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### UNIVERSITY OF CALIFORNIA

Los Angeles

From Picket Fences to Picket Lines:

An examination of neighborhood collective memory and responses to industrial pollution disasters

A dissertation submitted in partial satisfaction of the requirements for the degree of

Doctor of Philosophy in Political Science

by

Adria Vee Tinnin

2020

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#### ABSTRACT OF THE DISSERTATION

From Picket Fences to Picket Lines:

An examination of neighborhood collective memory and responses to industrial pollution disasters

by

#### Adria Vee Tinnin

Doctor of Philosophy in Political Science
University of California, Los Angeles, 2020
Professor Lorrie Frasure Yokley, Co-Chair
Professor Matthew Alejandro Barreto, Co-Chair

This dissertation examines differences in government and community responses to local industrial pollution disasters and the differences in outcomes received by demographically different community types. It does so by asking two distinct research questions. First, what factors influence the mode of mobilization a community engages in, when responding to an industrial pollution disaster? Second, what factors influence government responsiveness to these mobilized communities? I examine these questions through a comparative case study analysis of two communities in Los Angeles County: the affluent white neighborhood of Porter Ranch and the working-class Latinx area of Southeast Los Angeles. This study connects social movement

theory with literature on environmental racism. It does so by extending Fredrick Harris' (2006) argument that historically informed collective memory spurs or motivates participation in collective action, to also consider how collective memory influences the modes, or tactics, of mobilization. This dissertation also engages with Hahrie Han's "issue publics" theory, to understand the motivation for collective action in polluted communities (2006). With the use of ethnographic data, in-depth interviews, and media sources, I find that the local collective memory of a community's relationship with local government, determines the mode of mobilization in which that community engages when it experiences an industrial pollution disaster. Specifically, I find that communities with a collective memory of a positive relationship with the state, will utilize the tactics that demonstrate a favorable expectation of local government action – the faith-in-government framework. Likewise, a community with a collective memory of a negative relationship with local government will utilize tactics that demonstrate an unfavorable expectation of local government action – the no-faith-in-government framework. In response to the second research question, I engage with the literature on government emergency response. My research finds support for Birkland and De Young (2011), who suggest that coordination across different levels of government leads to procedural uncertainty and impacts the quality of local government responsiveness to pollution disasters. Like Birkland and De Young, I find that the ad hoc creation of industrial pollution legislation has exacerbated the uncertainty the authors described. My overall findings demonstrate the importance of creating comprehensive industrial pollution policies that consider both emergency prevention and emergency response; to that end, I provide a list of policy recommendations aimed at reducing uncertainty. Understanding local-level collective memory and how it impacts a community's response can teach us how to improve emergency response policy making and

develop a better understanding of how industrial pollution impacts the relationship between communities and their elected officials.

The dissertation of Adria Vee Tinnin is approved.

Michael Chwe

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University of California, Los Angeles
2020

For my mom.

You make everything possible.

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## List of Acronyms

Cal EPA: California Environmental Protection Agency

CalGEM: California Geothermal Energy Management Division

CARB: California Air Resources Board

CBE: Communities for a Better Environment

CPUC: California Public Utilities Commission

DOGGR: Division of Oil, Gas and Geothermal Resources

DTSC: Department of Toxic Substances Control

EPA: Environmental Protection Agency

EYCEJ: East Yard Communities for Environmental Justice

FERC: Federal Energy Regulatory Commission

ISD: Interim Status Document

LACDPH: Los Angeles County Department of Public Health

LULU: Locally Unwanted Land Use

MELA: Mothers of East LA

NIMBY: Not In My Back Yard

PHMSA: Pipeline and Hazardous Materials Safety Administration

PR: Porter Ranch

RCRA: Resource Conservation and Recovery Act

SCAQMD/AQMD: South Coast Air Quality Management District

SELA: Southeast Los Angeles

SPR: Save Porter Ranch

USDOJ: United States Department of Justice

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"Alone we can do so little, together we can do so much."

#### - Helen Keller

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## Chapter One: Introduction

This dissertation examines differences in government and community responses to local industrial pollution disasters and the differences in outcomes received by demographically different community types. When communities experience industrial pollution of their physical environment, what accounts for the differences in tactics employed by different communities? What accounts for differences in government response to polluted communities? Is there a systematic pattern? Furthermore, what accounts for the differences in outcome for these different communities? In short, this dissertation seeks to answer two main research questions. First, what factors influence the mode of mobilization in response to environmental pollution, and how does this vary by community type? Second, what factors influence local government responsiveness to communities experiencing environmental pollution, and how does this vary by community type?

This study connects social movement theory with literature on environmental racism. It does so by extending Fredrick Harris' (2006) argument that historically informed collective memory spurs or motivates participation in collective action, to also consider how collective memory influences the modes, or tactics, of mobilization. This dissertation also utilizes Hahrie Han's "issue publics" theory, to understand the motivation for collective action in polluted communities (2006). Han finds that community members will mobilize in response to a collective problem when they recognize the issue as affecting themselves personally, and that this is true even in communities that do not fit the expectations of a traditional resource model for political participation (2006). A major pollution event, such as a gas leak or industrial lead

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<sup>&</sup>lt;sup>1</sup> At its core, the resource mobilization theory set forth by Henry E. Brady, Sidney Verba and Kay Lehman Schlozman claims that the likelihood of a person's political participation is dependent upon the amount of resources one has – specifically "time, money, and civic skills." These resources, it is claimed, are the most salient factors

poisoning, impacts everyone in a community thereby making it a collective problem, but it does so by impacting individual human health, thus making it also a very personal problem. In short, Han's work provides the theoretical foundation for understanding why collective action takes place in response to industrial pollution disasters.

These dominant theories – collective memory and issue publics – only answer the question of why people mobilize but do little to answer *how* they mobilize. I argue that the mode of mobilization in which a community engages, is determined by the collective memory of its relationship with the state and/or local government. Reconceptualizing the basic understanding of what collective memory is and how it functions allows it to be used to understand the mode of mobilization, not just the motivation for mobilization. While much of the extant literature on collective memory focuses on the African American community, I argue that collective memory exists in both historically privileged and historically marginalized communities alike. By considering both a low-income, predominantly Latinx community and an affluent, predominantly white community, this research provides a broad comparative analysis of local collective memory and modes of mobilization.

To put the theory simply, if a community's collective memory is that of a positive relationship with the state, the community will take action through institutional channels. If the collective memory is that of a negative relationship with the state, the community will take grassroots actions reminiscent of the civil rights movement of the 1950s and 1960s. By making this extension my work opens the path for further research on the relationship between environmental pollution, racial politics, collective memory and collective action.

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when the consistently significant variable "socioeconomic status" is disaggregated. (Brady, Henry E., Sidney Verba and Kay Lehman Schlozman. "Beyond SES: A Resource Model of Political Participation," *American Political Science Review.* (1995) 89:2, p271-294.

In this chapter, I first review the extant literature on collective memory and the literature on motivations for collective action, specifically issue publics (Han 2006) and group threat (Edwards 1995). I then discuss the limitations of these theories for examining what factors influence the mode of a community's mobilization. Next, I offer my own theory of what accounts for a community's tactical choices. I also explore the factors influencing government responsiveness and why the speed and sufficiency of that responsiveness varies across different community types. The subsequent section presents an overview of the case studies this dissertation analyzes. Finally, I discuss the data and methods used and present a brief outline of the remaining chapters.

### What is Collective Memory?

Much of the extant literature describes collective memory as individual memories of past experiences, or significant events, which are passed down through generations. For example, in Fredrick Harris' 2006 article, about collective memory and collective action during the civil rights movement, he discusses how the collective memory of slavery and frequent lynchings<sup>2</sup> aided in the mobilization of the African American community one hundred years after slavery ended. Harris states that, "collective memory may serve purposes for individual decision-making by providing individuals with historically-nuanced information that enhances their propensity to engage in collective action" (Harris 2006, 2).

While Harris and other scholars (McAdam 1999, 2003; Dawson 1994) often discuss collective memory in relation to the civil rights movement, and the influence that the memory of

<sup>2</sup> 

<sup>&</sup>lt;sup>2</sup> While Frederick Harris' study focuses on the south and memories of lynching in the south (ex: Emmett Till), this violence also occurred in the Midwest as well as the west coast (particularly Oregon). This is important to remember as it plays a role in developing collective memory. Regardless of whether or not an event was televised or discussed on major network news, the frequency and broad distribution of lynchings and other racist encounters generated a shared feeling and, in turn, a collective memory of violent racial injustice. In short, the creation of this memory did not depend solely on the southern experience.

centuries of slavery had on motivating mass participation, there is no reason to assume that collective memory must be centuries in the making, nor is there reason to assume that it only exists within racial group identities. This dissertation utilizes the extant theory of collective memory "providing individuals with historically-nuanced information that enhances their propensity to engage in collective action" (Harris 2006, 3) to investigate the existence and effects of a local, or neighborhood-level, collective memory. I argue that when an environmental pollution emergency occurs, a neighborhood-level, or place-based, collective memory is activated. The positive or negative nature of this memory significantly influences the communities' mobilization tactics. However, before examining the limits of the existing conceptualization of collective memory, a firm understanding of its link to collective action must first be established.

## Collective Memory and Mobilization

Social movement theory can be a challenging subject for political scientists to study. Social science research, as conducted in political science, often aims to generate predictions about the likelihood of future events. This can be difficult to do with a social movement because each observable case appears to be a wholly unique event and occurs relatively rarely. To solve this problem Doug McAdam, Sidney Tarrow and Charles Tilly (2001) create an explanatory process-map of how social movements occur. In other words, they seek to provide a generalizable answer to the question: What causes people to mobilize? The authors theorize all social movements as the result of the same set of causal mechanisms, concatenated into processes that produce different outcomes based on the ordering and combination of the mechanisms (McAdam, Tarrow and Tilly 2001).

One mechanism that is of particular importance is that of social appropriation. McAdam, Tarrow and Tilly state that "It is a challenger's capacity to appropriate sufficient organization and numbers to provide a social/organizational base...which makes mobilization possible" (McAdam Tarrow and Tilly 2001, 47). Or, as Harris phrases it, "Social appropriation is a causal mechanism that allows challengers to employ information to interpret whether environmental conditions pose either an opportunity or a threat to collective action" (McAdam Tarrow and Tilly 2001, 48, as referenced by Harris 2006, 7-8). For Harris, this appropriation mechanism is particularly useful in explaining how collective memory turns into collective action in the African American community. Whether events are "appropriated in behalf of collective action at T1 or as collective memories at T2" they provide actors with "interpretative material to build action frames," which in turn stimulate collective action (Harris 2006, 9-10). In other words, when there is a significant pollution event it can either be appropriated into collective action at that moment or can be appropriated and stored as a collective memory to be used to mobilize collective action in the future.

Harris (2006) uses the murder of Emmett Till as an illustrative example. In 1955 Emmett Till, a 14-year old African American boy, was lynched in Mississippi after a white woman falsely accused him of making a sexual comment to her in a store. This was a memorable injustice that the majority of African Americans were familiar with at the time of the civil rights movement; a survey conducted 11 years after Till's murder showed that 62% of respondents reported remembering the event (Harris 2006). Harris points to the NAACP and Emmett Till's mother as appropriating Till's murder as a call for action against racial oppression and violence

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<sup>&</sup>lt;sup>3</sup> T1 and T2 refer to two distinct time variables in Harris' model of how events are appropriated by movement leaders. Given that Harris' full model is not presented here the reader should interpret "T1" as the present time, and "T2" as some future date.

in the United States; the event was employed for collective action at a later time. In other words, if the event is stored as a collective memory, then it can be "tapped into" in the future as the motivation for mobilization (Harris 2006). This is how a collective action framework of injustice is created and spurs mobilization to occur.

### Threat and Collective Action

The idea of long-term collective memory acting as a catalyst for collective action is convincing. However, there is an equally compelling alternative hypothesis: group threat.<sup>4</sup> Bob Edwards (1995) suggests that when an individual family experiences a rare and/or life threatening illness it is considered a private misfortune, but once people begin to communicate with one another and learn that many families are suffering equally unusual ailments, then the situation becomes understood as a collective problem rather than a private misfortune (42). This collective problem is a threat to the community and mandates collective response. While there may be some free riders – as is the case in any collective action scenario – most people will participate in the movement because they are all equally impacted as individuals; everyone has a stake in the outcome.

Han describes these groups of people with a shared concern as "issue publics;" a term first coined by Philip Converse (1964).<sup>5</sup> As Han (2009) explains, an "issue public" is a group of people who become involved in politics because they see a particular policy issue as directly affecting their lives (51). The central claim of the issue public hypothesis is that people will

<sup>&</sup>lt;sup>4</sup> This idea of group threat is not to be mistaken for the more widely known theory of racial group threat as written about by Kinder and Sears (1981), Giles and Hertz (1994), and Bobo and Hutchings (1996.

<sup>&</sup>lt;sup>5</sup> "Philip Converse first coined the term "issue publics" to refer to the different groups of voters who have particular personal concern for certain policy issues...These people have built connections between their personal goals and a specific policy issue" (Han 2009, 11-12).

participate in politics, regardless of their level of resources, 6 if they understand a particular issue as affecting their lives directly. Once there is a desire to address this particular issue, people will get involved in politics regardless of a lack of general interest in politics or a lack of material resources.

While the issue public hypothesis and the collective-memory-to-collective-action hypothesis Harris described seem very different on their face, they both rely on the causal mechanism of appropriation to convert a source of motivation into action. In the case of threat, it is appropriation that tells the community what or who to blame for their collective problem. Once the community discovers that numerous families or individuals are suffering from the same, or equally unusual, ailments it is appropriation that tells them what or who is responsible for causing it and appropriation that determines if they will actually mobilize. Similarly, it is appropriation that converts collective memories into calls to action. Regardless of the source of motivation it is the causal mechanism of appropriation that is converting that motivation into action – but what sort of action? This dissertation argues that the mode of mobilization in which a community engages is dependent upon whether the community has developed a faith-ingovernment or a no-faith-in-government collective action framework.

#### The Construction of Collective Action Frameworks

Collective action frameworks "are narrative maps guiding movements toward their goals...They are interpretive symbolic schemes socially constructed by movements to orient their action in an ever-shifting political, social and cultural context" (Edwards 1995, 45). A

Verba and Schlozman 1995).

<sup>&</sup>lt;sup>6</sup> The resource model of political participation claims that people will participate in politics only when they have 1) a general interest in politics, 2) a relatively high level of income, and 3) a relatively high level of education. Hahrie

Han's use of the issue public hypothesis explains why it is that people with a low level of income, low level of education and little to no general interest in politics, still become politically active on certain policy issues (Brady,

framework includes four components: "interpretations of the injustice or immorality of specific social conditions, an attribution of blame, some kind of action agenda for solving them, and a motivation for taking that action" (Edwards 1995, 41). Frameworks can be shattered if the basis for the frame is proven to be flawed or naive. Conversely, a framework can be extended to incorporate new issues that are interpreted as being closely related to the existing narrative (Edwards 1995; Capek 1993; Harris 1991).

During the civil rights movement of the 1950s and 1960s, collective memory operated as the motivation for taking action – the fourth requirement of the collective action framework. This allowed for the expansion of the civil rights movement's collective action framework of injustice and inequality to incorporate other issues related to the collective memory of state sanctioned oppression. Numerous studies have found that a disproportionate number of hazardous waste and other noxious facilities, are located in communities of color and low-income communities (Mohai and Bryant 1992; Bullard 1990; UCC 1987). This means that the negative health impacts of living in close proximity to noxious facilities also disproportionately affect people of color and low-income people. After people began to learn that toxic facilities are disproportionately located in communities of color, the civil rights framework of racial injustice was extended to include issues of environmental injustice. The mechanism of appropriation worked to extend the framework of injustice and moral indignation that helped drive the civil rights movement of the 1950s and 1960s, by calling upon collective memories of racial injustices and adding environmental pollution to the long list of those injustices.

## Place-based Collective Memory

Recalling that a collective action framework has four essential requirements: 1) interpretation of injustice; 2) attribution of blame; 3) action agenda; and 4) motivation for action.

The causal mechanism of appropriation satisfies the first two requirements of a collective action framework – interpretations of injustice and, from those interpretations, an attribution of blame. Appropriation, as discussed by McAdam, Tarrow and Tilly (2001), is the mechanism by which people identify an injustice and attribute blame to something or someone for the injustice. The collective memory hypothesis of mobilization and/or the issue public hypothesis of mobilization can both serve as a motivation for action, thus satisfying the fourth requirement of a collective action framework. Either collective memory of past injustices is triggered and motivates action in response to the contemporary issue, or a contemporary threat that directly impacts people's lives will motivate them to act in their personal best interest. However, neither of the theories discussed thus far provide a satisfactory answer for the third requirement – the formation of an action agenda. How do people decide which tactics to utilize when responding to the perceived injustice? To account for the creation of an action agenda, or repertoire of action, a different conceptualization of collective memory is needed. Without this, we are only able to understand why people act, but not how people act.

While the example of the civil rights movement serves as an excellent example of collective memory in operation, it also creates an assumption that collective memory is tied specifically to racial identity. However, I assert that collective memory exists and can be activated in any politically salient identity group: sexual identity, gender identity, racial identity and even neighborhood identity. In other words, the memory of events that occurred in a particular place, influences how people in that place respond to future events. More directly, the collective memory of a community's interactions with state and local government will influence the tactics that community engages in when responding to a pollution event.

I argue that a community's local collective memory of its relationship with the state will determine that community's mode of mobilization. For example, if a community has had experiences of positive interactions with local government – perhaps they report a pothole in a street and receive road repairs in a timely fashion, their garbage is always collected on time or they have a good relationship with the local police department – those people will feel able to go to the government for help when they experience a pollution event. Due to a collective memory of local government responsiveness, they have a belief, or expectation, that such responsiveness will continue following an industrial pollution event; I call this the "faith in government" framework.

However, if a community has a collective memory of a negative relationship with the state – perhaps they have numerous potholes that go unrepaired, the garbage is not collected regularly, or experience violent policing – those people will feel that there is no use in asking the government for help when they experience a pollution event. Due to a collective memory of local government indifference, they have a belief, or expectation, that such indifference will continue following an industrial pollution event. I call this the "no faith in government" framework.

It is plausible that a historically privileged group, such as white Americans, would generally have a collective memory of a positive relationship with the state. White Americans have always had high levels of government representation, full constitutional rights of citizenship<sup>7</sup> and have historically benefited from the American legal system. As a result, they possess a collective memory of the state acting in their best interest. This creates a framework based on the belief that elected officials will be responsive to the needs and concerns of voters.

<sup>7</sup> 

<sup>&</sup>lt;sup>7</sup> While not all white people have enjoyed the full rights of citizenship since the founding of the country, (suffrage was not extended to non-land-owning white men until the late 1820s and 1830s, and was not extended to white women until the passage of Nineteenth Amendment in 1920) all those who have enjoyed full rights are white.

When confronted with an incident of industrial pollution the collective memory of this community's relationship with the state taps into a particular kind of action repertoire. For communities with a collective memory of a positive relationship with the state, we should expect to see the community's action repertoire direct them to tactics that work within institutional channels, including calling or writing to elected officials, voting and making campaign donations. If the government is not responsive to the complaints of the community and does not act on their behalf, however, then this "faith-in-government" framework will be "shattered" (Edwards 1995). In its absence, a new framework must be adopted.

Conversely, it is also plausible that not just the African American community, but also other politically marginalized communities have a collective memory of a negative relationship with the state. In this case the community, regardless of the reason for marginalization (race, immigration status, income, education, sexuality and/or gender identities etc.), will operate within a "no-faith-in-government" framework; having no faith that elected officials will be responsive to one's needs and concerns. This framework will direct the community toward engaging in grassroots modes of mobilization such as protesting and picketing. In this framework the expected government response would be a reluctant or insufficient effort from government officials that is ultimately inadequate. If the government responds quickly and effectively, this unexpected outcome will shatter the "no-faith-in-government" framework and the community will begin to utilize the action repertoire typical of more privileged groups.<sup>8</sup>

## State and Local Government Responsiveness

In attempting to understand what factors influence the modes of mobilization in sociodemographically different communities, we must also understand what factors influence

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<sup>&</sup>lt;sup>8</sup> See chapter two for a diagram of this process.

differences in local government responsiveness. The comparative case study analysis in this dissertation juxtaposes two cases of industrial pollution that occurred in the same county, but in very different types of communities and with very different responses from both the community and the local and state governments.

It is possible that affluence is one factor that influences differences in local government responsiveness. Martin Gilens (2012), in his book *Affluence and Influence: Economic Inequality and Political Power in America*, finds that federal government policies are in line with, and respond to, the policy preferences of the 90<sup>th</sup> percentile of the income distribution. Gilens' findings go so far as to show that there is little to no relationship between the policy preferences of the middle and low-income groups and the policies adopted by the federal government (Gilens 2012).

Gilens' work provides useful information about the relationship between income inequality and the inequalities in government responsiveness. The consideration of affluence in my case studies comes into conversation with Gilens' work. However, the units of analysis in this dissertation are the state and sub-state levels rather than the federal level. It is certainly possible that local governments demonstrate the same inequality in responsiveness that Gilens found at the federal level. It could be that local politicians are more likely to respond to the needs and desires of those constituents who are more likely to vote, make campaign contributions or who may be in the same social or professional circles as elected officials. Christopher Tausanovitch and Christopher Warshaw look at government responsiveness at the municipal level in their article titled, "Representation in Municipal Governments" (2014). Despite the prevalent assumption that municipal politics are non-ideological, Tausanovitch and Warshaw find that "the policies enacted by cities across a range of policy areas correspond with the liberal-

conservative positions of their citizens on national policy issues" (2014). In other words, municipal governments pay attention to the ways in which their citizens vote in national elections and then shape their policies in accordance with those positions; national elections are used as a liberal/conservative thermometer, so to speak. Additionally, the authors find that differences in institutions have little to no effect on municipal responsiveness to citizen policy preferences. While the work of Tausanovitch and Warshaw provides support for the idea that local government does in fact respond to its citizens differently, their data, like that of Gilens (2012), measure governmental responsiveness to policy positions and not to emergencies. This is significant because emergencies do not conform to electoral cycles and are therefore not represented in a policy-preference analysis at any level of government.

## **Emergency Response to Pollution**

While the literature concerning responsiveness to policy preferences does not offer much insight on government responsiveness to industrial pollution disasters, the literature on emergency responsiveness does. The focus of much of the literature on emergency responsiveness is on natural disasters, such as hurricanes (Gerber 2007; Bullard 2008; Spencer, Lachlan and Griffin 2007; Barnes, Hanson, Novilla, et al. 2008), rather than industrial pollution disasters; however there are important similarities that make natural disaster literature pertinent. Whether a community is facing a natural disaster or an industrial disaster, they are still facing an emergency and are in need of emergency response. In other words, it does not matter if a community is flooded with toxic sludge or filled with flood water, because in either case they want the government to fix the situation so that they can go home again.

There are some important distinctions between natural and industrial disasters, however. First, the type of disaster experienced determines which level of government takes the lead in

response. For example, in the event of a natural disaster, the Stafford Act (1988) dictates that the federal government provide support for the states, but that the states lead the decision making (Birkland and De Young 2011). Conversely, in the event of an oil spill, or pollution of a sea navigable waterway, the federal government takes the lead in response, with state and local governments assisting the effort. Birkland and DeYoung (2011) explore these questions of federalism and find that uncertainty about what emergency response policy – and therefore what model of federalism – applies to a given situation, results in poor government responsiveness.

It is my hypothesis that these complications of federalism are mirrored at the within-state level. When a disaster occurs, it must first be decided whether the state, county or city government takes the lead, who provides material support, and how much. As will be discussed further in chapter four, interviews with elected officials and regulatory agency officials point to the possibility that what matters most in determining the adequacy of government responsiveness is the amount of coordination involved between different levels of government with more coordination leading to less procedural clarity. Furthermore, I find that the ad hoc nature of the creation of emergency response policy exacerbates the negative externalities of intergovernmental coordination.

#### Case Studies

The motivating cases for this study are two separate environmental pollution events in Los Angeles County, California, which received starkly different responses and outcomes. The first case is of a battery recycling plant, located in the city of Vernon, which released large amounts of lead and arsenic into the surrounding air and soil of the low-income, majority Latinx

communities of southeast Los Angeles County. The second case is of the largest natural gas leak in national history, which occurred in the high-income, predominantly white community of Porter Ranch, located in northern Los Angeles County. These case studies are the focus of chapters two and three.

### Exide Technologies, Inc. and Southeast Los Angeles

The battery recycling plant in the City of Vernon, in southeast Los Angeles County, first opened in 1922. In 1981 the plant, then owned by Gould Inc., was cited by the California Department of Toxic Substances Control, documenting numerous violations of environmental and safety regulations. It was nevertheless allowed to continue operating under "interim status"; the plant operated with this "interim" permit for 33 years. When Exide Technologies, Inc. purchased the facility in 2000 the State of California told the company that it needed to clean up the toxic pollution created by the plant over the previous decades. However, Exide Technologies was granted annual extensions on the time to clean up while continuing to operate. After decades of community activism the Exide battery recycling plant was permanently closed in 2015 (Barboza 2016).

Tests have found severely high levels of lead in the soil of nearby schools as well as in an estimated 10,000 homes. High levels of lead have also been found in the blood streams of adults and children in the area (Johnston 2019; Barboza 2015). Despite this knowledge, the State of California has never declared a state of emergency to address the situation, only a fraction of homes have had the contaminated soil removed, and inadequate funding has been provided to

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<sup>&</sup>lt;sup>9</sup> The battery recycling plant is located in the City of Vernon, but impacted the cities of Maywood, Commerce, Bell, Huntington Park, the Los Angeles City neighborhood of Boyle Heights and the unincorporated area known as East Los Angeles. I refer to them collectively as southeast Los Angeles because they are all located in that region of Los Angeles County. For the purposes of this study, the conflation of these different neighborhoods and cities into an entity is warranted because the plant impacted them all similarly.

speed the testing and cleanup of the area. In 2016, the State of California allocated \$176.7 million from the general fund to the cleanup effort in southeast Los Angeles. The Department of Toxic Substances Control also allocated \$7 million to the cleanup effort – a significant portion of its departmental budget but a drop in the bucket toward complete remediation. This total of \$183.7 million, however, is only sufficient to clean up a portion of the approximately 10,000 affected properties, as the total funding needed is over \$400 million (Richard 2017).

Furthermore, this funding was written into the state's budget as a *loan*. This means that as of 2018 the \$176.7 million, plus interest, must be paid back to the state despite the testing and cleanup of the area being nowhere near finished (Assembly oversight hearing 2018, hereafter AOH 2018).

In the case of the Exide battery recycling plant, the state government failed to completely revoke the operating permit or otherwise force the company to meet environmental regulations. The state government also failed to hold Exide Technologies responsible for cleaning up the toxic waste that was emitted in a roughly two-mile radius around the plant. The pollution problem was allowed to persist for over three decades and neither the governor of California, nor any county or city politicians, ever declared a state of emergency to gain additional resources to address the problem.

