 to ram a deal down the throats of the residents of Kettleman City that I for one find unpalatable. For too long, Kettleman City has been the victim of the country's insatiable greed for funds that are generated at the expense of the health of our community. It is ridiculous to pay a consultant that amount of money when the residents of Kettleman City have long stated, loud and clear that we no longer want to be a dumping group for dangerous toxic chemicals...Nobody wants to say the impolite word, but that fact is that it is racism. The county has always exhibited the good-old-boy mentality that they know what's good for their Mexicans. Hiring an "independent consultant" instead of listening to us and allowing us to participate in the review process... [the LAC] is not even representative of over 92 percent of the community of Kettleman City. There is not one person on this committee who is Latino. The one Kettleman City resident (who incidentally, is not Latino) that sits on the committee is so vocal about her support of Chemical Waste Management, that there is no way that anyone would buy that she is capable of making an objective decision. The whole LAC process has been at best a farce and at worst, illegal... What would Hanford residents have said if the meetings for the rehab facility had been held in Kettleman City? How would they have felt if they were not even given notice of the meetings? What would have been their reaction if the few notices that were given out were written in a language that they did not understand? I imagine that the residents of Hanford would have called this whole process illegal. Wake up Kings Count, all of these things are going on right now in Kettleman City! Why don't we deserve the same respect and dignity that other residents of the county receive?" (Alatorre 11/14/08)

Angel submitted his opinion a few days later for the paper (Angel 11/17/2008) followed by Bob Henry's comments that stressed how the company "set the standard for the industry" and how

CWM “had the privilege to serve as a model hazardous waste treatment and disposal facility for a delegation from the Chinese EPA at the request of the U.S. EPA and DTSC” (Henry 11/27/08). Eager to meet the mid-January 2009 deadline, the LAC consultants quickly scheduled a series of meetings in Kettleman City only to be confronted at the first meeting by protestors:

“It was the first of a series of meetings scheduled to be held—with little notice to the community—over the next week in Kettleman City. County-hired consultants are in a hurry to gather community reaction. Pressed by a county-imposed deadline of Jan.15, consultants are cramming four meetings into an 11-day period as the last stage of the Local Assessment Committee process. The committee is charged with negotiating with the trash-disposal giant for compensation for its landfill expansion...the consultants and three committee members were met by nearly 60 protestors when they started the meeting. Protestors, some of them children, chanted in Spanish “What do we want?” A replying chorus cried, “Justice!” “When?” they continued. “Today!” others chanted back” (Yamashita 12/9/08).

At the end of April 2009, a decision was reached at the county level. The Board of Supervisors “voted unanimously to accept a settlement package that would require Waste Management to pay more than \$1.2 million upfront for various projects and spend more on an ongoing basis for the welfare of Kettleman City—which opposition groups say was reached through an ‘illegal process’” and “the agreement between the committee and Waste Management was approved despite a petition signed by nearly 500 residents condemning the committee.” (ibid., 4/3/09) As part of the settlement Waste Management was to pay:

- Up to \$100,000 for a community health survey of Kettleman City
- \$552,300 to pass off the debt owed by the Kettleman City Community Services District
- 10% or up to \$150,000 toward construction of the Caltrans safe-crossing project for Highway 41 in Kettleman City and for two electronic speed-indication devices at the intersection, which will cost about \$70,000
- \$450,000 to the Reef Sunset School District for various outdoor facilities
- To hire independent consultants to prepare air-quality and water-quality monitoring reports each year.

### ***“Look at How They Treat Me Because I Ask for Justice”***

In the midst of all this—the EIRs, hastily scheduled meetings, local newspaper press coverage, opposition and protest by local Kettleman City residents and all the controversy surrounding the landfill expansion plans—Greenaction announced that they had conducted a community grassroots survey in Kettleman City during the summer of 2008 and had discovered a significant health emergency. Their door-to-door survey campaign had found that of the twenty births in the town at least five babies were born with birth defects in a fourteen-month period between 2007 and 2008, and three of those babies had died. Greenaction, along with a coalition

of other groups, held a press conference at the Kings County Government Center in Hanford at which activists and “a group of parents showed up...holding photographs of their children with cleft palates and holding up signs bearing slogans such as ‘save the children’ and ‘no more birth defects’” then demanded an investigation and “called for a moratorium on all permitting processes for the proposed polluting projects until an investigation is done” (Yamashita 7/9/09). Tensions also began to take center stage at the county tensions began to boil over other projects in the area, including the expansion of the landfills, sludge farm operations in Kettleman City, and the proposal of a new power plant in Avenal (ibid.).

The problem with this disclosure in Kettleman City was that the testimonies given by parents whose babies were affected by the string of deaths and/or birth defects contradicted what county officials believed to be true. A few days after the press conference, both the county health officials and the EPA announced a preliminary investigation. Immediately Keith Winkler, the Kings County’s health director, was quoted as saying:

Purely on the number of reported cases, it might be argued that a “cluster” exists... [But of the five cases], the identity of one child could not be confirmed by the health department. The county also found out that one other child who died was born in Avenal, not Kettleman City... the county health officer has indicated that to the extent that a cluster may exist, it is his preliminary determination that it is most likely a random event unrelated to any environmental exposure to Kettleman City...2.97 cases of birth defects per 1,000 live births were reported from Kettleman City between 1998-2005—a number far lower when compared with 13.7 for Kings County and 12.27 for the entire Valley. (Yamashita 7/18/2009)

Dr. Benjamin Hoffman, the chief medical officer for Waste Management Inc., said: “I’ll make a guess that you’ll not find that cluster that it does not exist. There are some birth defects, but I’m going to bet there’s no unifying case. Local data didn’t show anything; that was consistent with worldwide literature” (ibid.). These sorts of conclusions drawn by officials connected to the county and corporation compared Kettleman City in the context to the rest of the county, region, and state over a longer period of time, that is, beyond the period between 2007 and 2008 as Greenaction had reported. This is a significant factor to remember because in the official state investigation of the crisis in the small town in 2010, officials took out of context the specific geographical and direct exposure to the landfill (and other potential polluting sites) that residents of this small town endure verses the rest of the region.

In the face of growing concern over this latest crisis, the Kings County Supervisors approved plans to hold public hearings regarding the CWM’s proposals to expand their landfill operations. The company agreed to pay \$150,000 to fund the rental of the Hanford Civic Auditorium to accommodate an anticipated crowd of over 600 people, a sound system, security, and court reporters (Yamashita 9/23/09). At the first meeting, which lasted for eight hours, “about 500 people filled an exhibit hall and two overflow areas with television monitors at the Kings County Fairgrounds” and “the Kings County Planning Commission listened to both sides of a controversial proposal” (Jimenez 10/6/09). The hall was packed “project supporters far outnumbered the protestors and a majority of the audience were employees of Waste

Management or their friends and families...the hearing marked the culmination of a five-year planning process for the company” (Yamashita 10/7/2009). CWM facility supporters and employees (from all around the region) were bused in wearing green company t-shirts and hats; “at one point, about 40 expansion opponents marched in and interrupted the hearing, chanting ‘si se puede’—yes, we can. Commission chairman Mark Cartwright warned the protestors to take a seat and be quiet or be removed from the meeting. They were not removed, but a man who had interrupted the proceedings earlier was escorted by law enforcement officers outside the fairgrounds gates” (Jimenez 10/6/09). The man who was removed was Ramon. He stood up during the meeting, demanding “Spanish translation by an independent party, not someone hired by Waste Management, and a full five minutes to speak in addition to the translation. But he was denied” (Yamashita 10/7/09). Ramon recalled his experience at the public meeting:

“Ay, look. There was a meeting one or two years ago in Hanford and there were so many people in attendance, but everyone with Chem Waste t-shirts, and I think that they were from the entire country because there were thousands of those t-shirts staring at you there in the meeting. And when we wanted to protest what had happened, they began to tell me, let’s go outside. The police, the guards were everywhere. I explained I didn’t have to go outside, I was there, and I began to yell, at the injustice. Then I just didn’t want to listen and someone came and pulled me, and it wasn’t just one but they surrounded me, the guards and the police. Um, I thought that there were like ten or twelve, but my daughter said that there were more. They shoved my daughter too. And they kicked me out when I had a poster of one of the children who was sick, while yelling ‘is this justice?’ Look at how they treat me because I ask for justice.

And well, I was surrounded by the police and when we were forced outside, they asked me ‘what’s your name?’ And of course I gave them my name. ‘Let’s see identification’ and I gave them my driver’s license and one tells me, ‘we won’t arrest you.’ I said ‘but why would you arrest me if I haven’t committed a crime or is it a crime to ask for justice?’ They got quiet, didn’t say a word. When they got all my information and they looked me up and found nothing, because I have never done anything wrong, and the only thing that I ask is justice. And one of them says ‘well, you still cannot come back inside.’ See, everyone who asks for justice always had to pay the consequence of speaking up. They left me alone, closed the door and didn’t let me back in. One policeman came to me and asked, ‘how long have you been living in Kettleman?’ I said, ‘all my life.’ And he said, ‘well, why don’t you just go to live in another town where you live in peace?’ ‘Ay’ I said, ‘do you want me to leave the company alone? To let them poison?’ He responded ‘well, you could live in peace.’ ‘No’ I said, ‘this isn’t peace, fleeing from dangers to leave others in danger, it’s not fair.’ He left and didn’t say anything. And then my wife could barely walk, she was ill during that time, and I wanted to go help her stand up because she couldn’t walk very well and they didn’t let me in, so someone else had to go help her.”

In a similar way, Maria explained the discrimination she and others felt at the meeting:

“You can see the discrimination because it is something so notorious that it is depressing to come to a place like this. My husband and I sat down. We went to a very large meeting where I think, the entire world showed up. So many people from various sectors of Chem Waste came to Hanford. They were screaming in English obviously ‘leave wetbacks’ and ‘what are you doing here?’ My husband sat down at the meeting among some of the Chem Waste employees and they were saying, ‘what do we care that those deformed children died?’ My husband said they must’ve thought he didn’t speak English. Then he said to them ‘you know what, shut up because this hasn’t happened to you and my daughter was one of those babies that died with malformations!’

They got quite and didn’t say anything. Then something that’s really sad was said. For someone to say to you ‘get out of here, what are you doing here?’ And they discriminate against you, you can see it from a distance and you feel it too. They look at you with bad taste in their mouth. We have gone to meetings about the water and obviously they think that we don’t know any better. I know a little English, but not much, but I can understand many things. We go there and since the majority of the people were Anglo, when two or three Hispanics come in, they turn and look at you as though they are saying ‘what is she doing here?’ But I don’t know if it’s because they are afraid of all we are doing or because they definitely can’t stand us because we are Hispanic.”

Bradley described a personal account of harassment in town:

“Another time in Kettleman City, me and my friend were run off of the Interstate 5 onto the median by a Chem Waste truck so that’s happened, and you know, in more recent years we had protests or a conference in Kettleman City and police are swarming all over the place, attempting to intimidate people. There was actually a civil rights complaint filed in 2007 that I helped with on behalf of the residents of Kettleman against the highway patrol and sheriffs for harassment and intimidation of people peacefully assembling. So yeah there is a lot of, you know, they use a lot of tactics to intimidate, to put fear in these people, directly or indirectly. At the hearing in October 2009, when Ramon was escorted out, they threatened to arrest us from the podium by the County Planning Commission because we had the audacity to actually stand up, we were brave enough to stand up before it started as they were about to begin the so-called public testimony midst an armed camp of police with canine squads, that we realized that the Latino Spanish speakers were going to get two and a half minutes to speak, while the English speakers were going to get five minutes! The nerve! I mean that’s illegal and we objected on the record and they kept telling us to shut up and sit down, to let the hearing proceed, and we were like well then wait a minute, you see this is not proper. You can’t do this in the United States of America, you know.”

Kit Cole, spokeswoman for the company, stressed the importance of the project as a necessary step to ensure expansion of the landfills capacity:

It is very important not just for the Central Valley, but for the state. About 30 percent of the hazardous waste come from the Valley, 30 percent from Northern California, and 30 percent from Southern California. It is because of the Kettleman Hills landfill that sites like PacBell (now AT&T) Park in San Francisco can be built, all of the lead paint from Golden Gate Bridge could be cleaned up and the Archie Crippen Tire Fire site in Fresno could be cleaned up. It is a critical resource for the state of California as well as locally for businesses (Yamashita 10/7/09).

County officials explained that they had requested the California Birth Defects Monitoring Program to provide more data for the small town. In an effort to discredit the work of Greenaction and the residents, Dr. Michael MacLean, the county health officer, said:

The state data is a far more reliable scientific approach than a door-to-door survey approach which activists demand county officials initiate. ‘If the United States doesn’t know what causes most birth defects, what do you think is the probability that we’re going to figure this out on four cases? There’s no science that can be done with four cases. We will only find what might possibly have caused this. We’re going to end up with the same thing we started with’<sup>3</sup> (ibid.).

Eventually the planning commission approved the expansion of the landfill acreage and supported the building of a new 64-acre landfill. A coalition of communities and activist organizations appealed the decision. In December 2009, the Board of Supervisors listened to both sides regarding the issue, except the meeting was very similar to the meetings held in Hanford just a few months before. At this meeting, CWM warned that if the expansion was not approved, not only would 60 jobs be jeopardized, but the landfill might be closed: “the facility will be full in January 2011” (Yamashita 12/8/09). The resident-activists pointed out that Boeing Co. and NASA sought to send radioactive waste to the landfill from the Santa Susana Field Lab, the former rocket and nuclear reactor testing facility in Simi Valley, California, which had experienced a meltdown at its site. According to the *Los Angeles Times*, the facility “was among 22 such facilities that California Environmental Protection Agency officers determined contained unusually high levels of radiation” (Sahagun 12/8/09). A couple of weeks after the meeting, CWM “voluntarily decided not to accept solid or hazardous waste from any portion of the Santa Susana Field Lab because of the uncertainty and community concerns about the levels of radioactive constituents in these materials” (Hanford Sentinel 1/12/10). By mid-December 2009, Kings County officials sent a letter to the state requesting an investigation into the birth defects problem in Kettleman City. The move was prompted by a request by Supervisor

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<sup>3</sup> Similar situation has occurred with uranium miners.

“Richard Valle, whose district includes Kettleman City [because] the number of birth defects and deaths have been confirmed said Dr. Michael MacLean” (Jimenez 12/16/09; Schwartz 2009).

Still, on December 22, 2009 the Board of Supervisors rejected the appeal made by residents and activist organizations to favor the decision made by the County Planning Commission. Disregarding the months of opposition by community members and activists, the supervisors voted unanimously for the expansion of the site. The news sent shock waves throughout the country and the world—even a newspaper in Ecuador (*El Universo*) covered the story (El Universo 2009).

In January 2010, state health officials rejected the county’s request for an investigation into the potential causes for the birth defects and deaths of babies in Kettleman City. Winkler, the county health director, informed the community that he had received a phone call from Dr. Linda Rudolph, deputy director of the state’s Department of Public Health: “Her reply was that they had done an analysis that does not indicate the investigation would be fruitful. We have not received anything in writing in response to [the health officer’s] letter requesting the study, but that’s what we were told by Dr. Rudolph” (Yamashita 1/12/10). With mounting concerns among residents, Supervisor Valle demanded an explanation by the state as to why they were not going to investigate the cluster, and “a letter urging the department to send an official to next Tuesday’s board meeting to give the explanation in person in public was faxed to the state agency” (ibid.; 1/21/10).

### ***“We Speak Up, We Struggle, and We Fight For Our Babies that Died and for the Babies that Will Come”***

In the community today there is a subtle, unspoken distinction that is made between the residents-turned-activists. There are the “old-timers” and the “new-comers.” The old-timers are people like Mary Lou and Ramon who fought against the incinerator in the 1990s and who continue to be involved in issues regarding the town. More recently, newcomers have emerged, not by choice, onto the environmental justice scene in Kettleman City. The situation around the birth defects has helped to mobilize particular segments of the population in town that might not otherwise have come together. The newcomers have no direct connection to the 1990s movement in town, but they recognize the struggle that began before their time. Many of these newcomers are women whose babies have been born with birth defects and/or have died. Other newcomers have lived in the town for many years but for one reason or another never participated in community meetings or events. These residents attribute their present activism directly to two things: their real-life experience with the health emergency in town and the in-your-face discrimination that many townspeople have been forced to endure and have complained about for many years. There does not seem to be any animosity toward any specific group, but there is a general consensus that the people who were involved in the past influence the direction of the existing movement. Many of the elders believe that what is happening today—birth defects, deaths, and cancer—is related to the long-term exposure to poisons that have taken years to become manifest in the lives and within the bodies of people. Mary Lou is convinced that “the crisis in town is proof that the 1990s activism was right all along for warning against future

contamination and now we fight because this crisis serves as a warning that the situation will only continue to get worse with time.”

Mary Lou explains that as an old-timer, she did not aspire to become an environmental activist but became an activist out of sheer necessity and a desire to save the lives of her family and her neighbors:

“You know, it’s not like I grew up wanting to become some kind of household name, you know. In fact it was just the opposite. I came from a pretty conservative home, from a culture that reinforced minding one’s own business. My father made sure of this. Outside of our family, we didn’t really associate with the people around us. I enjoyed my childhood because it was simple, no worries, and no pain, there was stability. Later when Ramon and I moved into Kettleman, you know, I didn’t even know my neighbors. It just wasn’t a natural thing for me to do, you know. To like bake a cake and go and introduce myself. I kept to myself, to my family, to work, to just living. Then, then, you know, it all changed. We were never told, we had absolutely no idea that this facility was in our backyards. I mean, we smelled stuff. We saw trucks every day, all day. But honestly, you know, I didn’t know any better. We got a flyer about a meeting and so we went, because we thought it was important to know about these things in your community. All of a sudden my life changed.

“Espy, a neighbor in town, began to ask questions. Eventually we got Bradley to come and educate us. We had to learn about nonviolence. I knew of Cesar Chavez of course, as did Ramon. We were Mexican after all, working in the fields. We knew of Martin Luther King Jr. We knew of Jesse Jackson and others. What we didn’t know then was that what was happening in Kettleman City was happening in other places, in their own unique way, but all of us, it turned out to be, you know, all colored people, and we were all fighting something of the same nature. And so every day, for hours on end, we worked to come together and fight. Now these women are coming together because of the babies. Times are different now. History is on their side. We fought in the 1990s against Chem Waste, the County, state.

“Today we are still fighting. But the nature of the fight is different you see. You know, we speak up, we struggle, we fight for our babies that died and for the babies that will come. We thought things would get better in the 1990s, but it hasn’t. I think the chemicals have done something to us. The air is no good. The water is terrible. Our jobs don’t help either because we get exposed, you know. How much more will we have to fight? We will fight until our babies are born normal. My gosh, you know, I am an American too. My grandchildren are too. My daughter Maricela is too. This is not fair, this is not right. This struggle is that simple. We fight because this is not right. And it’s more pressing today than in the 1990s because we can see the effect. Look at those photos that the mothers carry. It is painful to look at the mothers and the photos. It gets to you. It breaks your heart.”

Other residents, whether old-timers or newcomers, understand the significance of what is happening in their town under the pressure of a possible expansion of the landfill and its threat to their health and environment. In my conversations with various residents, I was curious to know how the community decided to go after CWM for the pollution in their town, rather than, say, the big corporate farms all around them, the contaminated water they bathe in, and/or the oil companies and old pipelines that are rusted and leaking. Maggie explained:

“When you have pain, you get involved. The pain I felt when...when...when... I had my son. The pain of seeing his face, this gives me strength to fight so that other mothers never have to go through the same thing because it is a terrible pain to live through. I may not know much, but I do know one thing is for sure. Living next to the largest toxic landfill is no good. I know that can't be good and I know it's not good to work in the fields, to be exposed to those chemicals they put on the fruit and vegetables that the entire world then eats. This can't be good too. I see the water coming from the tap. It's disgusting. See, I can do something about the water like go buy bottles. But what can I do about my husband's work in the fields? How will we survive? Is it better to work or to sit and be on government support? We work in the fields out of necessity. As for the dump, see, see, the elders they say they were never told that it even existed. I understand they were lied to and I believe this, I believe they were lied to because they lie to us now. They tell us there is no contamination, but why do they keep getting penalties by the government?”

Angela\*, a long-time water activist in the Central Valley, describes the facility:

“Beyond those hills, beyond the physical eye, you can't see them, just like the garbage, they're almost invisible. Like the garbage you don't see, the whole point is to blind you from it so you don't speak out because of it. That company is so big, so big they run the show in the County. Anything they want, anything they say, they get it. And who is most impacted? These people in Kettleman. It's like a castle on a hill where a king or something lives. Those hills are like their borders, barriers, their walls that protect them from the outside, like a shield. But the most incredible thing about this is how do we, I mean how do we really know for certain that they always follow the law, especially behind those hills? How do we know they aren't putting nuclear waste in those landfills? They are in the business of waste because there is so much money to be made. But what if? What if they were doing more? I say this because I know the company's record, they are bad, really bad, and I truly believe these people are being used in some kind of toxic waste experiment. The worst part about all of this is that they know, the government and the corporation together know what they are doing, and get away with it. This is why I blame them before I blame everyone else because if you can get to this landfill and expose them, you expose all the other people who put their waste there, and if you can do that, then you will know what actually went in there. That's how I think. Of course I think I am in the right.”

Ramon explained that the current health crisis in town is a reflection of the history of unaddressed problems that have plagued the town for years:

“The problems in this town go beyond the recent birth defects and deaths. There are many possible explanations for it, but as of now, we just do not have any answers. If it is not one source, it is another. At least we can recognize and agree on that. There is an uncertainty all around us, but we know that there is nothing to be uncertain about. We, we, us, we are very certain as to the sources and causes for all this mess, even if no one in the government or anyone else wants to admit it. I see it, I smell it, and I know it. We bury them. We see them dying. We are witness to it.”

Michael\* has been living in Hanford for most of his adult life. He described the toxicity surrounding Kettleman City and the consequences that has on the land and on the people:

“Kettleman, that ole’ town is nothing short of being a pot of cooking stew. When stew is cooked, it’s really delicious when you throw in carrots, onions, and the sorts of vegetables. It takes on a life of its own, absorbing all the ingredients and seasonings. That’s what they are doing in that ole’ town, throwing together, mixing up all kinds of poisons, mixing everything and letting it go up into the air, fall deep into the soil, and heck, its even in the water, even in the food. The pesticides and fertilizers, all that stuff. When the planes come, they come very close to their homes. I say go over there and you’ll see how close their homes are to the fields. It’s a mockery that they even let people, legally, live there. The homes are right next to the fields. Kettleman is nothing like a good ‘ole town from the times long done. It’s basically a field. There is no distinction. You think pesticides decide to land on the branches of the trees or the stems of the fruit, or on those poor peoples’ houses? No. Usually like right now when it’s raining, lots of people are working there. Everything gets absorbed like in the landfill. Eventually that stuff, that disgusting illegal stuff, will go into their bodies. But here is the problem. There is no face for the pesticides. Sure in Kettleman they got Chevron and Shell, and PG&E. I don’t know anyone who works there and there is no face except for gas stations. As for the farmers, well, that’s another issue altogether. They’ve been protected by the government since day one.

“But you know who has a face in Kettleman? It’s that Chem Waste facility that has a face, and the worst part about it, is that they like their face to be known to be exposed to all because they are a good neighbor, at least that’s what they tell us they are. But that ‘ole town, that Kettleman that we pass to on our way to the coast, well, it’s nothing short of being a landfill altogether. It’s like there is no shock anymore because those people, like the trash in the dump, are slowly, slowly decomposing. I know that’s harsh to say, but I can’t explain it differently. When we think of Kettleman from afar, like from Hanford, it’s nothing short of a

being a dump, everything and anyone there is just a plain 'ole dump. I'm sorry to say that."

Miguel\* was raised in Kettleman City for the first ten years of his life. He now resides in Lemoore where he is raising his own family and continues to work in the fields. He rationalized why residents in Kettleman City do not blame their bosses:

"We don't blame the farmers because we are safeguarding our lives since we depend on the fields as much as the fields depend on us. But there's West Lake, a big farm gone bankrupt. They used to be the big ones, the biggest one. There's the Boswell man down the street. Um...He's too far for us in Corcoran. Nobody sees him. He just owns the fields and people work on it. On paper they own businesses like these, but they are kind of protected. That's how I see it. They are detached. They own lots of land. We work on the cotton, we get paid cheap, and they make money. Lots of money. So who do you blame? Who has the most money? The biggest pockets. That's how I see it.

"But you know, babies die, people die, cancers come and go, and then you face even more after death. If you believe that is. All the money in the world isn't going to bring back those kids, the elders, and the community folk. All the money in the world wouldn't and it's best that we come as a community, larger numbers this way, the entire county, to try to fix some of the problems we know we have such as bad water, pollution, pesticides.

"But you have to target someone. Like a something that is big that is making the situation unbearable. Does that make sense? You understand? They are making the situation worse and sitting on top of the hill like the White House is this Chem Waste. And you know what really gets to me and makes me boil inside? It's how they claim they are so good. For that reason alone, I want to make them pay. They have big pockets and I believe they are heartless."

Mary Lou explained:

"Well, uh because we, it's not that we don't point our fingers at the farmers, it's just part of it, and crops have to be grown and they, they maybe need their little scolding too, the farmers that is. Pesticides should be banned, some have been, but some of those illegal chemicals continue to be used. We try to tell people to be safe when they are working in the fields. But we turned our attention to Chem Waste because they kept repeating the same thing over and over again to us, that they were using state of the art technology, that the incinerator was safe. But I just felt like, well, if it's really so safe, why is there so much concern? Common sense would tell you there are problems associated with not only the technology but the entire enterprise of land filling, especially in our neighborhood. Once I asked a Chem Waste employee if he lived in the county and he said his family lives about 200 miles away, up in the woods in Lake Tahoe. I smiled at his response and asked if they use an incinerator to get rid of their waste, especially poisonous

waste. He said they didn't. I asked him to feel our pain. We go after Chem Waste because we began looking outside of our community, at other communities in the country, and we began to notice the link. Yes the links were so obvious to many of us, that we fit some kind of profile for where to situate these dumps and build incinerators. And then we learned there was a government issued document encouraging industries to site in communities like our own. And this made me mad. Very mad to the point that it wasn't enough to just point the finger at them anymore. I had to be heard and I had to expose them."

Ana, a community organizer for Greenaction, explained how they conducted the survey in 2008 and how the mothers who had lost their babies were approached by the group:

"We interviewed as many people as possible for the survey. I believe it was probably about a little bit more than 200 people and we found out that there's a lot of children with asthma, people with allergies, not to mention the miscarriages. We also learned that people in this community and other communities too don't want to come out and say they had a miscarriage because it is way too personal. So you can imagine that some of these people didn't want to speak about their miscarriage, let alone birth defects or losing a baby. And the community is so small. It's like you don't have privacy living in Kettleman City. So what do you do? You keep to yourself and mind your own business. You don't tell people about your family situation.

We learned that the issues around the miscarriages and the babies is something really, really personal, that culturally speaking, you don't just go out and talk about it. It's not something common to tell your neighbor you know hey I just had a miscarriage. You don't tell anybody for that matter. You would really, really have to be close to the person and win the trust of people in order to get them to talk. Well, when I started visiting some of the parents, obviously it was very painful especially to see the parents talk to me about their situation. And how that had come about was that I had heard rumors in the community about what was happening to so and so person and I went over and told them, you know, that we were doing a health survey and we wanted to find out what the problems and issues within the community were.

I explained how important it was that they participate in this. Honestly that's when they started, you know, telling me, you know. It was so hard to listen to their stories and I was just listening to them, for them, it was all real, it wasn't like a story being told, you know. I happened to look into the situation and we started connecting the dots because it wasn't only just one parent, there were more mothers who were coming out. We connected the dots and told them that they weren't alone. They didn't believe us at first but we explained how we knew of other mothers who had experienced some of the same things and that we needed to come together to be a force to do something about it. But first we had to talk to the mothers so they knew what they were getting themselves into as activists

especially in this town especially because people before them had been fighting the county, state, and the corporations. And I think all mothers, all the mothers came together because individually all these people in this community are either suffering from something or have something in their system whether its allergies or you know something as dangerous as having chemicals to cause birth defects or cancer, they are compelled to come forward. It's like they believe this is why God put them here, to speak out.”

In August 2009, the mothers came together before regulatory officials at a community hearing in the Kettleman City community center. They began attending county hearings demanding an investigation into the causes of their babies' birth defects and/or deaths and they also began giving interviews to journalists. The newcomers did something that the 1990s Kettleman City activists were never able to do—that is, they were able to physically show their opposition for the toxic waste facility by holding up photographs of deformed babies that they believe were a consequence of pollution in the town. They enlarged the photographs of the babies with deformities and held them up at demonstrations and meetings urging officials to investigate the situation. Maria painfully describes losing her daughter:

“When Ashley was born, I was shocked because I was told that she was going to die. I mean imagine it. No. I had no idea I was going to talk to the news because I asked myself, ‘what is going on in Kettleman City, why are children being born like this?’ And my mom called my house and said ‘there is a woman who is working for an organization that wants to know why the children are being born this way.’ Then I said ‘give her all my contact information so that she can call me and she can come visit and ask me about it but by then Ashley had already died. Ana came and spoke to me, told me about the survey. I realized I wasn't alone. Other people started to worry because America was born sick, Ashley was born sick, Ivan was born sick, Emmanuel was born sick. People started to worry, to think, ‘what is happening?’ All the questions led to interests then protest.

“I don't want future generations to have sick children or that people keep dying from cancer because personally I have lived in Kettleman City for seventeen years and I have met a lot of people who are no longer here. Who had died within months from cancer. This is such a small town and it's not fair that we live through this and to have people not protesting this, to remain quiet is not enough. The majority of the people here are fearful, because we are poor people, undocumented; we are not bilingual, people who are scared about immigration officials who might come and leave their families alone or whatever. But I want them to know that this will not continue to happen, that we are struggling for all, for all the families. So even if one person cannot speak because they are scared, in their place two stand on their behalf. For my daughters, for my mother, for my siblings, for my nieces. I have nieces who thirteen, fourteen years old and who will one day have a family of their own and I don't want their children and for

them to suffer the way we have, for them to suffer what I suffered with my daughter.

“And that they tell me tomorrow ‘your daughter had a deformed child or with malformations or with cancer or respirator problems’—I don’t want that for my daughter’s daughter. I want to help the people and let them know that we are here. And I am not going to stop doing all this until we get answers. Until they tell us who is to blame, when everything is free from contamination and free of all of this, that’s when I will stop. I will keep fighting for all those people, for everyone who cannot speak, for everyone who is scared. I am going to continue until I die, because I like what I am doing and also to fight to honor my daughter who is no longer here.”

Maria’s daughter Ashley died in January 2009. Eight months later Maria was interviewed by a local paper, *Vida En El Valle* and began to speak up: “It is no longer a coincidence that my daughter was born unhealthy, that other babies were born unhealthy, that infants have died, and that more are being born with defects. Why is it happening? There has to be an answer, but unfortunately no one has given us one. They tell you ‘we promise we are going to investigate, we promise we are going to investigate,’ but nobody has responded, and answered why babies are being born like this” (Plevin 9/24/09). She explained how she found out something was wrong with the pregnancy:

“In Avenal I got a pregnancy test and from there they sent me to Lemoore to be seen by another doctor who supposedly treats pregnant women. When I was five months, I wanted to stop working because one of my legs was hurting. I then told the doctor that I wanted an ultrasound because I wanted to know if my baby was coming fine and he said that he could not perform the ultrasound because the baby was so small. His assistant wanted to listen to the baby’s heart, she but could not locate the heartbeat. Imagine how I felt. Then the doctor tried and he grew worried because he was having a difficult time finding it too. He searched for nearly fifteen minutes, for Ashley’s heart, and obviously they couldn’t find it because I think that since then she wasn’t well. In the end they did find it and said everything was okay. After two or three months later, they performed an ultrasound. Nothing special was done. They sent me to a specialist who said the baby was very big and that they needed to put me on a diet because I was prone to have diabetes during my pregnancy. First they said the baby was too small, now the baby was too big. They sent me to a specialist in Visalia so that they could treat the diabetes. They told me that I couldn’t eat tortillas, bread, all that because my baby was very big but that was a lie because when Ashley was born she was only three pounds in fact she was less than three pounds.

“I gave birth at exactly nine months but I was told Ashley was born genetically at eight months. No one ever told me anything. A C-section was scheduled for March 2008. I got to the hospital and they started everything they wanted to do. I asked them what was happening and said they “the baby has a cleft palate and a

cleft lip.” I was surprised that America, Magdalena’s daughter had died a month before and my heart jumped thinking that my daughter was going to die too...the same sickness...the same, but not exactly, but both chromosomal problems. Ashley’s was 18 and America’s 16. Ashley had chromosome 18, cleft palate, cleft lip, mental retardation, a heart murmur. She was far worse, medically speaking, than America. They took her to Madera hospital because she was very sick. She had two heart attacks, and had she had another one, the doctors warned me that they would not be able to do anything to revive her. She was not going to live, not more than a month the doctors told me. She lived ten and a half months.”

Magdalena Romera, whose daughter America died in 2007, explained to a reporter: “My daughter America was the first of the babies born with a cleft and other problems. Until the day she was born, the doctor told me she was fine. She was 4 and a half months old when she died. At first, I thought it was an act of God. Then I started hearing about the others” (Los Angeles Times 1/1/10).

Lupe, still feeling distraught for not having known better, described how one day, without knowing about the growing situation in town, she witnessed one of the mothers with a dead baby in her arms:

“One of the mothers, wish I didn’t know, she um... she um... she covered up the baby because she didn’t want anyone to see it because it was defective. She didn’t want anybody to laugh at her baby. And I didn’t know, I didn’t know. I thought she was just taking her baby just to the church, but when we asked her, we shouldn’t have asked her, we found out. We didn’t know how she died or why it happened. And I know all those mothers are in a lot of pain because they have no answers. She held the baby. She was going to the church and then to bury her baby. We saw it. We witnessed it. We can’t keep doing this. I still feel bad. I still see the image almost every day.”

Maggie’s son was born with a cleft lip and half of his brain is still missing. She is one of the newcomers, but she has become one of the more vocal mothers:

“I used to go to the clinic in Avenal, but then they sent me to Hanford explaining that since I was eight months along, the doctor or midwife could get to me that way. I went to Hanford and my stomach was very small and although I had ultrasounds before and everything was fine, they did an ultrasound and told me my baby had an open lip and they referred me to the children’s hospital in Madera so I could get a more profound ultrasound. They sent me to Madera. I was there for two hours. They checked me and the baby and they told me that my baby had not only the lip, but also his nose was open and a very wide nose. I saw a person who specializes in high risk pregnancies and I began getting ultrasounds like two times a week throughout the last month and every time I went all the way to Madera, they told me things were getting worse. For example, well, they told me about the lip, the nose, and the eyes, and then after that, they tell me that it is also

missing another part and that he had a liquid or something like that, in a part of the heart that shouldn't be there.

"Each time I went it got worse. Then my faith in God was greater and each time it got greater because I would say to myself God will create a miracle. When I was going to give birth they scheduled the appointment for a C-section in a hospital. On the day of the appointment, in the room, they had many specialists. I don't recall well because I was a little scared because there were a lot of people there in the room waiting for my child to be born and to check everything. And before they transported me to the room after the operation, a nurse came in and asked me if I wanted to hug him because, like that, he was going to die. She asked me if I wanted to hug him and if I wanted to look at him! It was terrible. I went into this with a lot of faith, but when they said that, I was trembling and I got scared.

"And when he was born, my husband told me he was born with an open lip. I had hoped that he wouldn't be born like that, but my husband said 'he looks like a little monkey.' Because he looked like that, his nose, well, really, it was open like a little monkey. I felt like, like I had a little animal instead of a boy, but at the same time I reminded myself he was my son and I loved him and I am happy with my son...The doctors performed a lot of studies and they only said that, well, it's not genetic, that he wasn't born that way because of me or my husband, and that this syndrome with my son was very rare. They explained that my son's condition was very rare. They did studies to see if it was our lifestyle to see if something we may have done that may have caused this. They wanted to blame us for this. In the end they said he was born like this because he chose to be born like this.

"But that wasn't an answer for us. I have other children. They were normal. I worry that there will be more people with cancer in Kettleman. I worry about getting cancer. I worry more children will be brought into this world like this. Their children will grow up with deformities. I feel incompetent and frustrated. I don't know how to say it, to see that I can't give my children a better quality of life. Look where I live. It's terrible to feel that you can't give them more, because they deserve it and you know it. All I know for certain is that where I live has something to do with all of this. There is too much contamination. So I have joined the other mothers to fight for answers."

Although the birth defects crisis was becoming common knowledge to local residents, Maggie described her discomfort when she first brought her son home from the hospital:

"I'll never forget the look. Everything told me, you know, you could see their sorry faces when they looked at my son's face. Many people turned away when they saw his face because it did look very bad. Many people even felt sorry to see him, and a brother of mine didn't even want to see him. He felt that...he felt he couldn't see him because it would make him cry. He didn't want to see his nephew...and other people too, when they would see him they would say, something has affected you. It was something that affected you that made your

son like this. What they meant was that it wasn't my fault. I told them I didn't know what it was. Some people said it was because of an eclipse, but I don't believe in that stuff because I believe and accept only God's will and He is the one who takes care of me and well, it was His will that the child was born like this for a reason.

"It's hard because even one person who believes in eclipses told me that my baby was born like that because I was dumb, because I didn't take care of myself and she was like blaming me, and I, well, I said no, that my baby was born like this for some reason, it was for a reason that God allowed it so that we can keep fighting because there's something in this community that is not normal. Then when those neighbors began to see other children born this way, they too agreed that yes, there is something going on and it is very bad."

While many of the women joined the activist movement in town, they explained that although their men folk were not physically standing in the frontlines with them at meetings and demonstrations, they acknowledged the support their male counterparts continue to give them. Maggie explained:

"My husband participates whenever he can, but he is almost always taking care of the children so that I can be there and listen in and I pass on the information to him. He says to me 'you go and I'll stay with the kids.' He agrees with everything that I am doing. What happens is that whenever there are events, or when one has to go and talk, they occur at times when they are working and since the men work in the fields, it is very difficult for them to get days off and if they ask for a day or two off, they lay you odd for a month or forever. Then they say to the women, 'we can't risk leaving our kids...without food, you go and I'll stay at work.'" But if it wasn't for their jobs, the men would be there too."

One of the most outspoken activists in town, Ramon, explained: "I participate to yell things at them, because I can't be silent. As much as I try to contain myself, I cannot." Similarly, Alejandro whose daughter Ashley died reasoned:

"I'm speaking for the men. We know a lot of people up there in Kettleman City, and in Kettleman City they're friend. We work together and every Friday and every Saturday, everybody reunites, drink a beer and everything. And I can hear the people, how they express their problems. No, just only looking for money that's why they do this and that. And most of the father, I can see like two or three with the same problem as me and my family. Our kids. The problems. We lost our daughter. One other father, I see at the cemetery, at Kettleman, at reunions, at the meetings. I don't know why the other fathers they don't go, maybe they don't care or I don't know. I don't know. But I'm never going to forget my baby. And I'm never going to give up."

### ***Critical Mass: Making Our Voices Heard***

The mothers captured the hearts and attention of people all across the United States who came across their stories in newspapers, magazines, and television coverage. Their protest was one that was quite visible and with the help and support of other residents and environmental organizations, they helped to shed light on something that could no longer be denied by officials. By the end of January 2010, then Governor Arnold Schwarzenegger directed state public health and environmental officials to visit Kettleman City to:

Conduct a thorough investigation into the causes of an abnormal percentage of birth defects... Schwarzenegger's intercession comes more than a year after activists unsuccessfully petitioned state agencies to investigate whether a large toxic dump near the community might be causing cleft palates and other defects among the mostly low-income Latino residents. Jared Blumenfeld, the regional administrator of the U.S. Environmental Protection Agency launched a federal inquiry, calling the situation "a human tragedy at a scale...none of us would want to have to endure. We will take our time and spend time on the ground...When I hear about people doing reports without going to the community, it makes my blood boil"...in a statement, Schwarzenegger emphasized that the investigation would "include interviews with families," as well as "a scientific review of soil samples and a full examination of medical records." Officials would also review the overall birth defect rate over a 22-year period in the region. (M. Roosevelt 2010; Cone 2010; Jimenez 1/30/10)

The EPA announced that Blumenfeld "planned to travel to Kettleman City next week in a rare personal visit by an EPA regional administrator. The trip expect[ed] to include a tour of the dump and conversations with parents of babies born with cleft palates and cleft lips" (Sahagun 1/29/10; Griswold 1/28/10). While the Board of Supervisors in Kings County was not persuaded by the activism coming out of Kettleman City (one month earlier it had voted unanimously to allow the facility to receive permits to expand its site), all of a sudden the small town was propelled onto the national scene when government agencies rushed to examine the birth defects crisis, bringing the environmental justice movement back into full focus.

With newspapers and television studios flocking into the town to interview residents, officials could hardly turn a blind eye. Moreover, the discovery of the birth defects cases enabled environmental activists and organizations to politicize and frame the issue as connected to environmental health and inequality. The community's ability to network with organizations throughout the valley and state in effect enabled them to galvanize government agencies into action. On January 31, 2010, the *Hanford Sentinel* reported county officials had:

Confirmed the sixth birth defect case out of Kettleman City from the 14-month period between September 2007 and November 2008...previously the official estimate of birth defects during that time was five out of 63 live births. Kings County Health Director Keith Winkler said the discovery of the sixth case was recent, although he could not elaborate how recent it was. The new information

was not immediately reported to the public because the pending state investigation may turn up more cases. (1/31/10)

The preliminary findings by state health officials concluded that there was nothing unusual about the rate of birth defects in the town between 1987 and 2008. In their presentation to the Kings County Supervisors, “officials acknowledged the high occurrence of birth defects in Kettleman observed in 2008. But they said the initial review of medical records found no patterns that suggest a common underlying cause for the health anomaly or an abnormal rate of birth defects in the community during the 22 year monitoring period ending 2008” (Yamashita 2/9/10). Bradley Angel from Greenaction refuted the findings, stating that “the report failed to mention the three infant deaths that have occurred in Kettleman since 2008 and the sixth and the seventh cases that came to light during the past week [and] the report failed to list exposure to environmental toxins as a potential cause of birth defects and that the report watered down the statistics by stretching the number over a 22 year period” (Yamashita 2/9/10). Immediately Senators Dianne Feinstein and Barbara Boxer called for a moratorium on the facility expansion permitting process (Los Angeles Times 2/10/10).

The Spanish radio and television networks also began to cover the crisis in Kettleman City. The *EcoConscious-Conciencia Ecologica* blog wrote a piece entitled “¿Basura o Bebes?” (Trash or Babies?). The blogs pointed out that the town was an example of how environmental injustice crosses with issues of reproductive injustice and how corporations do not care about the consequences of their actions with certain groups of people as long as they are able to profit from it (EcoConscious Blog).

Maricela Mares-Alatorre and Enrique Manzanilla, who worked for the EPA, were invited by *Radio Bilingue* “Linea Abierta” radio station that airs in the Sacramento and Fresno region to join in on a discussion of the “Renovada Lucha Contra los Desechos Toxicos” (“Renewed Battle Against Toxic Waste), emphasizing the environmental discrimination felt by residents and the results of the state’s findings. Manzanilla emphasized that what had been announced to the community was a draft report of their findings, but Maricela made the case that such reports have political power and that people like those in the county and state use such reports as truth in order to further their own agendas. The host sided with Maricela while openly expressing his skepticism of Manzanilla’s claims (Radio Bilingue 3/29/10).

Two of the mothers from Kettleman City were interviewed by Zaidee Stavely, the environmental reporter for *Radio Bilingue*. The program emphasized cleft lip and other birth deformities and it also sought the expertise of toxicologist Janet Sherman. Sherman argued that there was sufficient reason for an investigation since rates of birth defects and spontaneous abortions are abnormally high, but she pointed out that given the methodology, such an investigation would result in no conclusions at all. Sherman listened to the mothers disclose the health outcomes of their babies and at one point she suggested that the activist-mothers mark on a map where each of the parents lived and worked while they were pregnant to try to find a common factor/source. She also took note of the chromosomal abnormalities in the two babies and suggested the importance of investigating whether or not nuclear waste was ever dumped at the landfill because such toxic waste is known to cause chromosomal abnormalities (Radio Bilingue 11/19/09).

Leslie Berestein, in an article in the *Union Tribune* (2/2/2010), “Toxin Probe Eyes Link to Tijuana,” noted a link between toxic waste produced in Mexico by an American corporation and birth defects in Tijuana and the shipment of the cleanup waste to Kettleman City in 2004:

Nearly six years ago, environmentalist and government officials on both sides of the border cheered as cleanup efforts began on the site of Metales y Derivados, a notorious former American-owned lead smelter in Tijuana whose neighbors long had complained of health problems, including birth defects that they blamed on the toxic-waste site. As part of an agreement, roughly 2,000 tons of lead-contaminated soil and other waste removed from the site was trucked north to the United States for disposal. As it turns out, some of it wound up in a Central California toxic waste dump that is now at the center of controversy over a suspected cluster of birth defects in families living nearby. The waste trucked in from Tijuana, about 20 tons in all, constitutes a minute fraction of the toxic materials deposited...still, news of the health concerns there, which have promoted a state investigation, have those who pushed for the cleanup in Tijuana shaking their heads. ‘We feel terrible,’ said Amelia Simpson, director of the border environmental justice campaign with the Environmental Health Coalition in San Diego, which worked with the U.S. and Mexican governments on the cleanup. ‘It is another low-income community, and in this case, Latinos.’

There was never an official study linking birth defects in Tijuana’s Ejido Chilpancingo, a poor residential area, to the adjacent Metales y Derivados site that sat exposed for years, long after the plant was closed. ‘People never made a formal complaint because in our community, it is a stigma,’ said Magdalena Cerda, a community organizer with the Environmental Health Coalition. ‘All of the cases we knew of, they kept them a secret.’ Cerda, who worked directly with residents near the Tijuana site, said health problems in the Chilpancingo community included cases of children born with hydrocephalus, an abnormal buildup of cerebrospinal fluid in the brain, and spina bifida, a defect in which the spinal canal and backbone do not close before birth. Lead poisoning also interferes with development of the central nervous system and can cause learning and behavioral difficulties in children, who are particularly susceptible to the toxin... Metales y Derivados, which recycled vehicle and boat batteries brought in mostly from the United States, operated during the 1980s.

The contamination was discovered in the early 1990s; in 1994, owner Jose Kahn moved to San Diego to avoid arrest after Mexican authorities shut down the business and tried to charge him with breaking environmental laws. Kahn has since died. For years afterward, the property remained littered with 55-gallon drums and other containers filled with lead waste. More than a decade’s worth of efforts on behalf of environmental organizations on both sides of the border resulted in an agreement between the U.S. Environmental Protection Agency and its Mexican counterpart, Semarnat. In June 2004, a portion of the waste from Metales y Derivados was sent to Kettleman City, according to a federal EPA report. As part of the bi-national cleanup deal, became Metales y Derivados was a

U.S. company operating in Mexico under the North American Free Trade Agreement, the waste had to be removed to the country of origin. The rest of the roughly 2,000 tons of waste taken from the site and exported north went to a toxic waste dump in Nevada. More toxic waste would have been shipped back to the United States had it not been for the cost...there was enough to move the first 2,000 tons, but there wasn't enough money and we had to do what was most economically feasible. The alternate solution was to entomb an estimated 42,000 tons of remaining contaminated soil and waste beneath a concrete cap; about a year ago, a ceremony was held reopening the 4-acre site for use as a public park.

In March 2010, activists in Kettleman City openly criticized state officials for undercounting the number of babies born with deformities (Grisworld 3/4/10), and then came another disclosure:

New information brings the total count of babies born with deformities to mothers living in the impoverished farm worker community since September 2007 to 10—double the number previously acknowledged by the state and known to the count. The fact that the information didn't come voluntarily is angering activists as well as county officials and deepened their distrust toward the state agency, whose reluctance to investigate the concern last year has led to the governor's order in January...activists contend that the Department of Public Health has underplayed the seriousness of the birth defect concern and already has failed to show commitment to conduct a fair and thorough investigation. (Yamashita 3/9/10)

While the numbers were being debated, the movement in Kettleman City continued to gain critical mass in the media. A *Los Angeles Times* article captured the mounting grief endured by the community: "A year ago, these Mexican immigrants were shy, unquestioning. Not anymore. In less than a year, they have overcome their fears of government officials and placed this farm worker community, one of the poorest in the state, on the national stage" [and one mother explained] "the first time I spoke out in public against the chemical dump, I felt so scared and embarrassed that my heart was pounding, and I was shaking so hard I could barely speak. Today, I am a braver woman"" (4/1/10).

Similarly, the *Fresno Bee* ran a cover story with the headline: "Focus on Kettleman City: The Stories of Infant Deaths and Birth Defects Helped to Turn the Spotlight on this Small Community's Big Problem" (Fontana 2/3/10). The *New York Times* ran a full-page article with the headline, "In a California Town, Birth Defects, Deaths and Questions" (McKinley 2010). The cable news network, CNN, aired a segment on the "Small California Town Fears Birth Defects Linked to Toxic Waste" (H. O'Neill 2010).

On the internet, a Youtube video was posted "of three young men joking about children with birth defects in Kettleman City" (Griswold 2/5/2010). The video was quickly denounced by the facility and activists. Other videos have since been posted of activists and residents protesting meetings as well as recordings of media clips.

## ***“Fox Guarding the Hen House”***

In April 2010, the EPA announced that the CWM facility in Kettleman City had improperly handled PCBs at its site. EPA regional administrator Blumenfeld had ordered the inspection of the landfill to ensure it was in compliance. He said “there were a lot of questions about the facility. So after my visit, we sent a team of five enforcement investigators to the site for a week” and they found “PCBs in places they shouldn’t be. The chemicals were not contained where they were stored and where they were finally disposed of, in violation of federal disposal regulations. The company also failed to decontaminate the PCB storage area” (B. Anderson 3/9/10).

The company had already been “cited for non-compliance regarding the handling of PCBs in 2005. Waste Management also admitted in its settlement with EPA in 2005 that it failed to perform monthly monitoring of PCBs at one of its Kettleman landfills for three years from 2000-2003” (Yamashita 4/9/10). A few months later, after the EPA found that the company’s laboratory at the Kettleman Hill facility was unreliable, it sent a stern letter to the company:

A recent investigation at the Kettleman toxic waste landfill is producing post-treatment analytical results of ‘unknown quality’... the agency knew about a history of poor quality control at the Kettleman dump for some time, raising questions about why the problem was allowed to continue...among the findings include: a negative bias in cadmium measurements in the lab analysis method, unreliable analysis results for zinc, and although the facility’s May 2005 attempt to upgrade the software for the lab’s plasma emission monitor failed, the company continued to use the unit for analysis until December 2005. (Yamashita 6/2/10)

The EPA followed up by giving CWM 60 days to clean up soil contaminated with carcinogenic PCBs:

Discovered in soil beneath a concrete pad adjacent to a building where extremely hazardous wastes are treated for disposal. Preliminary results showed PCB at concentrations of up to 440 parts per million. Spills and other uncontrolled discharges of PCBs at concentrations of 50 parts per million on concrete or soil constitute a violation of the Toxic Substances Control Act. The landfill has operated for 28 years and is monitored, regulated, and controlled by nearly a dozen state and federal agencies. In those 28 years, the company has been fined more than \$2 million for infractions, including mishandling of PCBs, failing to properly analyze incoming wastes, storm water and leachate for PCBs, and failing to properly calibrate equipment. (Sahagun 7/17/10; Yamashita 7/17/10)

The Latino Legislative Caucus arrived in Kettleman City in June 2010 to hear the latest updates on the state and federal investigation. Assemblyman Alberto Torrico “let out frustration saying there is ‘lack of urgency’ from officials to address a health concern of national importance. ‘I’ve heard a lot of statistics and heard a lot about what the processes are. I could be mistaken, but I’m

not getting a real sense of urgency here. I feel like I'm getting the run-around.' (Yamashita 6/18/10; Jimenez 6/18/10; Stavelly 2010)

Soon after, the Center on Race Poverty & the Environment (CRPE) filed an administrative civil rights complaint against the County with the U.S. and California Department of Transportation alleging “intentional discrimination” against low-income Spanish speaking residents...some residents and activists claim they received less time to speak compared to English speakers and were not given translations of documents. They also claim they were intimidated by a large police presence at the meeting” [referring to the 2009 public meetings held in Hanford] (Yamashita 6/19-20/10; Jimenez 6/19/10).

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At the end of 2010, the investigation by the California Department of Public Health (CDPH) and the EPA reported their findings. CDPH reviewed the birth records and interviewed mothers of the children born with birth defects; the EPA tested the area's air, water, and soil to determine the causes of the recent birth defects in town. According to the official state report that was released in February 2011, the birth defects crisis in town remains a mystery because there was not a common or single cause or exposure for the birth defects:

Beyond narrowing their list of potential causes, state EPA and Department of Public Health investigators were still unsure why 11 babies were born with physical deformities in Kettleman City between September 2007 and March 2010. Three of the babies died. Tests of water, air, and soil; analysis of pesticides; and interviews with six of the affected families did not suggest a common cause for the health problems...Although more children were born with birth defects in 2008 and 2009 than would be expected for a population of Kettleman City's size, investigators found no clear trend that could be explained by exposure to environmental pollution. An examination of cancer rates for the census tract that includes Kettleman City found five cancer cases diagnosed among children younger than 15 during a 12 year-period, two more than would be expected. Most of the childhood cancers were acute lymphocytic leukemia and all occurred in areas of the census tract outside of Kettleman City...Although health investigators generally found pollution levels in Kettleman City to be similar to those elsewhere in the San Joaquin Valley. (Sahagun 11/23/10)

The report listed how CDPH had come to specific conclusions:

- They analyzed and tested 27 pesticides and showed it was unlikely that pesticides caused the birth defects.
- Air tests found no link between the Kettleman Hills Hazardous Waste Facility and environmental contamination in town. The ground beneath the facility diverts water away from the town, so wastewater from the facility cannot affect the wells that supply the town's drinking water.

- Testing found levels of arsenic higher than state standards in both wells that supply the town's water and in water from home taps. The arsenic levels were unlikely to cause birth defects, and most of the mothers who were interviewed said they did not drink tap water.
- Testing found low levels of lead in one of the town's wells and in the well that provides water for the elementary school.
- Air tests found benzene near one of the treatment units that removes the chemical from well water before it is distributed to the public.
- Soil and soil gas from a random sample of homes did not contain dangerous levels of contaminants. The only exception was one home where the yard had high levels of the banned pesticide chlordane, which is used to treat termites.
- There was no evidence that illegal dumping of trash or cars exposed the town to contaminants.

Bradley Angel refuted the findings, arguing that the report left too many questions unanswered: "Did they test diesel emissions? We don't know. Did they consider the fact that Chem Waste has been repeatedly busted for improper monitoring and handling of PCBs? Did they do a community health survey? Did they test the breast milk of the mothers? Did they do any bio-monitoring of people's bodies? We think the verdict is still out." (Yamashita 11/23/10)

The investigators examined the records from early 2007 through the end of March 2010, and found that there had been eleven children born with a major, structural birth defect during that time. But for various problems in accessing the mothers of these babies, investigators could interview only six of the eleven mothers, examining both their medical records and conducting face-to-face interviews. None of the fathers was interviewed, nor were other women in the small town. CDPH concluded that the information collected by investigators from the mothers and their records proved that there was no specific cause or exposure:

- Some of the birth defects may have looked very similar. However, after reviewing the children's medical information, we found that all the babies had different kinds of birth defects. A chemical or drug that causes birth defects will usually cause the same kinds of birth defects in every baby. This suggests that the birth defects in Kettleman City were not all caused by a community-wide exposure to the same chemicals.
- None of the mothers who were interviewed used tobacco, alcohol, or drugs. These things can cause health problems in babies as well as some kind of birth defects.
- The mothers had good health care while they were pregnant. Also the medical histories of the six interviewed mothers did not explain why they had babies with birth defects.
- Based on what the mothers told us, we do not think that they had exposures to chemicals at work, pesticides in the home, or chemicals from nearby industrial sources that would have increased their chances of having a baby with a birth defect.

A few days after the findings were announced, the CWM facility was fined more than \$300,000 for the improper handling of cancer-causing chemicals PCB: "Soil samples taken at the

Waste Management PCB storage and flushing building showed levels of PCBs ranging from 2.1 to 440 parts per million. Levels above 1 ppm exceed the regulatory limit and violate federal law” (Anderson 11/30/10). Moreover, “according to an email obtained from the U.S. EPA, state regulators suspended independent air monitoring for PCBs and pesticides at the Kettleman Hills waste facility in April 2008...this suspension of air quality oversight occurred at the same time as a spike in the number of local babies born with birth defects between September of 2007 and March of 2010” (Sepulvado 2010).

