

CHICANA FEMINIST PARTICIPATORY ACTION RESEARCH:
COLLABORATIVE ENVIRONMENTAL JUSTICE IN THE IMPERIAL VALLEY
AND THE IDENTIFYING VIOLATIONS AFFECTING NEIGHBORHOODS
COMMUNITY DEVELOPMENT PROJECT

By

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Abstract

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In 2007 in Imperial County, a community-based organization called Comite Civico del Valle (CCV), along with the Department of Toxic Substances, and concerned residents, created the Identifying Violations Affecting Neighborhoods (IVAN). IVAN is a community-based environmental reporting and monitoring system that is built on the idea that residents are the most knowledgeable about their environment and therefore should have a place at the table alongside environmental regulation agencies. For more than a decade, this has allowed residents to better report environmental concerns. However, for many residents there is still a lack of knowledge about how to properly utilize the IVAN reporting system, and, therefore, the inability to properly report environmental concerns.

The purpose of this project, the IVAN Community Development Project, was to create a community-based collaborative research project with the main objective of furthering the knowledge and the ability of residents to report environmental concerns by better utilizing IVAN. The IVAN Community Development Project, which is connected but distinct from IVAN reporting system, employed both Feminist and Participatory

Action Research (PAR) epistemology, methodology, and methods approaches to create a collaborative project that would allow for plurality, performativity, and inclusion in the process. Chicana Mestizaje-Feminism was applied to the reflection of the experience after the project's completion. By establishing a co-inquirer relationship, CCV and I, along with ten additional residents who were not affiliated with CCV prior to the IVAN Community Development Project, formed the Community Advisory Panel, conducted research, and co-wrote an IVAN Community Guidebook.

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I went so long without this book in my life. The awe-inspiring writings of Gloria Anzaldúa's were just what I needed to affirm to me the community organizing and academic research I see myself doing.

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I can't emphasize more that the IVAN Community Development Project was a collaborative effort between so many people that participated formal and informal at different points in the project. I would like to thank all those individuals that I did not mention, but took the time to support our efforts.

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Introduction

Low-income communities of color in the United States are disproportionately burdened with an overwhelming amount of environmental pollution compared to their affluent white counterparts (Bullard, Mohai, Saha, & Wright, 2008). The lack of accountability from environmental agencies to sufficiently address these environmental issues, even when continuously reported, prompted residents from the Imperial County in 2010 to demand environmental justice by challenging the California Environmental Protection Agency's (CalEPA) environmental reporting systems at the time and creating their own environmental reporting and monitoring system, the Identifying Violations Affecting Neighborhoods (IVAN). Through IVAN, concerned residents could put forth concerns that would be dealt with in a more transparent and collaborative manner. Led by a community-based organization called Komite Civico del Valle (CCV), IVAN was designed to be a community-based environmental monitoring system with the goal of bridging the gap between residents and environmental agencies.

IVAN has been a community-based tool that has been successful in creating space for collaboration between community members and community agencies, and has led to the remediation of many environmental concerns. However, it hasn't been utilized to its full potential by residents due to limitations in understanding and navigation of IVAN and the reporting process. The IVAN Community Development Project is a collaborative project whose main focus is to build the capacity of Imperial Valley

residents to better engage with the IVAN environmental reporting system. It is still difficult for residents to understand what to include in an environmental report, when one should submit a report, what will happen after they submit a report, and the jurisdiction of environmental agencies—essentially, who is responsible, and for what. In collaboration, CCV and I organized a Community Advisory Panel (CAP) to assist the IVAN Community Development Project in creating a community guidebook that would address these questions and provide Imperial Valley residents with an accessible tool made *by* residents *for* residents to assist in submitting and navigating the environmental reporting process. The CAP was formed with the sole purpose of guiding the IVAN Community Development Project.

The IVAN Community Development Project employs multiple post-modern epistemologies and methodologies because CCV and I recognized that western positivist constructions of research are problematic as it furthers the gap between citizens and experts (Fischer, 2000). CCV and I wanted to foster an inclusive research process by including those that would benefit the most from the project. This occurred on multiple levels: myself partnering with CCV and my and CCV's partnership with the Community Advisory Panel. This project aimed to eliminate the hierarchy between researchers and citizens, and engage in research and work from a community perspective. By utilizing a feminist-informed participatory action research approach (Maguire, 2001), we were able to create a project that focused on knowledge production from the everyday experience of community organizers and average residents. Participatory Action Research that doesn't embrace feminist theory arguably falls short of creating a liberatory project, by not

recognizing the complexities of gender, voice, power, multiple identities, and interlocking oppressions. For example, if CCV and I didn't further incorporate residents into our project, it would have limited the scope of the community guidebook. Working from a community organizer's perspective was important so as to create a project that had an applicable, pragmatic purpose, was action-oriented, and would hopefully lead to empowerment to those involved in the process.

CCV and I realized that we needed to collaborate beyond just ourselves to be able to successfully create a community guidebook that would meet the needs of residents and represented a multitude of perspectives. We recruited residents that might have an interest in participating through word of mouth, and emails. During the recruitment process it was important to us to put together a team of residents from different parts of the Imperial County, so their wasn't an over representation of one geographic area, different social- economic status, professions, and educational background formed the Community Advisory Panel (CAP). The panel consisted of ten residents that met regularly to provide input, conduct research, and co-write the community guidebook. Through the research process the IVAN Community Development Project evolved in unexpected but welcome directions, and CCV, the CAP, and I continually built on the main objective of better understanding IVAN. It should be emphasized that individuals were collectively and individually learning and developing awareness through their own growth. The process was bumpy and messy, but in spite of this, CCV, the CAP, and I were able to learn and build the community's capacity to respond to environmental concerns. The main outcome of the IVAN Community Development Project was the

creation and development of the IVAN community guidebook. The guidebook is considered a living document because it will continue to be revised on a yearly basis by CCV—it is constantly changing, updating, open-ended, adapting, and evolving. It was created from the multiple perspectives of all the residents that engaged in the research process. It is a reflection of community ideas, made *by* residents *for* residents in order to further empower them and give them the knowledge necessary to collaborate with nonprofits, environmental agencies, and local and state level institutions.

Mi Valle

In the fall of 2012 I was a participant in an event organized by CCV called the Toxic Bus Tour. The aim of the Toxic Bus Tour was to highlight some of the most polluted areas in the Imperial Valley, which is located in Imperial County, the southernmost county in California. It is a predominantly Hispanic region, and has an above average state unemployment rate. At the time of the tour, I was a student at San Diego State University studying psychology and environmental studies, and I was in town for the weekend to partake in the tour. The passengers of the tour varied in age and profession and included students, concerned Imperial County residents of all ages, and government officials representing agencies such as the Department of Toxic Substances and the California Environmental Protection Agency (CalEPA). This was my first introduction to environmental injustice, a concept that was unfamiliar to me at the time.

The bus departed from Calexico, my hometown, located right on the U.S.-Mexico border, and visited five hotspots of pollution: Enrique Camarena Junior High School,

which my little brother attended at the time, is located adjacent to an agricultural field, and is downwind from smoke from controlled burning and pesticides; a stretch of desert off of Interstate 98 that was being considered as a site for the development of renewable solar energy; the Brawley Beef Plant and an adjacent canal into which the plant dumped raw sewage and blood; and the finale of the tour, the bi-national New River, which is considered one of the most polluted rivers in the United States and flows between the U.S. and Mexico.

When we stopped at the New River, residents spoke about the health issues that the pollution caused in their lives such as asthma and respiratory disease. An EPA official from San Francisco heard their stories, and I remember wondering if he was there that day to just check a box—he came, he saw, he heard, and now his job was done. Did the EPA really want to help us? We're not Yosemite, we're not Joshua Tree, we are not a region that is often considered worthy of protection; we were just the Imperial Valley. It dawned on me that our lives in the Imperial Valley, in the larger scheme of environmental issues, were not a concern to the state of California. My neighbors, friends, and family, did not matter to the CalEPA as much as privileged tourists wanting to recreate in Joshua Tree, only 104 miles away from the New River, and on that day in 2012 I did not fully grasp the notion that we were disposable, that we were a product of a racist capitalistic system.

For the first ten years of my life, the New River was within walking distance of my childhood home and visible from the neighborhood skate park. It was murky, smelled horrible, filled with foam and plastic, and people would joke that if you fell in, you would

grow a third arm. I didn't question the quality of my environment—"asi es como es." That is just the way it is, a detrimental sentiment among the residents of the Imperial Valley that have been rendered powerless against their will by an unfair system.

Participating in the tour was the first time that I connected directly with the Imperial Valley, my home, and the first time I realized that I was focusing on the wrong environmental issues. I had spent my time and energy focused on recycling. But recycling was just a band-aid on the structural problems that don't just create waste, but disproportionately locate that waste in places like Imperial Valley. Getting more people around me to recycle seemed minor compared to the task of cleaning the New River.

It was upsetting—some cities have tours that highlight the beauty of their communities. But my community's only tour highlighted the ugly, the sites that damage the health of its residents and the environment. What's even worse is that there are many more sites the Toxic Bus Tour could have included, such as the hazardous waste landfill in Westmoreland—they just didn't make the cut.

I am not separate from the issues of the Imperial Valley; I am not separate from controlled burns, high asthma rates, polluted water, respiratory disease, and exposure to pesticides, or exploitation of agricultural workers. I am one of those people, which is why I have made it the center of my, and of our, collaborative project.

Environmental Justice Discourse and Environmental Decision Making

In order to facilitate a community development project that would successfully collaborate to create a guidebook making the IVAN reporting system accessible to all

residents, CCV and I drew on the environmental justice theories of environmental racism; that nature is defined as the space we occupy and that it is not separate from us; and the importance of speaking for oneself and being included in the environmental decision making process. We drew upon these theories because they tied directly to Imperial County residents' struggle to address environmental concerns and the importance of the IVAN community reporting system.

The United States Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” (EPA, 2018). However, communities of color and low economic status have historically and continue to disproportionately bear the brunt of environmental hazards in the United States, and have acquired less federal EPA services compared to their white and affluent counterparts (Bullard, 1994; Bullard & Johnson, 2000; Bullard et al., 2008). This unjust environmental burden denies people their basic civil and human rights, which is largely not discussed within the dominant environmental paradigm (DiChiro, 1996; Evans, 2002) and was eventually contested by people of color and led to the grassroots development of an Environmental Justice Movement (EJM) grounded in concepts such as civil rights, social justice, and the fight against environmental racism that still continues today. The EJM, contrary to the mainstream environmental movement, defines nature or environment as the place where people live, work, and play. In other words, the environmental justice framework considers people as an integrated into, and not separate

from, the environment (DiChiro, 1996; Sze, 2002). Another foundational framework of the EJM is that it strives to make visible communities that are systematically denied adequate political clout by advocating ideas of self-representation and autonomy known as the “speak for ourselves” philosophy (Cole & Foster, 2001).

The growth of the EJM is attributed to the accumulative outcome of many other social movements, such as the civil, labor, and anti-toxic movement (Cole & Foster, 2001). Beginning in the early 1980’s a chain of foundational events occurred in the United States that ultimately led to the nationwide acknowledgment of environmental injustice in the country, and eventually the rectification of civil rights and environmental protection policies in the United States (Bullard et al., 2008). The moment that is widely known to have begun the EJM is the 1982 Warren County, North Carolina mass protest against the siting of a PCB landfill in a predominately black neighborhood, where protestors claimed that it was an act of “environmental racism” (Bullard, 1994). Environmental racism is known as the “procedural, organizational, and geographic inequities expressed in persistent patterns of institutionalized discrimination in environmental policy making and decision making” (Peña, 2005, p. 131). Environmental racism also relies on the concept of “white privilege” that systematically allows white folks to structurally move away from environmental hazardous areas compared to people of color (Pulido, 2000). The social structure of environmental racism has been used as a framework for analyzing the pitfalls of the environmental decision-making process of siting waste facilities (Cole & Foster, 2001). The EJM drew attention to this unequal environmental burden placed on poor communities of color in the United States.

A foundational principle of the EJM is providing disadvantaged communities with the equal opportunity to participate in the environmental decision-making process that will most affect them—what EJ scholars call “procedural” justice. There are many social and economic factors, such as income, language, and education level that hinder marginalized communities from being able to adequately participate in the environmental decision-making process. It has been argued that a deliberative environmental decision-making process, built on the development of a local advisory committee, is a far fairer decision-making process for all parties involved, rather than traditional participatory processes (legal pluralism), which are still problematic for disadvantaged communities due to the unequal power dynamics of the actors involved (Cole & Foster, 2001).

The environmental justice discourse around the concept of *justice* has been critiqued as being overly framed as an issue of “equity” and less a struggle for “autonomy.” It has been argued that “autonomous sustainability” can “shift our emphasis from reactive strategies of equity-based struggles against the disparate impacts of environmental racism towards autonomy-based struggles from the sustenance of right livelihoods through self-governance and environmental management in local places” (Peña, 2005, p. 149-150). An example of a more autonomous model is collaborative environmental management, where communities have equal stake in the environmental decision-making, compared to the dominant environmental materialism. In the pursuit of more autonomy, environmental justice organizations have embraced capacity-building by partnering with academics. The participatory research method is considered effective in helping to create a better collaborative relationship between academics and activists, as

compared to research methods that often lead to further exploitation of these already-disadvantaged communities (Cable, Mix and Hasting, 2005).

Community Background of the Imperial Valley

Imperial County, also commonly known as the Imperial Valley, is located in the southeastern corner of Southern California. Imperial County is 4,176 square miles and is surrounded by San Diego County to the west, Yuma County and La Paz County, Arizona, to the east, Riverside County to the north, and Mexicali, Baja-California, Mexico, to the South. Imperial Valley is wholly encompassed within the Imperial County. This region has been known primarily for its close proximity to the U.S-Mexico border, its industrial agriculture and the Salton Sea. More recently, it has become a site for renewable energy development, including wind and solar. It has a population of 180,883, which is 83.3%, Hispanic and Latino (U.S Census Bureau, 2016), compared to 38.9% in California as a whole (U.S Census Bureau, 2017). The population is also 32.6% foreign born (U.S Census Bureau, 2016). The region's populations also includes 11.1% White (non-Hispanic), 3.4% Black or African American, 2.2% Asian, and 2.6% American Indian people (U.S Census Bureau, 2016). Other defining demographics that shape Imperial Valley are its high level of unemployment (24.0%), and the low average per capita income in 2014 of \$16,226 (Imperial County Comprehensive Economic Development Study, 2016). These statistics illustrate a community largely made up of mostly Hispanics and Latinos that are socially and economically disenfranchised.

However, Imperial Valley is home to one of the largest agricultural producers in California, with leading commodities such as cattle, lettuce, alfalfa hay, and broccoli (California Department of Food and Agriculture, 2013). Since the beginning of the Imperial Valley's colonization, the direct goal of settlers was to conquer the desert landscape by diverting water from the Colorado River for agricultural purposes. This imperialistic mentality still rings true in the culture of the agriculture industry in the region today. According to the Imperial County Agriculture and Live Stock Report, in 2016 the Imperial Valley had 542,063 harvested acres worth \$2,063,214,000 (Imperial County Agriculture and Live Stock Report, 2016, 3). In a time of water crisis for most producers in California, Imperial Valley farmers are still continuing to grow to their full production capabilities—and they are not stopping their momentum. Overall, the Imperial Valley's agriculture industry has dominated the region economically and is one of the main contributors to poor air quality.

The externalized cost of Imperial Valley's food production system (which requires synthetic chemical use and field burning) comes at a high price for residents of the Imperial Valley. Imperial Valley is known nationally as being a region that experiences an overwhelming amount of pollution, especially air pollution. According to the American Lung Association in 2016, Imperial County has some of the worst air quality in the United States, ranking 7th as the most polluted county by year-round particle pollution and 20th as the most ozone-polluted county (The American Lung Association, 2016). The Imperial Valley, like most regions bordering Mexico, has always been categorized as a non-attainment county and penalties constantly being waived for not meeting the 1994

National Ambient Air Quality Standard (NAAQS). The Imperial County is constantly waived from the NAAQS due to inability to distinguish from which side of the US-Mexico border the pollutions originates. The laws that are intended to govern and protect our air quality in the United States, such as the Clean Air Act (CAA) and National Ambient Air Quality Standard (NAAQS) seem to have minimal impact in this county. An outcome of the Imperial Valley region having high levels of Particulate Matter 10, Ozone, and CO₂ is that they also suffer from some of the highest rates of chronic bronchitis and asthma in the country (English, Behren, Harley, Neutra, 1998; Carranza, Núñez, & Collins, 2005). The public health cost is detrimental to say the least. According to Kelly, Jaramillo, Quintero-Núñez, Wagner, Collins, Meuzelaar, & Lighty (2010), “In Imperial Valley, the death rates from respiratory diseases is more than doubled that of California, and the childhood asthma rates is the highest in the state.” (1477).

