

**Newtown Creek Community Health & Harms Narrative Project (CHHNP):  
Final Report from the Newtown Creek Alliance**



“Well anyway, don't fall in the water over there...It's like falling in maple syrup, you can't get out of it.” – *CHHNP Participant*

Prepared by:  
Rachael Weiss, MPH  
Michael Heimbinder

## **A NOTE TO THE READER**

The Community Health & Harms Narrative Project methodology is rooted in oral history, which privileges the anecdotal and subjective information of participants. As with any qualitative study, its reliance on memory provides a rich tapestry of impressions and insights but historical and scientific accuracy is not guaranteed. It should also be noted that this project does not claim to represent all of the varied perspectives on Newtown Creek from the hundreds of thousands of people who have lived or now live in communities along Newtown Creek.

## **ACKNOWLEDGEMENTS**

This report is dedicated to the people who live, work, and play in communities along Newtown Creek. We would like to extend a special thanks to those who were kind enough to share their stories with us. Their lived experiences in the community are an invaluable asset without which this project could not have succeeded. We would also like to acknowledge all the individuals who contributed their time, energy, ideas, and expertise during different stages. This report would not have been possible without the hard work and support of Yvonne Kodl, Andrea Muraskin, Suzanne Snider, Jed Crocker, and Laura and Mike Hofmann.

## **ABOUT THE NEWTOWN CREEK ALLIANCE**

Founded in 2002, the Newtown Creek Alliance represents the interests of community residents and local businesses who are dedicated to restoring community health, water quality, habitat, access, and vibrant water dependent commerce along Newtown Creek. The Alliance has served as a catalyst and channel for effective community action and our efforts have made a positive and enduring impact on the health and quality of life of Creek-side communities. With the completion of another Creek-side open space at the end of the Manhattan Avenue, a community-based Brownfields planning grant from New York State, and recent investments in green infrastructure and stormwater management, the Alliance continues to support local businesses, job generation, community health, and a cleaner Creek.

**TABLE OF CONTENTS**

BACKGROUND .....3  
    About Newtown Creek .....3  
    Community Health & Harms Narrative Project.....4  
METHODS .....4  
    Narrative Collection & Analysis .....4  
    About the Participants .....5  
RESULTS .....5  
    Changes in the neighborhood .....5  
    Pollution problems of the past .....8  
    Pollution & health problems of today .....10  
    The connection between environment & health .....13  
    The neighborhood is poisoning us? The role of awareness .....16  
    Who is really to blame? The role of individuals, communities, government & industry .....17  
    What should be done? What can be done? .....21  
RECOMMENDATIONS .....22

## **BACKGROUND**

### ***About Newtown Creek***

Dividing Western Queens from Northern Brooklyn, Newtown Creek is one of the oldest industrial corridors in the United States. While the Creek once flowed through wetlands and marshes, today nearly the entire three and a half mile length of the Creek has been bulkheaded. From the 1800's to the present, the Creek has served and continues to serve as a center for manufacturing and living-wage jobs in New York City. Sixty years ago when New York City was the manufacturing capital of the world, the Creek was the busiest industrial port in the Northeastern United States, the value and volume of its cargo exceeding even that of the mighty Mississippi. Today, thousands of manufacturing jobs remain and infrastructure indispensable to the functioning of the city is sited here. Unfortunately, the industrial past and the decline of American manufacturing after World War II also left behind a legacy of pollution, abandoned and underutilized properties, and unemployment.

The land adjacent to Newtown Creek constitutes the largest contiguous industrially zoned area in New York City. Radiating out from the Creek industrial zones, dense residential areas begin to predominate. Over the last half century, the boundaries between residentially zoned areas and industrially zoned areas around the Creek have grown increasingly blurry as manufacturing enterprises have left and housing has moved in. The pace of this trend has accelerated in the last decade as rising real estate values in Manhattan have brought an influx of new residents, many of whom find affordable housing in illegally converted industrial buildings.

Creek-side communities such as Greenpoint and East Williamsburg in Brooklyn, and Maspeth in Queens, are home to a disproportionate number of environmental harms and risks. Up until the latter part of the 20th Century, heavy industries along the Creek - including oil refineries, fertilizer factories, and chemical plants - had free reign over the disposal of unwanted byproducts. With little-to-no government regulation and a limited understanding of how pollution impacts human health and the environment, dumping unwanted wastes into the environment was often the default method of disposal.

The result is that at least 69 of the 174 lots that form the Creek waterfront are known or suspected contaminated sites and many are abandoned or underutilized as a result. At any given time, plumes of oil can be seen seeping into the Creek from the massive 17-30 million gallon ExxonMobil oil spill, and groundwater discharges into the Creek are laden with toxic chemicals from hundreds of contaminated upland and shoreline sites. Within one mile of the Creek there are hundreds of brownfields, 17 State Superfund sites, 19 waste transfer stations, dozens of instances of hazardous vapor intrusion in homes and businesses, 12 registered point source air emissions facilities, and the largest sewage treatment facility in New York City. Moreover, the Creek annually receives 2.7 billion gallons of raw sewage and polluted stormwater from 22 permitted combined sewer overflow pipes. Creekside neighborhoods are also heavily impacted by automobile emissions from the Brooklyn-Queens and Long Island Expressways.

On average in New York City, 26% of the land is preserved as open space. In contrast, Brooklyn Community District (CD) 1, which includes Greenpoint and East Williamsburg, ranks well below the city average with a meager 4.3% of the land dedicated to open space. Maspeth, which occupies area in both Queens CD 2 and 5 is also sorely lacking in open space. Only 14% of the

land in Queens CD 2 is reserved as open space and although Queens CD 5 ranks substantially higher at 35%, cemeteries occupy the majority of that space. Deprived of quality open space and recreational facilities, many residents and workers make do with poor, even dangerous, access to the Creek, lounging on precarious bulkheads and trash-strewn street ends. The Creek is too polluted for safe swimming or fishing, but in the summer kids are frequently spotted taking a dip in the Creek and a sizeable number of local residents augment their meals with fish and crabs caught in the Creek. The Creek is also actively used by recreational boaters. The Long Island City Boathouse has introduced hundreds of people to the Creek on their fleet of open top Kayaks and sailing enthusiasts have created an impromptu marina where Manhattan Ave. and Vernon Blvd. meet the mouth of the Creek.

### ***Community Health & Harms Narrative Project***

After decades of dealing with slow/failed remediation efforts, recalcitrant industrial polluters and frequently unresponsive regulatory authorities, many Creek-side communities have become defeated, resigned to privately worry about their health concerns without hope for significant environmental improvement. The Community Health & Harms Narrative Project (CHHNP) has been designed to reverse this equation, inspiring community action by identifying shared health and environmental concerns and demonstrating the possibilities for positive change.

This report is not intended to prove causality between the environmental burdens in these neighborhoods and public health concerns. Rather, its purpose is to highlight and document the experiential knowledge of individuals who are inside narrators of day-to-day life in these communities. People who have a first-hand understanding of their neighborhood - who everyday use their eyes, ears, and noses - can provide essential contextual information that would otherwise be ignored or lost.

## **METHODS**

### ***Narrative Collection & Analysis***

All CHHNP participants were adults over the age of 18 years who spent at least five years living in one of three Creek-side neighborhoods: Greenpoint, East Williamsburg, and Maspeth. Participants were recruited at information meetings held at public venues throughout the community and through word of mouth. During these meetings, the project was described and residents were given the opportunity to schedule an interview at a convenient location of their choosing. Information regarding the use and dissemination of their story was communicated to the participants during the informed consent process (this project received Institutional Review Board approval from Hunter College on January 10, 2008).

