

The 40 Year Fire: Incineration at Wheelabrator Saugus



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*A senior honors undergraduate thesis at Tufts University
Original project here: <https://gjoche01.github.io/thesis-40yearfire/>*

About 10 miles north of Boston in Saugus, Wheelabrator accepts trash from [14 nearby communities](#). For the past 40 years, the facility has burned it, recovered some energy, and then dumped the byproduct in an ash landfill next to the facility.

Representative RoseLee Vincent represents the 16th Suffolk District, the area surrounding Wheelabrator. “It’s a money maker, it’s very easy to burn and dump, burn and dump,” she says, “It’s wonderful, it’s a wonderful moneymaker for Wheelabrator. It’s a disaster for my constituency.” She worries how the facility impacts the environment and the community’s health.

Wheelabrator is technically in Saugus, nestled between Bear Creek, Pines River, and the Saugus River, but it’s close to parts of neighboring Revere and Lynn. On their website, the company markets themselves as a waste-to-energy facility, creating 37 MW of “clean energy” each day.



A map of where the facility is located.

The landfill is located in Rumney Marshes Area of Critical Environmental Concern and doesn’t have a plastic liner system underneath it that most modern landfills have. It’s also next to several low-income and minority population communities that the state has designated as areas of environmental justice.

Vincent lives in the area, as did the past three generations of her family. She is one of the founding members of the [Alliance for Health and Environment](#), a group formed last spring that advocates for closing the ash landfill. Sitting next to the river, incinerator in clear view across the water, she says she grew up waterskiing here. She laments, “This is where poor kids used to have fun.”

Longtime resident Bill Brown says that when the incinerator first came to town in the 1970s, many community members saw it as environmentally friendly. They thought “We’re producing electricity, and we’re getting rid of our trash all at once. And nobody thought about what happens to the ash.” Incineration is sometimes, perhaps mistakenly, seen as a solution to landfilling, but the ash produced from burning still has to go somewhere.

Brown believes that the company makes an effort to be a good neighbor, "I think that they try, but let's face it, they do a job there. They burn, what is it 150 tons of trash a day of trash?...When you do that, you're going to pollute the atmosphere. That's the fact. But like I say, there are hundreds and hundreds of polluters of the atmosphere. To pick out one and say they're responsible is very irresponsible."



Top: Stephanie Fail walks near the facility. Bottom left: Fail in her childhood home in Saugus overlooking the incinerator. Bottom right: The view from Fail's house on Baker's Hill.

Stephanie Fail disagrees. She grew up on Baker's Hill overlooking the incinerator, "That plant made me an environmentalist. 100%," she says. She wishes that they would stop dumping the ash there. "The whole idea of looking at nature as a bottomless resource worked for the last generations, but it doesn't work for us," she says.

In the small town of Saugus, Wheelabrator is a divisive topic. People spoke to me in diners and coffee shops, but sometimes in hushed tones only after looking around to see who else was in earshot. When I reached out to the company for an interview, they refused to answer my questions.

1.

Health Impacts

Loretta LaCentra has lived in the Riverside area for over 30 years and worries how the facility might be affecting people's health.

“My husband was diagnosed at the age of 42 with a cancer that typically occurs at the age of 64 in most patients. I realize that this is anecdotal at best, but I am suspect of Wheelabrator after having seen too many cancer cases, respiratory issues, and autoimmune issues in my 30 years of living in the Riverside neighborhood; a neighborhood that is less than a half mile downwind of Wheelabrator.”



Caption: Loretta Stands in front of her Riverside neighborhood house, across the river from the Wheelabrator (incinerator on right)

She adds that she's seen a lot of her neighbors—including young children—as well as people her husband grew up with in the area, face cancer.

Anthony Michael Capachietti grew up within a quarter-mile from the facility and has recently been hired as a consultant to for the company. He's noticed a high incidence of cancer in the area—his mother and grandfather lived near the facility and had cancer.

It is known that municipal solid waste incinerators can produce dioxin, a chemical the EPA calls "[highly toxic](#)." According to the [World Health Organization](#), dioxin exposure can lead to reproductive and developmental issues, damage to the immune system, and even cancer.

In Massachusetts, a 2011 study found that municipal solid waste combustors are the largest point source for mercury, contributing 39.9% of the total point source mercury emissions in 2011. The [EPA](#) classifies mercury as a neurotoxin—"a substance that is known or suspected to be poisonous to nerve tissue."

The National Research Council's Committee on Health Effects of Waste Incineration concludes in *Waste Incineration & Public Health* that facility workers are likely at the highest risk for toxic chemical exposure. Though the council notes that there is lacking public health and epidemiological research on this topic.

