Canada's Love Canal: An Analysis of Social Class, Race and Gender in Nova Scotia's Steel Industry

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Abstract

The topic of environmental contamination, degradation and its impact on human life is frequently omitted from disaster research and disaster classification. Nevertheless, such hazards impact a great number of people around the world; with 1319 Superfund sites currently existing throughout the United States alone (US. Environmental Protection Agency, 2014). This does not include the many other thousands of sites scattered around the world, with the second-most critical North American site located in Sydney, Nova Scotia, Canada. The environmental disaster responsible for contaminating the Sydney site originated with the dominant Nova Scotia steel industry, and one particular steel mill that was the lifeblood of Sydney for generations. Within this disaster, the dimensions of social class, race and gender played significant roles in increasing the risk and vulnerability of certain town residents, due to factors such as historical geographic placement of social groups, a varying sense of concern and urgency displayed by authority figures, and social barriers preventing members of certain groups from participating in decisions and policies affecting their community. Such findings demonstrate the overwhelming need for greater recognition of environmental disasters and degradation within disaster research, classification and response efforts.

Introduction

Although it is largely unknown to most North Americans, Sydney, Nova Scotia is the site of the largest toxic waste disaster in Canadian history and the second largest in North American history, following the Love Canal neighborhood of Niagara Falls, New York (Brown, 2000, p. 145). Now known as Canada's Love Canal, Sydney was the location of a largely government-run steel mill that operated for a century between the years of 1900 and 2000, during which time it heavily polluted the town, especially the immediate surrounding neighborhood of Whitney Pier (Sierra Club of Canada, 2007). As the environmental contamination and subsequent serious health effects occurred over a period of 100 years without a main catastrophic event, it is not a case that is commonly regarded as a disaster; as Livingston (1999) appropriately states, "like most toxic waste sites, it doesn't look horrific and the danger seems falsely benign". Nevertheless, the effects of Sydney's steel production were indeed environmentally and socially catastrophic due to the massive degradation that occurred and the social dimensions that contributed to its impact. The features of a sociological disaster defined by Fritz in 1961 are also strongly present, including a beginning and end, substantial danger and loss of the members and structures of a society, extensive disruption of the social structure and essential social functions, and the need for a wide-scale response after the contamination (as cited in Tierney, 2007, p. 505). This paper will analyze a much-needed sociological perspective of the Sydney steel mill disaster by focusing on the influences of social class, race and gender toward the persistence of this disaster during its most recent two decades, between the years of 1980 and 2000, despite growing citizen opposition during this period.

Literature Review

The Town of Sydney is located on Nova Scotia's Cape Breton Island, which, since the colonial period of the early 19th century, has been a region abundantly rich in coal (Whitney Pier Historical Society, 2011). During this time, the majority of the coal mines in the area were owned and operated by a private company called the Dominion Coal Company Ltd, owned by the American businessman, H.M. Whitney (Whitney Pier Historical Society, 2011). Toward the end of the 1800's and beginning of the 1900's, the Dominion Coal Company expanded its industrial interests to include the production of steel, as the coal extracted from its mines could effectively be used to fuel the smelting ovens required for steel production (MacKinnon, 2013). The Dominion Iron and Steel Company was therefore established in 1899, and the world's largest and most state-of-the-art steel plant at the time was constructed in 1900 in Sydney; the heart of the coal mining region (MacKinnon, 2013). The economic and employment opportunities brought to the region by the Dominion Company, especially during the Great Depression of the 1930's, were widely welcomed by the residents and provincial government of Nova Scotia, and single-handedly transformed Cape Breton Island into an oasis of prosperity within an otherwise underdeveloped Atlantic Canada (MacKinnon, 2013). As Dewitt and Giffen (2011) describe, "steel and coal were king of Canada, and Cape Breton Island was the royal palace". This is comparable to Erikson's (1976) study of the coal industry in the Buffalo Creek region of the United States, which was "a way out of the cycle of poverty just beginning to appear in the early decades of the new century" (p. 94).