Angel accused the facility of “taking advantage of the time and for sugar coating the situation” because on December 23, 2010, the *Hanford Sentinel* reported that the toxic waste facility had entered an agreement with the Kings County Department of Public Health to pay for a county-wide pre-pregnancy education program for the next two years, costing \$159,000 (Yamashita 12/23/2010). The program was to help bring educational awareness regarding pregnancy to girls and young women throughout the County and not limited to Kettleman City.

As part of the state investigation, CWM spent \$800,000 on a study that was to gather and test air, soil, and vegetation samples over the course of a year. In its official report, CWM concluded that chemicals such as PCBs stored in the ground at the facility were too low to harm the health of the nearby community. EPA officials had helped to design and oversee the study, but the company conducted its own self-monitoring, by Wenck Associates, Inc. in 2010. Previous records had shown poor performance and monitoring of PCBs on the site, yet the results of the CWM’s own study announced on January 13, 2011, seemed to deny responsibility:

The levels of cancer-causing chemicals in its landfill are too low to harm the health of the nearby community...[Blumenfeld] said the data collected by the landfill showed there was no evidence to suggest chemicals migrated outside the dump at concentrations that would adversely affect human health. This is like a detective story. We’re trying to locate the culprit that has either directly or in connection with other things contributed to the birth defects. By ruling out PCBs we can really narrow our attention on other issues that may be of concern, like pesticide drift and arsenic in drinking water. (Burke 2011)

A few months later, in April 2011, the EPA released an 82-page report citing the facility for failing to follow protocols and meet particular standards; the EPA found that the company disposed of prohibited waste for five years between 2005 and 2010 and that its lab analyses were flawed. The *Hanford Sentinel* said that prior to the release of the report, “details were withheld at the time as the facility was given a chance to claim confidential business information” (Yamashita 4/7/11). The EPA, noting that the violations would not put human health in danger, stated: “our Resource Conservation and Recovery Act investigation report is now complete and identifies areas of non-compliance with hazardous waste management requirements including disposal of waste not properly treated for metals and failure to comply with federal requirements for analyzing hazardous waste” (ibid.; 4/7/2011). The report exposed “a recurrent issue at the facility is its on-site laboratory, whose data was found to be unreliable by the EPA last May...calibration failures of a sample analysis instrument were persistent in Chem Waste’s lab between 2006 and 2010...It is important to note that Kettleman lab was again certified by the California Environmental Laboratory Accreditation Program (ELAP) in January of this year” (ibid.). The article listed that were problems noted in the report:

- The company disposed of untreated landfill “leachate” (a solution formed by leaching, especially a solution containing contaminants picked up through the leaching of soil) from Landfill B-19, which has been partially converted to a bioreactor, about every 90 days without checking whether the waste met treatment standards.
- The facility disposed of prohibited wastes at Landfill B-18, a hazardous waste landfill, between January 1, 2005 and July 23, 2010.
- During the February 2010 inspection, EPA officials observed improper dilution of leached materials.
- Skimmings from one surface impoundment pond had liquid that exceeded standards for the toxic pollutants acetone, phenol and acenaphthylene.
- Treatment of leachate from another pond for cyanide was inadequate.

As for the racial discrimination case that resident organizations filed, on January 11, 2011, the Kings County “Superior Court Judge Steven Barnes ruled that the county properly analyzed the project’s health impacts and had substantial evidence to support its argument that the new toxic waste capacity won’t harm human health” (Hanford Sentinel 1/11/11). This ruling rejected activists claim over racial discrimination in the public meetings held in Hanford by the County Planning Commission.

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Bradley expressed his dissatisfaction over the investigation:

“At first they said the birth defects were statistically insignificant and they attempted to stretch out this data over two decades including other parts of the county and state. This was totally wrong to do, I mean, who else hosts the largest toxic waste dump in their backyard? What we essentially saw was a cover up, a very toxic cover up at that and you know we proved that we discovered more birth defects for the certain years than the state had admitted even though they are the ones with the damn records supposedly right? And when we pressed them and went public about it, the state Department of Public Health actually admitted they knew there were more birth defects than they had divulged and then made the bogus claim that they couldn’t even divulge the numbers because it might invade certain people’s privacy.

“I mean it’s just totally ridiculous and our claims were right all along. Total cover up by the state. So basically what we have is the fox guarding the hen house. These are agencies that refuse to investigate, these are agencies both California Department of Public Health and the California EPA that have both been directly

not peripherally, directly, involved in approving dumping in Kettleman City, there are agencies that always said that everything was fine. I mean the Department of Public Health...like uh...a few days before the hearing of 2009 we got tipped off by another watchdog organization that the Department of Public Health was about to approve the dumping of radioactive waste into Kettleman City from Boeing and Santa Susana. This is the California Department of Public Health. There is nothing public about them.

“These are the guys when Schwarzenegger ordered them to go investigate, they ended up doing it and if you look at their study, they didn’t even address the radioactive waste we asked them about. It’s like these agencies are born to filter, to classify, to speak on whatever data they produce. They say they didn’t detect radioactive waste, but there is proof over and over again it was sent there. We gotta ask ‘em, where did you look, how did you look, they don’t address these points. So you never really understand how the investigation was done to begin with. If the birth defects began in 2007, that we know of, right, and we have learned that Chem Waste who was supposed to be monitoring and self-reporting this information to the government, failed to do so, what can we conclude? That everything is fine and okay in the town? Is this even possible?”

Mary Lou draws a connection between the state investigation and the case of an onion gone rancid:

“These so-called experts come into town. They say they are listening to you. Then they go on and on about how if cancer is found in the community, it’s a simple case of one out of a million people. I don’t want to be that one in a million! Just take the example of the onion field that Westlake Farms lost. They checked those onions to see what killed them. They found it was the pesticide that did. Then they looked where it was sprayed on that particular day and they found it. They were able to connect it, the missing link that is. Why it happened. How it happened. When it happened. How much of it was sprayed on the onion etc. This is what they’re supposed to do with humans too. Babies have died. Babies have been born with deformities. Tomorrow it will be cancer. We already witness this in town. They are checking the dirt, they’re checking the air, okay fine. It has been contaminated. But they have not checked anyone in town, our hair, our skin, inside of our bodies. Our blood. Check us! We have had professor come and tell us that. We have doctors that come and tell us that. And do they do this, the investigators, no. No because then they might find something. You know that’s how they’re getting away with it because they check by the book. They check where they know they aren’t going to find anything or places that even if they find something, like say the babies are physically deformed so you can’t hide that, but then they say, we can’t determine the cause. That’s how they go around, around, around.”

Unconvinced by the official investigation, Maria expresses her frustration:

“Why do they say everything is fine when it is not. I still cannot believe that they say that Kettleman City is a place that’s free of toxicity and of illness when the people are dying, the children are dying. Then, how is it fair for them to say that everything is okay? It’s a lie and I am going to say it a million times. It’s a lie because they never came to draw blood, they never took a saliva sample. Blood or saliva from our bodies to see what part is contaminated and how we contaminated our children.

“Well, they came to ask us, they went to the houses of the mothers for two, three hours to ask us thousands and thousands of questions, what do you smoke? What do you drink? What did you eat three months before your pregnancy? Where were you sitting, where were you standing? What time did you close your eyes, who was your doctor, what did you eat? They asked thousands and thousands of irrelevant questions. It would have been better to perform tests. One day I saw a television show that’s like supposedly they have all these containers underground, like in canisters and they have them sealed and everything. But it’s like a time bomb because that’s going to last a while, but not forever. Everything has a limit and there’s going to be a point at which this will no longer fit, and then, where are they planning to dump if it will no longer fit?

“And there will be a time when, aside from everything that is already contaminated because they have some pipes so that they throw in layers of trash and seal it. Where does all that go? To the air, and the air, where does it go? To our bodies. And how do they know how contaminated we are? They don’t know because they haven’t come to do, to do studies of the soil because the ones who came from the EPA to perform studies of the soil to see what contaminants each house had. But go to a random house, study entire families, study skin, saliva, or blood to just how contaminated everything is.”

Lupe makes the case:

“To me the investigation is, is, is, to me, it’s something just like to cover up, to shut us up. Because definitely something’s going on here. We don’t know what it is. To me, I’ve been asking for a health survey door to door, and not only a health survey, but especially to those mothers that lost their children. You just can’t come into town and check the water and walk away. You must check our bodies. Something must be going on in their body too. Because simple science can tell you this, that if you inhale something over a long period of time that stuff gets into your body. We all know second hand smoking can kill you just as smoking the cigarettes kills you. What about toxic waste? The dirtiest, most toxic place in all of California is here in Kettleman City. Why? Because the largest toxic waste facility is in our backyard. Ironically all the science in the world controlled by a Democratic government says no, everything is okay. There is no 100% guarantee that what they’re doing at the facility is right. Look around the world, see the

disasters. If we have an earthquake here, what's going to happen to all these humans that are here in Kettleman City? We're gonna be...we're gonna be gone."

## **PART II: *Total Disaster***

## **Chapter 6: There is Absolutely Nothing Natural About This Disaster**

Hundreds of thousands of chemicals are used to produce the goods that we consume—from the foods we eat, the cosmetics we use on our face and bodies, and the furniture we bring into our homes. We are constantly being exposed to chemicals that are legally approved by the government without a full study of their possible impact on human health and the environment. Determining where to discard this toxic stew of used chemicals has posed a challenge for industries since World War II. Simply depositing these noxious wastes into landfills is a disaster waiting to happen.

Since at least the mid-twentieth century, dumping this waste into the earth has been the answer. Corporations that service waste praise “modern technologies” despite sound scientific data and empirical evidence from dump sites to verify its safety. The impact of our complete disregard of the environment and our continued dependence on landfills will endure for years to come. Landfill disasters are not always abrupt and obvious like the 1984 Bhopal and the 1986 Chernobyl disasters. Instead, disasters such as that of Love Canal in New York and Native American exposure to radiation and nuclear and chemical weapons build up slowly over time and affect large numbers of people. The devastation often becomes normalized as a rare occurrence. In most cases, people are exposed without ever knowing they have been exposed. Functioning as storage units, landfills have leaked and will almost certainly continue to leak. Landfills have permanently marked our way of life on Earth in much the same way that pyramids marked a lasting contribution of civilization in Egypt many years ago.

In their 1992 book *Rubbish! The Archaeology of Garbage*, William Rathje, the Director of the Garbage Project in the Bureau of Applied Research in Anthropology and Professor Emeritus of Anthropology at the University of Arizona, and Cullen Murphy, editor at large at *Vanity Fair* and the former managing editor of the *Atlantic Monthly*, describe the Fresh Kills landfill on Staten Island in New York City:

On a crisp October morning not long ago the sun ascended above the Atlantic Ocean and turned its gaze on a team of young researchers as they swarmed over what may be the largest archaeological site in the world. The mound they occupied covers three thousand acres and in places rises more than 155 feet above a low-lying island. Its mass, estimated at 100 million tons, and its volume, estimated at 2.9 billion cubic feet, make it one of the largest man-made structures in North America. And it known to be a treasure love—a Pompeii, a Tikal, a Valley of the Kings—of artifacts from the most advanced civilization the planet has ever seen. Overhead sea gulls cackled and cawed, alighting now and then to peck at an artifact or skeptically observe an archaeologist at work. The site was the Fresh Kills landfill, a repository of garbage that, when shut down, in the year 2005, will have reached a height of 505 feet above sea level, making it the highest geographic feature along a fifteen-hundred-mile stretch of the Atlantic seaboard running north from Florida all the way to Maine...Fresh Kills was originally a vast marshland, a tidal swamp. Robert Moses’s plan for the area, in 1948, was to dump enough garbage there to fill the marshland up—a process that would take, according to one estimate, until 1968—and then to develop the site, building houses, attracting light industry, and setting aside open space for recreational use.

Something along these lines may yet happen when Fresh Kills is closed. Until then, however, it is the largest active landfill in the world. It is twenty-five times the size of the Great Pyramid of Khufu at Giza, forty times the size of the Temple of the Sun at Teotihuacan. The volume of Fresh Kills is approaching that of the Great Wall of China, and by one estimate will surpass it at some point in the next few years. (pp. 3-4)

Chapters 6 and 7 examine the use of landfills on both a micro and macro-level and the pattern of landfill disasters that, by their very nature, fail to properly address the garbage and toxic waste crisis facing the United States of America and much of the world. Chapter 6 begins with an examination of national toxic waste regulations and the controversy surrounding the use of landfills to get rid of unwanted toxic poisons.

## *The Origins of Toxic Waste Regulation*

Corruption and illegal toxic waste dumping became a household topic of discussion in America only after the catastrophe of Love Canal received nationwide attention. Between 1947 and 1952, Hooker Chemical and Plastics Corporation (Occidental Petroleum Company acquired Hooker in 1968) stored over 43 million pounds of toxic waste that contained 82 different chemicals authorized for use by the government including radioactive and carcinogenic compounds in drums at the site (United States of America v. Hooker Chemical and Plastics Corporation, p. 13). When the drums began leaking in the 1970s, the nation's first chemically induced toxic disaster forced 200 people out of their northern New York state neighborhood. The land was later used to build a new residential development complex and an elementary school. In 1978, after discovering that the community of Niagara Falls, New York was built on top of 20,000 tons of toxic waste that had been unlawfully dumped by Hooker Chemical and Plastics Corporation to get rid of their toxic waste, President Jimmy Carter declared Love Canal a federal disaster area. With their children always sick, citizens launched their own investigation. Later, the New York State Health Commissioner eventually declared a state of emergency and the federal government was ordered to re-locate families. As a result of the Love Canal disaster, the federal government established Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, to hold polluters accountable to clean up a contaminated site.

President Carter admitted that Love Canal was “one of the grimmest discoveries of the modern era” (Beck 1979). The revelations of Love Canal sent shock waves throughout the United States and many activists and local communities began to cry foul-play, directing their anger at industries that seemed to believe they were above the law. Government officials responded by drafting legislation to make dumping illegal. Major news agencies began covering stories that detailed the affects of dumping on communities throughout the country. In 1979, ABC News aired *The Killing Ground*, a one-hour television documentary that revealed the environmental and human suffering that Americans were subjected to from dangerous, noxious waste. The public's growing fear turned into anger as people learned that major corporations were cutting corners to maximize profits by, for example, refusing to pay a hauler to carry off the waste to an authorized landfill. Instead, to reduce costs, many corporations simply opted to dump poisonous waste onto company land or discard it on the side of the road.

Americans demanded more effective enforcement of government regulations against this illegal dumping. Much to their surprise, however, they learned that regulations either did not exist and/or were poorly enforced. Although official and unofficial landfills were already operating throughout the country, there were lax regulations on chemicals and little to no regulatory oversight on the operation of landfills. Beginning in the late 1950s, Congress had passed a series of laws to protect the environment—Air Pollution Control Act (1955), Federal Clean Air (1963) and Air Quality Acts (1967), Clean Water Act (1972), Safe Drinking Water Act (1974), and the federal Motor Vehicle Pollution Control Act (1965).

In 1965, Congress approved the Solid Waste Disposal Act (SWDA), a national research and development program that provided technical and financial assistance to local and state governments to develop programs that controlled waste. SWDA did set minimum safety requirements for landfills, but it ignored the rampant crisis of toxic waste throughout the country. The Department of Health, Education, and Welfare (DHEW) and the Department of Interior

were given primary responsibility for overseeing the handling and disposing of waste from the processing of fossil fuels and minerals. Congress authorized \$79.95 million to the DHEW and \$44.55 million to the Department of Interior for five years between 1966 and 1970 (US EPA 1971, p. 22). Even before the discovery of the Love Canal disaster, waste was becoming a major national problem. In 1969, four years after the SWDA was established, a *New York Times* article declared a national trash emergency: “An avalanche of waste and waste disposal problems is building up around the nation’s major cities in an impending emergency that may parallel the existing crises in air and water...the Public Health Service found that 94% of the dumps and 75% of the incinerators were inadequate in respect to sanitation and pollution and termed this a national disgrace” (Hill, p. 1).

A 1971 EPA report, *Initiating a National Effort to Improve Solid Waste Management*, examined the progress of the SWDA and forewarned of an increasing waste crisis in America:

The 1960s ended with a population of over 200 million, a preeminent industrial complex, a vast agricultural industry, and an individual affluence without precedent. The environmental effects of these social phenomena are evident already in air and water pollution, urban and rural plight...Within the next 30 years this outpouring of waste material could more than double, as the population is predicted to double. Space for waste is not limitless...The intent of the Congress, as reflected in the SWDA, typifies one of the peculiarities of solid waste disposal: it cannot be regulated on a national level in the sense that air and water pollution can be regulated. There is no medium such as air or water that naturally carries solid waste across political boundaries, affecting the people at large. Most solid wastes are deposited on land locally and their disposition remains a local problem...It was apparent to the Congress that the primary contribution to be made by the Federal Government was assistance to State and local governments and interstate agencies, guided by the overall interests of the Nation. This assistance is rendered in the form of research and development at the national level, and technical and financial assistance for the planning, development, and conduct of solid waste disposal programs at the State, local, and interstate levels...these activities have been non-regulatory in nature but are intended to have deep and lasting economic and societal effect. (US EPA 1971, pp. 1-4, 6-7)

The EPA reported that while the SWDA established parameters for regulators to adhere to, the regulations were not as effective as anticipated. Overly concerned with deflecting the problem to the states, the federal government drafted legislation with such ambiguous language that it failed to address the industrial hazardous waste generated by increased production and population growth.

To make matters worse, the constant restructuring of which department was to be responsible for waste issues created confusion. Initially the DHEW, under the guidance of the Surgeon General, managed the waste problem. Then in 1968, the Public Health Service was re-organized into three major health units: Consumer Protection and Environmental Health Service, Health Services and Mental Health Administration, and National Institutes of Health. Consumer

Protection and Environmental Health Service was formed by the Food and Drug Administration (FDA) and the former Bureau of Disease Prevention and Environmental Control of the Health Services and Mental Health Administration (US EPA 1971, p. 18). In January 1969, the DHEW's Solid Wastes Program was re-organized into the Bureau of Solid Waste Management, one of the five bureaus in the Environmental Control Administration (ibid., p. 18). With two offices (program development and information) and three divisions (research and development, technical operations, and demonstration operations), which further complicated the management of waste. The limitations on the part of the government were documented in the EPA report:

The Bureau has long felt the severe constraints imposed by budget and personnel limitations, as it has been in the position of competing for limited resources with widely disparate programs of the Department of Health, Education, and Welfare. In an effort to make the most of inadequate resources, the Bureau has had to allocate much of its time and money to "putting out fires. (p. 107)

In 1970, the Environmental Protection Agency (EPA) was established and under the jurisdiction of the Office of Solid Waste Management Programs (OSWMP), the Bureau of Solid Waste Management and the DHEW division shifted again.

A Congressional mandate was launched to study the impact of SWDA on improvements made to the storage and disposal of radioactive, toxic chemical, biological, and other hazardous wastes believed to endanger public health and welfare. In the 1974 report *SW-115 Report to Congress: Disposal of Hazardous Wastes*, officials urged the federal government to regulate hazardous waste and to hold industry accountable for managing the waste they produced:

A regulatory approach is best for the achievement of hazardous waste management objectives. Such an approach ensures adequate protection of public health and the environment. It will likely result in the creation of treatment and disposal capacity by the private sector without public funding. It will result in the mandatory use of such facilities. Costs of management will be borne by those who generate the hazardous wastes and their customers rather than the public at large; thus, cost distribution will be equitable. Private sector management of the wastes in a competitive situation can lead to an appropriate mix of source reduction, treatment, resource recovery, and land disposal... The low level of utilization of this industry's services results from the absence of regulatory and economic incentives for generators to manage their hazardous wastes in an environmentally sound manner. This industry could respond over to provide needed capacity if a national program for hazardous waste management, with strong enforcement capabilities, was created. This industry would, of course, be subject to regulation also. (US EPA 1974, p. x)

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA) which fundamentally changed the management of waste. At the time President Ford signed the law into existence, he explained that it would "provide a workable program aimed at solving one of the highest priority environmental problems confronting the Nation" (Chambers and McCullough 1995, p. 22). The RCRA established a national program, under the supervision of the EPA, to

develop state-run hazardous waste programs that adhered to federal guidelines for the treatment, storage, transportation, and disposal of hazardous waste and were intended to prevent future environmental and human damage from the mismanagement of toxic waste. Since waste was thought to have a lifecycle, each phase had to be well documented. The cradle-to-grave pathway tracking system was designed to provide information to regulators, such as the source and type of waste, disposal methods, and shipment size and quantity to discourage illegal dumping. At each point of the process, from the source of the waste to its transportation to the point of disposal, a travel manifesto would be used to track information. The Superfund legislation that was created in 1980 to address the economic costs of cleaning up toxic waste sites used the travel manifesto as evidence about the owners/operators of a facility and the generators and transporters of the waste. The problem with the RCRA legislation was that it assumed that all the parties involved with the waste would work together to collect the required information and then report back on it. Moreover, the legislation was intended to control land disposal as the primary way to get rid of waste: “In order to forestall the type of environmental degradation likely to occur from the uncontrolled use of the land as an ultimate sink for the Nation’s ever-increasing supply of hazardous wastes, the focus of any hazardous waste regulatory program must first be on land disposal activities and those who provide and utilize land disposal services” (US EPA 1974, p. 20).

### *The Production of Hazardous Uncertainty*

One criticism of the legislation was that, though it managed the flow of hazardous waste—regulating the waste being produced, cleaning up toxic sites where it was improperly disposed of, and locating new sites to host landfills and incinerator plants (Florini 1982). If its purpose was to prevent another Love Canal from taking place in America, the government blew the opportunity to radically shift the toxic waste paradigm. The current legislation emphasizes the management of waste already produced, but completely fails to prevent the production and misuse of chemicals through proper regulation and enforcement in the first place. The RCRA legislation sought to control the flow of waste so as to discourage illegal dumping, but the legislators were lobbied by groups serving the special interests of major waste hauling companies and landfill operators. The regulations failed to control the abuse of chemicals by multinational corporations. Harold Barnett, an economics professor at the University of Rhode Island, points out that a “basic limitation of estimating hazardous waste generation by industry is that it does not focus our attention on the corporations that own and control these industrial establishments, that have earned the profits associated with the environmentally unsound disposal of waste products, and that are parties to the political and legal debate over liability for Superfund cleanup.” (1994, pp. 17-18)

The 1974 EPA report cautioned that “the private sector is not well suited for a role in which longevity is a major factor. Private enterprises may abandon storage and disposal sites because of changes in ownership, better investment opportunities, bankruptcy, or other factors. If sites are abandoned, serious questions of legal liability could arise” (US EPA 1974, p. 33). Thus the legislation created the system that effectively facilitated the growth of the companies because they were empowered to self-report, self-regulate, and self-monitor their practices—potentially producing data favorable for themselves. Regulators rely on the data submitted to them by these

companies to form the basis of their evaluations of the industry and issues of waste management. The assumption that companies are honest and law-abiding does not make sense: cutting corners to treat and ship waste is part of the for-profit business model.

The longevity of the chemical industry serves as an example of how, despite the implementation of legislation to monitor and control hazardous chemicals and waste, business continued as usual. The 1976 Toxic Substances Control Act (TSCA) authorized the EPA to collect data on the health effects of chemical substances and to regulate the manufacturing, use, and disposal of chemicals. But after fifteen years, the EPA had restricted only five chemicals: PCBs, CFCs in aerosols, nitrides in metal working fluids, dioxin, and asbestos (Mazurek 1995, pp. 59-60). In 1973, the EPA estimated annual toxic waste production at 10 million tons—100 pounds per American (Montague 1989). In 1980, America produced 125 billion pounds of toxic waste, enough to fill approximately 3,000 Love Canals (R. Nader et al. 1981). In the same year, the EPA estimated that at least 57 million metric tons of the nation's total waste could be classified as hazardous (US EPA 1980, p. 1). In 1981, the EPA estimated 264 million metric tons of hazardous waste was produced (National Research Council 1985). By 1988, 5.5 billion metric tons of hazardous waste was produced (US EPA 1989). In 1989, the U.S. produced more than 6 billion tons of waste—nearly 50,000 pounds per person (US Congress OTA 1989, p. 223). The EPA estimated that as much as 90% of the waste was disposed of improperly (US EPA 1980, p. 20) and that the production of hazardous waste, increased by 3% every year (Council on Environmental Quality, p. 181)—if left unchecked, this would double by the year 2000 (Testimony of Stephen J. Gage, Assistant Administrator for Research and Development, EPA 1980). The National Academy of Sciences estimated that there were almost 710,000 chemicals in commercial use, of which only about 20% had been thoroughly tested to determine if they were hazardous to human health, yet in 1987, the EPA listed only 450 of an estimated 35,000 potentially hazardous chemicals as being hazardous (Barnett 1994). According to the American Society of Civil Engineers and the EPA, in 2005, over 38.3 million tons of hazardous waste was generated with over 16,191 businesses and industrial facilities generating more than 1.1 ton of hazardous waste per month. And as of 2006, there were 1,500 contaminated sites on the EPA National Priorities List and over 600,000 possible brown-field properties (contaminated sites that are too small for Superfund).

These chemicals and the toxic by-products they produce have been used since at least World War II with little to no oversight and no conclusive evidence to verify their safety. Although government regulators and public citizen organizations request additional information about the chemicals and substances, industries tactically ignore these requests, citing Confidential Business Information (CBI) which permits them to legally withhold information on the basis of trade secrets. While it may be expected that chemicals be proved safe before they are used, the regulatory position, like that of the burden-of-proof clause, protects chemicals as innocent until proved guilty. This mind-set perpetuates the crisis. In America permits are not required to produce toxic waste and once the waste is classified as toxic, companies may submit a request for an EPA identification number. Moreover, the reporting of waste is a fairly new policy: “Within the United States, the first unified national effort to track intra-and-interstate shipments of chemical waste can be tracked back to November 19, 1980—when the United States EPA's so called ‘cradle to grave’ hazardous waste manifest tracking system became effective” (Enander 1998/1989, p. 2.14).

By the 1980s, members of Congress had begun to question the EPA's commitment to the enforcement of provisions of the RCRA (1982 Resource Conservation and Recovery Act Reauthorization: Hearings before the Subcommittee on Commerce, Transportation, and Tourism of the House Committee on Energy and Commerce, 97<sup>th</sup> Congress, 2<sup>nd</sup> Session). But a web of government bureaucracies was also a problem to laws. For example, in April 1985, months before the EPA fined the Kettleman Hills toxic waste facility for numerous violations (see Chapter 7), Harry Seraydarian, chief hazardous waste official for the EPA in California, testified before members of U.S. Congress that California government agencies had overlapping jurisdictions which led to mismanagement problems; he stated that the regulatory protocol was that "the EPA is required to give notice to the state before we take any direct enforcement action" and that the state had failed to do so (Green 6/8/1985). Seraydarian's testimony revealed that high levels of substandard regulation, poor enforcement by both federal and state government agencies, and collusion between polluting companies and the government agencies that were supposed to regulate them, had become the norm.

California was one of the first states in the country to implement a cradle-to-grave manifest system and the federal government botched a critical opportunity to study that program. Doing so very likely would have helped reveal problems that could have been avoided before implementing the same program on a nationwide scale. In the event, these problems produced uncertainties that did more harm than good in addressing America's growing toxic crisis. Like the California program, the nationwide program left a chaotic and bureaucratic paper trail for the California Department of Health Services (DHS) to sort through. Hazardous waste generators, transporters, and facilities were required to record information on the manifest form. Documents had to be sent by the generator to the DHS once a transporter received the acceptable waste. A copy of the biennial report, a signed form between the generator and transporter, was delivered to the facility upon arrival. Within thirty days, the facility was required to send this document to the DHS and the generator to confirm that the waste had been received and reviewed for appropriate shipment content. Facilities sent annual receipts of toxic waste that detailed the quantity, type, source, and ways in which waste was handled and disposed of at their facility. The step-by-step collection of information was good in theory, but the government lacked the capacity required to manage the manifest system and its bureaucratic paper trail efficiently. It created a fractured system that allowed many generators and facilities to get away with inept and corrupt reporting. Today, this information is electronically transmitted.

In this broken regulatory system, errors manifest themselves in three ways: lack of definition for waste codes, mis-identified and mis-classified waste, and improper record keeping (Pekelney 1990). In his book *Toxic Debts and the Superfund Dilemma* (1994), Harold Barnett describes the connection between the economic and political power of major corporate polluters and the inability of government regulators and legislators to take effective and timely action on Superfund sites. He argues that an aura of uncertainty is produced by the very same agencies that are entrusted to regulate the waste in the first place and that this uncertainty gives way to a total disregard of the problem at hand:

Agencies gather information to fulfill legal mandates and to write the rules that give specificity to the law. The regulated and environmental communities gather information to oversee, evaluate, and critique law and its implementation. Despite, or perhaps because of, the centrality of information to the regulatory

process, substantial uncertainty surrounds much important data. Uncertainty emerges from the limited ability of scientists and engineers to determine the contents of hazardous waste sites, to identify the pathways of contamination, and to gauge the risks posed to public health and the environment. (p. 9)

The uncertainty that Barnett describes is reproduced in classifications and what actually constitutes hazardous waste—a matter so technical and difficult for a layman to understand that, instead of answers, there are more questions, and even more uncertainties. One way to define hazardous waste is: “Any waste or combination of wastes that poses a substantial danger, now or in the future, to human, plant, or animal life, and which therefore cannot be handled or disposed of without special precautions” (Davis 1998, p. 2.3). Barnett provides a more comprehensive definition: “Hazardous wastes pose a substantial threat to public health and the environment. They are generated as raw materials, are extracted, refined, processed, and applied to the production of useful goods. When hazardous wastes are disposed of improperly, they contaminate soil, air, surface water, ground water, and threaten the well-being of humans and other organisms” (ibid., p. 9). Yet these definitions have become an enormously complicated matter under federal regulations, as activist Richard Denison of the Environmental Defense Fund (EDF) argues:

A number of large waste categories” [are] “sort of falling through the cracks” because of the way we categorize wastes: Under RCRA, wastes are hazardous or they are not, and those are the only two choices. If wastes are classified as legally ‘hazardous’ they are regulated, and if they are “not hazardous” you can do just about anything you want with them, no matter how dangerous they may be. (Montague 1989)

The RCRA defines hazardous waste as:

A solid waste or combination of solid waste which because of its quantity, concentration, physical, chemical, or infectious attributes may (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitating reversible illness; or (b) pose a substantial present or potential hazardous to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed. (Davis, pp. 10-11)

According to this law, hazardous waste falls into one of four RCRA hazardous waste lists (F,K,P,U) and/or the waste must exhibit at least one of four characteristics, including corrosivity, ignitability, reactivity, or toxicity. Within each of these characteristics are eight sub-sections that determine the levels of toxicity. Similarly, the EPA as a federal regulatory body has its own way of determining if waste is hazardous: (1) by its presence on the EPA developed lists or (2) by evidence that the waste exhibits ignitable, corrosive, reactive, or toxic characteristics (ibid., p. 2.3). What appears on the EPA list as a hazard may not appear on the RCRA list. The multiple definitions for toxic waste have created inconsistent classifications—take for example radionuclides, which are regulated by both the RCRA’s Toxic Substances Control Act (TSCA)

and the Atomic Energy Act. The TSCA classifies radionuclides as hazardous; the Atomic Energy Act does not (ibid., p. 2.12).

Uncertainty increases when waste is to be disposed of through a process of dilution: “When the dilution rules apply, the mixture of a hazardous waste with the diluents does not cause the diluents to become hazardous and may render the hazardous waste nonhazardous” (ibid., p. 2.10). The dilution process re-classifies any potential toxic waste chemicals and/or substances as anything but hazardous. Once this happens, those chemicals and substances are delisted under the RCRA legislation as nonhazardous, which enables companies to circumvent hazardous classifications that would increase the cost to store, ship, and/or treat the waste they create. Moreover, delisting skews the scientific properties of the waste so that companies may exploit political and economic loopholes created by the uncertain definition of what constitutes hazardous waste. The RCRA includes a petition process whereby some waste can be excluded from “non-specific sources and at a particular generating facility. Those wastes that successfully pass the petition process are delisted. If the waste is not delisted, it is a RCRA hazardous waste” (ibid.).

Multiple regulatory bodies that classify waste based upon overly ambiguous and technical definitions create regulatory discrepancies and a bureaucratic mess that fails to protect the environment. Montague (1989) reported that the American Chemical Society (ACS) found that “somewhere between 50% to 90% of all U.S. hazardous waste is not regulated by RCRA, the Resource Conservation and Recovery Act. The wastes not covered by RCRA were officially exempted from RCRA by the EPA because the agency knew it did not have the resources to oversee their management.” Moreover, the scientific and technical jargon has created an exclusionary system between industry and government that leaves the layman unaware and incapable of understanding the risks he is exposed to.

On a side note, if legislation and inadequate government supervision have produced a fractured system that has not addressed the growing toxic waste crisis in America, imagine the consequences in countries to which this garbage is exported. The U.S., the largest exporter of waste, sends large quantities of it to India, China, Sri Lanka, and other countries with poor people willing to risk their health to sift through scraps of metal to re-sell. Some have called this “garbage imperialism” (Marbury 1995).

### ***Modern Technology?***

While today’s landfills contain dangerous chemicals that threaten our environment, human civilizations have left tombs, palaces, and artifacts within garbage pits that reveal how they live. Anthropologists, and specifically archeologists, have long used landfills as a goldmine for unearthing physical artifacts. Rathje and Murphy (1992) draw a certain parallel: For an archeologist, ancient garbage pits or garbage mounds, which can usually be located within a short distance from any ruin, are always among the happiest of finds, for they contain in concentrated form the artifacts and comestibles and remnants of behavior of the people who used them (p. 10). The goals of the University of Arizona’s Garbage Project which sifts through hundreds of pounds of garbage every day, are more specific. This garbage:

Represents valuable lodes of information that may, when mined and interpreted, produce valuable insights, insights not into the nature of some past society, of course, but into the nature of our own. Garbage is among humanity's most prodigious physical legacies to those who have yet to be born; if we can come to understand our discards, Garbage Project archeologists argue, then we will better understand the world in which we live. (pp. 4, 11)

Landfills are not a new invention, but they continue to be used in America because they are the cheapest way of getting rid of what we no longer want. And they produce more harm than good. In the United States, the proliferation of Superfund sites, extremely dangerous and toxic sites that have been selected for immediate government-sponsored cleanup, is a massive environmental crisis. In 1979, the EPA estimated that 1,200 to 2,000 of the 30,000 to 50,000 waste disposal sites in the U.S. posed significant threats to human health and the environment (Jorling 1979, p. 24). Not only is the cleaning of these sites expensive, but the EPA years ago cautioned that "in many cases it is impossible to assign dollar values to the long term harm to health and environment that has resulted from improper management of hazardous waste" (US EPA 1980, p. 8). Reports showed that 68% of remedies selected in 1977 failed to treat the source of contamination, while 44% of the remedies selected merely minimized exposure to contamination with fencing and capping (*ibid.*, p. 244). Even after the waste was removed from the Superfund sites, 87% of landfills that received the toxic waste were in unacceptable condition.

Transporting toxic waste from one site to another appears to be the short term remedy for cleaning up Superfund sites. Unfortunately, the old adage "one man's garbage is another man's treasure" does not apply to the transferring of waste from one owner/site to another. The waste, like the problem, simply moves to another site—or more specifically, another Superfund site. The 1980 EPA report also found that "75% of permitted land disposal facilities were not in compliance with EPA requirements for groundwater, were leaking, or in a condition unknown to the agency," and predicted that most landfills would likely attain high failure rates shortly after 50 years of operation (*ibid.*, p. 170). In May 1980, the EPA investigated 214 landfill dumps and found that more than 1.2 million people were (and continue to be) exposed to risks considered "high" or "medium" health threats (Cohn 1980). In 1987, the Government Accounting Office (GAO) reported to Congress that 70% of hazardous waste sites assessed by the EPA were leaking contaminants, and that 2,500 operating sites could potentially require corrective action at a cost of \$22.7 million (Barnett 1994, p. 259). Ralph Nader (1981) noted that "from the nation's 18,500 municipal landfills alone, an estimated 90 billion gallons of leachate enter the groundwater annually. How much leachate from industrial dumpsites has reached groundwater is not known, but with as many as 50,000 chemical dumps nationwide, the amount may be prodigious" (p. 25). Similarly, Harold Crooks, journalist, writer and documentary film producer, describes the daily workings at a landfill and warns of the toxicity the leachate contains:

Every working day the debris of modern life is buried in flat or rolling farmland, canyons, ravines, worked-out or abandoned quarries, sand and gravel pits, and marsh and tidal lands. The sites are the scenes of ceaseless movement reminiscent of an insect colony. At a working face of a landfill cell, dump trucks and packers disgorge [the variety of trash]. The equipment operator spends his shift trying to

develop the working face on an incline between twenty and thirty degrees, spreading the refuse against the slope while moving a steel-wheeled crawler dozer up and down, tearing and compacting the waste and eliminating voids. He makes passes across the slope, depressing the surface until it rebounds as much as it is pushed down. As construction of the cell progresses, the earth-moving equipment spreads and compacts cover material which has been excavated by dragline nearby and transported to the site by dump trucks. At day's end the cover is graded to prevent erosion and to keep water from ponding. Beneath the surface, decomposition takes place at various rates. Rainwater percolates into the myriad of cells, and the wastes absorb it like a sponge until they can hold no more. Then whatever rainwater enters from above forces an equal volume to leave below in the form of a malodorous liquid called leachate, which carries substances of unknown toxicity. Soil characteristics determine how fast and far the leachate flows. (1993, pp. 19-20)

Landfills give the illusion that the problem of our waste has been addressed because it is out of sight, out of mind, and out of reach. Yet these landfills are just pits inside the Earth that are used merely as containment systems or storage facilities that do nothing to fundamentally address the toxic waste problem (De Percin 1998). When all is said and done, is this truly a system designed to turn solutions into future problems?

The 1976 RCRA granted the EPA full responsibility to determine the appropriate technology to dispose of toxic waste. New Jersey Democratic Representative James J. Florio argued that the EPA was doing little to meet the demands set out by RCRA legislation:

Evidence of the seriousness and scope of the hazardous waste problem mounted while EPA stalled. Congress grew increasingly frustrated with the obvious manipulation practiced by the political appointees at the agency. As well as with the substantive environmental policy the agency pursued. In 1983, five and one-half years after the mandatory deadline for promulgation of RCRA standards and permits, the 98<sup>th</sup> Congress began a reauthorization process for RCRA. There was still no enforceable system for regulating the disposal of hazardous waste and little prospect for one soon. The problems recognized in 1976 had become common knowledge and, by 1983, evidence of the dangers was even more compelling. (Florio, p. 367)

Not satisfied with the EPA's performance, Congress approved the RCRA Reauthorization in 1983 to revise waste facility design standards, requiring landfills to install double liners, a leachate collection system, and groundwater monitoring and it a November 1985 deadline for all interim status landfill operators to submit a final permit application. As part of the application, facilities were required to submit groundwater monitoring data and a cleanup plan for water contamination at the site. When the deadline arrived, "over two-thirds of all operating, interim status land disposal facilities chose not to submit final permit applications. Their failure to meet the statutory deadline effectively removed over 1,000 land disposal facilities which were reluctant to comply with federal standards from the permit process, and thereby from the business of handling hazardous waste" (ibid., p. 368). The 1985 RCRA deadline effectively

removed companies that lacked the capacity to comply with federal regulatory standards. Wealthy companies with the infrastructure and financial means necessary to meet the new requirements for properly managing waste benefited from reduced competition within the industry of waste management thereby allowing them to position themselves as industry leaders with the monopolized power to influence the future of toxic waste management, particularly in light of internal government discrepancies.

Landfills are “planned, designed, constructed, operated, and maintained in accordance with federal RCRA Subtitle C, state, and local regulations” (Leung and Ross 1989, p. 10.3). The landfills are pits about sixty feet deep into the earth that must be sealed in with a plastic liner. Although liners were not always used, liner prevented chemicals and water from seeping into the groundwater table. Landfills also have treatment systems that work to “modify the chemical and/or physical characteristics of the waste to prevent the release of the hazardous components to air and water. These treatment systems are mostly standard chemical process[es] and unit operations that can remove, destroy, or contain the hazardous components of the waste” (De Percin, p. 10.84). Other factors such as “environmental protection measures, including control of leachate, gas emissions, surface water erosion, and precipitation run-on, are important aspects of site selection and construction for the hazardous waste landfill” (ibid., p. 10.5). The leachate that “passes to the bottom is collected by a perforated collection pipe and pumped again to the surface for treatment. Exterior monitors check for chemicals leaking into the groundwater” (LaDou 1987). Companies use these monitors to self-report data to governmental regulators. Leachate collection pumps the hazardous liquids out of the landfill.

In a sworn testimony, whistleblower William Sanjour, the former Chief of the Hazardous Waste Implementation Branch of the EPA, described Peter Skinner’s study of landfills in New York, heavily regarded by industry leaders as state-of-the-art-technology (Skinner 1980 in Sanjour 1982). New York accepted large quantities of toxic waste from other states. Skinner reported that one of the landfills accepted toxic waste from a Superfund site and the state’s landfill leachate collection system did not operate as expected, “creating an underground dam where the pressure of poisoned liquids” created more problems than solutions (Sanjour 1982). Like other technology, landfills may help resolve problems, but they may also present a number of unexpected problems when features of the technology malfunction.

Environmental engineer Ann Rappaport (1998) observed that “many policymakers and members of the public believed that landfill technology was inadequate to guard against contaminant migration in the long term” (p. 1.4). She was referring to a series of public reports that questioned the use of landfills in America. A 1977 EPA study, *The Prevalence of Subsurface Migration of Hazardous Waste Chemical Substances at Selected Industrial Waste Land Disposal Sites*, concluded that most, if not all, landfills, leaked waste into the environment:

- Groundwater contamination at industrial waste land disposal sites is a common occurrence.
- Hazardous substances from industrial waste land disposal sites are capable of migrating into and with groundwater.
- Few hydrogeologic environments are suitable for land disposal of hazardous waste without some risk of groundwater contamination.
- Continued development of programs for monitoring industrial waste land disposal sites is necessary to protect groundwater quality.

By the 1980s, Congress questioned the EPA's decision to authorize landfills as the only approved form of disposal. Reiterating their position, an EPA official stated in a 1982 letter that "landfilling is the lowest risk option currently available for dealing with large quantities of hazardous waste generated each year. It represents a commonsense alternative to the indiscriminate practices of the past" (Florio, p. 361).

Two reports that were readily available during this time also challenged the EPA's position on the long-term consequences of landfills and exposed government regulatory inconsistencies. Representative Florio (Democrat California) requested that the Office of Technology Assessment conduct a study of toxic waste federal regulations. The report, *Technologies and Management Strategies for Hazardous Waste Control* (1983), concluded that federal regulations governing toxic waste disposal do not assure "protection for human health" from "massive annual accumulations of hazardous waste," and it warned that the use of landfills would likely backfire because it was "highly probable" that waste would eventually leak out (U.S. Congress Office of Technology Assessment 1983). In *Management of Hazardous Industrial Wastes* (1983), a report produced by a committee from the National Research Council, concluded that there were alternative technologies available for better addressing the disposal of toxic waste. The report argued that underground storage such as landfills should be the last resort because many of the toxic chemicals can remain poisonous long years after they have been disposed into the earth are "very likely [to] migrate over long periods into groundwater." The report recommended that industry reduce the volume of waste generated during manufacturing of goods and treat the waste to make it less hazardous: although every technology presents some level of risk, "there currently exists some technology or combination of technologies capable of dealing with every hazardous industrial waste in a manner that eliminates the need for perpetual storage." Because these alternatives are not cost-effective, the sole limitation to their implementation on a large scale, the report recommended that funding "be continued mainly to improve existing technologies, particularly for making methods more reliable in design and operation and more cost-effective for specific waste streams" (Committee on Disposal of Hazardous Industrial Wastes, National Materials Advisory Board, National Research Council 1983).

Whistleblower William Sanjour tried on numerous occasions to warn the government about the horrifying problems related to landfill use. In 1982, testifying before the Subcommittee of Natural Resources, Agriculture Research and Environment and the Committee on Science and Technology in the House of Representatives, he again emphasized the consequences of landfills:

There is good theoretical and empirical evidence that the hazardous constituents which are placed in land disposal facilities very likely will migrate from the facility into the broader environment. This may occur several years, even many decades after placement of the waste in the facility, but data and scientific prediction indicate that, in most cases, even with the application of best available land disposal technology, it will occur eventually...One of the major problems with hazardous waste is the way it is disposed. Over 90% is dumped either in surface lagoons or buried in what are euphemistically called "landfills." Unlike garbage and human wastes, most of these wastes do not degrade and much of it remains poisonous forever. When hazardous waste is disposed of in or on the

ground, it can be carried by rainwater through and over the ground and off the property of the disposer and may eventually end up in or on someone else's property and in public water supplies. (Sanjour 1982)

Joseph LaDou (1987) argued that, despite all the available evidence, the fundamentally unsafe and dangerous nature of landfills presents the following problems:

- The plastic liner can easily be destroyed by external forces such as the bulldozer used to cover the liner with clay, sand, and gravel
- Leachate can disintegrate the liner
- The weight of the waste may crush the collection pipes or sludge may clog the perforations
- The protective cover may be damaged by external forces or erosion, permitting rainwater to penetrate to the wastes, overloading the collection system or causing the landfill to overflow

Critics warned of the dangers landfill disposal created from neglected seals around leachate removal lines that contaminated water tables to blowouts from accumulated gas pressure within the landfills leaks. Sanjour argued that it was not sufficient that "regulations, which instead of preventing disaster, knowingly allow it by promising to provide disaster relief." (Sanjour 1982) Though evidence suggested that landfill failures were inevitable, the government seemed to be willing to wait until the situation got out of hand. In light of the threat to the environment and human health and the visible and noticeably unaesthetic presence of landfills, people mobilized to protest against them with a load of complaints (Andrews and Lynn 1998, p. 3.10; Goldman 1986):

- Groundwater contamination
- Surface water contamination
- Air pollution
- Leaks, spills, accidents
- Destruction of wildlife habitat, national areas, wetlands
- Permanent contamination of site
- Contamination of nearby crops, fisheries
- Traffic congestion
- Odors
- Noise
- Visual ugliness
- Character of the community changes, drawing other heavy industry image as a dumping ground

The repeated warnings became prophesized reality when, in the mid-1980s, many of the landfill liners began leaking. Sanjour described these plastic and clay liners, and landfills in general, as unpredictable technologies, referring to residents of Wilsonville, Illinois, who were reassured that the clay liner of the toxic waste landfill in their community was secured. Research later proved that the community's fear of contamination had been warranted; the "experts were wrong

again... the imperviousness that clay liners showed in the laboratory could not be duplicated in the field. The landfill leaked toxins” (D. Daniel 1981, Morrison 1981, Sanjour 1982). Brown et al in Harry Freeman’s *Standard Handbook of Hazardous Waste Treatment and Disposal* (1998) also advised caution:

Unfortunately, even with the best technology available, water leaks into these landfills, resulting in the accumulation of leachates contaminated with hazardous constituents. Much of the accumulation of leachate can be removed via leachate-collection systems during the 30 years post-closure as required by law. Operation of such collection systems minimizes the potential for the leachate to breach the liner immediately after closure. However, leachates will continue to accumulate following the post-closure period, eventually penetrate the liners, and endanger the underlying groundwater. (p. 10.66)

Sanjour described the consequences around issues of contamination after the closure of a facility:

Real world experience has shown that when government officials allow a landfill to be built and then filled with thousands of tons of waste and then find it is polluting the groundwater, it is too late to force the landfill owner to do any meaningful clean up. If it is a commercial facility the operator will argue that if the government requires him to do a thorough clean up he will have to go bankrupt and the government will be stuck with the remedial costs since the regulations do not require financial assurance for such costs. If it is a manufacturing facility they will say that they will have to close down the plant and put hundreds of people out of work. In either case, enforcement officials lose all of their clout when they allow matters to get so bad that they are only left with draconian solutions. In practice they end up doing things to get themselves off the hook like raising the drinking water standards to the level of the pollution; or suddenly finding out that they cannot determine the unique source of pollution; or they will reach a compromise solution for some lesser form of remedial action, which historically has meant that the dumps continue to operate and continue to pollute; or they use the good old stand-bys that they need more studies or more money or more people or more time, etc. (1982)

With a life expectancy measured by mere decades, landfills are anything but sustainable. Despite landfill leaks, violations, out of court settlements, and dire consequences to residents’ health and community—business continues as usual. Contamination caused by landfills, especially groundwater pollution, is extremely difficult, if not impossible, to clean up. The EPA is commissioned to care for the well-being of people and the environment, but it still endorses the use of landfills in spite of well documented evidence that landfills generally fail after just fifty years (Barnett 1994) and it is ultimately the public that pays the ultimate price. Taxpayers are handed the bill for the cleanup, and the community must pay the price from contamination and pollution that jeopardizes their health and well-being.

## **Chapter 7: An Incremental Record of Disasters in the Making**

California, a state once known for setting precedent in toxic waste management policies, has long neglected addressing issues around the largest toxic waste landfill in the western United States. While many residents in Kettleman City direct their anger and dissatisfaction at landfill operators in their backyard, much of the problem stems from high levels of corporate power and negligence that breed recurring criminal behavior. For years, residents have been demanding justice, yet despite their history of injustice, and evidence to corroborate this exploitation, their story has remained ignored and unheard. To deny this, is to deny reality and to deny reality is psychoses.

Like so many communities throughout the world, Kettleman City represents a classic environmental justice showdown between people who sustain themselves by working the land and the rise of new industry and technologies that may increase productivity but threaten people in ways not yet well known or understood by government regulators or even scientists. There is a disproportionate distribution of power in this conflict: public citizens are demanding fair play and decency in regard to their environment and health but at the same time are trying to subdue the encroaching dominance of a multinational corporation with all its wealth and political and legal power. The environmental justice literature describes this inequitable and crooked conflict in much the same way as the Biblical story of David and Goliath. Corporations such as Waste Management Inc. (WMI) own and operate landfills for and in a hyper-consuming society that is hyper-wasteful. In places like Kettleman City, toxic waste is dumped into these landfills, processed, and buried for over 30 years. Completely invisible to the naked eye, the adverse affects are concealed within the landfill—out of sight, out of mind. A critical (re)examination of the Kettleman Hills toxic waste facility is an anthropological exercise in a study up and down (Nader 1969), the interests and structures that unnecessarily render people vulnerable, and turn hazards into disasters. Anthropologists, given their knowledge of hazards and disasters, provide a holistic perspective that takes into account the root causes of the disasters and their contextual relationships to time, resources, people, and politics. The history of the Kettleman Hills landfill should be understood as an incremental, that is creeping, disaster-in-the-making.

## ***Disproportionate Siting and the Rise of the Environmental Justice Movement***

(See Appendix 1 for map of commercial hazardous waste landfills in United States)

Though landfills have become the conventional way to get rid of waste, the choice of a site for one is frequently resisted by communities and environmental groups. Most people would agree that we need to have some sort of efficient disposal system but virtually everyone wants nothing to do with hosting a facility in their own town. The not in my backyard (NIMBY) and not in anyone's backyard (NIABY) attitudes gained popular momentum as part of a larger environmental justice movement in the United States by the 1970s and 1980s. Patterns of environmental inequity were documented and reported by various communities. Eventually their work grew into larger coalition-building efforts that connected some of the most severely impacted communities, many of which were burdened with not just municipal and solid waste landfills but also toxic waste landfills, incinerators, and other hazardous facilities. Communities noticed patterns of facilities being overwhelmingly located in predominantly low-income African American, Latino, and Native American communities, and with mutual support, began to demand justice.

The disproportionate siting of these facilities has been studied by various social science departments and community-based organizations. Environmental justice literature provides overwhelmingly convincing evidence that environmental quality in America is mediated by race and socio-economic status (Bullard 1983; also Bullard 1990, 1990b, 1993; United Church of Christ 1987; U.S. General Accounting Office 1983; Capek 1993; Mohai and Bryant 1992; Takvorian 1993). The 1983 study by the U.S. General Accounting Office of four hazardous waste sites in southeastern United States found that three out of the four off-site landfills were located in communities whose residents were predominantly African-American. In his book *Dumping in Dixie* (1990), sociologist Robert Bullard examined six of the eight municipal incinerators and five city landfills in Houston, Texas, and concluded that all of the hazardous facilities were located in predominantly African-American communities. In the 1980s, the United Church of Christ's Commission on Racial Justice launched the first national study to examine the relationship between race and the location of hazardous waste facilities in America. The Commission specifically studied the demographic patterns of areas that surrounded commercial facilities used for treating, storing, or disposing of toxic materials and uncontrolled toxic waste dumps that had been closed, abandoned, and/or deemed dangerous by the EPA. Their study found that although socio-economic status appeared to play an important role in the location of such facilities, race was a more significant variable for determining the location. Communities with the greatest number of commercial hazardous waste facilities had the highest percentage of minority residents (Lee 1993) and 60% of African-Americans and Hispanics in the United States live near one or more hazardous waste sites. The report also found that more than fifteen million African-Americans and more than eight million Hispanics lived in communities with one or more uncontrolled toxic waste sites, and that three of the five largest commercial toxic waste landfills, accounting for 40% of the total commercial landfill capacity in the United States (Emelle, Alabama; Scotlandville, Louisiana; Kettleman City, California) were located in predominantly African-American or Hispanic communities (United Church of Christ Commission for Racial Justice 1987). In 1994, President Clinton signed Executive Order 12898

which directed federal agencies to scrutinize their policies, practices, and programs to ensure that they would not have a disproportionate negative impact on the health and environment of particular communities. Anthropologist Melissa Checker pointed out, however, that the Order had “no teeth and [was] not enforceable. Environmental siting decisions are still left up to local and state governmental agencies.” (2005, pp. 22-23)

Similar studies replicated the findings from the 1980s and early 1990s regarding injustices around race, class, and the environment. Natural resources professors Paul Mohai and Bunyan Bryant (1992) examined fifteen cases on the distribution of environmental hazards in the United States between the years 1971-1992 and concluded that there was “clear and unequivocal class and racial biases in the distribution of environmental hazards” (p. 927). Two studies in California reinforced national trends. A 1990 study by the Environmental Health Coalition in San Diego County found that companies that generated, used, stored, and/or disposed of toxic waste were all concentrated in the county’s low-income neighborhoods where mostly minority communities lived. The largest quantity of toxic materials in the county was located in Barrio Logan, a largely Latino community (Williams and Takvorian 1990). In another study conducted by Citizens for a Better Environment (Belliveau et al. 1989) found “all of the lower income, minority neighborhoods are in the western and southern parts of Richmond where the highest concentration of petrochemical facilities are also located.” They documented that the facilities regularly released at least 210 different toxins into the air and water and solid waste were placed in unsafe industrial storage sites.

In the 1970s the United Church of Christ and the Southern Christian Leadership Conference participated in arrests and non-violent disobedient protests after contaminated soil was illegally dumped along a 210-mile stretch of roadway that affected fourteen counties in the state of North Carolina. During the cleanup phase, the state’s governor authorized burying the contaminated soils in a landfill in Afton, located in Warren County, the poorest county, and home to the largest percentage of African-Americans in North Carolina. Residents and activists, worried about their water source, protested the dumping of known toxins such as carcinogenic PCBs. Later, “when the environmental justice movement began building momentum in the early 1980s, it was church-based civil rights leaders, seasoned in the Civil Rights Movement, who were at its fore” (Cole and Foster 2001, p. 20). Some of the participants that were involved in the Warren County protests organized the 1991 First National People of Color Leadership Summit on the Environment, galvanizing activists and the establishment of the environmental justice movement. Luke Cole, a longtime activist, lawyer, and the former Director of the California Rural Legal Assistance Foundation’s Center on Race, Poverty, and the Environment, explained the various origins of the larger movement:

The movement grew organically out of dozens, even hundreds, of local struggles and events and out of a variety of other social movements...Many observers point to protests by African Americans against a toxic dump in Warren County, North Carolina, in 1982 as the beginning of the movement. The sociologist Robert Bullard points to African American student protests over the drowning death of an eight year old girl in a garbage dump in a residential area of Houston in 1967. Others note that the Rev. Dr. Martin Luther King Jr. was traveling to Memphis to support striking garbage workers in what is now considered an environmental justice struggle when he was assassinated in 1968. The United Farm Workers’

struggle against pesticide poisoning in the workplace, beginning in the 1960s (and continuing to this day), is the starting point for some. Some Native American activists and others consider the first environmental justice struggles on the North American continent to have taken place 500 years ago with the initial invasion by Europeans. Rather than an incident-focused history of the movement, however, we think it more useful to think metaphorically of the movement as a river, fed over time by many tributaries. No one tributary made the river the force that it is today; indeed, it is difficult to point to the headwaters, events can be seen as high-water marks (or perhaps, to push the metaphor, exciting rapids) in each stream, or the main river. (2001, pp. 19-20)

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The United States exports its waste to third world countries that have overwhelmingly poor populations with no access to the information, organization, and political influence needed to resist (Bullard 1983, 1993; Takvorian 1993). Bullard calls this practice of corporations and governments of strategically locating landfills in LULUs (locally unwanted land uses) an example of environmental and institutional racism (Bullard 1990). In another study, industry officials maintain that sites are chosen after careful analysis of objective variables—labor supply, access to markets, taxes, transportation facilities, power supply, the location of raw materials, water, and sewage, availability of land, and proper soil and geological foundations (Szasz and Meuser 1997, pp. 108-110). Both industry and government officials have maintained that siting protocols are objective and that local communities are infiltrated by outside environmental zealots. Site selection may also include an analysis of local politics and the local business climate to gauge potential opposition.