The feelings of this social hardship is well captured by the words of a longtime resident and director of CCV, Luis Olmedo, who is a native of the Imperial Valley and who with good reason is frustrated by the amount of pollution that the agricultural industry is allowed to get away with. He stated in the *Imperial Valley Press*, “It’s unfair that the costs that are being saved by the farmers are being passed on to the residents in terms of medical bills... Some people would call it casualties of the food production. I like to call it plain disrespect” (Varin, 2012). It has already been well documented by the medical field that particulate matter (PM) affects the respiratory system. Some of the effects of air pollution on the respiratory system are inflammation and destroyed lung tissue that cause coughing, wheezing and shortness of breath (Quintero-Núñez, Reyna,

Collins, Guzmán, Powers & Mendoza, 2006). These short-term effects turn into long-term health problems. Furthermore, the elevated rates of cardiovascular disease in the Imperial Valley have been associated with air pollutants, such as ozone, carbon monoxide, sulfur dioxide and particulate matter (California Environmental Health Tracking Program, 2015). For these reasons, the Imperial Valley has been identified by the California Environmental Protection Agency (CalEPA) as a disadvantaged community, which means it houses a population of people that are disproportionately burdened by multiple sources of pollution, not just air, as well as other social and economic factors that put them at high risk of environmental burdens (CalEPA, 2016). All of these factors have shaped the social, economic, and environmental climate of the regions.

Roots of Resistance: Komite Civico del Valle and The Identifying Violations Affecting Neighborhoods (IVAN)

My participation and ability to reflect today on IVAN Community Development Project started years ago, before the creation of IVAN, by people that were dissatisfied by the state's neglect to protect their environment and their community. This section is my attempt to capture their work of struggle and resistance. It is also attempting to bridge the people of the past to the present, and the present to the future working toward justice in the Imperial Valley. In order to understand the IVAN Community Development Project, it is essential that I share the realities, context, and problems for residents living in the Imperial Valley. Participatory Action Research can't be confined to a beginning or an

end. The seeds of the IVAN Community Development Project were sprouting before I became involved. This project builds on the work of individuals that have and continue to work relentlessly to make their voices heard.

In 1987, a handful of Imperial County, California residents formed a community-based organization called Comité Cívico del Valle (CCV), tasked with the broad objective of improving the quality of life of the marginalized populations in the Imperial Valley, through community involvement and grassroots organizing. During CCV's founding there was a deep need in the Imperial Valley to assist migrant farmworkers with various social service and health needs in the region. In addition, CCV also began as a service provider by assisting residents of the Imperial Valley in gaining citizenship through naturalization preparation classes (Nuñez-Alvarez and Ardón, 2008). Later, the organization began to widen its focus to include topics such as environmental health, education, nutrition, and asthma awareness. Through its work in asthma prevention and pesticide awareness, the focus of CCV has continued to evolve and now includes advocacy, civic engagement, resident education, and participation in "citizen science" research studies.

CCV is a community-based organization located in Brawley, California that advocates for underserved agricultural communities, like the Imperial Valley, by way of *civic engagement, advocacy, policy, and education*. CCV involves itself in environmental justice issues throughout California. CCV recognizes that poor communities of color historically and currently are systematically left out of the environmental decision making process and are therefore not given a voice in the decisions that often affect them

directly (Bullard, 1994). They strive to enhance civic engagement between the community members and local officials to implement an effective, healthy, sustainable, social, and economic environment for its community. CCV's motto is, "Informed people build healthy communities." Civic engagement is at the heart of CCV's work since its inception. CCV's goal is putting knowledge in the hands of people who are most affected by pollution, yet politically least capable of tackling a system that isn't built to support them to begin with. Prior to the development of the Identifying Violations Affecting Neighborhoods (IVAN), residents did not know how to report environmental concerns, and when reported to the CalEPA and other local authorities they would often go unaddressed, reducing monitoring and enforcement in the area (Jatkar and London, 2015). CCV insisted that it was the responsibility of these government agencies to uphold the law, not just in wealthy white communities, but also in agricultural communities of color.

In November 2007, five years before the one I attended, the first Toxic Bus Tour took place in the Imperial Valley. Made up of a small group of residents and a handful of Department of Toxic Substances Control (DTSC) employees led by CCV, the purpose of this trip was to visit multiple environmental hazard sites located throughout the region, *as identified by concerned community members*—as opposed to “experts” from outside the communities. After the tour, participants attended a workshop to collaborate and develop solutions to address environmental hazards affecting their lives. Between 2007-2010 a total of eight Toxic Bus Tours and workshops took place across California as part of the 2007 Environmental Justice Enforcement Initiative (Vivanco, 2011). A direct outcome of

these collaborations was the conception of the Imperial Vision Action Network, what is now called the Identifying Violations Affecting Neighborhoods (IVAN) model.

According to the IVAN website (ivan-imperial.org), IVAN is described as an “environmental monitoring system that connects the community with real people that can help solve local environmental problems.” There are two key components of the IVAN model: an environmental reporting website tool and the Environmental Justice Enforcement Taskforce (IVAN Taskforce) that meets monthly to discuss reports submitted by residents in a public forum.

The IVAN environmental reporting website is a crowdsourcing tool that allows residents to report and monitor the progress of environmental complaints submitted in their community. Originally, the reporting system was stored by the open source mapping technology called Ushahidi, a software originally created and utilized for mapping reports of violence in Kenya. Now, however, the IVAN reporting system is housed in its own custom website with the Google Earth mapping system embedded in it. Google Earth’s mapping system displays in real-time the locations of where the environmental concerns occurred. The mapping provides the public with a visual representation of the complaints submitted on the website that they can easily refer to. The IVAN website is different from the government complaint system in that all environmental reports submitted on the website are publicly archived. This provides a certain level of transparency to the environmental reporting process conducted by environmental agencies. It is also a great resource for residents interested in receiving daily alerts to environmental concerns in their community.

Although the IVAN website is a great resource for residents, the IVAN taskforce is the body of citizens and government working behind the scenes to work collaboratively to resolve the issues reported. CCV has been able to increase communication across multiple institutions (listed below) through the use of the IVAN Taskforce. The IVAN Taskforce meetings act as a platform for systematic problem solving, while addressing individual environmental concerns. There is regular attendance from the Imperial County Certified Unified Program Agency-Department of Toxic Substances (CUPA-DTSC), the Air Resource Board (ARB), the Agricultural Commissioner's Office, the Department of Pesticide Regulations, and the Water Resource Board, just to name a few. This is one way that CCV mobilizes people on a monthly basis to discuss the most important environmental concerns for both the community and environmental agencies. The IVAN model has been successful in creating a platform for bringing together two groups that are typically in conflict with each other to move the bar forward in protecting both people and planet.

The IVAN model thus far has played a significant role in restructuring the process by which disadvantaged communities report cases of toxicity, and hold government bodies accountable for the environmental burdens these communities face. The development and implementation of the IVAN model marks a turning point in the environmental reporting and monitoring in underserved communities. The IVAN model is reshaping how vulnerable communities protect, and in the process, reclaim their environment that has been systematically disregarded as a sacrifice zone. This community-based environmental monitoring system is built on the idea "that *residents*

are the most knowledgeable about their environment and therefore should have a place at the table with regulation agencies” (About IVAN, 2018). CCV initially launched the community-based environmental reporting and monitoring system in response to the lack of environmental enforcement by government agencies in the Imperial Valley, and residents and government agencies are still utilizing IVAN today. Since the inception of the IVAN model, it has expanded to seven additional communities in California, including Fresno, King and Kern Counties, Eastern Coachella Valley, the neighborhood of Wilmington, and Bayview Hunters Point. Over the years IVAN has greatly benefited both residents and government agencies in California by increasing the transparency of the environmental regulation process and enhanced collaboration and communication between both parties (Jatkar and London, 2015).

**Epistemology/Methodology/Method: Living in Between Epistemological,
Methodological and Method Approaches to Plurality, Performativity, and Inclusion
in the Environmental Reporting Process**

“Thus, borderland-mestizaje feminism is traversing not among multiple epistemologies, theories, and methodologies but *in between* them. It is in this *in-between* space we inhabit where we ‘can negotiate an empowering racial, gendered, working-class, political terrain we also call mestizaje’” (Saavedra & Nymark, 2008; 261).

In order to co-create a collaborative effort that was not only focused on addressing environmental injustices in the Imperial Valley, but also through praxis sought to shift the power dynamics that construct an unjust world require the IVAN Community Development Project to challenge dominant western constructions of knowledge. In line with the Identifying Violations Affecting Neighborhood’s (IVAN) philosophy “that residents are the most knowledgeable about their environment and therefore should have a place at the table with regulation agencies” (About IVAN, 2018), the IVAN Community Development Project focused on supporting residents’ efforts to speak for themselves in environmental reporting process that ultimately affects where they live, work, and play. IVAN itself is a community-based environmental reporting and monitoring system that has created a platform where citizens and experts can interact with each other to address environmental concerns in the Imperial Valley. The IVAN Community Development Project focused on building that capacity for residents to further engage in this decision-making process. It is important to clarify that the IVAN

Community Development Project is the focus of this paper, which encompasses the IVAN reporting network, meaning that while the IVAN Community Development Project helped improve the IVAN reporting network and guidebook, it did not create the IVAN reporting network.

Therefore, the IVAN Community Development Project engaged in complementary epistemological frameworks that guided the methodology and methods used to develop the guidebook that included, but wasn't limited to, Postmodern Feminism, Participatory Action Research (PAR), and Chicana Mestizaje-Feminism, which was applied to the reflection of the experience after the project's completion. Postmodern Feminism and PAR were used by myself and CCV; Chicana Mestizaje-Feminism was applied solely by myself after the project's end; however it was the experience of working with CCV that allowed me to use Chicana Mestizaje-Feminism in the first place. When I refer to the IVAN Community Development Project I'm referring to my Master's project. However it's important to emphasize that the IVAN Community Development Project doesn't exclusively belong to me. The complexity of the project's co-ownership is what allowed this project to thrive and be beneficial to all those involved. Therefore I will not be delineating who said what, as the information, as per the structure of the theories, belong to all involved.

These epistemologies, methodologies, and methods challenged positivist social science research stances on how individuals understand the world: what is knowledge, how is knowledge produced, and who can have knowledge. It is important to mention that there are as many versions of feminism as there are of PAR, and that for the IVAN

Community Development Project, it was essential to draw upon specific researchers within both of these fields to serve the needs of this project. Both frameworks have similar theoretical and practical concerns, such as a focus on participatory inquiry, the importance of subjugated knowledge, and political action that has been used together in social research (Maguire, 1987; Gatenby & Humphries, 2000). By drawing upon multiple theories of knowledge that reject positivism, CCV and I were able to ground ourselves within the social-political context in which we were creating the guidebook.

Both the feminist and PAR perspectives of social research challenge the unequal power dynamics (reflective of patriarchal, imperialist, white supremacy, and capitalist system) that positivist empirical research creates by not acknowledging the paradigms in which it constructs knowledge. Postmodern feminism has identified several problematic positivist research structures that stem from a system of domination – subject-object split, rational-emotional dualism, and the falsehood of a universal truth (Hesse-Biber, Leavy & Yaiser, 2004). PAR's participatory epistemology echoes those ideas of feminist theory, in addition to claiming that theory cannot be disembodied from practice (Brydon-Miller, Greenwood & Maguire, 2003; Huang, 2010). The merging of both feminism and PAR has been valuable to qualitative researchers that are interested in continually re-envisioning how and who is part of the inquiry process (Maguire, 1987). In each of the following sections I explain how Feminism and PAR epistemology, methodology, and methods are essential for addressing environmental injustice in the Imperil Valley.

Participation: Nos/otras beyond the subject-subject relationship

The positivist world-view creates a subject-object split that privileges the researcher/experts as the knower and validator of information, while the researched/citizen essentially becomes an object to be known with no agency in the inquiry process. The positivist mode of constructing knowledge within academia is further extended into how policy is created, where it is dominantly shaped by experts and leaving citizens out of the process (Fischer, 2000). Therefore, who, why, and how knowledge can be produced is predominantly limited to professionals elites. Historically, social research grounded in western epistemologies has and continues to be a means of colonizing knowledge and objectifying the other (Denzin, Lincoln & Smith, 2008). By adopting the subject-object split, academics intentionally or unintentionally reinforce systems of oppression through an extractive, unequal production of knowledge that disempowers the most vulnerable populations of individuals. This is why “participation is a political as well as an epistemological imperative which affirms that basic human rights of persons to contribute to decisions which affect them and to knowledge which concerns them and purports to be about them” (Reason & Torbert, 2001, p. 10). The IVAN Community Development Project focused on a more participatory form of creating knowledge that would include the individuals that would be most concerned and that would benefit most from the work.

According to Hesse-Biber, Leavy, and Yaiser, “Positivists traditionally *seek* knowledge in a narrow self-contained way, whereas feminists aim at *developing*

knowledge *with* their research subjects who bring their own experiential knowledge, concerns, and emotions to the project” (2004, p. 12). In other words, postmodern feminist research re-conceptualizes the researcher/researched and expert/citizen relationship by incorporating methodologies and methods that include participants’ subjectivity in the research process. Thus, everyone produces knowledge and should be included in the production of knowledge. The feminist perspective of developing knowledge *with* participants theoretically allows more voices to be included in the research process.

Similar to feminist epistemology, PAR’s participatory epistemology also breaks away from positivist orientations of generating knowledge by emphasizing research *with* participants and not simply *about* participants, which is customary of qualitative social research (Huang, 2010). PAR’s participatory epistemology also maintains that authentic participation (with, for, and by) is essential to producing critical emancipatory knowledge (Fals-Borda and Rahman, 1991; Reason, 1994). It is not enough to passively include others in the inquiry process; they need to be able to take ownership and guide the knowledge that is being created. According to John Gaventa, “participatory research seeks to break down the distinctions between the researchers and the researched and the subjects and objects of knowledge production through participation of the people-for-themselves in the attainment of creation of knowledge” (Gaventa, 1991, p. 121). In other words, the role of the traditional academic researcher shifts dramatically from an elite expert to a facilitator or co-inquirer that participates collectively in the knowledge production system. According to Hilary Bradbury Huang, “action research represents a *transformative orientation to knowledge creation in that action researchers seek to take*

knowledge production beyond the gate-keeping of professional knowledge makers” (2010, p. 93). PAR transforms that subject-object relationship into a subject-subject relationship where all those involved become “organic intellectuals of the working classes without creating permanent hierarches” (Fals-Borda, 1991, p. 5). Ideally, the subject-subject relationship should establish a more democratic transformative inquiry process that is centered on participation.

By embracing a theory of knowledge that re-conceptualizes the subject-object binary, it opens up space to radically re-imagine methodologically how, I, a social science graduate student, and Comite Civico del Valle, a community-based organization both interested in the environmental health of our community of the Imperial Valley, could collaboratively create something that would empower all those involved in the process. By adopting a subject-subject relationship or partnership, I, along with Comite Civico de Valle, intentionally shifted the knowledge/power relationship and established a more horizontal mode of constructing a project.. Each party brought specific experiential and academically trained knowledge to the table allowing for collective learning to happen. The forming of the Community Advisory Panel (CAP) pushed this concept further by creating additional space for residents interested in the IVAN Community Development Project to get involved in the process. The nuances that evolved in the learning process were because of the participatory nature of bringing together different voices and perspectives.

With that said, at different stages of the IVAN Community Development Project became apparent to me that the co-researcher relationship (as described above) that was

established between CCV and me, as well as with the CAP, was more complex and couldn't be captured by simply describing us as a subject-object relationship shifted into a subject-subject relationship. Throughout the course of the IVAN Community Development Project I was able to recognize that the subject-subject relationship is an oversimplified way of conceptualizing this relationship. Underneath the subject-subject relationship still remained the conflict of dualistic ideologies (external-internal or us-them). Initially, by adopting these ideas of co-collaborators it allowed us to conceptually share responsibility throughout the course of the project, but it also homogenized us in a way that didn't allow for an analysis of our intersectional identities and how they shaped our participation. For example, although I'm a graduate student working on this project (academia), I am also a community organizer that felt very comfortable speaking from a community perspective at the IVAN Taskforce meetings (community). It was hard to draw a line between my role as an academic and as an active community member.