Face-to-face interviews were conducted between May 2009 and May 2010. Each interview lasted approximately 30-60 minutes and was recorded using Edirol/Roland digital audio recorders equipped with lavalier microphones. A scripted interview guide was developed to elicit open-ended, non-leading responses on a variety of topics. Participants were first asked to provide personal information regarding their history in the neighborhood including any changes they may have noticed over time. The second part of the interview delved into the participant's experiences with environmental pollution in their neighborhood. In addition, participants were

also asked to describe any health problems that they thought might be related to exposures to industrial pollution. The interviews were transcribed verbatim and analyzed for recurring themes.

### ***About the Participants***

A total of 19 narratives were recorded and transcribed within the study area. The convenience sample included a diverse group of participants from Greenpoint (n=9), East Williamsburg (n=7), and Maspeth (n=3). The majority of interviewees (n=14) were long-term residents residing in their respective communities for 10 years or longer, most often for their entire lives. Participants ranged from retirees to community activists to recent graduates, each with different social and familial networks within the neighborhood. The presence of familial relationships between some participants (e.g., husband – wife, sisters, grandmother – granddaughter) added context to the narratives and tended to emphasize the differential experiences of individuals.

## **RESULTS**

### ***Changes in the neighborhood***

Change is a constant in New York City and many of the long-term residents describe growing up in communities that were more isolated from the rest of the City than they are today. Participants provided descriptions of local amenities, retail outlets, and entertainment venues that existed within their community. There was a feeling that everything one needed was available within easy reach of home, with an almost small-town feel. For example, three participants reminisce about going to local movies theaters with friends, and explicitly express their sadness that none of these venues exist today.

In addition, many individuals describe how the social atmosphere of their communities has changed over time, usually for the worse. Communities were places to socialize, safe havens where people engaged with each other regularly, sitting on stoops with children playing in the streets:

“When I first moved here, it was quiet. It was more like a family. We used to have block parties for the kids. We used to go out and do things with the kids. I was one of the people who would get things for the block party. And families would put their tables out and we would eat. It was more like people... they looked out for each other.”

“This was old Brooklyn. The days that I grew up here, this was two-family houses, two-family row houses. I’m going back to Roger Maris, Mickey Mantle. Kids playing ball in the street from 9 o’clock in the morning to 8:30 at night, 9 o’clock at night. You’d sit on the stoop, you’d turn the radio on and listen to the Yankee game. Everybody would stay out on the stoop. My mother would come out. My father would come home from work, have a couple beers, listen -- turn the radio on and listen to the Yankee game. You didn’t have to lock your doors. It was a great, great, great community. I mean, it was fantastic family life.”

People also took part in more formalized social organizations and gatherings, such as craft groups and social clubs:

“We had a social club where we used to meet and we used to dance, we used to make food, and get together, and have fun... We used to get together, we used to make meetings, we used to raise funds for people that their houses burn, people that their family pass away and they didn't have money to bury them, and we used to collect the money and help them with the burials. Like me, my apartment got burned and they make a party and what they collect in the party, they give it to me so I could get the furniture and clothes. Yeah, we used to do all that.”

Six participants worried over the loss of social cohesion and people remarked that neighbors do not seem to look out for one another any longer:

“People is not like they used to be. You know, they used to help others. Now they just see you in the street, laying down in the street, they don't even stop to see if something is wrong with you or to call the ambulance.”

“It's very sad too because it's not what it used to be... It's just that a lot of people, they just don't care and they don't try to help each other.”

“There was a nice Jewish community there and it's like everybody was family. You lived in people's homes and neighbors came to you... now it's sort of unusual, everybody's just too busy, but back then, you shared the common laundry room, so you always knew everybody's gossip or whatever.”

“People were just very different back then, they knew each other more. Now you have -- here comes my opinion of it -- the texting, where we're not as close, even though we think we are, with the texting and emails, there's still a distance. I'm not convinced that we're as close as we were 50 years ago.”

Participants offered their own ideas as to why the social atmosphere in their community has changed so dramatically. There is a general notion of transience, where long-term residents have either passed away or moved on to different geographic locations. In their place are newcomers who may share different social norms, values, and expectations. Five individuals mentioned how residential development and gentrification has spurred an influx of new residents, specifically through the redevelopment of old factories and industrial spaces:

“Yeah, overpopulation is a big thing. Flushing Avenue, all those new houses down there, when you drive up that way, just two years ago that was a factory building... This was all -- just when you come up to the corner, that new building, there was a gigantic, 60-foot, big spruce tree right there that they cut down and they built a new house there. You know?”

“Well, in the last three to five years the community has taken a drastic change in terms of housing. This was considered a semi-industrial area. We were surrounded with factories for so many years. Now those factories are actually residential dwellings. They are now lofts, and people live there. And it seems that every piece of land, vacant land that is, in the area has been developed and we're seeing a lot of high-rise buildings. For years, these were the only high-rise buildings in this neighborhood. Everything was basically one family, two family homes. Now, if you just look throughout the neighborhood you'll see 12-14 story buildings going up in the middle of a block where there's nothing but one and two family homes.”

“Yeah, well on the waterfront, closer to where I used to live, you've got like large condominiums coming up, you know, high rise condominiums more or less, because there's more space for that. And then you have kind of those old industrial space lofts that are coming in. I think it was around 2006 or seven where timeout New York had an article about Greenpoint being the next place to move, not saying that they were responsible for it, but I think within like a year, it blew up. It kind of did become the place for people to move to. So at one point, it was a lot more, it was a lot of people who

really, this is all they could afford, and now it's not that as much anymore, a lot of those people, at least it seems like, are moving out to places like Bushwick, or Crown Heights, or other various neighborhoods like that."

As the excerpt above notes, ongoing gentrification has tended to push out long-term residents who can no longer afford to live in these communities, breaking social ties. In addition, increases in population density have created new problems, including a perceived deficit of parking spaces and packed playgrounds. Interestingly, a young participant notes that although the redevelopment is in her mind positive, it is sad to see the history of these communities developed away:

"Domino [Sugar Factory] sadly, that's turning into a loft. That was sad, because a lot of my great grandmother's friends, like she was alive when I was born, for a while, until I was about 14, 15, so I knew her really well. She used to work in Domino, and my best friend's grandmother worked in Domino Sugar Factory. Most of the factories are changing into lofts. It's a good thing but it's really sad to most of the people in the neighborhood because it's memories, it's where they worked. All of the people in the neighborhood pretty much believe that they should be landmarked instead of changed into lofts and things like that."

Three individuals note that housing changes have increased the number of renters in their communities. As a result, they feel that the new people don't take as much pride in their neighborhood as those living in owner-occupied residences. They suggest that the priorities of renters' lie elsewhere and that this has negatively affected their community:

"Well, like I say, people don't take pride in the neighborhood. And that bothers me. That bothers me. And I really think it's because most of these families -- You can tell the people who own their homes, because they're always out doing something or trying to clean or sweep. I think it's because it has become like a metropolitan area, the city, where they're renting. And they really -- they sleep here but their priorities are elsewhere."

"So I guess most of the people used to own the houses. It was a lot of private houses and once they sold, so either the new owner or the government took the houses and they made buildings and the buildings, anybody move in the building, you know. So that have a lot to do and it's not, what do you call? It's nobody watching who's coming and who's going and what's going on, you know? And that's what made the building go down to the ground."

Seven of the participants discuss how their community has become much more diverse than it was in the past. Interestingly, residents report increasing diversity as both an opportunity and a challenge:

The neighborhood has changed quite -- you know? It was originally I guess, Irish and Italian when we came here, and now it's sort of Polish, Spanish and Irish too I guess yeah, whatever... We've got everything here, we've got everything. (laughs) This is not a melting pot, it's a mixing pot here."

"This area's in transition. There's a lot of people coming and going. Houses being knocked down, bigger buildings being built. People relocating to other areas... And the people that are coming into this area, they have no idea. They're just coming in here because they're saying, oh Greenpoint, next to Williamsburg, it's a great area. They travel from here to the city. Which it is. It's an easy commute. And they have no clue about the issues that are going on under here."