Despite the economic dominance of the Dominion Company in Nova Scotia, problems with severe mismanagement and growing international industry competition

caused the Nova Scotia Provincial Government to purchase the company in 1967, in an effort to rescue its regional economic benefits from ending in bankruptcy (Sierra Club of Canada, 2007). The Nova Scotia government therefore owned and operated the Sydney steel mill from 1967 until its closure in 2000 (Sierra Club of Canada, 2007). However, even before the government takeover of the mill, its interest in the company was strongly evident from the very beginning through its provisions of land, subsidies, materials and tax exemptions granted throughout the 1900s (Barlow & May, 2000, p. 7). There is also compelling evidence to suggest that both the Provincial Government of Nova Scotia and the Federal Government of Canada had been aware for decades of the environmental and health dangers resulting from the mill's toxic pollution in Sydney, but worked to deliberately conceal any such evidence (Barlow & May, 2000, p. 70). Since the 1980s, countless efforts of residents and activists demanding government action on the toxic contamination have also been stifled and contested by the provincial and federal governments, intensifying and prolonging the negative effects on the population and the environment (Barlow & May, 2000, p. 85).

As already mentioned, the most severe effects of the Sydney steel mill disaster were felt in the neighborhood of Whitney Pier, located within the closest proximity to the steel mill (Barlow & May, 2000, p. 80). Prior to the construction of the mill in 1900, the neighborhood of Whitney Pier did not yet exist, and the mill was therefore built on the periphery of the Town of Sydney (Whitney Pier Historical Society, 2011). However, during the construction and subsequent industrial operation of the mill, a large flow of workers from other areas of Canada, the United States and internationally were attracted to Sydney by the many new job prospects created by the industry; between

the period of 1901 and 1921, the population of Sydney ballooned from 2,400 people to 28,300 people (MacKinnon, 2013). Most of the immigrants were experienced African-American steel workers from various southern states in the US, as well as Chinese, Scottish, Eastern European and Russian workers who sought to flee poor economic conditions in their home countries and were actively recruited by company officials under promises of prosperity in Canada (Brown & May, 2000, p. 23).

The formerly small Town of Sydney did not possess sufficient housing and infrastructure for the sudden influx of workers and immigrants to the area, so the Dominion Company built homes for its workers on the outskirts of town nearest to the steel mill where they would be employed (Whitney Pier Historical Society, 2011). This area quickly grew to become an entire neighborhood of workers and their families, whose gratitude for simply having jobs was so clearly evident by the affectionate name of “Whitney Pier” that they chose for their community, after the Dominion Company’s owner, H.M. Whitney (Whitney Pier Historical Society, 2011). Not only was Whitney Pier geographically separated from the rest of Sydney by the steel mill, but its residents also became socially, politically and culturally segregated due to their position as the working class, economically disadvantaged, and ethnically and racially diverse (Barlow & May, 2000, p. 8). So, from its very beginnings Whitney Pier was a multiracial, multicultural, working class community confined on three sides by an industry that would cause it to become one of the most highly polluted sites on the continent (Livingston, 1999).

Also adding to the social dynamics of the Sydney disaster is the population of First Nations peoples, namely the Mi’kmaq tribe, that has lived on Cape Breton Island for over ten thousand years (Cape Breton University, n.d., a). The inclusion of the

Mi'kmaq tribe within the historical background of the Sydney steel mill disaster is paramount, especially since the land on which the mill and Whitney Pier were built in 1900 had traditionally belonged to the Mi'kmaq, but was donated by the government to the Dominion Company in the late 1800s under the promise of triggering an economic boom in the region (Francis, 2008, p16). This left the Mi'kmaq tribe to whom the land had belonged, to suddenly become displaced without any proposal of relocating elsewhere (Francis, 2008, p. 17). With very few alternatives remaining, many of these people "answered the labor needs created by the steel plant and coal mines of the 20th century" (Cape Breton University, n.d., b). As a result, First Nations peoples became a significant proportion of the steel workers within the mill, the residents of Whitney Pier, and among the community members most significantly affected by the toxic waste pollution of the area.