Similar to other Chicana feminists, I felt the tension of wearing multiple hats and felt stuck between activism and scholarship and between community and academia (Saavedra & Nymark, 2008). There seemed to be a constant ambivalence throughout the course of the IVAN Community Development Project, which opened me up to exploring additional participatory epistemologies that navigate these difficult methodological terrains. How do co-conspirators create a project where their positionalities are explored pluralistically? How do co-conspirators navigate their subjectivity? How does one emphasize their academic versus community organizer role or vice versa? These

questions are important for all those participating to contemplate, not just for the traditional academic to contemplate.

While contemplating these questions I was introduced to Borderland-Mestizaje Feminism (Saavedra & Nymark, 2008) that emerged out of the amazing work of Chicana feminism and the substantial work of Gloria Anzaldúa that furthers advances feminist critiques of dualistic modes of thinking (community/academia) by exploring the complexities of her borderland identity. Much of her work allowed me to push through some of the most difficult aspects about the PAR process, such as discussing the subject-subject relationship between CCV and me, and CAP. Anzaldúa's theory of "Nos/otras" made me rethink the subject-subject participatory relations used in PAR that can erase differences. Similar to Anzaldúa and other Chicana Feminists, I intentionally do not italicize words in Spanish as to not denormalize them. In Anzaldúa's book, *Interviews/Entrevista* (2000) she states,

We are mutually complicitous—us and them, white and colored, straight and queer, Christian and Jew, self and Other, oppressor and oppressed. We all of us find ourselves in the position of being simultaneously insider/outsider. The Spanish word 'nosotras' means 'us.' In theorizing insider/outsider I write the word with a slash between nos (us) and otras (others). Today the division between the majority of 'us' and 'them' is still intact. This country does not want to acknowledge its walls or limits, the places some people are stopped or stop themselves, the lines they aren't allowed to cross...[But] the future belongs to those who cultivate cultural sensitivities to differences and who use these abilities

to forge a hybrid consciousness that transcends the ‘us’ vs. ‘them’ mentality and will carry us into a *nosotras* position, bridging the extremes of our cultural realities (as cited in Keating, 2006, p. 9-10).

By writing *Nos/otras* with a slash between it, she is emphasizing that *us/them* can exist within the *we*; without losing our original identities. Rather, we have just transformed into something *new*—what she calls the *Mestizaje*. The participatory inquiry process that shifts the subject-object relations (*us/them*) into a subject-subject relationship (*we*) is messy, but I think conceptualizing this relationship as *Nos/otras* provides space to explore the contradictions that can arise in the inquiry process. When traditional academics engage with community organizers in a participatory process, two worlds are clashing with each other. By erasing differences in the participatory process there is an assumption that everyone is in the same situation and moving in the same direction, which isn’t the case.

Unfortunately, we weren’t able to explore Anzaldúa’s *Nos/otras* theory within the time frame of the IVAN Community Development Project, but in reflecting on the participatory inquiry process, it was helpful to discuss the subject-subject relationship that appeared in the course of the IVAN Community Development Project, using the terms *Nos/otras* to intentionally reflect the complexity of the participatory inquiry (as described more detail in the next chapter). The subject-subject relationship unfolded organically in the participatory process, which led ultimately to the inclusion of more individuals being involved in the process of creating a community of inquiry.

Embodied intellectual Practice: Mente y Cuerpo/Mind and Body

By grounding the IVAN Community Development Project in feminist and PAR epistemologies, we are also challenging the rational-emotional dualism that positivism creates by claiming that it's knowledge is *objective* and *value-neutral*. Similar to the object-subject split, the rational-emotional dualism fragments the relationship that individuals can have with the inquiry process because it creates the illusion that one is outside of what they are studying. Another way of describing the rational-emotional dualism is the disembodiment of the mind from the body, and is reflective in empirical positivist research (Reason, 1994). This creates the falsehood that scientific research is done in a vacuum and is essentially apolitical, ahistorical, and doesn't contain any personal bias. This, in combination with the subject-object split, creates scientific inquiry that isn't critical of it's own positionality within the knowledge it is creating.

Both epistemologies acknowledge that no researcher can be objective; it is never a "view from nowhere," but rather a "view from somewhere" (Hesse-Biber et al., 2004, p. 12). By rejecting the rational-emotional dualism, one can pursue knowledge creation that claims subjectivity and actively engages in its pursuit for knowledge. Action researchers "embrace the notion of knowledge as socially constructed and, recognizing that all research is embedded within a system of value and promotes some model of human interaction, we commit ourselves to a form of research which challenges *unjust* and *undemocratic* economic, social and political systems and practices" (Brydon-Miller et al., 2003, p. 11). In doing so, feminist and participatory epistemologies are claiming that

knowledge production is experienced in connection to the mind (rational) and body (emotional) and separating the two is counter productive to the research process. By reintroducing the *el cuerpo* (body) to the center of theory and practice, knowledge can be constructed from the perspective of the human experience, which is counter to the sanctity of positivist research (Saavedra & Nymark, 2008).

Rejecting the positivist assumption that scientific knowledge can be *objective* and *value-neutral* dramatically shifts one's perception of popular knowledge (that is often rejected and marginalized) and the role that dominant scientific research plays in constructing one's life. This realization can demystify the roles of the academic/expert, while empowering others to actively construct knowledge that benefits them. There are three dimensions to participatory research that challenge the power relationship of the rational-emotional dualism. These are the creation of knowledge, consciousness, and action, all three of which collectively create a process of empowerment and social change (Gaventa & Cornwall, 2001). Therefore, PAR is not just a means of creating knowledge, but also becomes "a tool for the education and development of consciousness as well as mobilization for action" (Garventa, 1991, p. 121-122). The focus on conscious raising and action is a significant part of action research because it emphasizes peoples' lived experiences and fosters an intimate connection with understanding the world around them.

Therefore, PAR is also focused on doing research that serves a purpose. According to Peter Reason, "the practice of action research is not a value-free process; it raises questions of values, morals, ethics, and is intended to contribute to the flourishing

of human persons, communities, and the ecosystems of which we are part” (2006, p. 192). In other words, PAR is focused on working with people and communities to solve problems that are affecting their lives. The IVAN Community Development Project was developed to create a user-friendly guidebook and educational material to help assist residents in being able to report environmental concerns, which can be a confusing and intimidating process. This was a concern identified by Comité Civico del Valle and I, and carried out collaboratively with the Community Advisory Panel (CAP). The CAP focused on addressing the question: “What information does one need to successfully report an environmental concern?” This led to reviewing the IVAN website, having everyone go through the process of submitting a report and sharing their experience, and attending IVAN Taskforce meetings. All of the information that was collected through this research process informed how the guidebook was structured and what information would be included.

Another component of PAR is that it is an emergent process that is experimental and action oriented. It is described as a process that “emerges over time in an evolutionary and developmental process, as individuals learn skills of inquiry, as communities of inquiry develop, as understandings of the issue deepens, and as practice grows and shifts changes over time” (Reason, 2006, p. 197). Although the IVAN Community Development Project unfolded over the time frame of a year and half, it went in unexpected directions. An example of an unexpected direction was when we decided to organize a community clean up in the process of creating the guidebook because there had been a significant amount of IVAN reports (identified in our research) submitted

about illegal dumping in a neighborhood located in El Centro, California that was not getting resolved in a timely manner, and the problem was growing worse for that neighborhood. Questions began to be posed by CAP members, including myself, about the limitations of the reporting system and the role of the IVAN Taskforce. At the IVAN Taskforce meeting we were told it was a conflict between the county and the city pointing fingers at each other and not determining whose responsibility it was to clean up the alleyways. As a result, CCV and I, along with some CAP members, responded by organizing a clean-up in the neighborhood where the IVAN reports were made to make it clear to the city that this was a serious issue and needed to be addressed. Although this event could be considered a clear example of “action” in the IVAN Community Development Project, action took many forms, such as meeting once a week to discuss these issues.

Another layer to this process is the creation of knowledge through action. Thus, action is not relative, but has meaning for those engaging in the process. This is described as the action-reflection cycle where, “the nature of action can be deepened, moving from practical-solving to more fundamental social transformation” (Gaventa & Cornwall, 2001, p. 76). It’s difficult to capture in words the action-reflection-action cycle that took place during the IVAN Community Development Project. Multiple layers of this process occurred simultaneously with CCV and I, as well as CAP, while working on the IVAN Community Development Project, and while also reacting to social-political issues that arose. This ranged from speaking at city council meetings about environmental issues to organizing other events, such as the community clean up. This particular community

clean up stemmed from the IVAN reports—that are publicly displayed and mapped on the IVAN website to gain information for the guidebook—that showed that there was a concentration of waste being illegally dumped in one specific neighborhood, and that knowledge led a subgroup of us to organize a community cleanup.

The transformation of consciousness that can come about amongst co-researchers through awareness building is essential to generating knowledge that benefits all those involved in the process. PAR emphasizes the social transformation for people's liberation, meaning, "people cannot be liberated by consciousness and knowledge other than their own" and that "it is absolutely essential that people develop their own endogenous consciousness-raising and knowledge generation" (Fals-Borda & Rahman, 1991, p. 14). The social learning that takes place in the PAR investigative process is both personal and collective. Paulo Freire's concept of *conscientization*, which is, "an act of knowing, through which a person is able to look critically at the world he/she lives in, and to reflect upon it" (1970, p.13) has influenced the construction of critical awareness building in PAR. Ideally, there should be self driven personal growth occurring into the action-reflection-action cycles otherwise its blind action.

In the context of the IVAN Community Development Project the process consciousness was liberating, debilitating, or both, depending on one's response to their newfound knowledge. At different points of the IVAN Community Development Project, especially in the beginning, this process consciousness developed the need to openly share frustration with the lack of concern from environmental protection agencies in our community. As one CAP member at a community meeting described it, "once you are

aware of the problem, you begin to see it everywhere.” They were referring to the agricultural burns, which is a common practice in the Imperial Valley and happened year-round, and affects the level of air quality. Some individuals began to question their “*asi es como es*” mentality, the mentality of “that’s just the way it is.” Beyond just identifying a problem, but learning how these problems failed to get resolved even when reports are filed, further complicated our pursuit of understanding how government agencies regulate environmental issues. The IVAN Community Development Project raised a lot of questions on a collective and personal level that weren’t resolved necessarily throughout the course of the project.

The interconnectedness of the participatory process between knowledge, action, and consciousness isn’t always clear because it is an ongoing learning process that goes beyond the work described here, but nonetheless brings together the rational and emotional allowed for this learning to happen in the first place. This emergent process is often described as a cycle between action-reflection-action. But after working on the IVAN Community Development Project, I personally feel this process is a lot more complex. How does one navigate a project collectively where individuals are processing information differently? When is it appreciated to move from action to reflection and back to action? To make sense of my experience as a co-researcher I continued to explore additional epistemologies of social change because the IVAN Community Development Project wasn’t moving necessarily in a circular (plan, action, observe, reflect) fashion as described by most action researchers (O’Brien, 1998).

This led me to Anzaldúa’s theory of *Conocimineto*, which is described as “...a

holistic epistemology that incorporates self-reflection, imagination, intuition, sensory experiences, rational thought, outward-directed action, and social-justice concerns” (Keating, 2006, p. 10). So much of what is encompassed in Participatory Action Research (PAR)—creating subversive knowledge, raising consciousness, and political action in a participatory approach—creates both internal and external shifts for those participating, making it difficult to go through such cycles in a procedural fashion. In Anzaldúa’s essay “Now let us shift...the path of *conocimiento*...inner work, public acts,” (2002) she described *conocimiento* as a seven-stage journey—*el arrebato*, *Nepantla*, *Coatlicue*, the call, putting *Coyolxauhqui* together, the blow up, and shifting realities—all of which are individual experiences in their pursuit of knowledge. This appears to be more reflective of my experience engaging in PAR as well as the experiences of others that participated. The seven stages are described below.

- *El arrebato...rupture, fragmentation...an ending, a beginning* is the first stage of *conocimientos* and it comes about because of a shift in one’s reality that no longer allows them to stay in that state of mind. “Cada [arrebato] turns your world upside down and cracks the walls of your reality, resulting in a great sense of loss, grief, and emptiness, leaving behind dreams, hopes and goals. You are no longer who you used to be...Exposed, naked, disorientated, wounded, uncertain, confused, and conflicted, you’re forced to live in *en la orilla*— a razor-shape edge that fragments you” (as cited in Reza-Lopez, Charles, and Reyes, 2014, p. 113.)

- *Nepantla...torn between ways*, the negotiation stage wherein the individual exists in an in-between space of transformation. In this stage, the reality before el arrebató clashes with the new reality, resulting in a new, hybrid identity where the contradictions of both realities can live with each other. According to Anzaldúa , “In Nepantla you are exposed, open to other perspectives, more readily able to access knowledge derived from inner feelings, imaginal states, and outer events, and to “see through” them with a mindful, holistic awareness. Seeing through human acts both individual and collective allows you to examine the ways you construct knowledge, identity, and reality and explore how some of your/others’ constructions violate other people’s way of knowing...” (2002, p. 544)
- *The Coatlicue state...desconocimiento and the cost of knowing*, caused by the overwhelming nature of Nepantla, leaves you in a paralyzed state of depression wherein the individual does not know how to move forward with this new information and insight, leading to the next step. “A paradox: the knowledge that exposes your fears can also remove them. Seeing through these cracks makes you uncomfortable because it reveals aspects of yourself you don’t want to own. Admitting your darker aspects allows you to break out of your self-imposed prison. But it will cost you... the pain of personal growth” (2002, p. 553).
- *The call... el compromiso...the crossing and conversation* refers to the

call to action that pulls the individual out of the depression in the Coatlicue state; rather than stay in that state, the individual feels the need to act. “Your passion motivates you to discover resources within yourself and in the world. It prompts you to take responsibility for consciously creating your life and becoming a fully functioning human being, a contributing member of all your communities, one worthy of self-respect and love (2002, p. 557). The stage of the call is similar to the PAR concept of praxis where the co-researchers individually and collectively are engaging in theory, action, and reflection.

- *Putting Coyolxauhqui to together...new personal and collective “stories”* is the stage that “represents the search for new metaphors to tell you what you need to know, how to connect and use the information gained, and, with intelligence, imagination, and grace, solve your problems and create intercultural communities” (2002, p. 563) This is the stage of reinvention; how we look at language, ideas of “we,” for example the subject-object relationship evolving into subject-subject with the understanding that the latter is the act of coming together and not erasing identities, this idea of which is encapsulated in the word *Nos/otras*.
- *The blow up... clash of realities* is the stage when your new stories (ex. *Nos/otras*) encounter a clash of resistance from dominant ways of thinking that might cause one to move through additional stages of *arrebato*, *Nepantla*, etc. “You think you’ve made progress, gained a new

awareness, found a new version of reality, created a workable story, fulfilled an obligation, and followed your own conscience. But when you cast to the world what you've created and put your ideals into action, the contradictions explode in your face. Your story fails the reality test" (2000, p. 567).

- *Shifting realities...acting out the vision of spiritual activism* is the seventh stage transformation where you are aware of your consciousness and move through the world in an intentional and holistic way. Anzaldúa described this as a "Critical turning point of transformation, your shift realities, develop an ethical, compassionate strategy with which to negotiate conflict and difference within self and between others...find common ground by forming holistic alliances...enacting spiritual activism" (as cited in Reza-Lopez, Charles, and Reyes, 2014, p. 114).

At different points of the participatory research process I felt my co-inquirers and myself shifting between all seven stages. I would describe the subject-subject relationship as being in a constant state of *Nepantla*—living in an in between space of constant contradiction, being both academic/activist and us/them/we. There were moments of awareness and actions and then an inability to move forward (*The Coatlicue state*). CAP meetings sometimes had a clear focus and goal, and other times were better spent discussing, and sharing our individual ideas about the environmental issues or the IVAN website. The reflection-action cycle didn't move as cohesively as I imagined it would. This has been referred to as the "beauty of chaos" in the action research process: "We

never leave our corporeality; we are engaged in ongoing cycles of reflection and action in which our bodies and ourselves and those of our collaborators are not only present to us but essential to the very process of understanding messy. Pain, joy, fear, bravery, love, rage—all present in our action research lives” (Brydon-Miller, 2003, p. 21-22). Each individual processed this work in different ways and the collective learning process was complicated and will continue to evolve beyond the context of the IVAN Community Development Project.