Chapter 4 showed the reaction of some Kettleman City activists to the 1984 report by Cerrell Associates Inc., a Los Angeles based consulting firm, on how to select new lands for future toxic waste sites in California; the report found that rural communities comprised of poor, uneducated residents who sustained themselves through farming and ranching, and were receptive to promises of economic benefits, were the least likely to mount opposition to dump sites. The report clearly distinguished the implications of socioeconomic status on the likelihood of advocacy and resistance to toxic waste sites, documenting that “middle and higher-socioeconomic strata neighborhoods should not fall at least within the one-mile and five-mile radii of the proposed site... Older people, people with a high school education or less, and those who adhere to a free market orientation are least likely to oppose a facility.” (Powell 1984) Geographer David Harvey also affirmed that “one of the best predictors of the location of toxic waste dumps in the United States is a geographical concentration of people of low-income and color” (1996, p. 368). The largest toxic waste dump in California is located in Kettleman City (2010 census: 96% of Hispanic origin). The other two facilities are located in Buttonwillow in Kern County (2010 census: 78.4% of Hispanic origin, 2.3% African American) and in Westmoreland in Imperial County (2010 census: 87.1% of Hispanic origin).

David Morell, a former EPA and California regulatory agency official with over forty years of experience, pointed out that regardless of where a dump is sited, there will always be opposition:

No system of hazardous waste management will satisfy everyone's interests; too many divergent pressures and intense emotions are always at stake in this policy realm. No matter what is said and done, some people will feel aggrieved that the facility ended up in their town rather than elsewhere. But their minority viewpoint need not always prevail. Siting processes can ensure that at least the way decisions are made can be perceived as fully legitimate. Certainly, some level of parochial animosity will remain whatever the rationality of the arguments amassed by the facility's proponents. Opposition based on this factor alone needs to be identified, recognized, and then accepted for what it is. A few opponents in a community can always be isolated (though never silenced), and thereby rendered ineffective by the majority viewpoint." (Morell 1984, pp. 569-70)

Morell, however, fails to acknowledge a pattern that systematically targets and discriminates against communities of color. The landfill owners and operators turn to local officials, community and church leaders, county and state officials, and neighboring industries to establish a network of potential supporters that drowns out local opposition, promising job guarantees, direct cash payments and a percentage of the disposal fees to city governments, and supporting local community-based initiatives. They lobby state and local politicians and contribute to their election campaigns (see Chapter 10). And when things go bad and facilities are cited for violations that jeopardize the community health and well-being, the polluters exploit this good neighbor agreement, turning to their friends in high places, who will happily restore confidence in their commitment to the community by overlooking the violations.

### ***California's Toxic Waste Politics: A System Designed to Turn Solutions into Problems***

Around the same time that Love Canal made headlines across the nation, California state officials began investigating the Occidental Chemical Company (OCC) plant in Lathrop that manufactured the agricultural pesticide DBCP. Male OCC employees noticed that they suffered from an inability to conceive children, and tests later affirmed that DBCP was responsible for their abnormally low sperm counts. The state immediately banned DBCP. This should have been a known fact: twenty years earlier, Dow Chemical Company had carried out tests that confirmed DBCP caused sterility and liver and kidney damage, but failed to disclose this information to their own employees (*New Scientist* 1977). DBCP was also found in 193 of the 527 groundwater samples from 24 California counties and in the well water 500 feet from a waste pond used at the plant (*ibid*).

California had established the Hazardous Waste Control Act, the blueprint for the federal RCRA legislation in 1972, but by 1979, the state mostly owing to industrial and agricultural usage was one of the ten leading producers of chemical waste in the nation. An article published by *The Nation* magazine warned: "California has a toxics problem that many other states do not face. More than 300 million pounds of pesticides were used on crops in the state in 1979. Yet research into the effects of long term exposure to or consumption of food treated with chemical poisons is limited" (Rubin 1980). By 1980, California and nine other states produced more than

60% of the 57 million metric tons of hazardous waste generated by U.S. industry. A May 26, 1981, *Los Angeles Times* article revealed that “California, for years, considered the nation’s leader in safe and sane chemical waste control, has been rocked by the discovery of potential miniature ‘Love Canals’ throughout the state. The full extent of this health hazard is only now being documented by the state Department of Health Services” (Keppel). By 1983, California generated 8.9 million to 44 million tons of hazardous waste. By 1985, records still did not exist for the hundreds of small businesses that generated under 1,000 kilograms of waste per month but were not required to prepare waste manifestos to authorities.

In 1979, California had eleven Class I sites permitted to accept dangerous pesticides, refinery residues, and “scrubber water” produced in cleaning air emissions and water discharges. Just thirteen years after it first established the Hazardous Waste Control Act, every major review of California’s regulatory program for hazardous waste was condemned as inefficient. The state closed unreliable landfills that did not meet the standards of the regulations. By 1982, there were seven. By 1987 there were five. Today there are three toxic waste dumps in the state, and the Kettleman Hills Facility is the only Class I site.

In 1972, the Stringfellow Quarry landfill located in Riverside, California, was shut down because of severe groundwater contamination. The Class I toxic waste dump was constructed in the 1950s as “a series of evaporation ponds used to concentrate liquid wastes, Stringfellow received approximately 32 million gallons of wastes, mostly spent acids and caustics. In the heavy rains of 1969, the facility overflowed its containment dikes; it reopened after repairs, but by 1972 it had finally closed. The state began an active abatement program here 1977 with total costs that exceeded \$6.5 million” (Lester and Bowman 1983).

By 1980, four of the five Class I landfills in the southern half of the state had been closed within a few months of each other:

- The Palos Verdes landfill, operated by the Los Angeles County Sanitation District reached capacity and was shut down.
- The 243 acre Calabasas landfill in San Fernando Valley, operated by the same county sanitation district opened in 1965, but in 1980 state officials concluded that the underlying geology of the landfill did not meet 1972-established standards of impermeability. The landfill was reclassified as Class II, enabling it to stay open and receive solid and municipal wastes only.
- The 254 acre Simi Valley landfill was leased on private land owned by the Union Oil Company to the Ventura County Regional Sanitation District. Though the site opened in 1971, by 1980 site operators concluded that the geological conditions were inadequate to prevent possible groundwater contamination and thus could not meet the new federal standards under RCRA. The landfill remained open, but the Class I portion of the site was closed by the end of that same year.
- In San Diego, the Otay landfill was closed because operators claimed that although the site was safe, it was too small and would cost too much to bring the landfill to par with new federal standards. But between 1963 to the time it closed in 1980, this site received much of San Diego’s hazardous materials, some estimated 17 million gallons of liquid waste.

These closures left Southern California with only the BKK landfill, in West Covina, nearly 200 miles away from the closest Class I dumps in Kettleman City and Casmalia. The EPA cautioned in 1980 that “California and nine other states produced more than 60% of the 57 million metric tons of hazardous waste generated by U.S. industry. Only about 10% of this total [was] disposed of in [an] ‘environmentally sound’ manner” (Keppel 1981). Toxic waste and landfills became a controversial political and economic issue, and necessitated an immediate response from state politicians, regulatory officials, and the agricultural industry to address the looming problems. The closure of the other facilities increased public concern of potential illegal dumping. More than 60,000 residents lived within two miles of the facility and there were complaints of odors, illnesses, and environmental concerns. Industry and local officials resisted closing West Covina because doing so would incur increased costs and environmental risks from transporting the waste to longer distances.

Established by the EPA, the California Department of Health Services, and the Los Angeles County Sanitation District, the Southern California Hazardous Waste Management Project (SCHWMP) devised strategies for the safe and economical management of hazardous waste. With criteria the project developed for siting landfills using hydro-geologic and population analyses, it identified 48 potential locations in the state, narrowing the list to 28, and eventually to four to serve the seven counties in Southern California (SCHWMP 1982). In mid-1981, there were local efforts to recall a city council accused of corruption for serving the interests of big business and state officials over that of their own; S.B. 501 would have removed the local government’s authority to unilaterally close the BKK landfill (Morell 1983). The protest succeeded in getting a referendum on the November election ballot that would have prevented the landfill from receiving additional waste but it failed to pass because “it was attached with a provision to raise the city’s taxes by about \$1 million annually to make up the deficit if the landfill were closed” (ibid.).

This legal action was followed by the state’s announcement of a plan to phase out the dependency on land disposal and instead treat selected types of hazardous wastes (California Department of Health Services 1982). This produced “a radical shift away from the state’s precarious dependence on land disposal in favor of an aggressive program to direct the most hazardous wastes to new recycling, treatment, and destruction facilities” (Epstein et al. 1982). A report by the California Governor’s Office of Appropriate Technology (OAT) found that 70% of the state’s landfills had a “high potential for groundwater contamination” and that “it is technologically feasible to recycle, treat, or destroy at least 75% of all the hazardous wastes which were disposed of in our Class I landfills” (California Governor’s Office of Appropriate Technology 1981). California became the first state to ban the land disposal of certain categories of toxic wastes, requiring treatment, setting higher fees for land disposal, and increased monitoring and enforcement inspections (Governor Edmund G. Brown Executive Order B-8881 1981). In 1982, a two-year timetable was created by the DHS to prohibit particular toxic wastes from being dumped in landfills. These wastes were identified as extremely dangerous to public health, classified as toxic” (Morell 1983, pp. 144-145). Morell explained:

OAT had little contact with industry, which was shocked to be faced suddenly with an aggressive schedule to prohibit cheap land disposal of its wastes. Oil companies, chemical firms, electroplaters, and others argued that the governor’s

office had been captured by environmental zealots who had no comprehension of the realities of corporate economics. (p. 146)

In the following year, OAT, under pressure from industry, revised its proposals and clarified that the scheduled ban on land disposal of particular toxic wastes would only be enforced to the extent that treatment technologies were available (ibid.).

Government officials encouraged private industries to construct and operate new waste treatment facilities to assist in phasing out land disposal practices. In 1982, a sixteen-member Hazardous Waste Management Council and the DHS were established to oversee hazardous waste management and recommend legislative and administrative changes to overcome a web of local laws and local opposition that had halted the siting of toxic dumps and treatment facilities in the state. As part of the larger campaign to treat waste rather than dump waste, the SCHWMP redirected its focus from the siting of new landfills to identifying potential sites for on and off-site toxic waste treatment facilities. The DHS introduced criteria for the siting of treatment facilities near the initial source of waste generation. The new facilities would have to be compatible with existing land uses and truck transportation would have to be minimized. The emphasis on technology acknowledged the dominance of the private sector by making the government dependent on them not only to build these new facilities but to provide the expertise required to run them.

Donald Bright, an environmental consultant to Chemical Waste Management Inc. (CWM) made the case that, “we have to have urban collection points to make the disposal station in the boondocks work” (Keppel)—the “boondocks” referring to Kettleman and Casmalia landfill sites which were still open for business. CWM encouraged the use of the new technology, mandated by law, since it enabled CWM to take advantage of its network of resources and to position itself within the state as a leader in technology and waste resources. A closed-door meeting between private-sector industry leaders and state regulators to discuss the requirements resulted in an agreement that sought to eliminate the statewide phasing-out agenda and essentially this highly technical, political, and economic issue relating to the regulation armed corporations like BKK Corporation with the power and leverage to demand preferential treatment by local and state officials:

The BKK Corporation was both the principal corporate sponsor of new treatment facilities and the only operator of a Class I toxic waste landfill within Southern California. Any new competitor for the inexpensive land disposal of potentially treatable wastes might undercut the profitability calculations for BKK’s Wilmington treatment center—the very facility needed to implement the state’s landfill phase out activity... State environmental and public health agencies were increasingly locked into an unusual alliance with the corporate operator of the sole hazardous waste landfill in Southern California, an alliance which essentially required the absence of any new land disposal competition in order to contract the treatment capacity needed to implement the state’s innovative program to curtail land disposal. This alliance of health regulators, and corporate landfill operators was arrayed against a group of local elected officials pressing for additional land disposal capacity within the region.” (Morell 1983, p. 170)

In November 1984, the BKK Corporation announced that it would cease accepting hazardous wastes at the landfill before months prior families had to be evacuated from their homes because of toxic air emissions coming from the landfill.

***A Textbook Example: “One of the Most Heavily Regulated Facilities in California”***

The official website of the Kettleman Hills landfill facility lists five facts about the safety of the facility (WMI website):

1. The Kettleman Hills Facility, operated by Waste Management (WM), is one of the most heavily regulated facilities—in one of the most heavily regulated industries—in California. Strict federal, state, and local regulations include comprehensive air-quality protection and groundwater programs at the site, as well as daily, weekly, quarterly, and annual inspections and regular reports to elected officials and regulatory authorities
2. The Kettleman Hills Facility is an environmentally protective facility. WM has in place a comprehensive Environmental Management Program at the Kettleman Hills Facility to help ensure compliance with regulatory and corporate requirements. Just since 2007, four different local, state, and federal entities have studied WM’s facility and all concluded that it does not impact local residents. These findings continue a 30-year track record of protecting human health and the environment.
3. The Kettleman Hills Facility is not adversely impacting water for the residents of Kettleman City. Groundwater beneath the Kettleman Hills Facility is isolated and cannot be used as drinking or irrigation water. Indeed, it does not connect to or affect regional drinking water in the San Joaquin Valley or in the Kettleman Plain.
4. The Kettleman Hills Facility helps all California communities. Over the past 30 years, the Kettleman Hills Facility has played an important role in more than 4,800 community cleanup projects by producing safe disposal capacity.
5. The Kettleman Hills Facility needs to expand to continue to provide needed services to nearby communities. As the facility nears capacity, WM has started a permit process to expand. The Kings County Board of Supervisors voted unanimously to grant a permit, and a recent decision by Kings County Superior Court Judge concluded that the Board of Supervisors followed state environmental laws in doing so. The State of California and the U.S. EPA must approve the expansion before it can proceed.

These statements are misleading. For-profit, business and shareholder interests often conflict with the interests of local residents and the environment. CWM does not have “a 30-year track record of protecting human health and the environment” in Kettleman City. In fact, the facility has long had a reputation for poor performance and policy violations, and has been cited and fined millions of dollars. These half-truths have helped position the facility and its operators as industry leaders in the business of waste management.

In the 1985 explosive report, *Nowhere To Go: The Universal Failure of Class 1 Hazardous Waste Dump Sites in California*, environmental groups (Environmental Defense

Fund, Sierra Club, Citizens for a Better Environment, Campaign for Economic Democracy, Concerned Neighbors in Action, and Coalition on Environmental and Occupational Health Hazards) analyzed government documents on landfill sites, revealing the severity of toxic waste problems in California. The report warned that every Class I facility in California was leaking, and would not meet the new, stricter state and/or federal toxic waste standards and that only one facility had received a final operating permit. All of the other facilities were operating with an interim status (p.ii) that permitted them to operate while paperwork was reviewed by the state. The report revealed that the state had concerns that the facilities risked becoming Superfund sites due to incompliance with regulations designed to properly secure their waste. The extent of the toxic contamination required expensive cleanup in California and had been well documented with the Stringfellow acid pits in Riverside, the Rio Bravo injection well in Kern County, the BKK landfill in West Covina, and an operating industries landfill in Monterey Park. Environmental organizations proposed that facilities with leaks should not receive toxic waste, but state and local officials, failing to learn from the past mistakes of the private sector, selected the Kettleman Dump despite its leaks and citations, and fines, to store the contaminated waste from Superfund sites.

The *No Where To Go* report exposed environmental violations in Kettleman City by CWM, that, to this day, are rarely mentioned by government regulators, CWM and WMI, or even by residents and activists groups. Moreover, the storage of Superfund waste and corresponding repeated violations may very well complicate the 2010 health and environmental investigations that released CWM of responsibility for current health conditions in town. “The company describes its activities on the site as being largely treatment and storage, and has stated that only non-liquid, non-reactive, and non-flammable bulk and containerized wastes are disposed at the site” (Environmental Defense Fund, p. I-2). In April 1984 “the site received approximately 2,597,700 gallons of liquid hazardous wastes of various types, 6,605 cubic yards of contaminated solids, and 6,336 drums of acids, alkaline wastes, manufacturing wastes, tetraethyl lead sludge, solvent mixtures and other toxic wastes” (I-2). Despite numerous EPA citations that suggested otherwise, the CWM site presented itself as being capable of meeting the needs and expectations of the state Superfund waste. In light of the waste management problems in Southern California, and plans to replace phased out land disposal with treatment facilities, the Kettleman Hills facility remained open for business.

Earthquakes, though not mentioned in the report, are another threat to the safety and security of the Kettleman Hills facility. During the 1980s, the region experienced three earthquakes within just twenty miles of the western border of Kings County—the 1982 New Idria earthquake (5.4 magnitude), the 1983 Coalinga earthquake (6.5 magnitude), and the 1985 Kettleman Hills earthquake (5.9 magnitude) (USGS 1985).

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In the following section I cite four major findings from the Environmental Defense Fund report. (In the interest of space, I have omitted the sources for the report’s citations. Please refer to the actual report for these sources.)

Major Finding: *Hazardous wastes deposited in the Kettleman Hills facility have seeped into the groundwater.*

The Executive Director of the Central Valley Regional Water Quality Control Board (CVRWQCB) described contamination at the Kettleman Hills facility as “a problem at our one and only full-time Class I site [in the Central Valley Region] previously thought to be one of the best in the west.” In the same context a senior official in the Department of Health Services referred to “the statewide importance of the site.” The evidence of contamination is as follows. On July 31, 1984, Emcon Associates, Chemical Waste Management’s engineering consultants, reported to the CVRWQB that organic chemical contaminants of probable waste origin had been detected in a monitoring well (well K-4) at the site. The contaminants, 1,1-dichloroethane, benzene and toluene, were measured in the 200 to 300 parts per billion range, according to a CVRWQB phone conversation record. A subsequent written report by Emcon Associates extended the list of contaminants found in wells K-3 and K-4 to include chlorobenzene, chloroform, bis(2-ethylhexyl)phthalate, di-n-octyl phthalate, methyl chloride, tetrachloroethylene, trichloroethylene and the herbicide 2,4-D. From a sample taken on October 15, 1984, the report cites a total of 29,000 parts per billion of total organic halogens in well K-4. There is some indication that three other wells at the site are also contaminated but no conclusive evidence is available. CWM has since submitted an expanded hydro-geological study to state and federal agencies. Although EPA has criticized that study as being deficient in a number of aspects, there has been no official explanation of how wastes reached a depth of 315 feet below the site. Using the assumption that the permeability rates of the geologic formations below the site are the rates as reported by Emcon Associates, and using the further assumption that the geologic formations lie in horizontal layers, it is essentially impossible to explain how contaminants could have penetrated to a depth of 315 feet in the seven years since Class I wastes have been allowed to be disposed of on the surface of the site, or in the ten years since operations began there. However, it is now known that formations underlying the site are not horizontal but instead dip sharply, some as much as 30 to 40 degrees. It is therefore possible to speculate that the sharply dipping layers of sandstone and siltstone could be serving as conduits. If so, liquid wastes might have run along one or more layers, and thereby penetrated far below the surface. (I-4 – I.5)

Major Finding: *Chemical Waste Management, touting the underlying geological advantages of Kettleman Hills as the ideal location for a Class I facility has made inaccurate claims about the presence and location of groundwater under the site.*

In its promotional brochures, the operator (CWM) has represented the site as “textbook example of the required subsurface geology for the disposal and containment of hazardous wastes.” The company has claimed the area is “devoid of water.” In its Waiver Demonstration for groundwater monitoring, as submitted to EPA, the company describes the geological formations underlying the site as having a hydraulic barrier material permeability of  $1 \times 10^{-6}$  [negative six power]

centimeters per second. In the company's Waiver Demonstration for liners, submitted to EPA and subsequently withdrawn, it is stated that groundwater underlying the site is "at great depth (5000 feet), and is of unusable quality (5000 to 36,000 mg/l TDS [Total Dissolved Solids]). The company also makes the statement that the formations underlying the site are hydraulically isolated from usable groundwater. Subsequent events and discoveries at the site have yielded information which contradicts these assertions. Groundwater presence: On March 12, 1984, CWM reported to EPA that it had struck a water-bearing sandstone formation at 404 feet in an exploratory bore-hole. CWM described the formation as a 10 foot thick formation that allowed water to rise in the bore hole about 100 feet. Other borings at the site also encountered water-bearing formations from 8 to 60 feet thick. The operator, CWM, maintains that the water-bearing zones that it discovered below the site are not "aquifers" and that therefore, under CWM's view of the applicable regulations, CWM is not legally bound to implement a groundwater monitoring system or a groundwater assessment program. However, the company has agreed to proceed with a groundwater assessment program. Water quality: In 1983 the operator described the groundwater below the site as unusable (5000 to 36,000 mg/l TDS). However, tests of water recently discovered at between 300 to 500 feet below the site show TDS levels ranging from 2,800 to 17,000 mg/l, with most showing levels between 4,000 and 8,000. The federal Safe Drinking Water Act requires protection of all aquifers of less than 10,000 mg/l TDS unless an exception is granted. (I-6 – I-7)

Major Finding: *The Kettleman Hills facility emits volatile, organic compounds that are known or suspected carcinogens into the air.*

From June 27 through July 8, 1983, the Enforcement Division of the California Air Resources Board conducted an air sampling program at the Kettleman Hills facility. The sampling program was requested by the Kings County Air Pollution Control District. The sampling program was also part of an Air Resources Board program to evaluate draft sampling procedures developed jointly by the Air Resources Board and the Department of Health Services. Results of the sampling by the California Air Resources Board are as follows:

- On the first day of sampling for 23 inorganic air contaminants, levels of 14 contaminants (61%) exceeded those recorded at an urban monitoring station in El Monte, California. Levels were notably elevated for iron, silicon, chlorine, cadmium, mercury, selenium, and titanium.
- On one occasion sulfur dioxide levels reached a high of 7 ppm for one hour. Levels of 5,4,3, and 2 ppm were reached on other occasions. The California ambient air quality standard for sulfur dioxide is .5 ppm for 1 hour and 0.05 ppm for 24 hours. Thus, the highest levels recorded from sampling at the Kettleman Hills facility were 14 to 140 times higher than applicable state standards.
- High levels of volatile organic compounds were also measured. At one sampling station, levels of methylene chloride (a suspected carcinogen) reached 286 ppm; and

levels of trichloroethylene (a positive animal carcinogen) reached 18 ppm. The workplace standards for methylene chloride is 500 ppm for an exposure of 15 minutes; the workplace standard for trichloroethylene is 150 ppm for an exposure of 10 minutes. (I-7 – I-8)

Major Finding: *Chemical Waste Management was cited for violating the site's Interim Status Document.*

On April 13 and 14, 1983, EPA conducted an inspection of the Kettleman Hills facility and found 46 potential violations of the company's Interim Status Document. On July 3, 1984, EPA issued a compliance order citing four violations and ordering the company to pay a fine in the amount of \$108,000. CWM was cited for the following violations of standards for Interim Status facilities:

- Failure to implement a groundwater monitoring system capable of determining the facility's impact on the uppermost aquifer or to have an adequate waiver demonstration.
- Failure to develop and implement an unsaturated zone monitoring plan for land treatment facilities.
- Failure to develop a closure plan that includes provisions for partial closure, and closure of disposal units without demonstrating conformance with federal regulations.
- Making substantial modifications (including expansion) to the facility while operating under interim status.

The Kettleman Hills site has recently been the subject of an investigation by the U.S. EPA National Enforcement Investigation Center (NEIC). A Water Board memorandum states that this investigation has come up with a substantial number of violations in addition to those already listed in an earlier EPA complaint. On April 29, 1985, in response to questions at a Congressional hearing, EPA's representative Harry Seraydarian appeared to confirm that the multi-volume NEIC report on the Kettleman Hills facility showed "dozens" of new violations of existing regulations. EPA is presently holding the report as confidential. The report's title is: RCRA/TSCA Investigation of Chemical Waste Management, Inc., Kettleman Hills Facility. Document #EPA 330/2-85-008. On April 2, 1985, EPA sent CWM a formal Warning Letter detailing remaining deficiencies in the company's groundwater protection at the Kettleman Hills site. In a letter accompanying the twenty-nine page document, Philip Bobel, Chief of RCRA Programs for EPA Region IX, warned CWM that delay or failure to respond completely to the request for more complete information could result in termination of the company's interim status, or enforcement action under provisions of RCRA. Other Chemical Waste Management sites have reportedly been the subject of other investigations and enforcement actions in other states. (pp. I-9 – I-10).

In addition the report turned the crisis of toxic waste into a politically charged campaign issue that exposed further shortcomings by government regulators to effectively oversee and enforce

penalties on the landfill operators. Head of the state Toxic Substances Control Division, Joel S. Moskowitz under Governor Deukmejian, disputed the report:

To say “leak” gives the impression of a great hole with chemicals leaching out. The discovery of some leachate not connected to a water supply—we can argue semantics, but to say it is some kind of public health threat is absolutely incorrect...What this report did was to go through the files to find fragmentary indications that still need more investigation. But the implication that these sites should be shut down is not justified. Closing the sites would cause increased illegal dumping of hazardous wastes. There will always be a need to have Class I sites. (Benson 6/6/1985)

While some government officials denied the findings of the study, *Today's Toxic Dump Sites: Tomorrow's Toxic Cleanup Sites* (1986), a congressional report published by the Assembly Office of Research at the request of Member Lucy Killea (Chairwoman of the Assembly Subcommittee on Alternative Technologies), warned that the toxic waste disposal problem might be the most significant environmental health issue of the decade. The report replicated the research from the *No Where To Go* report and confirmed its findings. Still, the Department of Health Services, the State Water Resources Control Board, some Regional Water Quality Control Boards, and the toxic waste industry challenged both findings, arguing that both reports had overstated the charges and misrepresented the situation. The report reinforced the previous findings by the environmental groups:

All nine facilities were still leaking, some far worse than the previous year and none any better; none had submitted adequate hydro-geological data; none had adequate groundwater monitoring programs to detect the migration of contaminants; and many operated under interim status (that is, without final permits); and none of the dumps met state requirements for natural geologic barriers to prevent leakage of toxic waste into ground water. (California Assembly Office 1986)

The *Today's Toxic Dump Sites* report revealed that at least six sites in California on the federal Superfund list of the nation's worst hazardous waste sites were legal landfills that had been shut down after leaking. The report charged that contaminated ground water had been found at six of the nine dumps and that to date three of the nine had been shut down, while only six facilities accepting toxic wastes met state requirements for natural geologic barriers such as rock formations that would prevent toxics from leaking into underground water supplies. The report endorsed alternative technologies like waste reduction and recycling to eliminate landfills and tougher enforcement of the state's dumping laws. The report noted that the disposal system of landfills and ponds:

Is actually a system designed to turn solutions into problems....Long ago, California and the United States decided to dispose of its toxic wastes by dumping them out of sight in remote landfills. The determining factor in this decision was cost: it is cheaper to dump than to treat toxic waste. Over the years the dumping

process has become institutionalized, and today the state's Health and Safety Code contains hundreds of sections defining wastes, providing for their transportation and disposal, and setting standards for handling and disposal...Our current toxic waste disposal system of landfills and toxic ponds is actually a system designed to turn solutions into problems. Too often, today's waste disposal site is tomorrow's Superfund cleanup site. The evidence is spread throughout California, at the BKK dump site in West Covina, the Stringfellow Acid Pits in Riverside, McColl in Orange County, Rio Bravo in Kern County, and Capri and Wilco in Los Angeles. In every case cited above, wastes were legally dumped for 40 years and more before the effects were perceived, often with devastating results. Houses near BKK in West Covina were temporarily rendered uninhabitable. A long plume of toxic waste continues to flow underground from Stringfellow Acids Pitts under the city of Glen Avon, where bottled water is delivered at state expense because drinking wells in the area are polluted. (ibid., pp. 3-4)

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The politics of waste management, and specifically the use of landfills, have been influenced by politics throughout the history of this country. Incumbent California Republican Governor George Deukmejian's bid for a second term was challenged by Democratic Mayor Tom Bradley of Los Angeles. The report *Today's Toxic Dump Sites* charged that "state officials have shown a decided preference for turf battles and arcane arguments over 'how clean is clean' rather than actual enforcement" and declared that "by any standard, the toxic dump situation in California is in crisis" (California Assembly Office 1986). State Republicans claimed that the report and its supporters were politically motivated. In response to the report, Assemblywoman Lucy Killea, (Democrat San Diego) said, "without drastic changes in the way we manage hazardous wastes, today's hazardous waste disposal facilities will be tomorrow's toxic cleanup sites" (Benson 6/6/1985).

Between 1973 and 1989 nearly 10,000 businesses and government agencies sent 5.6 billion pounds of waste—sludge, pesticides, solvents, acids, metals, caustics, cyanide, and non-liquid PCBs—to the Casamalia landfill. The Casmalia landfill was eventually closed in 1989, just seventeen years after it had opened. While the total estimated cost to clean up the landfill is \$284 million, the EPA recently made a settlement deal for \$1.2 million with 49 small businesses and agencies for the cleanup efforts. So far, only \$110 million has been collected from the former owners and operators—Casmalia Resources, Hunter Resources, and the late Kenneth H. Hunter, Jr.

### *A Review of the Status Quo*

CWM purchased the Kettleman City landfill in 1979. A farmer from Avenal inherited the land from his grandfather and eventually sold it to McKay Trucking Environmental Disposal Services, the owner at the time of the purchase who had permitted local companies to dump oil

and sludge since at least 1972 when it received a Class II liquid waste disposal state permit. In August 1980, CWM submitted forms to the EPA to notify them of hazardous waste activity. In November 1980, CWM submitted an application for a RCRA permit and was granted interim status pending final administrative approval of its permit application. In 1981, California was awarded by the EPA phase one interim authorization to administer the RCRA hazardous waste program and by the end of 1982, the state Department of Health Services (which was charged with administering and enforcing the provisions of the state Hazardous Waste Control Act and the RCRA) gave the Kettleman site an interim status permit. The interim permit status prohibited substantial facility modifications or additions and required the facility to have a groundwater monitoring program, an unsaturated zone monitoring program for land treatment, and closure conditions. (United States EPA Docket No. RCRA-09-84-0037)

The EPA cited CWM and its Kettleman Hills facility for over 130 violations of federal laws, and in July 1984, it filed a civil complaint charge against CWM for violating its state permit for unlawfully modifying its facility, failing to monitor groundwater (it had never implemented a monitoring program and did not have an adequate waiver demonstration), and failing to prepare a partial facility closure plan. The fine was \$108,250. Acknowledging its wrongdoing, CWM did not contest the violations, and simply sent a check for \$108,250 (United States EPA Docket No. RCRA-09-84-0037). Unfortunately for CWM, the EPA returned the check upon discovering additional, significant violations at the landfill. The EPA fined CWM \$7.6 million, the largest penalty ever assessed by the EPA in the Western United States. Judith E. Ayres, regional administrator of the EPA's Western Region described the violations as "a situation of gross non-compliance with the federally mandated requirements for a hazardous waste disposal facility. The Kettleman Hills facility is in flagrant violation of federal environmental laws [RCRA and TSCA]" (Benson 6/6/1985). The violations included the following (California Assembly Office of Research 1986, p. 24):

- Failure to conduct proper groundwater monitoring
- Making substantial modifications or changes at the facility without receiving prior state approval
- Violating CWM's Waste Analysis Plan, including failure to follow a written plan for three years
- Failure to keep proper inspection records and operating records
- More than 1,500 instances of insufficient freeboard at ponds (liquid waste in holding ponds were in danger of overflowing)
- Placing incompatible wastes in ponds
- Placing bulk and containerized liquid wastes in landfills after this practice was prohibited by state law
- Placing reactive wastes in landfills without first rendering them non-active
- Failure to conduct proper land treatment
- Submitting inadequate hazardous work permit applications

In November 1985, CWM settled with the EPA, agreeing to pay the DHS \$110,000 a year for the next 10 years, to spend almost \$800,000 for an environmental audit of the facility by an independent third party to computerize operating records, and to conduct extensive soil

sampling before constructing new lined landfills (Ibid.). Steve Drew, a community relations manager for CWM, explained that “company officials expect to complete the improvements at Kettleman Hills by the end of 1986 if the Kings County Board of Supervisors grants the site a required permit by the end of this year” (Benson 6/6/1985). According to Ayres (the EPA regional administrator), the firm has agreed “to convert this facility into what should be a state-of-the-art land disposal facility in a very short period of time” (Soiffer 11/13/1985). Don Reddicliffe, a company official, stated “the infractions did not represent any threat to the environment or public health. We concluded that in order to keep the site open to waste generators we wanted to resolve (the citations) as soon as possible” (ibid.). Despite gross violations at the CWM facility, in mid-year 1986, the Kings County Board of Supervisors approved the expansion of the Kettleman City dump from 211 to 499 acres. CWM allegedly withheld EPA tests that revealed groundwater contaminated by cyanide and components of Agent Orange beneath the CWM facility from Supervisors prior to their vote (Stop Waste Management website). Nonetheless, the Central Valley Regional Water Quality Control Board unanimously approved an administrative order to authorize facility expansion:

Leaks have been a problem at the dump in the past two years. At least four wells designed to monitor ground water pollution at the Kettleman site have shown signs of chemical contamination traceable to old, unlined waste ponds...Under the expansion plan, [CWM] would build eight new waste ponds with a total capacity of more than 57 million gallons, and three new burial areas covering 96 acres, with a total capacity of nearly 7 million cubic yards of waste...The plan calls for the nine existing waste ponds to be rebuilt with complex linings of clay and heavy plastic to guard against leaks... The expansion enabled the dump to bury four times its present volume of hazardous wastes annually by the early 1990s. (Clemings 1986)

To fulfill the EPA mandates, CWM demanded 250,000 gallons of water a day for construction, dust control, human use, such as showers at the facility, and to make a thin mud to seal the waste ponds. The Kettleman City Community Services District board charged CWM a heavily discounted rate of just \$20,000 a month. In July of 1986, the Community Services District board, in response to resident concerns about water contaminated by toxins, a depleted water supply, and worn-out district pumps, voted 2-1 to reduce the amount of water sold to CWM to 100,000 gallons a month (Dudley 1986). In July of that year the dump “used more than 11 million gallons and wanted to buy more...estimate[ing] that Kettleman City could make \$40,000 a month selling water to CWM if it provided all that the dump wanted...the plant need[ed] about 500,000 gallons a day for a couple more weeks and half that for about four months, when construction is complete” (ibid.). An engineer hired by the district board explained that “the pumps have about 900,000 gallon per day capacity. If used at capacity daily, the life of the pump would be reduced by 1.2 months. The life expectancy of the pump is 240 months” (ibid.) Two weeks later, since the town was no longer selling large amounts of water to the facility, the board voted to return \$15,000 that CWM had donated to improve the town’s water well pump (South Valley Bureau 8/21/1986).

Around this same time, internal board issues intensified when the Community Services District board failed to elect a fifth board member, dividing the group between those believed to have special interests with CWM facility and those who did not. Aletha Ware abstained from the board's initial 2-1 vote to discontinue selling large amounts of water to CWM (her husband worked for CWM). The Kings County Board of Supervisors was then required to appoint a fifth member and selected Ted Ewalt, a CWM proponent and stockholder (South Valley Bureau 9/11/1986). Soon thereafter, with a membership sensitive to their interests, the Kettleman City Community Services District reversed their decision, voting "to allow outside water users to buy as much as 500,000 gallons of water a month" (South Valley Bureau 9/18/1986). This is an example of how CWM does business in town—using proponents to represent the entire town on both a local and state level. CWM has given thousands of dollars to support various Kettleman City projects; clearly the money serves to entice favorable votes.

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In 1984, because the numerous violations at the Kettleman Hills dump site, the EPA had banned Superfund sites from sending their waste there. Still, hazardous waste from the Stringfellow Acid Pits in Riverside, a Superfund site where nearly 35 million gallons of hazardous liquid industrial wastes contaminated local groundwater, and the McClellan Air Force Base in Sacramento, were sending waste to the Kettleman Hills landfill. The wastes were produced by major companies including, but certainly not limited to, General Electric, Montrose Chemical, Hughes Aircraft, and Sunkist Growers.

One month after the EPA fined CWM more than \$7 million for dumping and operating violations at its Kettleman Hills facility, radioactive waste, prohibited from Class I toxic waste dumps, was buried at the landfill. Bill Ihle, of the Department of Health Services, explained that with a ban in place, "it didn't seem necessary to require monitoring for atomic particles at dumps licensed to accept other hazardous wastes" (South Valley Bureau 9/18/1986). Dust containing isotope cesium 137, a radioactive waste, was buried ten feet under chemical waste and soil. The Tamco Steel Company in San Bernardino County, a facility where scrap metal was melted for reuse, sent two truckloads to the facility:

One truckload was buried [about 20 cubic yards] even though it had passed by a radiation detector that Chemical Waste Management had at the dump. A second truckload, however, tripped a radiation detector at a California Highway Patrol weight station on Interstate 5. That set off an investigation that led to the dust that already had been buried. (Green 8/2/1985)

A congressional report uncovered another violation: "Although CWM had a radioactive scanning device for incoming waste samples, it failed to detect the Cesium-137. The DHS decided to leave the radioactive waste...claiming there was no significant health or safety risk associated with the quantity and concentration of the radioactive material" (California Assembly Office of Research 1986, p. 25). The site had received such toxic waste "for at least two decades" "the state Department of Health Services permitted some mildly radioactive waste to go to city dumps because they considered the material harmless" (Bustillo 2003). Twenty-two of the fifty California dumps—from toxic waste facilities in Kettleman Hills to municipal landfills

in Calabasas—tested positive for “unusually high levels of radiation” (Ibid.). The Santa Susana Field Laboratory operated by Boeing’s Rocketdyne Division, where government scientists tested nuclear reactors and manufactured nuclear fuel and engines for rockets and missiles, “confirmed that lightly contaminated material has been shipped to” Kettleman Hills (Clifford 2000).

Democratic Congressman John D. Dingell ordered a Government Accounting Office probe into illegal dumping at the Kettleman Hills landfill (United States General Accounting Office 1985). The investigation revealed that from November 1984 through May 1985, the United States Defense Department, Department of Energy, and the National Aeronautics and Space Administration (NASA) blatantly disregarded the EPA’s ban on the disposal of Superfund cleanup waste at the Kettleman Hills landfill, dumping thousands of tons of toxic waste at the site. The ensuing report described the alarming quantity of hazardous wastes shipped by federal agencies to the Kettleman Hills facility:

A military installation sent 6,442 tons of toxic waste...the total amount of waste cited in the report compares to 5,012 tons shipped by military installations in the eight months before the ban, another 1,869 tons of waste, almost all of it shredded currency and food stamps from the Federal Reserve, were shipped to the site included 6,690 tons of lime sludge, 3,125 tons of contaminated soils, 2,221 tons of inorganic solid wastes, 1,548 tons of PCBs and PCB-contaminated materials. (Cannon 1986)

Congressman Dingle’s response was: “The situation at Kettleman Hills is an outrage. Even though the EPA banned further dumping of Superfund hazardous waste, other federal agencies not only continued to dump, but increased the amounts they dumped. Such practices subject the federal government to increased liability and create a disincentive for these landfills to comply with the law,” the EPA essentially had “no authority to prohibit such federal agencies from using commercial facilities that are in violation of pollution regulations” (ibid.)

In 1989, CWM sued San Jose’s Encom Associates for a defective design that included an “incorrect fill configuration” of the Kettleman City dump that resulted in the 1988 landslide of toxic materials and the ensuing damage to the landfill’s liner top and leachate collection system, the EPA “ordered Chemical Waste to suspend operations, excavate more than one million cubic yards of waste, and repair the liner system before operations can resume” (Miller; pp.10-11). Denying any wrongful doing on their part, Encom’s president, Thorley Briggs, described the situation as a “complicated technical issue...Encom Associates agreed to a \$5 million settlement with Chemical Waste Management, Inc. and Grundle Lining Systems, Inc., of Houston, Texas (manufacturer and installer of the liner) agreed to pay Chemical Waste an undisclosed amount” (ibid.).

Also in 1989, CWM was fined over \$300,000 for eleven administrative and operational violations and an additional \$80,000 in connection with a fire at the facility (ibid.). Later, between 2000 and 2003, the CWM landfill in Kettleman City agreed to a settlement of \$47,500 (a \$10,000 fine and a \$37,500 donation to the Kings County Environmental Health Services for the purchase of emergency response equipment) for failing to perform monthly monitoring of a leachate detection system for PCBs. In 2007, after an inspection of the KC landfill and a review of CWM records, the EPA issued a notice of noncompliance due to inconsistent procedures for measuring PCBs in leachate, storm water run-off, and incoming waste to the facility. No

monetary penalty was issued, but the notice required the facility to resolve the problems. Just three years later, however, in November 2010, the EPA levied a \$300,000 fine against CWM for inconsistently managing PCBs and for noncompliance with information and decontamination requirements. Moreover, samples taken by the EPA near the facility's PCB storage and flushing buildings revealed PCB levels ranging from 2.1 parts per million (ppm) to 440 ppm, well exceeding the 1 ppm regulatory limit. The severity of these violations potentially put human health and the environment in danger.

In August 2011, the EPA levied the largest penalty for failure to accurately analyze the toxic waste to be disposed of in their landfill (Chavez 2011). The settlement was a result of a joint investigation by the U.S. EPA and the California Department of Toxic Substances Control that began in 2010, under former governor Arnold Schwarzenegger. CWM was fined \$1,000,000 for not "following proper quality control procedures since 2005...dispos[ing] of waste that did not fully meet standards for treatment prior to disposal... [and] dispos[ing] of hazardous waste leachate from the landfill without assuring the leachate met treatment standards" (ibid.). As a result, CWM was required to install an advanced record-keeping system, purchase new equipment for laboratory analysis, make operational changes to its leachate system, and consult an independent laboratory to test its waste for at least two years. CWM was empowered to self-report the monitoring of air around the facility and then submit its findings to the EPA. Their self-monitored study found no significant sources of harmful emissions. Moreover, a PCB study by the EPA that determined that chemicals did not migrate off the site, suggests there were no adverse effects to the local community's health or environment.

**PART III: *Reign of a Waste Corporation***

## **Chapter 8: How One Person's Trash Became another Person's Treasure**

Significant socio-historical, political, and economic processes are the background to the way in which wastefulness became the predominant culture in America. It is within this social setting that Waste Management Inc. (WMI) emerged as a powerful corporation. Consumer and industrial demand for waste hauling and landfill services, cultivated by a corporate capitalistic economy that defined nineteenth-century American values, lifestyles, and vocations, fueled the growth of the waste industry.

Three books describe significant incremental processes responsible for transforming Americans' lives and triggering the waste industry's expansion. In her ethnography *Worked Over: The Corporate Sabotage of an American Community* (2003) anthropologist Dimitra Doukas examines how corporate capitalism gradually replaced a well-established and self-sufficient regional economic system in the Mohawk River Valley of central New York state during the late nineteenth century. *Waste and Want: A Social History of Trash*, by historian Susan Strasser (1999), uncovers how the emergence of mass production and mass distribution has created a consumer culture of waste that has replaced thriftiness and an intimate relationship with material goods. And Stuart Ewen in his epic book *Captains of Consciousness: Advertising and the Social Roots of the Consumer Culture* (1977/2001) examines how advertising has changed the American economy from an economy defined by production to an economy defined by (over)consumption.

These books shed light on a manufactured, American culture of waste and on how industries and corporations have used advertising to "educate" people and thereby control their private lives—a background to examining how Waste Management Inc. (WMI) has become the largest waste services corporation in the world, head of an empire that extends far beyond waste itself.

## *Corporate Power and Monopolies*

Doukas explains the corporate takeover of a family-owned business and how it shifted the community ethos, producing detrimental effects that would last for years. The Remington family helped sustain a local economy by its manufacture of weaponry, typewriters, and other products. The skills and knowledge of local residents developed and maintained a system of self-rule and mutual dependency that decentralized power and encouraged autonomy for three generations:

Communities were tied together by water and rail, they were not dependent on each other for the necessities of life. Local farms provided whatever the householders' backyards did not. Local workshops made the tools they used. Local grain was ground to flour at local mills—the miller took his wage in flour, which he could then sell to the baker and the grocer. Local grain was mixed with local hops and brewed into local beer. Local apples were pressed in local cider mills. Local wood was planed in local sawmills. Local clay was baked into bricks. The people of the “island communities” looked first to each other for what they needed. (2003, pp. 61-62; emphasis by author)

As “island communities,” the townspeople prospered because their way of living was grounded in a mutually supportive, economic cooperative system that ensured stability and equality. Though the townspeople were “class conscious,” their economic system was grounded in “old values,” social equality, a commitment to community, and respect for each other’s labor. This “gospel of work” emphasized Jeffersonian revolutionary ideals that “common people” would serve public interests (p. 62). By the turn of the century, the “rise of the corporate giants, upended a culture of *traditional American values* that had jelled around the virtue of hard work and suspicion of great wealth, in pursuit of a sustainable *equality*” (p. 6). Doukas observes that “the consolidation of corporate capitalism could not have taken place without an immense cultural campaign, intended to overcome the nearly unanimous anti-corporate sentiments of the populace” (p. 5). The rise of American trusts and corporations replaced a “gospel of work” with a “gospel of wealth” that impaired the town’s efficient systems of governance and economic stability. By the “turn of the twentieth century, the trusts, numerically tiny but connected to big capital on Wall Street and abroad, managed a coup that subordinated places like the Valley, across the industrialized United States, to a moneyed foe that looked suspiciously like the Old World aristocracy their democratic ideals had long condemned” (p. 13). The corporate takeover of the Remington enterprises in 1886 was not an isolated series of events:

What happened to the Valley and to other “island communities” was *the trusts*, secret—in fact, illegal—cartels of capitalists, organized for the purpose of “cornering”—that is, monopolizing—particular markets. And once they got respectable, they wanted to forget, and wanted us to forget, where they came from. But by 1910 or so, changed into the clean legal clothes of a modern corporation, they controlled the productive property—factories, mines, wells, mills, refineries, railroads, telegraphs, telephones—of the United States. The trusts were the disreputable ancestors of many of today’s corporate giants. Their

goal, monopoly, and its means, incorporation, had long been recognized as dangerous to freedom and prosperity.... Incorporation, critics had charged for centuries, gives special privileges to the few at the expense of the many. (pp. 67-68)

In the Mohawk River Valley, the corporate takeover of the Remingtons made way for large companies to corner the market, drive out competition, limit production, and manipulate market prices. The capitalists monopolized resources and commodities that were vital to people's lives. In a capitalist economy that celebrates choices, monopolies ironically do the exact opposite, controlling production and manipulating the price of coal, oil, iron, steel—limiting consumer's choice and keeping prices and profits artificially high:

The trusts were capitalists, not producers. They monopolized a market by taking over enterprises that local producers, like the Remingtons, had built from scratch. Dodging the law at every step, it was surely a nerve-wracking way to make a fortune but, all things considered, it was a relatively easy route to fabulous wealth. You did not have to work day and night to invent something, or make something better, or find a better way to make something. Why build brick by brick when you can put together a group of powerful men and take it from the people who built it? (pp. 70-71)

### ***Manufacturing a Waste Culture***

Americans did not always produce the five pounds of trash per person per day that they do today. In *Waste and Want: A Social History of Trash*, Susan Strasser examines the history of trash, and uncovers the processes that transformed a culture based on value into a culture of endless waste-making. She argues that trash was minimal across America before the twentieth century, and since at least the mid-twentieth century, excessive waste by each individual has become common, standard practice: "American culture offers the world's most advanced example of the 'throwaway society'" (1999, p. 16).

Corporations have normalized and rationalized the "throwaway society." Garbage goes hand in hand with production: discarding the old to make room for the new encourages trash. Corporations which generate increased profits through increased consumer consumption have successfully associated garbage with advanced technologies and progress that make our lives better and more convenient.

Long before disposability became mainstream, people "sorted" what we now throw away. Sorting, as Strasser describes, was based on making use of everything. People were mindful of how products were manufactured, what materials were used, and how the products could be reused: "Fixing and finding uses for worn and broken articles entail a consciousness about materials and objects that is key to the process of making things" (pp. 9-10). This consciousness was rooted in peoples' creativity and ability as domestic caretakers, seamstresses, blacksmiths, carpenters, and farmers to value their own set of skills by maintaining a high standard for the materials they used and salvaged. People respected the goods that were

produced because they valued the labor, time, energy and foresight needed to produce such goods; they had an intimate relationship with the things they created, and used products until they were worn out or no longer of use. Women sewed clothes for their families, and knew how to mend the same pieces of clothing to accommodate changing fashion trends; they reused materials such as worn out clothes as rags, for quilts, or to stuff pillows. Nothing went to waste and everything was salvaged:

Most Americans produced little trash before the twentieth century. Packaged goods were becoming popular as the century began, but merchants continued to sell most food, hardware, and cleaning products in bulk. Their customers practiced habits of reuse that had prevailed in agricultural communities here and abroad. Women boiled food scraps into soup or fed them to domestic animals; chickens, especially, would eat almost anything and return the favor with eggs. Durable items were passed on to people of other classes or generations, or stored in attics or basements for later use. Objects of no use to adults became playthings for children. Broken or worn-out things could be brought back to their makers, fixed by somebody handy, or taken to people who specialized in repairs. And items beyond repair might be dismantled, their parts reused or sold to junk men who sold them to manufacturers. Things that could not be used in any other way were burned; especially in the homes of the poor, trash heated rooms and cooked dinners. (ibid., p. 12)

The industrial revolution of the nineteenth century brought tremendous changes in transportation, commerce, and energy. Machines and factories transformed the American economy into an urban, industrial society under the conviction that increased productivity would make life better and easier. Inventions such as light bulbs, telephones, and automobiles further industrialized the country and made life more convenient. By the twentieth century, the consequences of industrialization, mass production, and the rise of consumer culture influenced values and ethics. A waste culture was the direct result of the convenience and disposability of machines and mass-produced, prepackaged goods supplanting goods produced locally by peoples' specialized skills and expert knowledge of materials. Strasser explains the impact of these changes over several generations: "During the 20<sup>th</sup> century, older people have been more likely to conserve. The young, for whom the new is normal, have more readily adopted the ideals of cleanliness and convenience that underlie *disposability*" (p. 9). She notes that industries have manipulated consumers into associating shopping and the purchase of material goods with the illusion of freedom and wealth, breeding a consumer culture that advances a lifestyle of over-consumption: "Mass production and mass distribution literally generated more stuff, and more trash. More people had more things and less space for storage in tenements, apartment houses, and other city dwellings" (pp. 13-14). Thus, for well over one hundred years, the American fixation on disposability, fashion, and technological advancement has increased mass consumption and waste production to an extent once unimaginable.

## ***Control and Advertising***

Centralizing resources into the hands of a few giant corporations produced powerful monopolies. But how does a corporation maintain its power overtime? In *The New Industrial State* (1967), economist John Kenneth Galbraith blamed corporate advertising for creating a demand for consumer products that served a company's bottom line more than the consumer's well being. Doukas alludes to Galbraith's change:

The Valley's story is a regional variant of a larger story, the corporate sabotage of American democracy. Today we hardly have the words to remember it. And we do not because the corporate coup was not only a matter of controlling production, land, jobs, natural resources, and money. It quickly became a matter of thought-control, of *cultural* production. (pp. 13-14)

Controlling the minds of consumers through the use of advertising not only influenced American ideals and values but created needs. The influence of mass advertising extended far beyond the shores of the United States, reaching, as historian Victoria DeGrazia (2005) documents in her book *Irresistible Empire: America's Advance through 20<sup>th</sup> Century Europe*, to Europe in less than one century. Small neighborhood stores that promoted face-to-face contact could not compete with large-scale corporate capitalism that brought large supermarkets, influencing political ideology and transforming local, diverse, class-segmented societies in favor of mass standardized consumption.

In *Captains of Consciousness: Advertising and the Social Roots of the Consumer Culture* (1977/2001) Stuart Ewen examined advertising as a significantly "novel philosophical system, a pivotal medium by which a new, consumerist way of life was shaped, depicted, communicated, and sold" (2001, p. 8). Studying advertising "provided a fascinating window through which one could see capitalism shifting, over the course of the twentieth century, from an economy defined primarily by production to one defined by consumption" (p. 8). By the early twentieth century, Henry Ford and the automobile industry began "to recognize that mass production and mass distribution were *necessary* steps toward survival in a competitive market" (p. 24), but the same could not be said for workers, who became "a decreasingly *significant* unit of production within the modern manufacturing process" (p. 26). The value of specialized labor has little significance in this new system. For capitalism to survive, workers have to spend the fruits of their labor on the products they help produce; mass production and mass distribution required that the manipulation of labor be transformed: "while the nineteenth-century industrialist coerced labor (both on and off the job) to serve as the 'wheel horse' of industry, modernizing capitalism sought to change 'wheel horse' to 'worker' and 'worker to consumer'" (p. 26). Employees gradually received higher wages and shorter hours to encourage increased consumption, but corporate capitalism still needed "to realize the continuous need to habituate people psychically to consumption beyond mere changes in the productive order which they inhabited" (p. 30) thus modern advertising "must be seen as a direct response to the needs of mass industrial capitalism" (pp. 30, 31).

Advertising creates consumers and drives their demand for products. Ewen explains: "the mechanism of mass production could not function unless markets became more dynamic, growing horizontally (nationally), vertically (into social classes not previously among the

consumers) and ideologically” (pp. 24-25). The outcome was a “systematic, nationwide plan to endow the masses with more buying power” depending solely on an elite market to consume its products failed to maximize the capitalists’ profits, so there had to be “an ideological bridge across traditional social gaps—region, taste, need and class—which would narrow prejudices in his favor” (p. 25). To further influence consumer behavior, “the control of the masses required that people, like the world they inhabited, assume the character of machinery—predictable and without any aspirations toward self-determination. As the industrial machinery produced standardized goods, so did the psychology of consumerization attempt to forge a notion of the mass as practically identical in all mental and social characteristics” (p. 84).

Corporations contract behavioral and social psychologists to explicitly target human instincts that “channel social impulses” (p. 81); to create mass appeal “ad men welcomed the work of psychologists” to play on peoples’ emotions, habits, and instincts (p. 33). Some ads invoked fear, self-consciousness, and judgment by others; other ads manipulated reality and created a contrived “need” for things. The advertisements stimulated a sense of empowerment through shopping and buying. Companies successfully associated their products with beauty, worthiness, and significance—illusions to promote consumerism. People defined their self-worth with the value of products they owned. As such a consumers buys not only a product, but buys an experience that may “ameliorate social and personal frustrations through access to the marketplace” (p. 36).

The ultimate goal of advertising was not just to sell products, but to sell products that promoted particular socio-cultural and economic ways of life. Advertising transformed consumption on a massive scale to control peoples’ sense of self, community, and their relationship to things. People began to “locate [their] needs and frustrations in terms of the consumption of goods rather than in the quality and content of [their] life work” (p. 43). Deceived by an illusion of individuality, people defined themselves by their consumption of things. Advertising exploited people’s insecurities and fears with “mass produced visions of individualism by which people could extricate themselves from the mass. The rationale was simple. If a person was unhappy within mass industrial society, advertising was attempting to put that unhappiness to work in the name of that society” (p. 45).

American consumerism has accelerated since *Captains of Consciousness* was published: “In the 1980s commercialism mushroomed into a vehement global religion. Where advertising once inhabited circumscribed arenas—television, radio, newspapers, magazines, billboards—today nearly every moment of human attention is being converted into an occasion for a sales pitch, while notions of the public interest and noncommercial arenas of expression are under assault” (2001, p. 14).