“A lot of people moved into the neighborhood and a lot of cultures just started to spill into Greenpoint, which was abnormal at first, because we only basically have three, which is Italian, Irish and Polish, in the neighborhood. So to see someone of a different culture, a different background, doing something different or dressing differently, was really a shocker to me definitely... Growing up, I was the only African American child on this block and that was hard, that was very hard...But now, like this drastic change of like culture shock, it's amazing. It's like Manhattan just moved to Williamsburg and I just love it. I would say that's the best thing, just the culture. There's so much more things going on as far as like art is concerned. There's so many things going on, like as far as like art galleries and they have more clubs and more things to do now. And I'm like in the perfect age range to do those things, so I'm just like, it came right on time.”

### ***Pollution problems of the past***

The majority of participants, when asked to describe their community historically, mention the predominate role of industry in the surrounding area. Eleven individuals point out a number of factories and industrial sites that were either situated in their immediate vicinity or else visible through their windows. Specific factories or industries mentioned in the narratives include Kaiser Aluminum (whose presence could not be confirmed by a search of historical records), Van Iderstine (a fat rendering facility), Duraflex Hart (a plastics and PVC manufacturer), oil refineries, gas tanks, garbage incinerators, and many others producing goods such as underwear, fire engines, soap, paper, industrial fans, trucks, and frankfurters. Interviewees describe the truck exhaust, smoke, smells, and haze emanating from these factories on a daily basis:

“Then we come to Van Iderstine. That forget it, especially in the summer time when you had your windows open, and Van Iderstine was a fat rendering place. They would render fat, but the stench of it, it was terrible. So, in the summertime, of course you didn't have air conditioning then, you had fans. So, you had to close your windows to keep the stench out...But, the odor traveled, and did it travel. As soon as you smelled it Van Iderstine was at work again.”

“And they used to have a soap factory. That's not here any more...And you could sm-- Oh, my God! A paper factory down on Humboldt, down the back and go around. But that's not there any more. And you -- Oh, it used to smell. If the wind was blowing the wrong way, forget it.”

“I lived on the uppermost floor, and I had a very clear view of the Long Island Expressway, and beyond it was the industrial area, from a vantage point, from my bedroom window. I remember looking out and seeing like a haze.”

Three participants also remembered smelling bad odors of unknown origin, which they described as gas, sulfur, wood burning, and chemical-like smells:

“Many times, we were sitting outside, and these odors would come from the Brooklyn area, and we never knew what it was. Sometimes there were fires over there, and the smoke actually would come up here... Well, sometimes it was like a burning smell, like wood; other times, it was kind of chemical. Most of the time, it was kind of like a chemical smell, like I can't really describe.”

“Same experience, on certain very damp, hot days. You would get this smell sort of like you get in Staten Island, if you know what I mean, similar smell but not as pervasive as it is in Staten Island. Ridgewood would get that kind of sulfury kind of smell. There is Newtown Creek and a lot of other little waterways, which I thought were probably polluted. Like I said, there's the big gas tank there, I was curious about that.”

“We used to get a sewage smell and a gas smell, and we'd get a smell like you know, when the tide goes out, you would get the smell or if the wind was blowing, you would get the smell. It's like Secaucus, remember in Secaucus years ago, when it was really, you could drive through like that. And then it would go away, it wasn't constant. We used to get a gas smell. Everybody would come out of their houses, and I would always listen, see if I hear a hissing or anything like that. And then all of a sudden, the gas company would show up and they would test it and everything was fine. So I don't know.”

In addition to odors, three individuals also discuss the historical presence of white ash or soot that would usually appear in the early morning and blanketed gardens, cars, and clothing:

“When we first moved here, in the morning, it would be like snow coming down your car. You could have your car washed, the next morning it would be like little round pieces of soot or whatever it is, but only it used to be white. I used to remember writing on it, on the car. And then by the time the sun came out and everything, it would sort of dissipate. It's still dusty, a lot of extra dust, but as the factories closed and the houses moved in, I guess the pollution sort of left you know?”

“Just beyond the cemetery was a major sanitation plant, and I don't know if that was considered Maspeth, but you would see the stacks constantly just polluting the air, and it was allowed back then, including the incinerators that we had in every building; this is before those laws were passed, where you saw again, the soot would come. It would almost -- I'm not 100 percent sure of this, but occasionally, you would see the cinder, you know the soot, coming down on your clothes. I don't remember it being a big problem, but you know, you knew that you were breathing all that in.”

“And we had a wonderful vegetable garden. So, you know, I made pots of tomato sauce and all kinds of stuff for my kids, not knowing what was in that soil. We used to get -- a lot of times, in the morning, there was a funny ash on top of the tomatoes.”

They attributed the ash to garbage incinerators. Each individual noted that the problem abated when the incinerators were not in use and disappeared entirely after the incinerators near them were shut down permanently.

Much of the industry in these communities was focused along the banks of Newtown Creek, a body of water that was, and continues to be, notoriously polluted. In recognition of the pollution, eight of the participants mentioned the malodorous smell and appearance of the Creek while they were growing up. The Creek was described as a dumping ground, contaminated with oil and emitting noxious odors:

“Also, over the years -- even as a little girl, I remember coming home from upstate with my family, and you always knew when you were getting to Greenpoint because -- even if you were sitting -- even if you were sleeping in the car, the smell would just like slap you in the face as you were coming over the Greenpoint Avenue Bridge.”

“Yeah, it was the Newtown Creek we used to get odors from. But, that, again I think was more in the warmer weather, and in the wintertime it was too cold. I guess it got frozen. But, yeah I think it was just in the warmer weather that we would get the smell from it...It smells like garbage, rotten garbage. But, when it started, or when it ended, I don't know. You know, sometimes you just don't pay attention. It's there, but you it's just part of life, you don't know when it started or when it stopped.”

“There were times when we could not even sit outside. The smell was just so, so bad. My relatives would come visit me from other neighborhoods, and they would be like what is that smell? I mean, you’d wake up in the morning to it. It just gave you a nauseous, nauseous sick feeling. The smell was just really, really bad. One of the places that I do go shopping is Western Beef, where you actually have to cross the bridge that covers the creek to go there. I remember riding through that area and everybody rolls up the windows to their cars because it smelled so bad. And then to look at the green, slimy water, it was just awful. Just awful.”

“Many years ago, you could walk over to Greenpoint Avenue Bridge, which is a bridge over the -- walk over. All you had to do was look down at the creek. I mean, you could walk across that thing. You didn’t have to have snowshoes on or nothing to walk across that thing. There was so much oil on the top of that creek. It was terrible. It was terrible.”

“I know when we went to high school, we used to pass over it [Newtown Creek], and we used to say, on different days it would run different colors, depending on what was being dumped on that particular day. I don't even know what they were putting there.”

Interestingly, five of the participants observed that the smells had lessened over time and the appearance of the Creek had improved, particularly over the last decade. Most are quick to point out that although they see improvements, full restoration of the Creek is still a long way off:

“It’s, I must say that it [Newtown Creek] has improved. It has improved immensely...occasionally now, when there is a heavy downpour of rain, you sometimes do get a little whiff of the odor from the creek. But, it has greatly improved. Nothing like it used to be. We couldn’t even sit outside before.”

“And the pollution from down there [by Newtown Creek], I think it has gotten somewhat a little bit better. It’s not, still, perfect. It’s far from perfect. But you get the right day, 95 degrees, 80% humidity in the air, where your clothes are sticking to you, the fumes that come off that creek -- you could smell it.”

### ***Pollution & health problems of today***

As a result of dumping and pollution from historic industries, communities around Newtown Creek are potentially exposed to numerous environmental health hazards. In recent years, the Greenpoint oil spill has peaked both media and political interest, particularly in the face of ongoing civil litigation. Eleven individuals mentioned the oil spill as a pollution problem in the neighborhood, but are quick to qualify that they are not experts. In addition, many people discussed the spill as physically proximate to their home but they also evoked a sense of distance in terms of inaccessibility:

“I guess there's been a lot of media coverage on the oil spill that happened a while ago and how it's kind of a big mess I guess underground. But I'm not an expert on it by any means.”