The steel mill was not simply significant to the Town of Sydney because it was located there, but more so because the town was built around it; to remove the steel mill from Sydney would be "as if they removed the Vatican from Rome" (Dewitt & Giffen, 2011). Not only did the mill represent the livelihood of Sydney, it also represented a way-of-life and a strong sense of pride for the working class men of "the Pier" who regarded their jobs as an integral part of their identity. An African-Canadian man and former worker of the mill reflects on his working days as a young man in the mill, and fondly states "I was very proud to be a steeler, I enjoyed my job, I was good at it, and I loved every minute of it" (Dewitt & Giffen, 2011). For these working class men and their families, the steeler way-of-life had become a tradition that was already a few generations deep. Another former worker, Caucasian, states: "my dad worked there for

43 years, my grandfather worked for 49 years, and I worked for upwards of 20 years" (Dewitt & Giffen, 2011). In this sense, the fate of many of the mill's workers had been rooted in them from birth by a variety of complex factors, including the unparalleled dominance of the steel industry in Nova Scotia, the strong pride and work ethic held by the working class, the occupational traditions that originated with previous generations of workers, and the economic dependence of Sydney residents on the steel industry.

During the first 80 years of the mill's operation, very few signs of opposition ever arose (Sierra Club of Canada, 2007). In cases of an environmental disaster such as this, where the disaster occurs slowly and over a long period of time, the effects of the disaster are often also slow to appear. This is highly problematic, as it significantly contributes to increasing the level of risk and vulnerability faced by members of the community. In the case of Sydney, suspicion of the disaster only began to arise during the 1980's when residents began to notice "many more people in their community were dying of cancer and other ills than the rest of Nova Scotia" (Barlow & May, 2000, p. 96). A whistleblower within the mill leaked classified governments files containing concealed information about the industry's toxic dangers (Barlow & May, 2000, p. 72). Despite this, many residents of Sydney and Whitney Pier remained in a state of denial about the harmful effects of the mill, while many others preferred to quietly sell their homes to unsuspecting buyers, resenting anyone who began to publicly protest the mill and drive down housing prices in the area (Barlow & May, 2000, p.175). The government took great advantage of this division among residents to repeatedly postpone a solution within "a system plagued by delays, denials and despair, and one that never accepted responsibility" (Barlow & May, 2000, p. 140).

Data and Methods

The analysis conducted by this paper will utilize sources that have previously focused on the Sydney steel mill Disaster. In addition, sources analyzing other major and similar disasters, namely the Love Canal disaster of the 1970s, the Buffalo Creek disaster of 1972, and the Hurricane Katrina disaster of 2005, will also be used to compare and contrast how affected residents were impacted, how the disaster was perceived by residents, and the treatment received by these residents from authority figures in response to the disaster. Furthermore, general disaster analysis and response research will also be used to apply elements of the Sydney case to the current knowledge base that exists on disasters. These sources stem from a multi-disciplinary standpoint, including sociological, social justice, historical and environmental approaches. This paper will seek to integrate the topics and disciplines discussed within each of these sources, focusing specifically on the relationship between social class, race and gender, and the degree to which residents were impacted. There will also be an aim to expand on the analysis of the sources analyzed, in order to propose new ideas and observations regarding the role of social dimensions within this disaster, especially that of gender, which is minimally discussed elsewhere.

Analysis

The duration of the Sydney steel mill disaster over a period of 100 years can be attributed to a variety of social factors, which have already been extensively analyzed by some sociologists. However, as citizen opposition to the mill began to arise in the 1980s, yet the problem was permitted to persist for another 20 years after this, clearly demonstrates that greater and more current underlying social factors were also at play

in this disaster; an aspect that has not been sufficiently examined to date. This blatant disregard by the government for 20 years of citizen opposition is an unmistakable indicator that certain Sydney residents were systematically excluded from contributing to any decisions affecting their community. This analysis will examine how the most recent decades of exclusion and disregard for citizen opposition, based on social class, race and gender, is the most important contributing factor to the persistence of this disaster between the years of 1980 and 2000.