Tufts University Department of Civil and Environmental Engineering's [Professor Anne Marie Desmarais](#) says that the core issue of incineration is the trash itself—there's no practical way to control what people put out on the curb in their trash bags before it's burned and releases chemicals. For example, she says, small compact florescent light bulbs contain mercury and can easily slip into the waste stream.



Left: The incinerator peaks out behind the marshland in Saugus. Right: GE and other industry across the Saugus River

Eric Lampedecchio grew up across the river from Wheelabrator mostly unaware of these issues, "I kinda saw this thing my entire life," he says, "No one really explained to you what it was, it was just the trash recycling plant my parents pointed it out as."

Recently, though, he says he's become more concerned about the health impact of the facility after learning about these potential health hazards..

“I'm kind of scared to death. It's a very scary thing... A good 15 years of my life I got exposed to that stuff, and now that I'm 32, I have a better understanding of oh my god, I'm at a greater risk than almost the rest of the city because of where I grew up.”

He worries that there is a lack of communication of these risks to residents, “They move into the area with no idea as to what they're really being exposed to. It's not like you move in and get a flyer that says hey, welcome to the neighborhood, guess what you are now at greater risk for this cancer.”

Although some neighbors complain about seeing high rates of cancer, a March 2016 paper “[Evaluation of Cancer Incidence in Saugus, MA](#)” from the Massachusetts Bureau of Environmental Health Community Assessment Program concluded that overall there is not an unusual pattern of cancer in Saugus. According to the Bureau of Environmental Health staff, Wheelabrator requested that the state perform the evaluation.

This study looked at state cancer data from 2007 to 2011 to determine if Saugus had a higher-than-average cancer rate. Their overall conclusion is that there isn't an unusual pattern of cancer in Saugus; yet, they did find statistically significant elevations in brain and other nervous system (ONS) cancers and testicular cancer. They found some types—like kidney and renal pelvis, lung and bronchus cancers, and cancers of the oral cavity and pharynx—to be elevated but not statically significantly so.

The department's staff reminds in an interview via email, “It should be noted that this evaluation was a routine screening-type...The report did not include an evaluation of the Wheelabrator facility itself.”

Despite the evaluation's results, some people are not satisfied.

Elle Baker, a Revere resident and founding Alliance member, argues that the study isn't complete because it only looked at Saugus—but parts of Lynn and Revere are also extremely close to the facility. Notably, the Point of Pines neighborhood in Revere—not Saugus—is just across the river from the incinerator, while there are parts of Saugus that are miles from the facility. A study looking at cancer rates in a radius around the facility would have been better she believes.

Baker also questions studying rates in just a five year period—a decision the Bureau of Environmental Health justified in an email interview saying it was the most recent data available from the state cancer registry and that Wheelabrator specifically requested a review in Saugus. Peter Manoogian, a founding Alliance member and Saugus resident, points out that cancer is not the only potential issue. He wonders about asthma and respiratory issues.

Ann Devlin, president of Saugus Action Volunteers for the Environment (SAVE) and Saugus Town Meeting member, is not convinced, “Well, the cancer rates are up regardless of what they say in their glossy brochures. We do have higher cancer rates,

We don't know, it's very hard to what constant exposure to chemicals are going to do over the lifetime of a person. So, we don't know.”

Saugus Director of Public Health David Greenbaum notes that while the report is helpful in seeing the reported cancer types and rates in the past few years, it can't be attribute a definitive cause, “It's really not helpful in determining, is facility A the root cause of cancer going up in town?”

It's really hard though to prove that any one source is the cause of disease. [Professor Desmarais](#) says that these epidemiological studies are challenging, you have to somehow control for other factors like exposure to carcinogens in other places and smoking. That's in addition to the fact that often people don't live in one place their entire lives.

When asked about the select elevated cancer rates Greenbaum admits, “It could be caused by anything. I really couldn't make any comment on it other than there was an increase in these particular types of cancer in town whether or not it's related to Wheelabrator... I don't have any evidence that it is, and I don't have any evidence that it's not.”

To his knowledge, cancer incidence reports like these are the only analysis that's been done. While it is challenging to definitively prove what causes an increase in disease, Greenbaum says that it could be beneficial to look at how the facility has impacted cancer rates starting at the beginning of its operation over 40 years ago. Though, he says he doesn't know if the town would do this, “It would be a very expensive undertaking and budgets being what they are, it would probably be very difficult for a municipality to undertake that.”