How did the community respond to the battery plant's pollution? Local residents of the affected areas – namely the cities of Vernon, Commerce, Bell, Huntington Park, East Los Angeles, Maywood and the Los Angeles City neighborhood of Boyle Heights – have spent years organizing, signing petitions, and protesting. Community groups such as East Yard Communities for Environmental Justice (EYCEJ), Mothers of East L.A. and Communities for a Better Environment (CBE) have organized local residents who are concerned about the pollution to

participate in these actions. The lead and arsenic poisoning from the Exide battery recycling plant was spread through illegal dumping of lead into unlined pits in the ground, as well as through smoke and other emissions from the chimneys, which deposited ash on people's homes and cars. In this regard, the pollution of southeast Los Angeles has been a very visible event for residents – certainly just as noticeable as the natural gas leak that occurred around the same time in a different part of Los Angeles County.

#### The Aliso Canyon Natural Gas Storage Facility and Porter Ranch

On October 23, 2015 a leak from a natural gas well was discovered inside Southern California Gas Company's Aliso Canyon underground storage facility, located near the affluent community of Porter Ranch. This gas leak, the largest in United States history, caused nose bleeds, headaches, nausea and other non-life-threatening illnesses (though residents now attribute local cancer diagnoses to the gas leak). In response, on January 4, 2016, California governor Jerry Brown personally visited the Aliso Canyon facility and the neighborhood of Porter Ranch. On January 6, 2016 – he declared a state of emergency. The governor and the Los Angeles City Attorney's office mandated that Southern California Gas Company (SoCal Gas) relocate families into rental homes or hotels paid for by the company (Barboza 2016; Gazzar 2015). The gas storage facility was temporarily shut off and the leak was completely repaired by February 18, 2016, just less than four months after it was first discovered.

In the community of Porter Ranch, residents did not initially engage in the same grassroots tactics as the residents of southeast Los Angeles engaged in. Instead, Porter Ranch residents called and emailed their elected officials; they expected that action would be taken on their behalf. As the government response demonstrates, they were correct in that assumption and seemed to receive exactly what they asked for.

Why did these two events, Exide and Aliso Canyon – which occurred in the same county, within the same time frame, 10 with the same state government departments involved, both with toxins that pose immediate health impacts on residents – receive such different outcomes? Is the difference in outcomes the result of the differences in community demographics, the difference in the type of pollutant, or the difference in mobilization tactics? Could it be due to the fact that Exide Technologies is a private company while SoCal Gas is a public utility? Scholars such as Robert D. Bullard (1994 and 1996) and Laura Pulido (1996 and 2000) would likely attribute the difference in outcome to the racial and economic differences between southeast Los Angeles and Porter Ranch. Others would likely attribute the difference in response to the difference in pollutant type (i.e. that gas is more immediately detectable than lead) or differences in tactics (i.e. that people in Porter Ranch employed more effective tactics, which would have provided the same outcome in SELA had they been used) (Rojas 2006; Taylor and Van Dyke 2004).

#### Overview

The primary goal of this dissertation is to examine what factors determine the mode of mobilization taken by community members and the level of government responsiveness to different community's pollution issues. Using qualitative methods, I concur with the arguments of Bullard (1990), Pulido (1996 and 2000), Edwards (1995), Harris (2006), Bullard and Wright (2012) and others, that race and class are the underlying reasons for different communities receiving disparate responses and outcomes when confronted with serious pollution events. However, I extend existing analyses to argue that the variation in tactics used by each community is a result of the different collective memories each community holds about its

<sup>&</sup>lt;sup>10</sup> While the Exide battery plant had been emitting pollutants for decades it was not closed until 2015, which is the same year that the Aliso Canyon gas blowout occurred.

relationship with the state. The first chapter of this dissertation introduces the reader to the topic of environmental racism. Chapter two delves into the extant literature, pulling together theories on social movements, collective memory, environmental racism and government responsiveness. The chapter then lays out my intervention in these bodies of literature. I argue that the collective memory of a community's relationships with local government influences the community's mode of response. If the community expects that its elected official will listen, its actions will be directed at gaining the attention of elected officials, whereas if the community expects that its elected official will not listen, its actions will be contentious and will be directed to filing lawsuits and staging protests. Furthermore, I argue that government responsiveness is largely dependent upon the amount of federalism-related procedural uncertainty. In other words, emergency response has been legislated in an ad hoc fashion that has placed different levels of government in charge of different types of disasters – the clearer it is which level of government is in charge of responding to the disaster, the better the response will be.

Chapter three is the first of two empirical chapters and presents the findings of in-depth interviews, small group interviews and observational data collected at meetings of resident activists, as well as state and county government meetings. I find support for my argument about community-level collective memory influencing the mode of mobilization in which each community engages. Chapter four, the second empirical chapter, focuses on the factors that influence government responsiveness to communities impacted by an industrial pollution disaster and utilizes interview data, observational data and archival news media from the beginning of each disaster. Finally, chapter five discusses the implications of these findings for policy makers and community organizers and concludes by identifying pathways for future study on the politics of industrial pollution.

## Chapter Two: Creating Place-based Memory

"Toxic chemicals are the embodiment of racism (and gender and class violence) because they are intended to produce benefits for some while doing harm to others."

- David Naguib Pellow (2007, 46)

The very term "environmental racism" is considered controversial to some; after all, trees cannot be racist. While that is true, the politics involved in who gets to live near trees and who does not, are more often than not, racial. Since the 1987 report, "Toxic Wastes and Race," published by the United Church of Christ, it has been a documented fact that toxic waste facilities and other hazardous facilities are disproportionately located in low-income communities and communities of color. Ben Chavis, one of the principal investigators on the report, defined environmental racism this way: "Environmental racism is racial discrimination in environmental policymaking, the enforcement of regulations and laws, the deliberate targeting of communities of color for toxic waste facilities, the official sanctioning of the life-threatening presence of poisons and pollutants in our communities, and the history of excluding people of color from leadership of the ecology movements" (as quoted in Pellow 2018). Since that first study, a body of literature has developed in which an important debate has emerged: Is it environmental racism if the toxic facility was located in the area before the residential community was there?

Scholars such as Capek (1993), Bullard (2000), Taylor (2000), Pulido (1996 and 2000), Pastor, Sadd and Hipp (2001), Brulle and Pellow (2006), Mohair, Pellow and Roberts (2009), and Bullard and Wright (2012), argue that this "chicken or the egg" debate about whether the toxic facility or the community of color came first, is utterly irrelevant. Their point, which I agree with, is that it does not matter which came first because in either case the outcome is the same – disproportionately more people of color living near toxic facilities than their white

counterparts. The next section provides a broader understanding of the complexities of environmental racism and its connections to collective memory.

Understanding how environmental racism relates to the formation of place-based community collective memory is important because it is what gives rise to the paradox this dissertation examines. The literature on collective memory and social movements has predominantly focused on the civil rights movement and race-based collective memory. The literature on environmental justice has focused on case studies of communities of color. The paradox then arises: what happens when privileged, predominantly white communities are impacted by industrial pollution? By reconceptualizing collective memory as place-based, rather than race-based, I am able to examine the behavior of both types of communities and the factors that influence their reactions to similar disasters.

The literature on environmental justice also does not give much attention to the factors that influence government responsiveness. Robert Bullard and Beverly Wright (2012), Dorceta E. Taylor (2014), and others, consider the ways in which the government fails to provide for communities of color that are impacted by industrial pollution. However, without a comparative case study it is difficult to determine if poor government responsiveness is unique to the community type or is a general feature of industrial pollution disasters. Determining what factors influence government responsiveness can only be done by observing outcomes of disasters in both privileged and marginalized communities, which is what I do in this project.

## Which came first? The facility or the people?

The first side of the "chicken or egg" debate mentioned above, states that if the toxic facility was sited in a location before residences were constructed, then the proximity of the community and the industry cannot be deemed a case of environmental racism. In some cases,

residences are constructed very near to (or on top of), active or defunct toxic facilities. For example, an oil field in Carson, CA., which was no longer active, was sold to a real estate developer who cut the wells at ground level, covered them in a few feet of dirt and then constructed an entire tract of homes on the land (LA Times April 27, 2010). Thirty years later, cancerous fumes are seeping up from the ground, contaminating people's homes and threatening their health (LA Times April 27, 2010). It has been argued that this situation, in which the toxic facility was sited and constructed long before anyone lived nearby, cannot be considered racist because there was no way to know who would live there in the future. However, in the United States race has played a significant role in determining where people are and are not allowed to live, making the proximity of pollution and people of color an outcome of systemic racism.

When discussing residential segregation, one most often thinks of the Jim Crow south, however, through the New Deal housing programs of the early 1930s, racialized residential segregation became a nation-wide policy. One important focus of these New Deal programs was to address the huge number of mortgage loans that had defaulted during the Great Depression. Mortgage loans had become a significant part of the nation's economy and the high rates of default seriously hurt already struggling banks. The federal government sought to end the Great Depression by propping up American homeowners and would-be homeowners. To that end, the Home Owner's Loan Corporation (HOLC) was established in 1933 and the Federal Housing Administration (FHA) was established soon after, in 1934. The HOLC's purpose was to refinance defaulted mortgages by instituting a 20 year, fixed-rate mortgage loan – a significant departure from the then standard five to ten year mortgages. The idea was that this extended time table would make monthly payments more manageable and reduce the interest on the original

loan, thus fewer people would go into default. Unfortunately, even after undergoing a HOLC refinance, 40% of mortgages still defaulted (Frasure 2015).

In response to the continued defaults, HOLC needed to develop a system to assess the risks associated with financing a particular property. The Corporation's appraisers divided cities into neighborhoods and then developed detailed questionnaires about the occupant's income, age and ethnicity, the type of construction of the home, the price range of homes in the neighborhood, the sales demand for homes in the neighborhood and the general condition of the home in consideration and of those in the neighborhood. (i.e. least likely to lose value and become worth less than the loan amount).

When determining the "worthiness" of the neighborhood several factors were considered. The HOLC's questionnaire focused on eight criteria: economic stability, protection from adverse influences, freedom from special hazards, adequacy of centers, transportation, utilities and conveniences, level of taxes and special assessments, and the market appeal of the neighborhood. The HOLC then used these questionnaires to create "residential security maps," which ranked the assessed neighborhoods into four categories. This system of evaluating the credit "worthiness" of neighborhoods became known as "redlining" because the lowest ranked neighborhoods, which were almost exclusively majority minority communities, were assigned the color red on the security maps.<sup>11</sup>

In 1934 the Federal Housing Administration (FHA) was established as another way to spur economic recovery from the Great Depression. Unlike HOLC, the FHA did not provide financing for home buyers. It instead insured mortgage loans, given by banks, up to 80% of the

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<sup>&</sup>lt;sup>11</sup> The HOLC security map categories were as follows: 1) Green: homogeneous neighborhoods with new construction and is in a location that is always in demand. 2) Blue: Still a desirable neighborhood but it is slightly less homogenous (likely because of the presence of "white ethnics"), and has yet to reach its peak but will stabilize in the near future. 3) Yellow: a declining neighborhood. 4) Red: Already declined.

total loan amount. In other words, if a borrower was approved for an FHA insured loan and then defaulted on that loan, the federal government would pay the bank 80% of the amount owed. This guarantee of payment allowed banks to issue home loans with less risk to themselves, thus increasing the number of people able to buy a home. However, the FHA used the racist security maps created by HOLC to determine the risk of default and therefore, whether or not they would offer mortgage insurance. As a result, 98% of the 7 million home loans that were underwritten by the FHA were given to white people (Frasure 2015).

The result of redlining was that people of color were forced to live in areas that were considered "blighted" (Baldassare 1986, Massey and Denton 1993, Thomas 1998, Williams 2003, Frasure 2015). Considering that one criterion for receiving a ranking of red was the presence of "special hazards," areas that already had a dirty industry in operation at the time of FHA ranking, were considered "blighted." These neighborhoods were essentially reserved for people of color, particularly African American people, because by HOLC and FHA guidelines, they were deemed high risk and not worthy of credit (Williams 2003). In short, since the 1930s the federal government has had a hand, along with private financial institutions and realtors, in pushing communities of color nearer to existing dirty industries, such as polluting facilities or other locally unwanted land uses (such as meat rendering plants, lead smelters, garbage dumps, etc.). It is precisely this fact that renders absurd the argument that a case cannot be "environmental racism" if the hazard predates the community. While the company generating the toxins may not be guilty of intending to expose people of color to danger, the exposure is still the result of racially motivated actions and is therefore environmentally racist. 12

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<sup>&</sup>lt;sup>12</sup> In his book Resisting Global Toxics: Transnational Movements for Environmental Justice (2007), David Naguib Pellow traces the codevelopment of racism and environmental harm back to European expansion in the 16th century and finds that it has greatly informed contemporary racialization. "This form of racialization functions to diminish the rights of people of color, indigenous peoples, and immigrants based on the racial categories they occupy. This

The second side of the "chicken or egg" debate discussed at the beginning of this chapter, states that in cases where a low income community or community of color exists *before* the siting of a hazardous facility in the area, then selection of said community seems to be a clear instance of environmental racism. However, such an instance does not meet the legal burdens to make this claim in court. In fact, the siting of toxics in marginalized communities has never been stopped by an environmental racism lawsuit or any legal claims on the grounds of the Equal Protection Clause (D. Taylor 2014). In order to make a legal argument that something is "environmental racism" the courts require proof of *intent*; an insurmountable blockade to pursuing any legal action on these grounds.

The burden of intent requires that the plaintiff(s) prove that the polluter selected the site to intentionally harm a group of people because of their race. To prove something of this sort, one would have to imagine a document or recording of a conversation where corporate executives openly plot racial destruction – an unlikely event. In fact, it seems unlikely that many polluters are intentionally targeting these communities because of their race, per se. Rather, they are simply conducting business in the manner that will garner them the largest profit margin by keeping overhead costs low.

Capitalism drives companies to the communities with the fewest political obstacles to conducting their business and the cheapest land. These two incentives – the path of least resistance and the lowest cost of operation – encourage hazardous industries to be sited in or near communities of color. First, communities of color and low-income communities are typically less politically powerful. Historically, people of color and poor, non-land-owning whites, were excluded from the right to vote. People of color in particular were excluded from the benefits of

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racist logic, which gives ethnic minorities an "animalistic" quality, justifies the concentration of people of color in jobs and residential spaces that are particularly dirty or hazardous" (Pellow 2007, 38)

home ownership by New Deal programs. When considering political participation, home ownership is an important factor for several reasons. One theory is that property taxes are an important part of any city's tax base and therefore its ability to provide goods and services. This means that politicians have an incentive to keep homeowners in their municipality, rather than risk "losing" them to neighboring communities (Tiebout 1956). A second theory is that because government policies tend to be more closely tied to the policy preferences of the affluent, and home ownership is a step toward affluence, governments may be more likely to consider the preferences of homeowners in their districts than those of renters (Gilens 2012). Still another theory is that homeowners tend to participate in elections more often, which means it is worthwhile for a politician to please them/court their vote (Hall and Yoder 2019). Whatever the exact mechanism, the correlation between a lack of home ownership and a lack of political power is well established.

Second, because of the redlining instituted by HOLC and the FHA, and then adopted by realtors and banks, the land where people of color live is considered "blighted" and therefore less valuable. Toxic industries are attracted to the lower costs of land because by reducing their overhead costs they can increase their profits. As a result, those communities shoulder a disproportionate amount of the burden of toxic substances in the United States. While race contributes significantly to this outcome, through the practice of redlining, it is capitalist economics that are ultimately driving industry into these communities. In other words, while racism is the underlying factor creating the financial incentives for industry, it is the incentives themselves (i.e. cheap land and less political resistance) that motivate companies to operate in and inevitably pollute, communities of color.

This history of government participation in the racial sorting of neighborhoods creates a collective memory in these communities of political and social marginalization. In this way, the codevelopment of racism and environmental destruction (Pellow 2007) created a collective memory of oppression that helped spur the environmental justice movement as an extension of the civil rights movement. What is puzzling, however, is what happens in historically privileged communities when they experience an industrial pollution problem? Do they respond differently than marginalized communities? Because privileged communities have a different historical experience and a different collective memory of their relationship with the government, I anticipate that their mode of mobilization will be different.

## Place-based memory and collective action: An Argument

To examine this puzzle, I present an argument that connects localized histories and experiences to the modes of mobilization in which communities engage when responding to pollution disasters. To do so, I review the extant literature from which my theory is derived, present my argument and hypothesis and what should be observed in the case study results if my theory is correct.

While the primary focus of this dissertation is to understand the modes of mobilization in which communities of different demographics engage when responding to pollution disasters, it is important to note that studying modes of mobilization depends on first understanding the motivation to participate in collective action. For decades the literature on political participation theorized that participation was limited to those with a general interest in politics (Almond 1950), or that participation was dependent upon having certain resources (Brady, Verba and Schlozman 1995). While the attentive public model and the resource model both ring true for some populations, the theories fail to explain the occurrence of political participation among

people who have no general interest in politics, who do not have much, if any, disposable income, who do not have high levels of education and who do not have significant leisure time. In other words, while these theories may explain political participation in the Porter Ranch case, neither of these theories can explain the political participation of the communities of Southeast Los Angeles.

In her 2009 book, *Moved to Action*, Hahrie Han describes how people who are personally impacted by a political issue form an "issue public" to take action on that specific issue, even if they lack any features required by the two aforementioned models. Han defines an issue public as "people who have made the connection between a political issue and their personal concerns...those who recognize politics as a way to respond to their personal concerns" (Han 2009, 50-51). Han's issue public model explains what motivates people to take action and clearly applies to any community impacted by pollution, regardless of resources, including those featured in my case studies.

Han's version of an issue publics model answers the question of what motivates each community in this dissertation to participate in collective action, however, motivation is only one part of a collective action framework. A collective action framework, as Bob Edwards (1995) explains, is a "narrative map" used by an issue public to "orient their action in an ever-shifting political, social and cultural context." A collective action framework includes four components: "interpretations of the injustice or immorality of specific social conditions, an attribution of blame, some kind of action agenda for solving said conditions, and a motivation for taking that action" (Edwards 1995, 41). These frameworks can be shattered, if the basis for it is proven to be flawed or naive. Likewise, frameworks can also be extended to incorporate new issues, so long

as the new issues are interpreted as being connected to the existing narrative (Edwards 1995; Capek 1993; Harris 1991).

The civil rights movement of the 1950s and 1960s offers an example of a collective action framework being extended to incorporate a new issue, resulting in the environmental justice movement. The civil rights movement centered around a long history of race-based injustices including, but not limited to, slavery, lynching, Jim Crow, the denial of voting rights, police brutality, limited access to equal education or higher education, limited access to professional opportunities, and the like. Once people came to understand their exposure to pollution as being yet another fruit of the same racist tree, the civil rights movement's framework of race-based injustice was extended, and the environmental justice movement was born (Harris 2006). To apply Edwards' components of a collective action framework to this example: exposure to pollution was interpreted as an injustice, blame was attributed to racism, the same action agenda as used in the civil rights movement was adopted, and the motivation for taking action was the personal impacts of exposure to hazardous toxins (such as threats to health and property).

As previously stated, the motivation for taking action is only one aspect of a collective action framework. Another aspect of the collective action framework that has not received much attention in the social movement literature is understanding the action agenda, or mode of action, in which communities engage. To understand what factors determine how people act, given that they have decided to act, I engage with Fredrick Harris' (2006) work on collective memory. I argue that a reconceptualization of the kinds of groups that can share a collective memory allows for an understanding of mode, not just motivation, and thus satisfies the action agenda component of a collective action framework.

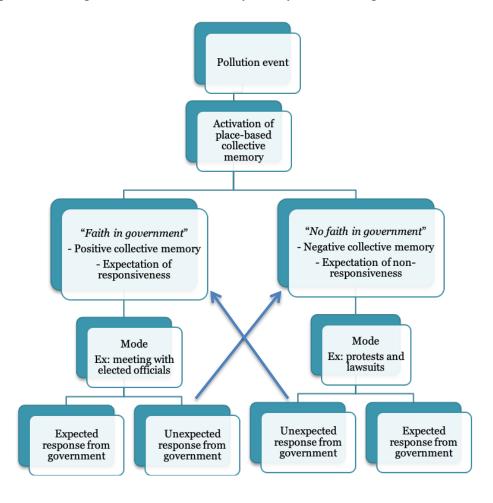
The theory of collective memory effectively asserts that one does not need to personally experience something in order for it to impact one's behavior (Halbwachs 1951, 1992; Schuman and Scott 1989; Dawson 1994; Zelizer 1995; Zerbaveal 1996; Harris 2006). Collective memory is often defined as memories of past experiences or events that have been appropriated at the group level and provide "individuals with historically-nuanced information that enhances their propensity to engage in collective action" (Harris 2006, 3). However, the literature on collective memory has two underlying assumptions that should be interrogated.

First, much of the extant literature on collective memory and social movements has focused on historically marginalized communities and the impact the memories of that marginalization have on political participation (McAdam 1983, Dawson 1994, Edwards 1995, Harris 2006). This focus on marginalized communities has created an assumption in the literature that collective memory is a feature exclusive to marginalized communities. However, Harris' theory implies the existence of collective memory in historically privileged communities as well. In his 2006 article, Harris theorizes that memories of racial oppression may facilitate collective action in some instances and deter it in others. He states that "past events symbolizing the cost of challenging structures of oppression may weaken the possibility of collective action among marginal groups while events symbolizing victory may signal to group members that successful cooperation is possible" (Harris 2006). In other words, it is possible to have positive collective memories and negative collective memories and that the two kinds of memories generate different outcomes. So, if marginalized communities have collective memories that can be positive or negative, then it follows that privileged communities may also have a collective memory consisting of positive and negative events.

Second, in focusing on the collective memory of marginalized communities in the United States, the literature has also focused almost exclusively on racial minority communities – primarily the African American community. Harris (2006), Edwards (1995), McAdam (1983) and others have studied collective memory and collective action by focusing on the civil rights movement of the 1950s and 1960s. In doing so, the literature has inadvertently created the assumption that collective memory is exclusive to racial group categories. However, all people have numerous identities (ex: woman, Democrat, African American, mother, researcher, Californian, conservationist, etc.) and what matters is which identity is made salient in a particular context. This means that while collective memory exists among people with a shared racial identity, there is likely also a collective memory among those who share the same gender identity, political identity, or geographic identity; it is only when a particular identity becomes politically salient that its respective collective memory becomes relevant. I therefore extend Harris' theory to argue that collective memory also exists at the neighborhood level, where a history of local government responsiveness, or lack thereof, creates a collective memory of how "people in this area" are treated. In instances of environmental pollution emergencies, geographic identity – and the positive or negative collective memory of that community's relationship with the government – is what is most salient.

The definitions of collective memory presented by Harris (2006), Edwards (1995) and others allows us to understand the motivation to take action – the "propensity to act," as Harris phrased it. However, by eliminating the two assumptions outlined above, I find that a reconceptualized understanding of collective memory allows for an understanding of the factors that influence a community's tactics – their action agenda. Given that a community has decided to take action in response to a pollution disaster, I argue that the collective memory of that

community's relationship with local government will determine the mode in which the community responds. If the community has a positive collective memory of its relationship with the state, then its initial tactics will demonstrate some level of "faith in government," such as attending city or county council meetings, writing to and calling their elected officials, and signing petitions to be sent to elected officials. If on the other hand, the community has a negative collective memory of its relationship with local government, then its initial tactics will demonstrate some level of "no faith in government," such as protests and forming grassroots organizations. Finally, I hypothesize that if the government's response to the community is not what their *a priori* framework expected, then the framework will be shattered, and its opposite will be adopted. The diagram below illustrates my theory of switching frames.



When a pollution disaster occurs, such as the gas blowout at Aliso Canyon or the lead and arsenic emissions from Exide, it activates a placed-based collective memory of the relationship between the impacted community and the local government. If local histories and collective memories of the community-state relationship are indeed influencing their modes of mobilization, what should we expect to see in each of the case studies? The argument anticipates that people in a community like SELA, will have a collective memory of a negative relationship with the local government that has led them to expect an inadequate response when they are in need; a no-faith-in-government framework. If I am correct, we should expect to see people protesting in the streets, forming a grassroots community organization, filing lawsuits, and other tactics that demonstrate no *a priori* expectation that the government would prioritize their wellbeing.

Conversely, I anticipate that people in a community like Porter Ranch will have a collective memory of a positive relationship with the local government that has led them to expect that the local government will prioritize their wellbeing (LA Times 1999). If I am correct, we should expect to see their mobilization efforts focus on calling, writing to, and meeting with elected officials, contacting government regulatory agencies, such as AQMD; or contacting SoCal Gas directly, as they would do to report any gas leak.

Finally, as indicated by the arrows in the center of the diagram, if a community receives a response from the government that is contrary to what their framework anticipated, then the framework will be shattered, as Fredrick Harris (2006) phrased it, and the opposite frame, with its accompanying action agenda, will be adopted. If a community with a faith-in-government framework receives a slow, inadequate response from the government in regard to a pollution disaster, then that framework is no longer appropriate and needs to be updated or replaced. The

poor response they received from the government – likely elected officials – makes a no-faith-in-government framework more appropriate and the associated modes or tactics are also adopted. Likewise, a community with a no-faith-in-government framework that receives a swift and efficient response from their elected officials, will also have their framework shattered and a new one will be adopted that is more appropriate; in this case it would be a faith-in-government frame and its associated tactics.

While this theory accounts for the factors that influence the mode of mobilization in which a community engages when responding to an environmental pollution disaster, the inverse must also be explored. What factors influence the government's response to these communities? For that I turn to the literature on government emergency response. While this literature is overwhelmingly about responding to natural disasters, not industrial pollution disasters, there are important parallels to draw, and distinctions to make, that warrant exploration of this literature.

First, natural disasters and industrial pollution disasters both require swift government intervention to assess the level of damage and/or continued threat posed to the public and ensure that everyone has food, water and shelter. Second, natural disasters and industrial pollution disasters are both emergencies – rare events by definition – and as such the legislation that guides responsiveness has been created in an ad hoc, reactionary manner; new acts are passed after disasters occur, rather than preemptively. This means that many of the same complications and uncertainty that arise in the study of natural disaster response are also present in industrial pollution disasters.

The ad hoc nature of the emergency response legislation has led to different theories of federalism being applied to different types of emergencies. First, responses to natural disasters are typically led by the state and local government with the support of the federal government

upon request, whereas responses to oil spills are led by the federal government with state and local governments in the support role (Birkland and De Young 2011). In their 2011 article, Thomas Birkland and Sarah De Young find that "the balance of national and state powers inherent in federalism can also lead to confusion and delay in disaster response" (471).

Responses to natural disasters are governed by the Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), enacted in 1988, which dictates that the federal government assist in responding and creates a streamlined plan for how best to support local governments. For example, when responding to hurricane Katrina it was the Louisiana governor's office that led the effort in terms of decision making and the federal government simply supported those decisions with supplies from FEMA (Birkland and DeYoung 2011). In the event of an oil spill on the other hand, the National Contingency Plan is the "federal government's blueprint for responding to oil spills and hazardous substance releases" and only applies to oil spills in sea-navigable waters, toxic releases into public water systems, and "releases at hazardous waste [Superfund] sites requiring emergency removal actions" (EPA 2020). These two approaches represent competing doctrines of federalism and, in cases where it is unclear which piece of legislation applies, that conflict results in confusion and delay of response.