No Universal Truth

Another fundamental objective for using a feminist informed PAR is the rejection of the positivist concept of a universal truth, and instead constructing knowledge from a multiplicity of perspectives or truths grounded in the experience of those participating. As for the concept of a universal truth, “there is no universal truth in a hierarchal society but rather partial and context-bound truths that can be accessed through relationships with our research participants” (Hesse-Biber et al., 2004, p. 14). The IVAN Community Development Project’s purpose and meaning comes from the perspective of the co-researchers’ experiences and individuals who live in the Imperial Valley. Therefore, “Truths become products of a process in which people come together to share experiences through a dynamic process of action, reflection and collective investigation. At the same time, they remain firmly rooted in participants’ own conceptual worlds and in the interaction between them” (Gaventa & Cornwall, 2001, p. 74). In the context of the IVAN Community Development Project there were many perspectives that were

interacting with each other, some participants drew upon their experience living in different areas, including growing up in Imperial Valley, while also connected to their own professional and academically trained knowledge. It's important to emphasize that although everyone who participated was a resident of the Imperial Valley at the time, there were differences in education level and background, economic status, background in community organizing, age, and language.

One of the objectives of the guidebook was to bring to the surface knowledge that often goes dismissed in the environmental decision-making process. "Action researchers argue that their work is based on ways of knowing that go beyond the orthodox empirical and rational Western epistemology and that start from a relationship between self and other, through participation and intuition" (Reason, 2006, p. 195). In doing this, partnering with CCV and CAP, the IVAN Community Development Project started from the perspective of concerned residents and community organizers and not environmental regulatory agencies, which are the dominant 'regime of truth' in the environmental decision making process. Both epistemologies are focused on retrieving Michel Foucault's concept of subjugated knowledge, which is the term generally used to describe the kind of knowledge within the power/knowledge relationship that dominant discourse considers to be illegitimate (Foucault, 1980, p. 81). By creating the IVAN Community Development Project from a diversity of perspectives (truths) grounded in the experience of residents, it allowed for us to create something that would be useful in addressing the unequal power dynamic that is imbedded in the environmental regulation process.

The guidebook itself is also an extension of the philosophy that there is no universal truth, because it isn't intended to be an all-encompassing document, but instead a tool to encourage other residents to advocate for themselves and continue asking questions to develop their own understanding of the situation. We encourage residents to question the system of environmental reporting and monitoring that IVAN is an extension of. Therefore, It was agreed upon that the guidebook would be a living documents that would evolve and be updated by different residents to address new questions and concerns that arise in the open-ended inquiry process.

There is also the acknowledgment that the IVAN Community Development Project does not capture all of Imperial Valley residents' struggles with environmental issues and is limited to our own understanding of the world and the issue at hand. Gloria Anzaldúa states, "Your identity is a filtering screen limiting your awareness to a fraction of your reality. What you are or your culture believes to be true is provisional and depends on a specific perspective. What your eyes, ears and other physical senses perceives is not the whole picture but one determined by our core beliefs and prevailing societal assumptions" (2002, p. 542). There are many blindspots when it comes to research, and it is important to adapt and change when they become known. One of those blindspots could take the form of a perspective that was not considered. The IVAN Community Development Project can be viewed as an attempt to bring in diverse perspectives to avoid exclusion, but that is only one small piece of a larger puzzle.

Since the people participating and their values are at the heart of the inquire process it is important that co-researchers emphasize not just *how* they conduct their

research but also *why* they conduct their research (Hesse-Biber et al., 2004, p. 13). The disclosing of information is essential to providing substance and transparency to the research process. This is also another layer of engaging in decolonizing methodologies by incorporating the co-researcher as a living part of the study (Lincoln & González y González, 2008). For myself, I was interested in this project because I grew up in Calexico, California, a border town (described in the previous chapter) where air quality and other environmental toxins continues to be a concern for my family and friends, and I wanted to do something to address this problem. I'm deeply concerned about the social and environmental injustice and inequities that poor communities of color like the Imperial Valley disproportionately face. I couldn't imagine creating a project or thesis, while attending graduate school, that wasn't going to benefit my community in some way or another. Everyone who participated has some interest in being a part of a project that would address the concern they have about the environmental quality of the Imperial Valley. This was captured in some CAP members' personal letter to the readers in the guidebook expressing their one individual perspective about why the guidebook is important to them.

Final Thoughts

The IVAN Development Project set out to utilize epistemologies and methodologies that disrupt the hierarchal modes of knowledge production that continue to reinforce systems of domination that leave poor communities of color and other marginalized groups out of the environmental decision making process. In order to create

the IVAN Community Development Project that was participatory, awareness raising, and allowed for political action in the process required us to push the boundaries of what social research can be. “One might say that there are two faces to action research: the practical question of how we engage with a group of people in service of doing things they care about better, and the utopian project of helping bring forth a very different kind of world, one characterized by inquiring intelligence in participation with others” (Reason, 2006, p. 198). This project views action research in these two ways, and holds true in trying to create a positive, social change. Social scientists need to push out of their comfort zone when it comes to research; even feminist and PAR, which are already marginalized within academia, needs to be further broken down by embracing more radical forms of decolonizing epistemologies and methodologies such as Anzaldúa’s theory of Mestizaje. Gaile S. Cannella and Kathryn Manueltio (2008) argue that social science should

- (a) Reveal and actively challenge social systems, discourses, and institutions that are oppressive and that perpetuate injustice (even if those systems are represented in disciplinary knowledge) and explore ways of making those systems obviously visible in society; (b) support knowledge that has been discredited by dominant power orientations in ways that are transformative (rather than simply revealing); and (c) construct activist conceptualizations of research that are critical and multiple in ways that are transparent, reflective and collaborative.

It is between these multiple methodologies and methods that we will be able to come up with projects and research that weave together new ways of being and thinking in the world. By including the co-researchers in the process, we are validating our knowledge, which is essential to social justice work. The knowledge production process in and of itself becomes a means of dismantling the power dynamics that positivist scientific epistemology creates. Furthermore, working from the perspective of the marginalized, in this circumstance the residents of the Imperial Valley that are faced with the most environmental and health issues, we are able to address research questions that only their knowledge could assist in answering.

In the book *Joyful Militancy*, the authors speak of collective power, and the “sense that things are different, that *we* are different, that a more capable ‘we’ is forming that didn’t exist before.” This is referred to as “joyful transformation,” which entails a new conception of militancy. The authors go on to explain that “to be militant about joy means being attuned to situations or relationships and learning how to participate in and support the transformation rather than directing or controlling it.” In its conception, PAR was considered to be a mobilizing act of militancy, a “creative social-political force” that could reconstruct what the State could be (Fals-Borda & Rahman, 1991, p. 6). PAR is a transformative process that can push the boundaries of both academics and community organizers and how we can collectively recreate a world that is more just. In the same vein, participatory action research can be considered a joyful form of militancy.

Methods and Process: Building Capacity with the IVAN Community Development Project

In this section I provide a more detailed description of what the participatory action research process meant in the context of the IVAN Community Development Project by elaborating on the participatory methods, such as community meetings, that were used to develop the guidebook and the decisions that were made, providing more insight and transparency in the research process. How were choices made? Why did Comité Civico del Valle (CCV) and I choose to create an IVAN guidebook? What role did the Community Advisory Panel (CAP) play? In addition to the challenges this project faced. The key to developing a good Participatory Action Research project is awareness and transparency in the decisions that are made by all parties involved in the process (Reason, 2006).

Beginning a PAR Project: A Negotiation of Roles

I decided to include a summary of the initial interactions and collaborations that took place prior to the “official” starting point of the IVAN Community Development Project to be able to draw attention to the important work that happens outside the confines of a specific project. This provides insight into the relationship building that happens and made way for a project where CCV and I could collectively together. PAR that is trying to avoid colonizing practices, which can occur if researchers are not critical

of the process, emphasizes the need for relationship building that is used to establish participation (De Los Santos Upton, 2017). The beauty of participatory action projects is that they require reflectivity and adaptation from participating prior to the “official” start of the project.

I first became aware of CCV as a junior studying Psychology and Environmental Studies at San Diego State University interested in social and environmental issues. At the time I would travel regularly to my hometown of Calexico, located in the Imperial Valley, to attend CCV’s events as a community member. I attended the 2012 Toxic Bus Tour, which focused on educating both the public and government officials about the most environmentally-polluted areas in Imperial Valley, and their annual Environmental Health Leadership Summit (EHLS) that invited academics, environmental agencies, activists, and community members to discuss the most important social and environmental justice issues, such as air pollution and the Salton Sea. Between 2011-2014, I worked directly and indirectly with CCV while going to school. My early involvement with CCV opened up the doors to me being welcomed into the organization and be given the opportunity to work with them.

It wasn’t until the winter of 2015 that I officially began meeting with Luis Olmedo, the Executive Director of CCV, and other staff members to determine if there was an opportunity for a graduate student like myself to support their current efforts as an organization. I also began at the time working as a remote volunteer technical writer and a regular member on their IVAN Taskforce that met once a month to review environmental reports submitted to the IVAN website. These positions led to Mr. Olmedo

and me to further discuss the possibilities of developing a project that would be beneficial to the organization, but also allow me to complete my graduate program. It was important to us to begin this (at the time, potential) project from the position of equal collaborators, allowing both parties to provide sufficient input early on as possible in the project's formation. It was also important for us to be transparent in our expectations going forward, and foster a relationship where we could work collaboratively.

Early on in the development of the project Mr. Olmedo, and Humberto Lugo, the IVAN Air Community and Environment Policy Advocate, shaped the direction of the project, identifying the needs of CCV and educating me on the most pressing environmental issues happening in the Imperial Valley. During one of my initial visits to the CCV office Mr. Lugo invited me to join him on one of his many impromptu air monitoring runs to make sure that all forty Community Air Monitoring Network (CAMN) monitors spread across Imperial Valley were running smoothly. The air monitor that was causing trouble that day was located near the southern tip of the Salton Sea, about 20 miles from the CCV office, which is located in Brawley, California. Mr. Lugo took the back roads, being very familiar with the area and the fastest routes to get to the air monitoring sites. We drove past miles and miles of fields as he talked to me about his favorite music and how he got involved with CCV. I was very happy to hear that he is a lover of punk music, being a lover of this genre myself. All of a sudden the scenery turned from fields into miles and miles of feedlots. I asked him what road we were on. I was taken aback to see such a large feedlot in the Imperial Valley. He informed me that we were near Brandt Cattle, located on Brandt Rd and that it is the largest Concentrated

Animal Feeding Operation (CAFO) in the Valley. He explained that it was the same family that owned the Brawley Beef plant. He then went on to give me an in depth history of the beef industry in the Valley. He explained how Brawley Beef changed hands in 2006 and then became National Beef, and now is back to its original owners and has been renamed One World Beef. One World Beef at the time was trying to reopen the beef processing plant for business after closing in 2014 for a variety reasons including violating the Clean Water Act for dumping raw sewage into the city water treatment plant.

At this stage of forming the project, I recognized that although I considered myself to be very aware of environmental justice issues in Imperial Valley and grew up in the area, I didn't currently live in the area and lacked the years of intimate knowledge that can only come from the lived experience of working daily on environmental and social justice issues at the grassroots level. I approached this project initially from a more academic lens, whereas Mr. Olmedo and Mr. Lugo came from community-organizing stances. We both had enough of a crossover of academic and homegrown knowledge that allowed us to transcend the differences in background. Little did I know, approximately one year later, during my time working out of the CCV office space, I would be speaking on behalf of CCV at a Brawley City Council meeting demanding that the city council members, One World Beef, and California Water Resource Board not to repeat history by failing to enforce environmental law and compromise public health and water quality for the sake of profit.

Another key aspect of developing this project was making sure that my methodology as an academic researcher and their work as an organization complemented each other. I was aware that CCV had a history of doing citizen science projects in partnership with academic institutions and deployed a methodology that embraced a horizontal development of knowledge. Both of CCV's research projects, the Respira Sano Project and the Community Air Monitoring Network (CAMN), are structured to facilitate a process of co-researchers benefiting both the community and the academic institution participating in the study. CCV is constantly publishing research and attending research conferences to discuss the issues that are most important to them, utilizing their community research to support environmental justice policy. Since PAR in practice is so vast and looks different depending on the project, organization, researchers, and other factors that are involved in structuring this type of project, it was important to get a sense of how PAR has worked for CCV in the past. Having the opportunity to observe and participate in CAMN community meetings before beginning the IVAN Community Development Project gave me an idea of how participatory action projects have been structured thus far between CCV and other academic researchers.

The months of conversations, meetings, and volunteering with CCV in different capacities prior to the project development were essential to creating a strong relationship where there could be space to develop a PAR project. Although never directly stated, CCV staff needed to trust that as an academic researcher I was going to be able to uphold the values of CCV and work as a team player in the organization, and vice versa--that I

was going to be able to depend on them to be an active participant in a project that would ultimately lead to the completion of my Master's program.

Project Rationale: Why an IVAN Community Development Project?

The IVAN Community Development Project came to fruition for two main reasons: (1) the current directions of other CCV projects relating to IVAN helped shape the needs, and (2) the extensive amount of research already conducted on the IVAN program helped us identify clear areas of focus for continual improvement. First of all, after many conversations and having the opportunity to familiarize myself with CCV's current projects, Mr. Olmedo, Mr. Lugo, and myself came to the conclusion that there was a need to further develop aspects of the Identifying Violations Affecting Neighborhoods (IVAN) community-based environmental reporting and monitoring system. This came about because IVAN Online (the reporting and monitoring website) was going through a redesign to launch the Community Air Monitoring Network (CAMN) in the fall of 2016, which is a network of 40 air monitors located throughout Imperial Valley that measures Particulate Matter 10 and 2.5 (PM-10 and 2.5), and posts it in real time online (IVAN Air, 2018) where it is accessible to the public. There was a significant collaboration already happening between academics, community members, and CCV to complete this long-term project to develop a community-based air monitoring system, and to continue working on the foundational aspects of the IVAN model. By focusing my involvement with CCV on the environmental reporting and

monitoring side of the IVAN model, there would be equal growth along both ends of the evolving IVAN model.

Secondly, government agencies and public health researchers have extensively evaluated the potential of the IVAN model from both the perspective of community members and federal environmental regulation agencies. Three program evaluations have been completed by the California Department of Toxic Substances Control (Vivanco, 2011; Huynh, 2013; Watanabe, 2014), one qualitative analysis by the UC Davis Center for Regional Change (Jatkar & London, 2015), and a performance review by Technical Assistance Service for Communities (2016), all of which provide extensive comments about the strengths and weaknesses of, and recommendations to improve, the current IVAN model. The main method used in all five studies was phone and in person interviews conducted with government officials from different branches of the California EPA, founders of IVAN, CCV employees, and community members involved with IVAN.

The first evaluation, conducted on IVAN during its first year of its creation, identified that there was a limited number of residents that were engaging with the website, and that this might be due to the lack of awareness of the website, lack of technological accessibility, and lack of technological knowledge that was preventing residents to use IVAN Online (Vivanco, 2011, P. 6). Although this continues to be an obstacle, a second evaluation (2013) concluded that the struggle for IVAN to reach its full user potential was reflective of insufficient resources and funding to develop educational campaigns and host reporting workshops (p. 7). This is an important

distinction because the IVAN model functions with minimal funding and any other additional development, such as an education campaign that would require additional grant funding. Over the years, the user base has grown in Imperial Valley, but the quality of reports still reflects a need to educate the public further on how to properly submit IVAN reports. According to the evaluation by Shrayas Jatkari and Jonathan London (2015), one of the main challenges that IVAN is experiencing is that “community residents do not always have the technical capacity to provide reports with the level of detail needed by public agencies,” and therefore they need to “provide additional training for community members to build their skills and capacity to participate in the program effectively.” Overall, after reviewing these evaluations there seemed to be a clear need to create community outreach and education material to provide residents with the tools to better utilize IVAN. This became the focus of the IVAN Community Development Project.

As beneficial as these evaluations were to further the development of the IVAN program, CCV, along with Imperial Valley residents, have been financially limited in being able to successfully implement them. My work began with assisting CCV in co-writing a CalEPA Environmental Justice Small Grant to fund the IVAN Community Development Project. The IVAN Community Development Project was awarded the 2017 CalEPA Environmental Justice Small Grant of \$40,000, which funded the creation of the community guidebook and additional technical support development of the IVAN website.