“There was an oil spill on Apollo not too long ago, so that kind of scared me just a little bit. Like it's in our water supply and there's like a plant right there, like a few blocks down from here. You can actually see it, right there.”

“The oil spill, I don’t know when they’re going to ever do anything about that...They had a lawyer that was supposed to get back to you on something. Never happened. I only had two meetings. Then when you tried to talk to them, you know, it was like you call the office, you do this, you do that, and nothing really came out of that. You’ve still got the oil. And I actually think it’s because they had an

oil refinery -- I'm not sure -- down around Apollo and Norman, back on the back side...And I just know, when it rains and the water back up in my basement, it's oil -- there's oil."

"Well, there is the Newtown Creek oil spill, which I am aware of that. And as far as I know, I know I'm within that area of it. I don't know if I'm like directly on it, that's one thing I have sort of chosen to kind of ignore."

Despite substantial media coverage, misinformation was common when participants were discussing the Greenpoint oil spill. Receiving their information via newspapers or neighborhood word of mouth, participants were often unclear or mistaken as to the specifics of the spill including the origins, historical time line, spill extent, and current state of remediation:

"I know my friend Richie, he knows a great deal about Greenpoint. He actually told me that there was an oil spill on Apollo, because he used to hang there a lot and we were just like, there was a time he was like what is that smell? The next day they said that there was an oil spill here. So he was just like yeah, you might want to stay away from the water...So basically, I'm just going to say that the oil spill was on Apollo and it happened really fast. Let's just say it happened really fast and what I know of, the people near that area supposedly suffered a great deal as far as health. You can look into that if you like, but that's what I was told."

"Well, I didn't realize that they had that big oil spill in the seventies, and, you know, that's when my kids were growing up and everything. And I don't know. I thought it was something in the past, but now I've been told -- and my husband said that when he was working there in 1995, in that area, they told him to stay away from there, that that hadn't been properly, you know, cleaned."

"I understand down closer to the other end of Greenpoint that... I understand people there got sick, and they blame it on the oil spill that was down there in the river...we had Ciccone Oil company here, and I don't know where the spill came from, but it was from the oil company, Ciccone. Now how it got in the water, I don't know. And I'm so used to it that I didn't even read anything about it in the paper, so I don't know anything else other than it's in the water."

"And it's been in the paper, there was a big oil leak there apparently, but again, I wasn't aware of it at the time when it happened...It's been written up, I don't recall. I think it was in the 60s, maybe the 50s or the 60s but again, I don't remember exactly, and I wasn't involved in it, I wasn't aware about it when it was happening."

"But I don't remember how I first heard about the ruptured tanks in the Newtown Creek. I might have heard about them the way everybody else did, which is when -- I think it was -- Wasn't it Councilman Yasky who started to make it public?...I would -- I would summarize it [the oil spill] by saying that right after World War II, a couple of oil tanks ruptured underwater and have been leaking ever since, and that -- Am I right about that? Is that -- Is that an accurate assessment of the situation? 'Cause that's what I read."

Four individuals also mention the presence of toxic smells or fumes in the neighborhood that are emitted by the Creek or the soil and in their opinion, may be related to the oil spill:

"You get the right day, 95 degrees, 80% humidity in the air, where your clothes are sticking to you, the fumes that come off that creek -- you could smell it. That stuff's terrible. You don't want to go home and have supper. I've lived with this all my life. You can't tell me that this is not -- there's not a health issue coming out of there. They're now telling me that there's benzene fumes coming out of the soil. It's a known carcinogen."

“There is a kind of a gaseous smell that every once in a while I smell in the front of my apartment...And I don't know if that's -- I really don't -- it's kind of one of those smells like over the years, this is not a constant smell at all, this is something that kind of wafts up every once in a while, so I don't know if it's just like from cars, or what it's coming from exactly, but I have noticed that...It's not seasonal. It's just one of those things, it really doesn't happen often, like very, very few times, but it's a hard smell to describe, it's kind of got like a gasoline smell to it, but that's why I think that it might be from Newtown Creek, I don't know.”

In addition to the Newtown Creek oil spill, several other environmental nuisances are mentioned throughout the narratives. The second most common complaint, discussed by seven participants, is the presence of dumping, garbage, rats, and dog excrement:

“It seems like we've been a dumping ground in this area for years.”

“Yeah, garbage, the garbage that they take out, they don't dispose the garbage the way they should be. And the smell, the rats, and all these animals comes around and they broke the bags and everything. Mainly it's the garbage.”

“Basically, I know there's actually a dumping ground for garbage not too far from here. It's actually the next block over and about two blocks down, and that's where they basically dump all the garbage. These are -- all these houses, like they get the fumes when they burn them, that stench and stuff that you smell, that's from the plant and them dumping waste and things like that. It's just like, where exactly are you dumping them?”

“There's garbage on the sidewalk. People don't pick up behind their dogs. You go in the park. You smell the dog poop. Kids are playing. That's unsanitary. Then you see the papers. You can sweep your sidewalk and come back. It's just like you didn't. Cigarette butts everywhere.”

“So, you see a lot of dirt and garbage, and even these are litter baskets on the corner. They are so overflowing sometimes because people just walk down with their household garbage and deposit there, which they're not supposed to. And there is, was it a \$200 fine or something, if you get caught, but I never see anybody around to get out the fines. It is really messy, and I think that's a health hazard with that. You know, especially with the summer coming up and the hot weather, yes.”

Another pollution source brought up by four individuals was air pollution, congestion, and noise from vehicular traffic in the neighborhood:

“I heard -- I heard that it had become extremely congested, that there was a lot of traffic. There was noise pollution and probably more car pollution, 'cause the -- there were more cars. There were motorcycles, truck traffic. That was always the case. But -- but I heard that it got worse.”

“I believe it affected me, and I remember having difficulty breathing at times, and the smell, I guess from the Long Island Expressway, from heavy traffic, and from the industrial area.”

One participant discusses the reality of living within close proximity to several waste transfer stations and how illegal truck traffic has motivated action:

“What happens is because we are very close in proximity to the Brooklyn-Queens Expressway and because there are a lot of factories in this area, there is a lot of truck traffic. And, some of these trucks are going down streets that are not truck routes. Residential blocks where there should not be any trucks. So, we get the noise, the exhaust. A lot of them are transporting waste material. Very, very

close to this community we have several waste transfer stations, and they cart garbage from all over the city. A lot of those transfer stations are within walking distance from here...I have stood on Metropolitan Avenue and counted the number of trucks that come through that area. Primarily, those trucks that are going back and forth from the waste transfer stations, a lot of times there is some substance dripping from the trucks. They smell really, really bad, and we have been fighting for a long time to control the truck traffic in this. I've been involved in standing at the expressways and watching trucks come off the BQE and going down local streets that they shouldn't be going down. And, even though they try to do it at 4 or 5 o'clock in the morning, they still should not be there. They shouldn't be traveling that route."

### ***The connection between environment & health***

Proving a correlation between known environmental hazards and public health is often impossible, especially considering multiple exposures. In addition, environmental health science is plagued with long latency periods between exposure and emerging illness that makes establishing a causal relationship difficult. However, individuals living in these communities are quick to point out a number of health problems that have either directly or indirectly impacted themselves and their community. Diseases mentioned in the narratives include asthma, bronchitis, arthritis, cancer (liver, lung, stomach, pancreas, breast, thyroid, bladder, brain, and ovarian), leukemia, brain tumors, progressive supranuclear palsy, encephalopathy, lacuna infarct, congenital blood birth defects, bone tumors, an unidentified connective tissue disorder, lupus, fibromyalgia, autoimmune disorders, alopecia areata, seizure disorders, thrombocytopenia, and antinuclear antibodies.