Social Class and Race

As previously described, due to the history of Sydney and neighborhood of Whitney Pier, social class and race are two social dimensions that are inextricably connected within this disaster. Perhaps the most striking indicator of how Whitney Pier was regarded by the rest of Sydney is evident not only from the social segregation of its residents, but also from the neighborhood's geographical segregation from the rest of the town, which continued until the mill's closure in 2000. Barlow and May (2000) state that since Whitney Pier was located directly behind the steel mill, its residents were required to either travel the entire distance around the mill to access Sydney's downtown, or alternatively they could cross straight through the mill's contaminated grounds (p. 106). It is likely due to this physical and social segregation that residents of the Pier widely report a rare need to ever leave their neighborhood; "we were self-sufficient, you didn't have to leave Whitney Pier, it was all there for you" (Dewitt & Giffen, 2011). Whitney Pier was the closest in proximity to the steel mill, and therefore exclusively designated to be where the laborers and their families lived. The next closest community of Ashby, located on the opposite side of the mill and somewhat

further from its grounds, was where the industry's foremen lived with their families, while the town's wealthy residents and directors of the mill lived even further beyond Ashby, "as far as they could get from the steel plant as possible" (Dewitt & Giffen, 2011).

The settlement history of the neighborhood of Whitney Pier bears an overwhelming resemblance to the settlement patterns of other significantly disaster-affected areas. For example, Erikson's (1976) study of the Buffalo Creek disaster revealed that like Whitney Pier, the homes into which the coal miners of that region settled were also almost exclusively built by the area's coal companies, in the unoccupied land near the creek, in order to house their workers close to their jobs (p. 22). As a result, these predominantly working class residents were the most severely affected by the now famous 1972 flood to hit the area (Erikson, 1976, p. 29). Furthermore, the Lower Ninth Ward in the City of New Orleans is an example of a settlement pattern where, like Sydney, the least desirable land was left to marginalized social groups, becoming predominantly populated by working class African-Americans following a period of extreme population growth in the city (Elliott, Haney & Sams-Abiodun, 2010, p. 632). The Lower Ninth Ward was considered to be a less desirable area due to its location below sea level, on swamp lands, and without natural embankments to prevent the area from inundating (Elliott, Haney & Sams-Abiodun, 2010, p. 632). Consequently, it was also the district hardest hit by Hurricane Katrina's "biblical floods" of 2005 (Padgett, 2010).

Today, the neighborhood of Whitney Pier is commonly considered to be one of Canada's earliest successful "experiments in multiculturalism" (Barlow & May, 2000, p.

46). Perhaps the only silver lining in the Sydney disaster, Whitney Pier continued to function in social harmony throughout the last two decades of the steel mill's existence:

> Being a steelworker transcended race and religion, they shared the rhythm of life that most others couldn't even comprehend. Like soldiers, they also shared the camaraderie that comes from doing dangerous work under the most difficult conditions… hot, dirty and dangerous (Dewitt & Giffen, 2011).

Residents of Whitney Pier became united, despite their racial and cultural differences, over the common denominator of being the working class and those most severely affected by injuries, illnesses and deaths caused by the mill (Barlow & May, 2000, p. 46). Former residents now fondly recall the neighborhood as a diverse yet united and cheerful place, with one resident even stating: "we had a United Nations long before the United Nations" (Dewitt & Giffen, 2011). Those who lived in Whitney Pier personally understood the social and economic struggles of their neighbors and therefore unified behind these struggles despite their racial and cultural differences. In contrast, the rest of Sydney saw the multiculturalism, working class status and economic hardship of Pier residents as a means of distinguishing and excluding these residents from the rest of the town, therefore creating one large and diverse 'other' based on such social features.

Once suspicion of the mill`s pollution began to arise in the 1980s, two separate committees were established to deal with the environmental and human health problems affecting the town; the first committee was called *Act! For a Healthy Sydney*, and consisted of concerned Sydney residents and professionals (Barlow & May, 2000, p. 95). The second committee was the *Joint Action Group*, and consisted of municipal, provincial and federal government members, whose purpose was to consult with

community residents about ways to approach the town's existing problems (Barlow & May, 2000, p. 95). While the establishment of these committees appears to be a progressive step toward community involvement in the issues, neither committee included any representatives whatsoever from Whitney Pier, or for that matter any non-white representatives, until three years after their formation (Barlow & May, 2000, p. 169). In addition, while the Joint Action Group regularly held public town hall meetings, in an effort to appear to promote citizen involvement, in reality the community members were made to listen to hours-worth of technical jargon during these meetings before being given an opportunity to speak (Barlow & May, 2000, p. 107). These deliberate exclusions of certain community members quickly discouraged numerous Whitney Pier representatives from participating or ever attending meetings again, while others who vocalized their frustrations with the minimal participation were simply banned from future meetings due to "flared tempers" (Barlow & May, 2000, p. 107).