Nos/otras: Participatory Action Research

The IVAN Community Development Project was designed to co-facilitate a learning experience where residents from the Imperial Valley could participate in the development of an IVAN community guidebook. This meant the collaboration was occurring at multiple levels between CCV, CAP, and myself. I use the term Nos/otras to describe all the co-researchers (CCV, CAP, and myself) that participated in this project; the term will be used interchangeably with “we” and “our”. The term Nos/otras was not used by CAP or CCV during the course of the project, but in my analysis of the IVAN Community Development Project, Nos/otras seemed appropriate in capturing and describing this complex relationship. The intent of the IVAN Community Development Project was to create resources that were generated *by* residents *for* residents in the Imperial Valley. Nos/otras vision wasn’t to simply to produce a guidebook for the community, but instead have the IVAN Community Development Project be part of a larger transformative process where residents could actively engage in the process. The hope was that by allowing more people to be involved in the process it would empower residents’ building on their knowledge and taking ownership of the information created for the IVAN model. It was important to involve more people in the process, because it is limiting to simply partake in the reappropriation of knowledge created by others, but instead create an opportunity to really question dominant knowledge, power structures, and owning the knowledge that was gained throughout the process (Gaventa, 1991, p. 126). Therefore I will describe this project in two parts: the structure, formation, and

participatory action research process of the Community Advisory Panel (CAP), and the development of the community guidebook.

The CAP was made up of a group of ten residents, including myself, that met once a week for two hours over the course of three months. Meetings were held on Thursdays, beginning on March 16th, 2017 continuing until Friday, July 12th, 2017. These CAP meetings were spent brainstorming and addressing the overarching questions, *What information does one need to successfully report an environmental concern?* In addition, we also posed specific questions related to the guidebook, such as *what would an IVAN guidebook look like, and how do we create an IVAN guidebook?* More questions were generated throughout the research process and at times others took precedence over the ones above, depending on the direction of the action-reflection process. The residents that formed the CAP came from different geographic locations across the Imperial Valley; some had worked with CCV in the past, others for the first time; and some knew what IVAN was, while others were unfamiliar with the program. Participants were between the ages of 21-70 and varied in educational background and employment. CAP members were recruited by word of mouth. The only two requirements that CCV and I had when forming CAP was that they were residents, and didn't work for an environmental agency. There was a lot of back and forth between CCV and I about having or not having government involved and we decided that there were other ways to get feedback from environmental agencies (such as IVAN meetings) and that this project should be community focused and having a government presence might interfere in that process.

At the first meetings Nos/otras openly and collectively discussed dates, times, transportation, and locations of the community meetings in order to create a more inclusive process that would be flexible and meet everyone's needs. These meetings took place at different locations throughout the Imperial Valley, with everyone generously hosting at least one meeting at their homes or places of work. The changing locations allowed Nos/otras to create space outside the CCV office to explore these conversations, which wasn't originally planned, but turned out to be fruitful. Having different members take on the responsibility of hosting a meeting allowed us to share the responsibility amongst all those involved. All of the meetings involved the sharing of homemade food (ensalada de nopales, and garden rolls), beverages (infused mint water, tea, and coffee), and snacks (vegan pastries). The sharing of food provoked unexpected conversations about food justice and healthy eating (which wasn't the focus), but brought Nos/otras back to the discussion about environmental justice in the Imperial Valley that could go beyond the scope of the project.

The first three meetings focused on understanding the IVAN reporting and monitoring system, which was a continuing process. At the first meeting Mr. Lugo and I presented an overview of IVAN and the goal of the IVAN Development Community Project, while also leaving space for CAP members to influence the direction of the project. Mr. Lugo and I emphasized that we wouldn't be using these meetings to inundate the group with information, but instead we were more interested in facilitating group discussions and activities where everyone would be responsible for contributing to the learning process. The first three meetings opened up unexpected questions and concerns

about the user friendliness of the website design and the process by which reports are reviewed and processed. This required us to address these concerns before Nos/otras could move forward with creating an IVAN community guidebook that would ultimately lead residents to a website that is easy to navigate. This led Nos/otras to write explanatory text for the website, such as a frequently asked questions section, a thank you for submitting a report page, and other information to inform the user of the process that happens after a report is submitted. At this stage, a lot of Nos/otras energy focused on improving the functionality of the website.

There were also a lot of personal conversations about individual experiences around environmental toxins and the social, economic, and political struggle and barriers that interfered with getting these problems solved. At this point in the project, there seemed to be so much about the reporting process that was unclear and required more understanding and research from all parties involved. This led to independent research sessions with individual CAP members submitting a report and going through the process themselves and reporting back to the group. Several CAP members spent time with me driving around Imperial Valley taking pictures of environmental violations and attending IVAN Taskforce meetings. All this led to discussions about the pros and cons of the IVAN website and the IVAN taskforce. There seemed to be a need to focus some of Nos/otras attention on updating the website and understanding the reporting process, so that the guidebook would have a bigger impact for those that would be using it.

At the third and fourth CAP meeting, everyone broke into groups of two and reviewed specific categories of environmental concerns (air, water, pesticide, toxic

substances and solid waste) and reported back to the group about their area of concentration, causing a brief shift in the overall focus of the project. The focus seemed less about the guidebook and more about the questions as to why reports weren't being properly addressed when reported. Questions, such as: *Why were reports not being addressed in a timely manner? What are the limitations and strengths of the IVAN taskforce? What is the responsibility of different governing bodies, such as the city and the county?* More specifically, going through the reports made Nos/otras aware that there were reports about illegal dumping in alleys being submitted by several residents from the city of El Centro that weren't being addressed by the IVAN reporting system in a timely manner. When this issue was brought up at the IVAN Taskforce meeting it was realized that this issue was the result of a conflict between the city and the county and that there wasn't anything more that the IVAN Taskforce's government problem-solver could do because it was not in the jurisdiction of the Department of Toxic Substance to address illegal dumping. All they could do was continue letting the city know about the problem. Through multiple conversations, Nos/otras decided to organize a Dia Del La Tierra (Earth Day) cleanup for the neighborhood that was experiencing the illegal dumping.

This is an example of where residents can use the IVAN website as a tool to monitor environmental hazards and respond in a more grassroots manner outside the limitations of the legal enforcement of the IVAN Taskforce. The Dia Del La Tierra Cleanup came together in the time span of one month with the support of everyone (CCV, CAP and IVAN Taskforce). Members of CAP took on the responsibility of

designing the event website and flyers, inviting environmental regulatory agencies and environmental organizations to table at the event, as well as organizing materials the day before the event, and acted as team leaders the day of the event. CCV and I wrote proposals to government agencies for funding and donation letters to local businesses that covered the cost of food, water, and cleaning supplies for all the participants. There was an overall collaborative effort from everyone to make this event happen. The community cleanup was a huge success, with 57 community members of all ages, including high school and college students from across the Imperial Valley attending. A total of 4 tons (8,000 pounds) of solid waste was collected. The decision to mobilize as part of the project provided insight to those creating the guidebook about the type of political power IVAN can have in making a difference, particularly during a time when local government refused to act.

Organizing the community cleanup helped to clarify some of the questions Nos/otras had, but also allowed us to push forward with creating an IVAN Community Guidebook. Prior to this event, there wasn't a lot of confidence in creating an IVAN Community Guidebook that would try to guide its readers to solve these issues on their own. Although a lot of work happened during these meetings, much of the reviewing and structuring of the guidebook took place outside these meetings. The creation of the guidebook happened through the use of a Google Document, allowing everyone to have the ability to review, write, and edit the document. Although everyone participated in the creation of the guidebook, CCV and I took the lead (with their feedback) in structuring the initial outline and content. Depending on individual interests, CAP members

contributed to different parts of the guidebook; some developed content for specific chapters while others preferred to contribute pictures and other graphics. In the end, the IVAN Community Guidebook is a five-chapter booklet that is meant to guide its readers in how to submit IVAN reports, while also providing them with detailed information of each environmental reporting category. Chapter one introduces the reader as to why this guidebook is important and how they can navigate the guidebook. Chapter two explains what IVAN is and provides a brief breakdown of the main parts of IVAN and its reporting system. Chapter three explains how to use IVAN, which includes a breakdown of how to submit a report, navigate the website, and get involved with the IVAN Taskforce. Chapter four provides a broad overview of the five environmental reporting categories and how one can identify this problem, what agency is responsible for this concern, and how to go about reporting this concern. Chapter five provides additional resources, such as frequently asked questions, acronyms, and a letter from the authors.

The IVAN Guidebook is not meant to be an all-encompassing document, but instead to be viewed as a tool that would continue facilitating the participatory action research process beyond Nos/otras by encouraging its readers to actively engage in the environmental regulatory process and draw their own insights and conclusions. The guidebook used the acronym “AKA” to describe its process, which means Awareness, Knowledge, Action. The five environmental reporting categories were divided in this structure so that the reader could flow through a similar process as Nos/otras did when learning about IVAN and creating the guidebook.

Challenges Faced

There were several challenges faced when trying to organize and facilitate the IVAN Community Development Project. Embracing Participatory Action Research (PAR) allows for a more collaborative process that flows organically between all those involved, allowing time for meaningful participation to develop. It isn't a process that can be rushed. PAR projects take a long time, and it could be argued that they have no beginning or end, continuing beyond the end stage they are often given. Time was a key challenge for this project. The CalEPA Environmental Justice Small Grant was a yearlong grant that required Nos/otras to create a community guidebook regardless of the participatory process. Therefore, there were pros and cons in having grant funding that required deliverables within a specific timeframe and that interfered in the PAR process that diverges from the outcome driven model. One advantage was that there was funding to provide stipends to CAP members, including myself, for their time, as well as paying for a computer program and designer to implement updates over the course of a year. However, due to deadlines, CCV and I took the lead in writing the guidebook in order to push the process along so that there would be a complete document for our funders. To combat this deadline, but still wanting to stay true to the process, Nos/otras decided that the guidebook would be a living document that would continue to evolve beyond this timeframe in order to not limit the participatory process. Ideally, the guidebook might have taken much longer than three months to create, but there were also limitations in my ability to relocate to the Imperial Valley for an extended period of time to work on the

project. I was only able to spend 6 months (from January to August) working in person from the CCV office. CCV, as a non-profit organization, also had limitations in being able to dedicate an extended period of time to one project; there was a lot of energy that went into the administrative aspect of managing grant funding. Also, all the CAP members had jobs that limited the amount of time they could meet on a regular basis.

Another challenge was managing the collaborative process at certain points in the project between all parties that were involved. It was difficult to keep everyone on the same page when there were so many people involved. In addition, facilitating meetings rife with disagreements required compromise and ongoing conversations in order to move forward. Sometimes it was hard to move forward because there would be ongoing debates about a particular topic. Toward the middle of the project it became challenging for Mr. Lugo to attend CAP meetings, so I took the lead in facilitating those meeting and met with him separately to go over the details of the meetings. This led to some miscommunication between the groups because we weren't all present during important meetings.

Conclusion

If I could save you I would have

A part of me thinks I am today

I moved in-between worlds

And I think at one point I might have left you on the other side

But I haven't forgotten you

You are with me wherever I go

I see you do you see me

It might be hard for you to see

And I to see you

As both a community organizer and academic, throughout the course of this collaborative project I often pondered the questions, how do we create possibilities for others to grow? Ways to learn with each other? How do we create a more just system? How do we become organic intellectuals not bound to institutions of academia and/or nonprofit work? As of this moment, I feel that in order to grow our collective capacities to address the social, political, and environmental issues of today in a more just way, we need to continue to re-create and re-envision the conventional boundaries of what it means to be a community organizer or an academic, and embrace a hybrid of the two. The world of community organizing and academia cannot continue to be isolated from each other, only considering each other as an afterthought in their work. It was essential for me as both a community organizer and an academic to envision and conceptualize

how I could bridge these two worlds—theory and experience. This led me to, after the project's completion, reflect upon this project through the lens of Chicana Feminist Participatory Action Research in the context of the environmental justice work in the Imperial Valley and the IVAN Community Development Project. From my perspective, meaning solely my own perspective and not that of CCV and CAP, by embracing a Chicana Feminist Participatory Action Research, we created an intimate participatory inquiry process that allowed for transformation and growth, and challenged the boundaries and western world views that reinforce hegemonic knowledge.

When the knowledge making process is limited and defined by only one way of knowing the world, as it is often constructed through western positivist inquiry, so much is lost for those who do not fit into this one way of knowing. The contrasting terminology used to reflect the verb “to know,” which is intimately connected to the creation of knowledge, in both English and Spanish is reflective of the multiple ways of understanding the world. In English there is only one word to describe the verb “to know,” but in Spanish there are two ways to describe the verb “to know.” There are the terms *saber* and *conocer*, which are used under different contexts of knowing the world. The term *saber* means to know something as a fact or information about something, for example “*Sé que Sacramento es la capital de California*”. On the other hand, the term *conocer* means to express a familiarity or acquaintance with a person, place, or thing. For example, “*¿Conoces a mi hermana?*” When using the word *saber*, there isn't a relationship between the person and what they know, it's just objective knowledge. The term is most closely related to the use of the English term “know” and western concepts

of knowledge. But when using the term *conocer*, there is an experiential relationship or connection reflected in the knowing-making process. This distinction is important because it ties back to Anzaldúa's theory of *Conocimiento* and the heart of participatory action research, which is trying to recreate knowledge that is built out of a deep relationship with understanding the world. In other words, its not good enough to simply *saber*, we need to create social science research that is focused on having a connection and awareness of the knowledge it is creating (*conocer*).

To embrace the concept of *conocer* versus *saber*, we are choosing to have an intimate relationship with the inquiry process, opening up a door to a human inquiry that is focused on healing rather than truth. According to Peter Reason, "To heal means to make whole: we can only understand our world as a whole if we are part of it; as soon as we attempt to stand outside, we divide and separate. In contrast, making whole necessarily implies participation: one characteristic of a participative world-view is that individual person is restored to the circle of community and the human community to the context of a wider natural world" (10, 1994). Part of the growing process within community organizing and PAR is creating space for healing for all those involved in the process.

Lastly, I consider Chicana Feminist Participatory Action Research to be a form of joyful militancy in that it agitated the business-as-usual-concepts of environmental reporting and governance, academic research, and strived for local radical collaboration. It was confusing for those not directly involved in the process to understand what we were. We were often asked if we were a research project or a new non-profit. People in

local government positions that attended the community clean up were very interested in understanding our motives as a group. This inquiry process was experimental, open-ended in many ways, and allowed for us to be creative, vulnerable, and to connect with each other. We were given the time to mobilize with each other and to recognize each other's and our own capacities. This project began from the starting point of those involved and unfolded in an unexpected way. "Being militant about collective, enabling transformation is about trust in people's capacities to figure out this way forward together, along with a willingness to participate only in the process" (Montgomery & bergman, 2017, p.79). It was a pleasure to work with so many amazing people who chose to participate in a project that was infinitely varied and complex.

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**Appendix: Guidebook to Reporting Environmental Concerns using the Identifying
Violations Affecting Neighborhoods-Imperial (IVAN-Imperial) Community**



Guidebook to Reporting Environmental Concerns using the Identifying Violations
Affecting Neighborhood-Imperial (IVAN-Imperial) Community

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Comite Civico del Valle is a community-based organization located in Brawley, California, with the endeavor of improving the lives of disadvantaged communities through a broad range of approaches including civic education, outreach, research, citizen science, and crowdsourcing.

Dear Imperial Valley Residents,

I hope that this guidebook can support your efforts and future interests in reclaiming Imperial Valley, a region that is overwhelmingly plagued by multiple sources of pollution. I strongly believe that everyone is deserving of a healthy environment that allows both people and the planet to thrive. However, growing up in Calexico, California, I struggled to find the right information and resources to make this belief a reality. I found the lack of public participation not to be the fault of residents, but the fault of government agencies' ability to properly serve my community. I refuse to accept this reality.

Through awareness, knowledge, and taking action, Imperial Valley residents can better participate and navigate environmental regulations to ensure a clean environment for future generations. Keep this guidebook close by; in your car, in your desk drawer, give a copy to a friend or loved one. But most importantly, use it!

Together, we can demand and strive for a cleaner environment.

Kristian Salgado

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1-Introduction

This guidebook is a resource for Imperial Valley residents to better understand and utilize a *community-based* monitoring system called the Identifying Violations Affecting Neighborhoods (IVAN-Imperial) Community. The Identifying Violations Affecting Neighborhoods Community will be referred to as IVAN-Imperial to distinguish itself from other IVAN Communities that exist throughout California and were inspired by IVAN-Imperial.

It is not common knowledge to know who is responsible for regulating different environmental problems, and how to go about reporting such environmental concerns and violations in one's community. The majority of people know to call 911 to report car accidents, or report fires to the local fire department, but few know who to contact to report air, pesticide, solid waste, toxic substance, and water concerns.