Bill Brown, Town Meeting member and longtime resident, says his biggest issue with anti-Wheelabrator people is that haven't offered enough evidence, “In everything that they've done, they've never ever offered clinical data, studies, reports, brought forth scientists or anyone that could say the problems in this area are directly related to Wheelabrator.”

Wheelabrator is not the only source of industry in the area. Brown worked at General Electric (GE) across the river for 34 years where he says they test engines. He adds, “What I'm saying is yeah, Wheelabrator is a contributor, but so is GE across the river”

“It's hard to put borders on a struggle,” resident Stephanie Fail says. Although she is not in favor of Wheelabrator, she says this is a bigger issue, “Is this really the border of the problem. No? If this even in this frame of the border of the problem? No. It's a systemic issue with the watershed and we need to look at the whole watershed.”

Highway 1A also runs next to the residential areas across the river from the incinerator, and the facility itself is on route 107. Studies have found that highways and other major traffic centers pose health risks, like asthma and lung cancer. Specifically, the

Community Assessment of Freeway Exposure and Health Study ([CAFEH](#)) at Tufts University studied air pollution and health in several Boston-area communities near highways. Although they did not look at data from Saugus, they found that populations living near the highway had biological markers that suggested they were at a higher risk for cardiovascular diseases.

2.

Facility Concerns

Health is not the only concern from residents, another is that the landfill has no plastic liner.

John Polcari, Corresponding Secretary of the Point of Pines Beach Association, says the lack of liner is his major beef with Wheelabrator. “The fact that it’s an unlined landfill and nobody knows what’s underneath it. They certainly haven’t published anything in terms of surveys, core samples, testing.”

According to the [Massachusetts Department of Environmental Protection](#) (DEP) Wheelabrator is one of two unlined, active landfills in the state. In most modern landfills there is a double liner system made of plastic underneath to protect the surrounding area.

The landfill is built directly on top of an old solid waste landfill that has natural clay underneath it. Despite the state labeling it as not lined, the company argues their landfill is lined because of this natural clay. In a project by for University of New Hampshire’s Casey School of Public Policy, master’s students Elle Baker and David Corbie [videotaped an interview](#) with Wheelabrator, “Clearing the Air: Wheelabrator’s Counter” as a follow up to an [earlier project on Wheelabrator](#). In the interview, Jim Connolly, Wheelabrator Vice President of Environmental Health and Safety, insists that the landfill is lined. When I contacted the company for an interview and was denied, this was a specific question I asked about.

According to Joe Ferson, a representative from the Massachusetts Department of Environmental Protection (DEP), because the ash landfill was built on top of a solid waste landfill, it was “not feasible” to construct a conventional plastic liner system. Instead he says that Refuse Energy System Company (RESCO), the company that owned the ash landfill before Wheelabrator, had to develop alternative safety measures.

Kirstie Pecci, a Senior Fellow at Conservation Law Foundation and founding Alliance member, has been working as an attorney opposing solid waste facility expansion since 2008. When she first learned of Wheelabrator, she was shocked to find out that the landfill was unlined—and alarmed that it’s in an Area of Critical Environmental Concern (ACEC).



The Rumney Marshes area near Wheelabrator

The incinerator and landfill are in [Rumney Marshes Reservation ACEC](#), an area with a thousand acres of salt marsh and tidal flats, home to fish, shellfish, and public nature trails. Tides from the Atlantic Ocean bring salty water into the wetlands where the Saugus and Pines Rivers meet the ocean. In 1988, the area was designed an [Area of Critical Environmental Concern](#), a label from the state meant to protect and preserve ecologically significant areas. The U.S. Fish and Wildlife Service called the area "one of the most biologically significant estuaries in Massachusetts north of Boston."

Heather Murray, a staff attorney at Conservation Law Foundation Massachusetts, explains that the ACEC label aims to protect the area, "It's an acknowledgement that this is a highly sensitive ecological area that deserves a very, very high level of protection to the point where because it is an Area of Critical Environmental Concern, a new landfill would never be allowed to be sited there in the first place."

Pecci stated at a February 6th Saugus town meeting that because the landfill was already there, it was allowed to exist, or "grandfathered in." Pecci says that the ACEC designation is prohibitive, "If you wanted to build a porch here you wouldn't be allowed to today...If you wanted to extend your yard into an ACEC you wouldn't be allowed to... you cannot fill it with clean soil. Nevermind put an ash landfill there."

Beyond the fact that it's an ACEC, Professor Desmarais says that a marsh is not a good place for a landfill. Wetlands and marshes, she says, are crucial for excess water storage, "As we get to sea level rising and global climate change, we're going to realize we need that storage. And so if you expand the landfill in a wetland area, you're going to remove storage. That's a place where water can go after a flood, which is a lot better than in the roads or in the basement."