Still more complicated is the lack of legislation clarifying which doctrine of federalism applies to a pollution disaster other than an oil spill. Before any emergency response can be provided in such a case, there must first be a determination of which *level* of government – state or local – should take the lead. Once the correct level of government is determined, a second question arises: which department or agency is responsible? For example, in the case study of southeast Los Angeles, both the Air Quality Management District (AQMD) and the Department

for Toxic Substances Control (DTSC) were involved. The pollution from the Exide facility was in the air, which made it the purview of the AQMD. However, the pollution settled into the soil of the surrounding area, which is then the responsibility of DTSC. This jurisdictional overlap required increased coordination between departments that are in different levels of government, have different sources of oversight and ultimately contributed to making the closure of Exide a slower and more complicated process. Drawing from these theories of federalism's impacts on government emergency response, I anticipate that confusion about which level of government and which agency should take the lead will ultimately result in an inadequate response.

The following two chapters present the findings from in-depth interviews, small group interviews, observational data from meetings of community organizations, state government hearings and county government meetings. First, in chapter three, I examine the factors that contributed to the modes of mobilization seen in the case study communities and find support for my argument that a place-based collective memory determines the framework and tactics that are used in response to an industrial disaster. Chapter four examines the factors that influence government responsiveness to these impacted communities and finds support for the theory that the same federalism-related challenges that exist at the national level, also exist at the state level. Finally, in chapter five, I offer a discussion about the significance of these findings as both a contribution to the literature on environmental justice and social movements, but also as offering practical insight for state and local government officials and resident-activists.

# Chapter Three: Community Mobilization

The first research question that this dissertation addresses is what factors determine the mode of mobilization in which a community engages when responding to an industrial pollution disaster. In responding to examining this question I developed an argument in two parts. The first is that the positive or negative nature of the local-level collective memory of a community's relationship with the state determines the mode of mobilization a community engages in when responding to an environmental pollution disaster. I find support for this argument in both the Porter Ranch and SELA community case studies. The second part of my argument is that tactics, or modes of mobilization, change when the existing narrative framework is shattered and a new framework is then adopted. According to Harris (2006) we should expect to see frameworks shattered when they are deemed to be no longer applicable. I argue that in the case of community response to a pollution emergency, this shattering occurs when the community receives an unexpected result from the local government; which is to say, when the government's response is inconsistent with the expectations of the community's framework. While I find support for the first part of the argument in both case studies, I only find evidence supporting this second part of the argument in one of the two cases. This is because I only observe the community receiving an unexpected response from the government in the Porter Ranch case, but not in the Southeast Los Angeles case; a shortcoming which I address later in this chapter.

## Methodology

I use a qualitative approach to the study of modes of mobilization in response to environmental pollution disasters. The nature of the research questions posed in this dissertation – that is, accounting for the variation in modes of response to pollution across different community types as well as the variation in government responsiveness to those communities –

requires that a qualitative analysis be conducted to create an adequate understanding of the mechanisms at work. Given that this dissertation aims first to understand the inner workings of social movement organizing in response to environmental pollution, there is a clear need to explore the problem, honor the voices of community members, map the complexity of the situation or the unfolding of modes/tactics, and convey multiple perspectives of participants; thus my study is particularly suited for qualitative research.

According to John Gerring (2007), a "case connotes a spatially delimited phenomenon (a unit) observed at a single point in time or over some period of time. It comprises the type of phenomenon that an inference attempts to explain" (19). Depending on the research question the "case" could be an individual, an institution, a nation-state, an event (ex: a revolution, or a chemical waste spill), or any subnational unit such as a city, town or neighborhood. The general rule of case study research is that it consists of one or a few cases and that those cases use the same unit of analysis as the phenomenon trying to be explained. For example, a research question about why different types of communities choose different tactics when they mobilize in response to environmental pollution, make the community the appropriate unit of analysis. The case studies in this dissertation use the community as the unit of analysis and are observed over the duration of their respective industrial pollution disasters.

Case studies "may be more useful than cross-case studies when a subject is being encountered for the first time or is being considered in a fundamentally new way" (Gerring 2007), which is certainly the case in this dissertation. I am aware of no other study that seeks to understand modes of community mobilization in response to environmental pollution across different economic and racial community types. In addition, I reconceptualize the notion of collective memory in a fundamentally new way by arguing for a place-based, rather than race-

based, origin. The newness of the subject makes the case study approach an excellent fit for this dissertation.

A case study is, by definition, the intense study of a single unit for the purposes of understanding a larger set of similar units (Gerring 2004). The two case studies presented in this dissertation are both in Los Angeles County, California. The first case is in Porter Ranch, California – a Los Angeles City neighborhood situated in northern Los Angeles County – where the largest natural gas leak in American history occurred in 2015. In 2025 a natural gas well ruptured inside the Aliso Canyon natural gas storage facility, which is operated by Southern California Gas Company (SoCal Gas) and located just two miles outside of Porter Ranch. The second case is of a lead acid battery recycling plant in Vernon, CA, that was opened in 1922 and not closed until 2015, despite a 1981 citation for violating state environmental laws. Following the citation – which noted extensive lead and arsenic contamination of the air, ground and water from the battery smelting facility – the California Department of Toxic Substances Control issued the plant a temporary permit to continue operating. This temporary permit was in effect for over 30 years despite the company taking little to no action to clean up the pollution. In both of these cases I made numerous visits to the affected communities and interviewed community organizations, local residents who participated in collective actions and local elected officials.

#### Case Selection

The two central case studies of this dissertation are two very different communities located in Los Angeles County, California. These two communities, one containing seven small cities in the southeast part of the county, and the other a Los Angeles City neighborhood called Porter Ranch, located in the northern part of the county. The two communities have both experienced egregious environmental pollution events but are otherwise very different places.

The racial, economic, education and home ownership demographics are strikingly different, as shown in Table 1. In addition, the two communities responded to their pollution event with very different modes of action. The lower income, higher minority community in southeast Los Angeles responded with protests and marches in the street, while the wealthier and whiter community of Porter Ranch responded by meeting with elected officials and hiring their own geologist to conduct environmental tests and reports. The government also responded to these communities in very different ways; the community of Porter Ranch received a swift and thorough response to their problem, while those in southeast Los Angeles suffered exposure for over 30 years after the California Department of Toxic Substances Control first cited them for violations of environmental law.

Table 1: Demographic Comparison of Case Study Communities

	Porter Ranch	Southeast Los Angeles*
Race	58% White	90%-98% Latinx
Median Income	\$101,073	\$34,887 - \$45,341
Percentage Foreign Born	38%	40% - 50%
Home Ownership	78%	~ 30%
Bachelor's Degree (ages 25+)	34%	1% - 5%

Source: U.S. Census, American Community Survey 2015

<sup>\*</sup>The figures shown for SELA represent the highest and lowest values of the zip codes within Boyle Heights, Vernon, Maywood, Huntington Park, Bell, and East Los Angeles.

#### Data

In order to test my theory, I need to collect data that indicates 1) whether or not people have a memory of government responsiveness in their neighborhood and if so, whether it is positive or negative; 2) how the community expected the government to respond; 3) whether or not the government responded to the community as it expected; and 4) whether or not an unexpected government response led to a change in frameworks and tactics. I collected this data by conducting interviews with movement participants in each case study community and asking questions designed to capture the necessary data.<sup>13</sup>

Because I am interested in how people act, given that they have already decided to act, I only need to speak with people who have participated in a response to the respective pollution disaster, not to people in the general community. I conducted one-on-one interviews with these resident-activists, as well as community organizers, elected officials and staff members of the Department of Toxic Substances Control. In addition to these individual interviews I attended weekly community meetings in Boyle Heights for six months, and monthly community organization meetings in Porter Ranch for one year. In total, from 2018 and 2020, I conducted 32 interviews: 11 one-on-one interviews and 21 informal group interviews in Southeast Los Angeles and Porter Ranch. I also collected data from community information meetings and events held in SELA by East Yard Communities for Environmental Justice (EYCEJ), film screenings organized by activist groups and/or local elected officials, <sup>14</sup> as well as from State Assembly oversight hearings held in SELA and Porter Ranch for their respective disasters.

<sup>&</sup>lt;sup>13</sup> See interview questions in Appendix C of this dissertation.

<sup>&</sup>lt;sup>14</sup> The community organization Save Porter Ranch co-hosted a film screening with national NGO, Food and Water Watch. The film, "Blowout: Who's Next?" (2018) featured three different communities across the country that have been impacted by fracking and natural gas blowouts - one of the communities featured was Porter Ranch and the Save Porter Ranch organization. In Southeast Los Angeles, CBE, EYCEJ, and Assemblymember Christina Garcia held a screening of the film "The Devil We Know" (2018). While this film was not about the Exide case, it was a

### The Aliso Canyon Well Blowout

### "Shut it all down!"

To reiterate, the first part of my theory proposes that a community's local-level collective memory of its relationship with the state informs the "action agenda," or tactics, in which the community engages when responding to an environmental pollution disaster. If this is correct we should expect to see neighborhoods with histories of socio-political marginalization have a collective memory of a negative relationship with the state and that they will mobilize using a no-faith-in-government framework. A no-faith-in-government framework can be observed through the use of tactics that do not exhibit an expectation that elected officials are on the side of the community. The tactics will instead utilize actions such as protests, rallies, contentious public comment sessions at government meetings and the formation of grassroots organizations focused on spreading information to the community. Communities working within this framework aim to get media attention for their issue because it is the only way they will be able to pressure elected officials, who otherwise "do not care" (Interview 9-24-2018, Interview 4-26-2018). In other words, the historically nuanced information (Harris 2006), or collective memory, leads them to believe that their elected officials will not take action on their behalf, even when made aware of the problem.

Likewise, we should also expect that neighborhoods with histories of relative sociopolitical privilege will have memories of a positive relationship with the state and will operate with a faith-in-government framework. My findings from case studies of the Porter Ranch and

large effort to educate the community about environmental justice issues in their community and in other low-income, majority-minority communities like theirs. The screening was held August 29, 2019, in the auditorium of Bell Gardens High School. Pizza and popcorn were provided, the hall was lined with local environmental organizations distributing information, and the Public Health Department was also on scene spreading information about their blood testing program for lead exposure. At least 500 people attended the event.

Southeast Los Angeles communities support this theory. Communities operating within a faith-in-government framework engage in tactics that focus on institutional channels of government. These communities focus, for example, on pressuring their elected officials through phone calls, emails and even in-person meetings. In short, their collective memory has led them to believe that once made aware of the problem, their elected officials will take swift action on their behalf. If my argument is correct, we should expect that the community of Porter Ranch, with its history of elite political connections, will have developed a faith-in-government framework and will use tactics like those listed above.

As discussed in chapter two, Porter Ranch is a 1300-acre planned community in the north San Fernando Valley, in the foothills of the Santa Susana mountains. Porter Ranch was designed and constructed by renowned California developer, Nathan Shapell, and his company Shapell Industries. According to the California Homebuilding Foundation, initial construction of homes in the Porter Ranch area began in 1974, however the final plans for the community as it exists today were not approved until 1990 (Daily News 2016).

Nathan Shapell, who was also the chairman of the powerful state regulatory agency known as the Little Hoover Commission from 1969-1997, turned this part of the San Fernando Valley into "Porter Ranch" with strong support from the Los Angeles City Council, who helped push the project through the approval process. For example, when Shapell Industries began construction of Porter Ranch, it was done so as an exclusively residential development. However, in the late 1980s, roughly a decade after residential construction began, Shapell proposed the inclusion of several million square feet of commercial retail space; an idea which, according to reports by the *Mercury News* and the *Los Angeles Times*, long-time "residents strongly opposed...because they feared increased traffic," (Nelson 2007a, Nelson 2007b). Despite

this opposition from the previously rural community however, the City Council approved plans for Porter Ranch to have approximately 3,300 single-family homes and three million square feet of commercial retail space, quite literally paving the way for a new, more affluent community.

The Porter Ranch development is "one of the largest, biggest housing and commercial projects in Los Angeles' history," (Daily Mail 2016) and was a "signature project" for Shapell Industries (California Homebuilding Foundation 2020). Being a "signature project," Shapell Industries ensured that the neighborhood would attract an elite clientele by setting the price of these homes well above average for the county; homes in Porter Ranch sold for as much as \$749,000 in 1999 (\$1.15 million in 2020 USD) when the average home price that year in LA County was \$205,321 (Zillow 1999). Porter Ranch homes now sell for well over \$2 million, which is still significantly higher than the county average of \$672,687 (Zillow 2020).

The elite connections that made the construction of Porter Ranch possible, combined with discriminatingly high home prices, resulted in a community steeped in privilege and government attentiveness. Figures 1 and 2 show that from 1990, shortly after construction began, to 2015, when the blow out occurred, the racial demography of Porter Ranch remained about the same. Figures 3 and 4 show the same stability in the income data over the same time period.

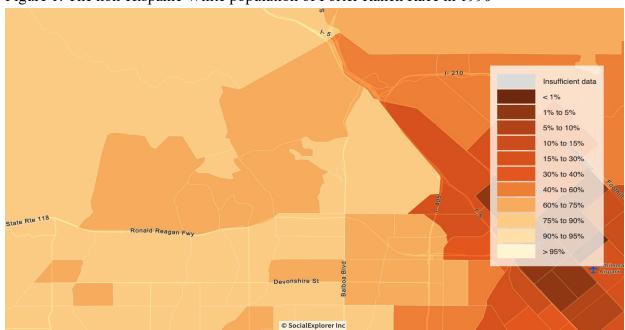


Figure 1: The non-Hispanic White population of Porter Ranch Race in 1990

Source: US Census 1990

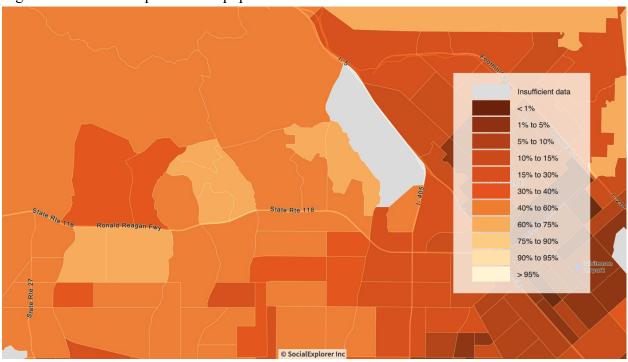


Figure 2: The non-Hispanic white population of Porter Ranch Race in 2015

Source: US Census, American Community Survey 2015 (5 year estimates)

Note: Although the proportion of the non-Hispanic White population has decreased since 1990, the census tracts of Porter Ranch are all over 40% White, and many are still over 60% White.

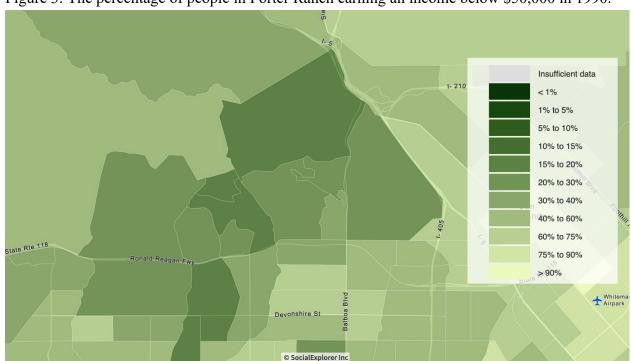
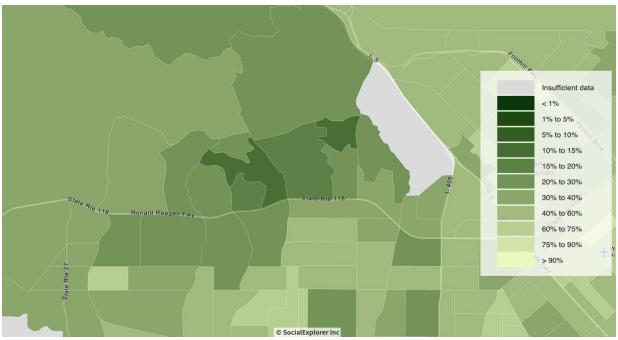


Figure 3: The percentage of people in Porter Ranch earning an income below \$50,000 in 1990.

Source: US Census 1990

Note: The state median income in 1990 was \$55,000.





Source: US Census, American Community Survey 2015 (5 year estimates)

Note: The state median income in 2015 was \$64,500.

When I spoke with Porter Ranch residents in one-on-one interviews, as well as in Save Porter Ranch's monthly meetings, this collective memory of privilege was expressed as not having previously felt the *need* to be aware of the government because their needs have always been met without asking. For instance, when asked the question "Have you ever contacted the city for services of any kind?" a female interviewee from Porter Ranch responded "I never thought about it before. I've never called for services but I've never needed to, either. Someone important must live around here because our streets get paved all the time – I've never seen a pothole around here" (Interview 8-6-2018). A second female interviewee made similar statements about never having had the need to interact with the government prior to Aliso Canyon. She stated,

"I live on a short little cul-de-sac and every once and awhile, the garbage truck will skip our street and we call and say, "hey you missed us" and they come back the next day. For some reason potholes aren't really a problem. For some reason they like to pave our streets a lot. So, we think somebody important must live in our area, because they seem to take care of us," (PR interview 9-5-2019).

Another interviewee shared how prior to the well blowout at Aliso Canyon he had never had a reason to be involved in, or aware of, local government. This resident of 41 years felt that while he did not have a memory of a great relationship with local government, he did have a memory of not needing anything from local government. He assumed that regulatory agencies did their job to protect the people and he had nothing to be concerned about. When responding to a series of questions about political knowledge and participation prior to the Aliso Canyon blowout, he said,

"I can sum up [my relationship with the government] in one word: none! Didn't communicate, wasn't involved, didn't participate, didn't, didn't, didn't. Now I'm the Treasurer of the Porter Ranch neighborhood council, which I had never heard of before all this. I

didn't attend city stuff, I didn't consume city services outside of utilities, it wouldn't even have dawned on me to approach anybody or ask (PR interview 8-16 -2018)."

When asked the question, "Have you ever contacted the city for services of some kind, and if so, what was the result," the most negative response I received in Porter Ranch was from a man who lived in Northridge, adjacent to Porter Ranch, but was active in the mobilization response to the Aliso Canyon blowout. He explained that after purchasing an electric car he learned that he would have to start a new account with Los Angeles Department of Water and Power (LADWP), in addition to the account he already had for his home, in order to have the car charging station installed at his apartment complex (Interview 8-2-2018). 15 He "got fed up after three months" and went to the LADWP Commissioner meeting, where he told his story during public comment. In response, the "[LADWP] president waived over the head of electrical services and took care of the problem on the spot. I had to go cause trouble, but as soon as I did, they responded right away. The LADWP is very responsive" (Interview 8-2-2018). While he felt that he had needed to "cause trouble" to have his needs met by the government, his actions demonstrated a clear faith-in-government by utilizing traditional institutional channels to voice his frustration. The fact that this interaction was met with the swift and complete response that a faith-in-government framework leads one to expect (he reported that he had ultimately "had a great result" (Interview 8-2-2018)), means that the framework remained intact and unchallenged.

I also asked interviewees, "Thinking back to before the Aliso Canyon blowout, what did you think about the local government? Did you believe that your elected officials listened to

<sup>&</sup>lt;sup>15</sup> The City of Los Angeles offers an incentive program where they will install an electric charging station for you at your apartment complex. The program is meant to entice people to purchase electric vehicles by eliminating the barrier of not having a charging station because you rent your home. The program requires that you open a separate account with LADWP specifically for the charging station however, so that if a new tenant moves into the building they do not have to pay for the charging station if they are not using it (LADWP 2018).

people like you?" In response to this question, one male resident said, "You grow up thinking yeah..., the government/agencies that are in existence to protect you from, will protect you from. That's the belief," (Interview 8-16-2018).

At the June 2018 SPR meeting, a woman shared that her older neighbors (senior citizens) "use to believe what they were told by the Gas Company and the government because 'they wouldn't hurt us.'" She said that some people think because they did not personally get sick or experience extreme symptoms, that there is no real problem (SPR 6-2018). While this trust is no longer shared by all, the interviewee's response reveals that people in Porter Ranch had faith in government prior to the blowout occurring. Similarly, the same respondent who reported the ultimately successful interaction with LADWP also said, "[Prior to the Aliso Canyon blowout] I had delightfully mixed feelings [about whether elected officials care about people like me]." This respondent shared that his positive view of local government was influenced by his experience working for the Sierra Club's "Beyond Coal Campaign" in 2013. The campaign aimed to pressure elected officials to move their cities' power plants "beyond coal" as a fuel supply and by 2013 the city of Los Angeles agreed to get off coal (Interview 8-2-2018). The interviewee went on to say,

"I loved [mayor] Antonio Villaregosa because he said 'we want to get the city off coal' and took a stand before it was popular; and I love him for that. We won that. It seemed to me that in LA, the city council, the board of supervisors, the LADWP commissioners...there were a lot of people there that I really respect and have integrity. So I have positive feelings, really positive feelings toward local government...at the same time, I think that they are, like all governments, mired with corporate contributions, so they're going much slower than they should in dealing with this stuff and I think Aliso Canyon is a perfect example [emphasis added]" (Interview 8-2-2018).

This quote is particularly illuminating for my theory about the impacts of a collective memory of a positive or negative relationship with local government. The respondent states that he has "really positive feelings toward local government," and goes on to specify the mayor, the city council, the county board of supervisors and the LADWP board of commissioners as the "local government" in which he has faith. The specificity of the governmental bodies indicates that levels of trust or faith in government for communities impacted by environmental pollution disasters may vary by agency of government. In other words, trust or faith in government may be compartmentalized; having faith in one elected official or regulatory agency does not automatically translate to faith in other elected officials or regulatory agencies. While the theory presented in this dissertation refers to a faith-in-government framework and a no-faith-ingovernment framework, in reality it may be more of a faith-in-(insert specific regulatory agency or elected official here) framework and a no-faith-in-(insert specific regulatory agency or elected official here). In any case, the specificity, or compartmentalization of faith, observed in the above interview was not unique to that single respondent. It was, however, unique to the experience of shattering frameworks, which will be discussed further, later in this chapter.

Exide Inc. and Southeast Los Angeles "Stand by our side, shutdown Exide!"

In the communities of southeast Los Angeles, histories of corporatism, local government corruption, and socio-political marginalization along lines of race, class and immigration status, have created a local-level collective memory of a negative relationship with the state. This memory created a no-faith-in-government framework for social interaction and collective action. Over the many decades since the incorporation of the cities of Maywood, Commerce, Bell, Huntington Park, Vernon, and the establishment of the neighborhood of Boyle Heights in Los Angeles, this framework has been continually reenforced through negative interactions with

police, poorly maintain public amenities (i.e. libraries, parks, trash collection, condition of roads, etc.) and high crime rates. This feeling of having a negative relationship with the state was voiced in all one-on-one interviews, community organization meetings and public comment portions of government hearings in SELA. Even former Bell Gardens activist turned State Assemblymember, Christina Garcia, stated that, "sometimes, your elected officials aren't looking out for you," (Interview 9-24-2018). An East Yard Communities for Environmental Justice (EYCEJ) staff member echoed the sentiment when she stated, "Sometimes your own elected officials don't care," signaling just how widely held that feeling is (Interview 4-26-2018). But what factors created and then reinforced these memories? What evidence is there that the SELA communities operated with a no-faith-in-government framework at the time they found out about Exide?

To determine what framework the SELA communities were operating within before the discovery of Exide's pollution, I rely on in-person interviews as well as media coverage from the time the State of California issued the facility an Interim Status Document (ISD), in 1981. When interviewing people in Porter Ranch, it was easy to have them recall the memory of their faith in government before the Aliso Canyon well blowout because it occurred only three years prior to the start of my interviews. However, in the case of Southeast Los Angeles, large numbers of the community began to learn about Exide's pollution thirteen years before my interviews began and the state knew about it for over thirty years prior. Because of this lag time, I rely more heavily on media accounts to provide evidence as to what sort of collective action framework people had before facing the Exide disaster.

Exide Technologies – a multinational corporation that produces lead acid batteries – owned and operated a lead battery recycling plant in the City of Vernon where it was responsible

for emitting thousands of tons of lead and arsenic into the surrounding environment. While the City of Vernon is almost exclusively industrial it is surrounded by predominantly residential communities, each in its own municipality. Bordering Vernon to the south is the City of Huntington Park, to the southeast is the City of Maywood, to the east is the City of Commerce, to the northeast is the CDP East Los Angeles in unincorporated Los Angeles County, and to the north is the Los Angeles City neighborhood of Boyle Heights. The City of Bell, which is just south of Maywood and does not share a border with Vernon, was also impacted by Exide's pollution because the small size of Maywood places the City of Bell just two miles from Vernon. It is the residents of these municipalities who bear the brunt of Exide's pollution and who are mobilizing in response to it.

With the exception of the City of Los Angeles and unincorporated Los Angeles County, these are all very small municipalities, each just a few square miles, with no physical barriers at the boundaries to create any sense of separation or distinction between them. Each community is over 95% Latinx, making the southeast the most densely Latinx area in all of Los Angeles County. The median income, education level and home ownership rates are virtually the same across the communities. <sup>16</sup> Furthermore, because Exide's pollution drifted across municipal borders, community organizers work across borders thus indicating a shared collective action framework. To understand what the collective action framework was in SELA prior to the Exide disaster, I analyze the histories of these cities and show how the collective memory of marginalization created their no-faith-in-government framework.

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<sup>&</sup>lt;sup>16</sup> Figures 3, and 4 in Appendix A depict the racial demography of Southeast Los Angeles since 1980 when the area changed from a predominately white working class neighborhood, to a predominately Latinx working class neighborhood - Figure 2 shows the racial demography of SELA in 1960, to illustrate the significant change in population and, by extension, collective memory. Figures 7, 8 and 9 show the percentage of the population earning an income below the state median, which demonstrates that despite the change in racial demography, the area was and remains a low-income, working class neighborhood.

The City of Vernon, in Los Angeles County, California, was home to an active lead smelting facility from 1922 to 2015. The facility, purchased by Gould, Inc. on May 3, 1979, was acquired by Exide Technologies in 1983 after the former corporation was purchased by the latter. The city, which is only slightly more than five square miles, is home to "more than 1,800 businesses" (City of Vernon) but only 110 residents, according to the 2010 Census. The city describes itself as "offering an environment uniquely friendly to business," whereas former Los Angeles County Supervisor Gloria Molina has referred to it as a "company town;" the city's history supports both claims (Long Beach Press Telegram 2011).

The City of Vernon was incorporated in 1905 by a small group of ranchers and merchants, most notably John B. Leonis, who saw the site where three railroads converge as a prime location to create a haven for industry (City of Vernon Accessed 4-5-2020). Leonis courted wealthy east coast industrialists to relocate their west coast facilities to his city. By the early 1930s dozens of national corporations, such as Owens-Illinois, Alcoa and Studebaker had manufacturing facilities in Vernon. In 1933 Leonis also formed an independent utility company, Vernon Light and Power, for the city. This allowed Vernon to control its own electricity prices and gave significant utility cost reductions to businesses, thus creating the capital incentive for corporations to move to Vernon, en masse (Forbes 2-9-2007).