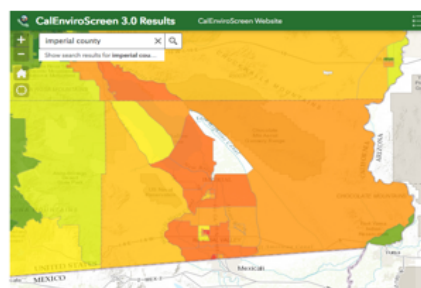
The goal of this guidebook is to create a user-friendly resource created *by* the community *for* the community in order to further empower residents, like yourself, to collaborate with nonprofits, industries, and environmental agencies at the local and state level in order to solve these complex environmental problems. Residents are the eyes and ears of their community, and therefore the most knowledgeable about what is negatively impacting both their quality of life and environment. It is essential for community knowledge to be shared in order to properly focus resources to solve environmental problems affecting our communities. Throughout this guidebook Imperial Valley and Imperial County will be used synonymously.

Why is this Guidebook Important?

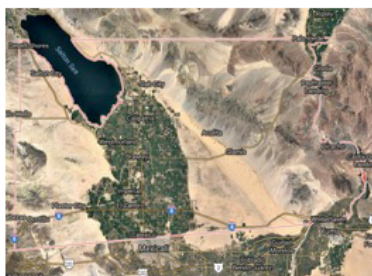
This guidebook is important because the Imperial Valley is without a doubt a region where its people and environment are in distress. As identified by the Office of Environmental Health Hazard Assessment (OEHHA) California Communities Environmental Health Screening Tool: CalEnviroScreen Version 3.0 (2017), Imperial County continues to fall into the top 25 percentile of California communities that are disproportionately burdened by multiple sources of pollution, often referred to as disadvantaged communities.¹

¹ <https://oehha.ca.gov/calenviroscreen>

Air quality is at the forefront of this pollution problem. Imperial Valley's air quality has failed to meet the Clean Air Act (CAA) standards for National Ambient Air Quality Standard (NAAQS) since 1997.² Furthermore, according to the American Lung Association in 2016, Imperial County had some of the worst air quality in the United States, ranking 7th as the most polluted county by year round particle pollution, and 20th as the most ozone-polluted county.³



Since Imperial County is a border region, it is important to not look at these environmental issues in isolation, but as an accumulation of all surrounding environments. That being said, the environmental and public health research is not much better for Imperial Valley's neighbor to the south: Mexicali, Mexico. Similar to the Imperial Valley in the United States, the municipality of Mexicali, Mexico, is notorious for its air pollution levels in Mexico. According to the National Institute of Ecology (NIE), as of 2005, Mexicali has the highest levels of Particulate Matter (PM10) and Carbon (CO) in the country⁴. What occurs on one side of the border impacts the other side of the border and vice versa.



This information shouldn't come as a shock for most Imperial Valley residents that are no stranger to poor environmental quality, such as air pollution, that negatively impacts their quality of life and environment. It is quite common for everyone in the Imperial Valley to have their "environmental injustice story"-- not being able to be physically active due to poor outdoor air quality, being exposed to pesticides, being affected by illegal dumping, or any other particular environmental concern.

The objective of this guidebook is to be a quick and easy reference (like a phonebook for environmental concerns) to help Imperial Valley residents shift the conversation and

² <http://www.co.imperial.ca.us/AirPollution/otherpdfs/2017ICOzone.pdf>

³ <http://www.lung.org/assets/documents/healthy-air/state-of-the-air/sota-2016-full.pdf>

⁴ Reyna, M., Bravo, M., López, R., Nieblas, E., & Nava, M. (2012). Relative risk of death from exposure to air pollutants: A short-term (2003–2007) study in Mexicali, Baja California, México. *International Journal of Environmental Health Research*, 22(4), 370-386.

solve these environmental concerns, and share the narrative of our environmental story. Imperial County is a region of multiple ecological resources that contributes to the state of California and the United States, yet we face the brunt of environmental pollution. Part of the current challenge is informing the general public about how to respond to these issues. This guidebook, utilized by the community, can be a step in the right direction in solving these issues.

How Can You Navigate this Community Guidebook?

This guidebook maps out IVAN-Imperial reporting system as well as the five environmental reporting categories with their corresponding regulatory agencies responsible for protecting the Imperial Valley community and environment. Use it as (1) a resource to understand what the current environmental concerns are, (2) who questions can be directed to, and (3) how can *you* further *your* actions to resolve these environmental concerns. When you think of the reporting system, think **AKA**: Awareness, Knowledge, and Action. IVAN-Imperial strive to bring about these three objectives:

1. **Awareness**- Having the ability to identify factors negatively impacting the quality of your environment. Growing up in the same environment your whole life sometimes makes it challenging to be able to identify environmental violations that might seem normal. For instance, being accustomed to the common practice of burning garbage or yard waste, which can be dangerous for your health.
2. **Knowledge**-Knowing who to report these concerns to. IVAN- Imperial's Environmental Reporting System streamlines this process and makes it as simple and effective as possible. Learn who the people are behind the IVAN-Imperial reporting system. It is the government's job to help you understand the environmental reporting process.
3. **Action** - Action can take many shapes and forms. This may include submitting a report to the proper agency, and attending the proper meetings, such as that of the Environmental Justice Task force or city council. These actions can help resolve environmental concerns.

Chapter 4, Environmental Reporting Categories is made up of these three sections. However, as you explore each chapter, it helps to think about it in the above terms: Awareness, Knowledge and Action. Once you have familiarized yourself with this guidebook you will be able to easily refer to it as needed.

2 - What is IVAN-Imperial?

Identifying Violations Affecting Neighborhoods, commonly referred to as IVAN-Imperial, is a "*community-based* environmental reporting and monitoring system that connects the community with real people that can help solve local environmental problems."

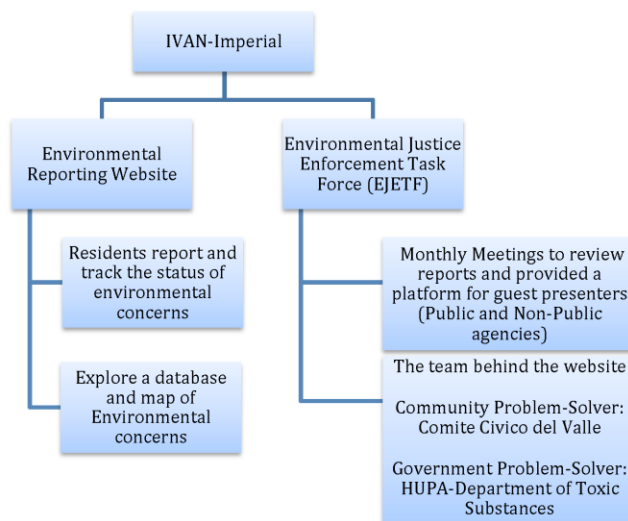
Prior, to the development of IVAN-Imperial in 2010, Imperial Valley residents had no adequate reporting system to address and resolve local environmental concerns that should have been regulated by public environmental agencies, like Department of Toxic Substances (DTSC). In response, Comité Civico del Valle (CCV) and other local environmental justice organizations created the IVAN-Imperial website and Environmental Justice Enforcement Task Force (EJETF) to address the lack of public agencies' ability to properly enforce and regulate environmental concerns in the Imperial Valley. Seven years after its creation, IVAN-Imperial continues to grow and develop strong relationship with underserved communities and environmental agencies throughout California. IVAN-Imperial has since expanded to six other communities in California that face similar environmental injustice challenges.



Key components of IVAN-Imperial

IVAN-Imperial consists of (1) an environmental reporting web-tool and monitoring database system, and (2) an Environmental Justice Enforcement Task Force (EJETF) made up of both residents and environmental agencies that meet monthly to review, discuss, and resolve environmental concerns (Figure 1). The two key aspects of IVAN-Imperial described above are what make this environmental reporting system unique because it places residents at the forefront of environmental enforcement and protection in California. IVAN-Imperial allows residents to literally sit at the table and have a back and forth conversation between government agencies, nonprofits, and other decision-making entities. With IVAN-Imperial, a clean environment is an attainable reality. The structure of IVAN-Imperial can be seen on the next page.

Figure 1: The Structure of IVAN-Imperial

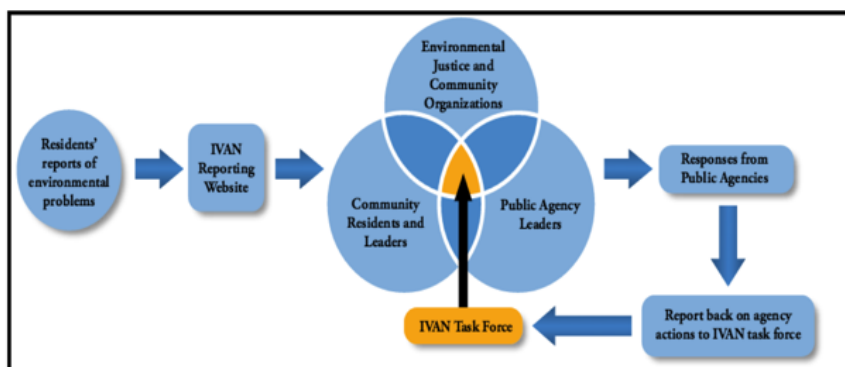


The IVAN-Imperial Reporting System

The IVAN-Imperial reporting system works in a circular problem solving system, which means that the environmental concern at hand will ideally continue to be reviewed by the EJETF until it reaches a resolution that meets everyone's needs—residents, regulatory agencies, and environmental justice non-profits. Below I have broken down the steps that are taken when a report is submitted.

1. Residents report environmental concerns using the IVAN-Imperial Reporting Website.
2. Once a report is verified by the government and/or community problem-solver it is posted on the website and forwarded to the agencies that is responsible for addressing the report category.
3. The agency the gets the reports begins the evaluation process, which might included opening an investigation or simply taken action to get ride of the environmental concern. There is back and forth communication between the problem-solvers and government agency. The website is updated throughout each step of the process.
4. The EJETF is the forum where all the reports are reviewed. This is where all parties involved can discuss the resolution or the process that needs to take place so

that a resolution can occur. If a resolution is not met this system will continue until the problem is resolved.



Source: UC Davis Center for Regional Change. (2015) From Testimony to Transformation: The Identifying Violations Affecting Neighborhoods (IVAN) Program in California.

Sometimes a report can be very simple, such as an environmental concern about a pile of tires that were illegally dumped on the side of the road within city limits. Other times, reports go into long-term process or require larger conversations between all parties involved because the EJETF identified a gap in local or state environmental regulation. This process has been successful, especially when dealing with reports with no current regulation.

3 – How to use IVAN-Imperial?

Similar to this guidebook, IVAN was created by concerned citizens in the Imperial Valley to provide a service to other residents struggling to voice their environmental concerns. With that said, IVAN was designed with community in mind. In this chapter you will learn how to navigate the environmental reporting website and how to get involved in the IVAN taskforce meetings.

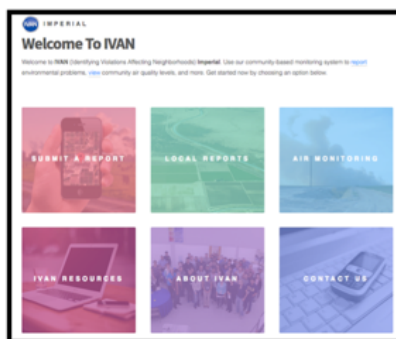
Environmental Reporting Website

Between 2007 and 2010, environmental complaints made to the state of California were ignored and unresolved in underserved and disadvantaged communities like Imperial Valley. In response to this, Comité Civico del Valle, with the help of dedicated local

employees from the Department of Toxic Substances Control- Certified Unified Program Agency (DTSC-HUPA), developed their own environmental reporting and monitoring website, known today as IVAN-Imperial.

IVAN-Imperial works closely with the currently revised environmental government complaint system (calepacomplaints.secure.force.com) to better address and resolves environmental concerns. IVAN-Imperial strives to empower residents, especially individuals from disadvantaged communities who, due to cultural or language barriers, might not otherwise report an environmental concern through government complaint systems.

The IVAN-Imperial website is a *community-based* environmental reporting and monitoring system, which means that unlike other government complaint systems, all environmental reports submitted on this website are publically archived, providing a certain level of transparency. IVAN-Imperial is also a great resource to residents interested in receiving alerts notifying them of environmental concerns in their community.



Signup for environmental alerts!

A great way to stay informed about environmental concern is to sign up for email alerts. When someone submits a report you will receive an email about the report.

Using IVAN-Imperial Environmental Reporting Website

Having the ability to report environmental concerns in a simple and comprehensive manner, while also having the ability to review an archive of environmental reporting data is a great tool to help residents make sense of environmental enforcement. This section will explain how to submit a report on IVAN-Imperial and how to navigate the reporting and mapping archive.

Submit a Report

IVAN-Imperial's environmental reporting web tool is a one-stop shop for reporting and tracking the progress of environmental concerns in an easy and effective method.

Step-by-Step Instructions on How to Submit a Report:

1. Go online to ivan-imperial.org
2. Click "Submit Report"
3. Fill out the form
 - a. Title - Provide a title for your environmental concern/incident.
 - b. Address - Location of where the environmental concern/incident happened. If you do not know the specific address, drop a location pin on the map below.
 - c. Category - There are a total of five environmental categories to choose from, and you are welcome to select more than one (refer to chapter 3 for more information).
 - d. Date - Date and time the environmental concern/incident occurred.
 - e. Description - Describe the environmental concern/incident as detailed as possible, the more specific information provided, the better. As you write your description, ask yourself: What happened? What materials or substances are involved? Is this an ongoing occurrence? How many people are impacted by this incident? *For a more detailed instructions of what to include in the description visit the section of each environmental category under the section, "Action."*
 - f. Contact Information (optional) - This part of the application ask for your name, phone number, and email address. You have the options to include all or part of your contact information. Its important to note that this information **will not** be made public and will only be used by IVAN-Imperial problem-solvers, unless permission is given otherwise. If you choose to be 100% anonymous (no name, number or email) IVAN strongly recommends you to be as detailed as possible in your report because we are unable to follow up and ask further questions.
 - g. Documents - Safety Comes First! Please be careful when taking pictures and video of any potential environmental violations. Upload pictures, video and/or supplementary documents to this report.
4. Submit your Report! Once you have submitted an IVAN-Report it cannot be edited or alter. Check back regularly to see the progress of your report that will be located on the IVAN-Imperial webpage called, "List of Reports." The listed reports has two main sections to review: report status (located on the upper-right hand corner) and updates located in the section called, "Administrator Comments." For more information about reviewing a reports visit page 12 section, "Reporting Achieve: List of Reports."

5. Attend the EJETF Meeting to provided feedback about your report. If at any point you are not happy or have pending concerns or questions about your environmental concern feel free to contact us on the ivan-imperial.org/contact.

How to Navigate the Reporting Archive and Mapping System?

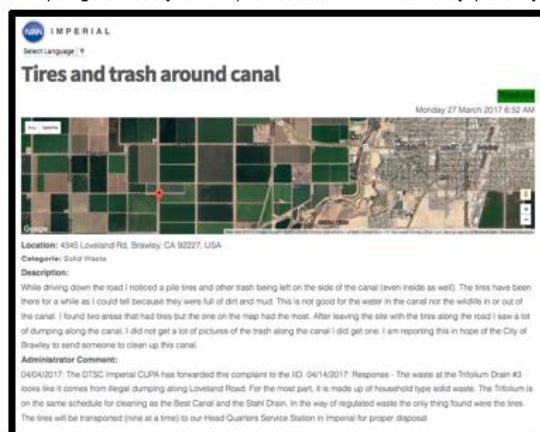


One of the best features of the IVAN-Imperial website is having the option to explore 9 years of environmental reporting and monitoring by navigating through individual reports, and mapping systems. By organizing information in this manner, users will be able to identify trends in environmental concerns on multiple geographic scales. For example, the 2017 Earth Day Clean Up took place in a neighborhood in Imperial County where the Environmental Justice Enforcement Task

Force identified to be a hotspot of illegal dumping using the IVAN mapping system. This community cleanup was a huge success! 57 high school students and residents collected 4 tons (8,000 pounds) of solid waste. This is just one example, of how the mapping system has be utilized to improve the environmental quality of Imperial Valley. This section of the website is a living archive and is a great tool to identify locations of concern.

Reporting Achieve: List of Reports

All reports submitted on IVAN-Imperial are posted on the website as public information. This is the location on the website where you will want to check back to see the progress of your report. There are two key parts you want to check: status and administrator comments.



Report Status: On the right hand corner there is a colored box, with the status of the report (green) resolved, (yellow) in progress (red) unresolved.

Administrator comment: This is the location where the community or public agency problem solver will post their notes and communicated with the reporter, especially if they didn't included contact information. The comment should included important information; such as the date the report was forward to the proper public agency, what public agencies are involved, if any additional information is needed, and when this report will be reviewed at the EJETF.

By making environmental reports public knowledge it allows more people to participate and be able to identify possible trends in environmental concerns that are impacting the community at large. It is also a great platform for public agencies to communicate both directly and indirectly with residents.