Today, most experts familiar with the Sydney steel mill disaster agree that the denial of responsibility and conflict-of-interest on the part of the government was a major contributing factor to the disaster; "the provincial government was the polluter, the regulator, and the one responsible for compensation" (Livingston, 1999). Even the judgment of the medical community was heavily influenced by the government and social prejudices. For example, for many years while the rates of disease skyrocketed in Sydney, doctors often followed the lead of government officials by consistently attributing these illnesses to the unhealthy lifestyles of residents (Barlow & May, 2000, p. 59). Even a number of official medical studies, mainly funded by the government, concluded that "Cape Bretoners were very bad people. They ate too much salt,

consumed too many fatty foods, didn't get enough dietary fiber, drank too much and certainly smoked too much" (Barlow & May, 2000, p. 98). What worsened this problem was the complete dependence of workers on their jobs, which compelled them to continue attending work, further exposing themselves and their community to toxins on a daily basis (Livingston, 1999). A former mill worker states; "the company was life. We had steel for breakfast, dinner and supper" (as cited in Barlow & May, 2000, p. 31). An important comparison exists here to Erikson's (1976) study of the Buffalo Creek flood, where coal miners also suffered from excessively high rates of injury, illnesses and death, yet continued to regularly attend their jobs due to an overwhelming fear of unemployment (pp. 98-99). There is no question that the steel mill in Sydney, like the mines in Buffalo Creek, "have imposed an awesome penalty on the men who ventured into them" (Erikson, 1976, p. 98), as well as the community that lived around them.

Throughout most of the history of Nova Scotia`s steel production, the industry was plagued with problems of mismanagement, namely a lack of interest, involvement and dedication on the part of government officials and managers (Livingston, 1999). A former worker recalls that the mill's directors were always "heard but not seen… they ran the plant, but as long as they were making money they never repaired anything, they never did any modernization, they never put anything back in, they just took" (Livingston, 1999). This contributed greatly to the persistence of the disaster during its later decades, as even until its closure in 2000 the mill was still operating on machinery and technology that was last considered state-of-the-art in the early 1900's. Under such management that neglected even to update its facilities and basic equipment after 100 years of use, one can easily deduce the minimal regard that existed for the working

conditions within the plant and the detrimental environmental conditions around the mill. Due to this, workplace safety ultimately became the individualized responsibility of the workers, who had no avenues available to demand better working conditions and improved industry practices. Heron (1987) explains that contrary to popular belief, steelmaking is a very complicated and dangerous process that requires highly skilled labor (p. 5). Although the mill's workers may have come from humble backgrounds, they were obligated to learn quickly from one another in order to avoid being seriously injured or killed on the job (Heron, 1987, p. 5). Perhaps most interesting is that despite these advanced technical skills acquired by the workers, their position on the social hierarchy and their regard within the industry always remained unchanged, and their concerns were perpetually disregarded. As one resident stated, "they're getting rich, and you're getting sick" (Livingston, 1999).

Gender

Without question, the social dimension that has been the least analyzed within the Sydney steel mill disaster is gender. Due to the historical period during which the mill was founded, as well as the hard labor that was required to produce steel, the work force consisted almost entirely of men and boys (Barlow & May, 2000, p. 20). There is no question that by working within the mill, these men and boys were the most severely, directly and frequently exposed population to the pollution produced by the industry. However, the wives, mothers, sisters and daughters of these men were also on the front lines of the contamination, as their days were spent within the boundaries of Whitney Pier where the families of the workers lived, and where "billowing orange smoke… coated the clothes on their lines with red grime" (Barlow & May, 2000, pp. 20-21).

Erikson (1976) reiterates the extent of the environmental pollution to surrounding areas caused by industries that utilize coal as fuel, by describing that exhaust from the coal industry in Buffalo Creek “hung over the narrow settlements like a pall” (p. 96). It is therefore clear how highly vulnerable the women and children of such communities are to the contamination. On one occasion in Whitney Pier, during the early years of the steel mill’s existence, a group of women organized a rally to protest the amount of orange smoke that was constantly poured over their houses (Barlow & May, 2000, p. 21). However, these women were immediately reminded by city and company officials that “no smoke” meant “no baloney”, and the protest quickly disbanded with the women fearing for the livelihoods of their families (Barlow & May, 200, p. 21).