Although everyone interviewed discussed the presence of health problems, participants varied widely in establishing a connection between health and the environment in their narrative. In general, three health linkage themes emerged from the narratives. The first theme involved five individuals who did not attribute health problems to neighborhood pollution:

"My son have all the illness that I have. He had everything from me, I had everything from my parents. Like diabetes, thyroid problems, heart problems, all of these things. I don't think it's from the pollution."

"Yeah, I've heard like stories from other people, not that I necessarily remember right now, but I haven't experienced any like bad health I don't think because of it. But like I said, I haven't lived here that long."

"Me, I traveled all over the city, I've worked all over the city. I have lymphoma. I had an operation on a lymph gland, but I can't really attribute it. I think, because I had -- I remember when I was a kid growing up in Astoria, we had a lot of respiratory problems down there too, in Long Island City. So I can't really say it's from this neighborhood, you know?"

"Knock on wood, I've been pretty healthy all my life. I never had -- my sister did have a touch of -- my father and my sister I think, had some respiratory problems, but it seems to have been genetics, I think. I don't know if it was exacerbated by the pollution, but it was just a touch. It was nothing that ever became more than that. My grandmother just had problems getting older, but nothing... She died of cardiac problems. I have other relatives in Brooklyn, there was cancer, but I don't...I think in any group of people, you can always have, no matter where you are, some people that die too young. So I don't -- but when you were saying about Newtown Creek, we were not really close to it."

Ten participants who have recently begun to question whether there may indeed be a link between health and the environment represent the second and most prevalent theme: the presence of illness clusters. Although many participants' observations were embedded in uncertainty, they nevertheless associated specific illnesses with living in their neighborhood:

“So, with the BQE, with the waste transfer stations, with the truck traffic, with the smell of Newtown Creek, I've begun to be interested in health issues and the environment. As I said before, especially me, myself, coming down with cancer, and one of things that we have seen a spike is in the number of cancer diagnoses in this area. So, I'm wondering, for the first time, could that possibly have an impact on the cancer spike that we're seeing in the neighborhoods with the environmental issues that's going on.”

“There was actually a lot of people this year that died from cancer, just (snaps fingers), just like that. There was a little girl, she lived in that brown house, next to the red house, and she died of cancer. It was really sad, she was like nine you know? So it was really sad, and I think that has a lot to do with what's going on here, definitely.”

“There's asthma, bronchitis, the arthritis. I mean it has to be something that they can be done for all this because I never see, you know, I don't know, in my country the people die because they're old. They die from 112, 100 years, and believe it or not none of them have any illness. What they have is old age. In here you have bronchitis, you have arthritis, you have everything. So it has to be something in the air here.”

“There were four people that I grew up with that developed cancer, and at a -- at a relatively young age. Three -- three out of four of them died. A girl, she -- she was a couple years older than me only, died, 19 or 20 or something from breast cancer... And then someone -- someone I went to school with also, he died -- he died right around the time we got married... And another guy, he -- he had a tumor on his back. But he was -- he was cured. And he -- He's -- As far as I know, he's OK. And a fourth person, he was morbidly obese, but he -- he developed liver cancer and -- and he died a -- a few years ago. So, I mean, that seems like a high -- to me, a high incidence of cancer in young -- at a younger age. And I -- I think there was a correlation, living in Maspeth. I can't say that it came from breathing in the air from Newtown Creek, but I think living in Maspeth was probably a factor, you know?”

“I grew up as a very severe asthmatic. I guess I always wondered if my asthma might have been aggravated by the pollution that was caused by the Long Island Expressway.”

“Someone was talking the other day and they were saying, you know, a lot of women in Greenpoint are beginning to get cancer. I wonder is it from the -- I wonder is it from the -- something with the water, no sewers. You know, they were just talking. And I spoke up and I said, “Well, my family has cancer.” My family's noted for breast cancer. I said, “And I don't think mine came from that.” But some people could, you know... I've just heard people talking. They're saying, you know, a lot of women -- I know a couple of women who live here who ha-- And -- and I know a couple -- I know one that died from cancer. I can't say it came from here, because I don't know. I don't know. But I'm just saying that's how they feel and that's what they say. They were just talking. And I says, “You think that that could be possible, because there are no sewers?” I said, “Really, I don't know.” And I don't know.”

“And in February of 2009, I was told by a neurologist at St. Luke's Roosevelt Hospital that he would like me to see an oncologist at Sloan Kettering, to look further into an MRI they had done, for a possibility that it was a brain tumor. And it being -- I mean, I was 33 at the time. I was eventually diagnosed with a brain tumor, in March of '09, and, I mean, there's no -- they don't know exactly what

caused it, and there's no, you know, definitive answers that the doctors could give me. But one thing they did tell me is that being 33 years old and diagnosed with this is very uncommon. And one of the most immediate things I thought of was having lived in Greenpoint.”

“Well, I’m not sure about it, but I did wonder why I was diagnosed with lupus, fibromyalgia, MS, which they call disease of the young, and I don’t know what I’m doing with it. And my next-door neighbor has Parkinson’s, and the lady directly across the street passed away of Lou Gehrig’s. Then the lady all the ways down the block, she died of a rare blood disease that came on suddenly, but they don’t know what it was. Then right here over the block -- and this one happened recently now -- this lady Elizabeth, she had lupus, and she wasn’t young either. And the girl I told you about, 44-year-old girl, she didn’t live here any longer because she got married and moved, but she did grow up here, and she died at 44 of cancer. They don’t know where the cancer came from. Now, this all happened the past couple of years. I mean, I think that’s too much for one block.”

“I needed to move anyway [from Greenpoint] because I didn’t have proper workspace in my house. I couldn’t really continue my career working at home there. And it wasn’t an easy decision, because we were very comfortable in that household. But it was also just -- You know, I was thinking, I don’t know if I really want to try and get pregnant in this neighborhood. I had heard anecdotally that there are cancer clusters all over that part of Brooklyn. And I just thought, eh, time to get away.”

“Well, it was known that there was a very -- it appeared that there was a higher than normal incidents of cancer in the area where we lived. I’ve just been thinking about the past few days. What I can think of is there was a sanitation department, I think an incinerator of some sort, that was very close by, and other than that, the co-op had four buildings. Each building had two incinerators and at that time, the custom was any garbage you had, you threw it in the incinerator, and then they would burn it, without much thought about what was being burned or produced. They stopped that at some point, I don’t remember what year. Maybe that had some effect, I don’t know, but I think that was the same, as they had incinerators in all the other buildings in the city, so I don’t know if it was anything special, but one way or another, there were quite a few people who died earlier than usual from cancer.”

The third theme describes two individuals who have moved beyond the inquiry stage and describe their certainty of the connection between pollution in their neighborhood and health problems:

“You can’t tell me that this is not -- there’s not a health issue coming out of there [Newtown Creek oil spill]. They’re now telling me that there’s benzene fumes coming out of the soil. It’s a known carcinogen. Why is everybody getting cancer? All I can say is that when I go -- when I stated this at one of the meetings that I went to -- when I go pump gasoline into my car -- I said, “There’s a little sign on the side of the gas pump that says, ‘Inhalation of these vapors has been known to cause cancer in laboratory animals.’” Well I went there and I said to them that day when Dawn Hettrick, who, like I said, represents the state of New York Environmental Protection -- I don’t know what her claim is beyond that. She said to me, “It’s not a health issue.” I said, “Well, if there’s not a health issue, how come I’m reading this sign over here and I’m breathing these emissions in for the last 58 years?” I’m now 60. So it’s now 60 years. And why is everybody getting sick? “Oh, well this here -- well everybody’s going to die.” Everybody’s going to die. We all know that everybody’s going to die. But everybody don’t have to die of cancer... We all know we’re not going to be here forever. But that doesn’t mean that I have to hasten it or anybody got to die of cancer of the liver, or stomach cancer, or cancer of the pancreas, or lung cancer, because of the stuff that you -- and they admitted at that meeting -- ExxonMobil, British Petroleum -- they admitted that they polluted this ground.”