Mapping System: Map of Reports

IVAN-Imperial's website uses Google mapping technology to geographically organize and illustrate the location of environmental reports. As mentioned before, residents are the eyes and ears of the community and the information they report is valuable to the IVAN-Imperial mapping system. Using the information provide by residents, like yourself, CCV is able to successfully interpret this data and provided it as a public resource.

This mapping system allows residents to quickly and easily identify potential pollution sources near them.



Navigating options:

1. Search by category: In the left hand corner pick the pollution category that interests you the most. Select a drop pin to read a brief description of the corresponding report.
2. Search by location:
3. Select a drop pin to read a brief description of the corresponding report.
4. Click, "view" to see a complete report

Environmental Justice Enforcement Task Force

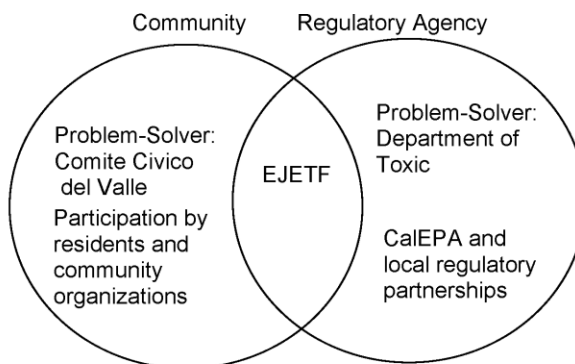
The second foundational part of IVAN-Imperial is the Environmental Justice Enforcement Task Force (EJETF). EJETF is a group of dedicated community members and various environmental

agency representatives that are in constant communication, but convene once a month to review and discuss environmental reports submitted on the IVAN-Imperial Environmental Reporting System, as well as other environmental concerns brought forth by the community and/or environmental agencies.

This task force benefits both environmental regulatory agencies and the community members that participate. For example, environmental complaints may require the involvement of multiple regulatory agencies because the reported complaint is water issue, but also a soil and air concern. These meetings provide a safe space for cross-sectional dialogue between these environmental regulatory agencies with the presence and input of the public. Another benefit is allowing residents, who are the eyes and ears of the community, to speak one-on-one with individuals who can help solve these environmental concerns. The shared knowledge and relationship building that occurs between residents and environmental regulatory agencies during these meetings are a cornerstone of the IVAN-Imperial Community.

Key Stakeholders

The EJETF has four main stakeholder groups: regulatory agency problem-solver, government agency partners, community problems-solver, and community partners.



Below I have included the list of the stakeholders and a description of their role in the EJETF.

Regulatory Agency Problem-Solver: is/are responsible for reviewing, forwarding, and updating the progress of environmental concerns submitted on IVAN-Imperial. In other words, they are the first responders when an environmental report is submitted on IVAN-Imperial. They are also typically in charge of facilitating Environmental Justice Enforcement Task Force meetings.

Government Agency Partnerships: IVAN-Imperial has a variety of government agency partnerships. Some government agencies that currently participate are: Department of Toxic Substances Control-Certified Unified Program Agency (DTSC-HUPA), Imperial County Agriculture Commission Office, Imperial County Air Pollution Control District (APCD), Regional Water Quality Control Board-Colorado River Basin, California Air Resource Board (ARB), and California Environmental Protection Agency (CalEPA).

Community Problem-Solver: act as liaisons between partnering non-profits, environmental regulatory agencies, the local community, and the Environmental Justice Enforcement Task Force. The community-chair takes on a variety of roles depending on the needs of the Environmental Justice Enforcement Task Force, such as organizing Toxic Bus Tours or Cleanup Days.

Community Partnerships: IVAN-Imperial has a variety of residents that live across Imperial County that make an effort to attend monthly meetings, organize outreach events, and take on different environmental injustice causes that might not be felt equal throughout the region.

Task Force Meetings

At the Environmental Justice Task Force meetings, there is a place at the table for concerned community members, environmental agencies, and local government representatives. Come join in on the conversation!

- Rotating Location: Department of Toxic Substances Control 627 Wake Ave., El Centro, CA 92243 or Comite Civico Del Valle 235 Main Street Brawley, CA 92227
- Phone: 760.352.0381
- Meeting Time: 3pm-5pm
- Meeting Schedule: Every third Thursday of the month

Why is reporting important: AN IVAN-Imperial Success Story

One report can make a difference! In March 2010, a concerned resident, Esther Bejarano, submitted a report with photo and video documentation to the IVAN reporting system about an abandoned feedlot in the outskirts of Calexico, near the New River. She observed standing water pollutants, including manure (waste matter discharge) and decomposing cattle carcasses.

Shortly, after this report became public it gained a lot of traction and awareness both within and outside the Environmental Justice Enforcement Task Force (EJETF). This report became the regulatory concern of Colorado River Basin Regional Water Quality Control because this cattle feedlot was in violation of the federal Clean Water Act, as well as Air Pollution Control District because air pollutants from Concentrated Animal Feeding Operations (CAFOs) can be a serious source of air pollutions become a public health hazard. The outcome of the report led to the violator, Phillips Cattle Company, cleaning up the location and well as an auditing of all CAFOs near the New River all found with minor or moderate deficiencies. The enforcement actions helped improve the operations and management of CAFOs in the Imperial Valley.

4 - Environmental Categories

Since understanding environmental categories is such a huge part of understanding the IVAN-Imperial environmental reporting process, we have dedicated a whole chapter to each type of environmental reporting category and what agencies are responsible for responding to that report. This section should help guide you in submitting an IVAN-Imperial report. Bring about awareness, knowledge, and action.

It's important to note that not all environmental concerns reported lead to an environmental violation, however by reporting them to IVAN-Imperial it brings awareness to the issue at a local, state, and federal level, and might eventually lead to a bigger discussion around policy change.

Environmental reporting is organized around 5 pollution categories: Air, Water, Pesticides, Solid Waste, and Toxic Substances. Although CalEPA and IVAN-Imperial's reporting system divide environmental concerns into these five categories, we are very aware that these categories often overlap. For example, an incident of pesticide drift can be both an air and water quality concerns. For this reason, the IVAN-Imperial reporting system encourages the collaboration between agencies to be able to successfully address these environmental concerns.

5 Environmental Reporting Categories:

Air - Air pollution is a general term used to describe undesirable amounts of particulate or gaseous matter in the atmosphere, both indoors and outdoors air quality.

Pesticides - Describes many substances used to control pests. Pests include insects, weeds, plant diseases, rodents, algae, viruses, and bacteria. Pesticides include insecticides, herbicides, fungicides, rodenticides, disinfectants, and other kinds of pest-controlling chemicals, including many household-cleaning products.

Solid Waste - Often referred to as *trash*, this category includes household and commercial garbage, such as: construction and demolition debris, sludge, ash, discarded appliances and vehicles, manure, landscape clippings, and other discarded wastes.

Toxic Substances - Often referred to as hazardous material, this substance contains properties that make it dangerous or capable of having a harmful effect on human

health or the environment, such as waste oil, fluorescent light tubes, asbestos, lead, and mercury.

Water - Water pollution covers a wide variety of water topics: drinking water and water use, wastewater, water bodies (rivers, lakes, watersheds, groundwater, and wetlands), and overall water quality.

Air

For most residents living in the Imperial Valley, air quality is of utmost concern. This has become a huge challenge for Imperial County to solve due to multiple factors, including the influence of local industry, international border, and weather conditions.

Nonetheless, most residents living in this region struggle or know someone who struggles from asthma and/or other serious respiratory health problems. This section will list the most relevant air pollution concerns, who is responsible for regulating and monitoring air quality, and what factors should be included in an air monitoring report.

Awareness

Below is a list of the air pollution sources that contribute to poor air quality in Imperial Valley. Although many of these air pollution sources might seem normal or a part of everyday life, they are hazardous, and it is important to be able to break that pollution cycle and identify these air quality concerns. Depending where you live in the Imperial Valley some of these air pollution sources might be more relevant than others.

Mobile Sources – Are source of pollutants that move around, like cars, planes, and boats, and can't be identified by a specific location. Below is a list of the main mobile pollutant sources in Imperial Valley:

- Idling heavy-duty diesel trucks
- Smoking vehicles
- Idling vehicles near schools
- Idling or smoking locomotive engines

Stationary Sources – Are source of pollutant that can be linked to a specific location, such as a field or business.

- Agricultural burning
- Burning of waste
- Pesticide Drift (discussed in detail in the section, "Pesticides")
- Fugitive dust
 - Agricultural tiling
 - Off roads vehicles

- Unpaved roads
- Construction projects
- Salton Sea (exposed playa)

Knowledge

Congrats now that you have familiarized with the main source of air pollutions in the Imperial Valley. The agencies that are responsible for investigating these violations are the Imperial County Air Pollution Control District (local public agency) and the California Air Resources Board (state public agency). The IVAN-Imperial reporting system encourages its reporters to also contact the agencies responsible in order to get a more timely response.

Imperial County Air Pollution Control District (APCD)

The Imperial County APCD is the local public agency that is responsible for protecting the public and environment from harmful air pollutants. This includes the permitting and regulating of agricultural burning, citing illegal burning, monitoring and improving local air quality.

When you call APCD or when they are notified by an IVAN-Imperial problem solver during regular business hours (8am-5pm) the APCD will log your call, assign the complaint to an inspector, which will initiate an investigation within 24 hours of receipt. The same contact number and procedure is used for non-regular business hours, weekends and holidays. For more information you can visit the APCD website: www.co.imperial.ca.us/AirPollution. To submit air complaints to the APCD directly call (442) 265-1800.

California EPA Air Resources Board (CalEPA-ARB)

The Air Resources Board's (ARB) is one of the governing bodies on the Environmental Protection Agencies (EPA) that oversee air pollution at the state-level. Its mission is to promote and protect public health, welfare and ecological resources through the effective and efficient reduction of air pollutants in recognition and consideration of the effects on the economy of the state. For more information about ARB air complaints visit: <https://www.arb.ca.gov/enf/complaints/complaints.htm>. To submit a general air pollution complaint contact 1-800-952-5588.

Action

Environmental concerns that impact air quality are a time-sensitive matter. For this reason, it is very important to report them the moment you see them. Too often a report goes unresolved because the reporter waits too long to submit a report and there is no longer anything for the inspector to inspect.

What information should I provide? Depending on the type of IVAN-Imperial air report you are submitting, there are a few extra details that you might want to add or reiterate in the *description* section of the report.

1. Mobile Sources – Details to include in mobile reports: vehicle type (ex. truck, SUV, convertible), license plate number, vehicle company name and number (if applicable), and make and model of the vehicle (ex. Ford, Honda, Toyota).
2. Stationary Sources – What is it? Is it smoke or dust? Do you smell an odor? Where is it? Who or what is causing the problem? Is it a continual problem? Include the time of day and frequency. When there is a stationary source of air pollution identifying the location of concern is key.

Don't forget that video and images strengthen your report! For example, snapping a picture of the vehicle with the license plate number.

Water

Water is Imperial Valley's most valued natural resource. There are several bodies of water located throughout the Imperial Valley including the Salton Sea, the New River, Alamo River, and 3000 miles of irrigation canals managed by the Imperial Irrigation District (IID). In fact, without water diverted from the Colorado River, the Imperial Valley could not exist as a rich agricultural region. This section will list the most important environmental water concerns, the public agencies that are responsible for monitoring and regulating, and key information that you might want to include in a water concern.

Awareness

Below is a list of the most relevant environmental water concerns in the Imperial Valley.

Domestic use

- Drinking water
- Water wasters
- Waste water
- Storm water

Irrigation (Canals)

- Ruptures/overflow
- Trash or hazardous material
- Biological contaminants
- Fertilizers/pesticides
- Dredge

Bodies of water

- New and Alamo River
 - Biological pollution
 - Chemical contaminant levels
 - Pesticide/fertilizer pollution
 - Total dissolved minerals
 - Storm water
- Alamo River Wetland
 - Wildlife
 - Trash or hazardous material
- Salton Sea
 - Agricultural runoff
 - Salinity and nitrates

Knowledge

There are many agencies that share the responsibility for monitoring and regulating water quality in Imperial Valley. Depending on the type of water concern the city, county, state, or public utilizes agencies responsible for addressing that issue. This section will list and describe those main public agencies.

Imperial County Public Works Departments (ICPW)

The Imperial County Public Works Department is the local agency that oversees county infrastructure, such as wastewater, drinking water, water wasters, and storm water. Their mission statement is “to preserve and enhance public safety and quality of life through reliable, cost effective infrastructure. Foster partnerships that strengthen relationships with communities and industry. Provide quality and responsive service through highly motivated, professional, and knowledgeable staff in a safe and fair work environment. Continually improve quality of service through optimal resource management.” For more information about Imperial County Public Works Department visit: <http://www.co.imperial.ca.us/publicwork/default.htm>. To submit a general water concern contact: (442) 265-1818.

Imperial Irrigation District

The Imperial Irrigation District (IID) is the local public utility company that manages both electricity and water. For this reason, they are responsible for the maintenance of 3000 miles of canals that bring water to both agriculture and homes in the area. For more information visit: www.iid.com. To submit a water concern contact: 1 (760) 335-3640.

California Region Water Control Board, Region 7 (Colorado River Basin)

The California Region Water Control Board, Region 7, is the regional department within the CalEPA that oversees local water concerns relating to the Salton Sea, New River, and the Alamo River. The State Water Resources Control Board's mission is "to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations." For more information visit: www.swrcb.ca.gov/rwqcb7. To submit a general water concern contact: (760) 346-7491

State Water Resources Control Board, Division of Drinking Water (DDW)

The Water Resource Control Board is another state agency that oversees the regulation of water. The California Water Board mission is to, "seek to preserve, enhance, and restore the quality of California water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations."

The State Water Resources Control Board has designated the Imperial County Public Health Department, Division of Environmental Health, as the Local Primacy Agency (LPA). According to Imperial County Public Health Department website, "the LPA is responsible for enforcement of the California Safe Drinking Water Act, which includes the enforcement of state laws and regulations pertaining to the permitting, operation, maintenance, and monitoring of small public water systems with less than 200 service connections within Imperial County." For more information visit: waterboards.ca.gov. To submit a general water concern contact: (619) 525-4159

Action

What information should I provide? Depending on the type of IVAN-Imperial water report you are submitting, there are a few extra details that you might want to add or reiterate in the *description* section of the report.

1. The more details you can add about the location of the water problem the better. Is it a canal, river, or wetland?

Solid Waste

There are various types of waste generated within the Imperial Valley. It's very important that businesses, schools, hospitals, and individual households deal with their waste in a responsible manner. The build up of solid waste in vacant lots and alleys can lead to pest breakouts and other public health concerns. The number #1 environmental concern submitted on IVAN-Imperial is related to illegal dumping of solid waste, such as furniture and tires. This section will list the most important environmental solid waste concerns, the public agencies that are responsible for collecting, monitoring and regulating solid waste, and well as information that is important to include in a solid waste report.

Awareness

Below is a list of the most relevant solid waste concerns in the Imperial Valley. I encourage you to use this list not just as a resource for submitting reports, but also as a preventive resource that will guide you in the proper disposal of solid waste.

Commercial and Residential Waste – For a more detail breakdown of how to properly dispose of items, like tires, printers, types of plastic etc. visit: www.ivrma.org. Below is a list of the general ways to deal with solid waste.

- Recycle
- Landfill
- Green waste
 - o Compost
- Special waste collection
 - o Hazardous waste (discussed in detail in the section, "Toxic Substances")

It is never an okay option to get ride of solid waste by:

- Illegally dumping near or in canals, vacant lots, alleys, near a specific body of water (ex. Salton Sea, New River etc.)
- Illegal burning of waste

Knowledge

Imperial County Public Works Departments

The Imperial County Public Works Department is the local agency that oversees county infrastructure, such as the local landfills. Their mission statement is "to preserve and enhance public safety and quality of life through reliable, cost effective infrastructure. Foster partnerships that strengthen relationships with communities and industry. Provide quality and responsive service through highly motivated, professional,

and knowledgeable staff in a safe and fair work environment. Continually improve quality of service through optimal resource management.” For more information about Imperial County Public Works Department visit: www.co.imperial.ca.us/publicwork. To ask general landfill or waste management concern contact: (442) 265-1818.

Imperial Valley Resource Management (IVRMA)

IVRMA is a local organization that advocates and supports recycling efforts in Imperial Valley. For more information about IVRMA visit: www.ivrma.org. To ask any questions about recycling in the Imperial Valley call: (760) 337-4537.

There are two garbage collection services in the Imperial County: Republic Services and CR&R Incorporated Environmental Services.