Vernon consists almost entirely of factories and warehouses including meat packing plants, rendering plants, metal works, steel mills, smelters, food packing companies and apparel manufacturers. HOLC's 1939 "Residential Security Map," or redlining map, of Los Angeles County refers to the entire area as "industrial" and does not assign it a residential grade (Nelson, Winling, Marciano, Connolly, et. al). In fact, until the construction of the privately-owned Vernon Village Park Apartments in 2015, there were very few housing units in the city limits

and what housing stock did exist was owned by the city government. The city-owned housing is rented to a few city employees and to the industrial companies operating in Vernon that want a place for employees to live. In other words, the City of Vernon has been in sole control over who resides within its borders and, therefore, who may vote in city elections.<sup>17</sup> This government control over residential access gives credence to Supervisor Molina's accusation of Vernon being a company town masquerading as a city; it seems that Vernon is a "company town" for multiple companies.<sup>18</sup>

The industry-centered history of Vernon has informed the surrounding communities' modes of response to the pollution from the Exide facility. When asked the question "Have you talked to the City of Vernon about this?" at a meeting of the Mothers of East L.A., the responses from attendees – most of whom live in Boyle Heights – were that such a thing would be pointless, "it isn't Vernon's concern," or simply that "no one really lives there" (MELA 4-29-2019). Figure 5 shows Vernon's stark contrast to the surrounding municipalities on a population density map.

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<sup>&</sup>lt;sup>17</sup> According to a 2007 article by Forbes, in 1980 Bruce Malkenhorst Sr. – who was then the decades-long incumbent city administrator, clerk, finance director, treasurer, redevelopment agency secretary and chief executive of the utility Vernon Light and Power – evicted someone from their home after that person ran against Malkenhorst in an election.

<sup>&</sup>lt;sup>18</sup> See Appendix for a map of the population density of Vernon compared to the surrounding cities.

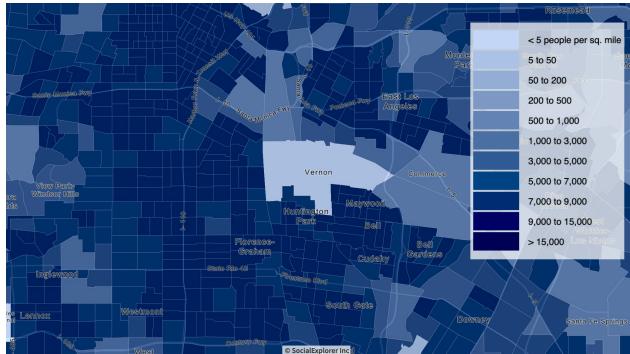


Figure 5: Population density of Southeast Los Angeles.

Source: US Census, American Community Survey 2018 (5 year estimates)

The residential cities surrounding Vernon have long been working class areas but have transitioned over time from majority white populations to majority Latinx populations. The City of Maywood for example, was given a grade of C/third/yellow by HOLC in 1939, due to its working-class, white ethnic population and because of its proximity to pollution sources, specifically the industrial zones of Vernon and "six arterial highways" (Nelson, Winling, Marciano, et al, 2020). In fact, every neighborhood or city that touched the border of Vernon was coded as either red or yellow; blighted or soon to be blighted. Boyle Heights for example, was described as

"...a "melting pot" area and is literally honeycombed with diverse and subversive elements. It is seriously doubted whether there is a single block in the area which does not contain detrimental racial

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<sup>&</sup>lt;sup>19</sup> The area description of Maywood, by HOLC, stated the reasons for classifying the area yellow, due to a mixture of housing types,10% of the population was foreign born (though the report specifies that none of these immigrants came from subversive races), the presence of a high voltage power line across the area and its proximity to "six arterial highways" (Nelson, Winling, Marciano and Connolly 2020).

elements, and there are very few districts which are not hopelessly heterogenous in type of improvement and quality of maintenance...Many of the thoroughfares are arterial in character and is hazardous residential territory and is accorded a general medial red grade, although in many parts slum conditions prevail. The Federal Government, in conjunction with the city government are undertaking a slum clearance project covering 41 areas in the extreme northeast part of the area," (Nelson, Winling, Marciano and Connolly 2020).

It is important to notice that in assigning these low grades to the areas around Vernon, the existing environmental degradation was taken into consideration, regardless of the racial demographic. In other words, whether an area was predominately white working class, like in Maywood, or predominately low income people of color, like in Boyle Heights, environmental factors such as the pollution which comes from "arterial roads" and the proximity to heavy industry were part of the assessment.<sup>20</sup>

As discussed in the previous chapter, this redlining helped pave the way for transitions in the racial demography of neighborhoods. For example, in both the 1940 and the 1960 census Maywood's population was over 95% non-Hispanic white, however, by 1990 (Manning 2019) the non-Hispanic white population had decreased to between five and ten percent of the population.<sup>21</sup> As the racial demography of the communities changed, so did the collective memory of SELA; those who had collective memories of white privilege moved out and people with collective memories of political and social marginalization moved in. Figures 6, 7, 8, 9, 10 and 11 show the racial and economic demographic transitions in SELA from 1960 to 2015.

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<sup>&</sup>lt;sup>20</sup> These arterial roads in many cases have expanded into major freeways. Most notably is the 710 freeway, which travels north-south, from the ports of Los Angeles and Long Beach, to the Boyle Heights area where it connects to I-5 and I-10; the two most significant freeways for distributing goods from the ports throughout the country. The Port of Los Angeles is the largest port (by number of shipping containers) in the United States, making the truck traffic on the 710 freeway a significant source of hazardous emissions and particulate matter, which has been linked to the high rates of asthma in the area.

<sup>&</sup>lt;sup>21</sup> The range is reflective of the different census tracts within Maywood.

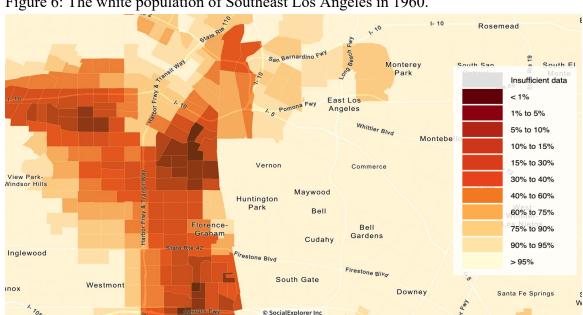


Figure 6: The white population of Southeast Los Angeles in 1960.

Source: US Census 1960

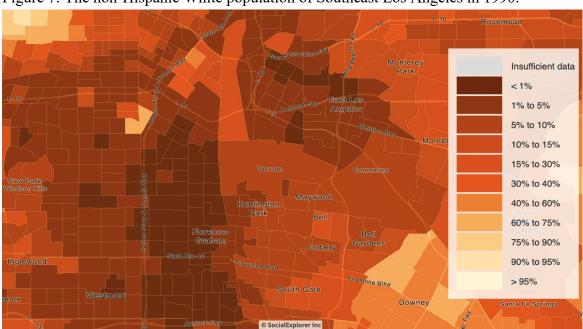


Figure 7: The non-Hispanic White population of Southeast Los Angeles in 1990.

Source: US Census 1990

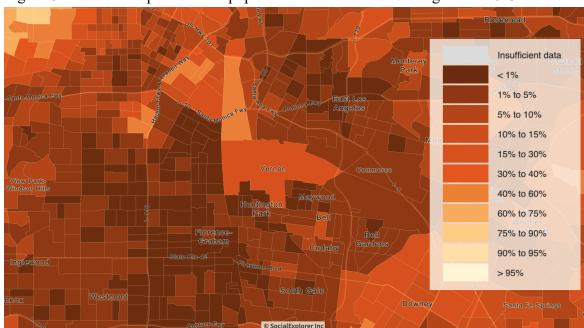


Figure 8: The non-Hispanic White population of Southeast Los Angeles in 2015.

Source: US Census, American Community Survey 2015 (5 year estimates)



Figure 9: The percentage of the Southeast Los Angeles population earning an annual income below \$5,000 in 1960.

Source: US Census 1960

Note: The national median income in 1960 was \$5600.



Figure 10: The percentage of the population of Southeast Los Angeles earning an income below \$50,000 in 1990.

Source: US Census 1990

Note: This data is from the first census conducted after the shift in the area's racial demography. The state median income in 1990 was \$56,000, indicating that although the racial demography had changed, the economic demography had not.

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Figure 11: The percentage of people in SELA earning an income below \$60,000 in 2015, when the Exide facility in Vernon was permanently shut down.

Source: US Census, American Community Survey 2015 (5 year estimates)

Note: The state median income in 2015 was \$64,500, so this map illustrates the percentage of households earning a below average income.

While political and social marginalization of Latinx people on the basis of race has a long history in Los Angeles, the specific collective memories of Latinx people in SELA since the 1980s has been shaped by multiple fights against the state and local government regarding a variety of locally unwanted land uses (LULUs). The first significant collective action movement in SELA was led by a group of residents who became known as the Mothers of East Los Angeles (MELA), when, in 1985, California Governor Deukmejian proposed the construction of a state penitentiary in East Los Angeles; the proposed site was within two miles of 34 schools (Pardo 1990). As community members began to learn of the proposed prison construction, a group of concerned residents, mainly women – although men have been involved participants throughout the group's history – began meeting and planning protest actions against the proposal (Interview 3-25-2019). The group, which was reported to have a membership of approximately 400 people at the time, held weekly protest marches in the streets of Boyle Heights, organized a letter writing campaigns to state assembly members, and even made the 800 mile round trip journey to Sacramento to protest in front of the capitol building (Associated Press 1984; New York Times 1989; LA Times 1989; Pardo 1990; Interview 3-25-2019). In accordance with Hahrie Han's issue public hypothesis (2009), the mothers became involved in protesting against the proposed prison because it would impact their children's wellbeing and the overall quality of life in the community.

Although MELA and the other groups that formed a coalition against the prison proposal were ultimately successful in their goal to defeat the project, the community's no-faith-ingovernment framework did not shatter. This is because although they succeeded in changing the state government's plans, the success was not the result of any surprisingly swift or efficient government responsiveness. Rather, the defeat of the prison project was the result of years of

fighting *against* state and city elected officials who labeled their community as the most appropriate location to build a prison, thus supporting the idea that the government doesn't care about them.<sup>22</sup>

The framework was further supported when the residents had to fight to keep out other LULUs; specifically proposals for an above-ground oil pipeline that would run through the middle of East Los Angeles, and the construction of a hazardous waste incinerator (LA Times 1989; Pardo 1990; NBC News 2014). These battles made clear that the success experienced in stalling and then defeating the prison project was not to be understood as the government now "listening to people like you," as I phrased the question to interviewees. Rather than the government being the entity you assume will help protect you, in SELA the government was a more consistent source of threat than of protection.

These experiences created a memory of a negative relationship with the state. As a result, the initial tactics of the community were not directed toward calling regulators' attention to the issue; rather, they directed their actions toward generating outside pressure on the regulatory agencies and elected officials to force action. While this difference may seem subtle, it is quite important. If a community has faith that the government will protect it by taking action, then when it encounters a problem like Exide or Aliso Canyon, its initial response is simply to notify the government, like the people of Porter Ranch did. However, if a community does not think that the government will act to protect it, then notifying the government of the problem will noy make a difference, so its initial response will be to find a way to force the government to protect it anyway. As will be discussed further in the following section, the no-faith-in-government framework that the SELA communities operated within led them to expect that the government

<sup>&</sup>lt;sup>22</sup> State Assemblymember Gloria Molina was the community's only real ally the community had among elected officials and she was politically ostracized on the issue by other assembly members (San Diego Tribune 1986).

would provide an ineffective, slow or otherwise insufficient response to the Exide issue. Unlike the community of Porter Ranch, the SELA communities received the result they anticipated.

#### **Shattered Frameworks**

Recall that the second part of my argument states that communities which do not receive the response they expect from the government will have their existing framework shattered and will adopt a new one. To examine this, I must find a case study of a faith-in-government community receiving an unexpectedly bad result from the government, as well as a case study of a no-faith-in-government community receiving an unexpectedly good response.

### From picket fences to picket lines in Porter Ranch

As discussed earlier in this chapter, a history of always having their needs met without needing to protest or picket created a collective memory of a positive relationship with the state, and thus, a faith-in-government framework of mobilization in Porter Ranch. When the blowout at Aliso Canyon occurred, residents assumed that the responsiveness the government had shown to their community in the past (such as having their streets regularly repaved to avoid developing potholes, promptly correcting a missed garbage pick up, etc.), would continue; they expected the government to be on their side. However, the response they received from the government in the days immediately following the blowout lead to a shattering of that framework for those actively engaged in collective mobilization.

The response residents expected was that their health and safety would be protected by the city and state governments as well as county and state regulatory agencies.<sup>23</sup> They expected that the government would force SoCal Gas to evacuate and relocate everyone until the broken

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<sup>&</sup>lt;sup>23</sup> These jurisdictions differ because the Aliso Canyon storage facility is on county land, but the community of Porter Ranch, although only half a mile away, is on city land.

well could be brought back under control. Furthermore, they expected that SoCal Gas would be forced to cease operations at the facility until the completion of a long-term health study (SPR meeting 6-27-2018; Interview 8-6-2018; Assembly oversight hearing 2019, hereafter AOH 2019).<sup>24</sup> This, however, is not what happened.

There are several key moments in the timeline of Aliso Canyon that people referred to in all one-on-one interviews in Porter Ranch, at the Save Porter Ranch monthly meetings and the State Assembly oversight hearing I attended, as moments at which both the gas company and the government failed them. The first is that they were not made aware of the blowout for three days after it had begun, despite numerous people calling and reporting smelling gas and experiencing headaches, nosebleeds and nausea. The second is when Governor Brown did not come to Porter Ranch in person for almost three months after the start of the event. The third, is that the Los Angeles County Public Health Department issued a letter to all physicians advising them not to run toxicology tests on patients with Aliso-related complaints but to "look for other causes instead" (LACDPH 2016).

These moments of disillusionment and disappointment are the moments at which the "shattering" of frameworks takes place. However, to know that a framework has actually been shattered and that a new one has been adopted, there needs to be an observable change in the mode of response in which the community engages; there must be a tactical change of some kind. The remainder of this section demonstrates, through the voices of resident activists, the ways in which the preexisting faith-in-government framework was shattered in the months following the Aliso Canyon gas blowout, and how the observable change in tactics produced by

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<sup>&</sup>lt;sup>24</sup> In addition to direct statements in interviews, this sense of expectation was observed by noting the key complaints about, or disappointments with, the government's response to Aliso; the things people are upset about are the things they thought were a given or assumed would automatically happen, but did not. Being shocked by government inaction implies some level of faith existed prior to that point.

this shattering supports my argument that the community adopted a no-faith-in-government framework.

People who bought homes in Porter Ranch did not know that the largest natural gas storage facility in the western United States was located in the foothills bordering their community (Interview 8-6-2018, Interview 8-16-2018, Interview 9-5-2019). During an informal group interview with activists in Porter Ranch, they shared that residents who purchased their home during the 1960s, who reported having been generally aware that there were active oil wells near their community, were led to believe that the oil drilling was slowing down and would end over the next decade or two (SPR 2-2019). However, as the oil was pumped out of the hill, empty caverns were created underground, which Southern California Gas Company began utilizing to store natural gas. Residents in the area were not told that this facility was being constructed or that fossil fuel activity was not slowing to an end over the next decade, as some had previously believed (SPR 2/2019). Similarly, residents who purchased homes in Shapell's new development were not informed that there was a large gas storage facility – or any kind of fossil fuel activity – on the hill behind their houses (SPR meeting 6/2018; SPR meeting 7/2019; Interview 8/16/2018; Interview 8/8/2018; Interview 9/5/2019).

In the June 2018 monthly meeting of Save Porter Ranch, four attendees - all of whom own houses in Porter Ranch - stated that they were never informed that there was an active oil field within one mile of their front doors (SPR June 2018). One woman said, "We didn't know there was an oil field right there. They didn't want us to know" (SPR June 2018). The group expressed a concern that California real estate disclosure laws, which stipulate what information a seller must disclose to a buyer about a property prior to closing the sale, may have been

 $<sup>^{25}</sup>$  In this instance, "they" refers to both the homebuilders – Shapell Industries – and the real estate agents who sold them their homes.

violated. While it is beyond the scope of this dissertation to determine whether or not there was a disclosure law violation, what is important is the impact that the blowout had on residents' trust in their being protected by state regulators.

The lack of knowledge about the existence of the Aliso Canyon storage facility left residents in the dark about the strange smells in their neighborhood prior to the well blowout, making the disaster all the more shocking. In an interview with a lifelong Porter Ranch resident, he stated that on the day of the blowout he smelled the gas immediately and although he knew that it was definitely coming from outside of his home, and that it was definitely too much gas to be coming from a neighbor's barbeque, he had no idea what the source of the smell could be.

The common answer you're going to get is that no one knew. I've lived here my whole life, I remember right where you're sitting was a big empty field. None of this existed. I've been here for 41 years. I've hiked up in front of this facility...no one had any idea what the f\*\*k was there. You don't know that it's the facility that's the largest gas storage facility west of the Mississippi. What people learn is that all these years, when you walk outside and you smell gas, you think 'oh, it must be something with my neighbor,' or something to reason it away because you have no conceptual idea that this gigantic facility is even around. But then when you think about it, it wouldn't make sense for it to be your neighbor's barbecue, because how much gas is your neighbor letting out that you can smell it in front of their house (PR interview 8/16/2018).

Another long-time resident, a woman who moved to Porter Ranch from Northridge in 1995, also reported not knowing about the facility when her property was purchased. Her husband had purchased a Porter Ranch home in the 1980's and it was not disclosed to him that there were oil and gas wells in the area. When asked how she found out about the oil and gas operations if it had never been disclosed, she said,

"He [interviewee's husband] actually found out through a coworker in his department. It was someone who worked up there actually, at what's called Base Maintenance because there's communication towers up there. He [husband] said "Oh I just moved near where you work." And he said "did you know there's a big oil field there?" He did not know that." (PR interview 9/5/2019).

A woman who purchased her Porter Ranch home in 1999 also reported that she had never been informed about the gas storage facility's existence and, upon learning of it after the blowout occurred, attributed past smells to the facility. She said, "I knew something was going on, but I didn't know what. We all got bloody noses...My god, what are we living next to? We had no idea when we bought all those years ago." As she reflected she went on to describe a history of minimization and lies from the gas company. She said,

There've been a few times where we'd be outside enjoying a nice summer's day or something and all of a sudden you'd smell something. I stopped even calling because every time I do they [SoCal Gas] say "oh we're just venting." So that's what would happen, people would call and they'd say 'We're just venting. We're just venting. That was their story (PR interview 9/5/2019).

When the blowout occurred on October 23, 2015, the smell of mercaptan, benzene and other chemicals that were mixed with the gas, filled the air of Porter Ranch and neighboring downwind communities, such as parts of Northridge and Chatsworth. While residents began reporting the intense smell of gas and developing headaches, nausea, nose bleeds, and burning of the eyes and nose, SoCal Gas engaged in what one resident called "instant minimization" (Interview 8/16/2018).

When one resident called the gas company to report the intense smell at his house that day, he was told by an employee that, "We're just having a little issue with the facility, it's no big deal," (Interview 8/16/2018). This sort of minimization of the problem, on the part of the gas company, continued for three days before they finally announced that a well had blown out and that they were unable to immediately regain control of it (SPR 2018). According to Save Porter Ranch, the most active and well known resident group responding to the blowout, their

leadership called 911, the Air Quality Management District (AQMD), County Supervisor Michael Antonovich's office, and posted on social media (SPR 2018). Following these complaints, AQMD came to Porter Ranch and took air samples, declaring on October 25, 2015, two days after the blowout, that a gas leak was coming from the Aliso Canyon facility; the Gas Company, however, did not publicly confirm the ruptured well SS-25 until the 26th. When SoCal Gas began to make public statements, they assured the public that the blowout "did not pose a threat because it [was] outdoors and over a mile away from and more than 1,200 feet higher than homes or public areas," and because mercaptan – the additive that gives natural gas a detectable odor – is added in such small amounts that it is believed to be harmless (Daily Mail 2015; City New Service 2015).<sup>26</sup>

Despite these assurances, on October 26, 2015, SPR took two important actions to inform the community about the danger posed by the chemical exposure. First, they organized a community forum to discuss the possible health impacts they could be facing from inhaling so much gas, and to spread the word about what they call the "smell something, say something" plan for community response. The plan was that whenever you smell gas, you report it to the Gas Company, AQMD and to SPR via Facebook. If AQMD receives three complaints within one hour they will send an investigator out to take air samples, so SPR encourages people to use Facebook to alert their neighbors to smells and coordinate their calls to reach the threshold needed to get AQMD's attention (SCAQMD 2016; SPR 6-27-2018; SPR 2018). Second, they called the principals of the two local elementary schools – Porter Ranch Community School and

<sup>&</sup>lt;sup>26</sup> The independent root cause analysis conducted by Blade Energy Partners, and completed in May 2019, found that the leak was caused by a rupture in the outer casing of the well. This rupture caused gas to flow between the well and the casing, which then completely separated, resulting in an uncontrollable leak, or "blowout." According to a Blade Energy representative at the Assembly oversight hearing of August 2019, the initial rupture in the casing was the result of microbial corrosion, which would likely have been discovered if proper safety checks had been conducted.

Castlebay Elementary – to inform them of the gas leak. According to SPR, the principals had not been made aware of the blowout by anyone, including SoCal Gas, the County Department of Health, SCAQMD, or the Los Angeles Unified School District. SPR leaders followed up with the principals via email to provide them with "documentation of the health impacts of being exposed to mercaptan" (SPR Timeline).<sup>27</sup>

Also on October 26, 2015, members of Save Porter Ranch and Food and Water Watch, attended a "So Cal Gas open house" (SPR 2018). During the meeting, a representative of SPR asked about the health effects of mercaptan exposure and were given a flippant response from a gas company employee, who allegedly said, "That's a good question. Why don't you go look it up" (SPR 2018).

While this flippant response may be a one-off incident, it is an event that the Save Porter Ranch organization has made a point of including in the timeline published on their website; it is also a story I was told at the first Save Porter Ranch meeting I attended in June of 2018. This interaction therefore not only made an impact on how the members of SPR view the gas company and their relationship with one another but repeating the story of this negative interaction over and over, online and in-person, makes it part of the collective memory of Porter Ranch and informs their tactics. The elementary school principals not being informed about how to protect students, the Gas company denying for three days that anything was happening at all, the disregard shown to concerned residents at the open house and the "instant minimization" that followed, solidified a distrust in the SoCal Gas. Feeling that they had been wronged by the gas company – and possibly bamboozled into buying their houses – they looked to government regulators like the AQMD, County Department of Public Health, California Public Utilities

<sup>&</sup>lt;sup>27</sup> According to Save Porter Ranch, the information they emailed to the elementary school principals was the publicly available information from the CDC's website about the health effects of prolonged mercaptan exposure.

Commission (CPUC) and their elected officials in the City Council, the County Board of Supervisors, and the State Assembly, as well as the Governor, to defend them.

In November of 2015 Save Porter Ranch focused on spreading information about the potential health impacts of long-term exposure to mercaptan, benzene and other chemicals and heavy metals believed to be accompanying the methane spewing out of the well.<sup>28</sup> Members of SPR attended a Porter Ranch Neighborhood Council meeting,<sup>29</sup> which was also attended by representatives from SoCal Gas and the LA County Department of Health. SPR members brought printed copies of the Center for Disease Control and Prevention's (CDC) warnings about the known effects of long-term mercaptan exposure, and handed them out to every representative and resident in attendance. At that meeting, the group also began surveying residents about their health symptoms. On November 14, 2015 the organization also held a community forum at Castlebay Elementary where they presented the results from their small health survey, and continued to tell people about the dangers of mercaptan and benzene exposure, and to coordinate calls to AQMD to maximize their impact (i.e. reach the three calls per hour threshold for response).

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According to the County Public Health Department, SoCal Gas never provided information on "the composition of the source gas," or "the composition of the drilling lugs that were utilized for the attempted well kills, and then consequently spewed out in the form of an oily mist and ended up landing on properties and causing more problems" (Cyrus Rangan speaking at Assembly oversight hearing 8/6/2019). What is known, and was known at the time, is that the Aliso Canyon facility is a former oil field. When the oil was all pumped out in that spot (there are other active oil wells in the vicinity), the well was converted from an extraction well to an injection well, and the cavity left empty from gas pumping was refilled with methane. This means that the methane and mercaptan is also mixing with any chemicals remaining from the crude oil that once occupied that space. AQMD later confirmed that Benzene was present in the air, however SoCal Gas maintains that there were only trace amounts and that ongoing monitoring since October 30th, "thus far, the air results have shown benzene levels in the community consistent with concentrations expected for the area. When detected, benzene is present at levels that are consistent with background concentrations in the area " (SoCalGas 2015).

<sup>&</sup>lt;sup>29</sup> The Neighborhood Council system is a form of local government that exists throughout the City of Los Angeles. Neighborhood Councils are elected bodies that hear local level concerns and have a small budget to address these concerns.

On November 18, 2015 the California State Division of Oil, Gas and Geothermal Resources (DOGGR) declared the Aliso Canyon blowout an emergency and demanded that SoCal Gas release the information about the exact chemical makeup of the gas and to submit a plan for sealing off the damaged well. The next day, November 19th, the LA County Department of Public Health announced that, because the plan announced by SoCal Gas indicated it would take several months to seal the well, it had determined the mercaptan odor was a public health issue and ordered SoCal Gas to pay for the relocation of affected people (SPR 2018; Daily Mail 2018). However, when residents began to call the Gas Company for details of how to sign up for relocation, the employees they spoke with knew nothing about the relocation process at all (SPR 2018). In response, on November 20th, SPR members went up to the gates of the Aliso Canyon facility and spoke with a Gas Company representative about the lack of information; the Gas company's website was updated later that day to include the phone number people should call to arrange relocation (SPR 2018).

While this example may seem like an excellent response – after all, the same day that residents pointed out a problem, it was rectified – the people of Porter Ranch did not perceive it that way. They felt that they shouldn't have needed to advocate for themselves so much. They expected that the Public Health Department and other government regulatory agencies would automatically intervene to ensure their safety, because it is, after all, their primary purpose. The disappointment in response from the Public Health Department in taking almost a full month to mandate relocation, becomes new information incorporated into the local collective memory of

<sup>&</sup>lt;sup>30</sup> According to Dr. Cyrus Rangan of the County Department of Public Health, the order was issued not because levels of mercaptan were dangerously high, but because the Gas Company failed to kill the well on its first attempt, the estimated timeline for having the leak completely sealed off was extended to several months. Rangan stated that Public Health issued the warning and mandated SoCal Gas pay for voluntary relocation, "out of an abundance of caution," because the impact(s) of long-term exposure to mercaptan is not well known (AOH 2019).

their relationship with the state and begins to crack their preexisting faith-in-government framework. As one SPR member said, "SoCal [Gas] isn't the enemy, the government is," because the gas company is expected to prioritize their bottom line, but the government is expected to prioritize the public welfare and failed to do so.