But the company resists admitting they operate in the marsh. Connolly argues in the [UNH public policy students' video](#) that because the current ash landfill is built on top of an old landfill that operated in the 1950s and 60s, they aren't dumping in the marsh.

"The ash has always been placed on the footprint of where waste had previously been placed," he explains, "...The previous landfill was in the marsh but when we got here and started placing ash, the marsh was no longer a marsh."

Although the company seems to disagree, the state has said in [official documents](#) that the landfill is in the Rumney Marshes ACEC.

SAVE president and Town Meeting member Devlin believes that the facility would never be sited there today, "By today's standards, never. And it would never be unlined. The fact that it sits there, unlined, in an area of critical concern—it's not adjacent to, it's in—is not good for any of us."

3.

Expansion Efforts

The ash landfill was estimated to reach capacity by late 2017, but the company has made efforts to expand. In May 2016, Wheelabrator submitted an Environmental Notification Form (ENF) to the state outlining its plans for expansion. The company plans to upcap two valleys in the landfill and continue to dump ash there, extending the life of the landfill to an estimated 2023.

Because the ash landfill is in an Area of Critical Environmental Concern, the company's request was subject to the [Massachusetts Environmental Policy Act](#) (MEPA).

Essentially, after a period of public comment, the MEPA office had the power to require an Environmental Impact Report (EIR)—further study of the project's impacts—or to send Wheelabrator onto the state permitting process. They don't have the power to approve or deny the project, only to require further investigation into it. Public letters from residents flooded in and public meetings were held. In the end, the [state decided](#) that an EIR would not be necessary, sending the project into the permitting process with the DEP.

Murray says that Conservation Law Foundation Massachusetts, a group part of the Alliance, is concerned no EIR was required, "The most basic place to start would have been to do an analysis and look at those impacts and try to figure out whether or not this expansion is something that should be allowed to proceed but unfortunately that wasn't done."

4.

A Community Responds

In February, the town of Saugus created new rules that would limit the facility.

The Alliance for Health and Environment [got over 450 signatures](#) on their proposal to amend the town's zoning bylaws, triggering a vote. The rules were threefold: adding definitions of ash, "landfill" and "ash landfill" to the official bylaws, restricting the height of any ash landfill to 50 feet, and banning any landfill from citing or expanding in or adjacent to an ACEC. On February 6th in an exhausting, nearly three-hour long meeting, all three were voted in.

But with Wheelabrator's current height limit set at 50 feet, Town Meeting member Bill Brown says this is obvious spot-zoning targeting the incinerator. Capachietti, a former resident, agrees. He says, "It's spot zoning—they're going after a single use that exists, it's a lawful use that exists... I don't know that I'm 100% for Wheelabrator, I'm more for approaching it the right way. I don't think the zoning changes is the correct way."

Fail disagrees. Laws, she points out, are formed when you have the need for them. "You can't have premonitions, like I think we're going to need this legal structure in 20 years. We don't know! We handle it one issue at a time. That's how laws are built, it is a living system... We shouldn't have a courtroom telling businesses that they have more power than a community of concerned citizens. We shouldn't."

Now the Massachusetts Attorney General's office has [90 days](#) to approve the changes.

5.

Money, Money, Money

Unsurprisingly, money lies at the heart of this issue.

A month before the vote on these new ash bylaws was taken, John Daukas—a lawyer representing the company—wrote in a [letter to the Board of Selectmen](#) that if the laws are passed, the company will take legal action.

With this legal threat looming, there is concern in the town that backlash from Wheelabrator would be costly.

Town meeting members Gene Decareau and Bill Brown worried about these financial concerns at the bylaw vote. "We are forcing Wheelabrator to take the town to court and that will cost hundreds of thousands of dollars," Brown said.



Left: Bill Brown stands in Saugus. Right: Gene Decareau, a lifelong resident, in central Saugus

In 2003, the town tried to pass similar zoning rules to limit landfills height to 40 feet—which was less than Wheelabrator’s permitted height of 50 feet. The company challenged them, and in 2005, Massachusetts Land Court [struck the rules down](#).

Brown thinks that for this reason, the laws don’t stand a chance in court. He underscores that as a Town Meeting member, his concern is finances. A legal battle between a small town and a corporation does not seem promising.

"Who's going to say uncle first? The town probably is going to say uncle first because they have limited funds I would think," surmises Steven Castraberti, owner of Prince Pizzeria in Saugus.