CR&R Incorporated Environmental Services

CR&R Incorporated collects waste from the cities of Calexico, Brawley, and Imperial. CR&R Incorporated is considered to be one of Southern California's most innovative and successful waste and recycling collection companies, serving more than 3 million people and over 25,000 businesses throughout Orange, Los Angeles, San Bernardino, Imperial, and Riverside counties. For more information visit: <http://crrwasteservices.com>. To ask questions about waste disposal in your area call: (760) 482-5656.

Republic Services

Republic Services collects waste from El Centro, Heber, Holtville, Westmorland and Unincorporated areas in Imperial County. For more information visit: www.republicservices.com. To ask questions about waste disposal in your area call [\(760\) 355-0004](tel:7603550004).

Department of Resources Recycling and Recovery (CalRecycle)

CalRecycle is a branch of the California Environmental Protection Agency (CalEPA) that is responsible for overseeing waste and recycling programs in California. This includes beverage containers and electronic-waste recycling, organic management, used tires, used motor oil, carpet, paint, mattresses, rigid plastic containers, plastic film wrap, newsprint, construction and demolition debris, medical sharps waste, household hazardous waste, and food-scrap composting.

Action

What information should I provide? Depending on the type of IVAN-Imperial solid waste report you are submitting there are a few extra details that you might want to add or

reiterate in the *description* section of the report. Solid waste reports aren't as time sensitive as other environmental reports, but it is know that one illegal dump tends to lead to a change reaction and before you know it there is an overwhelming amount of waste.

1. Where the waste is being dumped? It is important to describe the location of where the illegal dumping took place beyond just including an address. For example, is it near and/or in canals, vacant lots, and alley, near bodies of water, like the Salton Sea or New River? The locations of where waste is being dumped is an important detail that determines who is responsible to cleaning the waste.
2. What type of waste is being dumped? It is also important to describe in detail the type and amount of waste. For example, five tires or four gallons of oil in an alley will most help the problem-solver to identify who is responsible for cleaning up the solid waste.

Pesticides

Pesticides are a *toxic substance* that is used legally because it provides a benefit to its users, such as keeping pest way from farmers' agricultural production. However, it can still pose a threat to public health. The number one industry in the Imperial Valley is agriculture. For this reason pesticides potentially pose a higher risk for residents here than in other non-agricultural areas in the United States. In 2015, Imperial County ranked 11th in pesticide use in California with a total of 4,975,642 pounds of pesticides being used in agriculture production⁵.

In addition to agriculture industry, there are also many other ways a person can be exposed to pesticides, such as the misuse of cleaning products, like Clorox. This section will list what products are considered to be pesticides, what public agency is responsible for monitoring pesticide use, and how to actively protect oneself from pesticide exposure.

Awareness

Who uses Pesticides? Pesticides are a part of everyday life; especial in an agricultural community like the Imperial Valley, and for this reason it's important that everyone that uses them for both industrial production and personal use uses them responsibly and knows how to respond in the cause of an emergency.

⁵ <http://www.cdpr.ca.gov/docs/pur/pur15rep/tables/table1.pdf>

Agriculture

- Pesticide Drift
- Pesticide Spills
- Employee Exposure through negligence

Domestic use

- Cleaning products
- Pest products

Other business

- Swimming pool maintenance companies
- Landscaping companies
- Janitorial companies

The Label is the Law!

Did you know that the label on pesticide packaging is considered to be a legally binding document? Using pesticides in an incorrect way is against both Federal and state law. It is important that all users of pesticides, such as farmers follow these rules closely.

Knowledge

There are two agencies that work together to regulate pesticides in California from a local and statewide level.

Agricultural Commissioner, Sealer of Weights and Measures

Imperial County Agricultural Commissioner is the local agency that is responsible for monitoring pesticide use in the Imperial Valley. Their mission statement is "to promote and protect our agricultural industry by providing clear direction and appropriate regulatory oversight while protecting our citizens and the environment through the enforcement of pesticide laws, weight and measurement standards, the detection and eradication of pests harmful to our agricultural industry, human health, and other plant resources." For more information visit: www.co.imperial.ca.us/ag. In order to report a pesticide concern call: (442) 265-1500.

California Department of Pesticides Regulation (CA-DRP)

The Department of Pesticides Regulation is one of six agencies that make up the California Environmental Protection Agency (Cal-EPA). DPR has the primary responsibility for regulating all aspects of pesticide sales and use to protect public health and the environment. DPR's mission is to "protect human health and the environment by regulating pesticide sales and use, and by fostering reduced-risk pest management." For more information visit: www.cdpr.ca.gov. To contact the Southern Regional Office call (714) 279-7690.

Action

What information should I provide? Depending on the type of IVAN-Imperial pesticide report you are submitting, there are a few extra details that you might want to add or reiterate in the *description* section of the report.

According to the Department of Pesticide Regulation below are the steps a person should take when exposed to pesticides⁶. Similar to air quality reports, pesticide concerns are also a timely manner and should be reports as soon as they occur. Submitting an IVAN-Imperial report will help make sure your pesticide concern gets reviewed.

Emergency

1. If you or anyone else is seriously sick due to direct exposure to pesticides (swallowing, inhaling, eyes and skin contact) **call 911** for help and/or call **Poison Control Center 1-800-222-1222**.
2. If you want to see a doctor or go to the hospital, have someone else drive. Make sure you inform your doctor that you were exposed to pesticides. The doctor is required to report any suspected pesticide illness to the county health officer within 24 hours.
3. Once the person exposed is safe contact the Imperial County Agricultural Commissioner office as soon as possible at (442) 265-1500.

Non-emergency

1. If you know an individual or group using pesticides negligently, although it is not an immediate emergency, it is still very important to report them.
2. With your safety in mind document the pesticide concerns the best you can. The type of pesticides being used, how is it being used (sprayed, diluted in water, etc.), the company or household misusing pesticides. Pictures and videos are a great way to support your descriptions.

Toxic Substances

There are many items that people use that if no properly stored or disposed of can be hazardous to people and the environment. These items often have labels that say, CAUTION, FLAMMABLE, WARNING or POISON. Waste that has characteristics of *ignitability, corrosivity, reactivity, toxicity* are considered to be toxic and therefore should be used and disposed of responsibly. This section will list the most important hazardous waste concerns, the public agencies that are responsible for collecting, monitoring and regulating hazardous waste, and well as information that is important to include in a toxic substance report.

Awareness

⁶ A Community Guide to Recognizing & Reporting Pesticide Problem

The Department of Toxic Substances organizes hazardous waste in five categories: non-source specific waste (F-list), source specific waste (K-list), discarded commercial chemical products (P-list and U-list), discarded mercury containing products (M-list).

Non-source specific waste

- Agricultural pesticide/fertilizer run-off

Source specific waste

- Geothermal plant

Discarded commercial chemical products

- Hospitals
- Pesticides producers

Discarded mercury containing products

- Fluorescent light bulbs, thermostats, thermometers, and novelty items, such as flashing footwear.

In addition to the five main hazardous waste categories there is also everyday household hazardous waste that also needs to be managed responsibly. The list below are a few household items that you might be wondering what to do with. These items should be thrown away with your other trash items. These should be drop-off at the appropriate recycling or waste disposal center. To know where to dispose of your hazardous waste visit: earth911.com.

Household Hazardous Waste

- Antifreeze
- Batteries
- Drain cleaners
- Electronic Wastes (TVs, computer monitors, cell phones, etc.)
- Glue and Adhesives
- Household cleaners
- Oven cleaners
- Paints
- Pesticides
- Pool Cleaners
- Solvents
- Used Oil
- Waste containing Asbestos

Knowledge

The Department of Toxic Substances Control- Certified Unified Program Agency (DTSC-CUPA) is the locally governs entity that oversees the proper management of hazards in the Imperial Valley. They are an extension of the larger governing body of the Environmental Protection Agency (EPA) Department of Toxic Substance Control. DTSC mission statement is "to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products." For more information visit: www.dtsc.ca.gov. To report an hazardous waste concern call (760)-352-0381.

Action

What information should I provide? Depending on the type of IVAN-Imperial toxic substances report you are submitting, there are a few extra details that you might want to add or reiterate in the *description* section of the report.

1. Be as detailed as possible when describing what you are seeing. For example, if you see open containers that appear to have toxic labeling on it. List how many containers, in what condition are the containers in, is there a company logo.
2. Location is key! It very important to describe the location because it lets the inspector know about possible causes. For example, is this a source specific waste that is coming for one violator.

5- Extra Resources

Frequently Asked Questions

- **What is Identifying Violations Affecting Neighborhoods-Imperial (IVAN-Imperial)?**
The Identifying Violations Affecting Neighborhoods, commonly referred to, as IVAN is a “*community-based* environmental reporting system that connects the community with real people that can help solve local environmental problems.” IVAN-Imperial consists of (1) an online environmental reporting web tool and number called the IVAN environmental reporting system; and (2) an Environmental Justice Enforcement Task Force that is made up of both residents and environmental agencies that meet monthly to further review, discuss, and resolve environmental concerns.
- **What is the IVAN Environmental Reporting Website?**
IVAN Environmental Reporting Website is a web tool and reporting number that allows residents to report and monitor the progress of environmental complaints submitted in their community. A key component of IVAN Environmental Reporting Website is the Google Earth mapping system that displays in real-time the location of where the environmental concerns occurred. The map provides the public with a geographic visual of the complaints submitted on IVAN Environmental Reporting Website that they can easily refer to.
- **How is the IVAN Environmental Reporting Website different from other government complaint systems?**
IVAN Environmental Reporting Website is a *community-based* environmental monitoring system, which means that unlike other government complaint systems, all environmental reports submitted on the IVAN Environmental Reporting Website are publically archived. This provides a certain level of transparency to the environmental reporting process conducted by environmental agencies, such as the Department of Toxic Substances (DTSC). IVAN-Online is also a great resource to residents interested in receiving daily alerts to environmental concerns in their community.
- **Is IVAN Environmental Reporting Website a replacement for other government complaint systems?**
No, the IVAN Environmental Reporting Website is simply a *community-based* environmental monitoring system that works closely with the current environmental government complaint system. IVAN Environmental Reporting Website strives to empower residents, especially individuals from disadvantaged communities who, due to cultural or language barriers, might not otherwise report an environmental concern through government complaint systems.

- **I already submitted a report on IVAN Environmental Reporting Website. Is it necessary to also call the respective local government agency to report the environmental concern?**

It is encouraged, as there is a benefit in doing both, especially for time sensitive environmental concern such as air pollution. If you feel comfortable doing so, contacting the respective government agency could speed up the investigation process. However, if you do not feel comfortable, IVAN-Imperial will try its best to address the concern in a timely matter.

- **How do I track my IVAN report?**

It is important to revisit your IVAN report to see the status of your complaint. There is a section on each report titled, "Administrator Comments" where you can view the notes posted by the problem-solver, and track complaint resolutions.

- **Who is responsible for the managing IVAN Environmental Reporting Website?**

Comite Civico del Valle (CCV) and other statewide partners are responsible for managing and maintaining the technical support for all the IVAN Online websites.

- **What is the reporting jurisdiction of IVAN-Imperial Environmental Reporting Website?**

Each individual IVAN Environmental Reporting Website mapping system reflects the environmental concerns submitted with their defined jurisdiction. For example, if a report from a neighboring community, such as Mexicali, Baja California, is submitted there is presently no guarantee that the problem-solver will be able to get in contact with the proper regulatory authority to deal with the reported environmental concern. Therefore the report might only appear on the website but not result in any action. This is something that the IVAN Network is trying to improve, so we still encourage you to submit a report.

- **What happens after I submit a report on IVAN Environmental Reporting Website?**

Once a report is submitted it is reviewed by the local acting problem-solver and posted on the website. The problem-solver then "takes action" and forwards the report to the proper environmental regulatory agency/agencies responsible for responding to the environmental violation. Each month pending, old and new reports are discussed at a public meeting called the Environmental Justice Enforcement Task Force Meeting.

- **How long does it take for a report to be posted IVAN Environmental Reporting Website?**

An report takes approximately 4 hours to be displayed on the website. Please return to the website within 24 hours to view the status of your report.

- **Why should I include my contact information?**

In many instances, it is in the best interest of a reporter to include their contact information. This allows the problem-solver the option to ask further questions that can help in the solving process of the environmental concern. The only person authorized to see your contact information for the sole purpose of following up with further questions is the acting problem-solver, unless permission is given by the reporter to do otherwise.

- **What is the Environmental Justice Enforcement Task Force?**

Each IVAN has an Environmental Justice Enforcement Task Force, which is a group of dedicated community members and various environmental agency representatives that convene once a month to review and discuss environmental reports submitted on the IVAN Environmental Reporting Website, as well as other environmental concerns brought forth by the community. The Environmental Justice Enforcement Task Force has key stakeholders: Regulatory Agency Problem-Solver(s), Environmental Justice Non-Profit Problem-Solver(s), community partners and government agency partnerships.

- **Why is the Environmental Justice Enforcement Task Force necessary?**

The Environmental Justice Enforcement Task Force is an essential part of IVAN. It provides a benefit to both environmental regulatory agencies and the community members that participate. For example, an environmental complaint may require the involvement of multiple environmental regulatory agencies because the reported complaint is not just a water issue, but also a soil and air concern. These meetings provide a space for open conversations between these environmental regulatory agencies with the presence and input of the public. Another benefit is allowing residents, who are the eyes and ears of the community, to speak one-on-one with individuals who can help solve these environmental concerns. The shared knowledge and relationship building that occurs between residents and environmental regulatory agencies during these meetings are a cornerstone of IVAN.

The People Behind the Guidebook: Words from the Authors

This guidebook was put together with the support and guidance of community members that were both passionate and interested in learning more about improving the quality of life in the Imperial Valley. Below I have included several short letters from those community members.

Dear Imperial Valley Residents,

We present this handbook with a strong belief that the Imperial Valley deserves to be a community that provides people with a great place to live and raise their families. It is unfortunate that some residents, especially those born and raised here, believe that the air quality and other hazardous living conditions are normal. The reality is that we do face severe problems and simply cannot keep being conformists when it comes to some of the questionable decisions that our government agencies' may make. It is time to take a stand and pressure those in charge to correctly enforce environmental regulations to protect the residents of the Imperial Valley.

We need to create awareness in our communities and spread knowledge to the people. Once we make it known that living in a healthy and clean environment is achievable, we can then increase participation and pay closer attention to government agencies' and the decisions that they make. We need to ensure that Imperial Valley residents are considered first over all other interests. Our children, especially those with sensitive conditions, deserve clean air.

The Imperial Valley can be a better place to raise a family, and it is our hope that this handbook will serve as a gateway to a cleaner and safer tomorrow.

Carlos

Dear Imperial Valley,

This guidebook is a tool for your benefit, but its power is dependent on how you use it. It's no secret the many problems we face here in the Valley, whether they be social, environmental, health, climatic, or economic, we all know the struggles we face as a community. Fortunately, we now have a way to gather our concerns as one voice, hand it directly to the right agencies, and hold them accountable. The change we need won't

start from the agencies that have caused them - it starts with us standing together - and I hope you take full advantage of the platform this guidebook provides.

Gregorio Ponce

Dear Imperial Valley,

Our land and our environment can't advocate for itself. T, so that's where this guidebook and **you** come in. This guidebook will equip you with the knowledge and resources to educate yourself about many local occurrences we deem as "normal" that are affecting our home and our bodies. Being involved in this project has opened my eyes to the injustices our community faces. While it may seem overwhelming at times to discover all of the harmful faults in our practices and systems, this guidebook is like a light in the tunnel. Please share this information; knowledge is power.

Marcela Morlett

Imperial Valley Residents:

We hand over this resource guide as a form of empowerment not only for you but also to protect future generations and our environment. Inside you still find names to local, state, and federal agencies as key resources. We place this knowledge at your fingertips so that you may have positive momentum that will create a ripple effect towards changes in our community. All we need is you to make a difference and all of us put together can create an amazing impact!!

Carolina Garcia

Dear Neighbors,

Like many of us in the Imperial Valley, I've dismissed environmental violations as norms in our agricultural community. Never because I didn't care, but because this is how agriculture works and has been working for years; I was uninformed. This guidebook is designed, in simple terms, to create awareness and provide the right resources. Though the information may seem overwhelming and at times discouraging, it is up to us as individuals to want to change, to want a better environment for our children and future

generations. Know that one small environmental-friendly act multiplied by a million of people, can transform the world.
Please use this guidebook to help build mindfulness and share enlightenment with others.

"The greatest threat to our planet is the belief that someone else will save it." - Robert Swan

Crystal Cortez