“About -- I’d say about six months after that [PVC manufacturing] facility was closed, some of my health problems decreased, and my son’s asthma, which was pretty severe at the time, really decreased. Him and I both went down to having maybe very mild asthma. So we were -- you know,



looking back, I'm able to see that that manufacturer was a direct cause of that particular health problem that my family had.

"My spin on that question is, I don't think that my health has been affected; I know my health has been affected, because I've been witness to a lot of things that have gone on in this neighborhood, and I've -- you know, I bear witness with my family on how it's affected us. I say this to everybody that interviews me, so it's like -- you know, I know it by -- it's like a by-heart ramble. My family's medical health history reads like an Area 51 report."

### ***The neighborhood is poisoning us? The role of awareness***

It is clear from the narratives that most participants have noticed that their community has suffered or is suffering from an uncommonly high prevalence of health problems. However, the extent to which the environment is to blame requires more information. Nine individuals discuss a general lack of awareness, both historical and present, that continues to cause uncertainty:

"Nowadays it's different, but it was so many years ago. I don't know how much awareness there was back then, of all the environmental problems that existed in the area."

"What -- what amazes me, because much like myself, I don't think that a lot of the residents, and not just Cooper Park, but in this area, really have associated illnesses and health problems to the environment here. I think that a lot of awareness needs to be geared towards that because people are just thinking, well I'm sick because I got old, I'm sick because I ate the wrong thing, I'm sick because of this, and that may not be the situation. Especially with the high rate of asthma and cancer, it's just not coincidental that that happens in this area."

"Apparently, nobody's figured out yet, what causes -- we know a number of things can lead to cancer. Whether it was this, that or the other thing, I have no way to know."

"Oh, I'm sure there's a lot of pollution around that we don't know about, that could be corrected if it was found, but a lot of it is buried under the ground... Sometimes, when they build a new house, they don't know what they're building on."

Several of the participants also worry about newcomers who are moving to the area unaware of the potential pollution in the neighborhood:

"And the people that are coming into this area, they have no idea. They're just coming in here because they're saying, oh Greenpoint, next to Williamsburg, it's a great area. They travel from here to the city. Which it is. It's an easy commute. And they have no clue about the issues that are going on under here."

We've got a lot of nice, pretty trees in the McCarren Park, nice tree-lined streets leading to different new condos and stuff, but the fact is that these people are moving in not knowing, not understanding. The people that were here before are either moving out of the neighborhood or have since passed away, or may be sick -- granted, not everybody is sick, but enough to, I think, worry."

Despite the acknowledged importance of awareness, there is an underlying fear of fully understanding how the neighborhood environment impacts the health of residents. This is especially true when the environmental hazards are out of sight, and therefore can be easily ignored. Five individuals discuss how they vacillate between wanting to understand how

neighborhood pollution may be impacting their health on the one hand and maintaining a willful ignorance on the other.

“Well, a lot of the elderly in this neighborhood know a lot more. At first, I used to talk to them, but now I tend not to because they scare me. They literally scare me because they really know what's going on, you know what I mean? I don't want to say, like I want to be completely ignorant to the whole thing, but I live here and I don't want to be paranoid and just like constantly scrubbing and washing and scrubbing, because they really, really know what's going on. They've been here for a while, especially my grandfather and he's just like, what I know, you don't want to know. You know what I mean? So, I try to like have an ear out, have an ear to the ground, just to pick up a few things, but me and my friends, they don't really talk about that. They really don't even want to know, to be honest.”

“Yes, I know that Newtown Creek is close, but I kind of -- I don't know if purposely is the word, but I just kind of tend to forget about that a lot, because I mean, I'm quite a few blocks away from there, so I don't see it or really notice it... Well, there is the Newtown Creek oil spill, which I am aware of that. And as far as I know, I know I'm within that area of it. I don't know if I'm like directly on it, that's one thing I have sort of chosen to kind of ignore. Yeah, I do love living here, hopefully, I hate joking about this, but hopefully, I won't have health repercussions based on where I'm living.”

“The later years, I don't know. It [the pollution] wasn't really in the front of your mind. Maybe it was just the, you know. I'm sure there were a lot of people aware of it, and maybe I just chose to close my eyes, you know I live here, and you make the most of it, right?”

“I have -- no family, but I still have a lot of friends that live there. And I guess they like living there. I mean, it is a nice place to live. And I guess they don't want to think about it, that somehow where they live caused what happened to me. I also -- it sort of -- I know someone, sort of, like -- I know someone who once had cancer, but he still smokes. So that's always been a mystery to me. And he also lives in Greenpoint. That's sort of the same sort of thing, I think, people who smoke. And it's sort of like, you can't deny the health effects -- that especially; there's no -- but yet people do, every single day, when they light cigarettes.”

“I've done a lot of Internet searches; there's, like, the River Keepers, the Newtown Creek Alliance -- just snippets here and there. I've never done any, you know, real thorough research, because, you know, I guess it -- I was living in Greenpoint. I didn't want to scare myself too badly. Though I do remember in 2004, when we moved to Meeker Avenue and got a backyard, when I was hoeing up the backyard, you know, I do remember a couple times making jokes about the Beverly Hillbillies -- about how we struck oil -- when I dug down a few feet. So it was something to joke about, versus being scared of.”

### ***Who is really to blame? The role of individuals, communities, government & industry***

Realistic solutions to the problems mentioned in the narratives are by no means straightforward. Important questions remain unanswered. The complete extent of the groundwater and soil contamination in the neighborhoods surrounding Newtown Creek is unknown, the crowded urban setting makes it difficult to establish which parties are responsible for the contamination, the best way to remediate source contamination and mitigate potential human exposures is not always clear, and the politics of how and where noxious infrastructure should be sited is contested. In addition, there is a lack of consensus concerning the appropriate role of individuals, communities, industry, and government when it comes to cleaning up contamination and eliminating environmental risks. The narratives reflect this uncertainty, revealing conflicts in how participants assign blame, designate responsibility, and propose solutions.

This uncertainty has led some individuals to blame themselves for health problems. Reflecting on past decisions, three individuals debated whether they should have behaved differently:

“We lived on Meeker, right up by the creek there, for a couple years, and when we moved into our apartment on Meeker -- at 795 Meeker -- we were lucky to get a backyard, and we didn't build flower -- or garden boxes, which one would think would be necessary in a neighborhood that one knew -- or suspected -- to be polluted. We just -- we bought a few bags of dirt, threw it down, and went about throwing -- growing tomatoes. And we ate everything that we grew out of that garden, for two straight summers. And in retrospect, I -- perhaps it was a little bit of a rash decision, to not take the time to try to make it a little safer for ourselves...Just the fact that, like, the soil when we moved in -- even the appearance of it wasn't very healthy. It was just a weed-strewn lot, pretty much. And some of the vegetables the first summer came up rotten, completely rotten. I mean, whether it was connected to the pollution underneath the soil, who knows, but it seems like one of those things that perhaps -- at least in retrospect, we perhaps shouldn't have been eating things planted in our backyard there.”

“Back then, I didn't realize, you know, really what dumping meant, you know...but when I think back, you know, the things we must have been handling, you know? Well, I used that garden. We cleaned it up immaculately, and, you know, we uncovered what looked like flower beds from many years ago, and all of these, like, lilies of the valley and stuff that had been planted there started coming up again. And we had a wonderful vegetable garden. So, you know, I made pots of tomato sauce and all kinds of stuff for my kids, not knowing what was in that soil. We used to get -- a lot of times, in the morning, there was a funny ash on top of the tomatoes. And, you know, back then, like I said -- I was in my twenties; I was kind of naïve -- I used to take the hose, spray it off. We picked the tomatoes, crushed them up, made tomato sauce for our family. A couple of years later, after we had moved up on the corner of Dupont Street at Manhattan Avenue, I learned, from being on the fifth floor and seeing the puffs of smoke, that that was actually incinerator ash. Many years after that, I learned that that incinerator ash was packed with dioxins and stuff that never leave the soil. So, you know, in thinking back, I was serving my family loads of dioxin-filled tomatoes.”