Although Fail doesn’t think the town should shy away from a legal battle, she acknowledges they don’t have many resources, “We're poor, we're working class...We don't have as many lawyers on call. We don't have the deep pockets to fund it. if you look the people in East Saugus don't have a lot of money, that's why they live by the river [and across from the incinerator].”

Beyond the financial concerns tied to the company’s threatened legal action, Wheelabrator contributes a significant amount of taxes, according to [The Boston Globe](#), \$3.4 million annually. Their financial contributions to the town are not something the company lets anyone forget. In a press release from late January published in the *Saugus Advertiser*, the company says it paid [\\$4 million dollars](#) in taxes and philanthropy, in addition to providing 46 full-time jobs. In their [advertisements](#), they brag they are the largest taxpayer in Saugus.

Castraberti says he doesn’t live in Saugus and is independent, but understands why people may be unhappy about the company. Yet, he points out, “Of course, on the other hand, they [Wheelabrator] are also good neighbors in many regards. They are there to help out.”

He says that each year, Wheelabrator sponsors the “[Unsung Heroes](#)” dinner at his pizza restaurant, an event to honor public school students for academic achievement and community involvement.



Castraberti in Prince Pizzeria

The company makes notable charitable contributions to the community—also something they like to remind people of, branding themselves in their [promotional content](#) as a “good neighbor.”

Castraberti points out, "They do outreach to schools, and they're willing to help out the PTOs of a lot of these schools, because sometimes they are underfunded and these guys have the ability to help out...They are fairly high profile in what they do."

For the past 10 years, Wheelabrator has provided a driving range on an area of their capped landfill for the local high school golf team—which, according to Saugus golf coach Jeff Mitchell is his public MEPA letter, provides a huge savings to the athletic department. In 2013, the company won a community service award for their work with the local schools after sponsoring the high school golf tournament and donating a new scoreboard to the gym.

Saugus High Athletic Director, Mike Nelson, told [The Lynn Daily Item](#), “Every time we ask Wheelabrator for help, they not only come through, but in many cases Wheelabrator employees contribute time, energy and funding beyond what we have asked for.”•

They are one of main sponsors of annual [holiday tree lighting event](#) and donated [thousands of dollars worth of defibrillators](#) to the fire department and school system. Last fall, students at Waybright Elementary collected [cans for a food drive](#) and [socks for a homeless shelter](#). Wheelabrator Saugus matched or nearly matched the goods the students raised.

Decareau, a lifelong Saugus resident, worries that the zoning bylaws could jeopardize the company's support, "I don't think they will be as willing to contribute so much to the town if they're fighting and have to do all this extra work. Why would they continue to give you all the support and help you need? It doesn't make sense."

Not everyone agrees their efforts are purely genuine though. Representative Vincent argues that simply giving money doesn't make you a good neighbor. She sees their donations as an effort to silence people.



Saugus Town Hall with a sign in front that says "sponsored by Wheelabrator"

Lampedecchio, the nearby resident who expressed health concerns, agrees. He says, "You hear about all the negative health impacts from Wheelabrator, but right in front of city hall they have a little Wheelabrator advertisement sign, like sponsored by Wheelabrator...if a picture could say a thousand words, that would be it...I think that money talks unfortunately and Wheelabrator has done a very good job of investing their money." With good publicity, he says, they are able to save from from what they really do.

Devlin, Town Meeting member and SAVE president, similarly believes that their donations sway people to like them, "I've never done any kind of a survey on my own but it seems as though the people who are for it, the people who support Wheelabrator have been generously provided for. Their schools have been giving gifts and they have been just rewarded for their support and I think that it very short-sighted."

6.

A Refuge, for the Birds

The incinerator has an unexpected group of sympathetic allies: bird watchers.

Linda Pivacek, a bird watcher and retired statistician and epidemiologist, lives in nearby Nahant. When she saw Wheelabrator from across the river in Revere, she was instantly drawn to the grassy area that they maintain near the facility, Bear Creek Wildlife Sanctuary.

She says that grasslands are disappearing and threatening bird populations, "Grassland breeding birds are in terrible trouble, there's little habitat left for them." These birds need large open, grassy areas to breed, she says.



Left: Linda Pivacek spots a bird in the marshland, Right: Marshland near the facility

Pivacek has been collecting data on breeding patterns since 2002 in the Rumney Marsh area, including the Bear Creek Sanctuary. She says the sanctuary has been a vital place for grassland birds that depend on this habitat. "It's been great," she says, "since there is a lack of other grasslands for these birds."

LaCentra, the resident concerned with Wheelabrator's health impact, lives across the river from the facility and regularly kayaks through the marshes. She's not convinced, and says that even without Wheelabrator's efforts, there would still be wildlife there, "I mean, it's a salt marsh, you would typically expect that. So it's rather disingenuous for them to say, 'Oh well we brought all these birds in here with our sanctuary,' because there's always been birds there."