Ewen was right. The use of advertising by corporations continues to be a socio-cultural force influencing who we are, what we do, and how we live our lives. The rise of corporate capitalism and technological advancements together with an advertising industry that encourages disposability, fashion, and unrelenting progress, has created culture unimaginably dependent on waste. Consumers today, people like you and I, have made it possible for WMI to establish the *need* for its waste management services; it does not need to sell its services to consumers. Effective public relations tactics and a well-recognized brand are all that WMI needs to position itself as a world leader in an industry that simply caters to the demands and lifestyles of people who don’t know any better or even care.

## *The Origins of a Waste Industry*

Industrialization broke the cycle. In an industrial system, the flow is one-way: materials and energy are extracted from the earth and converted by labor and capital into industrial products and by-products, which are sold, and into waste, which is returned to the ecosystem but does not nourish it. Thus, the late-twentieth-century household produces goods from factories, mends little, bags the detritus in plastic, and places it at the curb to be conveyed to the transfer station or the incinerator. The late-twentieth-century city takes in most of what it uses by truck and train and airplane, and flushes its waste into landfills and sewage treatment plants, and toxic dumps. (Strasser, pp. 14-15)

Strasser's *Waste and Want* describes how long before waste hauling became the norm, sustainable waste disposal in the nineteenth century included pigs, cattle, and other livestock roaming the streets and feeding on garbage (p. 129). Swill children collected kitchen garbage and peddlers went door to door to trade manufactured goods for cooking by-products, rags and bones that people collected in their basements throughout the year (1999). The notion that one person's waste is another person's treasure originated from this period of time in American society because people lived simple lives, lived within their means, utilizing only what was necessary and only when it was necessary.

By the turn of the twentieth century, municipal waste services were established in most American cities to meet the increased production of waste generated by population growth and correspondingly increased production and consumption. In 1906, "New York employed 750 workers to load Manhattan's residential trash onto trucks and 1,200 men to sweep its streets. The city collected less than half a million tons of household trash and over two million of ashes and street sweepings" (pp. 123-24). Although waste from street sweeping and ashes declined, as automobiles replaced horses and gas replaced coal and wood, household waste increased. As trash began to pile up in neighborhoods and more people began to produce more waste, sanitation became a significant concern. Between 1903 and 1907, "Pittsburg's garbage increased forty-three percent, Cincinnati's thirty-one percent, and Newark's twenty-eight percent. One Milwaukee health commissioner was credited with increasing the quantity of garbage collected by sixty-two percent over four years, while the population grew by twelve percent. Some of these increases can be attributed to population growth, some to growth in consumption, and some to more efficient collection" (pp. 124-25).

The efficient removal of waste encouraged a disregard for what happens to waste that has remained with Americans even today. Because waste services remove waste, the problem, just like the waste, is out-of-sight and out-of-mind. It was a common practice for people to dump things on the far edge of town, with no consequence and/or accountability. People believed, as did health officials, that dumping their garbage into rivers and oceans not only had little or no environmental effect, but would instead help to create new land. Strasser uncovered an 1898-1899 New Orleans Board of Health report that sought to assure residents that, while dumping garbage into a water supply may appear unsanitary, it had little influence because the water is "an immense body of water in constant motion"(p. 127). Americans also disposed of their trash by burning it. By 1914, there were 300 incinerating plants operating throughout the nation and

Canada and “of the eighty-eight built between 1908 and 1914, about half were in the South, where the hot climate made rapid disposal necessary. Incineration did not begin to decline until the late 1930s, when it began to compete with the sanitary landfills, a British innovation that was to become the preferred American disposal method for much of the rest of the twentieth century” (p.135).

Most people were fundamentally oblivious of what happened to household trash once it left their sight. Disposing of waste using other alternatives was made relatively obsolete by landfills that provided a legally mandated location for dumping garbage. Waste had been turned over to technicians, as a problem to be solved by refuse collection and disposal. Operators of both publically and privately owned landfills controlled all the procedural details of who could dump, what could be dumped, and when it was to be dumped. As industries expanded, they required additional resources and spaces for dumping their waste. This demand further strengthened the development of a waste management industry in America:

By the early 1950s, most American trash was collected by agencies or by private companies overseen by municipalities. Refuse was dumped in the country, hidden in landfills, or destroyed in incinerators. Kitchen garbage was ground up and flushed down the drain, as far from most people’s minds as it had once been to the wealthy with servants. (p. 271)

By the 1970s, following public concern about the dumping of industrial toxic waste along roads, highway regulations made illegal dumping a state and federal crime. It was not a crime to produce the waste, but discarding waste by unauthorized procedures was illegal. Government officials then created a systematic way for Americans to get rid of their waste by endorsing a “proper” way of disposing of waste. By doing so, government established America’s dependency on this industry and provided them the power to control the costs associated with the management of waste.

Dumping or burning were popular ways of getting rid of unwanted things. Environmentalism and sustainability furthered a celebration of Earth Day and the promotion of recycling as an alternative to landfill use. By the early 1990s, “many American cities had enacted a variety of product bans, mandates, taxes and tax incentives to promote recycling. This burgeoning interest in recycling efforts, the mandating of waste diversion and the availability of public monies to underwrite such activity set into motion a new round of corporate concentration” (Crooks 1993, p. 33). Recycling presented corporations with an ideal opportunity to access a lucrative industry while “doing good for the environment.” As I explain later in the chapter, these corporations took full advantage of this business goldmine, pushing out smaller businesses to make room and money for its shareholders. Crooks documented this:

Throughout the 1980s consumer and recycling groups, fearing that the franchising of recycling would severely handicap both private and non-profit recyclers and help oligopolize the business nationwide, fought off attempts by local and state authorities to award exclusive contracts. But by the early 1990s, the major waste haulers were asking cities to give them commercial and industrial recycling franchise agreements along with their refuse pickup contracts. And with such contracts in hand, they quickly moved to exert their publicly sanctioned territorial

imperatives...In fact, so far had such companies gone in supplanting competing systems of public and private waste management that one alarmed U.S. senator concluded the disposal industry was becoming a “shadow government” whose leading members helped regulatory authorities write regulations, lay down rules for enforcement and train agency employees in writing and awarding contracts. (p. 34)

### ***The Emergence of Big Business in the Waste Scene***

On its company website, WMI describes itself as:

The leading provider of comprehensive waste management services in North America. Through its subsidiaries, the company provides collection, transfer, recycling and resource recovery, and disposal services. It is one of the largest residential recyclers and also a leading developer, operator and owner of waste-to-energy and landfill gas-to-energy facilities in the United States. The company’s customers include residential, commercial, industrial, and municipal customers throughout North America.

They are not exaggerating when they claim that it is the “largest environmental services company in North America” and the “leading provider of integrated environmental solutions.” Though it employs over 45,000 people and services over 20 million residential, industrial, municipal, and commercial customers worldwide, WMI is by far the only corporation in the world that has strategically cornered and redefined waste and waste services by influencing social, cultural, economic, and political arenas. In just a few decades, the corporation has expanded its business enterprise far beyond conventional waste hauling services. An examination of WMI’s history and its corporate public relations culture is needed to understand how the company operates and how it monopolizes an entire industry. In its pursuit of becoming the largest provider of waste services, WMI has used waste legislation influenced by its lobbyists and created by supporters in Congress to acquire smaller businesses and monopolize the waste industry.

The business of waste management really took off after World War II. The national economy grew, consumerism transformed American culture, and as the rise of the chemical and industrial sectors all produced massive amounts of waste, the demand for the daily management of municipal solid waste and toxic waste paved the way for a waste industry to flourish. The 1965 Solid Waste Disposal Act set new regulatory standards that smaller companies could not meet. Lacking the cash needed to make mandated improvements to their business, the small companies gradually fell one by one, creating a vacuum from which a monopoly could thrive. A few men understood the complexities of a culture so dependent on the (over)consumption of goods. These men recognized the demand for waste hauling services and capitalized on the opportunity.

The history of WMI dates back to the nineteenth century when “An old Dutchman named Huizenga travelled by horse and buggy into Chicago every day. On his way home people would

ask if he would mind picking up some trash and dumping it at the edge of town. Deciding there might be a good business there, Huizenga purchased another wagon and converted it into a trash buggy” (Crooks 1993, p. 74). Years later in the 1950s, Ace Scavenger, a waste hauling company founded by a descendant of the Huizenga family in Chicago, was worth over half a million dollars, “with yearly revenues of \$750,000” (Ibid., p. 74). In the 1960s, the company expanded under Dean Buntrock who took over the company after his father-in-law died. Buntrock, as the founding president of the private company, National Solid Wastes Management Association, became “the industry’s spokesman. He had a voice in Washington where the new waste management laws were being written” (p. 75). Wayne Huzienga, nephew of the founder of Ace and “Chicago’s original garbage entrepreneur,” eventually became a multibillionaire with Blockbuster, a movie and video game rental store, and launched a small collection company in Florida (p. 74). In 1968, Buntrock and Huzienga partnered to create Waste Management Inc. (WMI). The company was incorporated in Delaware and was relocated to Houston, Texas, in the 1990s.

By the early 1970s, the newly implemented waste legislation forced small-scale waste haulers to confront the fierce competition by larger companies that sought to secure their place in a growing market. These larger companies expanded their business by acquiring smaller waste haulers and disposal sites. With ownership of nearly every service involved in the processing and managing of waste, WMI exploited its monopolist power to manipulate prices. They transformed waste hauling services from an industry serviced by small, family-owned and locally based companies to a large-scale, nationwide empire controlled by one company. WMI positioned itself to win a race with rules it dictated along the way.

In 1971, WMI went public to generate the capital needed to expand its services throughout the country. Its acquisition of 133 companies within nine months in the early 1970s exemplified the company’s appetite for targeting smaller neighborhood-based moms and pops businesses. Huizenga defended WMI’s takeover philosophy:

It was just easier, faster and cheaper to go in and buy out a guy who was already established in a market, even if he was very small. Then we’d hire a bunch of salespeople to go out and do the internal growth. The plan was always to have internal growth, but in order to get internal growth growing quickly, it’s sometimes easier to go...into a certain market and buy out a guy who had three or four trucks, and then you’d say, ‘OK, let’s grow this business now’. (Jacobs 2005)

Though it was primarily involved in municipal and residential waste collection and disposal, WMI maintained impressive earning reports, generating \$36.7 million in profits in 1979, ranking first in earnings and second in sales in the waste-handling industry. It secured tremendous growth in 1977 when profits surged 58% and again in 1978 when earnings rose 47.6% (*New York Times* 1980). WMI acquired hundreds of smaller waste companies, growing an astonishing 48% every year between 1971 and 1980. By 1972, the three largest garbage companies—Browning-Ferris, Waste Management, and SCA Services - operated 80% of the 119 landfills in the United States (Goldman et al. 1986).

WMI strategically welcomed federal and state regulations of toxic waste and landfills as it began to establish itself in the hazardous waste industry. This transformed the management of hazardous waste in America as legislation such as the 1976 Resource Conservation and

Recovery Act was passed to create national guidelines for the management of toxic waste. The toxic waste crises in America provided WMI with a long-term, highly profitable opportunity to provide specialized services urgently demanded by the government and private industries such as the chemical industry. WMI's successful penetration into the waste industry left it well positioned to profit from the toxic waste crisis:

Nothing about the business of treating hazardous wastes seems attractive. It deals with dangerous and repulsive gunk. It reeks with economic, legal, political, and technological perils. Even as politics and enraged citizens scream ever louder for a cleanup, engineers are finding that decontaminating toxic sites is a lot harder than they thought. Companies that try must contend with confusing laws and a sluggish bureaucracy at the Environmental Protection Agency...Yet for a lot of companies the sheer scale of the potential business dwarfs the dangers...The companies best situated to benefit immediately from the cleanup are the major garbage collection firms, especially Waste Management of Oakbrook, Illinois, and Browning-Ferris of Houston...Of a score of major U.S. hazardous waste landfills, Waste Management owns eight and Browning-Ferris three. When the Resource Conservation Recovery Act calling for more careful handling of toxic trash was passed in 1976, Waste Management took a long look ahead and prepared to get business the act would create. While it was still possible to open new landfills without touching off howls of protest, Waste Management launched a \$400 million investment plan, mainly to build a landfill bank that could carry it well into the 21<sup>st</sup> century. (Main 3/17/86)

WMI invested millions of dollars to develop the infrastructure needed to compete with other companies in the toxic waste industry. It established Chemical Waste Management (CWM) in 1975 to separate its capital investments in toxic waste from the rest of its waste management businesses and in 1978, CWM was incorporated as a wholly owned subsidiary of WMI and began acquiring facilities in Lake Charles, Louisiana; Vickery, Ohio; Port Arthur, Texas; Corpus Christi, Texas; and Emelle, Alabama. The toxic waste facility in Emelle, Alabama, is the largest in the US. In 1979, WMI headed west and acquired the Kettleman Hills facility in Kettleman Hills, California. In 1980, under the Superfund legislation, the EPA received authority and funding to clean up abandoned toxic sites. In a revealing *New York Times* article in 1980, Dean Buntrock, WMI Chairman and Chief Executive Officer, admitted that his company operated under the guise of environmental protection for profit. In other words, WMI benefited from both the waste people produced and the waste left from reckless disasters created by other businesses in the waste industry. This created a win-win situation:

The growing public concern over hazardous waste gives us comfort. It means that proposed legislation will come about and that we will enter an era of better handling of chemical wastes. The capital investment we made in the last three years mostly in site acquisition and upgrading of various types of processing facilities will be utilized. (10/20/1980)

Though WMI and its subsidiaries benefited the most from such investments, regulations supported (directly or indirectly) a growing monopoly in the waste business. In 1981, WMI diversified its business, launching the Environmental Remedial Action (ENRAC) division within CWM to clean up contaminated toxic waste sites. A later agreement with Ashland Chemical Company permitted the company to provide chemical waste collection and disposal services nationwide. CWM's infrastructure—treatment facilities, landfills, and incinerators—positioned it to meet the demand for servicing chemical waste. By 1981, the company reported revenues of \$119.1 million (Kepos 1994, pp. 108-10). The EPA contracted ENRAC to clean up the Seymour Recycling Center, a Superfund site in Seymour, Indiana, that earned WMI a company record \$7.7 million.

WMI and its subsidiary CWM continued acquiring companies. By 1982, it had acquired a Consumer Aerosol Destruction plant in Calumet City, Illinois, Solvent Resource Recovery, Inc. in West Carrollton, Ohio, the first site that recycled chemical waste, and Chem-Nuclear Systems Inc., renamed Chem-Nuclear Environmental Services Inc. and the recipient of a federal government contract to refine low-level nuclear waste in fourteen states, and also contracts with the Department of Defense and the Department of Energy to clean up the Exxon Valdez oil spill. The company also acquired Trade Waste Incineration, Inc. and began burning toxic waste for the first time. The company purchased Ocean Combustion Services which owned the vessels Vulcanus I and Vulcanus II (Shabecoff 1/1/1988). WMI believed that it could solve all the waste issues by using incinerators to burn waste such as PCBs over the ocean: "A series of test burns of toxic wastes, including the herbicide Agent Orange, which contains dioxin, were conducted on incinerator ships in the Gulf of Mexico in the 1970s and 1980s. The last two test burns, chiefly of PCBs, were conducted by Waste Management" (Ibid.). Although burning waste proved hazardous to the environment, WMI continued to build incinerators in Sauget, Illinois and Port Arthur, Texas, burning contaminated soil from Superfund sites and Cold War weapons that release toxic fumes into the environment. By the mid-1980s and early 1990s, WMI's continued expansion included the acquisition of Brand Companies Inc, the country's largest asbestos cleanup operator, a company that recycled solvents and engineering and consulting firms (Kepos 1994). In 1984, CWM's revenues, which accounted for 15%, or nearly \$200 million, of WMI's multi-million dollar revenues, was higher than any other waste hauling company in America (Goldman et al, p. 168).

In 1984, WMI acquired one of its strongest competitors, Boston-based SCA Services, Inc., the third-largest waste treatment company in the country. Acquiring lucrative SCA assets such as the largest toxic waste incinerator in all of the United States (in Chicago) that was legally permitted to burn PCBs and other hard-to-destroy organics, as well as a treatment facility in New Jersey, treatment and landfill facility in New York, landfill in Indiana, and a proposed treatment facility near Memphis, added \$200 million in revenues to the \$1 billion WMI was already generating. With WMI's acquisition of SCA, WMI obtained 25 solid waste landfill units, 43 solid waste collection units, a solid waste transfer station, and eight existing or proposed hazardous waste facilities (Goldman, p. 170). When the federal government grew alarmed and acted quickly to maintain competition in the market and forced WMI to take action. WMI signed an agreement with Genstar Inc., a Canadian company, for the sale of 40% of SCA's assets, enabling WMI to maintain its control over the company. The deal between the two companies "satisfied U.S. Department of Justice requirements and Genstar became the third-largest solid waste company in the United States as a result" (ibid.). In the same year *Fortune* ranked WMI

57<sup>th</sup> in revenues of the 100 top diversified service companies. The next year WMI moved to the 46<sup>th</sup> position: in terms of its assets, it ranked 22<sup>nd</sup>, in net-income 12<sup>th</sup>, and in net-income as a percent of sales, 4<sup>th</sup>. WMI grew to serve over 430 communities and over 326,000 commercial and industrial customers.

By the 1990s, record-speed mergers and acquisitions created a centralized waste industry in the United States. In less than two decades and after acquiring one of its biggest competitors, WMI successfully secured its position as the largest waste hauler in the country and it did not stop there, but continued the quest to expand the empire beyond the borders of North America. Throughout the 1980s and into the 1990s, WMI extended its reach into countries like Saudi Arabia and Argentina. Crooks documented this new venture: “New milestones awaited them in improbable corners of the globe. By decade’s end they had secured the two largest civic systems contracts ever awarded [Saudi Arabia and Argentina]” (1993, p. 81). By 1989, they owned and operated ten landfills and incinerators throughout Europe and by 1990 they operated in twenty-three countries worldwide. The company grew to acquire more than 2,000 companies, creating a complex corporate organization with 250 local divisions, 40 regional offices, and 9 area offices as well as headquarters.

## **Chapter 9: The Internal Workings of a Fortune 500 Corporation**

Early on in its quest to capture the waste market, WMI understood the importance of owning and operating the only legal spaces used for waste disposal. Presently, WMI owns and operates the largest network of landfills, with 273 active sites, 367 collection operations, and 355 transfer stations, providing services in nearly all facets of waste treatment including low-level nuclear, chemical, and asbestos cleanup, as well as the daily removal of trash, waste reduction, and recycling.

WMI understood that in order to become the leaders of its industry, it had to secure ownership of technological innovations that would sustain their enterprise well into the twenty-first century. In a 2010 interview, CEO David Steiner recognized that “picking up and disposing of people’s waste is not going to be the way this company survives long term. Our opportunities all arise from the sustainability movement” (Gunther 12/6/10). The company sought to re-define waste by transforming what waste is, by giving value to what people discard, and by increasing the possibilities of its re-use in order to generate additional revenue and profit. With diminishing natural resources and human dependency on energy commodities such as oil, coal, natural gas, and uranium, WMI tactically framed its corporate agenda within an environmental sustainability context so as to make it appear that wasteful consumption can alleviate the energy crisis in this country by way of producing alternative sources of energy. Marc Gunther, a *Fortune Magazine* contributing editor, wrote in 2010:

A cornerstone of the new strategy is [Steiner’s] belief that energy and commodity prices will rise, driven by economic growth in China and India... Higher commodity prices will drive recycling because the value of materials extracted from the waste stream—paper, plastic, aluminum, steel, and precious metals like gold and mercury—will go up. (12/6/10)

Once this strategy was put in place, WMI successfully cornered the waste market by acquiring a host of companies and their technologies of waste-to-energy, pollution control equipment, and recycling services. WMI currently operates 16 waste-to-energy plants, 134 recycling plants, 111 beneficial-use landfill gas projects, and 6 independent power production plants. Yet, in its quest to expand the enterprise, WMI has maintained a fundamental prerequisite to cut corners as much as it can. In almost all the facilities WMI owns and operates, the company has maintained a marred record of extensive violations cited by state and federal regulators, out-of-court settlement deals, anti-trust and civil penalties. In this chapter I provide a glimpse into this record.

## *Two Steps Ahead: The Launching of a “Sustainability” Business Enterprise*

In the 1980s, WMI was perceptive of what was happening all around them: National Superfund legislation had been established, hysteria regarding contamination from toxic disasters was being reported in the media throughout the country, and there was growing opposition to sitings of landfills and incinerators. Around the same time, discussions about “resource recovery” as it became known, provoked interests within the industry to develop the capacity to potentially address the increasing waste problem, the rise of disposal costs at landfills, and the relentless growth in dependency and security of energy resources. WMI understood the social, cultural, and economic pulse of the nation and as a result took an enormous step forward and began to direct its business endeavors to acquire technologies that promised to convert waste into alternative commodities that could be (re)sold. They believed that if they acquired these technologies, they would securely position themselves two steps ahead of the waste industry.

While other competitors continued expanding exclusively in hauling services during the 1980s and 1990s, WMI immersed itself in investing millions of dollars to acquire companies that had already developed technologies to turn additional profits from waste. Just as it had done early on, WMI sought out the small established companies, since it had the economic capital and had secured shareholder confidence by having successfully established itself as the go-to waste services company by Wall Street investors. In 1980, WMI purchased 20% stocks in Wheelabrator Technologies and later, by way of a merger, secured 55% of the company’s entire stock. Prior to the merger, WMI did not own or have the engineering proficiency to convert waste into energy; Wheelabrator had patented rights to the technology and in 1972 had established a power plant in Saugus, Massachusetts, but it lacked the competitive edge it needed to make a name for itself within the waste market. In addition, the company desperately needed a way to dispose of the grey ash that it produced in the process of converting waste to energy—a major issue in siting new facilities. WMI came to the rescue by investing in the company and solved the ash crisis by permitting its disposal at landfills it already owned.

The significance of this acquisition is that WMI not only acquired the patented rights to exclusive technology but also stood to benefit even more, because Wheelabrator owned Rust International, the world’s leading engineer of waste-to-energy incinerators. In 1969, Rust had secured patented rights to technologies that it used in the design of highly efficient incinerators and along with WMI, was in a position by the early 1990s to promote what they called “alternative energies” and “alternative technologies” in the management of waste. Rust had operations throughout the world offering firms and government agencies services for environmental and infrastructure engineering and consulting ranging from hazardous waste cleanup to scaffolding provisions. Rust also owned large percentages in companies that provided asbestos abatement and environmental remediation. By the mid-1990s, Rust had cleaned up over 10,000 contaminated sites, including one-third of all commercial Superfund projects and 4,350 radioactive waste sites (Kepos 1995).

Today, as a wholly-owned subsidiary based in Hampton, New Hampshire, Wheelabrator operates 16-energy producing incineration plants that convert solid waste into energy. Despite some opposition to host incinerators in their backyard, the plants are presented as the latest “green” technology alternative in lieu of landfill use. The plants are strategically located near landfills that are reaching capacity so as to make the transition from burying waste into the ground to burning waste instead. These facilities are able to capture the energy released during

the combustion process (temperatures exceed 2000-degree Fahrenheit) by means of air emission control technologies that work to minimize emissions. The thermal energy is actually high-pressure steam which is then converted into electrical energy. The company sells both the steam and the electricity and the remaining scrap metal is recycled. WMI notes that the company has processed more than 130 million tons of municipal solid waste into energy, saving more than 130 million barrels of oil while generating 70 billion kilowatt hours of clean, renewable electricity (WMI website). As recently as 2008, Wheelabrator Technologies expanded its market by signing a cooperation agreement with Shanks Group, a waste and resource company that services the United Kingdom, Belgium, and the Netherlands.

In recent years WMI has worked to transform its vast network of landfills as sites that not only store and decompose waste but also, like their Wheelabrator technology, operate as producers of renewable energy. This “curbside-to-power” technique is described by WMI as a “modern green energy source.” The idea behind this is that as waste decomposes inside a landfill, it naturally produces methane gas and carbon dioxide, a known greenhouse gas that is detrimental to the environment. In a conventional landfill this gas is collected and then destroyed. WMI has developed a technology that can extract the gas from the landfill by drilling pipes down into the dump site. The pipe system then transports the gas to a nearby compression facility where the gas is produced and is then either sold to industries as an alternative fuel source and/or sent to an electricity generating plant where it can be used as fuel to turn engines and turbines that generate electricity to power homes and businesses. To date, WMI: “Supply landfill gas to more than 100 beneficial-use gas projects in North America, providing the equivalent of more than 475 megawatts of energy—enough to power more than 400,000 homes as well as saving the equivalent of nearly seven million barrels of oil per year” (WMI website).

By the beginning of the 1990s WMI had emerged as the largest collector of recyclables in North America. They made this fairly easy transition into the recycling aspects of waste management by integrating themselves with other existing companies. For example, Stone Container Corp., a major producer and converter of unbleached packaging products, came together with Waste Management of North America Inc. (a subsidiary of WMI) to form a paper-recycling joint venture called Paper Recycling International, L.P. Both companies stood to benefit from the venture, and Stone gained the exclusive rights to all its recycled fiber collected by Waste Management’s recycling programs; the waste was already being generated and WMI was already hauling the paper to its facilities. The venture was deemed profitable and in 1988 alone, waste paper recovery amounted to 26.2 million tons (Sherrod 1990). The joint venture enabled both companies to become the world’s largest marketing enterprise for recycled paper.

The same subsidiary, Waste Management of North America Inc., went on to establish the Recycle America and Recycle Canada programs to service residential recycling programs. By 1990, WMI’s residential recycling service had grown by 150%. It served over 1.8 million households in 253 cities, while acquiring operations in commercial recycling programs and centers throughout North America (ibid.). In 2003, WMI’s Recycle America enterprise combined the corporation’s entire “assets and operations of key domestic recycling processors and marketers to meet the demands of a diverse recycling market around the world” (WMI company website). In 2005, WMI collected over 8 million tons of recyclable materials, expanding to include a broad range of commodities—including metals, plastics, glass, and electronics as well as fibers such as office paper, newspaper, and cardboard.

To secure a consistent flow of materials, WMI sought to simplify recycling for customers by making it more convenient. In 2007, it became the first company to invest in single-stream processing technologies which essentially made it possible to discard recyclables all into one container—in the past, materials had to be separated before to pickup, resulting in poor recycling habits and minimal flow of materials. The new process uses single-stream technologies to separate the materials by means of automation equipment such as forced air and magnets. The waste industry of course considers the use of this technology as efficient and money-saving because it requires minimal human labor but the machinery is replacing the work humans once did and putting them out of jobs. The new approach “result[s] in the recovery of up to 30 percent more recyclable materials” (ibid.). In 2009, WMI managed more than 7 million tons of recyclable commodities and expects to process more than 20 million tons per year by the year 2020.

In the last year, WMI has begun to develop its recycling sector in Canada. In February 2012, it acquired the property and existing plant in Cambridge, Ontario, to retrofit and invest \$30 million to build Ontario’s largest private-sector single-stream recycling facility. The 126,000 square foot plant is expected to process up to 550,000 tons of material each year using WMI’s single-stream technology (magnets, screens, and optical scanners that separate, sort, and process the materials) (WMI 2/2/12). In January 2012, WMI announced it was investing an estimated \$16 million to upgrade a facility it acquired to establish Toronto’s most advanced facility for processing construction and demolition waste materials that would otherwise end up in a landfill. This facility will use the single-stream technology and the company’s Diversion and Recycling Tracking (DART) tool, an easily accessible online program created to assist planners, contractors, architects, and owners to measure their recycling, tabulate total diversion rates, and provide documentation to support unregulated-corporate sponsored LEED certification. DART was designed to create a flow of information for WMI to predict and develop its capacity for future waste flows. The LEED certification stands for Leadership in Energy and Environmental Design and “ensures that a building will have an integrated design and construction process that enhances resource efficiency, waste reduction, community connectivity, and occupant health and comfort” (WMI website). The certification is a way for companies to make themselves look as if they conduct themselves in a sustainable, environmentally friendly manner. Brad Muter, LEEDs vice president for eastern Canada, pointed to future prospects for this project: “Today, we manage waste for its resource potential [and] because continued strong construction activity and population growth are anticipated in Toronto” (WMI 1/26/12). This resource potential boom brings with it the promise that the plant will begin processing an estimated 87,000 tons in its first year. A wealth of material can be extracted from the waste flow: “At every construction site, builders have an opportunity to divert a variety of construction and demolition materials such as wood, rock, metal, cardboard, plastic, shingles, concrete, fiberboard and paneling. With so many substances to manage, calculating total diversion has traditionally been a time-consuming process. DART technology makes it easy to measure and improve performance” (ibid.). The company expects that there will likely be an increase in recovery rates based on the combined use of these technologies to WMI’s recycling centers and landfills.

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WMI estimates that an average of 95% of food waste goes directly into landfills, so the company is now invested in the business of organics to convert food scraps into compost or fertilizer. In September 2010, WMI purchased a majority interest in Garick, a thirty-year-old Ohio-based company that processes food waste into compost and mulch to sell to six states. Gunther, the *Fortune Magazine* contributing editor, explains that the challenge for the company is to continue to capture value in ways that are economically sensible:

To better capture the value of the rotting tomatoes, banana peels, and chicken bones that now end up in landfills, Waste Management has invested in a number of companies that are trying to turn organics into cash...Turning a ton of food waste into compost generates roughly \$40 to \$50 in revenue. [In 2010] Waste Management took a stake in Harvest Power, a Massachusetts-based startup that turns organic waste into compost and biogas, which can then be burned to generate electricity. Venture capitalist firm Kleiner Perkins Caufield and Byers is an investor in Harvest Power, which is building its first commercial-scale plant in British Columbia. Its technology could generate \$60 to \$80 a ton in revenue...Two other companies backed by Waste Management—Terrabon and Enerkem—are generating transportation fuels from waste, albeit on a very small scale. Houston-based Terrabon is making green gasoline from paper waste and chicken manure at a pilot plant in College Station, Texas, while Enerkem, a Canadian firm, is developing a commercial-scale facility in Edmonton, Alberta, to turn mixed solid waste into ethanol. (Waste Management won't disclose the size of its venture investments but says they are typically \$5 million to \$10 million.) If Terrabon or Enerkem are able to scale up and bring costs down...they could generate about \$200 to \$250 worth of fuel from a ton of waste. This would be a game changer. "If we can figure out a way to process and convert organic material better than anybody else, we're going to own that material," says [CEO] Steiner. Eventually Waste Management could pay its customers for organic waste—giving it an unbeatable advantage over competitors charging them to put it in landfills. (ibid.)

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In 2005, WMI expanded its reach to the fast-growing healthcare industry in America. Waste Management Healthcare Solutions, Inc. (WMHS), a subsidiary of WMI, provides a host of waste and environmental services specifically tailored to meet the demands of the healthcare industry. They state their "aim is to be the single source provider of operational and consulting services required to handle the healthcare industry's complex waste streams from compliance, safety, and risk assessment to in-house operational logistics, market assessment, and collection and processing for a variety of waste stream" (WMI company website). Their services include: medical waste disposal, incineration, solid waste, recycling, regulated medical waste, hazardous chemical waste, universal pharmaceutical waste, construction and demolition waste, low-level nuclear medical waste, beneficial reuse, waste data and financial analysis, emergency preparedness planning, waste assessments and consulting, education and training, and contracted in-house (ibid.). Recently WMHS received the exclusive endorsement of the American Hospital Association, paving the way for their quest to capture this sector.

Like their other corporate ventures, WMI sought to acquire as many companies in a short period of time in the health sector. In 2009, WMHS acquired Mountain High Medical Disposal Services, Inc., a medical waste collection, transportation, and processing health company that services the Salt Lake City area and the state of Idaho (WMI 10/20/09). The following year they acquired a medical waste processing facility and the collection assets in Dublin, Ohio, from a medical and dental waste collection and treatment services company, Frontier Services, LLC. The facility employs only six people while providing services to nearly 500 healthcare facility customers. The benefit of the collection assets as pointed out by William Bryce, the general manager of WMHS, is that “with the purchase of these assets, we can now provide our services in a five-state area including Pennsylvania, Ohio, Michigan, Kentucky, and Indiana” (WMI 8/5/10). In 2010, a 13,700 square foot medical waste processing facility was opened in Vernon, California, the largest of its kind in the state. The facility processes up to 100 tons of medical waste per day (five tons per hour including chemotherapy, pathological, hazardous, medical, pharmaceutical, and sharps waste) from hospitals and other facilities throughout Los Angeles, San Diego, Orange, Riverside, San Bernardino, and Ventura counties (WMI 6/10/10).

WMHS supported the SB 1305 legislation in California to ban the inclusion of sharps (needles) in residential waste because they believed it would severely injure their employees who handled the waste stream. More than three billion needles and syringes, used by people who suffer from diabetes, hepatitis, multiple sclerosis, infertility, and allergies, end up in residential waste streams. Expecting an increase in the use of needles based on the number of people who will be diagnosed with diabetes in the future, WMHS took advantage of this lobbying effort. Beginning September 1, 2008, it became illegal for residents in the state to discard their sharps in their residential waste, instead requiring them to be transported in an approved sharps container managed by a toxic waste facility, medical waste generator facility, or a facility managed as part of a mail back program (WMI 8/25/08). In 2011, Becton, Dickinson and Company, a medical technology company in partnership with WMHS, announced an agreement to recycle the sharp waste from hospitals and other healthcare facilities. It launched the BD ecoFinity Life Cycle Solution, an innovative service that will recycle medical sharps waste and use the material to manufacture new products.

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The explosive growth of personal electronics and the switch to digital broadcasting has produced yet another market that WMI strives to corner. The need for convenient and accessible electronic recycling (or e-cycling) programs is in growing demand throughout the world as electronic waste (or e-waste) is becoming the fastest-growing commodity in the waste stream. These electronics contain compounds of mercury, lead, and cadmium that can be dangerous if not properly handled, yet the United States does not have a federal policy for the proper disposal of this waste. Electronics recycling is managed under WMRA (Waste Management Recycle America) and operates a growing number of drop-off locations throughout the America and Canada (they currently have the largest network of more than 80 locations). Although there is no legislation regarding e-waste, in 2008, WMI signed the independent Basel Action Network’s “Electronics Recycler’s Pledge of True Stewardship,” which sets out acceptable green guidelines that protect workers and the environment. This pledge means that WMI/WMRA promises to keep e-waste out of incinerators and landfills and not export it to developing countries or prisons for recycling purposes (a very widespread practice) and will also strive to recycle and track the e-

waste through an efficient recycling stream (WMI 11/16/10). WMI was the first U.S. electronics recycler to achieve e-waste certification ISO 9001 and 14001 certification for its processing centers. In 2010, WMI commended President Obama's position on developing access to e-waste recycling for Americans that follow safe, environmentally responsible practices. Twenty-six states in the United States already mandate e-waste recycling programs.

As of February 2009, all television stations were required to convert from analog broadcasting to digital. The change prevented older model television sets from picking up the digital transmission without the use of a special converter. According to the EPA, "82 percent of the 2.25 million tons of old TVs, cell phones, and computer products generated in the last two years ended up in landfills" (WMI 8/28/08). WMI noted that "used or unwanted electronics amounted to about 1.9 to 2.2 million tons. Of that, some 1.5 to 1.9 million tons was primarily discarded in landfills, and only 345,000 to 379,000 tons was recycled" (WMI 8/1/08). In 2008, just before the conversion to digital broadcasting began, WMI partnered with Sony Electronics Inc., a leading provider of audio/video electronics and information technology. Sony had launched a *Take Back Recycling* program designed to provide free recycling for Sony products. By September 2008 residents of the Boston-area were encouraged to drop off their electronics at the Gillette Stadium for free. WMI also worked with LG Electronics USA, Inc., the North American subsidiary of LG Electronics, Inc., a transnational technology company that manufactures home appliances, consumer electronics, and mobile communications. Together they launched a nationwide electronics recycling program in over 160 locations across America to collect used, unwanted, obsolete or damaged consumer electronic products. Patrick DeRueda, the president of WMRA, explained that "people are seeking services to help them recycle electronic waste responsibly and economically" (ibid.).

In 2011, WMRA sought to corner the e-waste market by acquiring Access Computer Products Inc., a leading provider of cell phone, ink and toner cartridge, and consumer electronics reverse logistics, remarketing, and recycling services. It also acquired Mordell, LLC, Assess's re-commerce partner responsible for refurbishing and selling used computer equipment obtained through Access and other third-party suppliers. By the end of 2011, WMI had secured its dominance of the e-waste stream.

### ***Sustainability in an Expanding Empire***

In his book *Rubbish Theory: The Creation and Destruction of Value* (1979), anthropologist Michael Thompson explains his theory on rubbish:

What I believe happens is that a transient object gradually declining in value and in expected life-span may slide across into rubbish. In an ideal world, free of nature's negative attitude, an object would reach zero value and zero expected life-span at the same instant...But in reality, it usually does not do this; it just continues to exist in a timeless and valueless limbo where at some later date (if it has not by that time turned, or been made, into dust) it has the chance of being discovered. It may be discovered by a creative *Times* reader and successfully transferred to durability. (pp. 9-10)

Thompson seems to imply that something considered garbage at a given point in time by one person can be rediscovered by someone else as having some value. The waste industry is only in business because it sees value in our waste and because they recognize this value as a fiscal profit to their benefit, they set out to manipulate our understanding of garbage not as a negative category but rather as one that has positive attributes. Gay Hawkins and Stephen Muecke (2003), media and cultural studies professors in Sydney, Australia, explain this notion of value in a capitalistic system:

At the rubbish dump we can stare at the masses of stuff spread out before us and know that money has been made. The huge tertiary sector devoted to getting rid of things is central to the maintenance of capitalism; it doesn't just allow economies to function by removing excess and waste—it *is* an economy, realizing commercial value in what's discarded. Waste, far from being the degree zero of value, can be exchanged as recyclable resource, antique, tourist landscape. (p. x)

Understanding this economic relationship between goods and value is what has made WMI remain at the top of the waste industry. WMI has exploited the very same cultural sentiments that Strasser described of nineteenth-century American values, lifestyles, and vocations that disappeared under the rise of industries and products that transformed a standard of living into our present “throwaway society.” When WMI initially entered the waste industry, it was more interested in securing control of municipalities and counties, and smaller companies than in the possibilities of use for the actual garbage they were collecting. Eventually the objective became flexing power over as much of the North American landscape as possible. In more recent years, WMI has been assessing value to the garbage it collects, but this value is unlike the long-gone era that Strasser described. The assigned value is predetermined by WMI, not by the consumer or producer of the goods because people have been conditioned by both the rise of industries and advertising to desire the latest, the newest, and the flashiest commodities. What WMI has done is to fill in the void between industries that make products and people who consume these products. WMI acts as agents or liaisons that perform the dirty business of cleaning up after people and industries, and it makes tons of money for doing so. By assigning values to waste and then using these values to promote the company and its many resources, waste is no longer just rubbish that needs to be got rid of but is a commodity that can be used, discarded, and eventually sold like any other commodity on the market.

In expanding its empire, WMI emerged onto the corporate scene in the twenty-first century as the poster-child for the sustainability movement. What began as an environmentally conscious movement spearheaded by activists and concerned citizens for the well-being of the planet, has been hijacked by corporations like WMI who have taken on the momentum of the movement to achieve, secure, and corner additional markets. Though it is in the business of managing all of the waste we produce, what WMI has effectively done is to manipulate the fundamental meaning and purpose of what sustainability is and what it should do, particularly in the context of protecting the environment. Thus sustainability is all at once both a business philosophy and practice that ultimately serves the purpose of generating immense power and capital and it makes WMI look good in the eyes of the public. By its very definition,

sustainability has a positive connotation, but in fact WMI has done little to address major environmental waste problems and instead strives to divert our attention at our own expense.

Merriam-Webster's dictionary defines *sustain* as transit verb meaning to provide with nourishment; to keep going (as to prolong); to hold up (as a prop would do); to hold up under (so as to endure, suffer; an example of this would be a broken arm); to support as true, legal, or valid; prove, corroborate. The adjective, *sustainable*, describes the person or thing doing the sustaining. Understanding this definition is important because the word sustainability has been excessively used and misused by corporations as nothing short of a catchy phrase that positions a product and/or service as friendly to the environment. Rather than "to provide nourishment," WMI has sought to redefine waste and waste services as "green" commodities that can be re-used and resold. People are deceived by the illusion of sustainability. The color green has become synonymous with environmentalism, the natural and organic, and implies an assurance of environmentally friendly practices. WMI has taken on the color as its corporate motto: "Think Green. Think Waste Management." Its participation within the larger and growing sustainability movement served to reinforce its monopoly over the waste industry by investing in technologies that can extract value from waste and reassign value as a commodity. For WMI, sustainability is a win-win deal because, though it seems to promote a sense of commitment to the environment and people, the sustainability movement is deeply rooted in a business approach that understands the market, supply and demand, and the need to create an alternative to traditional fossil fuel dependence. According to the company's 2010 fact sheet on environmental performance, WMI points out that their customers dictate their goals and demand for environmentally friendly alternatives:

Today's customers—in homes, businesses and communities across North America—want to know that the waste they generate is handled in the smartest ways possible. They want waste solutions that are better for the environment and, at the same time, better for the bottom line. They want solutions that focus on reducing, recycling, and recovering waste. And more. They want solutions that actually use waste in beneficial ways such as generating renewable energy to power communities. Or converting landfill gas into clean-burning vehicle fuel. In short, they want waste solutions that make good sense from an economic and environmental perspective... We will extract greater value from the wide range of materials that make up the waste stream. Our customers are counting on us to develop and deliver waste solutions that are good for business and good for the planet. And we are. (WMI company website)

The significance of this conglomeration of waste services enables WMI to maintain its domination as a one-stop shop for all potential waste related concerns and services. WMI has been able to penetrate and corner other industries within a waste context and its control is vast as shown by the technologies and resources to which they have exclusive rights. Its control of so many facets of the waste industry persists because industries and communities alike are dependent on WMI's services. And it remains powerful because there is no opposition.

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In *Industry Leaders Magazine*, reporter Carrie Ann comments, “Waste Management Inc.’s business practices are designed on working with the various stakeholders in society—the government, business partners and community partners—to extract value from waste in ways that protect and enhance the environment” (2011). As industry leaders, WMI boasts that their technologies set them apart from their competitors. They do have exclusive rights to these technologies and expert knowledge, but what does it mean to create a more sustainable world? This is an important question: not everything WMI has come up with is as great as they make it sound. Some of the technologies they promote as sustainable for the environment are flawed and do not resolve the waste crisis in this country; indeed, some of their technologies serve short-term interests and do little to protect the environment and human health.

WMI takes pride in being the first company in the waste industry to have the technological capability to produce renewable energy sources. Its website proclaims: “we helped pioneer the landfill gas-to-energy and the waste-to-energy industry, and we continue to aggressively develop new technologies.” WMI has been using its sustainability campaign to position these energy sources as alternative approaches to getting rid of waste in a landfill, but simultaneously converting the waste into a commodity, and not disclosing the cost that comes with the use of this technology. *Fortune Magazine* writer Marc Gunther observed that though WMI promotes itself as a green company, the “waste-to-energy plants do emit carbon dioxide, an unregulated greenhouse gas. Waste Management won’t say how much, it says, because there’s no agreed-upon methodology for measuring it...the company has yet to measure and disclose its carbon footprint” (Gunther 2/6/08). In the recent deal to expand the geographical reach of Wheelabrator services to the United Kingdom, WMI makes the case that utilizing these technologies enables WMI to reach one of stated sustainability goals, to:

Produce enough energy to power more than one million homes every year. By 2020, we expect to double that output, creating enough power for more than two million homes. Waste is a renewable energy resource. Landfill-gas-to-energy plants convert an otherwise powerful greenhouse gas, methane, into an energy source, while our Wheelabrator facilities provide electricity for the communities they serve. (WMI company website, fact sheet)

What Gunther alluded to in terms of the environmental contaminants being released into the air makes one wonder if this is the most efficient way to produce power. In May 2011, Wheelabrator agreed to pay \$7.5 million to settle a Massachusetts state lawsuit alleging that the company violated the Clean Water Act and the Wetlands Protection Act by improperly disposing contaminated sludge and waste water at its plants in Millbury and Saugus. It also violated the Hazardous Waste Management Act by improperly treating and disposing of ash at its plants in Saugus and North Andover (J. Russell 2011). The state launched an investigation into the company after complaints were filed by employee whistleblowers yet despite these violations and the settlement, “Wheelabrator did not acknowledge any wrongdoing as part of the settlement and maintained in a statement that it did not harm the environment” (Ibid.).

So what exactly is WMI boasting about? Is this the kind of technology we want to use in the future all across America? Will this waste-to-energy technology turn into a national crisis reminiscent of 1980s when numerous WMI’s landfills were cited for extensive environmental violations? Is this “sustainable” alternative technology going to blow up in our face in the

coming years? If the first and oldest plant in Massachusetts is struggling with poor performance, environmental contamination, and legal settlements, what can we expect from future plant sites?

Gunther (2/6/08) questioned the practice and cost of burning waste as an alternative means to get rid of waste that would otherwise end up in a landfill:

Is burning waste more environmentally friendly than putting it in a landfill? The company says there's no simple answer to that question. "If cities are lucky enough to have a choice, they've got to select based on their preference and budget," says Lynn Brown, the company's vice president for communications. "But they are both green solutions to managing waste." (Gunther 2/6/08)

Green solutions? Ironically, WMI does not seem to notice contradictions. At the same time it promotes these technologies as alternative mechanisms to landfills, it continues to endorse the use of landfills as the predominate method for getting rid of waste. Though they have been able to develop alternative energy sources that might alleviate to a small degree our dependence on fossil fuels, these technologies do little to address the problems associated with using landfills in the first place, including issues of social and environmental siting of landfills, the efficiency of technology to extract gas from inside the landfill, not to mention the potential contamination of groundwater sources in the process of using a landfill. Instead, WMI declares: "Today's modern, engineered landfill is an environmentally sound system for waste disposal that minimizes the impact on the environment. Landfills also offer a clean, renewable energy resource that is generated continuously through the decomposition of waste in landfills [electricity, alternative fuel, processed gas] (WMI company website).

They also compare landfill gas as a natural source similar to wind and solar, completely ignoring that there is nothing at all natural about landfills: "The U.S. Environmental Protection Agency (EPA) has endorsed landfill gas as an environmentally friendly energy resource that reduces our reliance on fossil fuels like coal and oil. Like wind and solar power, landfill gas is a natural resource that can be harnessed to produce green energy and has many benefits and advantages compared to fossil fuels and alternative energy sources" (ibid.). They continue to promote the use of landfills because landfills remain one of company's most lucrative assets to date. In 2009 landfills:

Generated \$11.8 billion in revenue and \$994 million in profit, and roughly three-quarters of it by collecting and disposing of garbage...The company's most valuable assets are its 273 landfills, which have enough capacity to absorb 4.8 billion tons of trash...Waste Management's shareholders love landfills; they're why the company expects to generate between \$1.2 billion and \$1.3 billion in free cash flow this year. "Landfill pricing drives our business," [CEO] Steiner told investment analysts during the company's latest earnings call. (Gunther 12/6/10)

WMI's investment in recycling operations is part of a larger strategy to promote the company as an environmentally conscious enterprise. One positive aspect to the recycling enterprise is that nearly 90% of what comes into a recycling center is eventually re-used. And of course, WMI stands to profit from this enterprise because it will "generate more than \$1 billion in revenues

from recycling, primarily from selling commodities” (Gunther 2/6/08). Though it actively endorses the three-R’s (Reuse, Reduce, and Recycle) as part of its business practices, WMI’s recycling venture, like the rest of its sustainable operations, has little to do with protecting the environment. What it has successfully accomplished in the recycling industry is to create end-markets for materials it collects. In this way, it stands to generate additional revenue and profit from the recyclables by turning the materials into commodities it sells. The Recycle America subsidiary is today, the company declares, the:

Leading marketer for post-consumer and post-industrial commodities...WMRA [Waste Management Recycle America] provides fiber, non-fiber, scrap metal, textiles, rubber, electronic scrap, and plastics to buyers worldwide...[and] the company also works to reduce the overall commodity price risk of its recycling business by placing a large percentage of its commodities under long-term floor price contracts. (WMI Company Website)

Gunther (2/6/08) comments:

The economics of recycling depend on the price the company can get for the commodities it ships out of here after they are sorted and bundled. Aluminum gets the highest price. But paper makes up the biggest share of recyclables... Some go to paper plants in the southeast, and some are shipped all the way to China, where the paper is made into packing materials and used to package things the Chinese make and sell back to us.

WMI has made a point in the “green” movement in acquiring recycling facilities throughout America and Canada and converting the plants to be equipped with the single-stream technologies. What it doesn’t say is that these facilities also can be harmful. Taking over a publically owned plant in Cambridge, Canada, established the largest private sector center in the area. In what has become an all too common pattern, WMI takes over companies and puts smaller-sized businesses and their employees out of work, yet it brags about supporting local economies: “Approximately 80 local green jobs will be created at the facility....This employment figure could increase as recycling volumes grow over time. As well, the area economy will get a boost during the construction and operation of the centre as WM sources local suppliers and contractors wherever possible” (WMI 2/2/12).

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Various multinational corporations have aligned themselves with WMI and its subsidiary WMRA to promote sustainability. When the switch from analog to digital broadband took effect, LG Electronics saw an opportunity they could not resist because they expected hotels to upgrade the television sets in their hotel rooms. They teamed up with WMI to provide “environmentally conscious hotel, motel and resort operators a convenient, cost-effective opportunity for recycling the obsolete hotel TVs” (WMI 11/9/09). Teddy Hwang, president of LG Electronics USA, explained at the time that the “program will encourage hotel operators to

dispose of outdated electronics in an environmentally responsible manner and further support LG's global sustainability initiative that also encompasses energy conservation, reduction of hazardous substances and responsible product designs" (ibid.). Patrick DeRueda, president of WMRA, explained that "by recycling used, unwanted, obsolete or damaged electronic equipment, useful materials such as glass, metals and plastics may be recovered for reuse in other products" (ibid). In this example, the corporate venture does little to address the core principles of sustainability. LG targeted hotels because these businesses require a massive consumer base. In order to attract customers to their facilities, hotels try to set themselves apart from any competitors; they provide comfortable rooms and ensure that the aesthetics of the building, hallways, and rooms are up to date. LG offered recycling services for the hotels old television sets, but what they were really interested in doing was getting these hotels to go out and buy the latest television sets they were selling in stores all across America. This motivation is precisely what drives these multinational corporations to promote sustainability in the first place.

Other corporations have been quick to jump on the bandwagon of sustainability because it makes them all look good. In 2009, Tropicana, the leading provider and marketer of branded fruit juices, worked with WMI to launch a national initiative to increase the number of juice and milk cartons for recycling (WMI 4/2/09). In the same year, DuPont Nonwovens and WMI initiated a national mail-in recycling program to capture banners, envelopes, and other items printed on DuPont Tyvek (ibid.; 4/14/09). In 2010, Yoplait joined together with WMI and Denver Recycles (the city's recycling service) to allow residents to recycle their #5 plastic yogurt cup in the regular recycling bins (ibid.; 11/9/10).

All these corporations have made sustainability a catchy, hip, and flashy marketing gimmick that positions them as companies that are working in the interests of the environment. Some words—sustainability, energy, reduction/minimize, responsible—have become standard in these corporate attempts to prove their viability in the corporate capitalistic economic system. By collaborating in recycling projects, corporations are reinforcing not only their power and control over a market (electronics for LG and waste management for WMI), but at the same time trying to legitimize the meaning they assign of what it means to be sustainable without ever addressing the fundamental problems of overconsumption in our society.

### ***A Pattern of Shameless Criminal Behavior***

Waste Management Inc., its subsidiaries, and its hundreds of sub-subsidiaries have been called the *Jekyll and Hyde* of the United States garbage business. In 1990, Waste Management sought to secure permits to construct a landfill dump in San Diego County. Before decisions were made, the Board of Supervisors requested District Attorney Edwin L. Miller, Jr. conduct an investigation into the company's business practices. Miller's 1992 report serves as a blueprint for the company's record of environmental violations, organized crime connections, corruption, anti-trust and unfair business practices. It concludes:

Waste Management's methods of doing business and history of civil and criminal violations have established a predictable pattern which has been fairly consistent

over a significant number of years. The history of the company presents a combination of environmental and anti-trust violations and public corruption cases which must be viewed with considerable concern. Waste Management has been capable of absorbing fines and other sanctions levied against it while still maintaining a high earnings ratio. We do not know whether these sanctions have had any punitive effect on the company or have merely been considered as additional operating expenses. We have reviewed recent practices and problems and our concerns have not diminished. The company's recent business practices and violations do not appear to be different from the past. We have been unable to determine whether Waste Management's history, as reflected by this report, has been due to a failure of proper management, or has been the result of deliberate corporate policy. (Miller, p. 57)

WMI has historically, as witnessed in Kettleman City, maintained a company policy of cutting corners and conducting illegal and unacceptable day-to-day activities at its numerous sites, only to absorb the cost from fines issued by government regulators in the face of extensive environmental and health consequences. What follows is a partial list of environmental violations by WMI.

In 1984, the largest toxic waste dump in the United States, located in Sumter County in the city of Emelle, Alabama, was charged by the EPA with 38 counts of improper disposal of PCBs. Tests revealed that traces of the chemicals were found in a ditch and swamp located outside the facility; dioxin was found at the site at intolerable levels. The facility was fined \$1.05 million (\$600,000 in civil fines for improper handling and storage of PCBs and \$450,000 for future environmental studies). A 1985 *New York Times* article that interviewed Hugh B. Kaufman and William Sanjour, officials in the EPA toxic waste program and whistleblowers, criticized the EPA, stating that the penalties did little to curb the company's bad behavior:

The agreement restored the company's permit to dispose of PCBs. It also waived, without explanation, a requirement that the bottoms of landfills storing toxic wastes be at least fifty feet from the historical high water table. And the agency agreed not to sue the company for any civil violations at the site based on facts known to the agency and its employees prior to October 12, 1978...Mr. Kaufman and Mr. Sanjour contend that the settlement [\$1.05million] was a windfall for the company, rather than a penalty for evasion of the law. They said the waiver of the fifty foot requirement alone would save millions of dollars for the company in the future. They also said the agency had information that the Emelle site might be leaking, which would be reason not to grant the waiver (Shabecoff 1985)

In 1985, the same facility was fined \$350,000 for violations and at one point in the same year the staff at the site had to be evacuated because of a fire. In 1987, local residents complained of headaches and eye irritations after the landfill emitted a chemical cloud. An environmental organization, Blue Ridge Environmental Defense League, documented that by 1990, Chemical Waste Management (CWM) promised that in the future, the Emelle landfill would be a "safe containment for hazardous wastes for 10,000 years" (Blue Ridge Environmental Defense League). The same organization also documented:

- The value of homes located near the dump dropped. The town mayor's home dropped from \$60,000 to \$15,000.
- In 1987 the Alabama DEM reported contamination of monitoring wells.
- In 1989 Alabama state troopers found 740 safety violations in 312 CWM trucks.
- In 1990 CWM paid \$123,000 for disposing sludge without proper treatment.
- Between 1978-1986, Sumter County unemployment rose from 5.8% to 21%.

Then in 1991, a pipe failure released over a quarter million gallons of liquid waste. In a 1996 legal case brought on by residents of Emelle and the original owners of the facility, the court found WMI guilty of cheating, fraud, misrepresentation, and greed. The original owners were awarded \$91 million (\$76 million for contract damages and \$15 million for punitive damages). The federal judge in the case, Odell Horton wrote:

During the trial of this case, it became crystal clear to this court, based up on the totality of the evidence in the record, that Defendant's top corporate officers decided upon and followed a well defined plan to cheat plaintiffs out of money rightfully due them under the terms of the purchase agreement for the Emelle hazardous waste disposal facility. Nothing more, nothing less. What is troubling about this case is that fraud, misrepresentation, and dishonesty apparently became part of the operating culture of the Defendant corporation even more so, Defendant and its corporate officers apparently refused to recognize their duties as required by the totally unambiguous contract...it seems Defendant and its corporate officers still believe that they did not do anything wrong. (ibid.)

In Ohio, the CWM facility paid millions of dollars for environmental violations including improper groundwater monitoring, modifying sites without government approval, mixing incompatible wastes, and for selling waste oil contaminated with PCBs and dioxins. In 1984, the Ohio Attorney General's office and CWM entered into a stipulated settlement whereby the company agreed to pay fines and assessments amounting to \$10 million. An April 6, 1985, *New York Times* headline read: "Big Waste Concern is Fined \$2.5 Million for Illegal Dumping"; the violations at that facility brought an immediate halt to the company's ability to accept waste for at least ten months. CWM had to clean up two open lagoons containing 120 million gallons of toxic waste including PCBs. Government regulators acknowledged that there was a high chance that harm had been done to human health and the environment:

The agency [EPA] said that the clean up, together with the fine, would cost CWM \$20 million to \$25 million. But the \$2.5 million fine was less than the \$6.8 million cash penalty originally sought by the EPA. The settlement also requires the company to accelerate its clean up of the two lagoons, to undertake a "comprehensive" program to monitor the underground water around the site, to hire an independent consultant to monitor its compliance with environmental laws and to stabilize waste containing PCBs on the site. (*New York Times* 4/6/85)

In 1990, the facility was fined \$750,000 for waste lagoon violations.