Several individuals discuss the role community-based organizations played in solving problems in their neighborhood and calling attention to environmental hazards:

“So NAG and Outrage are sort of like watchdogs to see that the EPA is taking the concerns of the community seriously... One of the things that has happened because of outrage and NAGs constant awareness and watching what goes on is that they have rerouted certain streets to make them truck routes. So, the trucks are not supposed to go down a lot of streets.”

“As far as the community people go, they've been working tirelessly to try and get things -- like, numbers of trees planted and get waterfront access and fight for parks in an effort to at least minimize the impacts that way -- you know, knowing that trees, you know, help the environment, clean the air -- you know, it's something.”

Six participants stated that the community must come together to solve problems, suggesting that individuals or the community as a whole is responsible for their own fate:

“I guess that we have to get together and help because we can't leave everything to the government. The government is too busy doing something else. And if we don't help nothing can be done. We have to do [it]...I guess that the community have to do because the government, I can't count on it. I mean it's not nice to say it but it's the truth. They got their own problems and they lay it on their problems, not on the community problem.”

“Basically, the community needs to come together. It's the 21st Century, it's time for everything just to come together, that's what I'm going to say about that.”

“I see nothing happening, right now. Because it's only -- it's like maybe a three- or four-man fight. But everybody's complaining. And I say, ‘Well, dial 311’ -- you know? – ‘Give your complaints to them.’”

“Being that people are so aware, you would hope -- I mean, people are just -- we're just bombarded with information overload, and people try to take the bull more by the horns and be more proactive. You will have, I guess groups of people, especially if they're going to put roots down or have been in Maspeth or any other town that they're in, they will probably do their own lobbying with their Congress people, their Representatives, and just by constant, constant getting after the politicians. Saying it and having it done are two different things, but I suppose with a lot of pressure from the communities, it hopefully is in the works... So I think now those people will just be more aware and be more active in having a safer place to live, or move to another area and hopefully, the new place will be safe. You never know.”

“It takes a lot of time until the truth really comes out, and if you're not happy and you're not going to be that proactive about it, then I suppose you just have to find a safer area to live, if there is such a place.”

Five individuals specifically blame the oil industry for the environmental hazards in their community however, the extent to which they believe they are responsible for remediation varies:

“ExxonMobil, British Petroleum -- they admitted that they polluted this ground. They said, ‘We know we've got 30 million gallons of gasoline on this ground.’ And they said, ‘We're going to get it out of there the next 20 years.’ Twenty years. It's been under here for 40 already, or 50. Now it's going to take another 20? And I told the guy -- I said to the guy, ‘Let me go home and pour 20 gallons of oil over your couch if you're so sure that you're going to get it out. And let me see if you're going to suck it out of your couch. I don't believe it can be done. You can't get it all out. It's not going to happen. There's always going to be some kind of product that's left into the ground that's a contaminant.’ So that's where I am. I don't believe them. I don't see them acting fast enough to clean this up, and I wish they would just act faster on it.”

“Well, all I know is that there's still leaking. Right? And no moves have been made to actually clean it up. And also, it's no longer administered by ExxonMobil. Is that correct? It's a different company now. And they're trying to claim that they're -- they're not liable because it's -- they're not ExxonMobil. That's what I remember... Well, they should have known that when they bought it. I mean, really, you know? Don't they have people who do that kind of research, to see what their liability would be if they -- if they're purchasing a company and the company's assets?”

The role of City, State and Federal government is mentioned in almost every narrative, although the confidence entrusted to government agencies varied widely across participants. Only one individual had something positive to say about the effort of government agencies:

“I noticed that there are a lot of EPA trucks in this community before -- we've never seen them before -- and we didn't know who to complain to about the problem when the creek smelled. We just went to the manager's office and complained to the manager, but now after going to the community board meetings and other meetings I've noticed that there are representatives there from EPA... When there

are complaints about a certain foul odor in the air, or dust, you do see the trucks out in the community now. So, that makes me feel a little safer.”

More common, as expressed by six participants in sentiments ranging from anger to resignation, was the feeling that government had failed, on numerous occasions, to solve neighborhood problems:

“You smell the sewer. You call 311. They give you the runaround. And that’s why you just keep calling, calling, calling. And they’ll finally send someone out. But there was a notice, back during raining season - They would always have somebody here to clean the sewers. Now you have to call and call, just to get one person maybe to come every three months.”

“The ash, that was during the 1980s -- the ash that I saw in the yard on the tomatoes. In the 1990s, when I had moved to the corner -- I actually have photographs that I took on the roof of that building of ash. Which, I made a complaint to the EPA. I’m still waiting for a reply, (laughs) so that’ll give you an example of, you know, what used to happen to our complaints.”

“Well, I mean, [I feel] angry. And not for the newcomers -- I mean, because they at least have the forethought -- you know, they could research where they’re about to move, where they’re about to invest. But for all the longtime residents, is it -- you know, the state, the city, the federal government - - have they known of these things? Have they just ignored it? Have they decided it wasn’t -- did they know about it and decide it wasn’t severe enough?”

“You know, and I get really pissed off. I can’t tell you how mad I get at these agency reps when they come to meetings and continually, like, pretend that they’re there to help us, and do nothing. We’ve been meeting with this Department of Health rep for over a year and a half at least. And then all the time that the community has been meeting with him, all he’s done is Googled a map, right, and drawn a circle around it, right? I as a volunteer could have drawn a more accurate circle, could have printed up a better map. (laughs) It would have taken me one day in comparison to the year and a half he spent. You know? So it’s like to me, that’s a blatant slap in the face.”

Despite the perceived historical lack of action, seven individuals believe that regulatory enforcement and pressure from the government is the only way to successfully address environmental problems of such magnitude and hope that regulatory agencies begin to engage the community and make progress:

“There are Superfunds and you have to rely upon the government to take care of that.”

“I know there’s going to be other meetings coming up in the future. I guess I’ll be there to voice my opinions, and I’m kind of vocal when I get there. I just hope it don’t fall on deaf ears. Like I said, Mobil and Exxon made \$40 billion in the last quarter or something like that. How are you going to fight them? How are you going to fight them? Unless the government steps in and really puts the fire to their feet and goes after them. I don’t even want to get into the politics of this thing. I don’t know where -- who contributes. Whether Exxon Mobil contributes to this guy’s party or this Senate candidate’s -- who knows. I’m not into that.”

“I think it’s up to the Department of Environmental Protection. I think they should check it [the Creek pollution] out and see -- you know, they should know how severe it is, if it’s harmful. They should know what it is. I really think it’s up to them.”

“I think what the whole city, state, and federal government need to do in this neighborhood, since there are lives at stake, they need to kick the friggin’ budget to the curb. You know, they go into debt

for a lot of different things, all right? This is people's lives, all right. They need to kick that budget to the curb and get this neighborhood cleaned up and greened up. They need to clean up the creek; they need to clean up the contaminated soil; they need to do way more in policing their own rules and regulations and actually force these different companies to do the right things. You know? And there should absolutely be -- it shouldn't take somebody like Riverkeeper to patrol up and down Newtown Creek and report stuff. That should be the Coast Guard all the time; that should be the agencies all the time... To see that and to know that all of these companies, all of these patrols have been on the creek and have not reported it -- that also speaks volumes in my mind, you know. It should not take Riverkeeper to report on this stuff. Where are the reports from the government, from the state, from the city? They have a big responsibility in everybody's lives here that's been affected by this creek and all the contamination in this community."