The facility hosts semi-regular bird walks where people flock to the sanctuary to bird watch, and the [Wildlife Habitat Council](#) notes that there's been 178 bird species spotted in the sanctuary.

The company has vaguely threatened in their ENF—the official form the company filed for their expansion—to stop maintaining the sanctuary if the ash landfill is closed.

7.

A History

When Rumney Marshes became an ACEC in 1988, the state took action. Conservation Law Foundation Senior Fellow Kirstie Pecci explains, “They filed a notice of noncompliance saying you know, an illegal situation we have here in Saugus and they said we are going to close it in 1996.” 20 years later, it's still there. This original 1988 agreement to close in 1996 was extended nine times to extend the landfill's life.

The neighboring communities had little say in these extensions. Pecci says that because the DEP amended their existing permit instead of issuing a new one, they avoided any public process and didn't go before the Saugus Board of Health.

Peter Manoogian, a founding Alliance member, expressed his frustration with this lacking public process in a letter he submitted to the state during the MEPA process, “The consent order and the amendment process has been used as a means to circumvent local review, environmental impact study, and established practices for assigning a site for disposal purposes.”

Conservation Law Foundation's Heather Murray adds, “Because there's been no public process in the past, the impacts of this landfill on the local community, particularly the neighborhoods in Saugus and Revere, have really never been evaluated. And that's extremely problematic.”

Devlin says these extensions on the landfill are a major part of the reason the Alliance is frustrated, “There's never been any talk of Wheelabrator closing down, nothing like that. It's about the ash pile that was supposed to close 20 years ago and they keep getting extensions from the state.”

Beyond this murky legal situation, the facility has some contentious history.

In 2011, the company paid [\\$7.5 million dollar fine](#)—the state's largest environmental violation settlement of its kind at the time—for alleged environmental violations at several plants. The lawsuit, sparked by two whistleblowers who worked at the facility, alleged that in Saugus thousands of gallons of ash spilled into the parking lot and marsh after a filter broke. The company then allegedly did not tell the state quickly enough and

started to clean up the mess incorrectly. There was also, allegedly, a hole in the roof that allowed ash to escape.

The company never admitted to wrongdoing, they just paid the fine. When confronted about these violations in UNH master student's "[Clearing the Air](#)," Wheelabrator Vice President of Environmental Health and Safety Jim Connolly said that they DEP and Attorney General's Office investigated, "They came to certain conclusions they we disagreed with. We're confident that we're operating in compliance and some of the allegations were untrue. But rather than continue to have an ongoing legal battle which could cost years and a great deal of money, the company choose to settle for the 7.5 million."

Since this incident, there have been more spills—in the past year, there have been two, in [November](#) and last [April](#).

8.

Testing

Pecci says that this ash they spilled, and the ash that they put in the landfill, is toxic. She says, "The ash is so toxic that when Wheelabrator dropped 20 pounds of it...they dropped 20 pounds of ash in their parking lot, it was a reportable event that they had to call the DEP about...it's so dangerous it was a reportable event but we're not admitting it's just as dangerous when we put it on the ash landfill."

Many members of the Alliance and those who are anti-Wheelabrator argue that the ash is toxic, but the company says that it isn't and insist they follow all federal and state standards for nontoxic waste.

What qualifies as "toxic" or "nontoxic"? In 1994, a [US Supreme Court ruling](#) mandated that this ash from municipal solid waste incinerators be considered hazardous material if it contained certain amounts of toxic chemicals—specifics that the EPA then decided.

Disposing of the ash as hazardous waste would have been expensive though, perhaps prohibitively so. In chemist Dr. Paul Connett's book *The Zero Waste Solution*, he writes that in 1986 David Sussman, Vice President of incineration company Ogden Martin, said, "It means finito, morte, the end for the resource recovery industry if ash is treated as hazardous waste... Either that or widespread violations. There is simply no room for four million additional tons annually of ash waste. It would overwhelm all existing hazardous waste fills."

When trash is incinerated in a typical energy-from-waste facility, two types of ash is created—fly ash and bottom ash. Fly ash, typically 10-20 percent of the total ash according to the [EPA](#), contains most of the metals and other toxins. The regulations the EPA created in response to the Supreme Court ruling let facilities test the ash's toxicity

by combining the two types of ash together, making it overall less toxic and less likely to cross into hazardous waste levels.

In the video interview with the UNH Master's students, Connolly says that they do this test once a quarter, but that there are no air quality test requirements for landfills. Again, when I reached out to talk to Wheelabrator for an interview, I asked about testing specifically and was denied.