CWM was subject to \$2.2 million suit filed by the Illinois Attorney General for violations of environmental laws at its landfill in Calumet City, Illinois. The EPA fined WMI over \$37,000 for failing to provide the agency with adequate information on groundwater monitoring and waste treatment activities at its dump located near Joliet, Illinois. The Illinois EPA filed a lawsuit to temporarily shut down SCA Chemical Services, Inc. (a subsidiary of WMI) for toxic waste incinerator control irregularities. The suit “alleged that air monitoring devices at SCA were disconnected at least four times during 1986 and 1987 and that chemical waste containing toxic PCB were fed into the incinerator at rates 30 percent higher than allowed under state and federal permits” (Miller 1992, p.13).

Additional facilities across America revealed some of the same patterns of improper and illegal behavior by WMI. The WMI facility in Furley, Kansas was shut down in 1982 after toxic chemicals were found to have contaminated the groundwater source and in New York, CWM was fined \$1.32 million by the EPA for violations of a PCB Detoxification Unit at its Model City toxic waste disposal plant in Niagara County (ibid., p. 16). In its Arlington, Oregon, toxic waste dump, CWM was fined \$360,000 by the EPA for failing to keep proper records of the types of waste it received at its dump (ibid.). Similarly, CWM was fined \$1 million at the Port Arthur, Texas, facility for improper collection system and inadequate groundwater monitoring. In what was described as the largest fine ever issued in an environmental lawsuit in the state of Wisconsin, WMI and its subsidiaries agreed to pay \$800,000 for compliance failures leading to the contamination of toxins leaking from the landfill and for poor monitoring of groundwater sources (ibid., p. 19). In New Milford, Connecticut, a settlement was reached between WMI and the townspeople for the closure of a dumpsite. The company agreed to pay \$43.1 million over the course of twenty-five years, but “in exchange, the town dropped its lawsuit and [would] not force the company to remove tons of garbage that the town claimed was dumped at the landfill in violation of a town ordinance” (New York Times 9/23/98).

In 1992, CWM pleaded “guilty to six felony violations of the federal Superfund law for the company’s failure to notify the government about reportable quantities of hazardous wastes that were released into the environment. Federal officials alleged that the company knowingly and intentionally crushed numerous drums containing hazardous substances in order to speed up a clean-up product outside Scranton, Pennsylvania. The company paid a \$3 million criminal fine and \$2.85 in criminal restitution. In total, the company paid \$11.6 million in criminal, civil and administrative penalties in connection with the settlement of the case” (Mokhiber, Corporate Crime Reporter). Alarming, but perhaps to no one’s surprise, WMI and its subsidiaries believe they are above the law.

### *Age of Hypocrisy*

A corporation like WMI can get away with a deficient performance record because in a country like the United States of America wherein capitalism and democracy reign, this company has successfully secured a monopoly in the waste industry. This kind of extensive control and a record of violations serve as a cautionary tale because, as Dimitra Doukas pointed out, this

hegemony encroaches and threatens our freedom and prosperity while wiping out a record of criminal misbehavior:

What happened to the Valley and to other “island communities” was the *trusts*, secret—in fact, illegal—cartels of capitalists, organized for the purpose of “cornering”—that is, monopolizing—particular markets. And once they got respectable, they wanted to forget, and wanted us to forget, where they came from. But by 1910 or so, changed into the clean legal clothes of a modern corporation, they controlled the productive property—factories, mines, wells, mills, refineries, railroads, telegraphs, telephones—of the United States. The trusts were the disreputable ancestors of many of today’s corporate giants. Their goal, monopoly, and its means, incorporation, had long been recognized as dangerous to freedom and prosperity.... Incorporation, critics had charged for centuries, gives special privileges to the few at the expense of the many. (2003, pp. 67-68)

Yet forgetting and disregarding WMI’s troubled past allows this corporation to continue to carry on its illegal criminal wrongdoing. Regrettably this is exactly what has happened in the United States. The history of WMI is one deeply rooted in the routine practice of corporate self-censorship and another case of Wall Street amnesia of big business gone bad. The shocking lesson to learn from this history is that, although it is one thing to act out of line and break the law, it is an entirely different matter when, after breaking the law, one gets awarded for doing so—setting a precedent that *anyone* can escape penalty and rise above the law.

The *Ethisphere Institute* is a think tank dedicated to the research and promotion of profitable best practices in global governance, business ethics, compliance, and corporate responsibility. In 2008, they gave WMI the “World’s Most Ethical Company” award in recognition of the company’s commitment to environmental leadership and sustainability (Ethisphere Institute 6/4/08). The decision-making process for this award was exhaustive:

Researchers and analysts reviewed several thousand companies in order to determine the finalists, which included a rigorous, multi-step evaluation process. The 2008 World’s Most Ethical Companies methodology committee is comprised of leading attorneys, government officials, professors, and leaders who care about ethical and honest business practices...Ethisphere analysts reviewed codes of ethics, litigation and regulatory infraction histories; evaluated investment in innovation and sustainable business practices; looked at companies’ activities to improve corporate citizenship; studied nominations from senior executives, industry peers, suppliers and customers; and worked with consumer action groups for feedback and ratings. (ibid.)

What is immediately apparent is that the award is a way for corporations to pat each other’s back and to recognize one another in a public space. Moreover, people who are in positions to uphold the law including lawyers, government officials, professors, and leaders turned a blind eye and failed to disclose the true extent of WMI’s ethical commitments. The award serves to validate WMI’s conduct and sets a standard from which other corporations can learn. CEO David Steiner,

who in 2007, was named to *Ethisphere's* "100 Most Influential People in Business Ethics," said: "It is an honor for Waste Management to be ranked so highly by Ethisphere, and it is an indicator of how strongly our corporate culture values ethics, diversity and sustainability...At Waste Management, I believe it is our responsibility to make positive change for the environment and for society" (ibid.). Steiner's comments were not entirely a lie because according to the company's employee Code of Conduct manual, they strive to emphasize values of integrity and inclusion in their business framework:

Focus on integrity and inclusion is more than just the name of our Code of Conduct. It explains our approach to business ethics... In today's business world, it's not only about what you achieve, but also how you go about achieving it.... The reputation of Waste Management rests upon how we act on the job every day. (WMI company website; ethics document)

Though it has been around for some time now, WMI has not always conducted itself with a "focus on integrity and inclusion." Instead, it functions within a corporate culture that promotes double-dealing (it did not establish a business ethics department within the larger corporation until 2000). Still WMI insists on describing itself as a corporate citizen "with a deep commitment to making a difference for the environment, for communities, and for people. We conduct ourselves in a safe and responsible manner while helping to build better communities, respecting and protecting our natural resources, respecting and protecting our people and doing the right thing" (ibid., p. 15).

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District Attorney Edwin L. Miller cautioned the San Diego Board of Supervisors about the extent of WMI's troubled past beyond their violations at the facilities they operated and owned: "The company, its subsidiaries, and employees have faced anti-trust lawsuits and government investigations in 17 states. Waste Management and its subsidiaries have paid millions of dollars in fines and other settlements for price fixing, big rigging, and other alleged illegal means of discouraging competition and establishing monopolies" (Miller 1992, p. 30).

As WMI expanded its empire throughout the 1980s and accrued a record of violations, it resorted to illegal behavior as a means to remain competitive in the waste market. In 1983, the company was convicted of price-fixing or anti-trust violations and paid \$350,000 in penalties. Two years later, things began to boil over and its covert business practices attracted the attention of the government. The federal justice department then launched an investigation into pricing practices in the \$15 billion trash hauling industry across the country. Federal grand juries in at least eleven cities studied industry anti-trust activities that included price-fixing, bid-rigging, and splitting up customers and territories (Stevenson, 6/10/87). Ira Reiner, the Los Angeles County District Attorney, brought on the largest anti-trust case in California's history after conducting an independent eighteen-month investigation. His investigation, separate from the federal investigation, uncovered:

Evidence of direct collusion among the companies to avoid competing to take away another company's customers. A customer that tried to switch trash hauling

companies would often deliberately be given a “high ball” price by competing haulers, meaning a rate that the hauler knew was higher than the current hauler was charging. In the event a customer did switch companies, the hauler that picked up the business would be expected to provide compensation, either with a cash payment or by giving up a customer to the losing company. Competitors that refused to play along in dividing that market, would be subject to a sales “blitz”, in which companies in the price cartel would lure away their customers with below-market prices until they agreed to join the conspiracy. (New York Times, 11/7/90)

In 1989, the *Corporate Crime Reporter*, an investigative weekly, identified WMI as one of the top ten worst corporations, calling it a repeat offender. Russell Mokhiber reported that the company’s:

Criminal record became so offensive that the Environmental Grantmakers Association (EGA), a coalition of foundations which gives money to environmental groups, began giving serious consideration to a proposal to not allow for-profit corporations to join its board. This move was precipitated by an attempt by Waste Management Inc. to become an EGA member. EGA consists of 90 foundations that fund national public policy and grassroots groups working for environmental protection...Waste Management’s presence at EGA meetings since 1988 created controversy within the group and led to the December 1989 vote on corporate membership...Those opposed to WMI admittance to EGA argued that Association members fund national and grassroots groups who undertake a myriad of environmental projects, and many of these environmental groups oppose the building of polluting disposal facilities, advocate toxic use reduction and waste prevention and encourage communities to reduce solid waste, all goals that conflict with WMI’s interests. (Mokhiber, 12/1989)

By the early 1990s, the company was continuing on this course:

The nation’s two largest garbage hauling companies, Waste Management Inc and Browning-Ferris Industries, Inc. recently paid \$50 million to settle a lawsuit in which they were accused of conspiring to fix prices across the United States...It is the first case to accuse the two multinational trash disposal corporations of anti-trust violations on a national scale, although both have a history of conviction and fines for regional price-fixing and other illegal activities...the companies, however, dismiss the plaintiff’s claims of a nationwide conspiracy, and “vigorously deny” that the agreement is an admission of any wrongdoing...The settlement will effectively bury the numerous documents and depositions introduced by plaintiffs in the class-action lawsuit. (Multinational Monitor 1991)

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Sociologists Alan A. Block and Frank R. Scarpitti (1985) studied organized crime and the Mafia's control over the burgeoning and dangerous toxic waste dumping industry. They documented how, as legislation was being drafted in the 1970s around toxic waste regulation, local law enforcement officials recognized the involvement of the Mafia in waste hauling services:

As the need to dispose of hazardous waste became more acute in the 1970s, and the concomitant potential for profits created new carting opportunities for solid waste haulers...Under these conditions, it is not surprising to find that organized crime figures who have long been associated with the solid waste carting industry became involved in practically every aspect of hazardous waste disposal. (1985, p. 63)

Using such tactics as fraud, extortion, restraint of trade, rigging bids, corruption public officials, and outright violence, the Mafia in cities like New York were quite successful. They developed a property rights system which essentially implied that one hauler, without having to deal with competition or interference, would maintain his right to pick up garbage from a particular customer for a period of time. The Mafia bosses kept the market stable by intimidating any newcomers or potential bidders in the areas they controlled. Once legislation was put in place in the late 1970s, the demand for inexpensive toxic waste services increased. Price-fixing techniques permitted the stability of the market:

Generators who once took care of their own waste now found it cumbersome and prohibitively expensive to do so. Increasingly, they turned to waste haulers to provide the service they once provided for themselves. As the need increased, so did the number of available transporters, as more and more of them entered the field from the allied solid waste industry. Although proper dump sites were scarce, these new haulers seemed to have no trouble getting rid of their loads and generators soon learned to ask no questions about the ultimate destination of their waste. (ibid., p. 60)

In the 1990s, WMI bought out one of its competitors, SCA Services, Inc. Though the company operated as trash haulers for the state of New Jersey, it grew to have close-knit ties with the Mafia and other mobsters operating out of New York. Under testimony, a former bank robber and convicted felon turned FBI informant, Harold Kaufman, explained to congressional investigators the extent of organized crime present in the waste industry:

Organized crime was deeply involved in the New Jersey garbage industry and was able to control it through fear and intimidation. As an example of the intimidation that racketeers could use, he cited the SCA Services, Inc., a firm he claimed was linked to organized crime and involved in the murder of Alfred DiNardi in 1976 because DiNardi's Custom Disposal Company violated SCA's property rights. Needless to say, this was a significant charge given that SCA was the third largest waste hauler in the United States, with stock traded on the New York Stock

Exchange and a board of directors made up of a number of prominent American businessmen. (ibid., p. 96)

The infiltration of the mob began to stir the pot of trouble for WMI, and as Block and Scarpitti noted, confirmed its association to criminal behavior:

There are many other national firms involved directly in waste collection and disposal which appear to have links to organized crime. Among this group are the country's three largest waste companies—Waste Management Inc., Browning-Ferris Industries, and SCA Services. That each of these companies has ties to individuals and groups with criminal records is not surprising, since each expanded by absorbing a number of local firms and allowing the former owners to continue as corporate employees. As we saw in New Jersey, these local waste companies were often linked to organized crime figures who did not hesitate to use past business tactics on behalf of their new employer. Although the parent companies have repeatedly denied mob connections, it is difficult to deny they have benefited from their questionable affiliations. The participation of all three national firms in local trade waste associations, their retention of many local managers of marginal character and reputation, and their continued quest for expansion and profit at nearly any cost make their protests and denials suspect at best. (ibid., pp. 289-90)

Their close ties to the Mafia became even more apparent when officials in New Orleans received gangster-style death threats for investigating allegations that WMI was overcharging the city. According to the Times-Picayune, the largest newspaper in New Orleans, Louisiana, representatives of Waste Management told two high-level New Orleans city employees that they would “wear cement boots” and would “meet their maker” if they continued to investigate alleged overcharging of the city by the waste hauler” (Montague, 10/17/88).

This dark side of WMI's corporate legacy serves as a reminder of how one corporation in the United States got so big with an eye on everlasting expansion that it deliberately resorted to surrendering itself to illegal behavior in order to sustain its position in the market.

***Fool me once, Shame on you. Fool me twice, Shame on me.***

Unlike the 1980s, when federal regulators found massive violations at various WMI owned and operated landfills, in the 1990s, the company took more daring steps to cover up its poor performing record. In 1993, CEO Dean Buntrock changed the company name to WMX Technologies, in an attempt to publically salvage the company's reputation, particularly as investors and shareholders began to reconsider and question the company's poor performance. By the late 1990s, the company was in a downward turn; a result of its relentless pursuit to conquer, acquire, and expand, coupled with poor leadership at the top and a fixation with stock prices. These issues exploded into the halls of Wall Street, exposing the magnitude of just how

negligent and corrupt the corporation had become. Corruption had made it possible for WMI to continue business as usual.

Particularly in last few years, with the taxpayer bailout of big banks and the automobile industry, America has seen its share of rampant corporate corruption. In the 1990s, what with Enron and Arthur Anderson in the headlines, WMI received little scrutiny. But WMI was in fact implicated in these scandals that exposed heartless corporate greed. In 2002, *Fortune Magazine* reporter Andy Serwer wrote:

There's something terribly rotten with American business right now, and its making a lot of us sick. All the new-economy lying and cheating that went on back in the '90s has come back to bite us in the you-know-what. And now its judgment day. No more excuses. No more extended deadlines, extra lines of credit, or skeezy numbers. No more "just trust us". No more b.s. Even as Wall Street gazes hopefully at signs of a recovery, the market is ruthlessly separating the haves (as in, your numbers are on the level) from the have-nots (your numbers stink!)... Yes, Enron may have been a rogue operation, but its collapse has forced us to shine a halogen light on the books of America's public companies, and what we're seeing sure ain't pretty. (2/18/02)

Since its start as a public company, WMI/WMX was always "obsessed with its stock price—and for much of that time it was a happy obsession. In the 1980s, [WMI] positioned itself as a classic growth company and its shares soared. It was Wall Street's favorite garbage hauler. But then came the 1990s, and that obsession became its curse" (Elkind 5/25/98). Their success as a growth company was facilitated by its acquisition of hundreds of smaller companies while its increasing stock price earnings encouraged investment bankers to take big risks. Throughout the 1980s, earnings climbed as did the stock price, rising from \$3.41 in 1984 to a peak of \$46.63 in 1992 (ibid.). This was a significant growth when you consider just how young the (inter)national waste industry was at the time. But the company was growing at such a speed that it became "so big that it couldn't buy enough smaller companies to keep up the frenetic pace. By the early 1990s, Waste needed to deal with a new reality: It couldn't be a growth company anymore" (ibid.). Buntrock "continued to promise turbocharged earnings—then failed to deliver. In 1993, the company projected \$10 billion in revenues but produced just \$9.1 billion. Profits fell by almost 50%, while the stock sank to \$23" (ibid.). At a shareholder meeting in 1994, Buntrock protested that, despite the outcomes, WMI was a growth company (ibid.). In no time at all, the corporation grew desperate and began cooking its books:

Here's how it worked. Standard industry practice is to depreciate—or write down—the cost of trucks (about \$150,000 a piece) over eight to ten years, with each year's depreciation expense reducing the bottom line. But in the early 1990s, at Rooney's direction [president of WMX at the time] and with Buntrock's assent, [WMI] began stretching the depreciation schedules by two to four years. This lowered the company's annual depreciation charge, boosting earnings. Waste also reduced by as much as \$25,000 the starting depreciation amount on each truck, claiming that sum as "salvage value"—an amount it would recover by selling the vehicles. Standard industry practice is to claim no salvage value. On a North

American fleet of nearly 20,000 vehicles, this manipulation added up. The company engaged in similar shenanigans with its 1.5 million steel dumpsters. Waste listed their useful lives as between 15 and 20 years—12 is standard—and claimed salvage value on them as well, again contrary to industry practice. In some cases management kept two sets of books, imposing the questionable depreciation schedules at headquarters on assets that were valued properly in the field.

Between the dumpsters and the trucks, the accounting maneuvers inflated pretax profits by \$716 million. But that wasn't all. Waste Management owns 137 landfills, all of which require millions of dollars in up-front costs to buy the land, win the permits, and develop. Then, after a landfill is filled, millions more must be spent; federal regulations require treating the site and monitoring for contamination for 30 years. The accounting treatment of these costs is determined by the probable life of the landfill. Obviously, expansion makes a landfill considerably more profitable by extending its useful life and spreading the capital cost—changed on the books as capitalized interest and depreciation—over a much longer period. So what did Waste Management do? Naturally, it claimed that landfill expansions were likely—even when they weren't. For its Live Oak landfill in Atlanta, for example, the company's books counted on a huge increase in capacity—even after the state had passed a law barring any expansion! Thus was the site's value inflated by \$30 million. Overall, charges for overvalued landfill projects totaled more than \$700 million. And on and on. Recycling facilities, hazardous waste plants, engineering operations—all were massively overvalued, artificially brightening the balance sheet. Taken together, the gimmicks boosted reported earnings by \$110 million or more each year. (ibid.)

Devoid of shame or responsibility, WMI thought it could get away with exaggerating the books. And it did, but only for a short period of time until the top leadership began to fall apart exposing larger, systemic problems within the company. In no time, "Waste Management was a Wall Street pariah. Bottom fishers and short-sellers moved in. And so did a new—and far more troublesome—kind of investor" (ibid.). In 1995, Nell Minow, a partner at Lens Investment Management in Washington, D.C., which works to improve corporate governance at poor-performing companies, invested millions of dollars in the company and wanted to address issues related to WMX's stock and its board of directors which included "five current or former company executives, plus Buntrock's attorney. Three of the outside directors—or the institutions they ran—received fees or contributions from the company... two-thirds of the board [was] on the payroll" (ibid.). The following year, George Soros and his hedge fund bought \$1 billion of the company's stock and together with Lens they demanded a new board of directors and the retirement of CEO Dean Buntrock. In 1996, Buntrock retired as CEO, but remained chairman of the board. His replacement was Phillip Rooney, who quit after only eight months on the job. The company "had started adding independent directors, including Steve Miller, a former Chrysler vice chairman who had fashioned a second career putting out fires at deeply troubled companies. Waste had begun a sizeable restructuring, including 3,000 layoffs, the sale of \$2.5 billion in

assets, and the restoration of the old Waste Management name. Koenig [former Chief Financial Officer] had been reassigned” (ibid.).

Having changed the company’s name back to Waste Management, Ronald T. LeMay, a former top executive from Sprint Corp., took over the CEO position. He lasted on the job for about three months before quitting and going back to Sprint. Why did he quit? Legend has it that he learned about the accounting problems and wanted out of the company. His sudden departure affected the company’s stocks by 20% that same day. In time, Former CFO James Koenig and his successor, John D. Sandford, severed their ties with the company. The market and investors were stunned at the rapid changes taking place. By the end of 1997, Steve Miller was named acting chairman and CEO of the company and Buntrock was to resign from his position on the board; Miller was all too eager to please shareholder interests. Months into the job, Miller began searching for a CEO—the fourth in a year—and decreased the number of staff and the number of regional headquarter offices. He also hired former Securities and Exchange Commission (SEC) chairman Rod Hills to help with the accounting issues he was coming across. Roderick M. Hills was appointed as a director on the board and later became the head of company’s audit committee. After an acting CFO was hired, Miller and Hills requested an audit team from Arthur Andersen, the company’s longtime accountants. Ernest & Young was also brought in, although neither company did much to stop the accounting fraud that was happening even under their watch. By 1998, WMI’s shenanigans were finally exposed:

After four months the company unveiled the results of its audit, and they were grim indeed: a pretax charge of \$3.54 billion—which even Buntrock calls “staggering.” (After tax, it comes to \$2.9 billion) The adjustments made 1997 the worst year in the company’s history, with a loss of \$1.18 billion. Reported profits of \$192 million in 1996 became a loss of \$39 million. Another \$904 million in net income was erased for prior years. Nearly three-quarters of shareholders’ equity—some \$3.6 billion—vanished overnight. ...In effect, that was the payment for the company’s accumulated sins during the decade. The primary sin, the company revealed, was having used improper, overly aggressive accounting tactics in an effort to boost sagging earnings. This had been going on for so long that the company had to restate earnings back to 1992. (ibid.)

Elkind, in *Fortune Magazine*, commented:

It’s always tempting to view a story like this one as an aberration—a singular event revolving around a company gone bad. Sadly, that’s probably not the case. Waste Management did the things it did because it refused to concede that it was no longer a hot growth company. Its desire to retain its status as a Wall Street highflier drove Waste Management not just to inflate its numbers but also to make a whole host of wrong-headed decisions. (5/25/98)

Not surprisingly, the SEC launched an investigation into WMI and its longtime auditor, Arthur Andersen. Around the same time all this Machiavellian corporate behavior was out in the open, there was growing interest among investors to take over the company. The company had agreed to be taken “over by a much smaller rival, USA Waste Services, in a \$13.5 billion deal. Not

many years before, USA Waste had been operating a single garbage dump in Norman, Oklahoma” (ibid.). The merger was a humiliating one for WMI, which praised itself for being one of the largest waste companies in the country and was now being taken over by one of its competitors. Still, the merger was viewed by shareholders as a success. USA Waste was owned and operated by John Drury, who started his company in Houston and long before the merger took place, Drury had set his eyes on WMI:

After LeMay left...USA Waste secretly took a minority position in a partnership that bought 13 million Waste shares. Drury met with Miller twice to make a sales pitch and sent emissaries to New York to drum up support among Waste’s big institutional investors. By early January—with the full extent of the accounting problems soon to be revealed—the Waste board was ready to listen. Drury and his team promised they could quickly produce \$800 million in annual cost savings from the combination. After the usual head-knocking over the numbers (the accounting revelations dropped the purchase price by \$900 million), the two sides reached a deal by the end of February. (ibid.)

A few years before the merger, New York Mayor Rudolph Giuliani and law enforcement officials had begun cracking down on organized crime (the Mafia and the mob) involved in the New York waste hauling, disposal, and recycling industries. USA Waste agreed to buy the Barretti Carting Corporation, a large New York City waste hauler. According to a *New York Times* article, “Barretti had been a focus of the city’s attack on organized crime. The company and its chairman, Philip Barretti Sr., were indicted by the Manhattan District Attorney... on state charges that the company was part of a cartel of 23 hauling concerns that inflated prices and controlled garbage hauling at offices and stores across the city” (Lueck 1996). USA’s effort to get into the New York waste market was also of interest for WMI/WMX at the time. WMI had acquired Resource N.E., the state’s largest trash and recycling company, in a \$200 million deal. In 1997, USA Waste Services agreed to buy most of the Canadian solid waste business of WMX for about \$186 million in cash and stock (*New York Times* 3/22/97). The significance of this acquisition becomes clear only after the WMI and Waste Services merger. USA Waste Services Inc. had its eye on WMI and sought to acquire the company’s assets even before its collapse. The merger secured the new WMI total control of the entire New York waste market.

Two things about this merger are particularly interesting. First, why and how did investors, especially after it was known that the company had a longtime track record of violations and was guilty of cooking the accounting books, continue to pursue this company? And secondly, what is the real story behind USA Waste Services Inc.? One answer to the first question is that WMI had become larger than life on Wall Street and had simply become too big to fail. Billionaire investors like George Soros understood the role that WMI played in the larger scheme of corporate capitalism particularly given its dominant role within the waste industry. A collapse of WMI would have essentially paralyzed services that millions of people demanded and that the state and federal government could not provide. The stakes were high. The company was enormous, extending its reach far beyond America into Canada, Mexico, and a number of other foreign countries, and its collapse, warned investors, had the potential to damage the entire waste industry and cause chaos among the general public who for years, never

thought twice about their trash. But would this really have happened? What would have happened if both investors and the government had tolerated WMI's bust for its years of dishonesty and negligence? After all, they had brought this upon themselves so why did they need to be saved? What were they being saved from—themselves? But they were rescued because the waste industry is a multibillion dollar market and unfortunately, in an industrialized corporate capitalistic democracy money talks.

In the weeks that followed, Drury shut down the headquarters of WMI in Oak Brook and opened its new offices in Houston. He reduced the number of employees who worked at Oak Brook from 1,300 to a staff of only 130 in Houston. Months later, Drury suffered a seizure and was diagnosed with a brain tumor, which effectively secured the collapse of the company yet again. Like times before, the board of directors refused to acknowledge what was happening. By early July 1999 the company began searching for a new CEO—the sixth in just three years (Elkind 9/27/99). In the meantime, Rodney Proto continued his role as the Chief Operations Officer and took on Drury's role.

Despite a fresh start after the merger that brought new board members and a new CEO, the company continued along its old ways. As before, the new WMI, under new management, resorted to aggressive accounting. In 2000, the SEC charged the company with violations to the anti-fraud, books and records, and internal controls provisions of the Securities Exchange Act. The Commission ruled:

WMI's management knew or acted in reckless disregard of whether the statements they made to analysts at the June waste Expo conference about the company's second quarter performance lacked a reasonable basis by omitting to state material facts about the company's inadequate systems, growing receivables balance, internal estimates of shortfalls, declining volumes, and price rollbacks. The fact that the deficiencies in WMI's systems prevented management from receiving timely and reliable data about the company's performance does not excuse the company for making statements without a reasonable basis or without disclosing material facts necessary to make the statements not misleading. (Securities and Exchange Commission)

In 2001, the charges included: "In what appears to be the third largest securities fraud settlement in history, Waste Management Inc. will pay \$457 million to settle a case brought by the Connecticut Retirement Plans and Trust Funds" and "the company allegedly failed to properly disclose to investors serious problems related to the merger between U.S.A. Waste Services and the old Waste Management Inc. in 1998 and certain company officials allegedly engaged in insider trading during 1999" (Mokhiber 2001).

WMI's accountant, Arthur Andersen, LLP, was found guilty of malpractice for improper accounting and unqualified audits of misleading financial statements made to WMI. Anderson was to pay \$20 million (ibid.). In 2002, the SEC launched suit in Chicago federal court for massive financial fraud during the early and mid-1990s. Fines were levied and officers were enjoined from directing or serving on boards in the future. Buntrock and half a dozen other top executives of WMI were charged with cooking the books—for restating earnings from 1992-1997 so as to show the company had inflated earnings by \$1.7 billion, the largest restatement in corporate history to that date, while shareholders lost \$6 billion. In 2003, former WMI

executives Rodney Proto and Earl DeFrates agreed to pay a total of \$4.2 million to settle insider-trading and other charges by the SEC. They were accused of making false or misleading statements in 1999 about WMI stock and selling shares while knowing the company's earnings were being inflated. Though they paid the settlement, they did not admit to nor deny the accusations (New York Times 10/23/03).

## **Chapter 10: The Darker Side: The Subtle Promotion of Wasteful Living**

Most people identify us by our green trucks and green bins. They think of us as a garbage company. They don't see us as the environmental services company that provides the sustainability platform for families, businesses, and municipalities. You see, our company has a goal—to help ensure that we pass on the planet to the next generation in better shape than we inherited it. This is a lofty goal, and we can't do it alone, but we hope to set an example for others to follow. Our world and the people who inhabit it are worthy of our highest aspirations and our best efforts. (WMI Chief Executive Officer David P. Steiner)

In the previous chapter I discussed how WMI assigns value to the waste that is generated and collected. As value is established over waste, WMI takes up our waste and asserts ownership over the garbage we produce. We are complicit because in order for WMI to survive in the marketplace of corporate capitalism, its customers must produce a constant flow of waste that requires WMI's services, and so the more waste that is generated is better and the more waste that is collected translates as more money for WMI.

In the process of assigning value to garbage, WMI is working to influence the American psyche as part of its business strategy. It has managed to manipulate peoples' relationship to the goods they buy and use and the waste they produce, all the time working to reinforce its role as custodians of waste in America, with the expertise over waste management services and people's lives, experts in the handling of the waste crisis we humans have created so that we don't need to think twice about it. In this culture of waste, waste-making is a convenient, routine, and unconscious activity—and, sadly, many people believe that waste is simply an inevitable consequence of our existence in the modern world. WMI wants us to believe this is so, to monopolize our knowledge about how much we know about waste services—all the while they alter what is visible/invisible so that we do not question the company or its business practices (this is a key point when you consider the darker side of the company's history).

Despite its faulty record and dishonest reputation, and after it was bailed out by corporate cronies, Waste Management Inc. continued to develop an empire. By the early twenty-first century, WMI was on a crusade to restore its reputation and win over the "hearts and minds" of the American public. Making waste and the behavior of wasting convenient, WMI has successfully advanced a culture of waste that makes producing waste a routine behavioral action. This conception of waste, coupled with a \$20 million public relations green-washing campaign, promotes WMI as responsible and resourceful, environmentally sustainable, green, and a neighborhood-led company that seeks to protect the environment and human health by exceeding industry and regulatory standards. As part of its quest in 2004, WMI, by advertising and marketing gimmicks, made itself a well-known brand—not simply a visibly good company. Its advertising and marketing tactics have resulted in furthering the objective of ultimately erasing the company's tarnished corporate history, while helping it avoid or at least lessen any potential objections or protests from future violations and/or scandals that come up. This chapter examines how as a corporation WMI distorts and neutralizes information about who they are and what they do. Given its history, WMI has moved away from implementing social control or overt coercion which is "culturally less acceptable in a democratic society" to a company policy

that seeks to control the mind—which as Laura Nader has noted, is “often implicit and not dramatic and is related to the creation of social categories and expectations and to ideological construction” (Nader 1995, p. 719). With our waste out of sight and out of mind, WMI’s manufactured culture of waste sustains the status quo—its power, its profits, and the normalcy of our excessive waste.

### ***Think Green. Think Waste Management.***

To reiterate, beginning in the 1980s and 1990s, corporations began to demonstrate their concern for the environment by promoting themselves as environmentally sustainable and friendly corporate leaders. An essay by Robert Gottlieb, Maureen Smith, and Julie Roque, entitled *Greening or Greenwashing? The Evolution of Industry Decision-Making*, explained how green, as both a color and a metaphor, came to represent this corporate sponsored movement:

During the 1980s and 1990s, the notion of a “green product” was introduced in relation to a wide range of product developments and industry activities. These developments were primarily stimulated by consumer-driven concerns over excess packaging, hazardous household products (e.g. insecticides, cleaning agents, automotive products), and particular product ingredients (most notably CFCs in aerosols). The issue of a company’s environmental identity also tied into this green consumerism matrix, influenced by the negative perceptions stemming from major environmental disasters...Reacting to specific campaigns initiated to stimulate product boycotts (many of them related to solid waste issues) as well as product or substance bans, a number of companies began to explore counter initiatives, designed to demonstrate the “greenness” of particular products or of the companies themselves. As a consequence, green marketing emerged as a tool both to deflect environmental criticism of industry activities, and for some companies, as a new device to expand market share. (Gottlieb et al. 1995, p. 188)

Green marketing was an unregulated form of corporate advertising: green marketing “has stretched the definitions of ‘greenness’ and “often subject to exaggeration and contradictory information” so that a “green product has become something of an oxymoron” (ibid., p. 193). Essentially, corporations have been able to make uncontested claims that oftentimes “are simply trivial, offering no environmental benefit of any consequence [and] downright misleading and fraudulent” (ibid., p. 189).

By 2004, WMI had launched an influential public relations green-washing campaign as a way to promote the company as responsible, efficient, and environmentally friendly; the emphasis on “greenness” was designed as a counter-initiative to dispel WMI’s crooked background and make it possible for WMI to restore itself, both to the general public and to its shareholders, as a leader in the waste industry. The green campaign was devised by Fogarty Klein Monroe (FKM), which in 2001 was contracted to develop and research a marketing strategy that would improve the company’s image. Six months of research on the company revealed that “85 percent of the news about Waste Management was negative. FKM’s charge was to turn that number around if it was going to get the desired impact from branding” (Williamson 2006). FKM, using focus groups to solicit peoples’ perception of garbage haulers, found that many people connected garbage haulers to the mob:

Tony Soprano’s name came up more than once, as did the infamous garbage barge that traveled up and down the East Coast in 1987, seeking a place to dump its load legally. A fair share of people still remembered the highly publicized

accounting missteps that Waste Management itself made in the late 1990s. (Deutsch 2008)

WMI spent over \$20 million to develop a dependable brand image and to give trash a good name. In 2003, the company's *Think Green* campaign was launched, and its first target was carefully chosen—it:

Aimed its message squarely at “influencers”—the people who attend public hearings about landfill expansions, who try to have recycling legislation enacted, who lobby their churches or municipalities or school districts to be customers of “green” companies. ‘We can’t say our demographics are retired Americans or 18-to-30 year old women’ said David Steiner, Waste Management’s chief executive. ‘We need the 48-year-old politician, and we need his 24-year-old constituent. And remember, those influencers may also have day jobs as purchasing agents.’(Deutsch 2008)

In a similar move to their corporate sustainability movement and the value they attribute to waste, WMI has taken over and redefined the greening tactic as a tool not only to deflect environmental criticism of industry activities as Gottlieb, Smith, and Roque noted, but also as a way to get into the human psychology. This ideological control as L. Nader (1983) describes, “deals with pressures outside of individuals or groups that result in the formation of a control that becomes culturally set over time. Ideals and principles affecting the behavior of individuals and groups are developed, penetrating and linking together different social domains and spheres of action, thought, and influence” (p. 2). In its attempt to penetrate the mind, WMI turned itself, quite literally, into a green company that would be easy for people to remember. By 2005, “the company was clad in green and the first ad designed to improve unaided awareness broke in September last year” (Williamson 2006). Everything now is green for WMI: garbage trucks, trash bins, and logo. The promotional information for the company uses green as a color to draw the link between color, corporation, and what they want people to know about them. They trademarked the slogan “Think Green: Think Waste Management” and put it into all their marketing materials:

- From everyday collection to environmental protection, Think Green. Think Waste Management.
- At Waste Management, we’re putting Think Green into action every day.
- When you think renewable energy, Think Green. Think Waste Management.

The “think green” motto may to the company, not so much imply the environment as it implies green money and profit. The aim is get their customers to think a certain way and to reinforce in the minds of people that Waste Management Inc. is very concerned about issues of the environment and waste. Green is “nature’s color”—grass, gardens, jungles, forests, trees, and plants—all of which represent growth and life. Green is associated with Earth Day, the planet, and the eco-system. It is also connected to the recycling movement that is directly linked to protecting the natural landscape. Green has a positive connotation and is globally recognized as

a color associated with doing good, strength and well-being, justice, and peace-making. It implies environmentally friendly, ecologically aware, conservational, recyclable, natural, environmental, ecological, organic, pure, and whole.

Like McDonalds and its identifiable letter M golden arches, WMI has, in just a few years, made itself a recognizable brand all over America. Its green garbage trucks along with the company logo, a simple capitalized W and M, have become a mobile public relations tool to boost the company's achievements in the industry. David Aardsma, senior WMI vice president for sales and marketing, says: "the trucks are the stars of our campaign, and that has created huge pride in our drivers. Our trucks are our invisible billboards. People who never noticed them before now probably see them every day" (Deutsch 2008). The sides of the garbage trucks help to emphasize the company's "greenness":

- The waste we collect helps power over one million homes
- Last Year we recycled enough paper to save 41 million trees
- This truck runs on natural gas. Another way we Think Green

These colorful messages and rhetorical techniques help to explain their line of work, while directly influencing and shaping our understanding and relationship with the natural environment but without addressing the sociopolitical, human, and environmental impact of the waste itself. They are intended to make us feel good about wasting. The only relationship we have with the company is that we know they pick up our garbage and the only human interaction we have with them is when we see their trucks on the road, read those slogans, and pay for their services. Our wasteful lifestyle is reinforced and even validated by the recurring messages on their trucks. People notice the slogans and are reassured: life can go on as usual and they can actually help the environment by using and discarding, to be turned into more good such as energy for homes. WMI's strategic ad placements in magazines like *National Geographic*, *Newsweek*, and *Fortune* help to reinforce the company's green agenda. In a *National Geographic* advertisement (see Appendix 2) the message is clear:

With energy costs and oil dependence on the rise, the need for renewable power is greater than ever. That's why Waste Management is using the resources at our disposal to create the energy equivalent of saving over 14 million barrels of oil per year. It's a powerful idea we're proud to drive forward. (2008, p. 161)

Thus green waste culture serves to exploit people by influencing how they think of the environment, trash, and WMI. We are constantly inundated with, this sort of propaganda, but most people are unaware; and that is the whole point, at least for WMI: if you cannot see it, then you cannot see through it, and you will not question it. We become believers.

## *The Good Neighbor Ploy*

(See Appendix 2 for WMI advertisement in Hanford Sentinel)

Though most people know WMI as the company that hauls garbage away in green garbage trucks, WMI implements what they call “a good neighbor” strategy in the communities that house their facilities using the policy as evidence of its corporate responsibility to these local communities. They give money for funding projects, support local sports teams, and, of course, they offer waste services. In a town like Kettleman City, the Chem Waste toxic waste landfill promotes itself as a friendly neighbor—despite its record of violations. The director of the facility, Bob Henry, is described as “a man on a mission: To convince people that the 1,600 acres he presides over is safe and, what’s more, a good corporate neighbor that frequently goes beyond the call of duty to contribute time and money to the tiny, impoverished hamlet of Kettleman City” (Nidever 8/10/07).

In the recent state investigation regarding the birth and death of babies with deformities, the company’s good neighbor policy was reinforced in the local county newspaper with particular attention to the monetary contributions that serve to sway potential decisions at the local level:

Defenders of Chem Waste frequently point to government regulations as assurance of the company’s safety...and company defenders are also keen to point out the company’s involvement in Kettleman City—an impressive list of activities that ranges from building and maintaining the school’s softball fields to helping the cash-strapped community services district build a new water treatment plant...Kings County also benefits financially, receiving annually 10 percent of the revenues from Chem Waste’s hazardous waste operations as part of a California law requiring the company to contribute...Much of the \$1.5 million to \$2 million goes to augment the county’s public safety services, particularly its fire department. (ibid.)

While the small town continues to be physically impoverished despite the millions of dollars the county receives from the corporation, the company boasts of its active participation over past quarter-century: “The Kettleman Hills Facility has been a part of the Kettleman City and Kings County community for over 25 years. Waste Management and its employees of the Kettleman Hills Facility are proud of our leadership in environmental protection and service to Kings County” (WMI Kettleman Hills Facility Website). The same website mentions two activities they support in town in collaboration with others:

- WM Kettleman Hills Facility, Paramount Farms and Reef-Sunset Unified School District work together to keep [Kettleman City Swimming Pool] open.
- Employees from the Waste Management Kettleman Hills Facility, the Kettleman City elementary school girls volleyball team, and the Kettleman City body builder club will

have collaborated to celebrate Earth Day by organizing a cleanup event in Kettleman City.

Extending its good-neighbor policy beyond communities that house their facilities, WMI has also supported organizations that promote environmentalism and diversity in communities that use their services. In 2008, it got involved in the GetGreen South Bronx Earth Fest to “raise environmental awareness and celebrate local cultural attractions, arts and community groups”: “Waste Management, Sony Corporation, CENYC, the NYC Department of Sanitation, the NYC Office of Recycling Outreach, Nos Quedamos and other community organizations, environmental groups, not-for-profits, businesses, and government agencies joined together” to host the event (WMI 4/19/08). In 2011, fourteen Keep America Beautiful, Inc. (KAB) affiliate organizations received a total of \$140,000 in grants made possible by WMI’s Think Green Community Improvement Grants which “are part of an ongoing national effort to encourage the development of local environmental solutions that build sustainable communities” (PR Newswire 8/18/2011). KAB is the nation’s largest volunteer-based community action and education organization. Barry Caldwell, WMI senior vice president of public affairs and communications and past chairman of the KAB board, was quoted having said: “Waste Management is committed to providing innovative environmental solutions in the areas of recycling, energy efficiency and land conservation, which make our communities cleaner and improve the quality of life. We are honored to partner with KAB, which has a similar mission of supporting its affiliates through creative solutions that enhance our communities” (ibid.). In lieu of their financial support, this neighborly relationship was recognized back in 2004 when KAB presented WMI with its “Vision for America Award in recognition of Waste Management’s innovations in product stewardship, waste treatment, recycling and conservation. With the largest network of landfills in the industry, Waste Management works with local community groups and companies to turn landfills into recreational spaces such as parks, campgrounds, athletic fields and golf courses, when possible. For example, in Waterford Township, PA, a little league baseball facility now stands where a landfill once operated. A constructed wetland was also created to manage surface water runoff and provide a preserve for native wildlife” (Keep America Beautiful, Inc. 2004/2005).

The good-neighbor relationship with communities, companies, and organizations is not limited to the United States. In September 2011, the second annual Texas-Israel Cleanovation Conference was held in Houston, Texas, where WMI has its headquarters. The conference featured:

The best Israeli and Global cleantech companies designed for building business opportunities for cleantech companies in Texas, all of the USA, and Israel. The event is designed to help you filter for optimal partners, customers and identify primary and/or supplemental funding. More than 200 participants are anticipated to attend, along with leaders from Fortune 100, select emerging growth companies and the public sector, with many having headquarters in Texas or Israel. First-hand access to most sophisticated technologies for energy efficiency, alternative energy, water filtration and more. (Texas-Israel Chamber of Commerce Cleantech)

The conference website provides quick facts regarding the interests in Israel (bold emphasis appears in original text):

- “**Due to Israel’s scarce natural resources**, it is leading the world in water and alternative energy innovations”
- “**Israel is the Silicon Valley of water**. Relative to its small size, Israel has devoted more resources to the development of wastewater treatment and reclamation than any other country in the world”
- “**Home grown Israeli VC community**—Israel has a vibrant local VC community which includes Israel Cleantech Ventures, AquaAgro and Terra Ventures—three firms dedicated to investing in Israel’s cleantech sector”
- “**The sun shines brightly over Israel**—the solar radiation Israel receives is a driver of solar thermal companies”
- “**Leveragability to tech expertise to cleantech**—Israel’s tech sector has flourished through the creation of core technology competencies that are world leading”
- “**The Bird Energy Fund**, a joint U.S. and Israeli government fund targeted to fund R&D partnerships between Israeli and U.S. companies has been making grants on a regular basis. The Texas-Israel Chamber can help you find the right partner”
- “**Israeli and U.S. Venture Capital Firms**: Firms have already committed to participate in this event representing over \$1B in investment potential”

As part of their good neighbor strategy, WMI also strives to promote “diversity” as their website says: “Waste Management is a proud partner with the communities in which we work, live, and serve. Our focus is to support minority and women’s organizations that strive to improve opportunities for professional development and advancement” (WMI Company Website). In other words, most of the communities that are home to WMI facilities are communities where low-income and mostly people of color live. WMI on its website offers scholarship support to a number of national service organizations, such as:

- National Association for the Advancement of Colored People (NAACP): “The dedicated workers, organizers, and leaders who helped the organization maintain its status as a champion of social justice, and fought long and hard to ensure that the voices of African Americans would be heard”
- Organization of Chinese Americans (OCA): “OCA is a national organization dedicated to advancing the social, political, and economic well being of Asian Pacific Americans in the United States. Waste Management employees are active in local chapter events and programs”
- National Hispanic Business Association (NHBA): “NHBA is dedicated to helping Hispanic undergraduate business students develop the real-world skills and relationships needed to launch successful professional careers”
- Women For Hire: “The only company devoted to recruitment services for women, Women For Hire offers career expos, seminars, a career-focused magazine, marketing

programs, and an online job board that helps leading employers connect with professional women in all fields”

- iHispano: “iHispano.com is the premiere networking site and job board for Latinos in the United States”
- NGLCC: “America’s National Gay and Lesbian Chamber of Commerce”

It hardly needs saying that the National Toxics Coalition, Citizens Clearinghouse for Hazardous Waste, and Greenpeace do not receive funding from WMI.

### *Creating Street Presence and Street Credibility in Entertainment*

While working to support communities and organizations, WMI recognized that a divide still existed between the company and its millions of customers. In 2010 it turned to reality television to personalize the relationship by giving themselves a face and a name, showing a company (beyond the garbage trucks, advertisements, etc.) that cares about its employees and the services they provide, but also emphasizing its leadership position in the waste services as *The Boss*. Just after the 2010 airing of the national Superbowl football game watched by millions of people, WMI was the first participant in the CBS reality show *Undercover Boss*, about an executive in a large corporation who is not an executive but rather an employee in his own business. The show sought to convey the image of executives who care about their employees and customers and want them to be satisfied with the inner workings of their business. Journalist Walter Kirn’s article in *Business Week Magazine* (2010) described the first episode:

In the season premiere, Larry O’Donnell, president of Waste Management, is dumped into the mucky trenches where his hefty paychecks come from. Wearing a drab uniform, his millionaire’s complexion concealed by a growth of graying stubble, Larry is given a series of yucky tasks meant to stir his conscience, steal his pride, and provoke huge grins of gratified resentment. He’s forced to snatch recyclable bits of trash from a speeding conveyor belt. He’s made—under the barking orders of a foreman whose chronic kidney alignments have hardened him toward able-bodied slackers—to fill bags with windblown scraps of litter. Finally, he’s given a scrub brush and a pump and told to clean and empty a long row of portable toilets at a scabrous fairground.

Having learned many tough lessons about the ways his well-meaning company undervalues, overwhelms, and generally jerks around its “front line” workforce (symbolized by a small group of cheerful stoics who give the company their utmost while enduring sometimes acute hard luck at home), Larry convenes his wary-looking lieutenants to issue corrective orders and share his testimony. As is sure to happen in some form on most every episode of the series... Larry presents himself as a changed man and implies that Waste Management must change as well.

The episode ends with a Fortune 500 version of The Sermon on the Mount. Surrounded by admiring workers, including those whom he met during his journey, Larry heralds the coming of a new kingdom... *Undercover Boss* is entertaining precisely to the extent that it is dishonest. The fraudulence peaks with its messianic mythmaking, but its faux populism is the true sham. Because the series' very existence requires cooperation from the executives that it purports to make suffer for their sins, it has to raise them higher, in the end, than it found them at the start. If it doesn't, they'll stop volunteering for their fake lashings and ritual redemptions. "Meet the new boss. Same as the old boss," sang The Who. However he chooses to hide it, scuff it up, or beg forgiveness for misusing it, the power is still his. And that's reality.

Adam Cohen's review in the *New York Times* (3/20/10) entitled "Unreality TV: If the Boss Only Knew, He Would Do Something" reflected on the show and its significance as a green washing technique:

Undercover Boss is bad television but a perfect show for our times with its heaping helpings of what politics is increasingly about: false populism...at its core, Undercover Boss sells a false idea of why many workers are in the position they are in and what can be done about it. It is the relentless focus on the bottom line, as well as out-of-touch executives that causes workplace wrongs to flourish.

Five months after the airing of the show, Larry O'Donnell left WMI to pursue chief executive officer opportunities elsewhere (WMI 6/2/10). The show and WMI helped O'Donnell's career more than it helped the television public though without showing it did tell the stories of some disadvantaged employees—the disparities between the employees and the executives. It did not mention that WMI's CEO David Steiner "received a compensation package of almost \$6.2 million for 2008, down slightly from 2007 [\$6.24 million] as the nation's No.1 trash hauler cut his performance bonus to reflect the company's weaker results in a deteriorating economy":

Steiner was paid a salary of \$1.1 million, up nearly 7 percent from 2007, according to a filing Wednesday with the Securities and Exchange Commission. He also got a performance-related bonus of \$1.1 million, down more than one-third from \$1.6 million the previous year. In addition, he received \$153,976 in other compensation, primarily for his personal use of the Houston-based company's jet and deferral plan matching contributions. Steiner also received stock awards and options the company valued at \$3.9 million when they were awarded on March 3, 2008. (Singer 2009)

Perhaps a new show entitled *Show Me the Money: How Much the Boss Makes* would be more appropriate.

Beginning in 2006, WMI began aggressively seeking out potential local and national sponsorship opportunities for building its brand and becoming a household name. Sponsorship opportunities not only make it possible for WMI to achieve greater brand recognition but it encouraged people and communities to trust the company. In addition, sponsorship allows the corporation to secure potential business with properties, organizations, and communities. Thus WMI has emerged from its dark past as one of the most visible and socially acceptable corporations in the United States by developing what I call a sophisticated “street presence” in both public and private spaces. As part of its corporate policy, it looks for branding opportunities in conjunction with corporations that present widespread spectator influence—not limited to reaching the people physically inside venues but also those television, radio, and internet viewers who watch sporting events and concerts from the comfort of their own homes.

In 2009, WMI and Live Nation, the world’s largest live music company, announced a multi-year agreement encompassing Live Nation’s venues, concerts, tickets and online platform (PR Newswire 2009). This collaborative effort further strengthened WMI’s desire for public exposure on a massive scale, considering that Live Nation “is the largest producer of live concerts in the world, annually producing over 16,000 concerts for 1,500 artists in 57 countries. The company sells over 45 million concert tickets a year driving over 70 million unique visitors to LiveNation.com in 2008” (Ibid.). Under the terms of the agreement, WMI: “Becomes the official waste services and recycling sponsor of 66 Live Nation venues across the country. Waste Management will be providing waste assessments to help minimize waste and promote recycling at all Live Nation venues, including concessions and backstage areas” (Ibid.). The program was designed as an extensive marketing public relations campaign by both companies to “green” their image and in the process, promote their services and interests. The two companies created the Recycling Rocks program to promote and encourage recycling to millions of concert-goers. On their interactive website, music fans can “recycle like a rock star” by reading profiles of various musicians and groups and how they recycle. Concert-goers can also purchase “green gear that rocks” and “movies that rock” (Live Nation website). What is interesting is how this “green” collaboration is reinforced by the use of musical artists as known celebrities who can be of influence. These celebrities are used as a voice for the entire venture, helping to legitimize both companies by endorsing their green initiative to recycle.

While we can agree that recycling is a positive thing for all of us to do, the problem arises when recycling, particularly as it is promoted by WMI, is explicitly targeting a segment of the population who enjoy music and attend concerts. Here wasting and recycling are coupled with entertainment, so in the waste culture that WMI cultivates, our values are influenced within a physical space that promotes fun, pleasure, and amusement. WMI is reinforcing its presence as the company that works to clean up for people before, during, and after the fun. WMI can use the website, its logo, and trash bins throughout the venue while at the same time reinforcing a habitual wasteful lifestyle. At no point do they actually educate people to stop wasting in the first place. If they did that, they would be out of business.

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The culture of waste fosters competition by partnering up with sporting venues and professional sports teams. It also promotes a sense of coolness on the part of the company in that it promotes itself in various sporting venues that during the course of a game stimulate a sense of limitlessness, adrenaline, excitement, and sportsmanship. It also indirectly reinforces particular

stereotypes associated with waste hauling. Hollywood movies depict waste hauling service employees as large, muscled, and toned men. We rarely speak of waste haulers as garbage women; we say “garbage men.” WMI’s sponsorship of sporting events, teams, and athletes reinforces the masculinity of this corporation indeed in fact it is not a stretch to say that most of its executives and board members are male. In the process of researching the company, I could not locate information on WMI’s sponsorship of female sports teams. This masculinity positions WMI as a force to be reckoned with in the waste industry and as a company that serves to protect the environment by responsibly caring for our well-being (and our trash). It gives off a kind of paternalistic quality in that the company seeks to protect its customers from the harmful waste that accumulates in our society. One Kettleman City resident said to me during an interview, “Waste Management portrays themselves as Godfathers to all of us. They care for us. Want only the best for us. Of course they could never do any harm on us, because they are our fathers.” Professional sports teams bring with them a sense of territory, statehood, and nationalism as each team represents a city or region. WMI understands how professional sports are considered national pastimes that promote a sense of nationalism and draw communities together. Sporting events are another way which WMI can extend its reach to millions of Americans.

Take, for example, how in November 2010, the company along with the professional football team, the Miami Dolphins, launched a “Two Ton Challenge” for recyclables collected from their fans during a pre-game tailgate. WMI declared: “two tons of recyclables will save 950 gallons of oil, 8,000 kilowatts of electricity or enough to power 5,000 homes, and 5,500 pounds of carbon dioxide emissions from reaching the atmosphere” (Sun Life Stadium 11/30/10). The challenge for the fans was to have fun before the game and produce as much recyclable waste as possible: “More than 150 Waste Management and Dolphins Special Teams volunteers will fan out across the Sun Life Stadium tailgating venues to encourage fans to help the environment and ask them to recycle their plastic and glass beverage bottles, aluminum cans, snack boxes and newspaper in an effort to collect two tons of recyclables from tailgating activities alone, about double the usual amount” (ibid.). As a pre-game event, WMI was given a space in the stadium to showcase its unique devices and ways of encouraging recycling: “In the Grand Plaza with a kids photo area in front of a WM truck and a display of its WM Solar Compactor trash containers and Bagster products. In addition, WM will showcase its partner PepsiCo Dream Machine kiosks where Dolphins fans can recycle plastic bottles and aluminum cans to earn points for personal rewards redeemable at greenopolis.com” (ibid.). After the game began, eleven WMI garbage trucks arrived to pick up the waste from the company’s Reuter Recycling facility in Pembroke Pines, the largest single-stream recycling plant in the southeastern United States” (ibid.). At the start of the fourth quarter there was an announcement about whether the challenge had been met. But the point of the challenge was essentially to encourage fans to waste for the sake of winning. Unlike other contests where there might be a prize, this contest had no rewards.

In another example, WMI signed a three-year multi-million dollar deal to be an official sponsor of the professional football team the St. Louis Rams. In exchange, WMI received stadium signage, recycling bins throughout the stadium, its logo on all tickets sold, and the company was highlighted during the game on the official scoreboard for all to see. The professional baseball team, Houston Astros, also joined forces with WMI to place 125 recycling containers throughout their ballpark. One of the players, “infielder Mark Loretta [joined] Astros front office staff executives in a ‘Think Green’ marketing campaign” (WMI 7/5/07). The

company has also a variety of other sports. It sponsored NASCAR's "Drive for Diversity" outreach program. It has partnered up with the Professional Golf Association (PGA) Tour, golf being popular among corporate executives and decision-makers. In 2010, WMI became the sole title sponsor of the Phoenix Open: "the PGA Tour and The Thunderbirds, a prominent Phoenix civic organization and hosts of the Open since 1939, reached the agreement for a six-year partnership with Waste Management Inc after a 10-month search for a new title sponsor" (PGA Tour). In 2012, the Open hosted the second annual "green out"—which encourages fans at the tournament to wear something green: "The green out has become an annual event celebrating Waste Management's eco-sensitive initiatives both at the tournament and in everyday life" (Waste Management Phoenix Open Website).