In a September 5, 2019 interview, a female resident said that after reading about children complaining of nosebleeds at the two elementary schools in Porter Ranch she began to wonder what the Los Angeles Unified School District was saying and doing to respond; this is when she shared a story that exemplified the shattering of the faith-in-government framework. The interviewee said,

I went to the LAUSD [web]site and they had a link to a fact sheet that Public Health had put out and it was dated November 13, 2015 and it basically said "oh any symptoms are due to odorants...there's a minimum response to it...but don't worry, everything will be honkey dory once the well gets sealed. There's not going to be any long-term health symptoms." This was like the first kind of step – it wasn't just So Cal Gas, it was the Public Health Department and others that were misleading the public (Interview 9-5-2019).

Her anger largely stemmed from the fact that the school district used the Public Health Department's letter as justification "for not doing anything at all" (Interview 9-5-2019). She made a point in this quote to highlight that her surprise was not just that the gas company would mislead people, but that the County Department of Public Health would participate in such a thing. When the Public Health Department ordered that SoCal Gas pay for relocation of residents, it actually served to shatter the framework of a trust in government because it confirmed to SPR and other resident-activists that their concerns about breathing in the gas had been well founded and that the government's dismissive response was either incompetent or purposefully negligent. The community perceived the government's treatment of the situation as an emergency one month after it began as proof that mercaptan was in fact dangerous to breathe

and that the Health Department was willfully negligent for over a month (Interview 8-16-2018, SPR 6-2018).

The second framework-shattering event came when Dr. Cyrus Rangan, Director of the Bureau of Toxicology and Environmental Assessment at the Public Health Department, issued a letter to all physicians in the Porter Ranch area instructing them not to run blood or toxicology tests on their patients and to look for other causes to explain symptoms (SPR June 2018; AOH 2019). According to a Food and Water Watch (FWW) community organizer, Dr. Nordella, a local physician, brought the letter he received from the health department to a community forum in November 2015, to share the pressure he and other doctors were feeling from the Health Department and that he was very concerned about being told not to run specific tests. <sup>31</sup> The FWW staffer said that, "This really scared and shocked the community to find out the Department of Health was on the gas company's side, not the public's" (SPR June 2018).

This FWW staffer said that after the letter from Public Health instructing physicians not to run blood or toxicology tests, representatives of the Department came to the next Porter Ranch Neighborhood Council meeting, and that this was seen as a sign of possible corruption or collaboration between the Neighborhood Council and Public Health. While I observed no evidence of such corruption, the truth of its existence is largely irrelevant. When considering, as this dissertation does, frameworks of mobilization, what is important is how the impacted community perceives the response from the government and whether it aligns with the existing framework, or if this new memory begins to crack the validity of the framework. In this instance,

<sup>&</sup>lt;sup>31</sup> Dr. Nordella rose to local fame after disregarding the Public Health letter and running such tests on his patients anyway. He was fired from his job and the belief held by members of SPR, other resident activists and echoed by Assemblywoman Christy Smith during the August 6, 2019 Assembly oversight hearing, is that he was fired because of his refusal to abide by the directive issued from Public Health. It is not possible to determine the true reason for his termination, however, because personnel records of the sort are subject to privacy laws.

the County Health Department's failure to act on behalf of the community for almost a month after the blowout began, to first say that there was no danger and then later say people should leave the area, and to have the community making complaints about headaches, nausea, nosebleeds and gastrointestinal problems the whole time, all amounted to – in the minds of residents – the failure of the government to protect their health as well as a failure to listen to, or believe, the community's complaints.

While the community's faith in the Public Health Department was gone, they still had faith in their elected officials. Following the announcement of relocation services being offered at the expense of SoCal Gas, SPR organized 200 people, including families with children, to protest at the corner of Tampa Avenue and Rinaldi Street, which is the busiest intersection in the neighborhood and where the greatest number people can witness the protest (Interview 9-12-2018, SPR 2018, SPR June 2018). The group was able to gain media attention for this action and began to receive press coverage of most of its events in the future. As one SPR member said, "They liked the story, they liked us and we were able to capitalize on that," (SPR June 2018). As of June 2018, members of Save Porter Ranch, through the leveraging of Food and Water Watch's network, had developed "100 media contacts" that they know personally since the blowout began (SPR June 2018).

The press attention raised Save Porter Ranch's profile and name recognition, which helped them secure meetings with elected officials. SPR members attended and gave comments at County Board of Supervisors' meetings and City Council meetings, where the group also held

<sup>&</sup>lt;sup>32</sup> Just before the start of an LA County Board of Supervisors meeting, SPR members gathered and held a small rally and press conference outside just before the meeting got underway. When the press conference was over I had the opportunity to interview a cameraman from a local Los Angeles new station. I asked him how they found out about the press conference - did SPR contact them or the other way around? He said that SPR likely sent a press release to the station and told them they would be holding this rally. He continued on to say that "there are some things that we will always show up for: anything about pets, babies or rich people. That will get us sent us out" (3-20-2018).

a protest beforehand and then participated in public comment during the meeting. On December 2, 2015 the environmental group Earthworks<sup>33</sup> sent "two operators" to hike with SPR and FWW in the Santa Susana hills where the gas storage facility is located. This is when Earthworks used its FLIR camera to photograph an infrared view of the gas plume rising up from the well for the first time. These photos were shown to the public at an SPR event on December 6th; seeing the huge plume of gas rising and spreading out over their neighborhood catalyzed residents to take action of their own.

On December 12, 2015 SPR held another protest, which they called the "Draw a Red Line Against SoCal Gas protest" (Indian Valley Daily Bulletin 2015, hereafter IVDB) or the "Red Line Protest" (SPR 2018). This protest was held at the intersection of Tampa and Sesnon, at the gate of the facility, and "an estimated 300 red-clad<sup>34</sup> protestors who walked a picket line in front of the gas field gate near the top of Tampa Avenue" (IVDB 2015). The group received media attention for this demonstration as well and they took that opportunity to call upon then governor, Jerry Brown, to shut the facility down permanently (SPR 2018, IVDB 2015). By calling on the governor to solve their problem they showed a loss of faith in regulators to do their job without outside pressure, but they also showed that they still had faith in their elected officials to take action on their behalf.

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public comment. The naming of the December 12, 2015 protest as the "Red Line" was a reference to them wearing

red and standing in a line in front of the facility – they are the line against SoCal Gas.

<sup>&</sup>lt;sup>33</sup> Earthworks is an environmental nonprofit organization focused on "protecting communities and the environment from the adverse impacts of mineral and energy development while promoting sustainable solutions" (<a href="https://earthworks.org/about/">https://earthworks.org/about/</a>). The organization was formed in 2005 when two smaller organizations - Mineral Policy Center and Poil and Gas Accountability Project (OGAP) - merged together to pool their resources.

<sup>34</sup> Save Porter Ranch always asks people to wear red shirts to their protests and demonstrations. The organization had red t-shirts made with white writing saying "SHUT IT ALL DOWN" and wore them to every event they participated in or held. They encourage people who do not have the shirt to wear a plain red shirt to show unity. This did look very impressive at the BOS meeting I attended March 20, 2018, where red shirts filled the gallery during

Throughout the month of December, 2015, Save Porter Ranch, with the help of national NGO Food and Water Watch, met with several elected officials and continued to do interviews with any media outlet they could. On December 21, 2015, SPR members met with State Senator Fran Pavley to discuss the ongoing chemical exposure from the blowout. They asked her to require that CPUC review the facility to ensure the safety of every single well on the premises. They also asked, "at the behest of Porter Ranch residents," that she use her position to urge Governor Brown to come to Porter Ranch in person to experience the smell for himself and listen to the concerns of the community (SPR 2018). On December 23rd, just two days later, SPR met with Assemblyman Scott Wilk, of the 38th District<sup>35</sup> and urged him to take the same actions they asked of Senator Pavley: demand that CPUC review the facility for safety and urge Governor Brown to shut it down permanently. Just eight days after this meeting, on December 31, 2015, SPR met with United States Congressman and fellow Porter Ranch resident, Brad Sherman (SPR 2018). SPR asked him, and he agreed, to send a letter to Governor Brown requesting that a state of emergency be declared for the gas leak. In response, Governor Brown made an in-person visit to Porter Ranch, met with residents and heard their experiences and the health symptoms they were experiencing, and on January 6, 2016, he issued a procolomation of emergency (SPR 2018, Office of the Governor 2016).

What is perhaps most significant about this series of meetings with elected officials is the time of year they took place. The meeting with Assemblyman Scott Wilk was two days before Christmas when government offices were all closed. Likewise, the meeting with Congressman Brad Sherman occurred on New Year's Eve – also a day that government offices are closed. In both of these instances the date of the meeting indicates a close and historically positive

<sup>&</sup>lt;sup>35</sup> This district is currently represented by Assemblywoman Christy Smith, who won the seat in 2016. Scott Wilk ran for State Senate that year and won, making him the representative for the 21st Senate District.

relationship with elected officials. Being able to meet with elected officials during a holiday is a strong indicator of a privileged relationship with state and local government. The legislatures at the state and federal levels were closed during this time so that representatives could be home with their families, but instead, these two politicians met with SPR and, in the case of Brad Sherman, took clear action on their behalf. While this willingness of their elected officials to meet with them is in alignment with the faith-in-government framework that was beginning to shatter with the loss of faith in the Health Department, the failure of this declaration of emergency to accomplish their goal (permanent closure of the facility) ultimately resulted in a total shattering of the faith framework and the adoption of a no-faith-in-government framework.

Governor Brown's emergency declaration on January 6, 2016, was referred to later by the co-founder of SPR as "pomp and circumstance and no real action" (SPR June 2018). The emergency declaration ordered that "all agencies of state government shall utilize all necessary state personnel, equipment, and facilities to ensure a continuous and thorough response to this incident;" that said agencies' actions would be as directed by the Governor's Office of Emergency Services and the State Emergency Plan; and that the Office of Emergency Services, being in charge of coordinating agencies, would "provide frequent and timely updates to residents affected by the natural gas leak and the appropriate local officials, including convening community meetings" (Office of the Governor 2016). The order went on to give specific directives for 1) stopping the leak, 2) protecting public safety, 3) ensuring accountability, and 4) strengthening oversight of gas storage facilities. There were orders given to DOGGR, CARB, CPUC, the Office of Environmental Hazard Assessment, and the California Energy Commission to direct SoCal Gas to take a variety of actions related to stopping the leak, monitoring the facility, mitigating climate issues, testing, and keeping the government as well as the public

advised of all progress on these fronts. For example, the proclamation stated that DOGGR would direct SoCal Gas to "take any and all viable and safe actions to capture leaking gas and odorants while relief wells are being completed," would require SoCal Gas to "identify how it will stop the gas leak" if the plan to construct relief wells fails (Office of the Governor 2016).

Unfortunately, Governor Brown's proclamation of a state of emergency did little to support or mend the faith-in-government the community had prior to the blowout. First, the emergency proclamation did not grant any additional – even temporary – powers to these regulatory agencies to legally force SoCal Gas to comply with the directives laid out in the proclamation. As a result, SoCal Gas continued to be uncooperative in disseminating information to the government and to the public and there was virtually nothing that agencies could do about it. As of August 6, 2019 – almost four years after the blowout occurred – County Public Health claimed to have still not received vital information from SoCal Gas despite having requested it repeatedly (AOH 2019). The oversight strengthening stated in the proclamation, which included requirements for "at least daily inspection of gas storage well heads using gas leak detection technology, ongoing verification of mechanical integrity of all gas wells, ongoing measurement of annular gas pressure or annular gas flow within wells; regular testing of all safety valves," to list a few, were not accomplished until SB380 was passed in 2017, two years after the blowout. The inability to force SoCal Gas to comply with these directives immediately after they were issued further shattered the community's faith-in-government to look out for their wellbeing.

Second, most of what the proclamation called for was research: studies were to be conducted and reports submitted to the governor's office on a regular basis. While conducting such research is an important part of learning how to best allocate government resources, it creates the appearance of talking about taking action, but not actually taking any action. For

example, four years after the blowout and the community's calls to permanently close the facility, the CPUC was still "engaged in a public process to determine whether Aliso Canyon is necessary in our system" (AOH 2019); a question residents feel was answered with a resounding "no" quite some time ago.

Furthermore, Governor Brown's declaration promised that, "the state will...convene an independent panel of scientific and medical experts to review public health concerns" (Office of the Governor 2016). According to SPR, "South Coast Air Quality Management District (SCAQMD) is going to do a study that is extremely underfunded so the results aren't going to be truly useful...they need thirty or forty million, but they only got about one million to do it" (SPR June 2018). Despite its being included in the Governor's orders, no such public health study has been conducted to date. In fact, despite the proclamation directly stating, "the state will convene an independent panel of scientific and medical experts," no such panel was convened and no funding was allocated from the state to do so. In 2019, as part of a legal settlement with LA County, SoCal Gas has paid \$40 million for a public health study to be conducted. This money was allocated to the LA County Department of Public Health to conduct the study. According to Dr. Cyrus Rangan of Public Health, the Department has put together a "steering committee and [are] developing the infrastructure for that committee." This steering committee will be

Convening an independent scientific panel with experts from all over the country in addition to some experts from our top health agencies, and they will be making the determination about what the study goals are. Then they are going to be putting out requests for proposals from researchers out there who would like to utilize our funds to perform research. Those proposals will come from outside researchers, academic researchers at universities, who will propose studies we allocate money to them to perform those studies (Rangan speaking at AOH 2019).

In short, it took until 2019 to get funding for a study that was ordered in 2016 and the current status of the study is that a committee has been put together, which is "on the precipice of putting together," another committee, which will then put out a call for proposals and ultimately fund a researcher whose project may garner useful information for the goals set out by the committee (AOH 2019). Actually, conducting the health study seems to still be a long way off, but when it is conducted it will likely not be the sort of survey research that residents have sought.

The result of all this "pomp and circumstance with no real action" has been the shattering of a faith in government framework (SPR June 2018). Despite having had access to elected officials, having had in-person meetings with numerous local, state and federal representatives, and having successfully pressured the governor to make an emergency declaration, the facility they demanded be closed permanently, was not. After the gas leak was finally stopped in February 2016, four months after it began, SB380 – authored by State Senator Fran Pavely – was passed to address and improve safety standards for natural gas storage facilities and effectively closed the Aliso Canyon facility until the safety requirements enumerated in the bill were met. Specifically, the bill requires

"the supervisor to continue the prohibition against Southern California Gas Company injecting any natural gas into the Aliso Canyon natural gas storage facility...until a comprehensive review of the safety of the gas storage wells at the facility is completed...well integrity has been ensured by the review, the risks of failures identified in the review have been addressed, the supervisor's duty to prevent damage to life, health, property, and natural resources is satisfied and the Executive Director of the Public Utilities Commission has concurred via letter with the supervisor's determination of safety" (SB380 2016).

The bill also authorizes the State Oil and Gas Supervisor to allow Southern California Gas Company to resume injecting gas into - but not extracting out of - Aliso Canyon after the "gas storage well comprehensive safety review is complete, the division holds a duly noticed public hearing in the affected community to provide the public an opportunity to comment on the safety review findings and the proposed pressure limit, and the supervisor has approved the maximum and minimum reservoir pressure at the facility."

The comprehensive safety review detailed in the bill is a very thorough inspection of all existing wells and an analysis of what the facility's infrastructural weaknesses are and a plan to address them. The bill does not, however, require that a root cause analysis of the blowout be conducted before allowing SoCal Gas to resume injections into the Aliso Canyon facility. In fact, the term "root cause" is nowhere in the language of the bill at all (SB380 2016). As a result, the Aliso Canyon facility was certified safe by DOGGR and CPUC, in accordance with SB380. Gas injections resumed in June 2017, with no analysis ever having been completed to determine the cause of the 2015 blowout.

I asked a life-long resident, who has become very involved in local politics, about this partial re-opening of the facility. He said,

"SB380...affected the close of the facility until a host of things could be met. One of the things was a root cause analysis, which still has not been done. The other is the whole facility. All the wells needed to be checked and certified by DOGGR....the CPUC said they needed to now determine a new working pressure and max capacity" (PR interview 8/16/2018).

This respondent was correct about SB380 effectively closing the facility and he was correct about DOGGR and CPUC being required to inspect and certify the facility as safe; however, he was incorrect about the bill requiring a root cause analysis be completed prior to allowing gas injection activity to resume. This misinformation works to shatter the faith-in-government framework. Like the Public Health Department's month-long delay in treating the blowout as an emergency, the belief that a root cause analysis was required but not conducted, reinforced a

growing perception of government negligence, rendering the faith-in-government framework inaccurate.

The perception of either incompetence or negligence on the part of regulatory agencies; failure to enforce the safety and inspection requirements specified in Governor Brown's emergency proclamation; failure to begin a health study, despite its being specifically mandated in the emergency proclamation; failure to complete a root cause analysis prior to resuming operations at the facility; failure of the government to force SoCal Gas to provide any and all requested information (i.e. the exact chemical composition of the gas); and betrayal of the community by the County Public Health Department, all combined to shatter the faith-ingovernment framework the Porter Ranch community previously held. As my argument predicts, this shattered framework was replaced by adopting its opposite: a no-faith-in-government framework. This new framework is built upon an updated version of the community's local collective memory. The collective memory of Porter Ranch now contains experiences of government inaction and indifference and with this new negative memory, a different framework, with different action agendas or tactics, and different expected responses, is adopted.

One of the earliest signs of the adoption of a new framework and the associated change in the modes of mobilization came in February of 2017, four months prior to the facility's reopening. On February 1, 2017, after more than a year of framework-shattering events, a very different kind of protest took place. At a hearing of the Department of Conservation, SPR members and approximately 500 other Porter Ranch residents took over the meeting (SPR June 2018). According to one SPR co-founder, the structure of the meeting placed the public comment section at the end of the "dog and pony show," what was the meeting (SPR June 2018). Rather than waiting until the end of hearing – which could last as long as eight hours – the group

disrupted the meeting and took over the agenda. "Old ladies were like "Yeah! Yeah!" [in support] and kids were talking about how even a year later, they're sitting in class and their classmates are having major nosebleeds" (SPR June 2018). As a result of this confrontational style of protest, "they [the officials in attendance] said they don't feel safe," and cancelled the meeting altogether (SPR June 2018).

When I first spoke with the Save Porter Ranch co-founders in June of 2018, they described this February 2017 demonstration. The tactic was inspired by the actions of a different community group in Oxnard, that was fighting a gas power plant (SPR June 2018). SPR members practiced and trained for this action; they even practiced scripts for what they would say (SPR June 2018). This preparation is a signal that their expectations of government response had changed to those fitting a no-faith-in-government framework; they expected that the government would try to suppress them, rather than help them. As one co-founder phrased it, "SoCal isn't the enemy, the government is" (SPR June 2018). When I expressed curiosity about this statement, the response was that they expect the gas company to be reticent to admit fault and not pay for damages if not required to – that is no surprise. What was a surprise to the residents of Porter Ranch, however, was the government's response to the community's concerns.

In reference to the government's response, one SPR member said "I've been to Sacramento a couple of times and you feel good – they listen and they feel for you. But the next thing you know they vote the other way because the lobbyists have intervened. It gets you down, but you have to keep going and expose all of them" (SPR June 2018). This same respondent said that prior to the Aliso Canyon blowout, she "had foolishly and naively thought we really had a voice and that things mattered - especially safety issues, because they are right there to cut down

the tree that might fall on someone, but now it's not that way...It's an intro to the real world" (SPR June 2018).

This last part of the statement is particularly striking evidence in support of my argument. Here, the respondent speaks to both the previous framework, which is described as a trust or faith in government, and also to the new framework, in which there is no longer a trust or faith in government. The respondent, a recent retiree in her early sixties, described this shattering of the previous framework as, "an intro to the real world," which signals that she feels the reality in which she lived before was "naive" and fake, which is precisely what happens when frameworks are shattered. The collective memory of the community has been updated based on new experiences, thus, the existing framework is deemed out of date and "naive" and is done away with. The timing of her "intro to the real world" also speaks to a level of privilege and elitism because she lived over sixty years before she and others in her neighborhood had any cause to think the government would not protect them.

# As Expected in Southeast Los Angeles

In order to determine if my argument about the shattering and adoption of frameworks is correct, I must have case studies of a community with a no-faith-in-government collective action framework and a community with a faith-in-government framework, where both communities receive unexpected responses from the government. If I do not have both of these case studies then I cannot make a definitive claim as to whether or not this "switching of frames" is actually occurring. This is a difficult requirement to fulfill, however, because cases of no-faith-in-government communities receiving an unexpectedly swift and efficient response from the government regarding an environmental pollution emergency are few and far between. I spent

several months looking for such a case and was unable to do so.<sup>36</sup> For this reason, the examination of this part of my argument is inconclusive, though there is strong preliminary evidence warranting future research. The communities of SELA received the same poor response from the government that they expected. With that said, this section will review the communities' responses to the process of closing Exide's Vernon facility and the process of cleaning the approximately 10,000 properties contaminated with dangerously high levels of lead.

As expected by their framework, the government's response to the community was inadequate. The factors that influenced the government's response is the focus of my second research question and will be discussed in chapter four. For now, what is most important is how the community perceived the government's response, because it is that perception or interpretation that either fortifies or shatters the existing collective action framework. In SELA the events that fortified the no-faith-in-government framework fall into two general categories: willful negligence that led to the problem in the first place, and willful negligence that resulted in a slow and underfunded remediation program. First, community members perceived the failure of regulatory agencies to enforce regulations in their communities, as a lack of concern for their health and safety. Second, the government's approach to remediation of properties in the area demonstrates a lack of understanding of the impacts that a large renter population, a large low-education population and a large low-income population have on cleanup efforts.

In the early 1980s, following the passage of the Federal Resource Conservation and Recovery Act of 1976 (RCRA), the lead battery recycling facility in Vernon was required to obtain a hazardous waste facility permit from the state government in order to continue operating. To aid in the transition DTSC issued hundreds of interim status documents, or ISDs,

<sup>&</sup>lt;sup>36</sup> Searches were limited to Los Angeles County to maintain the same governmental structures across cases.

which allowed hazardous waste facilities to continue operating while their applications were being reviewed. Exide operated with this interim status from 1981 until its final closure in 2015 (Interview 6-15-2020). The fact that DTSC was fully aware of Exide's pollution of homes but allowed it to continue operating anyway is the first reason residents in SELA perceive the government as being indifferent to their wellbeing.

The second reason residents in SELA perceive the government as being indifferent to their wellbeing is that they were not notified that the pollution was even occurring – they had to discover it on their own. According to a DTSC staff member, the community was aware of the pollution as early as 2005, however most of the community activists with whom I spoke remembered learning about the issue in 2008 and 2009. The DTSC staff member told me that the Department was considering granting Exide a toxic waste permit in 2005, and as part of that consideration a public meeting was held to hear comments from the community (Interview 6-15-2020). He stated that there was so much anger, "we stepped back and took another look at that application"; however, the department did not make a final decision on the permit for another decade (Interview 6-15-2020).

Monsignor Father John Moretta (Father John), the head priest at Resurrection Church, a Catholic church and parochial school in the heart of Boyle Heights that has, for decades, played a central role in community organizing on a range of issues, told me the history of how he and his congregation first learned about the lead poisoning from Exide. Resurrection Church is just under two miles<sup>37</sup> from the lead battery recycling plant. The plant had been operating as a lead smelter in that location since 1922<sup>38</sup> and the church was established in 1923. Despite this long

<sup>&</sup>lt;sup>37</sup> It is a 1.9 mile drive from the church to the Exide facility, according to Google maps.

<sup>&</sup>lt;sup>38</sup> Initially as the Los Angeles Lead Company, which no longer exists.

shared history, there was, according to Father John, no knowledge in the community that any pollution was coming from the plant (Interview 8/6/2018).

A worker from a neighboring plant (not Exide) found dust all over his car and he wondered what it was. He had it analyzed and found out it was lead. It was all lead from Exide. This was around eight years ago or something like that [2010]. Then they got the city. I think that Exide was forced to pay for a health assessment and that's where we got the information" (Interview 8/6/2018).

Around the same time that this investigation was going on, Father John met a man who had been a foreman working inside the Exide facility and was dying of lung cancer. According to Father John, "this man's attorney went to the family car and the amount of lead was off the charts." He explained that employees working inside the plant were required to "strip down, wash down and clean yourself before you leave, but as soon as you step outside the clean room, you're dirty again," and that all the lead gets tracked into the car (Interview 8-6-2018). As a result, any person entering the car was exposed to lead dust. "That's how the community found out about this," said Father John.

In her interview, a staff member of East Yard Communities for Environmental Justice (EYCEJ) and lifelong SELA resident, reported that she had also only recently learned about lead pollution coming from Exide.

[I found out about Exide's pollution in] 2014. Everything I knew was through East Yards. There was nothing on the news. I had to hear it multiple times to really understand that. I was like ok, well we're also contaminated by the ports and by the freeway...I didn't realize the severity of the situation. I also didn't realize the injustice of it. How I found out also, was through social media that East Yard was posting. I would go like here or there to a fundraiser, and would ask a team member or corps member I already knew and was like "what's up with the Exide thing?" (SELA interview 8/2019).

In short, although the lead smelting facility had been operating and polluting since 1922, the sudden discovery of the contamination by the community, caused residents to experience the

situation as an abrupt emergency. Like the Porter Ranch case, where people did not know that they lived next to a natural gas storage facility until they smelled it, people in SELA did not know they were being poisoned until it was discovered, so to speak, and by that point there was already a huge amount of lead in the soil for miles around. Also similar to Porter Ranch, the perceived secrecy of the issue – that the government had knowledge of the pollution and kept it from the public – bred distrust of the government in general and of DTSC in particular. Unlike Porter Ranch, the people of SELA had a collective memory of similar past injustices by state and local government, and thus expected the poor response they received.

Once the people of SELA began to learn about the lead poisoning in their area, the community's initial tactics represented their no-faith framework. The no-faith-in-government frame that was developed during the fights against the prison, the oil pipeline and the hazardous waste incinerator, was extended to include the Exide disaster as part of these same injustices and threats to their communities. As such, the same tactics were used: protest marches, picketing, and confrontational public comment sessions at any and all public meetings held by state officials concerning Exide.

Just like during the fights against the siting of other LULUs in the past, the fight against Exide was not supported by the elected political representatives of the area, thus making street protests the best way to pressure officials to enforce environmental laws in their communities. One resident activist said that when they tried talking to Hilda Solis (the area's County Supervisor) and other local elected officials, "The feedback we got was 'Don't do this. Exide has multibillion-dollar contracts with the military' and stuff like that. 'You're not going to shut them down.' Local electeds or regional electeds [were] like 'No. We're not touching it'" (Interview 8-

23-2019). This response was expected by the communities of SELA because the collective memory of their relationship with the government is riddled with such experiences.