9.

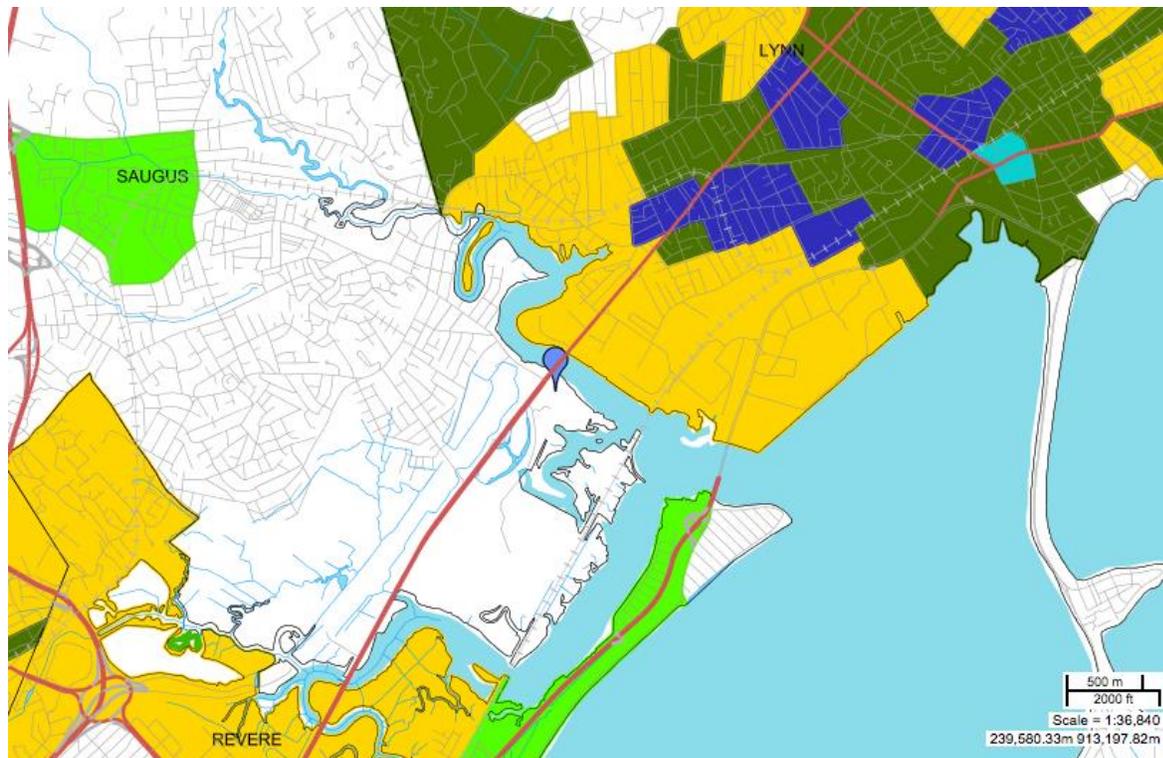
Environmental Justice

Representative Vincent says that economically disadvantaged areas like this often bear the unfair burden of pollution from industrial sources like Wheelabrator. She's frustrated that people often forget that this is an environmental justice community.

Massachusetts has an [environmental justice program](#) that labels certain areas those of concern based on [factors](#) like income level and minority population.

Deneen Simpson, the state's Environmental Justice Director, explains the program, "I think the goal of the policy is to make sure everyone has a voice, everyone is entitled to fresh air to breathe and clean water to drink no matter their race, income or English language proficiency, no one community should have more environmental bads without having its share of environmental goods."

Within a [one-mile radius around Wheelabrator](#), there are several environmental justice census groups of either low-income or minority populations.



Environmental Justice Populations 2010

- Minority
- Income
- English Isolation
- Minority and Income
- Minority and English Isolation
- Income and English Isolation
- Minority, Income and English Isolation

The areas of environmental justice near Wheelabrator Saugus, denoted with the purple marker. Map and key courtesy of MassGIS using the most recent census data.

At the February Saugus town meeting where the ash bylaws were voted on, Pecci echoed Vincent, “One of the reasons that this has happened is because Revere, Saugus, and Lynn have large environmental justice populations... If you guys were all really rich and had attorneys on call that you could do this for you and not have the financial issues that you were discussing earlier, like some municipalities, you wouldn’t have this facility in your community, I can assure you. And that’s not fair.”