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Expanding on its street presence, WMI has also developed an online presence using interactive social media. It can be found on Facebook and Twitter. More recently with the popularity of these social networking sites, WMI started its own "green" interactive social networking site, *Greenopolis*. On this website they explain: "Greenopolis makes a very simple—yet powerful—promise to you, our user: *We are about doing good*" (Greenopolis website). The company provides information and tools to "help you to recycle easily, help to save our natural resources for our children's children, track conservation through recycling and re-use, and educate and reward conservation" (ibid.). The objective behind this online website is to foster an environmental community: "The Web site, which includes several features that are common on different social networking sites, is committed to connecting people and businesses on green issues, and was developed to serve as an educational tool to teach people about ways in which to be more environmentally sound. Waste Management sponsored the creation of the site in an effort to get more people to start thinking green" (WMI 6/17/08). But it has also used the website as a way to cultivate a more personal relationship between people and recycling. The idea is to give people an incentive to recycle by developing a reward system (similar to the point systems that credit cards and grocery stores use these days). All people have to do is register on the website, track their points, and redeem their points on a web-based reward catalog that provides offerings from more than 10,000 retail partners and 130,000 physical locations nationwide. These include discounts and coupons for entertainment, dining, and travel with companies like Marriott, Ben and Jerry's ice cream, Arby's, Johnny Rockets, Domino Pizza, and Blockbuster (bankrupt now); and/or people can even use their points to donate to charities. According to their website:

Through both our On-Line site of Greenopolis and our physical, On-Street presence of Greenopolis Recycling Kiosks, we allow our customers to do actual, "trackable" good for the planet. We also try to make your everyday life better by offering rewards for helping the world and changing the way we handle natural resource and recyclables. Our overriding desire is to *actually* make the world a better place rather than just pointing out problems... Whether it's a blog post, video, info-graphic, podcast, tweet or email message, our content will be: positive; focused on recycling, reusing, repurposing, waste-to-resource or

conservation; fun to read; visually interesting; provide links to more information.  
(Greenopolis website)

“Why does Greenopolis reward you for doing the right thing? In order to change the world, recycling, reuse, and conservation must be fun, easy, and rewarding. Rethink, recycle, reward, closing the loop together” (ibid.).

Over the years WMI has also partnered up with a variety of other corporations, including Cabot Cheese, Johnson School of Cornell, General Motors, Georgia Tech, Green Mountain Coffee, Keep America Beautiful, and InterfaceFLOR (ibid.). Some websites such as *The Huffington Post* display a banner to grab the attention of readers and direct them to the website. What’s more, this interactive website has also produced a Greenopolis “Oceanopolis” Facebook game as well as Greenopolis Television broadcasts that provide anything from “everyday tips to keep it green and energy innovations to investigative reporting on events such as the Gulf oil spill” (ibid.).

### ***Targeting Children at the Happiest Place on Earth***

WMI has also disingenuously sought to capture and influence the minds of young children. These young kids don’t know the history of the corporation, and in targeting them at such a vulnerable time in their lives when they are the most impressionable, when their ideas, beliefs, and dreams are cultivated and influenced by their surroundings, WMI has sought to strengthen its control over future generations, not only to promote the company as leaders in the waste industry but as a way of influencing a culture of waste that will safeguard a continued waste stream well into the future.

In its quest to influence American values and culture, WMI partnered up with Walt Disney Resort—a rather clever way to target young children who come on vacation with their families and friends to the Disney World (and Disneyland), known as the “happiest place on earth.” In 2008 and lasting for three years, the companies hosted an exhibit at the famous INNOVENTIONS pavilion at Epcot in the Walt Disney World Resort. Over the years Epcot has become a business and corporate space for “green” public relations campaigns. INNOVENTIONS is a 100,000 square-foot pavilion that “celebrates the creativity, inspiration and innovations to improve our lives and the world around us” (WMI 2/26/08). The actual 4,000 square foot interactive exhibition by WMI, called *Don’t Waste It*, was designed “to create an experience that educates park goers about the latest advances in waste disposal and of the company’s “green” approach to handling garbage” (ibid.). By designing this showcase, WMI sought to control how much information people have about waste services, and of course it presented this narrative in a particularly positive light. The exhibit “walks guests through the number of ways in which garbage is handled throughout the collection process and illustrates the technologies behind single-stream recycling and converting waste into energy” (ibid.). Guests handled their own trash throughout the exhibit experience, which featured a life-sized garbage truck and a mini trash truck that recorded each person’s personal trash profile, following a particular route: (WMI website “Waste Management Shows Guests How to Think Green at INNOVENTIONS at Epcot).

- **Sort It Out:** Guests must first recycle their waste by sorting their digitized garbage on a virtual conveyor belt in this single-stream recycling center. The more materials that are recycled, the higher the guest's score.
- **Fuel the Burn:** Next, duplicating a Wheelabrator waste-to-energy plant, guests operate the crane or the dozers on the tipping floor as they try to produce electricity with the right combination of dry and wet waste. The more trash they feed into the boiler, the more energy they create.
- **Landfill Up:** Finally, guests can choose what the landfill will be used for after it's closed—a golf course, ballpark or wildlife preserve—and then dispose of the rest of their trash by properly “layering” the waste and landfill cover materials to produce the most methane gas, which will then be used to make energy.

At the end of the exhibit journey, based on how much trash people produce annually, park guests received a green score based on the amount of recycling and energy they were able to produce as a result of wasting. They also had the opportunity to email “a game completion certificate to themselves at home” (ibid.). Eric Goodman of Walt Disney Imagineering led the creative team working on the project:

I believe my first thought when I got the assignment was, ‘well, here’s a story that everyone knows about because we deal with garbage every day.’ Oh, how naïve I was “Goodman said. “I learned that most people only know half the story—how to create garbage. We are really good at filling trash cans and recycling bins a few times a week and dragging them down to our curb. But after that—well, I think we all believe a ‘garbage fairy’ makes the trash magically disappear. We assume the trash we see is not our garbage; that is everyone else’s garbage. As I began to meet the people of Waste Management, the second half of the trash story began to become much clearer. (Ibid.)

This fun-filled entertainment venue brings together children and adults and serves to reassure people that generating waste is part of who we are as human beings. One critic of the exhibition is Elizabeth Royte, author of *Garbage Land: On the Secret Trail of Trash* and writer for *OnEarth Magazine*. Interested in how WMI, through the exhibit, sought to influence young children, she observed:

I was curious about its new slogan “Think Green,” which seems the pinnacle of doublespeak. After all, the company’s success—it posted record-breaking earnings in February 2008, when this exhibit opened—depends on a steady, if not rising, stream of waste. It stands to reason that consuming and wasting less stuff, one of the best things an individual can do for the health of the planet, is antipodal to corporate goals. (Royte 2008)

Royte was skeptical of the greenwashing claims made by WMI and Disney:

Contrary to the depiction at Epcot, landfills don’t start collecting gas until years after operations commence, and fewer than half of Waste Management’s landfills

have such gas-to-energy systems. To make them financially viable, the dump has to contain large amounts of organic waste and be close to transmission lines in places where conventional energy costs enough to make the energy from landfill gas competitive...[the voice heard overhead that tells park guests what to do comes on saying] “Thirty seconds left! Your nature reserve is going to be beautiful.” Why am I hurrying? Because “the more layers [of garbage] you create, the more energy you produce”...Ding! Time’s up. I’ve generated enough energy to power six houses. The landfill looks like a green carpet, with shrubs and a gazebo. According to Waste Management’s script, it belongs to the community now. What goes unscripted is that so does liability for any future environmental or health problems. I leave my little truck to a final docking station and await my results. I get two of the three points for my recycling efforts, six of eight points for burning trash, and four of six points for burying it. “Think green and have a nice day,” the computer says. It’s a welcome change from “have a magical day,” the usual sign-off of Disney employees on the phone...In the upbeat “Don’t Waste It” world, there are no problems with landfill gases and liners that leak, with unhappy or sick neighbors, with toxic incinerator ash, mercury-contaminated fish, or dioxin-laced soil. The message from Waste Management, and by association from Disney, is that we needn’t radically change either our lifestyle or our way of thinking. Put your recyclables in the right container and there’s no need to alter our consumption habits. Why is this so important? Because visitors to Epcot can’t go 100 feet without an opportunity to buy something—Disney backpacks, mouse-shaped straws, logo caps, colorful buckets, plastic sandals, T-shirts, tutus, towels, stuffed toys, disposable cameras. On and on it goes—merchandise that will, in short order, be dumped. (ibid.)

### ***Waste Educators: Winning Hearts and Minds in Classrooms and on College Campuses***

More recently, the company has gone one step further and broadened its reach inside educational institutions. Starting at the kindergarten level through the high school years, WMI has established an educational curriculum, the objective of this online resource being to make it convenient for teachers to educate their students about waste and the environment. The curriculum is predetermined and manufactured by WMI—the same corporation that serves to profit from our waste in the first place. The WMI design of an educational curriculum about waste and the environment reinvents and maintains the company’s desire to control the industry and the hearts and minds of future wasters. The corporate press release below notice below shows how the curriculum is presented by WMI for the twelve grade levels:

What happens to the waste we all produce? When does it make sense to recycle? Can trash become energy? Questions like these are just some of the timely topics brought to life at [www.thinkgreen.com/classroom](http://www.thinkgreen.com/classroom), a new K-12 resource from Waste Management powered by Discovery Education. Complete with standards-based lesson plans, compelling videos, interactive activities and Think Green

Resources to engage students and extend the learning to the home. [www.thinkgreen.com/classroom](http://www.thinkgreen.com/classroom) is a powerful new suite of tools for educators seeking new materials to enliven environmental lessons. Teachers of children grades K-5 will find resources that will help them answer such questions as what our trash is made of, how physical properties are used to separate recyclables, and how decaying matter can be turned into energy. Middle school educators will find lessons that will help teach important concepts such as the consequences of too much waste, the importance of the “Four Rs”—reduce, reuse, recycle, and recover—and the process of energy conversion and its relationship to waste-to-energy technology. Lessons targeted for use by high school teachers compel students to think about solid waste and what we do with it, encourage the development of new options for solving solid waste problems, and initiate the evaluation of plans to apply what they have learned about the Four Rs. The wide varieties of student resources on the site help extend the learning in the home. With age-appropriate digital resources that include videos, puzzles, and stimulating interactive activities, students of all ages and their families can investigate a variety of timely and interesting issues related to recycling and waste management. (WMI 4/16/09)

The curriculum embodies a standards-based lesson plan as a way to ensure that by each grade level, students are exposed to only a fixed amount of information. By the time these kids get into high school, they are then challenged to come up with alternative options for solving the waste crisis. Dave Aardsma, senior vice president of sales and marketing, explains:

Each grade-specific curriculum on the ThinkGreen/classroom website is designed to advance the sustainability and environmental education goals of educators. Today’s students have an innate curiosity about the natural world around them. With these digital resources, teachers can employ a project-based approach to sustainability education that asks students to actively solve problems and pose solutions, rather than just passively absorbing new information. (ibid.)

This is inconsistent teaching and curriculum development because by the time these kids get to think critically about the waste they produce, they have already been conditioned by WMI (and other corporations for that matter) and the society they live in, that wasting is simply a byproduct of our existence and that any potential alternatives should be left in the hands of WMI. The children become socially and culturally brainwashed inside and outside of the classroom and the curriculum serves to reinforce the beliefs presented by the corporation in all its public relations marketing materials. These children are being conditioned to passively absorb information, information that WMI deems necessary because a consistent waste stream enables them to stay in the business.

Take the example of WMI and its subsidiary, Wheelabrator Technologies Inc., who target school-aged children for their annual *Symposium for Environment and Education*, first started in 1994:

The Symposium has put into action the company's long-held belief that businesses and communities should help educators introduce real-life experiences to young adults...participating school teams each identify and research a specific environmental or public challenge in their communities. Student teams are made up of students from academic science classes, environmental clubs, discussion groups, science or social studies teams and honor organizations. Under the guidance of educators and the local Wheelabrator facility, students leverage the resources and support of their community and local Wheelabrator facility; the teams develop solutions to these challenges over the course of the school year. The scenarios require a broad and realistic perspective on the impacts of society on the environment, compelling students to discover flexible and creative solutions to resource management decisions. Each year, Wheelabrator hosts approximately 10 schools and involves 100 seventh and eighth grade students in the program. In the spring, the teams travel to Florida for a two-day Symposium, where they present their projects and solutions to a panel of educators, politicians and local community volunteers. This panel is made up of customers from our client communities. As a progressive environmental company and responsible corporate neighbor, Wheelabrator sponsors the Symposium to help promote a future where the environment benefits from our children's balanced decision-making and active community involvement. As we all "give back" to our communities, the Symposium provides a valuable opportunity to work closely with the leaders of the future—our students. (Wheelabrator website)

One teacher offered a raving review about the conference: "After 13 years of having students attend the Wheelabrator Symposium, it is by far the best example of Corporate America working with schools to help the leaders of tomorrow develop. It is an experience, which can't be duplicated in the classroom" (ibid.). In its quest to brand itself, the corporation secured a place for themselves not only as industry leaders outside of the classroom, but inside the classroom; they have now taken up the role of waste educators. In 2010, WMI together with the Dallas Independent School District, USA Today, Live Nation, and the Dallas Mavericks developed an "Into the Bin, Out of the Box" educational program and recycling contest in the Dallas school district to get kids excited about recycling. The ten-week pilot program was launched in Dallas area junior high and high schools:

This exciting pilot program provides teachers with curriculum designed to enhance their students' reading skills delivered electronically coupled with a head-to-head recycling competition. Students will be encouraged to reduce paper waste while increasing their recycling activities. In addition, students from the school that recycles the most, win Live Nation digital music downloads and a celebration pep rally with special guest from the Dallas Mavericks...49 participating schools began receiving reading lessons electronically via the *USA Today Education* website. Waste Management, the Dallas Independent School District waste and recycling services provider, supplied each school with classroom and high-traffic common area recycling containers. Each week of the program, Waste Management will track and rank the schools based on the amount

of recycled volume collected. The educational and competition-based aspects of the program complement each other and make recycling fun and intuitive for Dallas students. (WMI 10/12/10)

Tracey Shrader, regional area vice president for Waste Management, explained that “between the convenience of the single-stream recycling system and the exciting competitive aspect of the program, we hope to help establish good life-long environmental habits that continue to benefit the entire Dallas metropolitan area into the future” (ibid.). That is exactly the purpose: the Dallas pilot program, with the Disney World Resort exhibition, coupled with a WMI teaching curriculum, all serve to manipulate these children’s behavior not so much to get them to stop wasting, but instead to encourage them to produce garbage in the first place.

After high school, these children are likely to come across WMI in one way or another at the college level. Earlier I described how WMI has taken advantage of the color green for the purposes of branding itself as an environmentally conscious corporation. In the April 2012 issue of *Common Ground*, a San Francisco Bay Area magazine, eleventh-grade students were asked their thoughts on the question of “What does it mean to be Green?” (*Common Ground*, p. 42). Notice how the word “green” is capitalized by the young students, reinforcing that to be green involves a belief in green not just as a color but as a sustainable way of living one’s life. They answered:

- To be Green is to have a piece of Mother Earth in every person and to stay fit and healthy.
- It means to care about your health, others, and the environment.
- Being Green is to grow organic food and clean up the trash on the streets.
- To be Green is to recycle, save energy, to do as much as possible to not pollute the air, and to reduce your carbon footprint. Being green is also helping people understand what being Green means.
- Green is having an atmosphere that has no pollutants. Green is living in a community that produces less CO2. Green is the most pleasant world that can be made.
- To be Green is to pollute less, farm more, and use less harmful chemicals to protect earth.
- I think being Green means to use natural stuff, to recycle more, to do things to help the world and not dirty it.
- I think the most important thing to save the planet is to pick up after yourself.

These young kids, in elementary school or high school, are constantly being reminded in “greenness.” Of course all that is promoted as “green” is not necessarily bad; in fact, it is just the opposite but green as an educational tool functions as a double edge; it can be positive and/or negative, depending on who is in control of determining the content and purpose.

For example, WMI, having incorporated the green movement into its corporate existence, has gone one step further to reinvent and dominate the green movement at the college level. Beginning in 2005, *The Big Green Bus* was launched as a collegiate program in which twelve college students from around the country have the opportunity to call a big green bus their home for the summer: “We’re traveling through the states this summer promoting positivity and enthusiasm for the environmental movement. It’s awesome what the environmental community

is already achieving” (The Big Green Bus Website). The 12,000-mile journey takes these twelve students through thirty-five states, from New Hampshire to California and then back. They stop at national parks and major cities. The bus is retrofitted to a model sustainable house, complete with solar panels, an energy-efficient fridge, eco-friendly wood floors, florescent lighting, bamboo countertops, and table tops made from recycled concrete. The bus runs on waste vegetable oil collected and processed from restaurants. The bus/trip is sponsored by (impartial list) Cabot Creamery Cooperative, The Home Depot, L.L. Bean, Annie’s, Sunpower Foundation, Greyhound, Caesars Entertainment, and the Thayer School of Engineering at Dartmouth. In this example, WMI’s green initiative has many positive attributes.

But there is a double edge to this venture. What makes this so interesting is that WMI is strategically using passionate, environmentally sensitive and environmentally conscious young adults to stand for and speak on behalf of the company on their summer bus journey. The company not only uses the bus as a mobile public relations campaign similar to their garbage trucks but has also joined forces with other corporations to promote itself straightforwardly as a corporation that is an essential part of the larger environmental movement—despite its faulty record, of which these young adults may never have heard. The double edge here is that, though something good is being promoted, the *Big Green Bus* program as a traveling educational project functions to reinforce how WMI is actively taking bold steps to influence how people think about waste, the environment, and the company. In fact, the project is even used to supplement college lectures and so the bus becomes an interactive, corporate-sponsored curriculum lesson. In November 2011, the first official event for the upcoming 2012 crew of students was held at the Dartmouth campus. One student described the event:

A Dartmouth professor in the Earth Sciences department who is a big fan of the bus (no surprise there) planned the event. He recommended we bring the bus to his class as a way to supplement the classroom discussion about energy alternatives. The class, entitled Environmental Change, is the largest class at Dartmouth, with over 200 students in the massive lecture hall. The course covers the realities of climate change, and Professor Robert Hawley has made very clear how the current anthropogenic changes differ in comparison to the cyclical oscillations in climate over hundreds of thousands of years...this particular class period dealt with the realities of personal energy use and concluded with a discussion of the alternatives. The Big Green Bus, therefore, was a perfect educational tool to bring the lesson to life...all in all, it was a great opportunity for the new crew to get experience telling others about the Big Green Bus project. Moreover, the invite from a distinguished member of Dartmouth’s Earth Sciences department to present to his class was a nice pat on the back for all of us...the event has left us more motivated than ever to create the best educational platform we can within the next seven months to take the country by storm. (The Big Green Bus Website Blog 11/21/11)

The notion of sustainability has gained much steam on college campuses in the last decade. The AASHE (noted earlier) is a vast network of colleges and administrators who seek to (AASHE website):

- Facilitate institutional efforts to integrate sustainability into teaching, research, operations, and public engagement
- Disseminate knowledge and best practices and promote resource sharing
- Support all sectors of campus in achieving sustainability goals
- Increase collaboration among individuals, institutions, and external partners to speed the adoption of sustainability practices
- Influence education policy so that sustainability is a focus at local, state and national levels

In a presentation before the Association for the Advancement of Sustainability in Higher Education (AASHE), WMI observed that there are: 24.4 million students, faculty, and staff; 85.3 million employed in education, and 105 million pounds of waste daily (WMI Youtube video). These numbers make college campuses a major source of revenue for WMI as each college or university requires waste services; consider their facilities, offices, campus grounds, events they host (games, performances, etc.) and the people they house and feed—WMI is learning to “think green” in big ways by looking to capture large markets. Their “Think Green Campus Model” is designed to help colleges and universities achieve “environmental sustainability” goals. The programs within the Model may include (WMI company website):

- Establishing a green council to set the stage for campus-wide collaboration
- Conducting an assessment to systematically identify the products being consumed on campus and how they’re being disposed.
- Identifying opportunities to divert products from landfill and optimize sustainability
- Engaging the campus community in programs that excite, inspire, and mobilize
- Gauging progress with our proprietary reporting tool

The company’s website explains they are a “dedicated team of education sustainability experts” who “work with you to enhance your campus’s current green efforts and encourage everyone on campus to think differently about the materials they use” (ibid.). Getting people to think differently is the design of this initiative. The Campus Model incorporates a greening campaign that includes (ibid.):

- **Green move in and move out:** “Reduce, reuse, and recycle” are message worth amplifying, especially at each semester’s beginning and end. Rely on Waste Management to put the entire program together for your school, including setting up receptacles, organizing special events, and involving local charitable organizations.

- **Green student living:** We can work with you to understand the on-campus habits of your students and create programs to advance environmentally sustainable lifestyles from the dorms to the dining halls and beyond.
- **Internship programs:** With positions on our sustainability team, students get ground-level experience in seeing how diversion and waste-stream management can lead to programs like zero landfill. Plus, they get invaluable experience working with North America's leading provider of comprehensive waste management services.
- **Campus Waste Watch:** Because our drivers have regular routes on your campus and surrounding areas, they know right away when something is out of the ordinary. Through Campus Waste Watch, we partner with campus security and local law enforcement agencies to serve as extra eyes and ears to report incidents.
- **Green Event pack:** From recycling containers to recycling kiosks, solar-powered compactors and other portable amenities, we can set up for an eco-friendly event. And when it's over, we can pick and recycle or compost the waste, with little going to landfill.
- **Grant Research:** Waste Management will help you identify and apply for the funding sources available to help your institution implement sustainability programs.

While it comes across as necessary and valuable to put into place such a program, the Campus Model is partnering up with educational institutions of higher learning to accumulate more wealth. Their personable approach makes for a fun experience wherein WMI seems to do all the work for the campuses. In fact, they even go as far as to be a funding source for campuses. WMI has taken advantage of the full-fledged sustainability movement that is taking shape on campuses across the country. Campuses like Arizona State University, Rutgers University, Boston University, Georgetown University, and the Los Angeles County Community College serve as case studies on the WMI website. In August 2011, it was announced that WMI was awarded the recycling collection contract at the University of Iowa. WMI would work: "Alongside UI [University of Iowa] and City Carton Recycling to phase in the single-stream recycling system to capture higher volume and higher value commodities from the waste stream. The single stream material captured at the UI will be transported to the City Carton Recycling sorting facility in Cedar Rapid" (U.S. Fed News 8/26/2011).

In another move to cultivate visibility on college campuses, WMI has been busy at securing sponsorship of collegiate athletics. In 2010, it became the official environmental partner of the Southern Conference through its multimedia rights partner SoCon Sports Marketing, an IMG College property. The Southern Conference, over 90 years old, has a good reputation:

National leader in emphasizing the development of the student-athlete and helping build lifelong leaders and role models... from establishing the first conference basketball tournament (1921), tackling the issues of freshman eligibility (1922), developing women's championships (1984) to becoming the first conference to

install the three point goal in basketball (1980)...the Southern Conference is the nation's fifth-oldest NCAA Division I collegiate athletic association. The conference currently consists of 12 members in five states throughout the southeast and sponsors 19 varsity sports and championships that produce participants for NCAA Division I Championships. (IMG College)

IMG College “works across local, regional, and national platforms to connect top corporations to the college market’s more than 172 million fans—77 million of which are female—an affluent fan base with more than 29 million college fans earning more than \$100,000, and 17 million fans between the ages of 18-24. IMG College partners with the nation’s top collegiate brands, including the NCAA and its 88 championships, NCAA Football, leading conferences, and some of the most prestigious universities in the country” (ibid.). The three-year contract permits WMI to expand “its waste and recycling operations on several Southern Conference campuses and at athletic events, as well as develop sustainability initiatives to engage students, faculty, alumni, and the surrounding communities” (ibid.).

In 2011, Rice University in Houston, Texas, announced that the baseball team’s legendary head coach Wayne Graham was set to be the broadcaster for the new Rice baseball radio show presented by WMI. Coach Graham was quoted at having said “this is a great opportunity to increase the dialogue between Rice baseball and its fans. It is also a wonderful opportunity to increase the visibility of college in Houston” (ibid.). WMI, surely saw this as a wonderful way to increase its name visibility on the radio as a local company town that seeks to be a good neighbor.

WMI has been cultivating a presence on college campuses beyond sponsorship of sports programs. A group of academic researchers from the Massachusetts Institute of Technology (MIT) SENSEable City Lab “embarked on a major project called *Trash Track*, which aims to get people thinking about what they throw away and how it impacts the environment. The project uses custom-designed electronic tags to track different types of waste on their final journey through the disposal systems of New York, London, and Seattle” (MIT SENSEable City Lab). Carl Rush, the vice president of organic growth for WMI, explained that the corporation funded the study “to see if there is a technology to help our entire industry become more efficient. We hope that when the results are analyzed, we will see ways to improve the logistics of waste—from our trucks, to our recycling, to our disposal systems” (ibid.).

At Columbia University, WMI and Wheelabrator are sponsors of the Earth Engineering Center (EEC) that “provide graduate level training in the ways and means of sustainable waste management to engineers and scientists, in particular those from rapidly developing nations where the need from an aging the ever increasing volume of wastes is most pressing” (Columbia University Earth Engineering Center).

The University of California (specifically to my knowledge the Berkeley and Irvine campuses) sends its toxic waste to the Kettleman City dump site and the corporation of WMI has been an active participant in research affairs at the Berkeley campus. In 2007, the University of California at Berkeley’s Haas School of Business and the College of Chemistry established the Sustainable Products and Solutions (SPS) Program through a five-year, multi-million dollar partnership with Dow Chemical Co. Foundation. SPS is based at the Center for Responsible Business at Haas School of Business and began with a \$2 million gift by Dow Chemical, for a total of \$10 million over the five-year period. The program focuses on “sustainability issues

involving society, science, engineering, the environment and finance” (University of California, Berkeley. “New Program to Focus on Sustainable Products”), and provides funding opportunities for master and doctorate students to “take into account all aspects of a product’s life, including those related to finance, environment, production and its interactions with people” (ibid.). Kellie McElhaney, executive director of the Center for Responsible Business and program director for the Sustainable Products and Solutions Program, was quoted saying “this program gives us the opportunity to offer seminars, student competitions, research, internships, field projects and fellowships that will help graduate students bridge research, theory, and practice in sustainability” (ibid.). For Dow Chemical Co, “Haas graduates also are playing a role in Dow’s sustainability strategy by taking jobs with the company, a large global supplier of products for almost all business segments, from solar power to water purification to electronics” (University of California Berkeley 2008).

In 2010, Kimberly-Clark, which manufactures brands such as Kleenex and Huggies, and WMI agreed to pay \$100,000 each renewable for three years, and the Haas School of Business accepted its financial sponsorship, apparently without taking into account the corporation’s legacy, which had recently been researched by one of the school’s own faculty member. In June 2007, Patricia Dechow, an accounting professor at the Haas School of Business, along with numerous faculty from universities throughout the country, reported their findings on what was considered “the most comprehensive analysis ever of Securities and Exchange Commission Accounting and Auditing Enforcement Releases—the agency that documents enforcement actions against companies, auditors, and officers for alleged accounting misconduct” (ibid.). Dechow and her coauthors “outlined the results of their analysis in a recent working paper titled ‘Predicting Material Accounting Manipulations.’” They “examined more than 2,000 SEC releases from 1982 to 2005, which resulted in a final sample of 680 firms alleged to have manipulated financial statements [and] Dechow and her coauthors took a deeper look at Enron and Waste Management, two very well-known fraud firms, to provide more intuition for how manipulating firms differ from a broader population of firms” (ibid.).

### ***He Who Pays the Piper Calls the Tune***

In the arena of American politics, WMI has extended its reach into the pockets of politicians and political action committees (PAC) who work on behalf of the company’s interest. Since 2010, under the *Citizens United* ruling by the Supreme Court, corporations and individuals can give unlimited amounts of campaign contributions. This proves to be problematic in more ways than one when you consider just how influential corporations and their executives are over the politics of this country.

In the 1988 elections, George H.W. Bush, Dan Quayle, Alan Cranston, and Doug Bosco benefited from the company’s financial campaign contributions. The Waste Management Inc. PAC, Employees Better Government Fund, was the seventh-largest corporate PAC in the 1988 elections, donating \$430,000 to the candidates (Lipsett 1991). In 1990, *The Multinational Monitor* reported that according to the Center for Responsive Politics (CRP), a non-profit, non-partisan search group that tracks the effects of money and lobbying on elections and public policy on a public online database, reported that the Employees Better Government Fund made

\$392,880 in political donations (ibid.). While four of the major corporations headquartered in Du Page County, Illinois, gave nearly \$1 million to federal political candidates and parties, most of the money:

Came from Waste Management and more than half of the total donated by the four firms [McDonald's Corp, Nalco Chemical Co, Spiegel Inc]... of Waste Management's total of nearly \$680,000, the firm gave about 63 percent of its donations to Democrats...gave some of its largest PAC contributions to incumbents in leadership positions: House Majority Leader Richard Gephardt received \$10,000; Rep. Dan Rostenkowski, chairman of the House Ways and Means Committee, received \$5,000, as did Sen. John Glenn, chairman of the Senate Governmental Affairs Committee. (Hazard 1992)

*The Multinational Monitor* observed that the company not only gave money to candidates and PACs but also sought to bring in former officials to serve in executive and management positions: "WMI has also made it a practice to hire former federal and state employees. WMI's vice president in charge of ethics, Joan Bernstein, was once a top EPA attorney. Other WMI employees include Angus McBeth, formerly of the Department of Justice, and Jeffrey Miller, formerly Director of Enforcement at EPA. Former Reagan Chief of Staff Howard Baker Jr. now sits on the company's board of directors" (ibid.).

The company also uses lobbyists to advocate on its behalf. In the Illinois campaign mentioned above, House Majority Leader Richard Gephardt was supported by WMI and eventually became a lobbyist for the company. In the 2012 election year, the Gephardt Group received \$160,000 from WMI (Center for Responsive Politics 2012; Lobbyists Representing Waste Management Inc). James E. Boland Jr. is another long-time lobbyist for WMI who has worked on behalf of some companies that were recently bailed out by the federal government. His biography reads:

James Boland has unique professional experience having addressed legal, regulatory, and legislative issues from leadership positions in each of the three branches of U.S. government, as well as from the private sector. A former Deputy Comptroller of the Currency, General Counsel to the U.S. Senate Banking committee, and Executive Director of the Federal Home Loan Bank Board, he has participated in the creation of legislation, U.S. Government policies, and regulations affecting domestic and international issues.... Boland advised some of the most recognized businesses in the United States, including Morgan Stanley, Waste Management Inc., The Limited, The Federal Home Loan Mortgage Corporation, and Merrill Lynch. (Sundquist Group)

Bracewell & Giuliani LLP is a law firm based in Houston specializing in energy, banking and financial institutions, environmental strategies, white collar criminal defense and special investigations, and private investment funds (Bracewell & Giuliani LLP. website). Rudolph Giuliani, the former New York mayor who sought to become a presidential candidate in the 2008 elections, joined the firm as a partner in 2005. The law firm has, at various points, had former

federal prosecutors, corporate lawyers, former EPA officials, former state governors and congressional leaders, as well as U.S. ambassadors working for them and their client interests.

Recently WMI spent over \$1.2 million to lobby the government, including the House and Senate during consideration of the EPA Regulatory Relief Act of 2011 (Center for Responsive Politics 2012d). The bill seeks to delay setting new regulations on air pollution emission standards for incinerators and boilers. Much to the benefit of WMI, the House passed the bill despite warnings by the EPA as to how severe the consequences will be (Zichal 2011):

- 20,000 additional premature deaths
- 12,000 additional heart attacks
- 123,000 additional asthma attacks that could have been avoided.

WMI has also used its lobbying power to influence legislation at the state level. Nearly twenty-four states have laws in place that help to reduce waste by banning the deposit of yard waste in municipal landfills and to use that waste for composting purposes. In 1990, the EPA estimated that “the United States recovered about 4 million tons of organic materials for composting; by 2008, that number had increased to 22 million tons” and the EPA called the “yard waste bans ‘essential’” (Mark 2012). WMI’s interest in yard waste is two-fold: first, they have to get states to change their laws pertaining to yard waste so that this waste goes into landfills and second, convert the waste into methane gas for energy generation which can be resold. The corporation, by way of campaign financing and political lobbying, has already helped to rewrite laws in Georgia and Florida (Mark 2012).

In 2008, WMI and Coca-Cola Recycling were named the official recycling providers for the Republican National Convention in Minneapolis. Corporate sponsorship of political party national conventions is an opportunity for companies like WMI to increase their street presence among hundreds of thousands of party supporters, congressional delegates, and former officials who get paid to meet with lobbyists during the conference. It is an opportunity for corporations to brand their support for the party, to receive name recognition, and for their lobbyists to mingle with officials who make decisions in Washington D.C.

In the 2010 election year, the waste management industry as a whole contributed \$4,448,860 (Center for Responsive Politics 2010). This industry, like any other industry, has an agenda when it gives money to politicians:

Like many energy-related industries, the waste management industry is trying to get on the green bandwagon, touting waste-to-fuel conversion technology as one way to reduce carbon dioxide emissions. In general, the industry is concerned with legislation related to emissions standards, the development of clean, renewable energy from landfill gas and increasing recycling efforts...the industry has traditionally favored Republicans with its cash, giving as much as 76 percent of its total contributions to the GOP. In 2008, the industry spent \$5.7 million on lobbying issues related to Superfund cleanups and energy and nuclear power... local refuse companies and firms dealing with hazardous and nuclear waste look to members of Congress for support when environmental and public health policy initiatives threaten to affect the waste storage and management business. (ibid.)

Of the contributors in the waste industry, WMI was the largest contributor, having donated \$570,000 (ibid.). As part of its PAC, Employees Better Government Fund, WMI gave \$471,166 in 2010, most of which went to Democrats (Center for Responsive Politics (2010b).

During the 2012 election year, the waste industry contributed \$2,536,000 (Center for Responsive Politics 2012b). WMI gave more money to Democrats in the Senate (\$9,500) than to Republican Senators (\$5,000) and more money to Republican members of the House (\$31,000) than to Democrats (\$10,000) (ibid.).

In the state of California, where the Kettleman Hills facility is located, politicians have benefited from contributions by WMI. The website *Follow the Money*, which documents information on money in state politics, reports that between 2003 and 2012, WMI, including its subsidiaries and employees, has given a total of \$5,359,635 (Follow the Money Noteworthy Contributor Summary), and California has been the largest recipient of WMI contributions among all states: The top three include California (\$1,002,345), Florida (\$490,000), and Pennsylvania (\$431,861) (ibid.). California also ranked high in WMI's contributions to candidates for governor across the country: Ed Rendell, Pennsylvania (2004-2006: \$67,000), Jerry Brown, California (2006-2010: \$57,100), and Arnold Schwarzenegger, California (2003-2006: \$43,500), followed by Rich Perry, Texas (2004-2010: \$35,000) (ibid.).

## **Chapter 11: Conclusion: Those Who Control the Future, Can Imagine It.**

In a 1980 *New York Times* article “They Divide and Subdivide, and Call it Anthropology” anthropologist Eric Wolf described the proliferation of subfields within the discipline:

Although American anthropology is still distinguished from other traditions by its ‘four-field approach,’ the practitioners of those fields [have] increasingly pulled apart, meeting, and publishing separately. Social-cultural anthropologists have also split into subdivisions, turning themselves into applied, cognitive, economic, ecological, legal, political, psychological, urban or even psycho-pharmacological anthropologists. (Wolf 1980)

Wolf noted “there are unvoiced concerns within the profession about what anthropology has become and where it is headed” (ibid.). These subfields, along with numerous others, have continued to develop over the past three decades and yet this proliferation has long-term consequences on who we study, where we study, and how we study our subjects. This dissertation is a response to Wolf’s growing concerns over the development and direction of American Anthropology—as the issue continues to stir debates. This research brings together various fields of anthropology all at the same time and in one research project so to highlight disciplinary diversity by drawing on the existing subfields of law, colonialism, corporatism, medical and public health, environment, and North America as a regional focus. This dissertation then reflects what Wolf hoped for—“anthropology’s eclecticism”—a disciplinary strength that does not hold onto rigid paradigms or assumptions (1980).

The three parts of this dissertation expand the scholarship on the anthropology of disaster and the study of corporations in the United States within a framework of environmental justice and the controlling processes underlying the dominant paradigms. This original research not only contributes to the literature on environmental justice movements in America but also provides the first critical documentation, connecting the dots over a short period of human existence, of the socio-historical changes in the Kettleman City region. I have specifically analyzed this research through a wide-angle view in the tradition of holistic analysis in anthropology to conclude that this study serves as a cautionary tale for the rest of the world to learn from.

The first part of this research examined the incremental degradation and devastation to the environment and to the subsequent health of the region’s residents since the mid-nineteenth century. The displacement and extermination of Native Americans and the Tulare Lake Basin, the killing and contamination of migratory birds in the Kesterson Wildlife Refuge, and the corruption and power of the agricultural industry were precursors to Kettleman City becoming the host of the largest toxic waste dump west of the Mississippi and the dismal response of government regulators and corporate officials.

The dangers presented this facility, like others throughout the country, and the infant deaths and birth defects in Kettleman City, speak volumes to a perilously high tolerance for destruction in the United States. This mind-set, rooted in the notion of progress, has normalized the corporate-produced disasters of our time. In their quest to convert the California valley into an agricultural and industrial powerhouse, humans have systematically damaged and contaminated the natural ecosystem. The examination of what has occurred in Kettleman City underscores the consequences of an industrial civilization with such complete disregard for the

environment that it spews environmental disinformation, violates policies at record-breaking rates, and threatens the ecosystem and human health in order to generate increasing corporate profits. The case of Kettleman City and the WMI empire exemplify the production of routine corporate negligence and devastation in American society.

In the second part of this study I examined how these environmental injustices are produced and maintained in an industrial corporate society. The study documents how the waste industry, and particularly WMI, grew into a powerful institution by the 1980s and 1990s that monopolized the entire American waste industry. I scrutinized the normalization of “errors” or “accidents” at landfill sites by this waste service corporation and I proposed a few key questions: Why does this happen and why does it go relatively unnoticed? Who controls information about the landfills and violations? Owing to poor regulatory enforcement by government agencies, these accidents, spills, and site contaminations have become an ordinary and acceptable practice. Violations and fines issued by regulators and out-of-court settlements made by the companies have become an all too standard protocol in matters pertaining to waste in this country.

I begin the last part of this study by tracing the socio-historical, political, and economic processes that have created a culture of waste. In the nineteenth-century Americans had a heightened awareness of the things they used and purchased. They valued thrift, and because recycling was common, people produced little waste. By the twentieth century, the Industrial Revolution led to the rise of corporations that used advertising to promote hyper-consumption. Increased consumption inevitably led to increased waste. This fundamental lifestyle change created a demand and dependence on waste hauling services, setting the stage for the waste industry to evolve into a powerful social institution. I then documented WMI’s history and examined how the company has successfully manufactured a culture that facilitates a misleading impression to the general public about who it is and what it does. Its success lies in the fact that its power comes from influencing peoples’ perceptions of waste and waste services—so much so that people have been brainwashed to believe that garbage is an alternative source of energy without ever questioning the amount of trash each person produces. WMI continues to promote its dominance as an empire over the rest of the waste industry by influencing political, economic, and cultural spheres of American society. And over the years its culture of waste has helped to sustain the status quo.

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In 1938, President Franklin Roosevelt warned:

The liberty of a democracy is not safe if the people tolerate the growth of private power to a point where it becomes stronger than their democratic state itself. That, in its essence, is fascism—ownership of government by an individual, by a group or by any controlling power.

As this research has shown, the way in which people live is heavily influenced by corporate capitalism that functions, not in the interests of the planet or the people, but rather with its own self-interest in mind. These corporations are the primary beneficiaries in an industrial capitalist

society that employs an ideology of progress and encourages people to accept the control of corporations over their lives. It is crucial that every American understand the predicament we find ourselves in today. Our society has been captured by the interests of corporate cronyism that corrupts our political process and jeopardizes our environment and well-being.

During the last days of his presidency, George W. Bush passed an eleventh-hour ruling, approved by the EPA in December 2008 and implemented in January 2009, exempting 1.5 million tons of hazardous waste from adhering to the 1976 Resource Conservation and Recovery Act (RCRA). Despite protests from environmental organizations and the general public, the Definitions of Solid Waste and the Emissions Comparable Fuels (ECF) ruling excused thousands of companies from complying with a law that protected human health and the environment (Earthjustice Press Release).

In March 2009, under the new Barack Obama administration, the Sierra Club and various other organizations filed a federal lawsuit challenging the Bush-approved rulings. They argued that the rulings encouraged poor management of toxic waste while stripping away protections for communities and the ecosystem. They also argued that the ECF sought to re-classify over 100,000 tons of hazardous waste as fuel to make it sound less threatening and to permit the burning of these toxins in unregulated industrial boilers (Sierra Club 2009). While the ruling sought to remove regulatory costs by re-classifying the toxins as fuels, it did little to combat the release of toxic emissions into the air. Earthjustice, an Oakland-based environmental justice group, cautioned: “Chemical and industrial waste that has been considered hazardous for decades is suddenly innocuous enough to be stored, transported, or processed without RCRA’s vital safeguards. The industrial wastes that will slip through contain some of the most dangerous chemicals known to man” (ibid.).

The ruling became law under the Obama administration, but it was not until June 2010 that the EPA withdrew the ECF rule (US EPA 6/8/10). The impact of the law is still undetermined, yet it does reveal how the inner workings of American politics and corporate interests remain one and the same. The rights and protections legally given to humans and the environment are jeopardized by the radical agendas and the growing influence of political action committees (PACs) funded by corporations that lobby for eased restrictions on their businesses.

In 2009, the Obama-appointed EPA administrator, Lisa Jackson, promised to examine the effects of hazardous waste recycling plants on minorities and low-income communities throughout the country. The federal decision was hailed by some environmental organizations as a move in the right direction to ensure environmental equality for all people. This decision under the Obama administration was described as a victory that had began under the Clinton-era, but was rolled back under the Bush administration. But the Obama administration’s commitment to ensure human and environmental justice was short lived. In 2011, the EPA issued permits to “build a \$530 million plant that would generate enough electricity to power 450,000 homes” (Yamashita 5/28/11). The 600-megawatt Avenal Power Center, just north of Kettleman City, is being developed, built, and managed by Macquarie Energy LLC, a subsidiary of Houston-based Macquarie Group Limited. EPA’s contentious decision exempted the facility from adhering to new air pollution rules that limit emissions of “sulfur dioxide, nitrogen oxides and greenhouse gases” (Nelson 2011). Paul Cort, a staff attorney for Earthjustice, said: “I think it’s a horrible decision. This is one of the worst places in the country to put a new major power plant. They may claim its state of the art, but this is not a community that needs additional pollution” (Yamashita 5/28/11).

In addition, the EPA also disregarded existing large-scale environmental and health concerns throughout California's Central Valley. The American Lung Association's 2011 report on air quality in the United States from 2007 to 2009 established that "of eight cities that were in violation of national pollution standards, four were from the Valley—Hanford, Visalia, Fresno, and Bakersfield [and] Hanford ranked in the top ten [cities] worst in ozone, short-term particle pollution and long-term particle pollution" (Nidever 4/28/11). A November 2011 report by University of California Davis researchers detailed dangerously high levels of pollution in the valley and encouraged government regulators to prioritize solutions for the region. In their report *Land of Risk, Land of Opportunity* researchers concluded that more than 1.2 million people in the San Joaquin are at high risk of premature death and disease due to bad air, dirty water, and poverty (London et al. 2011). The study highlighted the Kettleman City toxic waste facility as California's largest polluter and as an area most at risk: "In 2009, 1,286 California facilities emitted 38 million pounds of toxic chemicals and nearly 40 percent of them came from Chemical Waste Management's toxic waste disposal site" (Walters 2010).

As long as government regulators surrender to corporate interest, ordinary people will continue suffering from the decisions made at the top and the communities that are most impacted by these decisions will continue to pay the price as corporations cut corners whenever and wherever possible, increasing pollution as they increase their profits. This pattern will continue and nothing will ever change.

### ***A Fork in the Road***

I began this research in 2009 with a basic question after reading the local paper: Why are babies dying in Kettleman City? Over the course of nearly four years, I began to piece together the significance of what is happening in this small town in the Central Valley as it relates to larger processes taking shape throughout the country and the rest of the world. The current crisis in Kettleman City exposes the magnitude of the consequences of an industrial society governed by corporate capitalism on humans and the environment. An examination of the history of this region dating back to the nineteenth century to the present day beginning with the brutal assault on the lives of Native Americans and the coerced transformation onto the natural ecosystem should compel us to ask ourselves if this should continue to be the price our society pays in order to achieve the world's loftiest economic and commercial goals? After all, there is nothing normal about the conditions in and around Kettleman City. It is an out-of-control catastrophe that is real, lived, and extremely dangerous—and it is already turning up in backyards throughout the world. In fact, many of the issues that plague the town are problems that other communities are beginning to experience—from natural gas extraction to corporate deviance, neglect, and unaccountability to government regulatory failure and investigations into health discrepancies that fall short of producing answers.

So how we live our lives and why we enable corporations to control so many facets of our lives is the predicament we find ourselves in today. What is at stake is the future of America and the environmental legacy that will be passed down to future generations. Ignoring these growing concerns, as some government regulators and corporate executives continue to do, only intensifies the dire consequences that are certain to be felt for years to come. The dangers related

to the contamination of water, air, and soil are real, and they are not simply a threat to our environment and our health, but an infringement on our values and our democracy. WMI conveniently endorses a green economy that is efficient, less polluting, and less energy intensive. But in the process of promoting sustainability, WMI furthers its long and marred history with a corporate agenda bent on a continued expansion of its empire. Doing so inevitably requires more consumption and more waste—its power is fundamentally rooted in exploiting people and environmental resources. And we continue to accept the use of landfills in our society because of ideological convictions supported by science, technology, and government oversight that considers accidents, spills, and site contaminations as routine events because of how it treats them, as natural, inevitable, or necessary by-products of a corporate capitalistic society.

But who is thinking about the massive accumulation of waste that does not deteriorate? Who is thinking about the long-term consequences of excessive consumption and the continued use of landfills? The flat-earth people, described by Laura Nader as “Western peoples...[who] thought of the world as flat and thought they could just bulldoze the garbage over the edge” have yet to learn in the twenty-first century from the fact that “there are no more empty spaces and toxic waste dumps are in everybody’s backyard” (Nader 1991, p. 10). Do the flat-earth people today not witness the culture of wastefulness that is rampant not only in America but throughout the world?

And if most of the waste that is hauled away each day across America ends up in landfills, what does this say about us? For WMI, they are in the business of making a profit. But our complicity is the crux of the problem. We are responsible for the hyper-consumption, for the creation of the waste in the first place, and for the demand we have for waste services. If WMI threatens our livelihood, our environment, and quite possibly our existence as a species, it is only because we have allowed WMI to do so. We maintain that we are intelligent and technologically superior species driven by notions of progress. Yet devoid of corporate social responsibility and ethical consumption, corporations like WMI remain in business with little opposition from the masses. If we are to blame WMI, we must certainly take a look in the mirror too.

As the waste crisis intensifies, as landfills reach capacity and/or leak and contaminate local areas, and as corporations continue to influence how we think and live, humans living in the twenty-first century must question what their lives might look like in the twenty-second century. What if people began to think about the waste they produced on a daily basis? If people began to imagine a world without waste, what would it look like? What if landfills were no longer used and putting waste into the ground or burning it was not an option? What would a world look like if corporate capitalism ceased to exist, and the rule of law could not be easily influenced by lobbyists and political action committees? How might we change if we understood today in relationship to the past and the future? The ways in which humans live today around the world requires a fundamental paradigm shift in how we see ourselves in relationship to the world we live in<sup>4</sup>. This paradigm shift begins with imagining a world free of

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<sup>4</sup> Consider the example set up in the Netherlands where groups of people are putting their ideas into action. The Repair Cafes are where “people can bring in whatever they want to have repaired, at no cost, by volunteers who just like to fix things” (McGrane 2012). The idea was “conceived of as a way to help people reduce waste, the Repair Café concept has taken off since its debut two and a half years ago. The Repair Café Foundation has raised about \$525,000 through a grant from the Dutch government, support from foundations and small donations, all of which pay for staffing, marketing and even a Repair Café bus” (ibid.). Martine Postma, a former journalist, came up with the concept after becoming a parent and thinking more about the environment: “In Europe, we throw out so many things. It’s a shame, because the things we throw away are usually not that broken. There are more and more people

corporate influence, free of hyper-consumption, and free from the use of landfills. People must re-examine their values and begin the process of de-programming, to undo the way they think and behave so that we may imagine real, sustainable alternatives. If we hope to control the future, we must first imagine it.

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in the world, and we can't keep handling things the way we do" (ibid.). The Cafes raise awareness about the cost and value of things, as well as the production of waste while promoting an "anti-consumerist, anti-market, do-it-ourselves ethos" (ibid.). What's more is that the Cafes draw together the elderly populations who have skills that enable them to work with their hands, unlike the rest of society who depend on convenient, disposable goods. The Repair Cafes are a novel idea that seeks to improve everyday life in the Netherlands through grassroots social activism. This example serves as one alternative to how people might think and behave differently about what they deem as trash. What if such a program were implemented in America? It would signal a revival of nineteenth century American values that Strasser examined wherein people had agency over the goods produced and people became conscious of its value that they would be sure to use it and reuse it until they could no longer do so.

## Postscript

Since I left the field, the developments in the area of Kettleman City still do not look promising for people who live in the town, for Californians who expect their politicians and government agencies to keep their best interests at heart, and for the rest of the country who must recognize that the current dilemma in this town is not an isolated incident that will come to pass.

There is an oil surge gaining speed in Kettleman City, reminiscent of the 1930s oil and natural gas boom in the Kettleman Hills. In 2009, Zodiac Exploration, Inc., a Canadian company, began to explore the region after “larger oil companies [had] earlier abandoned the area and focused their attention on finding big oil fields overseas, leaving southwestern Kings County largely untouched” (Nidever 8/13/11). Randy Neely, the chief financial officer for Zodiac, explains: “We’re certainly the first ones to get back into that area in a long time...If we are successful, I think it would be terrific for the county, because, of course, they get to collect property taxes from us” (ibid.). What is different from the times that produced the town of Kettleman City is that this natural gas is located not in the hills but on flat farmland east of Kettleman City. Zodiac has begun operating two wells and expects that in a matter of time other wells will come on line as they receive the necessary permits from the county and state regulators; it has also acquired rights to 85,000 acres of land in Kings County, anticipating a resurgence of the area’s earlier period by “tapping into promising rock formations that require new technology to get the oil out” (ibid.). This new technology employs the controversial technique known as hydraulic fracturing or fracking to break previously inaccessible resources free of deep shale beds underneath the farmland:

It’s not easy drilling. The oil in the area isn’t sitting in gigantic pools as it does in the legendary oil fields in Saudi Arabia, for instance. The Kings County oil is stuck in denser rock that makes it harder to extract. The door has been opened for Zodiac partly because of new drilling technologies. One of them is horizontal drilling, which could allow Zodiac to save a lot of money by drilling one deep vertical well and then fanning out several horizontal branches from that, instead of drilling dozens of expensive, vertical wells. Another newer technology called fracturing may also prove to be critical. The process involves injecting pressurized water and chemicals underground to break up rock and allow trapped oil to escape to the surface. It’s opened up exploration into many areas that can’t be accessed by traditional drilling techniques... Zodiac is drilling [in the flat farmland east of Kettleman City] in the very deep 13,000-to-15,000 foot range in search of new rock strata. (ibid.)

Fracking, despite having been around for some time, poses a significant threat to the environment and human health. It is a process by which water, sand, and chemicals are injected deep into the ground to crack the shale rock and unleash natural gas. The water eventually resurfaces to the top and is then disposed of. The major concern about the use of this technique is its potential contamination of drinking water sources. In 2005, industry lobbyists swayed the Bush administration, citing Confidential Business Information so as to exempt companies from abiding by the Safe Drinking Water Act, which would otherwise have forced them to disclose the

chemicals and toxic materials they use in the process of fracking. Environmental activists have long warned against the fracking technique, and a study by the EPA in 2011 found groundwater in an aquifer around Pavillion, Wyoming, that contained compounds likely associated with fracking as well as high methane levels and benzene concentrations well above the Safe Drinking Water Act standards. Like the faulty landfills that were discovered throughout America in the 1980s, many of the wells that are used by the fracking industry reveal cracks that will potentially contaminate groundwater. In the face of mounting evidence against potential contamination, President Obama expressed his support for the drilling of natural gas in America in his 2012 State of the Union address:

We have a supply of natural gas that can last America nearly 100 years. (Applause) And my administration will take every possible action to safely develop this energy. Experts believe this will support more than 600,000 jobs by the end of the decade. And I'm requiring all companies that drill for gas on public lands to disclose the chemicals they use. (Applause) Because America will develop this resource without putting the health and safety of our citizens at risk. The development of natural gas will create jobs and power trucks and factories that are cleaner and cheaper, proving that we don't have to choose between our environment and our economy. (Applause) And by the way, it was public research dollars, over the course of 30 years, that helped develop the technologies to extract all this natural gas out of shale rock — reminding us that government support is critical in helping businesses get new energy ideas off the ground. (Applause)." (The White House 1/25/12)

As of December 2011, the Kettleman City natural gas project, dubbed the "Jaguar Oilfield Development," has been awaiting approval of conditional use permits to build a natural gas and crude oil processing plant—despite having already having begun drilling. Upon receiving approval for their project:

The plans call for connecting the central processing facility with the nearby Chevron tank farm as well as the existing Pacific Gas and Electric (PG&E) natural gas pipeline. The 21.5 acre project is proposed on a parcel east of 25<sup>th</sup> Avenue, an area across the street from the future FedEx transfer facility. If approved, the Zodiac project will be built in four phases. During the six-month well-testing phase, the company would drill several wells to determine the quantity and quality of oil and gas available. The company would spend the following 30 months working on pilot production while designing and building permanent facility. The company anticipates producing 5,000 barrels a day of crude oil and 5 million standard cubic feet a day of natural gas at first before expanding its capacity to 15,000 barrels per day of oil and 15 million standard cubic feet a day of gas. (Yamashita 12/6/11)

This plan poses significant problems, including the use of fracking, introducing a host of disasters, many of which will not be known for years. The water source in town is already

polluted with higher than permitted levels of benzene and arsenic, yet Zodiac's plans to use existing PG&E pipelines introduces possible other problems. In the wake of the September 9, 2010 San Bruno PG&E pipeline blast in the Bay Area, an investigation of the company's records on how and why the explosion occurred revealed PG&E's inconsistent record keeping. The company had "declared two high-pressure gas transmission pipes safe last year despite paper-trail gaps that left the utility ignorant of whether portions of the lines were running above legally allowed pressure levels" (Van Derbeken 2011):

For the pipe running from Kettleman City to Morro Bay [San Luis Obispo County near the Pacific coast], PG&E also listed safe pressure levels as "not determined" for seven portions where the company was missing records, according to inspection data reviews conducted in 2007 and 2010. When PG&E assumed the weakest grade of pipe for those seven segments, the resulting calculations showed some sections near Interstate 5 in Kettleman City were running at excessive pressure levels, as much as 40 percent above the maximum allowed under federal law. (ibid.)

In October 2012, Zodiac signed an agreement with Aera Energy LLC to drill four more exploratory oil wells. In return Aera will receive a 50 percent stake in the potential oil production on the 19,600 acres of leased land (Nidever 10/31/12). John Lehn, Kings County Economic Development Corp. CEO, has been quoted as saying he "doesn't think there's solid science proving that fracking harms the environment" and that "continued fossil fuel development is necessary to balance the use of renewable sources such as solar and wind power" (ibid.).

Numerous infrastructure developments are quickly breaking ground in Kettleman City. As county officials push to boost economic development in "the junction" (the Interstate 5 corridor), the Kettleman City Chamber of Commerce was established to help businesses and property owners build the area (Yamashita 5/27/10). The sudden interest in the junction seems to have come about as county officials seek lucrative opportunities that will bring with it revenue and tax incentives. The Chamber was apparently established "to help address community welfare and to spur economic growth, officials are stepping up their effort to secure money needed to build a water treatment facility in Kettleman City, a \$10 million project that could free the community of an existing moratorium on new commercial development" (Yamashita 5/12/10). Chamber president Bob Lewis, a longtime Kettleman City farmer and businessman, says "it's an area that, I think, has been overlooked to the great potential that is has. Now all the people are being encouraged. They feel life is coming back into this great intersection of I-5 and highway 41, the gateway to the Sierra and to the coast" (Yamashita 5/27/10). In order to lure drivers off the road and into the town, large electronic signs will be erected to promote Kettleman City businesses and Kings County events. In January 2012, a Kettleman City welcome center broke ground "to develop the area to be a destination, not a stop" (Nidever 1/5/12). The center, to be called "Bravo Farms, is 32,252 square feet of planned space that will include a gift shop, wine-tasting room, ice cream parlor, deli, fruit stand and playground area. The 6.64 acre site east of highway 41 is modeled after Bravo Farms in Traver [Bravo Farms is a South Valley cheese-maker]" (ibid.). In July 2012, Kettleman City opened up a Denny's restaurant that will be open 24 hours a day, 365 days a year (Hanford Sentinel 7/26/12).