East Yard Communities for Environmental Justice (EYCEJ) participated in organizing many of these protest actions by holding community meetings across their "memberships" (Interview 8-23-2019). EYCEJ held monthly meetings in different parts of SELA to inform the community about the toxic pollution coming from Exide. "So, we say 'this is what's going, what do you think? It's [messed] up right?' Then the community was like, 'Yeah, this is [messed] up. We should do A, B, or C'," an EYCEJ staffer explained (Interview 8-23-2019). From 2008, when significant numbers of community activists and residents learned about the pollution, until 2015, when the facility was closed, three hundred community members – sometimes more – held protests in the streets. Demonstrations were held near City Hall, on pedestrian freeway overpass bridges so the millions of drivers on the road below can witness their signs, and directly in front of the facility – although according to Father John, protesting directly in front of the building was dangerous to their health "because of the lead and because of the rendering plants" (Interview 3-25-2019).<sup>39</sup>

In addition to large public protests, community members also attended any and all public hearings on the issue, giving testimony of their suffering and confronting the officials they viewed as responsible for allowing the contamination to happen. This was the same tactic they used when fighting the proposed oil pipeline years earlier (Pardo 1990, 4). For example, at the

<sup>&</sup>lt;sup>39</sup> Father John shared an anecdote about one of the few protests held in front of the Exide facility. A female protestor had her baby with her at the event, which is quite common. However, another woman turned to her and said, "You really should take your baby home. You shouldn't be here with the lead." The health threat presented by standing outside the then still operating facility, in addition to the awful stench permeating the air from the meat rendering plant across the street, prevented the community from holding protests in front of the facility (Interview 3/25/2019)

end of the State Assembly oversight hearing held at Resurrection Church in August of 2018,<sup>40</sup> residents shared their experiences of cancer, asthma, miscarriages and other health conditions they attribute to the lead and arsenic contamination from Exide. One resident, a mailman who lives and works in the area, developed skin cancer all over his body, including the inside of his nose (AOH 2018). This resident argued that the presence of cancer inside his nose proves that his cancer was not caused by UV exposure from the sun but rather, from inhaling lead all day in the SELA neighborhood where he lives and works (MELA meeting 3-2019). A second resident shared that she has asthma, had two premature babies and has battled cancer and other unexplained illness throughout her life, which she says is a result of having lived just two miles from the Exide facility since she was born (AOH 2018). Another resident, who is also a local elementary school teacher, raised concerns about the increasing number of students she has with learning disabilities, auditory disabilities and other issues that can be attributed to lead exposure (AOH 2018). Although SELA residents attended, the contention they expressed demonstrates their lack of faith: they showed up expecting a fight.

Finally, Jill Johnston, Assistant Professor of Preventive Medicine at the University of Southern California, published a study in which she found high levels of lead in the baby teeth of children in SELA (Johnston et al 2019). Because baby teeth are formed in utero, during the second and third trimesters of pregnancy, the results are evidence that babies are being poisoned by lead before they are even born (Johnston et al 2019). Believing that the poisoning of their babies could have been prevented, the perception that the government is indifferent to their

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<sup>&</sup>lt;sup>40</sup> The State Assembly oversight hearing began at 5pm on a Thursday evening, not leaving much time for the residents of the working class neighborhood to make it home through Los Angeles traffic to attend. Despite this logistical challenge there were approximately 200 residents in attendance in the parochial school multipurpose room.

living or dying further fortifies the no-faith-in-government framework as evidenced by the continued use of grassroots tactics.

When the facility was closed in 2015, it did nothing to shatter the no-faith-framework for two main reasons. First, it was not city, county, or state government entities that succeeded in closing the facility, it was the United States Department of Justice. Intense and persistent community pressure directed at legal action eventually got the attention of the US Attorney General's office, which agreed to investigate (Interview 3-25-2019; Interview 8-23-2019). The USDOJ cited DTSC's 2013 study, which found that the trucks used to transport toxic waste had been leaking those contents all over the roads of Los Angeles and that the underground waste water pipes of the facility were leaking into the ground as well as into the LA River via storm drains (Interview 5-13-2019; Interview 8-23-2019; Interview 6-15-2020). The USDOJ also referenced SCAQMD's study done the same year which found that the facility's contamination posed the highest cancer risk of any site they had ever monitored (Interview 3-25-2019; SCAQMD 2019). The USDOJ threatened to file criminal charges against Exide for violations of RCRA unless the company agreed to permanently close the facility; they agreed to close, and the criminal charges were dropped.

DTSC and the state-level elected officials in power at the time maintain that they had simultaneously come to a decision to officially deny the permit, and that USDOJ simply came in and claimed credit after the hard work had been done. Residents, however, feel differently (Interview 5-13-2019; Interview 6-15-2020). The involvement of the federal government complicates the response effort in a number of ways which will be discussed in the following chapter. For the purposes of understanding the mode of community mobilization it is important to understand that having the federal government close the facility served to solidify the no-faith-

in-government framework because the federal government had just accomplished the task that state regulators and elected officials said could not be done.

# Chapter Four: Government Responsiveness

The primary focus of this dissertation is to understand the factors that determine the modes of mobilization in which communities engage when responding to environmental pollution disasters. However, to fully understand this subject – to truly understand the shattering and adoption of collective action frameworks – one must also address which factors influence the government's response to these mobilized communities. After all, that response determines whether or not the community's framework changes. Understanding the restraints regulatory agencies operate within, and what actions the government did or did not take and at what time, illuminates not only the degree of government responsiveness, but also whether the community's collective action framework is built on reality or perception. To that end, this chapter presents data from interviews with elected officials, regulatory agency employees, State Assembly oversight hearings and news coverage of each case study.

#### Methods

Like the interviews with community members, the interviews with elites, which includes both government bureaucrats and elected officials, were audio recorded and transcribed. Unlike the interviews with community members, these interviews took place in personal offices or via Zoom (due to COVID-19 restrictions), rather than public settings. I interviewed staff members of the California Department of Toxic Substances Control, Assemblymember Christy Smith, whose district includes Porter Ranch, Assemblymember Christina Garcia, whose district includes some of the SELA cities impacted by Exide, as well as former President Pro Tempore of the California State Senate, Kevin de Leon, who represented East Los Angeles at the time of Exide's final closure in 2015. The protocols for these elite interviews can be found in Appendix B. In addition to individual interviews, I attended an oversight hearing held by the State Assembly's ad hoc

committee for each case. I was able to meet for informal interviews with bureaucrats during and after these hearings and was also able to record audio and video of each six-hour meeting. These hearings allowed me to observe the dynamic between the government and the community and enabled me to learn about the actions and perspectives of those elites who I was unable to meet with for a formal interview.

As discussed in the previous chapter, it is important to supplement the interview data with media reports from the time of the incident. As time goes by, people may forget things, remember events differently than how they actually occurred, confuse dates and so forth, making news reports from the time of the incident an important form of corroboration and/or filling in the gaps in people's memories. It is also a helpful way to learn from interviews that were conducted with political elites who no longer work in government. To collect this news media, I modeled my protocols on the Social Conflict in Africa Database (SCAD), which utilizes keyword searches in the Nexis Uni<sup>41</sup> database to gather data on protests, riots, coups, strikes and other types of civil conflicts in countries across the African continent. The details of my search methodology can be found in the appendix. The most significant difference between my methodology and the original SCAD methodology is that SCAD narrowed the search to Associated Press and Agence France Presse newswires, whereas I did not narrow my search by publication. Utilizing the large international newswires makes sense when trying to collect data on countries that may or may not have a free press, however, because both of my case studies were treated as local events, there was reason to believe that local publications would have the most complete coverage.

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<sup>&</sup>lt;sup>41</sup> This database was formerly called Lexis Nexus and went by that name when SCAD was created. While the interface of Nexis Uni is slightly different than its predecessor, the content of the database is the same and the search methodologies needed very little adaptation.

## The Challenges of Federalism

Recalling from chapter two, Birkland and De Young (2011) demonstrate that the balance of powers between state and federal governments, inherent to American federalism, causes confusion and delays during instances of emergency response, such as in the case of the Deepwater Horizon oil spill of 2010. The authors find that because emergency response legislation is typically crafted after an emergency has occurred, this body of law has been created in a piece-meal, ad hoc fashion that utilizes competing theories of federalism, resulting in procedural uncertainty. For example, in cases of natural disasters, state governments take the lead in response with the federal government there to offer support, as directed by state leaders. However, if an oil spill occurs, the federal government takes the lead with state and local governments there to provide support (Birkland and DeYoung 2011). To further complicate the matter, when the disaster is a "hazardous materials release" (Young, Balluz and Malilay 2003), which level of government takes the lead may depend on the type of toxin and whether it was emitted into the air, water, soil or some combination thereof.

In response to this literature, I argue that the balance of powers between state and local levels of government, as well as between federal and state levels, will create confusion that is detrimental to a swift and effective response. Utilizing the methods discussed above, I find support for my argument that Birkland and De Young's findings about the challenges of federalism during emergency response also apply at the state and local levels of government.

Coordination between city, county and state levels of government was required in both the Aliso Canyon and Exide cases, and led to an inadequate response to each community. In Porter Ranch, this state-county coordination issue led to a government response that did not include consideration for public health, while in SELA it meant decades of delays in closing the

Exide facility. The community of Porter Ranch is located within the city limits of Los Angeles, therefore requiring the involvement of the City Council and possibly the mayor. However, because the Aliso Canyon facility is located just outside the city limit on county land, and because the Public Health Department is a county department, the County Board of Supervisors must also be involved in responding to this issue. In the case of Exide, the multi-city nature of the pollution means that in addition to the six autonomous city governments that are impacted, the County Board of Supervisors also had a role to play, not only because the unincorporated county area of East Los Angeles is impacted by the Exide pollution, but also because Public Health serves all the cities within the county.

Finally, the cases also share the involvement of the state government, in large part because state regulatory agencies were in charge of responding to both the Aliso Canyon (CPUC and DOGGR) and Exide (DTSC) pollution emergencies. State regulatory agencies are funded from the state's budget, thereby also requiring the involvement of state level legislators. The South Coast Air Quality Management District (SCAQMD or AQMD for short) was also involved in responding to both disasters and is a regional governmental body composed of a combination of elected officials and appointees from the city, county and state levels of government and serves Los Angeles, San Bernardino, and Orange counties.<sup>42</sup>

In each case, the requirement that different levels of government coordinate resulted in uncertainty about which agency should respond and how the oversight of that agency's response would be managed. For example, in Porter Ranch, the County Department of Public Health is

<sup>&</sup>lt;sup>42</sup> The AQMD board of directors is comprised of 13 members: four county supervisors, one representing each county in the South Coast region (Los Angeles, Orange, Riverside and San Bernardino); six city council members "representing the cities in each county (because of its size, Los Angeles County has two representatives elected by respective city selection committees, and the City of Los Angeles has one representative, selected by the Mayor of Los Angeles);" one appointed by the Governor of California; one appointed by the Speaker of the State Assembly; one appointed by the State Senate Rules Committee. (SCAQMD 2020)

charged with responding to issues that negatively impact human health, however, that negative impact cannot be definitively proven without the sampling help of AQMD, which is a regional agency that does not fall under the same oversight hierarchy as Public Health. Furthermore, because the Aliso Canyon facility houses natural gas, the state's Division of Oil, Gas and Geothermal Recovery (DOGGR)<sup>43</sup> and the California Public Utilities Commission (CPUC) also bear responsibility. This means that while the State Assembly has oversight authority over DOGGR and the CPUC, they do not have authority over the County Department of Public Health. Instead, if State Assembly members wish to create a change in policy or action at the Public Health Department, they must appeal to the County Board of Supervisors for help.

Similarly, in Southeast Los Angeles, the County Department of Public Health and the State Department of Toxic Substances Control (DTSC) have had to work together to address the issue of lead poisoning in the communities surrounding the Exide facility. The County Department of Public Health was in charge of carrying out blood-lead tests in the area; the State Assembly has no real authority to dictate the timing or scale of that testing. The multi-city nature of the Exide contamination has also meant that state agency DTSC, in order to not violate city sovereignty, has also had to work with individual city governments in carrying out the cleanup. Furthermore, the involvement of the United States Department of Justice introduced yet another level of government, which ultimately made it more difficult for DTSC and local leaders to provide an adequate response.

As previously discussed, both the Porter Ranch and SELA communities perceive that they have received inadequate responses from the government. However, because Exide was

<sup>&</sup>lt;sup>43</sup> On January 1, 2020 DOGGR was renamed and is now known as the California Geologic Energy Management Division, or Cal GEM. I will continue to refer to the agency as DOGGR because that was its name at the time of the cases being considered in this dissertation.

allowed to operate for over 30 years after state officials first discovered its pollution, while the Aliso Canyon facility was closed for one year and required the approval of both DOGGR and CPUC before allowing partial operations to resume, I argue that the Porter Ranch community received a comparatively better response from government than did SELA. Given that the Aliso Canyon facility and the Exide facility existed within the same "regulatory environment," as Assemblymember Christy Smith phrased it, the reason for the difference in responsiveness to the two cases was the result of differing amounts of coordination across levels of government. The Aliso Canyon response required less coordination between different levels of government, which resulted in a more effective response (Interview 3-17-2020). Table two summarizes the different levels of government with some regulatory authority over each industrial pollution disaster.

Table 2: The levels of government and agencies relevant to each case.

	Porter Ranch	Southeast Los Angeles
Level of Government	Regulatory Agency	
Federal	PHMSA; FERC	EPA
State	CPUC; DOGGR	DTSC
Regional	SCAQMD	SCAQMD
County	Public Health	Public Health

The first significant difference in government response between the two cases is that resident relocation assistance was offered in Porter Ranch but no similar program has ever been offered in SELA. On November 19, 2015 – 28 days after the leak began – Public Health required that SoCal Gas pay to relocate residents affected by the mercaptan odorant in the gas. According to Dr. Cyrus Rangan, this was because,

As [health] complaints mounted and expanded geographically throughout the neighborhoods in the community of Porter Ranch

and others beyond Porter Ranch, the gas company determined that the timeframe to stop the flow of gas from SS25 would extend far beyond their initial estimates and so at that time Public Health ordered the Gas Company to provide relocation assistance to any household that desires it (Dr. Rangan speaking, AOH 2019).

Residents of Porter Ranch were able to sign up to be relocated from their homes into rental housing or hotels in adjacent neighborhoods at the expense of the Gas Company, and a great many of them took advantage of the opportunity to escape the pollution. As one resident shared about the relocation program, "you have people fleeing. We were all displaced. If you're around, it reeks and you're sick, but this town emptied out," (PR interview 8-16-2018). The husband and father of five continued on to share how he and his large family lived in two small hotel rooms for five months before being placed in a rental house some 36 miles away from their home in Porter Ranch (PR interview 8-16-2018). While the implementation of the program was less than ideal<sup>44</sup> and many residents felt that it should have been offered sooner, the fact remains that a large number or residents benefited from being able to move to cleaner air with minimal personal financial burden. In the case of Exide on the other hand, no such program has ever been offered.

In SELA the only relocation that has been offered to residents is the program currently in place, which provides that if you would like to leave your home while it is being cleaned, DTSC will give you a check for roughly \$500 for your hotel expenses (MELA 7-15-2019). However, the time it takes the abatement crew to complete the work varies greatly from property to

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<sup>&</sup>lt;sup>44</sup> "I mean we were in a hotel for 5 months. So I had 5 kids ages 1-8 in two hotel rooms, in total the size of a Starbucks patio. For 5 months. They would only extend people in two week blocks, well imagine doing it every two weeks, for sixteen weeks. So ultimately, after a whole headache of being denied relocation, wanting a home, but a home for 7 people with little kids is a challenge so I had to go to arbitration, won arbitration but that didn't matter. Massive price gouging in the real estate and rental market – totally illegal but done on such a scale that nobody could do anything about it – because everyone knew what the gas company relocation companies were paying, so \$4000/month rents were now going for \$9k. Why? Because, well that's what the gas company is paying. Ultimately we ended up in Thousand Oaks – 36 miles away." (PR Interview 8-16-2018)

property<sup>45</sup> and the \$500 amount is far too little to afford decent housing in Los Angeles for more than two nights at most.<sup>46</sup>This small stipend makes the relocation offer unfeasible, leaving people to live in their homes before and during abatement despite illegally high levels of lead in the soil around the home and the dust inside the home.

In the Aliso Canyon relocation program, residents were given placement in hotel rooms for two weeks at a time, with the ability to renew for another two weeks, and many families were eventually placed into single family rental homes, all of which was paid for directly by the Gas Company as ordered by the Public Health Department. As Dr. Cyrus Rangan explained, because the Gas Company extended the amount of time estimated for closing the leak, it became necessary to relocate people out of "an abundance of caution," (Assembly Oversight 8-7-2019).

The Department may have taken a similar stance with Exide were it not for the involvement of the federal government. The agreement reached with the DOJ stipulates that Exide cannot be sued for damages by any resident and that the only valid pending lawsuit is with DTSC to collect repayment for the cleanup efforts. This agreement means that DTSC has to pay all upfront costs of remediation and residential relocation, and because the Department has a much smaller budget than Exide Inc. the remediation is a slow, piecemeal process and relocation assistance is nearly nothing. The immunity to further lawsuits that the DOJ's agreement provides, prevents the County Public Health Department from effectively mandating that Exide

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<sup>&</sup>lt;sup>45</sup> A man reported on 3-25-2019 that his "rather large property" was going on week five of clean up work; a woman reported on 4-15-2019 that her property was completed in three days but her friend's smaller property took over a week; a man reported on 4-15-2019 that his property had been marked "finished" by the abatement crew, however the crew had not leveled the ground or fixed the damage they caused to cement in over three weeks.

<sup>&</sup>lt;sup>46</sup> A Boyle Heights man shared that he was offered an apartment but he did not take it because it was not feasible. He said, "The amount of money they offer for housing isn't enough to be in a decent place," that he, his wife and children "are just too many people in a single hotel room," and that they would be unable to bring the family dog with them to a hotel. In contrast to the relocation services offered to the people of Porter Ranch, the relocation services offered to the people of SELA were not designed in such a way that they could actually be utilized (MELA 3-25-2019).

pay for relocation, the way they mandated SoCal Gas pay the costs of residential relocation in Porter Ranch.<sup>47</sup>

The DOJ's agreement with Exide has another negative externality. Because DTSC has to recoup the costs of remediation from Exide, the company has the opportunity to dispute the costs by disputing their responsibility for all of the lead contamination in the area. The company points out that the age of the homes in the area means that there is likely a lot of lead paint present, that there are many other industrial facilities that could be responsible, and that the community is surrounded by freeways and the lead in the soil could be the result of settling of exhaust particles. As long as Exide continues to legally dispute their responsibility for the lead found in the surrounding two miles of its facility, there is always the possibility that a judge may find Exide's arguments convincing and not force them to fully reimburse the state of California for the cleanup (MELA 3-25-2019).

Another stark contrast between the government's response to the two communities is the governor's issuance of a Proclamation of Emergency for the Aliso Canyon disaster, but not the Exide disaster. On January 6, 2016, Governor Brown released a Proclamation of a State of Emergency in response to the October 23rd well blowout. The delay in making the proclamation was faulted by many residents in Porter Ranch, however, from the perspective of the residents of SELA, the people of Porter Ranch were getting a lot more response from state officials than they ever have. The Proclamation gave specific directives to the CPUC, DOGGR, the Office of Environmental Health Hazard Assessment, the California Energy Commission, and the

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<sup>&</sup>lt;sup>47</sup> DTSC staff and state assembly members representing the area maintain that Exide will ultimately pay for the cleanup and all related costs, however the process of collecting that money is complicated by the fact that Exide Technologies filed for bankruptcy in 2015.

California Air Resources Board, to 1) stop the leak, 2) protect public safety and 3) ensure accountability (Office of the Governor 2016).

In contrast, no such emergency proclamation has ever been issued in response to Exide. Rather than being treated as an emergency, the environmental disaster in SELA was allowed to continue for 32 years before the state took any action to close the facility. In 1981 the California Department of Health issued the first citation (LA Times 3-12-2015) to the lead recycling facility for environmental law violations; the facility was issued an "interim status document" the same year. To understand how the facility was able to operate on an interim status for over three decades, and how the coordination problems between state, regional and county government structures influenced this problem, one must first understand the permitting process and history of Exide.

As previously mentioned, after the federal legislation known as the Resource Conservation and Recovery Act (RCRA) was enacted in 1976, hazardous waste facilities were required, for the first time, to attain a "hazardous waste" permit in order to continue operations. The US EPA issued all hazardous waste facilities that were applying for permits an "interim status document," or ISD, which allowed the facilities to continue operations while their application was being reviewed, regardless of how long it may take to issue a decision (Interview 6-15-2020). In California, several hundred facilities applied for a hazardous waste permit, so DTSC issued several hundred ISDs (Interview 6-15-2020). As companies began to do the cost-

<sup>&</sup>lt;sup>48</sup> The 32 years I am referring to is the amount of time from the first citation in 1981 until the first closure of the facility in 2013. The facility was reopened shortly after this initial closure and was not permanently closed until 2015.

<sup>&</sup>lt;sup>49</sup> The Department of Toxic Substances Control was not a separate department until 1991. Prior to that, it was a division within the Department of Health, which is why the citation issued to Exide by the Department of Health became the responsibility of DTSC.

<sup>&</sup>lt;sup>50</sup> In 1981 the facility was owned by Gould Inc., a company that was bought by Exide Technologies in 2000. Exide then inherited the citation and the interim permit.

benefit analysis of the additional costs and insurance liabilities involved in operating as an official hazardous waste facility, they removed their applications from consideration and the associated ISDs were cancelled. However, many facilities, including Exide, remained on the waiting list for a decision regarding their permit applications for years.

While awaiting a decision about a permit application, facilities like Exide were legally allowed to continue operating under their old permit. Operating with an old permit means that DTSC only has the legal authority to enforce the regulations that were in place at the time of the permit's issuance. If a facility is operating on a permit from 1981, it can only be held responsible for complying with the environmental laws and regulations that were in effect in 1981. Operating on an old permit is financially beneficial for the facility because old permits have fewer restrictions on emissions and other sources of pollution, thus not requiring any expensive changes to operating procedures or equipment. This ability to operate on an old permit with old regulations, reduces the enforcement capabilities of DTSC and also impedes facilities that do want to clean up their operations from doing so, as significant operational changes require a new permit be issued.

After Governor Schwarzengger downsized the permitting division of DTSC in 2008, from a staff of 105 to a staff of just 24 people, the permit applications began to pile up (Interview 6-15-2020). By 2013, when the current Acting Deputy Director of the Hazardous Waste Management Program came into the position, there was a significant backlog of expired and continued status permits, in addition to the outstanding ISD held by Exide, which needed to be decided upon (Interview 6-15-2020). In other words, "permits weren't worked on in any systematic way [from 2008 until 2013, because] there were so few people on staff," (Interview 6-15-2020).

15-2020). It was in 2013, as the division began to slowly regain staffing, that finalizing a decision about Exide's permit application was made a top priority.

To make a decision about whether or not to grant the hazardous waste permit to Exide – the last facility in California still operating on an ISD – DTSC sent a team to visit the facility in person, to learn how it operates, what clean up requirements may be appropriate, and what sort of permit conditions are needed for the facility (Interview 6-15-2020). The Acting Director recalls visiting the Exide facility during his first month on the job, saying

I saw a lot of official violations. So, one of the first things I did was take an enforcement approach and try to capture all the violations so we can make sure we hold them accountable. Also, the permitting program went back over their application and provided a number of comments on the application to make sure we had all the information we needed to make a decision. We also looked at corrective action and there was no corrective action – the facility was not doing any corrective action, clean up or investigations (Interview 6-15-2020).

The violations DTSC found during that visit were twofold. First, they noted a risk assessment that was conducted by the regional South Coast AQMD, which found the facility's stack emissions posed "an unacceptable risk" of cancer to the surrounding communities (Interview 6-15-2020; LA Times 3-25-2015). Second, DTSC found that the facility had a series of underground cement pipes which were unlined and leaking lead waste into the stormwater drainage system and then into the groundwater (Interview 6-15-2020; LA Times 3-25-2015). Per the team's recommendation, DTSC shut down the Exide facility on April 24, 2013. Exide fought the closure in court and was allowed to resume operations, still using their 1981 ISD, in July of that year (Interview 6-15-2020; LA Times 3-25-2015).

The poor response the communities of SELA received from DTSC was largely the result of the development of the hazardous waste permitting process, but it was also the result of poor coordination between DTSC, AQMD and the County Department of Public Health. While DTSC

worked to coordinate their enforcement efforts with AQMD, they were also relying on Public Health to carry out free blood tests to check the lead levels of nearby residents. Unfortunately, Public Health was not receiving significant community participation in the blood testing program. After three months the program had only garnered 150 participants despite having sent notifications about the program to over 30,000 homes. Furthermore; only one participant had elevated blood lead levels (LA Times 3-25-2015). This lack of data made it more difficult for DTSC to make the legal case that Exide posed an immediate danger to human health. While AQMD could point directly to the lead and arsenic coming out of the smoke stacks, DTSC had a harder time proving that 1) the lead in the soil belongs to Exide and not from one of the other numerous pollution sources in the area, and 2) that the lead in the soil is actually harming anyone. The dependence on agencies at other levels of government, with different sources of oversight and different mandates resulted in a slow response to the Exide facility's pollution. It was not until 2014 that the permitting program of DTSC recommended permanent denial of Exide's application and legal actions were begun to permanently close the facility.

The case of the Exide pollution disaster offers us an additional micro-case study about the issues of federalism. Specifically, the involvement of the United States Department of Justice (USDOJ) in the closure of the facility offers the opportunity to see the ways that state and federal coordination impacted the response the SELA community received. The federal government first became involved in the issue of Exide's Vernon facility in May 2014 when the US EPA informed Exide that its lead emissions violated federal law and that it could be facing criminal charges from the US DOJ (LA Times 3-25-2015).<sup>51</sup> After several months of negotiations, Exide and the US DOJ came to a settlement wherein Exide would permanently close the Vernon

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<sup>&</sup>lt;sup>51</sup> The EPA was notified by DTSC investigators who had found that the trucks Exide used to ship lead waste were leaking across California's highways. The interstate location of the pollution places it within the EPA's jurisdiction.

facility and would pay for the cleanup of contaminated soil within a radius to be agreed upon by DTSC.<sup>52</sup> In exchange, Exide would be protected from personal injury, or any other lawsuit from a private citizen and would bear legal responsibility only to DTSC for the cost of cleanup.

As discussed briefly in the previous chapter, the DOJ's swift action succeeded in shutting down the facility, but it also tied the hands of state officials who might have used the threat of additional legal action to persuade Exide to pay for the clean up efforts up front. Due to the nature of the settlement Exide reached with the DOJ, DTSC is now left to negotiate the radius of responsibility with Exide. This means that DTSC pays to test and clean properties and then has to sue Exide for repayment by proving it was their lead found at the properties. DTSC spent \$7 million of its own budget on the project and Governor Brown approved a \$176.7 million loan from the state's general fund to be used toward the clean up. The loan was given with the understanding that Exide is responsible for repayment. However, the state no longer has the authority to make new legal threats against Exide because the company has already settled with the federal government.

The communities of Porter Ranch and Southeast Los Angeles both received unsatisfactory responses from the government, however, as discussed, the response to Exide was even more inadequate than the response to the Aliso Canyon blowout. I hypothesized that this difference in response was the result of different amounts of coordination that was required to happen across levels of government. In the Aliso Canyon case, the two primary regulatory agencies, CPUC and DOGGR, are both state level agencies. This made their funding and

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<sup>&</sup>lt;sup>52</sup> This radius is still being negotiated. It began with just a few hundred feet around the facility and has expanded to approximately two miles. There is soil sampling being conducted by DTSC further out to see if there is any lead contamination that is traceable to Exide that could justify expanding the cleanup radius.