"I anticipate it [the pollution] getting worse. And I hope I'm wrong because big business is -- is so powerful and laws are made -- being made to give them even more power, and -- at -- at our expense, because that's the -- seems to be the priority now, not cleaning up the environment, just increasing the strength of big business."

### ***What should be done? What can be done?***

The environmental issues confronting the Greenpoint, East Williamsburg, and Maspeth communities are not easily solved or resolved. In their narratives, CHHNP participants offer some thoughts and concluding remarks as to what might be done to ameliorate the damage and make progress towards a positive resolution. Three individuals expressed the desire to have cases of disease and illness in their community counted statistically and officially documented:

"As I've stated before, I had 25 people on that block that came down with cancer when I made the initial statement. After that, I had people come to me, on the one block -- we're talking about Diamond Street. Meserole Avenue to Norman Avenue. I had other people come up to me and say, "Tommy, did you know I had cancer? Did you know I had cancer?" I said, "I really don't run around doing a poll on people's health issues on the block, who's got cancer. I just know that some people (inaudible)." Well, now it's up to 38 people... There's 38 people on the one block that have cancer. It's -- you're going to tell me 38 people on one street come down with cancer? And people have moved away. This area's in transition. There's a lot of people coming and going. Houses being knocked down, bigger buildings being built. People relocating to other areas. So there's people on that block that I can't even reach. I don't know where they went. So there could be even more than 38 on that block."

"Yeah, even with my lupus, OK -- now, lupus is -- it has a set of, you know, what do you call them, like guidelines on how it's diagnosed. And I was diagnosed with lupus, and I'm treated for lupus, but, now, I don't have all of the solid blood markers for lupus, so therefore I'm not considered one of the cases of lupus for research. So my case of lupus doesn't even qualify -- wouldn't even appear in any of these statistics, you know?... I had this conversation with this rep from the Department of Health. Now, my mother, my father, and their dog all died from brain diseases, OK; however, that would not show up in the same category in the statistics because brain cancers are in a different category than this type of palsy, you know, so it's not even going to appear that way. So it's kind of deceiving, when you're addressing chemicals that affect the brain, right, and yet they're separated like that. That means that there's a problem with how the Department of Health is looking at this problem for this particular neighborhood, and they really need to fine-tune what they're looking at and how they're categorizing it, if it's actually going to be a truthful report. Now, I mean, I think that it speaks volumes, just the fact that they had these brain diseases, you know, and it also speaks volumes about the Department of Health, how those categories are separated."

“Well, I mean, I've -- ever since the [brain tumor] surgery, I've been looking for a group -- someone -- an institution -- someone to take note of at least my age, my sex, and my condition. Something, a statistic, my addresses. My brother has worked for the state for -- doing epidemiological studies -- and I've written to him, various websites, "What about these people?" I thought about contacting the Newtown Creek Alliance, RiverKeepers -- I never have contacted any of these organizations. I have a bunch that I've thought about contacting. When I made the comment on that article that was posted on Gothamist, that was the first time I've publicly stated anything about my condition.”

The struggle to have these diagnoses counted and the perceived failure of government agencies to take note, speaks to the ambivalence with which some of the participants view the environmental issues facing their communities. There appears to be an internal conflict within three participants who still hope for action and positive change, yet despair that nothing can really be done to improve the situation:

“I don't think this is -- there's no simple answer. And I don't think that anybody's going to come in your backyard and put a vacuum house into the soil and going to be able to remove all the oil that's in -- like I said, dump 20 gallons -- show me. Dump 10 gallons in here, in the furniture. If you're going to get it out of the ground -- that's under the ground -- show me how you're going to get 10 gallons of oil -- that's sludge. Black oil. You know what I'm saying? Show me how you're going to get it out of here. If it comes out of here, or a rug on your floor, then maybe I'll believe -- maybe I'll -- still would be doubtful -- but maybe I'm going to believe that you can get it down from eight feet underground. Because I don't think it's going to happen. And it maybe down 20 feet underground. So you tell me how you're going to get that out from every house that's over here, every factory that's over here. I think it's a misconception. I don't think it's a -- they created an abomination and I don't [think] it can be corrected. I really don't.”

“As far as the oil spill is concerned, I mean, I know that Exxon has made small strides at least at cleaning it, and so I don't know, I guess that that's just going to be the way it goes, I think it's just going to be this slow, slow process. I don't really know if it's possible to fully clean something like that up. Especially if it's like in the earth, I really don't see how it's possible to completely extract that, it's different from water.”

“I mean, I got the impression when the story first came out that -- you know, about the ruptured tanks in the creek that the -- the company that owns it now would have been more than happy to just not ever have it known. So I'm pretty cynical about stuff like that. I think it's gonna be pretty hard to come to an agreement about what to do. But I also have no idea what's involved with taking care of it. So again, that's hard to answer.”

## **RECOMMENDATIONS**

Understanding the historical, political, social, and environmental characteristics of these neighborhoods is the first step towards creating healthy communities. The narratives in this report provide additional context to the environmental health injustices facing these neighborhoods. It is clear that these communities are in transition and the perspectives provided by CHHNP participants will help establish appropriate and innovative solutions. Recommendations from this report include improving social cohesion, increasing awareness and information transparency, documenting public health problems, and establishing monitoring and reporting protocols.

Many of the participants discuss changes in their neighborhoods that have transformed the social bonds and networks among residents. Gentrification and redevelopment trends have increased diversity in these communities bringing about new opportunities as well as critical challenges to social cohesion. Neighbors are less likely to know and look out for one another and residents are more mobile - traveling outside their residential vicinity for work, school, shopping, and entertainment. In addition, renting has become more common in these neighborhoods, which decreases the probability that individuals will establish long-term roots in the community. Efforts to improve the social environment should be built upon pre-existing formal and informal social structures in these neighborhoods. Block parties, farmers markets, local sports teams, social clubs, and resident associations are but a few examples of outlets or community groups that could be expanded and diversified.

The narratives suggest that awareness regarding environmental hazards in the community is inconsistent and often lacking. Many participants express a desire to know more about environmental health issues but are unsure where to look for more information. In addition, individuals moving into the neighborhood remain unaware of environmental hazards and their potential health consequences. Media reports and word of mouth are the main source of information for many residents, contributing to the spread of erroneous facts and a general lack of awareness. This indicates the need for information transparency and increased communication between residents, government agencies, and environmental and community-based organizations addressing these problems.

Several participants discuss the importance of documenting illness and specific diagnoses in their communities. The desire to be counted as a statistic is a call to action, a plea to public health agencies to take note of the unusually high prevalence of disease in these neighborhoods. Despite persistent pressure from the Newtown Creek Alliance, the New York State Department of Health has yet to fulfill its promise of a localized public health report for Greenpoint. Advocacy efforts should expand to include residents, community organizations, and other interested parties, organized around the need for such a study. Hopefully, the community as a whole can apply sufficient political pressure to persuade the Department of Health to action.

The continued presence of environmental hazards is not debatable, but without the appropriate monitoring and reporting procedures, the expectation of remediation is low. In addition to the limited air monitoring and vapor intrusion testing carried out by the New York State Department of Environmental Conservation, government agencies should establish a reporting protocol for environmental complaints made by residents. Calls to 311 are a start, but the response time and follow-up are inadequate and complaints should be compiled and sent directly to agencies with appropriate environmental oversight such as the Department of Environmental Conservation.

Lastly, there are several limitations of the CHHNP, which should be discussed. Unfortunately, the interviews were restricted to English-speaking residents, which excluded a large population of Polish- and Spanish-speaking individuals. In addition, participation was limited to residents of the three neighborhoods, which did not include the non-residential population of individuals working along the Creek or in Creek-side communities. Future studies should attempt to engage a more representative sample of individuals from these communities.