While these plans will surely transform the junction, the desire to attract people and businesses to Kettleman City gives the impression that the situation there is fine, in spite of a health and environmental crisis. In May 2012, residents revealed their findings from a second grassroots survey which recognized new health issues emerging in the small town. Resident and activist Maricela Mares-Alatorre announced that “a 17-month old boy has leukemia, a 6-year old has a brain tumor, and two teenagers have had tumors removed. Three residents—all between the ages of 40 and 50—have died of cancer in the past six months” (Plevin 5/8/12). One month later, state investigators released an updated report to their initial state investigation report from February 2010 that suggests a reversal in the number of birth defects cases: “The rates of birth defects in Kettleman City in 2010 and 2011 appear to be returning to the rates seen prior to 2008; CDPH has reviewed the Birth Defects Registry data collected from Kettleman City and has not found a common cause for the birth defects; CDPH will continue to monitor birth defects in Kettleman City and Kings County” (CDPH 2012b). While government regulators acknowledge an increase in the rate of birth defects in the town between 2008 and 2009, the report concludes that the rates have reduced. The problem with the report is that “data for births in 2010 and 2011 are preliminary” and yet health regulators still issues a report that drew on comparisons with inconclusive data (ibid.). One resident explained: “I know the birth defects problem has not stopped. A baby born in June 2011 had facial deformities, as well as missing fingers and limbs. You’re not living in Kettleman City. You’re never going to find an answer that suits us” (Grossi 6/19/12). The information from the CDPH came at about the same time it was announced that federal money would be awarded for the opening of a health clinic in Kettleman City (A clinic already exists in town, but its hours of operation and the services it provides are limited). Money made available by “grants through the Affordable Care Act” would help to keep the clinic open 40 hours a week and “offer some pharmacy services and the staff will be able to link patients to dentists, optometrists, and other specialists” (B. Anderson 6/22/12).

A few weeks later, the CDPH “committed over \$8 million in funding to provide safe drinking water for the Kettleman City Community Services District...the community has decided to pursue a surface water option, with a surface water supply from the California Aqueduct and required surface water treatment” (CDPH 7/6/12). Although regulators believe “the contaminated water is not connected to the rash of birth defects” it will take up to three years (by 2015) before clean water is brought into the community because it must meet a set of conditions including “demonstrating sufficiently high water bill rates for operations and maintenance of the treatment facility, showing a sufficient reserve fund and state approval of the technical elements” (Nidever 7/11/12). The irony of this move by CDPH is that back in January 2011, when the county asked for clean water for Kettleman City using the water from aqueduct, the CDPH was then reluctant to give money:

The state Department of Public Health is telling them [the county] that they’ll have to abandon those plans and drill a new well if they want a \$3 million grant. State officials say they’re required by law to send its grant money to the cheapest possible project, which they insist is a new well that will likely require treatments for arsenic and benzene and probably color, taste, and odor as well. Water drawn from the aqueduct would require treatment too, but it would be for things like bird dung and trash, not arsenic and benzene. (Nidever 1/14/11)

Did the laws change or did the interests of the state change in just a year and a half? Despite awarding the money, the town had to ensure that it could pay for the cost of maintaining the water system for years to come. How would they do this and how could they generate funds for this necessary project?

In August 2012, the Chem Waste facility announced that it was reaching capacity and had “only about 30,000 to 40,000 cubic yards of room left in the landfill—less than 1% of the permitted capacity” (Grossi 8/4/12). It claimed that “truckloads of hazardous waste have been reduced by more than 90%--diverted to other landfills in California, Arizona, Nevada, and Utah...The company has laid off more than half of the 90-plus workers at the landfill. Before 2008, Kings County was annually getting more than \$2 million in fees from hazardous waste deliveries. The money stream has almost disappeared” (ibid.). But just as this announcement is made by facility operators, the issue of clean water in Kettleman City becomes a Catch-22 for the residents:

After more than two decades, Kettleman City residents finally are seeing a huge reduction in truckloads of toxic waste passing through town on highway 41. Strangely, that could be a bad thing. Community activists are cheering the slowdown... but if the flow of toxic truckloads doesn't pick up, Kettleman City might lose an \$8 million chance to get health drinking water for its 1,500 residents... Waste Management's landfill is nearing capacity, and the company needs local support to expand. To get Kings County support, the company agreed to pay off Kettleman City's water system debt of \$552,000, which would help the town afford a new, badly needed water-treatment plant. But the company says it can only afford to pay if it gets the expansion go-ahead... Activists suspect the deal with Waste Management is part of a larger, money-making scheme to bring more businesses to the strip of fast-food and other travel businesses next to the nearby Interstate 5... Customers already cover a \$25,000 monthly payment on the water system's debt, which accumulated over many years from repairs, renovations and maintenance. Waste Management's payoff would wipe out that payment and put the Kettleman City Community Services District in position to cover costs of running a new plant. (Grossi 8/10/12)

Days later, the Kings County Board of Supervisors unanimously approved the plan. They “came up with the new plan because the state has eliminated the Kings County Redevelopment Agency, which had a \$3 million county loan to pay for the water treatment facility. County officials are hoping to get the \$3 million back and use it for the other pressing issues, including the needed expansion of the jail” (Nidever 8/15/12).

After years of protest and bringing to light the tragedy around the issues of birth defects and deaths, Kettleman City residents woke up on August 17, 2012, and read in their local paper that Chem Waste will likely receive the permits to expand their site. A spokesperson said, “our Kettleman Hills facility has been subjected to the most extensive monitoring evaluations, health risk assessments and regulatory inspections of any treatment and waste disposal facility in the country... it's important to be allowed to get back to normal business operations so that we can be in a better position to contribute to the Kettleman City community” (Nidever 8/17/12).

In September 2012, the EPA fined the facility \$9,375 for failing to analyze leachate for PCBs before their disposal at the Kettleman Hills Facility. In November they were cited by the Department of Toxic Substances Control for 72 instances of failing to report toxic materials spills (Nidever 11/16/12). WMI was fined \$46,000 in 2011 for similar spills. More recently in March 2013, the Kettleman Hills facility was fined \$311,194 for failing to report dozens of spills over the last four years (Griswold 3/27/13).

According to a filing with the U.S. Securities and Exchange Commission, as of December 31, 2012, WMI is a potentially responsible party in connection with 80 locations listed on the EPA's National Priorities List (Waste Management World 4/16/13a). The corporation is also responsible for environmental remediation liabilities worth over \$253 million down from \$273 million the previous year (ibid., 4/16/13b). This includes \$1.38 billion in liabilities related to its landfills (ibid.).

In spite of its performance record in Kettleman City, everyday that goes by, Waste Management Inc. continues to expand its empire into far and vast arenas. The corporation's total 2011 revenue was \$13.4 billion, and despite their sustainability claims as an environmental solutions provider, more than 80 percent of the trash they collect every year ends up in landfills. All empires that rise are bound to fall at some point in time. In early 2013, WMI purchased one of the largest recycling companies in the United States, the Greenstar LLC. The company manages "about 1.5 million tons of recycled material for more than 12,000 customers through 12 material recovery facilities, including seven single-stream plants and a brokerage business for recovered material" (Gerlat 2/12/13). In 2011, WMI paid \$425 million to acquire Oakleaf Global Holdings of Windsor, Connecticut, the nation's largest waste broker:

Through about 800 national accounts, [Oakleaf] provides waste and recycling services to about 115,000 locations around the country. The company, with few hard assets of its own, contracts for those services and then hires third-party haulers to provide the actual work in local markets... controlling the brokerage business allows Waste Management to better compete for national accounts... and because the disposal portion of the business has higher margins than collection, the ability to profit from this type of relationship is magnified. (J. Johnson 8/10/11)

The function of a broker is to act as a middle person, in this case, between the waste hauler and the customer. Oakleaf is supposed to be independent and working in the best interests of its customers. But because WMI is not independent and, as part of the deal, will likely give preference to its own operations and landfills over cheaper alternatives, Oakleaf's paying customers will likely lose. Moreover, as a result of the deal, a new national broker will emerge in the waste industry and take much of the business away. WMI owns the most landfills and remains the single largest waste services corporation in the world. This deal only increases its domain.

## Bibliography

Agyeman, Julian. (2005) *Sustainable Communities and the Challenge of Environmental Justice*. New York: NYU Press.

Alatorre, Maricela Mares. (2007) "Guest Commentary: EPA Missed Point on Toxic Dump." *Hanford Sentinel*, March 17.

\_\_\_\_\_. (2008) "Local Guest Commentary: Kettleman City Deal is Unacceptable." *Hanford Sentinel*, November 14.

Allen, Barbara L. (2003) *Uneasy Alchemy: Citizens and Experts in Louisiana's Chemical Corridor Disputes*. Cambridge, Mass.: MIT Press.

Association for the Advancement of Sustainability in Higher Education. <http://www.aashe.org>

Anderson, Barbara. (2010) "Landfill Mishandled Toxins." *Fresno Bee*, April 9.

\_\_\_\_\_. (2010) "Kettleman City Landfill Fined Over Handling of PCBs." *Fresno Bee*. November 30.

\_\_\_\_\_. (2012) "Federal Money to Help Open Clinic in Kettleman City." *Fresno Bee*, June 22.

Anderson, James, N. (1973) "Ecological Anthropology and Anthropological Ecology." In *Handbook of Social and Cultural Anthropology*, edited by John J. Honigmann. 477-97. Chicago, IL: Rand McNally & Co:

Andrews, Richard N., and Frances M. Lynn. (1998 [1989]) "Siting of Hazardous Waste Facilities." In *Standard Handbook of Hazardous Waste Treatment and Disposal*. edited by Harry M. Freeman. McGraw-Hill.

Angel, Bradley. (2008) "Say No to Toxic Waste." *Hanford Sentinel*, November 17.

Ann, Carrie. (2011) "Waste Management Inc." *Industry Leaders Magazine*, June 29.

Arroues, Kerry. (2011) Personal Communication. USDA Natural Resources Conservation Service, Supervisory Soil Scientist.

Aronson, Hal. (1997) "Constructing Racism into Resources: A Portrait and Analysis of the Environmental Justice Movement." PhD Dissertation, University of California Santa Cruz.

Assembly Office of Research. (1986) *Today's Toxic Dump Sites: Tomorrow's Toxic Cleanup Sites*. Sacramento, Calif: Joint Publications Office.

Associated Press (1985) "Illegal Water Subsidies Alleged Farmers Got \$1.5 Billion in Unauthorized Payments, Group says." *San Jose Mercury News*, August 22.

Associated Press Knight-Ridder News Service. (1985) "U.S. May Aid Farmers near Polluted California Refuge." *The Seattle Times*, March 18.

Auyero, Javier., and Debora Alejandra Swistun. (2009) *Flammable: Environmental Suffering in an Argentine Shantytown*. New York: Oxford University Press.

Barnett, Harold. (1994) *Toxic Debts and the Superfund Dilemma*. Chapel Hill, NC: University of North Carolina Press.

Beck, Eckardt. (1979) "The Love Canal Tragedy." *Environmental Protection Agency (EPA) Journal*. January. Accessed November 15, 2010. <http://www.epa.gov/aboutepa/history/topics/lovecanal/01.html>.

Beebe, Jas. W. (August-October 1932) "Kettleman Hills and Dudley Ridge Gas Area: A Story of Their Development from the Year 1900 to September 1932." *Hanford Journal*.

Belliveau, Michael., and Michael Kent, Grant Rosenblum. (1989) "Richmond at Risk: Community Demographics and Toxic Hazards from Industrial Polluters." San Francisco: Citizens for a Better Environment.

Benson, Mitchel. (1985) "Dumps Reportedly Leak Waste Toxic Liquids Drain from 8 Sites in State, Environmental Group Says." *San Jose Mercury News*, June 6.

Bentley, Martha. (1994) "Our Phantom Lake: A Sportsman's Delight." *Kings County Historical Review*. Accessed September 22, 2010. <http://kingsnet.kings.k12.ca.us/kcoe/curric/history/places/tularelake/lake2.html>

Berestein, Leslie. (2010) "Toxin Probe Eyes Link to Tijuana." *Union Tribute*, February 2.

Block, Alan A., and Frank R. Scarpitti. (1985) *Poisoning for Profit: The Mafia and Toxic Waste in America*. New York: William Morrow.

Blue Ridge Environmental Defense. Accessed December 4, 2011 [http://www.bredl.org/pdf/WMI\\_trackrecord2002.PDF](http://www.bredl.org/pdf/WMI_trackrecord2002.PDF).

Blum, Deborah. (1984) "San Joaquin's Farming Crisis Waste Water with Nowhere to Go; A Toxic Time Bomb." *Sacramento Bee*, November 25.

Bracewell & Giuliani LLP. (2012) Accessed August 22, 2012. <http://www.bracewellgiuliani.com>

Brechin, Gray. (2006) *Imperial San Francisco: Urban Power, Earthly Ruin*. Berkeley and Los Angeles: University of California Press.

- Bronson, William. (1968) *How to Kill a Golden State*. Garden City, NY: Doubleday.
- Brochure: *Little Kingdom of Kings: Kings County California*. (Approximately 1930s/1940s). Library of the California Historical Society. San Francisco.
- Brochure Avenal: *The Story of an Oil Town*. Library of the California Historical Society. San Francisco.
- Brown, Charlotte., and Mark Milke and Erica Seville. (2011) "Disaster Waste Management: A Review Article." *Waste Management*. 31: 1085-98.
- Brown, James. (1940) "The Story of Tulare Lake." In *History of Kings Country* by Robert R. Brown and J.E. Richmond. Hanford, California: A.H. Cawston.
- Brown, K.W., and David C. Anderson, James C. Thomas. (1998 [1989]) "Aboveground Disposal." In *Standard Handbook of Hazardous Waste Treatment and Disposal* edited by Harry M. Freeman. McGraw-Hill.
- Brown, Phil., and Edwin J. Mikkelsen. (1997 [1990]) *No Safe Place: Toxic Waste, Leukemia, and Community Action*. Berkeley and Los Angeles: University of California Press.
- Brown, Robert R., and J.E. Richmond. (1940) *History of Kings County*. Hanford, California: A.H. Cawston.
- Bryant, Pat. (1993). "Testimony of Pat Bryant, House Subcommittee on Civil and Constitutional Rights." *Hearing on Environmental Justice*; 9-10.
- Bryant, Bunyan., and Paul Mohai. (1992) *Race and the Incidence of Environmental Hazards*. Boulder, Colo: Westview Press.
- Buckner, Frank. (1932) "Kettleman Field Doubles Kings County Wealth." *Hanford Journal*, August-October 1932.
- Bullard, Robert. (1983) "Solid Waste Sites and the Black Houston Community." *Sociological Inquiry*, 53(2-3): 273-88.
- \_\_\_\_\_. (1990) *Dumping in Dixie: Race, Class, and Environmental Quality*. Boulder, Colo: Westview Press.
- \_\_\_\_\_. (1990b) "Ecological Inequities and the New South: Black Communities Under Siege." *Journal of Ethnic Studies* 17(4): 101-15.
- \_\_\_\_\_. (ed.) (1993) *Confronting Environmental Racism: Voices from the Grassroots*. Boston: South End Press.

\_\_\_\_\_. (ed.) (1994) *Unequal Protection: Environmental Justice and Communities of Color*. San Francisco: Sierra Club Books.

\_\_\_\_\_. (2005) *The Quest for Environmental Justice: Human Rights and the Politics of Pollution*. San Francisco: Sierra Club Books.

Burke, Garance. (2011) "EPA: Kettleman Dump Study Shows Chemicals at Safe Level." *Hanford Sentinel*, January 14.

Burnett, Peter H. (1851) Governor's Annual Message to the Legislature, January 7, 1851. *Journals of the Senate and Assembly of the State of California, at the Second Session of the Legislature, 1851-1852*. San Francisco: G.K. Fitch & Co., and V.E. Geiger & Co., State Printers, 1852), 15.

Bustillo, Miguel. (2003) "22 Landfills Test High For Radiation." *Los Angeles Times*, March 6.

California Department of Corrections and Rehabilitation. Avenal State Prison. Accessed on March 6, 2012. [http://www.cdcr.ca.gov/Facilities\\_Locator/ASP-Institution\\_Stats.html](http://www.cdcr.ca.gov/Facilities_Locator/ASP-Institution_Stats.html)

California Department of Health Services (1982). "Preventing a Toxic Tomorrow: California's Program to Treat Toxic and Extremely Hazardous Waste." Sacramento, Calif: Toxic Substance and Control Department. September 15.

California Department of Public Health (CDPH) (2011 [2010]). "Investigation of Birth Defects and Community Exposures in Kettleman City, CA." Sacramento, Calif. Accessed February 20, 2011. <http://www.cdph.ca.gov/Pages/KettlemanCityDocumentsNov2010.aspx>

\_\_\_\_\_. (2012) "CDPH Commits \$8 Million to Safe Drinking Water in Kettleman City." 6 July. Accessed July 10, 2012. <http://www.cdph.ca.gov/Pages/NR12-29.aspx>

\_\_\_\_\_. (2012b) "Birth Defects in Kettleman City and Surrounding Areas 2009-2011 Update." Sacramento, Calif. Accessed July 1, 2012. <http://www.cdph.ca.gov/programs/CBDMP/Pages/BirthDefectsinKettlemanCityandSurroundingAreas.aspx>

California Department of Water Resources. California State Water Project and the Central Valley Project. Accessed September 22, 2010. <http://www.water.ca.gov/swp/cvp.cfm>

California Governor's Office of Appropriate Technology. (1981) "Alternatives to the Land Disposal of Hazardous Wastes: An Assessment for California." Sacramento: OAT.

California Waste Management Board. "California Waste Management Board Progress and Challenge: Waste-to-Energy Projects 1982." Sacramento, Calif.

Cannon, Carl M. (1986) "NASA, DOE Dumped Toxics Illegally in San Joaquin Valley Agencies Violated EPA Ban on Toxics." *San Jose Mercury News*, January 26.

Capek, S. (1993) "The 'Environmental Justice' Frame: A Conceptual Discussion and an Application." *Social Problems* 40(1): 5-24.

Carson, Rachel. (1962) *Silent Spring*. Boston: Houghton Mifflin.

Carter, Lloyd G. (1985) "U.S. Accused of Violating Bird Treaty Act." *Fresno Bee*, February 19.

Castillo, Edward D. (1978) "The Impact of Euro-American Exploration and Settlement." In *Handbook of North American Indians, Vol. 8, California*. Edited by Robert F. Heizer. Washington, D.C.: Smithsonian Institution.

Center for Disease Control and Prevention. National Biomonitoring Program Website. <http://www.cdc.gov/biomonitoring/>

Center for Responsive Politics (2010) "Waste Management Industry." *Open Secrets.Org*. Accessed August 22, 2012 <http://www.opensecrets.org/lobby/indusclient.php?lname=E10&year=2010>

\_\_\_\_\_. (2010b) "Waste Management Inc. PACs." *Open Secrets.org*. Accessed January 6, 2011. <http://209.190.229.99/pacs/lookup2.php?cycle=2010&strID=C00119008>

\_\_\_\_\_. (2012) "Lobbyists Representing Waste Management Inc." *Open Secrets.Org*. Accessed August 22, 2012. <http://www.opensecrets.org/lobby/clientlbs.php?id=D000000161&year=2012>

\_\_\_\_\_. (2012b) "Waste Management Industry." *Open Secrets.Org*. Accessed August 22, 2012. <http://www.opensecrets.org/lobby/indusclient.php?id=E10&year=2012>

\_\_\_\_\_. (2012c) "Waste Management Inc. Contributions to Federal Candidates." *Open Secrets.Org*. Accessed August 22, 2012. <http://www.opensecrets.org/pacs/pacgot.php?cmte=C00119008&cycle=2012>

\_\_\_\_\_. (2012d) "Capital Eye Opener, Sept. 11: Primaries in Three States, Cash from Trash Hauler and More." *Open Secrets.Org*. Accessed April 17, 2013. <http://www.opensecrets.org/news/2012/09/capital-eye-opener-sept-11.html>

Chambers, John C., and Mary S. McCullough. "From the Cradle to the Grave: An Historical Perspective of RCRA." *National Resources and Environment*. Fall 1995. 10:21-23, 73-74.

Chavez, Wendy. (2011) "\$1 Million EPA Enforcement Action Against Kettleman City Hazardous Waste Landfill." EPA Press Release, August 24.

- Checker, Melissa. (2005) *Polluted Promises: Environmental Racism and the Search for Justice in a Southern Town*. New York: NYU Press.
- Clapp, Jennifer. (2001) *Toxic Exports: The Transfer of Hazardous Wastes from Rich to Poor Countries*. Ithaca, N.Y.: Cornell University Press.
- Clemings, Russell. (1986) "Agency Endorses Kettleman Dump Expansion." *Fresno Bee*, May 31.
- Clifford, Frank. (2000) "Widespread Use of Radioactive Scrap Assailed." *Los Angeles Times*, June 12.
- Cohen, Adam. (2010) "Unreality TV: If the Boss Only Knew, He Would Do Something." *New York Times*, March 20.
- Cohn, Victor. (1980) "EPA: 1.2 Million May Be Exposed to Toxic Waste." *The Washington Post*, June 6.
- Cole, L., and Foster, S. (2001) *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. New York: NYU Press.
- Columbia University Earth Engineering Center. (2010) Accessed November 3, 2011.  
[http://www.seas.columbia.edu/earth/wtert/meet2010/Proceedings/posters/poster\\_EEC2.pdf](http://www.seas.columbia.edu/earth/wtert/meet2010/Proceedings/posters/poster_EEC2.pdf)
- Committee on Disposal of Hazardous Industrial Wastes, National Materials Advisory Board, National Research Council. (1983) *Management of Hazardous Industrial Wastes: Research and Development Needs*. Washington, D.C.: National Academy Press.
- Common Ground Magazine*. (2012) "The Green Issue." April.
- Cone, Tracie. (2010) "Agencies Ordered to Investigate Birth Defects Near Waste Plant." *San Francisco Chronicle*, January 31.
- Cook, Sherburne Friend. (1955) The Aboriginal Population of the San Joaquin Valley, California. *University of California Anthropological Records*. 16(2):31-80.
- \_\_\_\_\_. (1976) *The Conflict Between the California Indian and White Civilization*. Berkeley and Los Angeles: UC Press.
- \_\_\_\_\_. (1978) "Historical Demography." In *Handbook of North American Indians, Vol. 8 California*. Edited by Robert F. Heizer. Washington, D.C.: Smithsonian Institution.
- Council on Environmental Quality (1979). *Tenth Annual Report of the Council on Environmental Quality*. In accordance with Section 201 of the National Environmental Policy Act of 1969. Washington, D.C.; Executive Office of the President.

County of Kings Official website. (2011) Accessed November 1, 2011. <http://www.countyofkings.com/bos/index.htm>

Crooks, Harold. (1993) *Giants of Garbage: The Rise of the Global Waste Industry and the Politics of Pollution Control*. Toronto: James Lorimer.

Crumley, Carole. (ed.) (2001) *New Directions in Anthropology and the Environment: Intersections*. Walnut Creek, Calif: AltaMira Press.

D'Rury, Aubrey. (1935) *California: An Intimate Guide*. New York: Harper and Brothers.

Daniel, Cletus E. (1981) *Bitter Harvest: A History of California Farm workers, 1870-1941*. Berkeley and Los Angeles: UC Press.

Daniel, D. E. (1981) "Problems in Predicting the Permeability of Compacted Clay Liners," Paper presented at the Fourth Annual Conference on Uranium Mill Tailings Disposal, Colorado State University, Fort Collins. pp. 665-75.

Das, Veena. (2000) "Suffering, Legitimacy, and Healing: The Bhopal Case." In *Illness and the Environment: A Reader in Contested Medicine*. Edited by Steve Kroll-Smith, Phil Brown, and Valerie J. Gunter. New York: NYU Press.

Dasmann, Raymond. (1975 [1966]) *The Destruction of California*. New York: Collier Books.

Davis, Mackenzie L. (1998, 1989) "Definition and Classification of Hazardous Waste." In *Standard Handbook of Hazardous Waste Treatment and Disposal*. Edited by Harry M. Freeman. McGraw-Hill.

DeGrazia, Victoria. (2005) *Irresistible Empire: America's Advance Through 20<sup>th</sup> Century Europe*. Cambridge, Mass.: Harvard University Press.

De Percin, Paul R. (1998 [1989]) "Air Pollution from Land Disposal Facilities." In *Standard Handbook of Hazardous Waste Treatment and Disposal*, edited by Harry M. Freeman. McGraw-Hill.

Deutsch, Claudia. (2008) "A Garbage Hauler Tidies Up Its Image." *New York Times*, February 7.

Di Chiro, G. (1998) "Environmental Justice from the Grassroots: Reflections of History, Gender, and Expertise." In *The Struggle For Ecological Democracy: Environmental Justice Movements in the United States*, edited by David Faber. New York: Guilford Press.

Diringer, Elliot. (1987) "New Rules Save Big Growers' Cheap Water." *San Francisco Chronicle*, April 10.

Douglas, Mary, and Andrew Wildavsky. (1982) *Risk and Culture: An Essay on the Selection of Technical and Environmental Dangers*. Berkeley and Los Angeles: UC Press.

Doukas, Dimitra. (2003) *Worked Over: The Corporate Sabotage of an American Community*. Ithaca, N.Y.: Cornell University Press.

Dove, Michael., and Carol Carpenter. (eds.) (2007) *Environmental Anthropology: A Historical Reader*. Boston, Mass.: Wiley-Blackwell.

Dudasik, Stephen. (1980) "Victimization in Natural Disaster." *Disasters* 4: 329-38.

Dudley, Anne. (1986) "Chemwaste Looking for More Water." *Fresno Bee*. August 10.

Earthjustice. "Restore EPA's Hazardous Waste Oversight: Bush Loophole Threatens Communities with Toxic Waste Contamination." Organization Press Release. Washington, D.C.

Eco Conscious Blog. (2010) "Basura o Bebes?" Accessed November 1, 2011. <http://ecoconscious.wordpress.com/2010/02/21/%C2%BFbasura-o-bebes/>

Edelstein, Michael. (2003 [1988]) *Contaminated Communities: Coping with Residential Toxic Exposure*. Boulder, Colo: Westview Press.

El Universo. (2009) "Junta Municipal Aprueba Expandir Basurero Toxico en California." December 23.

Elkind, Peter. (1998) "Garbage In Garbage Out: Waste Management Used to be a Wall Street Darling, with the Kind of Growth Rate Investors Love. But Then the Growth Slowed, and the Stock Dropped, and it Became a Different Kind of Company. The Kind that Cooks the Books." *Fortune Magazine*, May 25.

\_\_\_\_\_. (1999) "Waste Management Who's Driving This Rig? Scarcely a Year After the Book-Cooking Trash Titan Took a \$3.5 Billion Charge and Got Swallowed by a Smaller Competitor, Its Stock has Crashed (again), it Has no CEO (again), and Investors and Analysts Hate it (again). Notes from the Road to Nowhere." *Fortune Magazine*, September 27.

Enander, Richard T. (1998 [1989]) "Hazardous Waste Tracking Systems." In *Standard Handbook of Hazardous Waste Treatment and Disposal*, edited by Harry M. Freeman: McGraw-Hill.

Engelhardt, Zephyrin. (1912) *The Missions and Missionaries of California*. Vol. II and III; *Upper California*. San Francisco: James H. Barry.

Epstein, Samuel S., and Lester O. Brown, and Carol Pope (1982). *Hazardous Waste in America*. San Francisco, Calif.: Sierra Club.

Erikson, K. (1976) *Everything in Its Path: Destruction of Community in the Buffalo Creek Flood*. New York: Simon and Schuster.

Ethisphere Institute. (2008) "Waste Management Named to 2008 World's Most Ethical Companies List." June 4.

- Ewen, Stuart. (2001 [1977]) *Captains of Consciousness: Advertising and the Social Roots of the Consumer Culture*. New York: Basic Books.
- Farmer, Paul. (1996) "On Suffering and Structural Violence: A View From Below." *Daedalus* 125(1): 245-60.
- Farquhar, Francis. (1926) *Place Names of the High Sierra*. San Francisco: Sierra Club. Accessed October 8, 2010. [http://www.yosemite.ca.us/library/place\\_names\\_of\\_the\\_high\\_sierra/d.html](http://www.yosemite.ca.us/library/place_names_of_the_high_sierra/d.html)
- Farquhar, Francis P. (1932) "The Topographical Reports of Lieutenant George H. Derby." *California Historical Society Quarterly*. 11: 100-23, 247-65, 365-82.
- Florini, Karen L. (1982) "Issues of Federalism in Hazardous Waste Control: Cooperation or Confusion?" *Harvard Environmental Law Review*. 6:307-37.
- Florio, James J. (1986) "Congress as Reluctant Regulator: Hazardous Waste Policy in the 1980s." *Yale Journal on Regulation*. Vol 3:351.
- Fogarty, John. (1985) "Rep. Miller's Strong Stand on Kesterson." *San Francisco Chronicle*, April 4.
- Follow the Money. "Noteworthy Contributor Summary. Waste Management Inc." Accessed August 22, 2012. <http://www.followthemoney.org/database/topcontributor.phtml?u=4756&y=0>
- Fontana, Cyndee. (2010) "Focus on Kettleman City: The Stores of Infant Deaths and Birth Defects Helped to Turn the Spotlight on This Small Community's Big Problem." *Fresno Bee*, February 3.
- Gayton, Anna Hadwick. (1948) *Yokuts and Western Mono Ethnography: Tulare Lake, Southern Valley, and Central Foothill Yokuts*. Vol. 1. Berkeley and Los Angeles: UC Press.
- Gerlat, Allan. (2013) *Waste Age*. February 12.
- Gester, G.C., and John Galloway (1933) "Geology of Kettleman Hills Oil Field, California" *AAPG Bulletin*, Volume 17 <http://search.datapages.com/data/doi/10.13106/3D932BAC-16B1-11DF-8645000102C1865D>
- Gibbs, Lois M. (1998) *Love Canal: The Story Continues...* Gabriola Island British Columbia and Stony Creek, CT: New Society Publishers.
- Goldman, Benjamin. (1991) *The Truth About Where You Live: An Atlas for Action on Toxins and Mortality*. New York: Random House.
- Goldman, Benjamin., and James A. Hulme, Cameron Johnson. (1986) *Hazardous Waste Management: Reducing the Risk*. Council on Economic Priorities. Washington, D.C.: Island Press .

Gonzalez, Roberto. (2012) "Anthropology and the Covert: Methodological Notes on Researching Military and Intelligence Programmes." *Anthropology Today*. 28(2). April.

Gottlieb, Robert. (1993) *Forcing the Spring: The Transformation of the American Environmental Movement*. Washington, D.C.: Island Press.

Gottlieb, Robert., and Maureen Smith, Julie Roque. (1995) "Greening or Greenwashing?: The Evolution of Industry Decisionmaking." In *Reducing Toxics: A New Approach to Policy and Industrial Decision-Making*, edited by Robert Gottlieb, et al. Washington D.C.: Island Press.

Governor Edmund G. Brown, Jr. (1981) Executive Order B-8881. State of California. Sacramento: October 13.

Gramsci, Antonio. (2005 [1971]) *Selections from the Prison Notebooks of Antonio Gramsci*, edited by Quintin Hoare and Geoffrey Nowell Smith. New York: International Publishers.

Green, Stephen. (1985) "Did State Wait Months Before Tackling Dump?" *Sacramento Bee*, June 8.

\_\_\_\_\_. (1985) "State Worried About Radiation at Dumps." *Sacramento Bee*, August 2.

Green Action for Health and Environmental Justice <http://www.greenaction.org>

Green Action for Health and Environmental Justice DVD: Kettleman City in the Media.

Greenopolis Website. [www.greenopolis.com](http://www.greenopolis.com)

Griswold, Lewis. (1989) "An Amnesty Day for Tulare and Kings County Farmers to Turn in Old Toxic Agricultural Chemicals—Some of Them Illegal—is Being Planned for Late Summer." *Gannett News Service*, May 31.

\_\_\_\_\_. (2010) "Landfill to Host EPA Official." *Fresno Bee*, January 28.

\_\_\_\_\_. (2010) "Kettleman City Video Ignites War of Words." *Fresno Bee*, February 5.

\_\_\_\_\_. (2010) "Kettleman City Birth-Defects Inquiry Questioned." *Fresno Bee*, March 4.

\_\_\_\_\_. (2013) "State fines Waste Management for Spills at Kettleman Toxic Dump." *Fresno Bee*, March 27

Grossi, Mark. (2012) "Kettleman City Residents Protest State Birth Defects Study on Tuesday." *Fresno Bee*, June 19.

\_\_\_\_\_. (2012) "Kettleman City's Toxic Landfill Almost at Capacity." *Fresno Bee*, August 4.

\_\_\_\_\_. (2012) "Kettleman City's Water Deal Depends on Landfill Expansion." *Fresno Bee*, August 10.

Gunther, Marc. (2008) "The Greening of Waste Management." *Fortune Magazine*, February 6.

\_\_\_\_\_. (2010) "Waste Management's New Direction." *Fortune Magazine*, December 6.

\_\_\_\_\_. (2010) "Waste Management's New Direction." *Fortune Magazine*, March 6.

Gusterson, H. (1997) "Studying Up Revisited." *PoLAR: Political and Legal Anthropology Review*, 20: 114–19. doi: 10.1525/pol.1997.20.1.114

\_\_\_\_\_. (1998) *Nuclear Rites: A Weapons Laboratory at the End of the Cold War*. Berkeley and Los Angeles: UC Press.

\_\_\_\_\_. (2000) "How Not to Construct a Radioactive Waste Incinerator." *Science, Technology, and Human Values*. 25(3): 332-351.

*Hanford Journal*. (1928) "Wildcat Well in Kings is Big Gas Producer." October 7.

\_\_\_\_\_. (1928) "Great Flow of Gas Unchecked." October 12.

\_\_\_\_\_. (1928) "Kings County's Great Gas Well Continues to Flow Unchecked." October 16.

\_\_\_\_\_. (1928) "Deal Near Gas Well Rumored." October 17.

\_\_\_\_\_. (1968) "One Man Built a Town." February 24.

*Hanford Sentinel*. (2010) "Kettleman Won't Accept Radioactive Waste." January 12.

\_\_\_\_\_. (2010) "Sixth Birth-Defect Case Confirmed in Kettleman City." January 31.

\_\_\_\_\_. (2011) "Court Sides with County on Toxic-Waste Expansion Proposal." January 11.

\_\_\_\_\_. (2012) "Denny's to open in Kettleman City." July 26.

Harrington, John Peabody. (1921) "Tachi Yokuts Recordings." Library of Congress. California Collection, American Folklife Center.

Harvey, David. (1996) *Justice, Nature, and the Geography of Difference*. Oxford: Blackwell.

Hatch, James. (1958) "Tachi Yokuts Music." *Kroeber Anthropological Society Papers*. Berkeley: University of California.

Hawkins, Gay., and Stephen Muecke. (2003) *Culture and Waste: The Creation and Destruction of Value*. Maryland: Rowman & Littlefield.

Hazard, Anne. (1992) "Democrats Land Bulk of Pac Money From Firms." *Chicago Tribune*, November 2.

Heizer, Robert F. (Ed.) (1993 [1974]) *The Destruction of California Indians: A Collection of Documents from the Period 1847 to 1865 in Which Are Described Some of the Things that Happened to Some of the Indians of California*. Lincoln: University of Nebraska Press.

Heizer, Robert F., and Albert B. Elsasser. (1970) *A Bibliography of California Archaeology*. Berkeley and Los Angeles: UC Press.

Henly, T. J., to Geo. W. Manypenny, December 18, 1851 [1854], in "Message of the President Communicating a report... relative to the colonization of the California Indians," Sen. Exec. Docs., 33 Cong., 2 Sess., Vol. 7, Doc. 41, pp. 3-4 (752). Accessed on August 30, 2011. <http://calindianhistory.org/Time/1854Time.html>

Henry, Robert G. (2008) "Setting the Record Straight." *Hanford Sentinel*, November 27.

Hewitt, Kenneth. (ed.) (1983) *Interpretation of Calamity: From the Viewpoint of Human Ecology*. Winchester, Massa: Allen and Unwin.

Hiesinger, Margaret Amalia. (1999) "The House that Uranium Built: Perspectives on the Effects on Exposure on Individuals and Community." *Kroeber Anthropological Society Papers*. University of California Berkeley.

Hill, Gladwin. (1969) "Major U.S. Cities Face Emergency in Trash Disposal." *New York Times*, June 16.

Hoffman, Susanna M. (2010) "Of Increasing Concern: Disaster and the Field of Anthropology." *Anthropology News* 51(7): 3-4.

Hoffman, Susanna., and Anthony Oliver-Smith. (eds.) (2002) *Culture and Catastrophe: The Anthropology of Disaster*. Santa Fe, New Mexico: School of American Research Press.

Houston Astros. (2007) "Astros Think Green with Waste Management." July 5.

Hume, Brit. (1979) *The Killing Ground*. Documentary 60 minutes. ABC News Closeup.

IMG College. (2010) "Southern Conference and Waste Management Announce Environmental Sponsorship Agreement." November 10.

Ise, John. (1972 [1926]) *The United States Oil Policy*. New York: Arno Press.

Isom, Roger. (2009) "Guest Commentary: Local Growers Need WM Facility." *Hanford Sentinel*, October 6.

Jacobs, Daniel G. (2005) "How Wayne Huizenga Perfected the Art of Starting and Growing a Business." August 22. Accessed July 1, 2011. [www.sbnoline.com/2005/08/blockbuster-growth-how-wayne](http://www.sbnoline.com/2005/08/blockbuster-growth-how-wayne)

Jimenez, Eddie. (2009) "500 Pack Kings County Meeting on Landfill Plan." *Fresno Bee*, October 6.

\_\_\_\_\_. (2009) "Kings Co. Seeks Inquiry into Birth Defects: State to be Notified of Kettleman City Issue." *Fresno Bee*, December 16.

\_\_\_\_\_. (2010) "Kettleman Birth Defects to be Probed: Governor Orders State to Investigate Outbreak." *Fresno Bee*, January 30.

\_\_\_\_\_. (2010) "Kettleman Residents Seek Health Answers." *Fresno Bee*, June 18.

\_\_\_\_\_. (2010) "Investigation of Kings County Officials Sought." *Fresno Bee*, June 19.

Johnson, Jim. (2011) "WM CEO Says Oakleaf Deal Transforms Company." *Waste Recycling News*. August 8. Accessed August 10, 2011. <http://www.wasterecyclingnews.com/headlines2.html?id=1312811708>

Johnson, John. (1985) "Farmers Get Water in Kesterson Accord." *Sacramento Bee*, March 29.

\_\_\_\_\_. (1985) "Interior Chief Defends Kesterson Decision." *Sacramento Bee*, March 30.

Johnston, Barbara Rose. (1994) (ed.) *Who Pays the Price? The Socio-Cultural Context of Environmental Crisis*. Washington, D.C.: Island Press.

\_\_\_\_\_. (1997) (Ed.) *Life and Death Matters: Human Rights and the Environment at the End of the Millennium*. Walnut Creek, Calif.: Altamira Press.

Johnston, Barbara Rose., and Susan Dawson, Gary Madsen. (2008) "Uranium Mining and Milling: Navajo Experiences in the American Southwest." In *Half-Lives and Half-Truths: Confronting the Radioactive Legacies of the Cold War*, edited by Barbara Rose Johnston. Santa Fe, New Mexico: A School for Advanced Research Resident Scholar Book.

Johnston-Dodds, Kimberly. (2002) *Early California Laws and Policies Related to California Indians*. Prepared at the Request of Senator John L. Burton. Sacramento: California Research Bureau.

Jordan, Frank C. (1913) *California Blue Book: State Roster 1911*. Sacramento: State Department.

Jorling, Thomas C. (1979) Hazardous and Toxic Waste Disposal: Joint Hearings before the Subcommittee of Environmental Pollution and Resource Protection of the Senate Committee on Environment and Public Works; 96<sup>th</sup> Congress, 1<sup>st</sup> Session. Assistant Administrator EPA(Preliminary Assessment of Clean Up Costs for National Hazardous Waste Problems, consultant report to the EPA Office of Solid Waste, p.24.

Kahrl, William. (1985) "The Poison Also Rises Westlands' Unresolved Waste-Water Dilemma." *Sacramento Bee*, July 21.

Keep America Beautiful, Inc. Network News. (Winter 2004/2005) Stamford, CT: Keep America Beautiful, Inc.

Keppel, Bruce. (1981) "California Confronts Toxic Waste Crisis: Problem Grows as Supply of Usable Disposal Sites in State Diminishes Incomplete Source." *Los Angeles Times*, May 26.

Kepos, Paula. (1994) *International Directory of Company Histories*. USA: Cengage Gale. Volume 9.

\_\_\_\_\_. (1995) *International Directory of Company Histories*. Detroit, Mich: St. James Press. Volume 11.

Kettelman, Orrin D. (1971) "David Kettelman." *San Joaquin Historian*. Lodi, Calif.: San Joaquin County Historical Society. Vol. VII, No.1.

Kings County Community Health Status Report 2008-2009. Kings County Environmental Health Services. Hanford: Calif.

Kings County Centennials Committee. (1948) *100 Golden Years: Kings County Celebrates California Centennials 1948-1950*. Hanford, Calif.: Art Print Shop.

Kings County Centennial Committee. (1992) *Kings County: A Pictorial History*. County Government Center. Hanford, Calif..

Kings County Comprehensive Economic Development Strategy (2010). Economic Development Corporation and Job Training Office. Kings County, Calif.

Kings County Economic Development Corporation. (2010) Accessed March 6, 2012. <http://www.kingsedc.org/countyfacts.html>

Kirn, Walter. (2010) "The Fakery of CEOs Undercover." *Business Week Magazine*, February 4.

Kroeber , Alfred .L. (1907) *Indian Myths of South Central California*. Berkeley and Los Angeles: UC Press.

\_\_\_\_\_. (1925) *Handbook of California Indians*. Bulletin. Smithsonian Institution; 78.

\_\_\_\_\_.(1939) "Cultural and Natural Areas of Native North America." *University of California Publications in American Archaeology and Ethnology*: 38(1).

Lacayo, Erik. (2007) "Kings Co. Toxic Site Comment Sought. Feds Host Meeting this Month on PCB Plan for Kettleman Hills Facility." *Fresno Bee*, March 12.

LaDou, J. (1987) "The American Experience with Hazardous Waste Management." *Asia-Pacific Journal of Public Health*. 1(4): 41-45.

La Duke, Winona. (1981) "Red Land and Uranium Mining: How the Search for Energy is Endangering Indian Tribal Lands." *Radcliffe Quarterly*: 15-17.

Latta, Frank F. (1949). *Black Gold in the Joaquin*. Caldwell, Idaho: Caxton Printers.

\_\_\_\_\_. (1949) *Handbook of Yokuts Indians*. Oildale, Calif.: Bear State Books.

Lee, C. (1993) "Beyond Toxic Wastes and Race." In *Confronting Environmental Racism: Voices from the Grassroots*, edited by Robert Bullard. Boston: South End Press.

Lerner, Steve. (2010) *Sacrifice Zones: The Front Lines of Toxic Chemical Exposure in the United States*. Cambridge, Mass.: MIT Press.

Lester, James P., and Ann Bowman. (eds.) (1983) *The Politics of Hazardous Waste Management*. Durham, NC: Duke University Press.

LeVeen, E. Phillip., and Laura B. King. (1985) *Turning off the Tap on Federal Water Subsidies. Volume I. The Central Valley Project: The \$3.5 Billion Giveaway*. Natural Resources Defense Council and California Rural Legal Assistance Foundation.

Leung, Charles W., and David E. Ross. (1998 [1989]) "Hazardous Waste Landfill Construction." In *Standard Handbook of Hazardous Waste Treatment and Disposal*, edited by Harry M. Freeman: McGraw-Hill.

Levine, A. (1982) *Love Canal: Science, Politics, and People*. Lexington, Mass: Lexington Books.

Lindsey, Robert. (1985) "Irrigation Policy Assailed on Coast." *New York Times*, August 22.

Lipsett, Brian. (1991) "Trashing the Future." *The Multinational Monitor*. 12(9). September.

Little, Paul E. (1999) "Environments and Environmentalisms in Anthropological Research: Facing a New Millennium." *Annual Review of Anthropology* 28: 253-84.

Littlefield, Amy. (2009). "EPA Looks at Effects of Waste Plants on Minorities, Poor." *Los Angeles Times*, July 27.

Live Nation Website. <http://promo.livenation.com/recrocks/rockstar.html>

London, Jonathan., Ganlin Huang, and Tara Zagofsky. (2011) *Land of Risk, Land of Opportunity: Cumulative Environmental Vulnerability in California's San Joaquin Valley*. Davis, Calif.: UC Davis Center for Regional Change.

*Los Angeles Times*. (1928) "Strong Gasser Causes Furore." October 7.

\_\_\_\_\_. (1932) "Hanford Plans More Joy for Oil Workers." March 8.

\_\_\_\_\_. (2010) "Grief Prompts Quest for Answers: Birth Defects Spur Immigrant Women to Act Against Waste Dump." April 1.

\_\_\_\_\_. (2010) "Feinstein, Boxer call for delay on plans to expand Central Valley Landfill." February 10.

- Ludeke, John. (1980) "The No Fence Law of 1874: Victory for San Joaquin Valley Farmers," *California History* 59, no. 2.
- Lueck, Thomas J. (1996) "Major U.S. Recycler to Buy Large New York Trash Company." *New York Times*, March 1.
- Machiavelli, Niccolo. (2003) *The Prince*. Translated by Rufus Goodwin, illustrated by Benjamin Martinez. Wellesley, Mass: Dante University Press.
- Main, Jeremy. (1986) "Who Will Clean Up Hazardous Wastes, That Is. The U.S. Bill Could be \$300 Billion Over 50 Years. The Money Looks so Good that Big Companies are Jumping in and Wall Street Sniffs Big Gains." *Fortune Magazine*, March 17.
- Malinowski, Bronislaw. (1922) *Argonauts of the Western Pacific: An Account of native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea*. Long Grove, IL: Waverland Press Inc.
- Marbury, Hugh. (1995) "Hazardous Waste Exportation: The Global Manifestation of Environmental Racism." *Vanderbilt Journal of Transnational Law*. 28:251.
- Mark, Jason. (2012) "Cash for Trash: The Country's Largest Garbage Company is Lobbying to Repeal State Laws that Boost Composting." *Earth Island Journal*. Autumn Issue.
- Massachusetts Institute of Technology (MIT) SENSEable City Lab. Accessed November 3, 2011.  
Website: [http://senseable.mit.edu/trashtrack/downloads/trashtrackpressrelease\\_091709.pdf](http://senseable.mit.edu/trashtrack/downloads/trashtrackpressrelease_091709.pdf)
- Maugh, Thomas H. (5/25/1979) "Toxic Waste Disposal a Growing Problem." *Science*, New Series, 204(4395): 819-23.
- Mazurek, Janice., and Robert Gottlieb, Julie Roque. (1995) "Shifting to Prevention: The Limits of Current Policy." In *Reducing Toxics: A New Approach to Policy and Industrial Decision-Making*, edited by Robert Gottlieb et al.. Washington D.C.: Island Press.
- McAteer, J. Davitt., et.al. (2011) *Upper Big Branch: The April 5, 2010, Explosion: A Failure of Basic Coal Mine Safety Practices*. Report to the Governor, Governor's Independent Investigation Panel. Accessed May 12, 2011.  
<http://www.nttc.edu/programs&projects/minesafety/disasterinvestigations/upperbigbranch/toc.asp>
- McElroy, Ann., and Patricia K. Townsend. (1996, [1979]) *Medical Anthropology in Ecological Perspective*. Colorado: Westview Press.
- McGrane, Sally. (2012) "An Effort to Bury a Throwaway Culture One Repair at a Time." *New York Times*, May 8.

McKinley, Jesse. (2010) "In a California Town, Birth Defects, Deaths and Questions." *New York Times*, February 7.

Menefee Eugene L., and Fred A. Dodge (1913) *History of Tulare and Kings Counties California with Biographical Sketches*. Los Angeles, Calif.: Historic Record Company.

Miller, Edwin L. (1992) "Final Report: Waste Management Inc." San Diego District Attorney.

Moberg, Mark. (2002) "Erin Brockovich Doesn't Live Here: Environmental Politics and "Responsible Care" in Mobile County, Alabama." *Human Organization*. 61(4): 377-389.

Mohai, Paul., and Bunyan Byrant. (1992) "Environmental Injustice: Weighing Race and Class as Factors in the Distribution of Environmental Hazards." 63 *University of Colorado Law Review* 921.

Mokhiber, Russell. (1988) *Corporate Crime and Violence: Big Business Power and the Abuse of the Public Trust*. San Francisco: Sierra Club Books.

\_\_\_\_\_. (1989) "The 10 Worst Corporations of 1989." *Multinational Monitor*. December. Volume 10. No. 12. <http://www.multinationalmonitor.org/hyper/issues/1989/12/mokhiber.html>

\_\_\_\_\_. "Top 100 Corporate Criminals of the Decade." *Corporate Crime Reporter*. <http://www.corporatecrimereporter.com/top100.html>

\_\_\_\_\_. (2001) "Names in the News." *Multinational Monitor*. December. Vol.22 No.12. <http://www.multinationalmonitor.org/mm2001/122001/names.html>

Montague, Peter. (1988) "Waste Management Accused of Gangster-Style Death Threats against New Orleans Officials." *Rachel's Hazardous Waste News* #99. 17 October. Accessed March 1, 2011. <http://www.ejnet.org/rachel/rhwn099.htm>

\_\_\_\_\_. (1989). "New Estimates of Hazardous Waste: 2 to 10 Times More Than EPA Thought." *Rachel's Hazardous Waste News* #148. 26 September. Accessed November 7, 2011. <http://www.ejnet.org/rachel/rhwn148b.html>

\_\_\_\_\_. (1992) "After 12 Years Studying Toxic Dumps, Government Knowledge Remains Sketchy." *Rachel's Hazardous Waste News* #272. 12 February. Accessed January 3, 2012. <http://www.ejnet.org/rachel/rhwn272.htm>

Mooney, James. (1991; 1896) *The Ghost Dance Religion and the Sioux Outbreak of 1890*. Lincoln: University of Nebraska Press.

Morell, David. (1983) "Technological Parties and Hazardous Waste Politics in California." In *The Politics of Hazardous Waste Management* edited by James P. Lester and Ann Bowman. Durham, NC: Duke University Press.

\_\_\_\_\_. (1984) "Siting and the Politics of Equity." *Hazardous Waste*. Mary Ann Liebert., Vol1:4, 555-71.

Morrison, Allen. (July 1981) "Hazardous waste Landfills—Can Clay Liners Prevent Migration of Toxic Leachate?" *Civil Engineering*.

Moss, Kary L. (1996) "Race and Poverty as a Tool in the Struggle for Environmental Justice." *Poverty and Race* 1:1-2

Moyers, Bill., and Center for Investigative Reporting (CIR) (1990) *Global Dumping Ground: The International Traffic in Hazardous Waste*. Washington, D.C.: Seven Locks Press.

Mueller, Beth A., and Carrie M. Kuehn, Carrie K. Shapiro-Mendoza, Kay M. Tomashek. (May 2007) "Fetal Deaths and Proximity to Hazardous Waste Sites in Washington State." *Environmental Health Perspective*. 115(5): 776–80.

*Multinational Monitor*. (1991) "Busting the Trash Trust." January/February. Vol12. No.1 & 2.

Nader, Laura. (1969) "Up The Anthropologist: Perspectives Gained from Studying Up." In *Reinventing Anthropology*, edited by Dell Hymes. Ann Arbor, Mich.: Michigan University Press

\_\_\_\_\_. (1983) "1984 and Brave New World: The Insidious Threat of Covert Control." *Radcliffe Quarterly*. December. 69(4).

\_\_\_\_\_. (1991) "Whatever Happened to the Flat-Earth People? A View from the 21<sup>st</sup> Century." *Radcliffe Quarterly*. Pp. 8-10.

\_\_\_\_\_. (1995) "Controlling Processes: Tracing the Dynamic Components of Power." *Current Anthropology* 38(5): 711-35.

Nader, Ralph., and Ronald Brownstein, John Richard (eds.) (1981) *Who's Poisoning America: Corporate Polluters and Their Victims in the Chemical Age*. San Francisco, Calif.: Sierra Club Books.

Nash, June., and Kirsch, Max. (1988) "The Discourse of Medical Science in the Construction of Consensus Between Corporation and Community." *Medical Anthropology Quarterly* 2(2):158-71.

*National Geographic*. (January 2008) Official Journal of the National Geographic Society. Tampa: Florida. 213:1.

National Academy of Sciences. (1991) *Environmental Epidemiology, Volume 1: Public Health and Hazardous Wastes*. Committee on Environmental Epidemiology, Board on Environmental Studies and Toxicology, and National Research Council. National Academies Press. Available on <http://www.nap.edu/catalog/1802.html>

National Research Council. (1983) "Management of Hazardous Industrial Wastes: Research and Development Needs." Report on the Committee on Disposal of Hazardous Industrial Wastes.

National Materials Advisory Board. Commission of Engineering and Technical Systems. Washington, D.C.: National Academy Press. NMAB-398.

\_\_\_\_\_ (1985). *Reducing Hazardous-Waste Generation: An Evaluation and a Call for Action*. Washington, D.C.: National Academy Press.

Nelson, Gabriel. (2011) "EPA to Spare Calif. Power Plant from New Emissions Rules." *New York Times*, May 31.

*New Scientist* (1977) "Pesticide Causes Sterility in Workers." London: IPC Magazines. 1 September. 75:1067.

*New York Times*. (1884) "Rapid Disappearance of a Lake." January 12.

\_\_\_\_\_. (1898) "Tulare Lake Dries Up." August 15.

\_\_\_\_\_. (1928) "Big Profit on California Oil Well Likely for Woman Golf Star." October 10.

\_\_\_\_\_. (1980) "Waste Management Inc.: Thrives on Strict Rules." October 20.

\_\_\_\_\_. (1985) "Big Waste Concerns is Fined \$2.5 Million for Illegal Dumping." April 6.

\_\_\_\_\_. (1986) "U.S. Used Cited Toxic Dump." January 27.

\_\_\_\_\_. (1990) "Trash Hauler in Settlement." November 7.

\_\_\_\_\_. (1997) "USA Waste to Buy Canadian Unit of WMX." March 22.

\_\_\_\_\_. (1998) "Metro Business; Waste Management Settled Town's Suit." September 23.

\_\_\_\_\_. (2003) "Waste Management Pair to Pay \$ 4 Million." October 23.

Nidever, Seth. (2007) "Residents Protest Kettleman Landfill." *Hanford Sentinel*, March 28.

\_\_\_\_\_. (2007) "Chem Waste Promotes Its Contributions to Kettleman." *Hanford Sentinel*, April 20.

\_\_\_\_\_. (2007) "New Concerns Over Kettleman Waste Facility." *Hanford Sentinel*, July 16.

\_\_\_\_\_. (2007) "A Good Neighbor." *Hanford Sentinel*, August 10.

\_\_\_\_\_. (2010) "Chem Waste Tops State Toxics List." *Hanford Sentinel*, December 18.

\_\_\_\_\_. (2011) "Caltrans: Kettleman City Crossing Doesn't Meet Criteria." *Hanford Sentinel*, January 11.

\_\_\_\_\_. (2011) "State, County, Butt Heads Over Water Fix." *Hanford Sentinel*, January 14.

\_\_\_\_\_. (2011) "Study: Hanford Air Among Nation's Worst." *Hanford Sentinel*, April 28.

\_\_\_\_\_. (2011) "Canadian Company Drills New Wells Near Kettleman City." *Hanford Sentinel*, August 13.

\_\_\_\_\_. (2012) "Kettleman City Welcome Center Breaks Ground." *Hanford Sentinel*, January 5.

\_\_\_\_\_. (2012) "Kettleman Residents Could Get Clean Tap Water by 2015." *Hanford Sentinel*, July 11.