While it is widely documented that the steel mill employed almost exclusively men, with only a small number of women working in clerical positions, the labor availability of men became extremely limited during the second World War (Dewitt & Giffen, 2011). What is very minimally documented and almost completely unknown is that approximately 700 women were temporarily hired during this time, as the mill was forced to reluctantly allow them to “get their hands dirty” (Dewitt & Giffen, 2011). Another fact that often goes unmentioned is that the period during which these women were employed by the mill was when steel was at its highest rate of production due to the demand for this material in the war (Slaven, 2006). Although these women were employed in the same jobs as men and during the industry’s busiest era, they did not receive equal pay as men. A former African-Canadian female worker of the mill recalls, “I was making 20 dollars a week and doing a man’s job. You had to be strong… I was 17 at the time, born and brought up at the Pier” (Dewitt & Giffen, 2011).

The purpose of including the historical struggles of women within this analysis of the Sydney steel mill disaster is to demonstrate how women have been deeply impacted by the mill throughout its existence. These struggles continued throughout the last two decades of the mill`s operation, even when knowledge of the toxic effects began to arise. Since this occurred long after the World War, the vast majority of the women of Whitney Pier were no longer employed by the mill, and therefore spent the majority of their time in their neighborhood, taking care of their families and homes. Within their roles as family caretakers, the women of the community, particularly the mothers, were the first to bring attention to the fact that something was seriously wrong with the health and well-being of their families and themselves. In particular, two Whitney Pier women who lived on the street closest to the steel mill were the very first people to suspect that “they and their children were in mortal danger” (Barlow & May, 2000, p. 2). This point is supported by Haney, Elliott and Fussell (2007), who explain that affected residents often occupy traditional gender roles in response to a disaster, with women preparing for and responding to the safety needs of their families with more urgency than men (p. 75). This is especially the case with women who are mothers of small children (Haney, Elliott & Fussell, 2007, p. 75). Such was also true in Love Canal, Niagara Falls, when Gibbs (1986) began to notice her previously healthy young son develop serious illnesses once he began to attend the elementary school located near the contamination in their community (p. 175).

Despite the sense of urgency felt and displayed by many women affected by the Sydney steel mill disaster between 1980 and 2000, these women were not taken seriously by those holding positions of power, namely the municipal, provincial and

federal governments, medical experts and school directors. For example, one Whitney Pier woman regularly complained to the city about the orange dust that would cover even the inside of her home, but was repeatedly informed by city officials that her complaints simply “seemed like a nuisance” (Barlow & May, 2000, p. 116). Similarly, when Gibbs (1986) realized that the elementary school in Love Canal was situated near the contaminated site, she began to plead with the school board to relocate the children, but was simply informed that “they were not about to close the whole school because of one hysterical mother with a sickly child” (p. 176). Although the disregard toward these women was ultimately due to a combination of factors, gender is undeniably one of the most significant contributing factors to this problem; it is probable that these serious concerns would not have been as easily disregarded by authorities if the complaints had come from men. These examples make a clear case that women in affected communities must deal not only with the stigma that accompanies their community’s lower social position, but also with the additional burden of having their concerns blatantly disregarded and diminished simply due to their gender.

As previously discussed, the contribution of the medical community toward the problem must be examined once again, this time in the context of gender. In one of the few documented examples, a Whitney Pier grandmother rushed her infant granddaughter to the city hospital following a particularly smoky day that caused the infant to develop a viral lung infection and abnormally dark stool (Barlow & May, 2000, p. 117). However, the diagnosis that this alarmed grandmother received from qualified medical professionals was that the infant was being inappropriately fed, causing her to become ill (Barlow & May, 2000, p. 117). Here, the implication that either the infant’s

mother or grandmother was simply a bad guardian could not be clearer. Again, a strong comparison can be made here to an equally outrageous example that occurred in the Love Canal disaster, after Gibbs (1986) and a group of other concerned mothers attempted to alert health authorities of the various illnesses, including urinary tract infections, experienced by the children in their community (p. 189). The response received by them was that the "illnesses were all in our heads… and the urinary diseases were the result of sexual activities" (Gibbs, 1986, p. 189). Gibbs (1986) was left to wonder if this meant to imply that she was allowing her five-year-old son to engage in sexual activities (p. 189). To say the least, this is not the kind of response that these concerned mothers, who clearly cared enough about their children's health to seek professional medical assistance, expected to receive from qualified doctors and experts. Nor are these responses ones that foster a continued trust by these mothers toward the larger medical community.