<sup>&</sup>lt;sup>53</sup> The lead emitted from Exide has a specific chemical makeup that makes it unique from other lead sources and therefore identifiable in tests.

coordination much easier to navigate than in the Exide case, where the DTSC was the only state agency involved, and coordination was required with different levels of government that used different oversight mechanisms and funding sources. Following in the footsteps of Birkland and De Young (2011), who found that federalism issues impeded government response when national and state level governments must coordinate a response to a natural disaster, I apply the theory to state and county level governments and find support for the argument in this new context.

## Chapter Five: Implications for Policy Makers and Activists

"We're bureaucrats. If you can point to the statute that's being violated, we're all over it."

- DTSC staff member

This dissertation connected the literature of social movement theory with that of environmental racism to explain the modes of collective mobilization in response to industrial pollution in privileged and marginalized communities alike. Through the use of a comparative case study analysis of two communities in Los Angeles County, I found support for the existence of a neighborhood collective memory and that this memory influences the mode of mobilization in which a community engages. The community of Porter Ranch had a neighborhood-level memory of a positive relationship with the local government, exemplified by their actions which reflected an expectation that their elected officials would intervene in their best interest. In Southeast Los Angeles, the community had a local-level collective memory of a negative relationship with the local government, and when responding to the Exide disaster their actions reflected an expectation that their elected officials would not intervene in their best interest and might even work against it.

The second undertaking of this study was to examine the factors that influence local government's responsiveness to communities impacted by an industrial pollution disaster and to try to understand what accounts for the differences in outcomes received by different community types. I find that the most important factors influencing local government responsiveness is the amount of uncertainty that exists within the regulatory legislation. While the specific pollutant the community is exposed to should not matter, because a threat to health whether by lead or by benzine is still a threat to health, the ad hoc nature of industrial pollution legislation has resulted

in unnecessarily complicated regulatory regimes that are ultimately unable to provide adequate responses to communities experiencing industrial pollution disasters.

This dissertation examined an important intersection of the environmental justice and social movement literatures. The development of an argument for place-based collective memory and its impact on collective action in response to local industrial pollution disasters is an important contribution, but it is just a first step. In short, my study describes and explains this new avenue of research, but further testing of these arguments utilizing larger numbers of cases, as well as quantitative methods such as community surveys, will allow the phenomena described and explained in this dissertation to be tested in a way that helps us begin to make predictions about community outcomes.

My findings demonstrate the importance of creating comprehensive industrial pollution policies that consider both emergency prevention and emergency response. Creating policies for prevention and response will help mitigate the impact of toxic facilities on the communities living nearby and enable a smooth and swift response to communities in need. Policy clarity would also allow scholars and community activists to more accurately determine whether or not elected officials or regulatory agencies are truly acting to the fullest extent of their powers. Having policies and procedures in place before an industrial pollution disaster actually occurs will enable a much more efficient and sufficient response.

One policy recommendation would be to make changes to DTSC permitting laws that stipulate that a lapse or suspension in permit renewal results in a stoppage of operations. Under the current system, so long as a facility submits a renewal application six months prior to expiration then the old permit is automatically extended until the application is reviewed, regardless of how long the review process may take. I recommend replacing this with a policy

that does away with the automatic extension of old permits. Additional support should be given to DTSC so that the permit application review process is concluded in three months, which would allow facilities whose applications are denied three months to remedy the situation before their existing permit expires. When a permit expires operations should cease, regardless of the status of a renewal permit. This policy would ensure that facilities receive their permit decisions in a timely manner and that they are not able to skirt compliance with current environmental regulations.

A second recommendation is that procedures for coordination between regulatory agencies at different levels of government must be created to avoid further ad hoc decision making. These procedures should focus on the situations in which multiple agencies would be involved, such as if an airborne pollutant lands on the ground thus requiring the involvement of both AQMD and DTSC. Procedures guiding communication and the creation of a supervisory task force composed of staff from both agencies would help reduce redundancies between the agencies. Legislation that creates a fine enhancement when more than one element (ground, water or air) has been polluted would also help give more leverage to AQMD and DTSC, for example, when coordinating enforcement at the same site.

I also recommend that a division of the California Department of Health be dedicated to health studies of communities that have been impacted by industrial pollution disasters. This should include blood, hair and urine testing for lead, benzine, and other heavy metals and volatile organic compounds (VOCs). Including the involvement of the state's Department of Health will allow county public health departments to play more of a support role. The state will also have legal authority to compel information from polluters that county level agencies may not have.

That information will help identify the specific chemical makeup of the pollution – something

that was delayed in the Aliso Canyon case because the LACDPH did not have the authority to force SoCal Gas to disclose that information.

My final policy recommendation for improving the clarity of industrial pollution regulation is that California state legislators put together a legal task force to make policy recommendations that can help strengthen the state's ability to force private polluters like Exide to pay for cleanup. Current law stipulates that the polluter is financially responsible for remediation of pollution, however as evidenced by Exide's operations in Vernon, the legal authority to compel payment is ineffective. Understanding the legal loopholes that have allowed Exide to delay payment, and make possible their complete evasion of fiscal responsibility, can help legislators figure out how to close them. Ensuring that polluting companies pay for cleanup directly will ensure that communities of all types receive timely remediation.

The findings of this dissertation also demonstrate the importance of transparency for keeping collective action frameworks intact. Collective memory is not a fixed thing; it is constantly being updated as new events take place. It does not matter how long a community has had a faith-in-government framework, if it receives an unexpected response from the government then the faith framework will be shattered, and its more contentious counterpart will be adopted. If a politician wants to prevent a faith frame from shattering or is attempting to change the framework of a no-faith-in-government community, the elected official needs to make transparency the centerpiece of the approach.

As discussed in both cases, the community's perception of responsiveness is all that really matters when it comes to maintaining or shattering existing collective action frameworks. It is easy to perceive that your elected officials do not care about you if you think there are actions that they could have taken but did not. To influence the community's perception, elected

officials and regulatory agencies need to focus on informing resident activists about the legal authority they do and do not have; there must be a shared understanding of what actions are and are not possible for a given agency or official. In communities that had an *a priori* no-faith-ingovernment framework, the lack of transparency further solidifies the distrust and skepticism of the government's intentions. It is critical for residents in no-faith communities to know the constraints the local government must work within, so that expectations can be measured against the real possibilities.

This transparency can be achieved by elected officials making frequent updates to the public via twitter, email, radio and television, as well as in person visits to the community, regarding the actions that have been taken so far and what actions are to come and when to expect them. These updates will create the perception that the community's problem is at the top of their local government's priority list – that they are important. Increased transparency therefore not only reduces distrust by bringing light to the shadows, so to speak, but it also increases trust by making people feel that their problem is important to their elected official(s).

This research also illustrates the problems that arise from current land use zoning laws, which give zoning rights to cities. City sovereignty prevents the coordination of land use across municipal boundaries. For example, the entire city of Vernon is zoned as industrial or heavy industrial land use and yet, across the street in neighboring Boyle Heights and Maywood, there is land zoned as residential. This proximity of people and heavy industry exposes people to dangerous toxins, however because the residences and the industrial facilities are in different municipalities, the land use zoning does not have to coordinate. This means that despite statutes against placing industrial and residential zones side by side within a city, there is no county or state level coordination mechanism to ensure that a residential and industrial zone do not border

each other on either side of a municipal line. Although it would violate the notion of city sovereignty, I would strongly recommend the creation of a State Land Use Coordinator position within the Governor's office, to address the hundreds of places where residential and industrial zones are side by side but in different municipal jurisdictions.

For resident activists, my research suggests that being a multi-issue organization may be beneficial for maintaining group participation. Members of the leadership of Save Porter Ranch once asked me why I think the Mothers of East Los Angeles had more community involvement and more consistent turn out to meetings. While the answer to this question is outside the bounds of this dissertation, my observational data indicate that there may be a benefit to meeting frequently and to addressing multiple issues. Perhaps meeting weekly as opposed to monthly, would make the meeting part of one's routine and increase the likelihood of attending. Perhaps having multiple issues of concern, such as Exide's poisoning, the 710 freeway expansion, the increasing number of industrial size marijuana growing facilities, and the odors from meat packing plants, increases the number of people who attend meetings because people belonging to any one of these issue publics will attend the same meeting. This keeps people engaged and up to date with the response to Exide, even if it was their concern for a different issue that brought them to the meeting. Expanding the participant pool, so to speak, can help bolster support for actions and can get people involved in issues they may not have otherwise known about.

## The Imperative of Further Research

The ability for people to remain unaware of industrial pollution in one's community is fading away for three reasons that make future research imperative. First, industrial pollution disasters are increasing in regularity as the number of extreme weather events increases due to climate change. These large hurricanes, tornados and wildfires can damage toxic facilities and

cause industrial pollution disasters. Second, Donald Trump's administration has eliminated many federal environmental regulations, such as loosening rules limiting toxic emissions from industrial polluters, that have direct impacts on the residential communities surrounding toxic facilities. Finally, as heard through the voices of respondents in this study, living in close proximity to industrial pollution often causes respiratory problems, which makes people particularly vulnerable to contracting and dying from COVID-19.

The industrial pollution disasters of Aliso Canyon and Exide were caused by operational faults in the facilities, however industrial pollution disasters can also happen as a result of natural disasters. In 2017 Hurricane Harvey hit Houston, Texas flooding several superfund sites and damaging a hazardous waste treatment facility resulting in its leaking toxic waste. California wildfires leveled the town of Paradise in 2018, leaving behind hundreds of tons of toxic waste from the incinerated materials of homes, trailers and other buildings. In 2015, a tornado destroyed a chemical plant in Florida, spreading the contents all over the surrounding area. Due to the effects of climate change, these natural disasters are increasing in both frequency and intensity, which thus increases the likelihood of massive industrial pollution disasters.

Continued research is especially important when considering the reversal of important environmental regulations during the four years of the Trump administration. These reversals allow corporations operating hazardous facilities to return to cheaper and dirtier operational practices. According to the New York Times, as of May 2020 Trump's administration had reversed or significantly weakened 68 different regulations (NYT 7-15-2020). This deregulation includes removing any federal limits on emissions from power plants, eliminating requirements that gas companies report methane leaks, removing limits on mercury emission from coal power plants, loosening rules limiting toxic emissions from industrial polluters, and repealing the

requirement that state and local governments monitor and track vehicle emissions on federal highways. This deregulation lowers the operating costs and can increase profits for toxic facilities, but it does so at the cost of the immediate health and wellbeing of nearby communities. The deregulation, plus the removal of the United States from the Kyoto Protocol agreement, contributes to climate change which increases the danger of the future health and wellbeing of communities located near industrial polluters.

Finally, the current COVID-19 pandemic has exposed the implications of racial and socio-economic inequality, including unequal exposure to pollution. The disproportionate location of toxic facilities in communities of color means that the health of communities of color has also been disproportionately harmed. Health experts have already begun to make statements linking exposure to air pollution with complications from COVID-19 (Costello 2020; Cole, Ozgen, Stroble 2020; Gerretson 2020). The respiratory damage caused by exposure to industrial pollution of the air and/or soil, weakens the body and reduces the ability to survive the COVID-19 virus. This is particularly dangerous because many communities located near polluting facilities are low-income, with many residents who are "essential workers," interacting with the public and unable to fully prevent their exposure to the virus. In other words, the people who are among the most exposed segment of the population, are also the people who are the most vulnerable to dying if they contract the virus, because their communities are in areas burdened with pollution.

These three ongoing threats – climate change, Trump's environmental deregulation and the COVID-19 pandemic – make the future study of industrial pollution and collective action imperative. Because industrial pollution disasters continue to impact a variety of community types, scholars must also continue studying place-based collective memory. Understanding

place-based collective memory and how it impacts a community's mode of mobilization can teach us how to improve emergency response policy making and develop a better understanding of how industrial pollution impacts the relationship between communities and their elected officials.

# Appendix A: Land-Use Zoning Maps

Zoning Map for City of Maywood

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CM
M
OS
PF
R-3

Figure 12: Land use zoning map of the City of Maywood.

Source: Southern California Association of Governments (SCAG)

Source: City of Maywood, SCAG 2009

Note: The manufacturing or industrial zones of Maywood, represented by the magenta color, are directly across the street from residential zones.

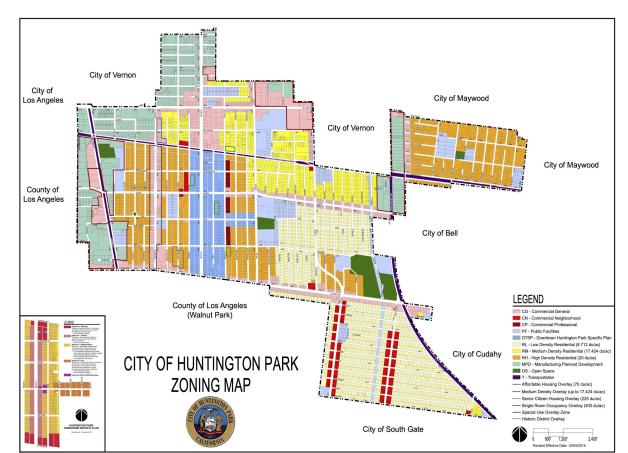


Figure 13: Land use zoning map of the City of Huntington Park.

Source: City of Huntington Park

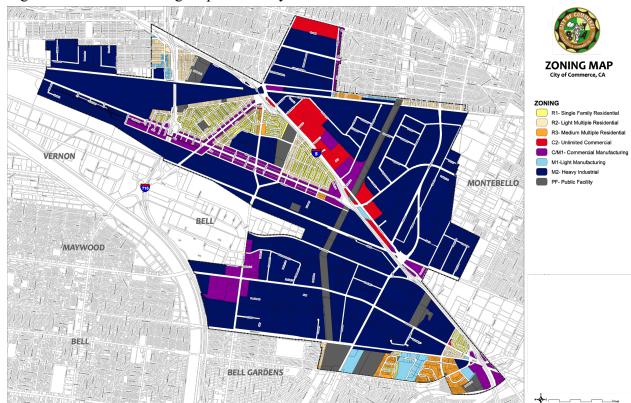


Figure 14: Land use zoning map of the City of Commerce

Source: City of Commerce

Note: Most of the City of Commerce is zoned as heavy industrial or commercial manufacturing, similar to the City of Vernon. This zoning map also shows the close proximity of residential zones and industrial zones.

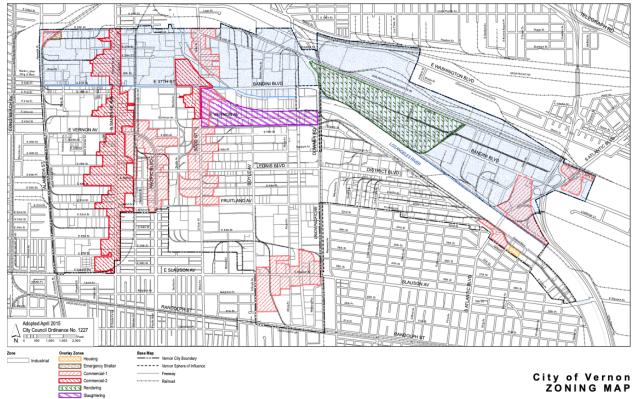


Figure 15: Land use zoning map of the City of Vernon.

Source: City of Vernon

Note: Most of the land in the City of Vernon is zoned for industrial use. The second most common zoning designation is for commercial land use, followed by the land used as a truck and freight terminal. What little housing there is (the lower left quadrant of the map), is surrounded by industrial and commercial zones.

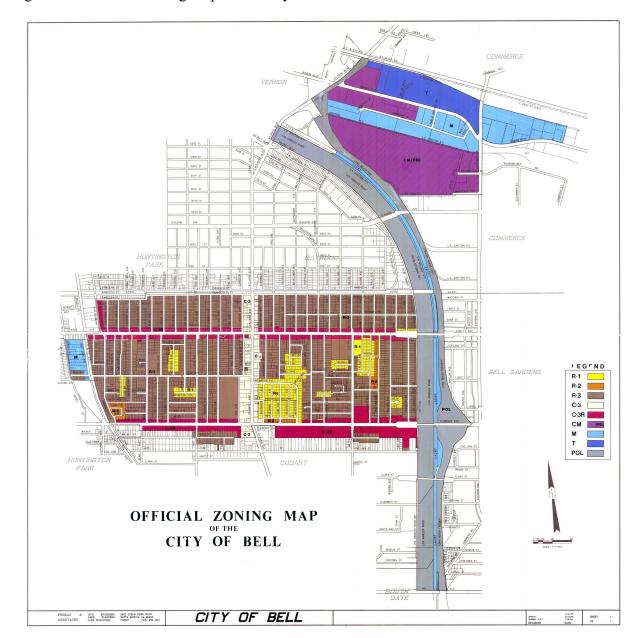


Figure 16: Land use zoning map of the City of Bell

Source: City of Bell

Note: The City of Bell has its residential zones further away from manufacturing and commercial zones. However, given the zoning in the bordering city of Maywood and Commerce, industrial manufacturing zones in these other municipalities are still very close to the residential areas of Bell, demonstrating the problem that arises from a lack of land use coordination across jurisdictions.

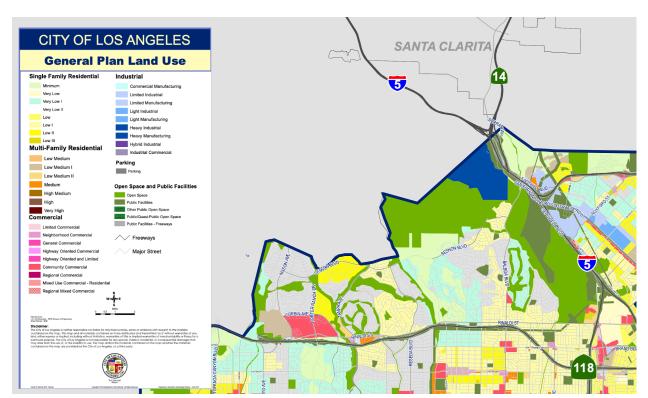


Figure 17: Land use zoning map of the Porter Ranch neighborhood of the City of Los Angeles

Source: City of Los Angeles

Note: The large blue industrial zone on this map depicts the Aliso Canyon facility, and is surrounded by greenspace. All other industrial or manufacturing zones are on the east side of a large greenspace and Interstate-5 so that these zones do not abut the residential zones in Porter Ranch.

## Appendix B: Interview Protocols

## Questions for Resident Activists

## **Demography Questions:**

- (warm-up) Before we start discussing (the relevant pollution disaster), I would like to ask you a few basic demographic questions. If you feel comfortable can you tell me your age, whether you own or rent your home and your highest level of education?
- How long have you lived in your neighborhood?
  - Where did you live previously?

#### Initial Framework:

- Thinking back to before (the relevant pollution disaster), what did you think about local government?
  - Did you believe that your local officials listened to people like you?
- Have you ever contacted the city for services of some kind (such as reporting potholes, missed garbage pickup etc.)? If so, what was the result?
- How would you describe the public services/public goods in your neighborhood? This includes things like trash collection, recycling programs, road maintenance, parks, libraries, etc.
- Have you ever had a negative interaction with a police officer in your neighborhood? If so, can you describe it?

#### Current Framework:

- Has (the relevant pollution disaster) changed your view of local government? If so, in what way?
- Do you know who your state and local elected officials are?
- Do you vote regularly?
  - For which party do you typically vote?

### Modes of Mobilization:

- How did you first learn about (Aliso Canyon/Exide)?
- What actions have community members taken in response to (Aliso Canyon/Exide)?
  - o If you have participated in any of these actions, what motivated you?

- If you have not participated in any of these actions, why not?
- How did community members first make their grievances known?
- What actions has the government taken in response to (Aliso Canyon/Exide)?
- Are any large nonprofit organizations involved, such as the Sierra Club?
- Are you still involved in the response to (Aliso Canyon/Exide)?
  - o If yes, what has kept you involved?
  - If not, what caused you to step away?

## Questions for Elected Officials and Bureaucrats

## General Questions:

- (warm-up) Tell me how you became interested in political leadership.
- (warm-up) Tell me a little about your role as (position).

## Government Response Questions (Aliso Canyon/Exide):

- When and how did you first learn about (Aliso Canyon/Exide)?
- What was your initial response? What did you do first?
- How has the community responded?
- Have constituents shared their grievances with you and if so, how did they go about it?
- What, in your opinion, are the most significant obstacles to remediation?
- In your view, have the actions of the community been influential? Were other state senators and assembly members aware of the protest activity?

## DTSC specific questions:

- Can you tell me the permitting history of the Exide facility?
- How was Exide able to operate on an "interim status" permit for over thirty years?

Appendix C: Nexis Uni Search Protocols

Case Study: Aliso Canyon

In Nexis Uni, go to the Guided Search and limit searches to within News and use the keywords

"Aliso Canyon" and "gas storage." Further limit the search by selecting the date range, October

23, 2015 (when the blowout occurred) to December 31, 2019. When the results are shown with

duplicates grouped, there are 6,218 stories.

Case Study: Exide

In Nexis Uni, go to the Guided Search and limit searches to within News and use the keywords

"Vernon California" and "Exide." Further limit the search by selecting the date range, December

19, 1981 (when the facility was first cited by the Department of Health) to December 31, 2019.

Then search within the results with the added keyword "Toxic." When the results are shown with

duplicates grouped, there are 845 stories.

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## References

- "300 Protest Possible Building of Prison In City of Industry." https://advance.lexis.com/document/?pdmfid=1516831&crid=173fb098-826a-4225-8cfe-

  - 00&pdcontentcomponentid=304478&pdteaserkey=sr5&pditab=allpods&ecomp=gb6 3k&earg=sr5&prid=6e6bf901-10ae-492c-9ad2-dea44783e770 (August 10, 2020).
- ABC7. "Protesters Demand Shutdown of Exide Plant | ABC7 Los Angeles | Abc7.Com." *ABC7 Los Angeles*. https://abc7.com/archive/9284054/ (June 15, 2020).
- Almond, Gabriel. 1950. The American People and Foreign Policy. New York: Praeger.
- American Bar Association, Center on Race, Poverty, and the Environment (California Rural Legal Assistance Foundation), and National Conference of Black Lawyers (U.S.), eds. 1996. *Directory of pro Bono Legal Services Providers for Environmental Justice*. Washington, D.C: American Bar Association.
- April 23, Kevin Roderick |, and 2012 3:56 Pm. "Lucy Delgado, Mothers of East LA Founder Was 87." *LA Observed*. http://www.laobserved.com/archive/2012/04/lucy\_delgado\_mother\_of\_ea.php (May 28, 2020).
- "Auschwitz Survivor's Daughter Becomes Billionaire." 2013. *Bloomberg.com*. https://www.bloomberg.com/news/articles/2013-11-14/auschwitz-survivor-s-daughter-becomes-billionaire-on-toll (May 28, 2020).
- Banzhaf, H. Spencer, ed. 2012. *The Political Economy of Environmental Justice*. Stanford, California: Stanford Economics and Finance, an imprint of Stanford University Press.
- Barboza, Tony. 2015a. "Exide's Troubled History: Years of Pollution Violations but Few Penalties." *Los Angeles Times*. http://graphics.latimes.com/exide-battery-plant/.
- ——. 2015b. "How a Battery Recycler Contaminated L.A.-Area Homes for Decades." *Los.* http://www.latimes.com/local/lanow/la-me-exide-cleanup-story-so-far-20151121-story.html.
- . 2016. "Brown Declares State of Emergency at Porter Ranch amid Massive Gas Leak." *Los Angeles Times*. http://www.latimes.com/local/lanow/la-me-ln-brown-declared-emergency-at-porter-ranch-amid-massive-gas-leak-20160106-story.html.

- ——. "How a Battery Recycler Contaminated L.A.-Area Homes for Decades." *chicagotribune.com*. https://www.chicagotribune.com/la-me-exide-cleanup-story-so-far-20151121-story.html (June 15, 2020).
- Barraclough, Laura R. 2011. *Making the San Fernando Valley: Rural Landscapes, Urban Development, and White Privilege*. Athens: University of Georgia Press.
- Barry, Joyce M. 2012. Standing Our Ground: Women, Environmental Justice, and the Fight to End Mountaintop Removal. Athens, Ohio: Ohio University Press.
- Bates, Robert H., Avner Greif, Margaret Levi, and Jean-Laurent Rosenthal. 1999. *Analytic Narratives*. Princeton University Press.
- Beat, Boyle Heights. 2013. "Community Residents Plan Protest to Shut Down Exide." *Boyle Heights Beat*. https://boyleheightsbeat.com/community-residents-plan-protest-to-shut-down-exide/ (June 15, 2020).
- Berg, Bruce L. and Howard Lune. 2012. *Qualitative Research Methods for the Social Sciences*. (8) San Francisco, Pearson.
- Birkland, T. A., and S. E. DeYoung. 2011. "Emergency Response, Doctrinal Confusion, and Federalism in the Deepwater Horizon Oil Spill." *Publius: The Journal of Federalism* 41(3): 471–93.
- Blade Energy Partners. "2019 Webinar on Aliso Canyon SS-25 Root Cause Analysis." 2019. *Blade Energy Partners*. https://www.blade-energy.com/webinar-alison-canyon-ss-25-root-cause-analysis/ (June 9, 2020).
- Blum, Elizabeth D. 2008. Love Canal Revisited: Race, Class, and Gender in Environmental Activism. Lawrence, Kan: University Press of Kansas.
- Brady, Henry E., Sidney Verba, and Kay Lehman Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." *American Political Science Review* 89(2): 271–94.
- Brady, Henry E., and David Collier. 2010. *Rethinking Social Inquiry: Diverse Tools, Shared Standards*. Plymouth: Rowman and Littlefield Publishers, Inc.
- Bullard, Robert D. 1994a. *Dumping in Dixie: Race, Class, and Environmental Quality*. Westview Press.
- ———, ed. 1994b. *Unequal Protection: Environmental Justice and Communities of Color*. San Francisco: Sierra Club Books.
- Bullard, Robert D. 2005. The Quest for Environmental Justice: Human Rights and the Politics of Pollution. San Francisco: Sierra Club Books.