\_\_\_\_\_. (2012) "Landfill Revenue to Fund Kettleman Water Treatment: County Turns to Hazardous Waste Fees to Bankroll Project." *Hanford Sentinel*, August 15.

\_\_\_\_\_. (2012) "Chem Waste Confident of Expanding Hazmat Landfill." *Hanford Sentinel*, August 17.

\_\_\_\_\_. (2012) "Canadian oil company to drill more wells near Kettleman City." *Hanford Sentinel*, October 31.

\_\_\_\_\_. (2012) "Toxic Landfill Cited for Not Reporting Spills." *Hanford Sentinel*, November 16.

Nordhoff, Charles. (1872) *California for Health, Pleasure, and Residence: A book for Travelers and Settlers*. New York: Harper and Brothers.

O'Neill, Heather. (2010) "Small California Town Fears Birth Defects Linked to Toxic Waste." *CNN Special Investigations Unit*. March 22.

O'Neill, Kate. (2000) *Waste Trading Among Rich Nations: Building a New Theory of Environmental Regulation*. Cambridge, Mass.: MIT Press.

Official Hanford Visitor Guide. (2011) Hanford, Calif.: Hanford Conference and Visitor Agency.

Oliver-Smith, Anthony. (1986) *Natural Disasters and Cultural Responses*. Williamsburg, VA: College of William and Mary.

\_\_\_\_\_. (1992) "Disasters and Development." *Environ. Urban Issues* 20:1-3.

\_\_\_\_\_. (1996) "Anthropological Research on Hazards and Disasters." *Annual Review of Anthropology* 25: 303-28.

\_\_\_\_\_. (2002) "Theorizing Disasters: Nature, Power, and Culture." In *Culture and Catastrophe: the Anthropology of Disaster*, edited by Susanna Hoffman and Anthony Oliver-Smith. Santa Fe: School of American Research Press.

- Oliver-Smith, Anthony., and Susanna Hoffman. (eds.) (1999) *The Angry Earth: Disaster in Anthropological Perspective*. New York: Routledge.
- Palinkas, Lawrence A., Michael A. Downs, John S. Petterson and John Russell. (1993) "Social, Cultural, and Psychological Impacts of the Exxon Valdez Oil Spill." *Human Organization* 52(1):1-13.
- Pastor, M., Sadd, J., and Hipp, J. (2001) "Which Came First? Toxic Facilities, Minority Move-In, and Environmental Justice." *Journal of Urban Affairs* 23(1): 1-21.
- Peevers, Andrea Schulte., and Sara Benson, Marisa Gierlich-Burgin, Scott McNeely, Kurt Wolff. (2003) *Lonely Planet California*. Lonely Planet Publications.
- Pekelney, David. (1990) "Hazardous Waste Generation, Transportation, Reclamation, and Disposal: California's Manifest System and the Case of Halogenated Solvents." *Journal of Hazardous Materials*. 23:293-315.
- Pellow, David Naguib. (2000) "Environmental Inequality Formation." *American Behavioral Scientist* 43(4): 581-601.
- \_\_\_\_\_. (2002) *Garbage Wars: The Struggle for Environmental Justice in Chicago*. Cambridge, Mass.: MIT Press.
- \_\_\_\_\_. (2007) *Resisting Global Toxics: Transnational Movements for Environmental Justice*. Cambridge, Mass: MIT Press.
- Pellow, D.N., and Brulle, R. (eds.) (2005) *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*. Cambridge, Massachusetts: MIT Press.
- Perkins, Tracy Enfield. (2008) "Becoming Political: Women and Environmental Justice in California's Central Valley." Masters Thesis, University of California Davis.
- Peterson, Bill. (1977) "Carter Opposes Effort to Break Up Western Acreage." *Washington Post*, October 2.
- Peterson, Cass. (1987) "Interior Depart. Reverses Water Rules: Farmers Could Avoid Acreage Limits on Subsidized Irrigation." *Washington Post*, April 10.
- \_\_\_\_\_. (1987) "Powerful 'Damage Control' Reversed Rules: Western Growers' Lobbyists, Hill Allies Preserved Water Subsidies for Tremendous Farms." *Washington Post*, May 9.
- Petryna, Adriana. (2002) *Life Exposed: Biological Citizens after Chernobyl*. Princeton, N.J.: Princeton University Press.
- PGA Tour (2009) "Waste Management to Sponsor Phoenix Open." December 9. <http://www.pgatour.com/2009/tournaments/r003/12/09/phoenix.open/index.html>

Plevin, Rebecca. (2009) "Parents Seek Answers After Babies Born with Defects." *Vida En El Valle*. September 24.

\_\_\_\_\_. (2012) "New Health Issues Arise in Kettleman City." *Vida En El Valle*. May 8.

Powell, J. Stephen., Cerrell Associates, Inc. (1984) "Political Difficulties Facing Waste-to-Energy Conversion Plant Siting." For California Waste Management Board State of California.

Powers, Stephen. (1873) The California Indians. No. IX. *Overland Monthly and Out West Magazine*. 11(2): pp.105-16.

\_\_\_\_\_. (1873) "Vocabularies of the California Indians." In Hubert Howe Bancroft (1883), Native Races. Berkeley: University of California Berkeley Bancroft Library.

PR Newswire. (2011) "Waste Management Helps Keep America Beautiful, Inc. Improve Community Environments." August 18. Accessed August 20, 2011. <http://www.prnewswire.com/news-release/waste-management-helps-keep-america-beautiful-inc-improve-community-environments-128001578.html>

PR Newswire. (2009) "Live Nation and Waste Management Launch Recycling Rocks (SM) Sponsorship Program." Accessed June 2, 2011. <http://www.prnewswire.com/news-releases/live-nation-and-waste-management-launch-recycling-rockssm-sponsorship-program-78759687.html>

President Clinton Executive Order 12898: "Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations." February 11, 1994.

Preston, William L. (1981) *Vanishing Landscapes: Land and Life in the Tulare Lake Basin*. Berkeley and Los Angeles: UC Press.

Quam-Wickham, Nancy Lynn. (1994) "Petroleocrats and Proletarians: Work, Class, and Politics in the California Oil Industry, 1917-1925". PhD Dissertation, University of California Berkeley.

Quarantelli, E. L. (1989) "Conceptualizing Disasters from a Sociological Perspective". *International Journal of Mass Emergencies and Disasters* 7(3): 243-51.

Radio Bilingue. (2009) "Conglomerado de Labios Leporinos." [http://www.radiobilingue.org/la/la\\_091116/htm](http://www.radiobilingue.org/la/la_091116/htm). November 19.

\_\_\_\_\_. (2010) "Renovada Lucha Contra los Desechos Toxicos." <http://archivosderb.org/?q=es/taxonomy/term/11&page=6>. March 29.

Rappaport, Ann B. (1998, [1989]) "Overview of Federal Hazardous Waste Legislation." In *Standard Handbook of Hazardous Waste Treatment and Disposal*, edited by Harry M. Freeman: McGraw-Hill.

Ratcliffe, Katherine. (1991) "Fusing Civil, Environmental Rights." *Christian Science Monitor*, May 24.

- Rathje, William., and Cullen Murphy. (1992) *Rubbish! The Archaeology of Garbage*. New York: HarperCollins.
- Reisner, Marc. (1986) *Cadillac Desert: The American West and Its Disappearing Water*. USA: Viking Penguin.
- Resource Conservation and Recovery Act Reauthorization: Hearings before the Subcommittee on Commerce, Transportation, and Tourism of the House Committee on Energy and Commerce, 97<sup>th</sup> Congress, 2<sup>nd</sup> Session 424-425 (1982).
- Roach, Ron. (1986) "EPA is Unsure Where Industries in State Dump Toxic Waste." *Evening Tribune San Diego*, February 14.
- Roberto, Gonzalez. (2012) "Anthropology and the Covert: Methodological Notes on Researching Military and Intelligence Programmes." *Anthropology Today*. 28(2). April.
- Roberts, Robin Michael. (2008) *Images of America: Kings County*. USA: Arcadia.
- Rogers, Heather. (2005) *Gone Tomorrow: The Hidden Life of Garbage*. New York: New Press.
- Roosevelt, Franklin D. (1942) "Appendix A: Message from the President of the United States Transmitting Recommendations to the Strengthening and Enforcement of Anti-Trust Laws." *American Economic Review*. Vol. 32, No. 2, Part 2 Supplement, Papers Relating to the Temporary National Economic Committee. Pp.119-28.
- Roosevelt, Margot. (2010) "Kettleman City Birth Defects: Schwarzenegger Steps In." *Los Angeles Times*, January 29.
- Rothman, Hal. (1988) *The Greening of a Nation? Environmentalism in the U.S. Since 1945*. New York: Harcourt, Brace.
- Royte, Elizabeth. (2005) *Garbage Land: On the Secret Trail of Trash*. New York: Back Bay Books.
- \_\_\_\_\_. (2008) "Disney (Waste) Land." *On Earth Magazine*, August 28.
- Rubin, Hal. (1980) "California Fights Toxic Wastes." *The Nation*. March 1; 239-42.
- Russell, Jenna. (2011) "Wheelabrator OK's Settlement of \$7.5 Million." *Boston Globe*, May 3.
- Sabin, Paul. (2005) *Crude Politics: The California Oil Market, 1900-1940*. Berkeley and Los Angeles: UC Press.
- Sahagun, Louis. (2009) "Kettleman City Asks: Why So Many Birth Defects?" *Los Angeles Times*, December 8.

\_\_\_\_\_. (2010) “EPA Probes Its Actions in Town with Toxic-Waste Dump.” *Los Angeles Times*, January 29.

\_\_\_\_\_. (2010) “Toxic Waste Dump Receives New EPA Order to Clean up Contaminated Soil.” *Los Angeles Times*, July 17.

\_\_\_\_\_. (2010) “Toxic Waste Dump Ruled Out as Cause of Kettleman City Birth Defects.” *Los Angeles Times*, November 23.

*San Francisco Chronicle*. (1929) “Oil Men Agree on Kettleman Conservation.” August 6.

\_\_\_\_\_. (1929) “Curtailment of Kettleman Oil Discussed.” April 30.

\_\_\_\_\_. (1929) “Oil Umpire Gives Curtailment Order.” May 1.

\_\_\_\_\_. (1929) “May Reach New Conservation Program at Kettleman.” May 30.

\_\_\_\_\_. (1929) “Six Oil Firms Agree to Quit Drilling in Kettleman Hills.” June 6.

\_\_\_\_\_. (1929) “Wilbur Seeking Definite Plan to Conserve Kettleman Hills Oil.” June 25.

\_\_\_\_\_. (1929) “Bay Region’s Industrial Chance Hangs on Kettleman Agreement.” July 22.

\_\_\_\_\_. (1929) “Gasoline Consumption Exceeds Increase in Petroleum Output.” August 4.

\_\_\_\_\_. (1929) “Oil Men Act to Curb Flow.” August 22.

\_\_\_\_\_. (1929) “Oil Men Agree to Cease Output at Kettleman Hills.” September 24.

\_\_\_\_\_. (1929) “Kettleman Oil Men Vote for Unit Plan.” December 12.

\_\_\_\_\_. (1930) “Wilbur in San Francisco Tells of Oil Conservation.” January 19.

\_\_\_\_\_. (1930) “State Files Suit to Stop Waste of Gas.” January 23.

\_\_\_\_\_. (1930) “Judge Grants Continuance of State Suit Against Kettleman Oil Firms.” July 3.

\_\_\_\_\_. (1930) “This Watch Dog Cannot Tell Household Friend from Tramp.” July 11.

\_\_\_\_\_. (1930) “Kettleman Oil Curtailment in Limelight.” October 14.

\_\_\_\_\_. (1930) “Kettleman Oil Control Plan Nears Accord.” October 18.

\_\_\_\_\_. (1930) “Kettleman Oil and Gas Producers Form Association.” December 31.

\_\_\_\_\_. (1931) “Oil Unit Plan Agreed Upon in Kettleman.” January 31.

\_\_\_\_\_. (1931) “Kettleman Plan Goes to Congress.” January 16.

\_\_\_\_\_. (1931) “Unit Plan Approved by Wilbur.” February 1.

Sanjour, William. (1982) Statement of William Sanjour, Chief Hazardous Waste Implementation Branch, U.S. Environmental Protection Agency. Testimony before the Subcommittee on Natural Resources, Agriculture Research and Environment, Committee on Science and Technology House of Representatives. Accessed April 2010. <http://home.comcast.net/~jurason/main/Congress2.html>

Saunders, Margery H. (1960) "California Wheat, 1867-1910: Influences of Transportation on the Export Trade and the Location of Producing Areas." Masters Thesis. University of California, Berkeley.

Scheper-Hughes, Nancy. (1992) *Death without Weeping: The Violence of Everyday Life in Brazil*. Berkeley and Los Angeles: UC Press.

\_\_\_\_\_. (2005) "Katrina: The Disaster and Its Doubles." *Anthropology Today* 21(6): 2-4.

Scheper-Hughes, Nancy., and Philippe I. Bourgois. (2004) *Violence in War and Peace: An Anthology*. Boston, Mass.: Wiley-Blackwell.

Schwartz, Noaki. (2009) "Central Valley Farming Town Demands Answers on Birth Defects." *San Jose Mercury News*, December 21.

Securities and Exchange Commission. (2000) Securities Exchange Act of 1934, Accounting and Auditing Enforcement, Administrative Proceeding File No. 3-10238. <http://www.sec.gov/litigation/admin/34-42968.htm>

Sepulvado, John. (2010) "Kettleman City: State Air Monitoring Stopped as Birth Defects Increased." *Capital Radio*, December 1.

Serwer, Andy. (2002) "Dirty Rotten Numbers Enron Made us Shine a Light on the Books of America's Public Companies. Now, if Your Company Carries Even a Hint of Bad Accounting, the Stock will be Savaged." *Fortune Magazine*, February 18.

Shabecoff, Philip. (1985) "EPA Relationship to a Waste Disposer Creates Controversy." *New York Times*, March 16.

\_\_\_\_\_. (1986) "Irrigation Fight in West Near End." *The New York Times*, July 25.

\_\_\_\_\_. (1988) "Company Abandons Proposal on Burning Toxic Wastes at Sea." *New York Times*. January 1.

Sherrod, Pamela. (1990) "Recycled Paper to Find Market in Joint Venture." *Chicago Tribune*, July. 17

Sierra Club. (2009) "New EPA to Review Bush Administration Midnight Regulations on Toxic Waste." 13 May. Accessed June 21, 2012. <http://www.sierraclub.org/environmentallaw/lawsuits/0382.aspx>

Sinclair, Upton. (1926) *Oil! A Novel*. Long Beach, Calif.. Albert & Charles Boni.

Singer, Stephen (2009) "Waste Management CEO Gets \$6.2 M Pay Package for 08." *Associated Press*, March 25.

Skinner, Peter N. (October 1980) "Performance Difficulties of 'Secure' Landfills for Chemical Waste and Available Mitigation Measures." *American Society of Civil Engineers*.

Soiffer, Bill. (1985) "California's Biggest Dump: \$4 Million Toxic Waste Fines." *San Francisco Chronicle*, November 13.

Soiffer, Bill., and John Fogarty. (1985) "Birds Dying at Sanctuary: U.S. Cutting Off Water to Some State Farms—Kesterson Pollution is the Cause." *San Francisco Chronicle*, March 16.

South Valley Bureau (1986) "Board Returns Money to Chemwaste." *Fresno Bee*, August 21.

\_\_\_\_\_. (1986) "Ewalt Gets Post in Kettleman City Connection to Chemwaste Stirs Protest." *Fresno Bee*, September 11.

\_\_\_\_\_. (1986) "Kettleman City District Board Expands Limit on Water Use." *Fresno Bee*, September 18.

Southern California Hazardous Waste Management Project. (April 15, 1982). *Status Report*. Los Angeles: SCHWMP.

Stavely, Zaidee. (2010) "Skepticism of Investigation of Birth Defects in Central Valley." *Radio Bilingue Noticiero Latino*, June 18.

Steinbeck, John. (1939) *Grapes of Wrath*. New York: Viking.

Stensrud, E.M. (1916) *The Lutheran Church and California*. San Francisco, Calif.: American Scandinavian Foundation.

Stern, G. (1976) *The Buffalo Creek Disaster: How the Survivors of One of the Worst Disasters in Coal-Mining History Brought Suit Against the Coal Company—and Won*. New York: Vintage Books.

Stevenson, Richard W. (1987) "3 Haulers of Refuse Charged on Pricing in Los Angeles Area." *New York Times*, June 10.

Stewart L. Udall (1963) *The Quiet Crisis and the Next Generation*. New York: Holt, Rinehart, and Winston.

Stop Waste Management Website. Information on the Kettleman Hills landfill. Accessed May 17, 2011. <http://www.stopwmx.org/cr2.html#kett>

Strasser, Susan. (1999) *Waste and Want: A Social History of Trash*. New York: Holt Paperbacks.

Sun Life Stadium. (2010) "Waste Management and Miami Dolphins Special Teams Volunteers Engage Fans to Meet 'Two Ton Challenge' for Recyclables Collected During Pre-Game Tailgate Festivities." *Sun Life Stadium Press Release*, November 30.

Sundquist Group. Sundquist Anthony LLC. (2012) "James E. Boland Jr. Biography." Accessed August 22, 2012. [http://www.sundquistanthony.us/bio\\_boland.shtml](http://www.sundquistanthony.us/bio_boland.shtml)

Szasz, Andrew. (1994) *Ecopopulism: Toxic Waste and the Movement for Environmental Justice*. Minneapolis: University of Minnesota Press.

Szasz, Andrew., and Michael Meuser. (1997) "Environmental Inequalities: Literature Review and Proposals for New Directions in Research and Theory." *Current Sociology*. July. Vol 45(3): 99-120.

Sze, Julie. (2007) *Noxious New York: The Racial Politics of Urban Health and Environmental Justice*. Cambridge, Mass.: MIT Press.

Takvorian, Diane. (1993). "Environmental Equity: Toxics and Neighborhoods Don't Mix". *Land Use Forum*. Winter: 28-31.

Tarbell, Ida M. (1906) "Commercial Machiavellianism." *McClure's Magazine*. March. Vol. XXVI No.5

Tarbell, Ida M. (1966) *The History of the Standard Oil Company*. Edited by David M. Chambers. Mineola, N.Y.: Harper and Row.

Taylor, D.E. (2000) "The Rise of the Environmental Justice Paradigm: Injustice Framing and the Social Construction of Environmental Discourses." *American Behavioral Scientist* 43(4):508-80.

Testimony of Stephen J. Gage, Assistant Administrator for Research and Development, EPA, before the Senate Commission on the Judiciary and the Senate Committee on Labor and Human Resources. June 6, 1980.

Texas-Israel Chamber of Commerce Cleantech. (2011) Conference Website: <http://texasisrael-cleantech.org/cleanovation-conference-2011/>

The Big Green Bus Website. <http://thebiggreenbus.org>

The Big Green Bus Website Blog (2011) "First Even for the 2012 Crew!" November 21.

The Environmental Defense Fund. (1985) *Nowhere To Go: The Universal Failure of Class I Hazardous Waste Dump Sites in California*. Sacramento: Toxics Assessment Group.

The White House. (2012) "Remarks by the President in the State of the Union Address." Washington D.C.: Office of the Press Secretary. 24 January. Accessed January 25, 2012. <http://www.whitehouse.gov/the-press-office/2012/01/24/remarks-president-state-union-address>

Thomas, William L. (1956) (ed.) *Man's Role in Changing the Face of the Earth*. Chicago and London: University of Chicago Press.

Thompson, Michael. (1979) *Rubbish Theory: The Creation and Destruction of Value*. Oxford: Oxford University Press.

\_\_\_\_\_. (1994) "Blood, Sweat, and Tears." *Waste Management and Research*. 12.3: 199-206.

Tokar, Brian. (1997) *Earth for Sale: Reclaiming Ecology in the Age of Corporate Greenwash*. Boston: South End Press.

Torry, William I. (1979) "Anthropology and Disaster Research." *Disasters*, 3:43-52.

Townsend, Patricia. (2008 [2000]) *Environmental Anthropology: From Pigs to Policies*. Illinois: Waveland Press.

United Church of Christ Commission for Racial Justice. (1987) "Toxic Wastes and Race in the United States, A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites." New York: United Church of Christ.

United States Census Data. 2010. Kings County.  
<http://quickfacts.census.gov/qfd/states/06/06031.html>

United States Congress. (1983) *Technologies and Management Strategies for Hazardous Waste Control*. Office of Technology Assessment. Washington, D.C.: U.S. Government Printing Office.

\_\_\_\_\_. (1989) *Coming Clean: Superfund Problems Can Be Solved*. Office of Technology Assessment. OTA-ITE-433. Washington, D.C.: U.S. Government Printing Office.

United States Environmental Protection Agency. Region IX, Office of the Hearing Clerk; Docket No. RCRA-09-84-0037 Determination of Violation Compliance Order and Notice of Right to Request a Hearing.

United States Environmental Protection Agency (1971) "Initiating a National Effort to Improve Solid Waste Management: A Comprehensive Chronicle of Activities and Accomplishments in Solid Waste Management within the US Department of Health, Education, and Welfare under Authority of the Solid Waste Disposal Act of 1965. (SW-14)

\_\_\_\_\_. (1974) "Report to Congress: Disposal of Hazardous Wastes." Office of Solid Waste Management Programs. SW-115.

\_\_\_\_\_. (1977) "The Prevalence of Subsurface Migration of Hazardous Waste Chemical Substances at Selected Industrial Waste Land Disposal Sites". EPA/530/SW-634), Washington, D.C.: U.S. Environmental Protection Agency.

\_\_\_\_\_. (1980) *Everybody's Problem: Hazardous Waste*. Office of Water and Waste Management. SW-826.

\_\_\_\_\_. (1989) *A Management Review of the Superfund Program*. Washington, D.C.: U.S. Environmental Protection Agency.

United States 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.

\_\_\_\_\_. (1985) "Hazardous Waste: Federal Agency Hazardous Waste Disposal at Kettleman Hills, California." Report to the Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives. Washington, D.C.: Government Printing Office. GAO/RCED-86-50.

United States Geological Survey. Significant Earthquakes of the World 1985. [http://earthquake.usgs.gov/earthquakes/eqarchives/significant/sig\\_1985.php](http://earthquake.usgs.gov/earthquakes/eqarchives/significant/sig_1985.php)

United States of America v. Hooker Chemical and Plastics Corporation et.al. United States District Court for Western District of New York. Filed December 20, 1979.

University of California Berkeley. (2007) "New Research Finds Red Flags to Uncover Accounting Fraud." *Haas Newsroom*, July 5.

\_\_\_\_\_. "New Program to Focus on Sustainable Products." Accessed November 3, 2010. <http://www.universityofcalifornia.edu/news/article/16680>

\_\_\_\_\_. "Leading Through Innovation: Sustainability Partners Dow Helps Students, Faculty See Fruits of Their Labors." *Haas School of Business*. Accessed November 3, 2011. <http://www.haas.berkeley.edu/strategicplan/culture/lti/sustainability-partners.html>

\_\_\_\_\_. (2010) "Sustainable Products & Solutions Welcomes Kimberly-Clark and Waste Management." *Haas School of Business Center for Responsible Business*. Volume 1 Spring. Accessed November 3, 2011. <http://responsiblebusiness.haas.berkeley.edu/Newsletter/Vol1/#kc>

U.S. Fed News. (2011) "University of Iowa to Phase in Single-Stream Recycling on Campus." 26 August. Accessed on November 3, 2011. <http://www.waste-management-world.com/index/from-the-wires/wire-news-display/1487805968.html>

Van Derbeken, Jaxon. (2011) "PG&E Declared 2 Lines Safe Despite Missing Records." *San Francisco Chronicle*, December 11.

Vang, Susie Pakoua. (2007) "Plan for Landfill at Key Juncture: Decision to be Made on Appeal Against Kings Co. Bioreactor." *Fresno Bee*, December 9.

\_\_\_\_\_. (2008) "Kettleman Hills Landfill Seeks OK to Expand Site." *Fresno Bee*, April 3.

Vaughan, Diane. (1996) *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA Chicago*. Chicago: University of Chicago Press.

Vayda, A. and B.J. McCay, (1975) "New Directions in Ecology and Ecological Anthropology." *Annual Review of Anthropology*, 4: 293-306.

Villarejo, D. (1986). "How Much is Enough? Federal Water Subsidies and Agriculture in California's Central Valley." *California Institute for Rural Studies*.

Vyner, Henry. (1988) *Invisible Trauma: the Psychosocial Effects of the Invisible Environmental Contaminants*. Lexington, Mass: Lexington Books.

Walker, Richard A. (2004) *The Conquest of Bread: 150 Years of Agribusiness in California*. New York: New Press.

Wallace, A. (1956) "Human Behavior in Extreme Situations." Washington, DC: National Academy of Sciences-National Research Council.

Walters, Dan. (2010) "Toxic Chemical Emissions in California Drop 14 Percent." *Sacramento Bee*, December 16.

Wasserman, Jim. (1993) "Little Town Notches Win Over Big Money." *Fresno Bee*, September 9.

Waste Management Inc. "Recycling and Diversion on College Campuses: AASHE 2011 Conference." Accessed on April 1, 2013. <http://www.youtube.com/watch?v=9jhOS5C2ySA>

Waste Management Inc. "Waste Management Shows Guests How to Think Green at INNOVENTIONS at Epcot." Accessed June 2, 2011. <http://www0.wm.com/wm/features/ribboncuttingepcot.asp>

Waste Management Inc. *Focus on Integrity and Inclusion*. Code of Conduct Document. Accessed June 2, 2011. [www.wm.org](http://www.wm.org)

Waste Management Inc. *Greenopolis*. <http://greenopolis.com/partnerships>

Waste Management Inc. (2008) *Sustainability Report: The Color of Our World*. Accessed on March 22, 2011. <http://www.wm.com/sustainability/index.jsp>

Waste Management Inc. Kettleman Hills Facility Website.  
<http://kettlemanhillslandfill.wm.com/index.jsp>

Waste Management Inc. Kettleman Hills Landfill website. Accessed November 1, 2011.  
<http://kettlemanhillslandfill.wm.com/environment/facts-to-know/safety.jsp>

Waste Management Phoenix Open Website. <http://wmphoenixopen.com/>

Waste Management Inc. Press Release. Company Website [www.wm.org](http://www.wm.org)

\_\_\_\_\_. (2008) "Waste Management "Thinking Green" at INNOVENTIONS at Epcot at the Walt Disney World Resort." February 26.

\_\_\_\_\_. (2008) "GetGreen South Bronx earth Fest Celebrates the Environment and Culture of the South Bronx." April 19.

\_\_\_\_\_. (2008) "Waste Management Named California Climate Action Leader." May 21.

\_\_\_\_\_. (2008) "Waste Management Announces Launch of Greenopolis.com; An Interactive, Online Environmental Community." June 17.

\_\_\_\_\_. (2008) "LG Launches Nationwide Electronics Recycling Program with Waste Management's Recycle America." August 1.

\_\_\_\_\_. (2008) "Hydrodermic Needles Illegal in Trash September 1<sup>st</sup>." August 25.

\_\_\_\_\_. (2008) "Waste Management and SONY Electronics to Host Free Electronics Recycling Event." August 28.

\_\_\_\_\_. (2009) "Waste Management, Tropicana Launch National Recycling Initiative Along with Carton Council." April 2.

\_\_\_\_\_. (2009) "DuPont Nonwovens and Waste Management Launch Recycling Program for Tyvek Products." April 14.

\_\_\_\_\_. (2009) "Waste Management Encourages K-12 Classrooms to Think Green with New Online Resource." April 16.

\_\_\_\_\_. (2009) "Waste Management Honored by American Lung Association for Environmental Achievements." April 20.

\_\_\_\_\_. (2009) "Waste Management Subsidiary Acquires Medical Waste Collection, Transportation and Processing Company." October 20.

\_\_\_\_\_. (2009) "LG Electronics Announces First Recycling Program for Hotel TVs, Computer Monitors." November 9.

\_\_\_\_\_. (2009) "Yoplait, Waste Management and City of Denver Encourage Better Recycling, One Cup at a Time." November 9.

\_\_\_\_\_.(2010) “Waste Management President and Chief Operating Officer Larry O’Donnell to Leave Company. Chief Executive Officer David Steiner Has Assumed President Role.” June 2.

\_\_\_\_\_.(2010) “Waste Management Opens Largest Medical Waste Processing Facility in California.” June 10.

\_\_\_\_\_. (2010) “Waste Management Acquires Medical and Dental Waste Processing Facility and Business in Ohio” August 5.

\_\_\_\_\_. (2010) “New “into the Bin, Out of the Box” Recycling Contest Encourages Dallas Area Students to Recycle.” October 12.

\_\_\_\_\_.(2010) “LG Electronics Announces First Recycling Program for Hotel TVs, Computer Monitors.” November 9.

\_\_\_\_\_.(2010) “Waste Management Supports President Obama’s Call for Expanded E-Waste Recycling.” November 16.

\_\_\_\_\_.(2010) “Linde and Waste Management Receive California Governor’s Award for Sustainable Facility.” November 16.

\_\_\_\_\_.(2012) “Waste Management to Establish Toronto’s Most Advanced Facility for Processing Construction and Demolition Waste Materials.” January 26.

\_\_\_\_\_.(2012) “Waste Management to Build Ontario’s Largest Private-Sector Recycling Facility in Cambridge.” February 2.

Waste Management World. (2013) “Waste Management: Named a PRP at 80 NPL Locations at Dec. 31.” *Waste Management World*. Accessed April 22, 2013. <http://www.waste-management-world.com/news/2013/04/16/waste-management-named-a-prp-at-80-npl-locations-at-dec-31.html>

Waste Management World. (2013b) “Waste Management: Had \$253MM Clean-Up Liabilities at Dec. 31.” *Waste Management World*. Accessed April 22, 2013. <http://www.waste-management-world.com/news/2013/04/16/waste-management-had-253mm-clean-up-liabilities-at-dec-31.html>

Wenck Associates, Inc. (2010) “Final Dioxin-Like Polychlorinated Biphenyl (PCB) Congeners Study Report. Chemical Waste Management, Inc. Kettleman Hills Facility.” Wenck File #0742-820.

Wheelabrator Technologies Inc. Website <http://www.wheelabratortechnologies.com/>

Williams, Joy., and Diane Takvorian. (1990) “Communities at Risk: Your Right to Know About Toxics in San Diego.” California: Environmental Health Coalition.

- Williamson, Richard. (2006) "FKM Portrays WM as Clean, Green Machine." *Adweek.com*, September 6.
- Winkler, Keith. (2011) Personal Communication. Director of Kings County Environmental Health Services. April.
- Wolf, Eric. (1980) "They Divide and Subdivide, and Call it Anthropology." *New York Times*, November 30.
- Yamashita, Eiji. (2007) "Kettleman City Landfill Project Delayed." *Hanford Sentinel*, December 14.
- \_\_\_\_\_. (2008) "Bioreactor Project Clears Legal Hurdle." *Hanford Sentinel*, January 31.
- \_\_\_\_\_. (2008) "Landfill Project Committee Draws Criticism." *Hanford Sentinel*, April 17.
- \_\_\_\_\_. (2008) "Groups Call for Disbandment of County Commission." *Hanford Sentinel*, August 8.
- \_\_\_\_\_. (2008) "More Public Input on Landfill Sought from Kettleman Residents." *Hanford Sentinel*, November 12.
- \_\_\_\_\_. (2008) "Protest Denounces County Process on Landfill Proposal." *Hanford Sentinel*, December 9.
- \_\_\_\_\_. (2009) "Feds Host Meeting on PCB Plan for Kettleman." *Hanford Sentinel*, February 6.
- \_\_\_\_\_. (2009) "Kettleman Landfill Settlement Accepted." *Hanford Sentinel*, April 30.
- \_\_\_\_\_. (2009) "Green Group Warns of Kettleman City 'Health Emergency'." *Hanford Sentinel*, July 9.
- \_\_\_\_\_. (2009) "Kings County Responds to Birth Defects Concerns." *Hanford Sentinel*, July 18.
- \_\_\_\_\_. (2009) "Landfill Hearing OK'd Despite Concerns." *Hanford Sentinel*, September 23.
- \_\_\_\_\_. (2009) "Anger Erupts at Landfill Meeting." *Hanford Sentinel*, October 7.
- \_\_\_\_\_. (2009) "County Hears Appeal Amid Protests; Landfill Decision Two Weeks Away." *Hanford Sentinel*, December 8.
- \_\_\_\_\_. (2010) "State Snubs County Request to Investigate Birth Defects." *Hanford Sentinel*, 12 January.
- \_\_\_\_\_. (2010) "Supervisor to State: Explain Rejection of Kettleman Study." *Hanford Sentinel*, 21 January.

- \_\_\_\_\_. (2010) "State: Kettleman Birth-Defect Rate Normal." *Hanford Sentinel*, February 9.
- \_\_\_\_\_. (2010) "Kettleman Birth Defect Cases Double." *Hanford Sentinel*, March 9.
- \_\_\_\_\_. (2010) "Chem Waste Management Fined for Violations." *Hanford Sentinel*, April 9.
- \_\_\_\_\_. (2010) "Kettleman Chamber Has Big Plans for the Future." *Hanford Sentinel*, May 27.
- \_\_\_\_\_. (2010) "Kettleman Chamber Resurrected." *Hanford Sentinel*, May 12.
- \_\_\_\_\_. (2010) "More Fed Heat on Landfill." *Hanford Sentinel*, June 2.
- \_\_\_\_\_. (2010) "Kettleman Hears Progress Update on Investigation." *Hanford Sentinel*, June 18.
- \_\_\_\_\_. (2010) "Feds Find More Problems at Kettleman Landfill." *Hanford Sentinel*, July 17.
- \_\_\_\_\_. (2010) "Civil Rights Complain Filed Against Kings County." *Hanford Sentinel*, June 19-20.
- \_\_\_\_\_. (2010) "State: No Common Cause for Kettleman City Birth Defects." *Hanford Sentinel*, November 23.
- \_\_\_\_\_. (2010) "Chem Waste Funds Countywide Prenatal Program." *Hanford Sentinel*, December 23.
- \_\_\_\_\_. (2011) "EPA Identifies New Violations in Kettleman." *Hanford Sentinel*, April 7.
- \_\_\_\_\_. (2011) "Avenal Power Plant Prevails in Lawsuit." *Hanford Sentinel*, May 28.
- \_\_\_\_\_. (2011) "Oil Project Hearing Delayed." *Hanford Sentinel*, December 6.
- Zara, Michael. (2005) "The Evolution of Corporate Legal Standing in U.S. and International Law: One View of the Doctrine of "Corporate Personality." *Kroeber Anthropological Society Papers*. No.92/93
- Zeff, R., and Marsha Love, Karen Stults. (1989) *Empowering Ourselves: Women and Toxics Organizing*. Arlington, Va: Citizen's Clearinghouse for Hazardous Wastes.
- Zichal, Heather. (2011) "Attacks to the Clean Air Act & the False Choice between a Healthy Environment and Healthy Economy." *White House Blog*. Accessed April 12, 2013.  
<http://www.whitehouse.gov/blog/2011/09/15/attacks-clean-air-act-false-choice-between-healthy-environment-and-healthy-economy>

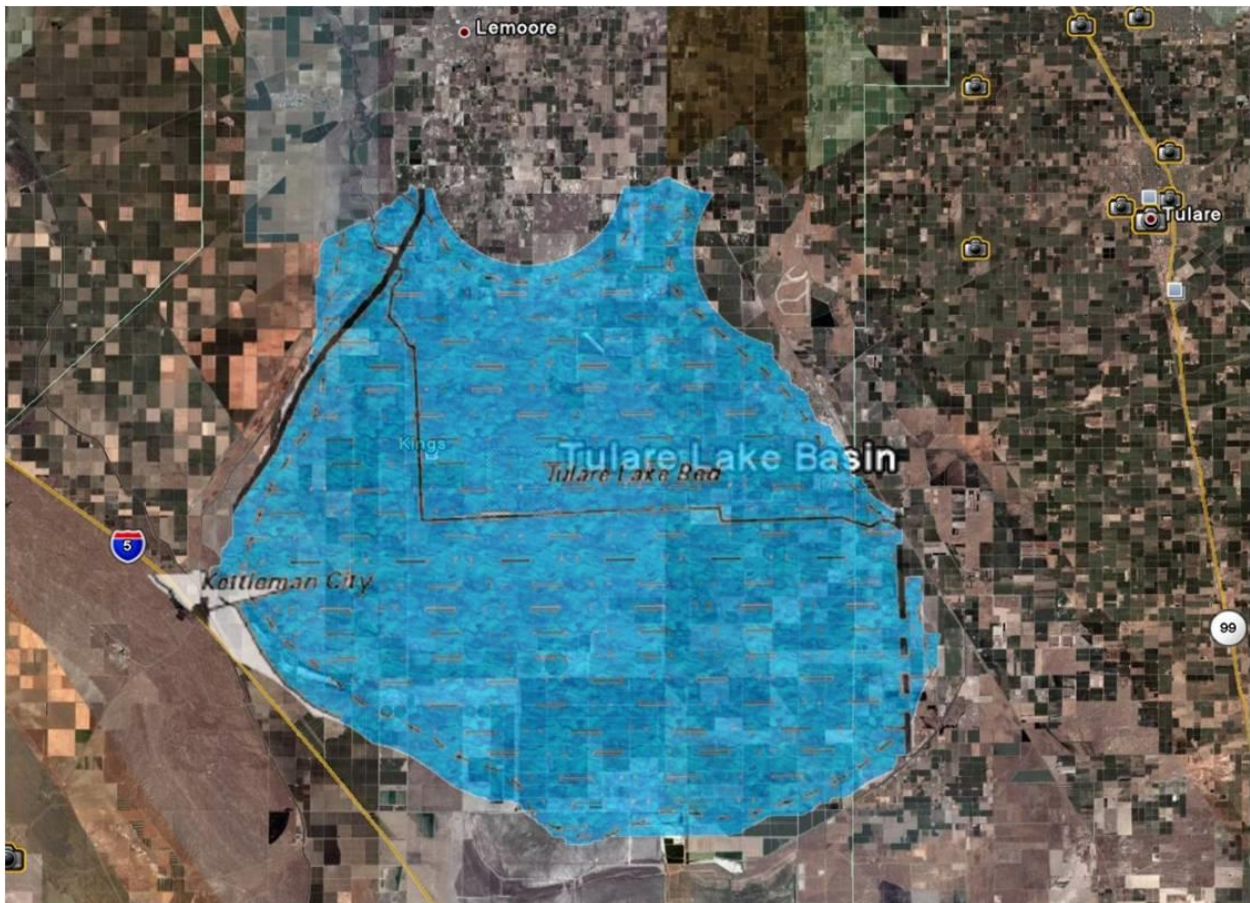
## Appendix 1



*Map of California's Central Valley*

*Courtesy of <http://www.westsidercd.org/ResourcesLibrary.html>*

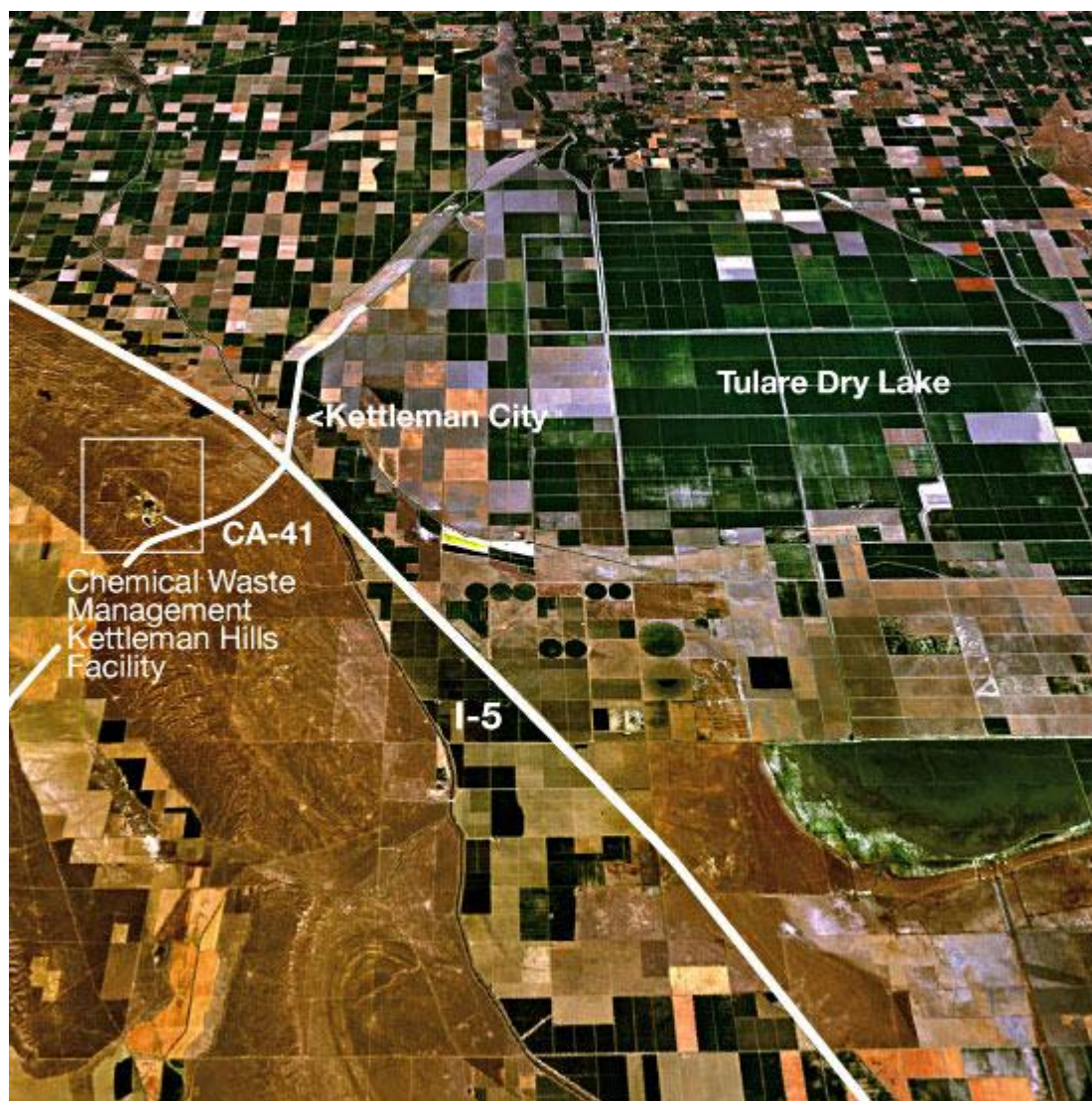
**Appendix 1 (continued)**



*Map of the Tulare Lake Basin*

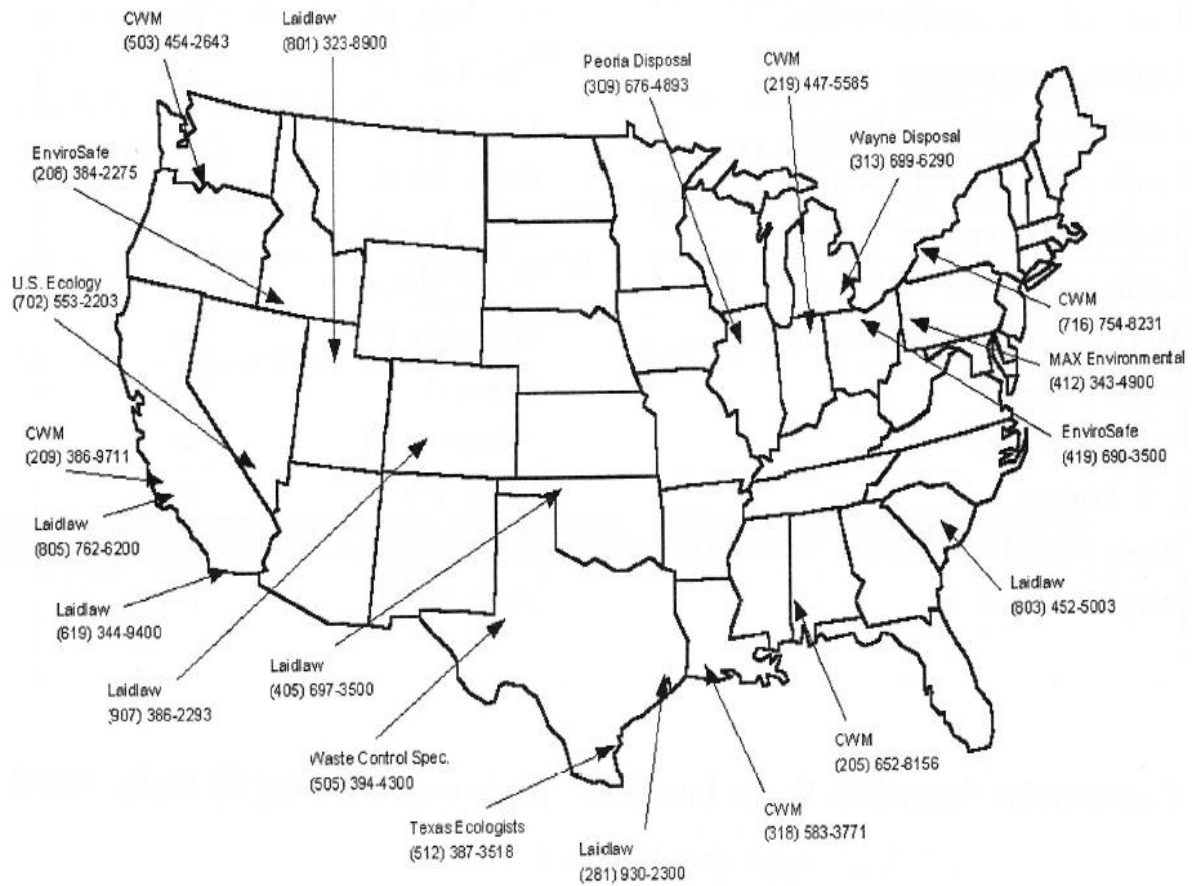
*Courtesy of [http://www.indybay.org/uploads/2009/07/11/tulare\\_lake\\_-\\_google\\_satellite\\_map.jpg](http://www.indybay.org/uploads/2009/07/11/tulare_lake_-_google_satellite_map.jpg)*

Appendix 1 (continued)



*Map of Kettleman City and its proximity to the Chemical Waste Management facility  
Courtesy of [www.invisible5.org](http://www.invisible5.org)*

**Appendix 1 (continued)**



*Map of the United States toxic waste landfills*

*Courtesy of <http://www.ehso.com/cssepa/tsdflandfills.php>*

**Appendix 2**

**LITTLE KINGDOM OF KINGS**

**KINGS COUNTY CALIFORNIA**

RAILROADS  
HIGHWAYS

Sierra to Sea Highway

San Francisco

Sacramento

Lake Tahoe

Yosemite Valley

Genit Grant and Sequoia Natl Parks

Kern River Canyon

Los Angeles

**Time By Auto to**

General Grant Park, Giant Forest and points in Sequoia National Park	4 hours
Pacific Coast resorts	4 hours
San Francisco and Sacramento	8 hours
Los Angeles	8 hours
Yosemite Valley	10 hours

*THE LITTLE KINGDOM OF KINGS*

**A U C T I O N**  
**KETTLEMAN CITY**  
*Grand Opening of the New Town of*  
**KETTLEMAN CITY, Kings County, Calif.**

---

**1376 Business and Residence Lots to be Sold By AUCTION SALE, starts Sunday, June 23, at 1 p.m. and continues each and every day 'till Sunday, June 30 inclusive.**

***The greatest event of its kind ever held in the state.***

Kettleman City, less than four (4) months old, yet probably the most talked of town in the country. Sixty new buildings in the last few weeks and hundreds of people turned away for lack of accommodation.

**KETTLEMAN CITY THE COMING OIL CITY  
OF THE WEST**

surrounded on three sides by the New Kettleman Oil Field, the greatest and biggest proven Oil Field in the world. Where the largest oil wells in the world are shooting up over 80% Gasoline oil. Where 36 new wells are now being drilled and more to start. Where three refineries are now being built. Where Big pipe lines are being rushed through to the sea. Where Millions of Dollars are being spent for developments and hundreds of men are employed.

Come to Kettleman City, where you are needed. Where the Biggest Money is to be made. Where you can start with small Capital and grow with the fastest growing town in the west. A new town backed by Millions of Dollars in wealth and pay rolls. 215 miles from Los Angeles via Bakersfield.

**Shares in oil rights on a pro-rata lot basis.**

***For further information write Chamber of Commerce,***  
**Kettleman City, via Lemoore, Calif.**  
**or James L. Dowd, Auctioneer**  
**560 N. Kingsley Drive, Los Angeles, Calif.**

*With the discovery of oil in Kettleman City, advertisements like these attempted to attract people to the area*

*Courtesy of Los Angeles Times. June 16, 1929*

Appendix 2 (continued)

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MILLIONS IN BLACK GOLD IN KETTLEMAN HILLS, \$150. easy terms, will buy a lot, insured title, in KETTLEMAN CITY, on north dome. Phone TWIN OAKS 5254.

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*Advertisement reads: "Millions in Black Gold in Kettleman Hills, \$150, easy terms, will buy a lot, insured title, in Kettleman City, on north dome. Phone Twin Oaks 5254."*

*Courtesy of Los Angeles Times Classified Ad. October 20, 1930*

Appendix 2 (continued)



**With energy costs and oil dependence on the rise,** the need for renewable power is greater than ever. That's why Waste Management is using the resources at our disposal to create the energy equivalent of saving over 14 million barrels of oil per year. It's a powerful idea we're proud to drive forward.

*From everyday collection to environmental protection,  
Think Green. Think Waste Management.*


[www.wm.com/thinkgreen](http://www.wm.com/thinkgreen)



*WMI advertisements in magazines such as National Geographic*

*Courtesy of National Geographic January 2008*

Appendix 2 (continued)



**“Proud  
To Be Your  
Neighbor”**

*Gail Vaughn*  
**Gail Vaughn**  
Facility Maintenance Lead  
27 years with Waste Management

**Working Side-by-Side**

*Having lived in Kettleman City for 40 years and raised my family here, I have a lot of pride in our community. In addition to my work at the Kettleman Hills Facility, I've spent more than 1,000 hours with my Waste Management colleagues building the ballpark and maintaining the sports fields in Kettleman City, assisting the local elementary school's maintenance crew and cleaning up illegal dumping around town.*

*I'm a Waste Management employee and I'm proud to be your neighbor.*

To learn more, visit  
[KettlemanHillsFacts.com](http://KettlemanHillsFacts.com)

The Sentinel - Wednesday, Aug. 18, 2010

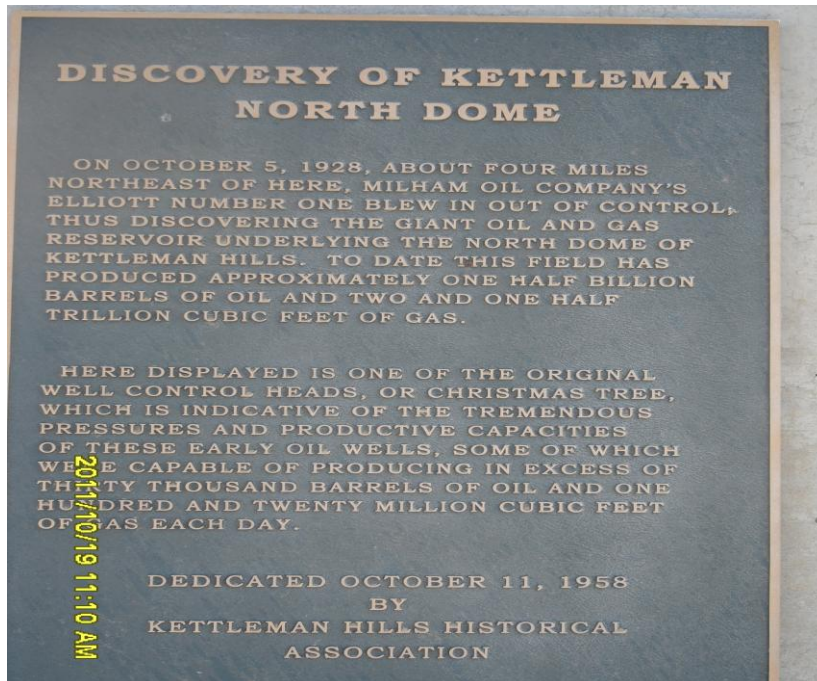
WMI Advertisement in Hanford Sentinel; Part of campaign to be a good neighbor. Courtesy of Hanford Sentinel August 18, 2010

### Appendix 3



*Above: Monument marking location of the oil discovered in the 1920s near Avenal in the Kettleman Hills. Photograph by Yalda Asmatey*

*Below: Placard on the Monument. Photograph by Daisy Lopez*



**Appendix 3 (continued)**



*Kettleman City home. Photograph by Daisy Lopez*



*Kettleman City home. Photograph by Yalda Asmatey*

**Appendix 3 (continued)**



*Kettleman City home—one of the newly developed homes with a sidewalk. Photograph by Daisy Lopez*



*Kettleman City home. Photograph by Daisy Lopez*

**Appendix 3 (continued)**



*Notice how close the agricultural fields are to the homes in Kettleman City. The town is surrounded by these fields*

*Photograph by Daisy Lopez*

**Appendix 3 (continued)**



*Kettleman City Playground located in the center of the town. Photographs by Yalda Asmatey*

Appendix 3 (continued)



*The only school in the town (Kettleman City Elementary School) and the town swimming pool*

*Photographs by Daisy Lopez*

**Appendix 3 (continued)**



*These pipelines run behind the playing field of the school. Photograph by Yalda Asmatey*



*The Kettleman City Community Center. Photograph by Daisy Lopez*

**Appendix 3 (continued)**



*Kettleman City grocery store. Photograph by Yalda Asmatey*



*Highway 41 runs through the town, splitting it into two parts. This picture was taken soon after the Caltrans repairs which paved the road. Photograph by Yalda Asmatey.*

**Appendix 3 (continued)**



*Man in a wheelchair crossing Highway 41. Photograph by Yalda Asmaty*



*Telephone in Kettleman City along Highway 41. Photograph by Daisy Lopez*

**Appendix 3 (continued)**



*Trucks passing through Kettleman City on Highway 41. Photograph by Yalda Asmatey*



*Street names reflect the history of the town. Photograph by Yalda Asmatey*

Appendix 3 (continued)



*Known by Kettleman City residents as “the junction.” Major stopover on the Interstate 5 and Highway 41. Photograph by Yalda Asmatey*



*The Junction. Photograph by Daisy Lopez*

**Appendix 3 (continued)**



*Opposite the junction along Highway 41 is the entrance to the WMI Kettleman Hills facility.  
Photograph by Daisy Lopez*

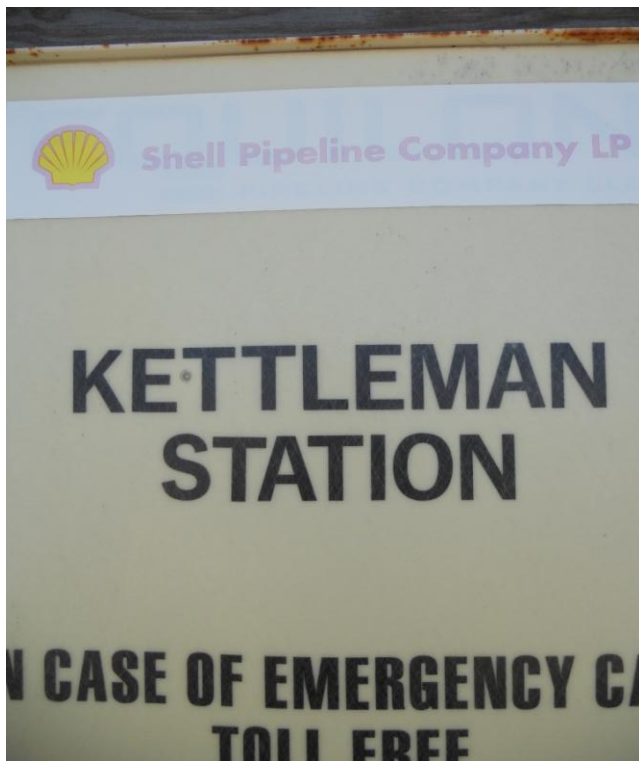


*Chevron Kettleman Hills Field. This is located just miles away from where residents live.  
Photograph by Daisy Lopez*

**Appendix 3 (continued)**



*PG&E Kettleman Substation located near Avenal. Photograph by Daisy Lopez*



*Shell Pipeline located just miles away from where residents live. Photograph by Yalda Asmatey*

**Appendix 3 (continued)**



*Unauthorized garbage dump located just beyond the homes in Kettleman City. In the distance is the Shell station. Photograph by Daisy Lopez*