A final prominent example that can be attributed to the influence of gender within this disaster relates to the manner in which studies about affected communities are received by authority figures. In the case of Love Canal, a group of concerned female residents conducted a community-level, amateur study of their area by going door-to-door and surveying community residents about the prevalence and types of illnesses that existed within their families (Gibbs, 1986, p. 181). The group then mapped and graphed their findings in order to pinpoint the areas of greatest concern, which were concluded to be nearest to the site of a toxic garbage dump and a series of small streams that passed near the dump (Gibbs, 1986, p. 188). Unfortunately, once the group presented the study to government officials, their findings were promptly

disregarded as “useless housewife data” (Gibbs, 1986, p. 189). Perhaps in anticipation of such a response from government officials in Sydney, the residents of Whitney Pier did not even begin to conduct their own study, but instead petitioned and organized hunger strikes in order to receive funding from the provincial and federal governments to contract an expert of their choice: Dr. Judy Guernsey of the Department of Community Health and Epidemiology at Dalhousie University (Barlow & May, 2000, p. 98). However, even before Dr. Guernsey was able to begin conducting her study, her peer-reviewed proposal was deemed to be unsound and therefore rejected by the government (Barlow & May, 2000, p. 100). After repeated accusations of inadequate proposals submitted by Dr. Guernsey, she and Dalhousie University swiftly withdrew their involvement in Sydney to prevent their “name and professional reputation from being dragged through the tar ponds” any further (Barlow & May, 2000, p. 100). It is curious to wonder if such humiliating and damaging accusations would have been permitted to pass with such ease and success if Dr. Guernsey had not been a woman.

Conclusions

Throughout its 100-year legacy, underlying social factors have been integral contributors to the steel mill disaster in Sydney. Although this disaster is not widely known, even to many Canadians and experts, the few sociologists who have studied this case have analyzed many of its social factors in great depth. However, due to the century-long duration, a sociological analysis with a specific focus on the most recent two decades of this disaster has been significantly lacking, especially since these two decades hold the important distinction of having been a period in time when the toxic effects of the Sydney steel mill were brought to light. This paper has provided a

concrete and relevant background on the overall history of Sydney, as well as the varying levels of vulnerability and risk faced by its residents, in order to ultimately focus on the influence of social class, race and gender on the continuation of the disaster between the years of 1980 and 2000. While the dimensions of social class and race have been somewhat analyzed already, this paper has expanded on these factors in greater detail over the specified period. In addition, it has explored the almost unmentioned dimension of gender within this disaster, in an attempt to also bring its important implications to light. Ultimately, the findings of this analysis have been that the dimensions of social class and race have been inseparably connected in Sydney, and have served to severely marginalize the population of Whitney Pier toward becoming the group most harshly affected by the steel mill. Furthermore, the added dimension of gender has further marginalized the women of Whitney Pier, which is especially significant since these women were among the very first people to expose the dark realities of the Nova Scotia steel industry.

This disaster, along with the toxic waste disaster of Love Canal are cases that clearly illustrate the overwhelming need for greater attention to be paid toward issues of environmental health, by better incorporating these issues within the classification of disasters. Such issues are also important sociologically, due to their disproportionately larger impacts on marginalized social groups, and the biased enforcement of environmental health protection based on social factors. In every case, without exception, environmental issues have a direct and significant effect on human health and human life, and should therefore be regarded with the same level of concern and urgency as other disasters are regarded. McKibben (1989) has warningly stated “there

is a tendency at every important but difficult crossroad to pretend that it is not really there” (p. 143). This has unquestionably been the case with too many issues of environmental health, as has been clearly demonstrated by the aspects of social class, race and gender in Sydney. If nothing else, the Sydney steel mill disaster has at least served to eliminate any doubt that above all, “steel workers are resilient people” (Dewitt & Giffen, 2011), as are all the residents of Whitney Pier, Sydney, Nova Scotia.