- Bullard, Robert D., and J Lewis. 1996. *Environmental Justice and Communities of Color*. Sierra Club Books.
- Bullard, Robert D. and Beverly Wright. 2012. *The Wrong Complexion for Protection: How the Government Response to Disaster Endangers African American Communities*. New York: New York University Press.
- Čapek, Stella M. 1993. "The 'Environmental Justice' Frame: A Conceptual Discussion and an Application." *Social Problems* 40(1): 5–24.
- Centers for Disease Control and Prevention. 2009. "Public Water Systems FAQ." *Centers for Disease Control and Prevention*. https://www.cdc.gov/healthywater/drinking/public/faq.html.
- Checker, Melissa. 2005. Polluted Promises: Environmental Racism and the Search for Justice in a Southern Town. New York: New York University Press.
- Cole, Luke W. and Sheila R. Foster. 2001. From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement. New York: New York University Press.
- Collective, The Faith in Action Writing. 2017. Faith in Action: A Handbook for Activists Advocates and Allies. Minneapolis, Minnesota: Fortress Press.
- Collins, Sheila D. 2014. "What a Difference a Disaster Makes or Doesn't: A Comparative Case Study of Governmental and Popular Responses to Hurricanes Katrina and Sandy" In *The Earth Charter, Ecological Integrity and Social Movements*, eds. Laura Westra and Mirian Vilela, 61-73. New York: Routledge.
- Costello, Author Paul. 2020. "Why Air Pollution Is Linked to Severe Cases of COVID-19." *Scope*. https://scopeblog.stanford.edu/2020/07/17/why-air-pollution-is-linked-to-severe-cases-of-covid-19/ (August 29, 2020).
- Crews Try Again To Plug Uncontained Gas Leak In Porter Ranch. https://www.youtube.com/watch?v=o\_zPT1Sx0dg (June 5, 2020).
- Cuesta Camacho, David E., ed. 1998. *Environmental Injustices, Political Struggles: Race, Class, and the Environment*. Durham [N.C.]: Duke University Press.
- "Daily News." *Daily News*. https://www.dailynews.com/2020/06/08/angels-prepare-for-draft-with-scouting-staff-ravaged-by-furloughs/ (June 9, 2020).
- De Leon, Kevin, California State Senate. April 15, 2019. Interviewed by Author. Los Angeles

- De Leon, Kevin, California State Senate. May 13, 2019. Interviewed by Author. Los Angeles
- Department of Toxic Substances Control Strategic Planning Meeting. Maywood. (July 18, 2019).
- Earth Island Institute, Urban Habitat Program, and Center on Race, Poverty, and the Environment (California Rural Legal Assistance Foundation), eds. 1990. *Race, Poverty & the Environment*. San Francisco, CA: Earth Island Institute.
- Edwards, Bob. 1995. "With Liberty and Environmental Justice for All: The Emergence and Challenge of Grassroots Environmentalism in the United States." In *Ecological Resistance Movements: The Global Emergence of Radical and Popular Environmentalism*, ed. Bron Raymond Taylor. State University of New York Press, 35–55.
- Ehrenreich, Ben. 2019. "The Road to Climate Catastrophe Runs Through a City Called Commerce." https://www.thenation.com/article/climate-catastrophe-solutions-begingrassroots/ (April 1, 2019).
- "Electric Vehicle Incentives." https://www.ladwp.com/ladwp/faces/ladwp/residential/r-gogreen/r-gg-driveelectric/r-gg-de-evncentives;jsessionid=RylvfM8Tyk5W81KTZqPvN7q20hxkYDV2yKnCSpfcLqM XltcZHLTc!1543163757?\_afrWindowId=null&\_afrLoop=256414838162158&\_afrWindowMode=0&\_adf.ctrl-state=bj6j0m1nd\_4#%40%3F\_afrWindowId%3Dnull%26\_afrLoop%3D256414838162158%26\_afrWindowMode%3D0%26\_adf.ctrl-state%3Dok9cae9g6\_4 (August 30, 2020).
- "Exide Battery Recycling Plant Leaves a Toxic Legacy." 2016. *KCRW*. https://www.kcrw.com/news/articles/exide-battery-recycling-plant-leaves-a-toxic-legacy (August 13, 2020).
- "EXIDE VERNON UPDATE: Los Angeles Area Residents Affected by Contamination from Exide Lead Smelter Say Slow Cleanup Adds Insult to Injury; Residents Wary of DTSC Which They Believe Dropped the Ball on Regulating Exide with Existing Laws to Protect Residents from Decades of Lead, Arsenic and Benzine Contamination Lead Free Frisco." https://www.leadfreefrisco.com/2016/06/exide-vernon-update-los-angeles-area-residents-affected-contamination-exide-lead-smelter-say-slow-cleanup-adds-insult-injury-residents-wary-dtsc-believe-dropped-ball/ (August 14, 2020).

- Facebook et al. 2010. "Toxic Soil Lurks beneath Carson Neighborhood." *Los Angeles Times*. https://www.latimes.com/archives/la-xpm-2010-apr-27-la-me-carousel-shell-20100427-story.html (August 2, 2020).
- Faith in Action: A Guide for Activists, Advocates, and Allies. 2017. Minneapolis, MN: Fortress Press.
- Farzan, Shohreh F., and Jill Johnston. 2018. "Toxic Metals Exposure Biomarkers among Children Living near Battery Recycling Industry." *ISEE Conference Abstracts*. https://ehp.niehs.nih.gov/doi/10.1289/isesisee.2018.P02.2360 (March 9, 2019).
- Frasure, Lorrie. 2015. *Racial and Ethnic Politics in American Suburbs*. Cambridge: Cambridge University Press
- Fuller, Trevor K. 2015. *Environmental Justice and Activism in Indianapolis*. Lanham, Maryland: Lexington Books.
- Gambetta, Diego. 1998. "Concatenations of Mechanisms" In *Social Mechanisms: An Analytical Approach to Social Theory*. Cambridge: Cambridge University Press.
- Garcia, Christina, California State Assembly 58<sup>th</sup> District. September 24, 2018. Interviewed by Author. City of Bell.
- Garrard, Greg, ed. 2014. *The Oxford Handbook of Ecocriticism*. New York: Oxford University Press.
- "Gas Leak near Porter Ranch Lingers Nearly One Week Later." 2015. *Daily News*. https://www.dailynews.com/environment-and-nature/20151029/gas-leak-near-porter-ranch-lingers-nearly-one-week-later (June 8, 2020).
- Gazzar, Brenda. 2015. "Porter Ranch Gas Leak Dampens Christmas Spirit for Those Struggling to Relocate." *Los Angeles Daily News*. http://www.dailynews.com/2015/12/25/porter-ranch-gas-leak-dampens-christmas-spirit-for-those-struggling-to-relocate/.
- Gerrard, Michael, and American Bar Association, eds. 1999. *The Law of Environmental Justice: Theories and Procedures to Address Disproportionate Risks*. Chicago: Section of Environment, Energy, and Resources, American Bar Association.
- Gerrard, Michael, and Sheila R. Foster, eds. 2008. *Law of Environmental Justice*. Chicago, Ill: American Bar Association.
- Gerring, John. 2007. *Case Study Research: Principles and Practices*. Cambridge: Cambridge University Press.

- Geuss, Megan. 2016. "Governor Declares State of Emergency in Connection with California Methane Leak." *Ars Technica*. https://arstechnica.com/techpolicy/2016/01/governor-declares-state-of-emergency-in-connection-with-california-methane-leak/ (June 9, 2020).
- Ghazi, Rizgar, Acting Deputy Director of Hazardous Waste Management Program at the California Department of Toxic Substances Control. May 15, 2020. Interviewed by Author. Sacramento.
- Gilens, Michael. 2012. Affluence and Influence: Economic Inequality and Political Power in America. Princeton University Press.
- Goldenberg, Suzanne. 2016. "Massive Natural Gas Leak in Los Angeles Prompts Governor to Declare Emergency." *The Guardian*. https://www.theguardian.com/usnews/2016/jan/06/los-angeles-natural-gas-leak-california-governor-jerry-brownemergency (June 9, 2020).
- "Governing Board." http://www.aqmd.gov/nav/about/governing-board (August 22, 2020).
- "Governor Brown Issues Order on Aliso Canyon Gas Leak | Governor Edmund G. Brown Jr." https://www.ca.gov/archive/gov39/2016/01/06/news19263/index.html (June 9, 2020).
- "Grounded During White Flight: How Being a 'White Boy' from Maywood as It Transitioned to a 96 Percent Latinx Neighborhood Helped Me Become a Better Citizen and Parent." 2019. *L.A. TACO*. https://www.lataco.com/grounded-during-white-flight-how-being-a-white-boy-from-maywood-as-it-transitioned-to-a-96-percent-latinx-neighborhood-helped-me-become-a-better-citizen-and-parent/ (March 7, 2020).
- Hall, Andrew B, and Jesse Yoder. "Does Homeownership Influence Political Behavior? Evidence from Administrative Data.": 46.
- Halpern, David. 2005. Social Capital. Cambridge: Polity Press.
- Han, Hahrie. 2009. Moved to Action: Motivation, Participation, and Inequality in American Politics. Stanford University Press.
- Harris, Fredrick C. 2006. "It Takes a Tragedy to Arouse Them: Collective Memory and Collective Action during the Civil Rights Movement." *Social Movement Studies* 5(1): 19–43.
- Hedstrom, Peter, and Richard Swedberg, eds. 1998. *Social Mechanisms: An Analytical Approach to Social Theory*. Cambridge University Press.

- II, Vann R. Newkirk. 2018. "Environmental Racism Is Real, According to Trump's EPA." *The Atlantic*. https://www.theatlantic.com/politics/archive/2018/02/the-trump-administration-finds-that-environmental-racism-is-real/554315/ (August 4, 2019).
- Johnston, Jill E., and Andrea Hricko. 2017. "Industrial Lead Poisoning in Los Angeles: Anatomy of a Public Health Failure." *Environmental Justice* 10(5): 162–67.
- Joint Hearing Natural Resources and Water, and Joint Legislative Committee on Emergency Management. Los Angeles. (August 6, 2019).
- Justice, United Church of Christ Commission for Racial. 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*. Public Data Access.
- King, Gary, Robert O. Keohane and Sidney Verba. 1994. *Designing Social Inquiry:* Scientific Inference in Qualitative Research. Princeton: Princeton University Press.
- "LA County Department of Public Health." http://www.publichealth.lacounty.gov/media/gasleak/Background.htm (June 8, 2020).
- "LACDPH Aliso Canyon Gas Leak LAHAN 030816 FINAL.Pdf." http://publichealth.lacounty.gov/eprp/Health%20Alerts/LACDPH%20Aliso%20Canyon%20Gas%20Leak%20LAHAN%20030816%20FINAL.pdf (June 9, 2020).
- Lambert, Thomas, Christopher Boerner, and Roger Clegg. 1996. *A Critique of "Environmental Justice."* Washington, DC: National Legal Center for the Public Interest.
- Los Angeles Board of Supervisors. Public Meeting. March 20, 2018. Los Angeles.
- Marable, Manning, and Leith Mullings, eds. 2009. New Social Movements in the African Diaspora: Challenging Global Apartheid. 1st ed. New York, NY: Palgrave Macmillan.
- Matias, Cheryl E., and Zeus Leonardo. 2016a. *Feeling White: Whiteness, Emotionality, and Education*. Rotterdam: Sense Publishers.
- ——. 2016b. *Feeling White: Whiteness, Emotionality, and Education*. Rotterdam; Boston: Sense Publishers.
- McAdam, Doug. 1983. "Tactical Innovation and the Pace of Insurgency." *American Sociological Review* 48(6): 735–54.
- McAdam, Doug, Sidney Tarrow, and Charles Tilly. 2001. *Dynamics of Contention*. Cambridge University Press.

- Mohai, Paul, and Bunyan Bryant. 1992a. "Environmental Injustice: Weighing Race and Class as Factors in the Distribution of Environmental Hazards Class, Race, and Environmental Regulation." *University of Colorado Law Review* 63: 921–32.
- Mohai, Paul, and Bunyun L. Bryant. 1992b. *Race and the Incidence of Environmental Hazards*. Westview Press.
- Moore, Donald S., Jake Kosek, and Anand Pandian, eds. 2003. *Race, Nature, and the Politics of Difference*. Durham: Duke University Press.
- "Mothers' Group Fights Back in Los Angeles." https://advance.lexis.com/document/?pdmfid=1516831&crid=92f49550-b873-4c94-8817-
  - 79c880ccbe1e&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3Aconte ntItem%3A3SJB-10M0-002S-X3T9-00000-
  - 00&pdcontentcomponentid=6742&pdteaserkey=sr3&pditab=allpods&ecomp=gb63k &earg=sr3&prid=e39d2aba-6a5f-4808-866f-b14cba17f544 (August 10, 2020).
- Munin, Arthur Carl. 2012. Color by Number: Understanding Racism through Facts and Stats on Children. 1st ed. Sterling, Va: Stylus.
- Myers, Jeffrey. 2005. Converging Stories: Race, Ecology, and Environmental Justice in American Literature. Athens: University of Georgia Press.
- "Nathan Shapell, 85; Builder Who Developed Porter Ranch Was Also Noted Philanthropist." 2007. *Los Angeles Times*. https://www.latimes.com/archives/la-xpm-2007-mar-13-me-shapell13-story.html (May 24, 2020).
- "Nathan Shapell, Builder, Reformer." 2007. *The Mercury News*. https://www.mercurynews.com/2007/03/12/nathan-shapell-builder-reformer/ (May 24, 2020).
- Natural Gas Storage: Moratorium of 2016, S.B. 380, California State Senate. (2016).
- "NEW GAS WELLS FOR THE NORTH VALLEY ???!!! January Monthly Meeting." https://mailchi.mp/saveporterranch/health-crisis-coverup-monthly-meeting-community-forum-1628605?e=f7f027f100 (February 12, 2019).
- Oversight Hearing: Status of the Exide Residential Cleanup. Assembly Budget Subcommittee No. 3 on Resources and Transportation. (August 9, 2018).
- Oversight Hearing: Status of the Exide Residential Cleanup. Assembly Budget Subcommittee No. 3 on Resources and Transportation. (August 9, 2018).
- Ozgen, Ceren, Eric Strobl, and Matt Cole. "Air Pollution Exposure Linked to Higher COVID-19 Cases and Deaths New Study." *The Conversation*.

- http://theconversation.com/air-pollution-exposure-linked-to-higher-covid-19-cases-and-deaths-new-study-141620 (August 29, 2020).
- Pellow, David N. 2007. Resisting Global Toxics: Transnational Movements for Environmental Justice. Cambridge, Mass: MIT Press.
- Pellow, David N. 2018. What is Critical Environmental Justice? Medford: Polity Press.
- Platt, Rutherford H. 1999. *Disasters and Democracy: The Politics of Extreme Natural Events*. Washington, D.C.: Island Press.
- "Politics Starts Locally: The Legacy Of The 'Mothers of East L.A." *NBC News*. https://www.nbcnews.com/storyline/hispanic-heritage-month/politics-starts-locally-legacy-mothers-east-l-n211286 (May 27, 2020).
- Popovich, Nadja, Livia Albeck-Ripka, and Kendra Pierre-Louis. 2019. "The Trump Administration Is Reversing 100 Environmental Rules. Here's the Full List." *The New York Times*. https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html, https://www.nytimes.com/interactive/2020/climate/trump-environment-rollbacks.html (August 29, 2020).
- Porter Ranch Residents Protest Outside Gas Company Demanding Leak Be Fixed ASAP. https://www.youtube.com/watch?v=cJglNIO3JPg (June 5, 2020).
- "Protesters Call for Shutdown of Gas Field."
  - https://advance.lexis.com/document/?pdmfid=1516831&crid=138b9a7a-8b73-48c8a900-
  - 1fc21d2b89b2&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3Aconte ntItem%3A5HKP-C6X1-F02B-Y0GT-00000-
  - 00&pdcontentcomponentid=270093&pdteaserkey=sr73&pditab=allpods&ecomp=kb 63k&earg=sr73&prid=7e09e828-c070-4e5d-9515-cb2fc7be92fe (June 9, 2020).
- Pulido, Laura. 1996. "A Critical Review of the Methodology of Environmental Racism Research." *Antipode* 28(2): 142–59.
- ———. 2000. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." *Annals of the Association of American Geographers* 90(1): 12–40.
- Radio, Southern California Public. 800. "Porter Ranch Facts vs. Rumors." *Southern California Public Radio*. https://www.scpr.org/news/2016/02/10/57348/sorting-out-porter-ranch-facts-vs-rumors/ (June 9, 2020).

"Regulatory Update: California Public Utilities Commission; The Utility Reform Network, Has Submitted (A1312013) Brief Filed by The Utility Reform Network on 09/25/2015 Conf# 90345."

https://advance.lexis.com/document/?pdmfid=1516831&crid=5a85837c-9e71-4ed1-9935-

bcd591359bfb&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3AcontentItem%3A5H5J-YRM1-DXCW-D0RD-00000-

00&pddocid=urn%3AcontentItem%3A5H5J-YRM1-DXCW-D0RD-00000-

00&pdcontentcomponentid=400469&pdteaserkey=sr5&pditab=allpods&ecomp=3fyk &earg=sr5&prid=ae926efb-8f61-4f23-8fee-b4f245fde224 (March 4, 2019).

- "Rep. Brad Sherman Doubtful Porter Ranch Facility Leaking Gas Can Be Reopened." 2016. https://losangeles.cbslocal.com/2016/01/19/rep-brad-sherman-doubtful-porter-ranch-facility-leaking-gas-can-be-reopened/ (June 5, 2020).
- "Reporting-Air-Quality-Problems-Brochure.Pdf." http://www.aqmd.gov/docs/default-source/publications/brochures/reporting-air-quality-problems-brochure.pdf (August 15, 2020).
- "Respect for a City's Autonomy." 2011. *Press Telegram*. https://www.presstelegram.com/opinion/20110426/respect-for-a-citys-autonomy (August 14, 2020).

Respondent 1. August 2, 2018. Interviewed by Author. Los Angeles.

Respondent 2. August 6, 2018. Interviewed by Author. Los Angeles.

Respondent 3. August 6, 2018. Interviewed by Author. Los Angeles.

Respondent 4. August 7, 2018. Interviewed by Author. Los Angeles.

Respondent 5. August 16, 2018. Interviewed by Author. Los Angeles.

Respondent 6. September 12, 2018. Interviewed by Author. Los Angeles.

Respondent 7. March 25, 2019. Interviewed by Author. Los Angeles.

Respondent 8. April 15, 2019. Interviewed by Author. Los Angeles.

Respondent 9. August 23, 2019. Interviewed by Author. Los Angeles.

Respondent 10. September 5, 2019. Interviewed by Author. Los Angeles.

Richard, Chris. 2017. "After Decades of Pollution, State Details Cleanup from L.A.'s Exide Battery Plant." *KQED: The California Report*. https://www.kqed.org/news/11553538/after-decades-of-pollution-state-details-cleanup-from-l-a-s-exide-battery-plant.

- Robert K. Nelson, LaDale Winling, Richard Marciano, Nathan Connolly, et al., "Mapping Inequality." *American Panorama*, ed. Robert K. Nelson and Edward L. Ayers. https://dsl.richmond.edu/panorama/redlining/#loc=11/34.031/-118.374&city=los-angeles-ca. (August 10, 2020).
- Rojas, Fabio. 2006. "Social Movement Tactics, Organizational Change and the Spread of African American Studies." *Social Forces* 84(4): 2147–66.
- Salehyan, Idean et al. 2012. "Social Conflict in Africa: A New Database." *International Interactions* 4(38): 503–11.
- Schelling, Thomas C. 1998. "Social Mechanisms and Social Dynamics" In *Social Mechanisms: An Analytical Approach to Social Theory*, eds. Peter Hedstrom and Richard Swedberg.
- Schilling, Teresa. "Root Cause Analysis for Aliso Canyon Finalized; California to Continue Strengthening Safeguards for Natural Gas Storage Facilities.": 3.
- "SCPPA | City of Vernon." http://www.scppa.org/page/member-vernon (February 20, 2020).
- "Sempra Unit Rolls Out Bonds For \$6B Capex."
  - https://advance.lexis.com/document/?pdmfid=1516831&crid=0bd67d8d-5eab-4ba9-9336-
  - 8770a558c36c&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3Aconte ntItem%3A5GCH-Y5V1-JD1P-T135-00000-
  - 00&pddocid=urn%3AcontentItem%3A5GCH-Y5V1-JD1P-T135-00000-
  - 00&pdcontentcomponentid=318088&pdteaserkey=sr15&pditab=allpods&ecomp=3fy k&earg=sr15&prid=b3fbeead-102b-46b2-8977-51a313f0bc18 (March 4, 2019).
- "Shapell Nathan." *California Homebuilding Foundation*. https://www.mychf.org/shapell-nathan/ (May 24, 2020).
- Small group 1. April 26, 2018. Interviewed by Author. Los Angeles.
- Small group 2. June 27, 2018. Interviewed by Author. Los Angeles.
- Small group 3. August 8, 2018. Interviewed by Author. Los Angeles.
- Small group 4. February 6, 2019. Interviewed by Author. Los Angeles.
- Small group 5. March 25, 2019. Interviewed by Author. Los Angeles.
- Small group 6. April 3, 2019. Interviewed by Author. Los Angeles.
- Small group 7. April 15, 2019. Interviewed by Author. Los Angeles.

Small group 8. April 29, 2019. Interviewed by Author. Los Angeles.

Small group 9. July 11, 2019. Interviewed by Author. Los Angeles.

Small group 10. July 15, 2019. Interviewed by Author. Los Angeles.

Small group 11. August 5, 2019. Interviewed by Author. Los Angeles.

Small group 12. August 7, 2019. Interviewed by Author. Los Angeles.

Smith, Christy, California State Assembly member, 38<sup>th</sup> District. March 17, 2019. Interviewed by Author. Sacramento.

"Snag Threatens Fall Debut of Prison on Otay Mesa."

https://advance.lexis.com/document/?pdmfid=1516831&crid=21876d5f-67cc-42e2-b12a-

46371dcca741&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3Aconte ntItem%3A4PCY-FMC0-TWDC-M561-00000-

00&pdcontentcomponentid=11811&pdteaserkey=sr73&pditab=allpods&ecomp=gb6 3k&earg=sr73&prid=a2b6c505-ee6c-483e-a4fa-da4d4546c6b1 (August 10, 2020).

Soechtig, Stephanie and Jeremy Seifret. 2018. *The Devil We Know*. Stephanie Soechtig. (Screened August 29, 2019).

"SoCal Gas Declares High OFO."

https://advance.lexis.com/document/?pdmfid=1516831&crid=a501a4d8-8d5a-4538-b29d-

f18beb671275&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3Aconte ntItem%3A5H60-3T71-JBRT-R41P-00000-

00&pddocid=urn%3AcontentItem%3A5H60-3T71-JBRT-R41P-00000-

00&pdcontentcomponentid=160956&pdteaserkey=sr0&pditab=allpods&ecomp=3fyk &earg=sr0&prid=ae926efb-8f61-4f23-8fee-b4f245fde224 (March 4, 2019).

SoCalGas Answers Questions About Gas Leak.

https://www.youtube.com/watch?v=lAZBK06qq 8 (June 5, 2020).

SoCal Gas. "12-05-16-SCG-Letter-to-PRNC.Pdf."

https://www.socalgas.com/1443740142816/12-05-16-SCG-Letter-to-PRNC.pdf (June 9, 2020).

"SoCalGas Issues Statement on Blade's Analysis of Aliso Canyon Well Failure." https://www.sempra.com/socalgas-issues-statement-blades-analysis-aliso-canyon-well-failure (June 9, 2020).

Staff, Los Angeles Times. "Exide Technologies: A History." *latimes.com*. http://timelines.latimes.com/exide-technologies-history/ (August 22, 2020).

- Stein, Rachel, ed. 2004. New Perspectives on Environmental Justice: Gender, Sexuality, and Activism. New Brunswick, N.J. Rutgers University Press.
- Tarrow, Sidney G. 2011. *Power in Movement: Social Movements and Contentious Politics*. Cambridge University Press.
- Tate, Katherine. 1991. "Black Political Participation in the 1984 and 1988 Presidential Elections." *The American Political Science Review* 85(4): 1159–76.
- Tausanovitch, Chris, and Christopher Warshaw. 2013. "Measuring Constituent Policy Preferences in Congress, State Legislatures, and Cities." *The Journal of Politics* 75(2): 330–42.
- ——. 2014. "Representation in Municipal Government." *American Political Science Review* 108(3): 605–41.
- Taylor, Dorceta E. 2014. *Toxic Communities: Environmental Racism, Industrial Pollution, and Residential Mobility*. New York: New York University Press.
- Taylor, Verta, and Nella Van Dyke. 2004. "Get Up, Stand Up': Tactical Repertoires of Social Movements." *The Blackwell Companion to Social Movements*: 262–93.
- "They Chose Us Because We Were Rural and Poor': When Environmental Racism and Climate Change Collide | Environment | The Guardian." https://www.theguardian.com/environment/2019/mar/08/climate-changed-racism-environment-south (August 4, 2019).
- Thomas, June Manning, and Marsha Ritzdorf, eds. 1997. *Urban Planning and the African American Community: In the Shadows*. Thousand Oaks: Sage Publications.
- "Timeline of the Aliso Canyon Gas Leak's Impact on Porter Ranch over the Last 3 Years." 2018. *Daily News*. https://www.dailynews.com/timeline-of-the-aliso-canyon-gas-leaks-impact-on-porter-ranch-over-the-last-3-years (June 8, 2020).
- Times, Special to The New York. 1989. "Mothers' Group Fights Back in Los Angeles." *The New York Times*. https://www.nytimes.com/1989/12/05/us/mothers-group-fights-back-in-los-angeles.html (May 28, 2020).
- "Toxic Shock: Toxic Exide Plant in Vernon Won't Actually Go Away For Years." https://advance.lexis.com/document/?pdmfid=1516831&crid=ad176cd3-a91c-4240-bc85
  - b1a693ce6827&pddocfullpath=%2Fshared%2Fdocument%2Fnews%2Furn%3Aconte ntItem%3A5FJ3-7MG1-F03R-N224-00000-
  - 00&pdcontentcomponentid=299488&pdteaserkey=sr20&pditab=allpods&ecomp=gb 63k&earg=sr20&prid=670cdd68-b376-44f4-8f1e-72a6587e5664 (August 13, 2020).

- Washington, Sylvia Hood. 2005. *Packing Them in: An Archaeology of Environmental Racism in Chicago, 1865-1954*. Lanham: Lexington Books.
- "Welcome to Paradise." *Forbes*. https://www.forbes.com/forbes/2007/0226/104.html (August 14, 2020).
- "When Porter Ranch Was Born, Huge Gas Wells Weren't Part of the Conversation." 2016. *Daily News.* https://www.dailynews.com/government-and-politics/20160117/when-porter-ranch-was-born-huge-gas-wells-werent-part-of-the-conversation (May 24, 2020).
- "Why Are Families in Boyle Heights and Southeast L.A. Still Being Poisoned by Lead? Battery Recycling Plant Leaves Behind 'a Chernobyl-Level Event' (Update)." 2019. *L.A. TACO*. https://www.lataco.com/exide-boyle-heights-and-southeast-l-a-chernobyl-level-event/ (June 15, 2020).
- Williams, Meredith, Director of the California Department of Toxic Substances Control. April 30, 2020. Interviewed by Author. Sacramento.
- Wright, James D. and Peter H. Rossi. 1981. "The Politics of Natural Disaster: State and Local Elites." In *Social Science and Natural Hazards*, eds. James D. Wright and Peter H. Rossi, 45-67. Cambridge: Abt Associates Inc.
- Yin, Robert K. 1994. *Case Study Research: Design and Methods*. 5(8) Thousand Oaks: Sage Publications.
- Zepeda-Milan, Chris. 2017. *Latino Mass Mobilization: Immigration, Racialization, and Activism.* Cambridge: Cambridge University Press.
- Zimmerman, Rae. 1985. "The Relationship of Emergency Management to Governmental Policies on Man-Made Technological Disasters." *Public Administration Review* 45: 29–39.
- Zimring, Carl A. 2015. Clean and White: A History of Environmental Racism in the United States. New York: New York University Press.