In Wheelabrator’s ENF—the paperwork they filed last summer for the MEPA office for their expansion—they did acknowledge that they are next to environmental justice populations. Their solution? They wrote that they translated their ENF into Spanish and put public notice of it in several local newspapers.

This situation is not rare. In Massachusetts there are seven municipal waste combustors like Wheelabrator. According to [MassGIS data](#), all seven facilities are in or next to areas designated by the state as environmental justice populations.

There is a consistent pattern of increased environmental and pollution hazards for poor areas and those of color. Researchers at the [University of Michigan and University of Montana](#) found that industrial sources of pollution and hazardous waste sites are likely to be in low-income areas and communities of color. They wrote they identified, “a consistent pattern over a 30-year period of placing hazardous waste facilities in neighborhoods where poor people and people of color live.” Race, [The Nation](#) reports, is the largest factor in determining if someone lives near hazardous waste. Specifically in Massachusetts, [a study from Northeastern University and Buffalo State College](#) found that landfills are concentrated in low-income communities and communities of color, and that these same communities are more likely to be near other environmental hazards than their wealthier, whiter counterparts.

10.

So What's the Alternative?

"The day that trash doesn't get collected in this town, the day that there's no place to take it and it sits on the curb for weeks at a time, people will be up in arms," Town Meeting member Brown says.

He brings up a crucial point. Collectively, Americans generate over [250 million tons of waste each year](#), waste that has to end up somewhere. If it's not reused or recycled, there are two main options for it: a landfill or an incinerator. Desmarais, Professor of Civil and Environmental Engineering, admits, “Neither is good for the environment. They're both bad, but probably landfilling is worse.” Trash gets burned in the incinerator and produces 15-25% of its original weight in ash, according to the [EPA](#). Solid waste landfills are also notorious greenhouse gas emitters. Incinerators then, she says, are somewhat of a necessary evil.

In this specific situation, Wheelabrator says the alternative to dumping in their current landfill in Rumney Marshes ACEC is to take the ash to another landfill they manage 56 miles away in Shewsbury. In their ENF they say that this option would be worse for the environment because of the estimated greenhouse gas emissions it would take to make the drive to the facility. Recently though, they did file an application with the state to temporarily put the ash in another off-site landfill in the case that the landfill reaches capacity before their original extension permit is approved.

According to Professor Desmarais, there are alternative technologies that are potentially better for the environment, like [bioreactor landfills](#) or using the ash to make bricks. The issue is cost, “It's more expensive to make bricks or concrete out of fly ash and bottom ash than it is to make it out of soil... It's a social problem, it's an economic problem. Right now it's cheaper to throw stuff away than it is to recycle it or to recover it.”

One solution to address the issue at its core is to produce less trash and move toward eliminating the need for landfills and incinerators. Beyond composting food and recycling everything possible, the “zero waste” movement aims to dramatically reduce

the amount of trash people produce by not buying plastic, bringing reusable bags to the store, and finding alternative uses for things you might otherwise throw away. Being mindful of how much trash you produce can be as simple as not using a plastic straw when you go out to eat.

In the end though, Devlin believes that as long as incineration is a profitable option, other alternatives like reusing and recycling will not be as seriously considered because incinerators are a for-profit business, “For-profit businesses need trash to keep their profits going. So there's no incentive to really get serious with manufacturers to reduce their packaging, with efforts to increase composting, or recycling in general.”

11.

Looking to the Future

LaCentra worries about Wheelabrator's future, “They have no intention of every closing if they get their way because it makes too much sense from a bottom line to keep that thing open. It's 50 feet now, how high is high enough for them?”

Nearby resident Lampedecchio says he's unsure what exactly the best outcome is, “I think any outcome that increases the health risks to the residents in that area is unacceptable, so in the very least I would like to see the landfill lined or even capped.”

But not everyone is concerned. Decareau has lived in his entire life and is content, “I find them to be honest and straightforward and I have no problem with Wheelabrator.”

Sitting on the river across from Wheelabrator, Representative Vincent gets emotional, saying that in her time in government, this issue is a priority for her. Looking to the future, she says she's working on legislation that would strengthen environmental justice initiatives in Massachusetts.

She recently sponsored bills that increase protection for EJ communities, and has proposed legislation that would impact Wheelabrator, like acts that would [prevent landfill expansion](#) in or next to ACECs and that would require the state to create a [special solid waste management council](#).

Vincent recalls first pushing legislation on Wheelabrator, “People said, she's a crazy environmentalist! I'm not, I'm not a crazy environmentalist. I care about the environment but I'm not a crazy environmentalist...You don't have to be a rocket scientist to know it's wrong.”



The Wheelabrator facility churns out smoke over the marshlands out smoke over the marshland