References

Barlow, M., & May, E. (2000). *Frederick street: Life and death on Canada's love canal*. Toronto, ON: HarperCollins Canada.

Brown, P. (2000). Environment and health. In C. Bird, P. Conrad & A. Fremont (Eds.), *Handbook of medical sociology* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.

Cape Breton University. (n.d., a). *The Mi'kmaq*. Retrieved from http://www.cbu.ca/mrc/the-mikmaq

Cape Breton University. (n.d., b). *Using the archives*. Retrieved from http://www.cbu.ca/beaton/archives

Dewitt, J. (Producer), & Giffen, P. (Director) (2011).*Heart of steel* [Web]. Retrieved from http://www.youtube.com/watch?v=wd_ETWr6Ca4

Elliott, J. R., Haney, T. J., & Sams-Abiodun, P. (2010). Limits to social capital: Comparing network assistance in two New Orleans neighborhoods devastated by hurricane Katrina. *The Sociological Quarterly*, *51*, 624–648. Retrieved from https://courseware.mymru.ca/bbcswebdav/pid-2670457-dt-content-rid-4364828_1/courses/48748.201304/Elliott_Haney_Sams-Abiodun 2010.pdf

Erikson, K. T. (1976). *Everything in its path: Destruction of a community in the buffalo creek flood*. New York, NY: Simon & Schuster Paperbacks.

Francis, R. (2008). Sydney harbour access channel deepening and the proposed sydport container terminal: Mi'kmaq ecological knowledge study. *Appendix G*, Retrieved from https://www.novascotia.ca/nse/ea/sydney.harbour.terminal/Appendix_G.pdf

Gibbs, L. M. (1986). Love canal and environmental crisis. In P. Wilkinson & M. Wyman

(Eds.), *Environmental challenges: Learning for tomorrow's world* (pp. 175-190). London, ON: Althouse.

Haney, T. J., Elliott, J. R., & Fussell, E. (2007). Families and hurricane response: Evacuation, separation, and the emotional toll of hurricane Katrina. In D. Brunsma, D. Overfelt & J. Picou (Eds.), *The sociology of Katrina: Perspectives on a modern catastrophe* (pp. 71-90). Retrieved from https://courseware.mymru.ca/bbcswebdav/pid-2670531-dt-content-rid-5092871_1/courses/48748.201304/Haney_Elliott_Fussell_2007v2.pdf

Heron, C. (1987). The great war and Nova Scotia steelworkers. *Acadiensis*, *16*(2), 3-34. Retrieved from http://journals.hil.unb.ca/index.php/Acadiensis/article/view/12124/12968

Livingston, N. (Director & Producer) (1999). *Toxic partners* [DVD].

McKibben, W. (1986). *The end of nature*. New York, NY: Random House Trade Paperbacks.

MacKinnon, L. (2013, October 10). *All that is solid melts into air: Deindustrialization and structural deficiency in Sydney, Nova Scotia*. Retrieved from http://activehistory.ca/2013/10/all-that-is-solid-melts-into-air-deindustrialization-and-structural-deficiency-in-sydney-nova-scotia/

Padgett, T. (2010, August 27). New Orleans' lower ninth: Katrina's forgotten victim?. *Time Magazine*, Retrieved from http://content.time.com/time/specials/packages/article/0,28804,2012217_2012252_2012673,00.html

Sierra Club of Canada. (2007). *From disco to sysco and jag: 1900-2005*. Retrieved from http://www.safecleanup.com/jag/timeline.htm

Slaven, S. (2006, February 01). *The birth of a steel plant - dosco and sysco years*.

Retrieved from http://sydneysteelmuseum.com/history/birth_continued3.htm

Tierney. (2007). From the margins to the mainstream? Disaster research at the crossroads. *Annual Review of Sociology*, *33*, 503–525. doi: 10.1146/annurev.soc.33.040406.131743

US. Environmental Protection Agency. (2014, February 27). *Final national priorities list (npl) sites - by state*. Retrieved from http://www.epa.gov/superfund/sites/query/queryhtm/nplfin.htm

Whitney Pier Historical Society. (2011). *Whitney pier community heritage trail: A walk through our history*. Retrieved from http://wphm.wordpress.com/community/whitney-pier-community-heritage-trail/