

## Transcript – Ways & Means S8E8 Goodbye, Cloud Factory

Lauren Rosenthal: From the Sanford School of Public Policy at Duke University, this is Ways & Means. I'm Lauren Rosenthal.

*Jackson Roach:* So, I'm walking along Pulaski towards the power plant now ...

Lauren Rosenthal: This is our contributor, Jackson Roach. He's in Chicago, walking along the side of a road in an industrial area. He's trying to see what's left of the old Crawford Power Plant.

*Jackson Roach:* ... I'm gonna cross the river now and see if I can get a better view...

Lauren Rosenthal: The Crawford Generating Station was built in 1924 and operated for more than 80 years. Burning coal to make power, until it was shut down in 2012.

The building that's left--- Jackson says it's kind of underwhelming now. There used to be these huge smokestacks for decades that spewed giant puffs of smoke into the sky. Now, those smokestacks are gone.

*Jackson Roach:* OK, I'm a little closer now, I can see the old brick building that used to have the power plant in it. Smokestacks seem to have been removed. It looks almost like a castle or a fort or something with 1-2-3-4-5, kind of 5 pillars on each side, almost like castle turrets or something...

Lauren Rosenthal: What made the plant remarkable, though, wasn't the structure itself. It was *where* the plant was – right next door to a Chicago neighborhood with churches and schools. It's hard to imagine city planners saying, "Oh yeah, now this spot is perfect for a coal power plant." Jackson knew it was close to a community, but it was still wild to see.

*Jackson Roach:* and then to my left is Little Village, just apartment buildings and this church, small low lying brick houses, front yards, back yards, fire pits, classic Chicago housing. So, It's really close to where the plant is...(fades down)

Lauren Rosenthal: So, Little Village, with its elementary school, families, shops -- and then this giant power plant – all super close to each other. The Crawford Plant and two other power plants in the Chicago area closed down all around the same time. Due in large part to an incredible lobbying effort from local groups.

But that wasn't the end of the story.

(Theme Music)

Lauren Rosenthal: In this episode of Ways & Means: Goodbye, cloud factory. How a crusade shut down a coal-fired Chicago power plant for good. What the closing of that plant meant for children's health and the environment. And what it didn't mean. This episode is part of our ongoing series Climate Change Solutions.

*Kim Wasserman:* Little Village is a really vibrant, amazing community on the Southwest side of Chicago. It's not very big. It's about five miles in radius and has a thriving Latinx community

Lauren Rosenthal: This is Kim Wasserman. She grew up in Little Village -- went to school there and raised her family there. She says Little Village is known as the Mexico of the Midwest.

*Kim Wasserman:* When I think of my neighborhood, I think of the ice cream street vendors. I think of folks selling all kinds of different products on the street, particularly food products, all the different smells. You can smell all kinds of different food. Fire hydrants open in the summertime, sounds of Mexican music, all the parties that folks have and the music blaring and the DJ blaring, kids everywhere. You know, Sunday morning, the sounds of roosters. Yeah, no, it's a thriving, vibrant neighborhood.

Lauren Rosenthal: Kim loves Little Village. But something happened in the late 1990s that changed the way she saw it. Kim became a mother. And when her baby was just three months old, he had an asthma attack.

*Kim Wasserman:* And so, sitting in the E.R., having a doctor ask me about not just my home environment and my family history, but then also asking me – sorry, [coughs] ironically my asthma has been kicking my ass for the past week, I mean I've been really wheezing, so my apologies.... asked me where I lived. And what was in my backyard, and what I lived near. And the doctor asked me that question and I said, yeah it happens I have a coal power plant and highway in close proximity to my home.

Lauren Rosenthal: She remembers the doctor saying, well, it's not hard to figure out what's going on here – or why the baby has asthma – think about the smokestacks in your neighborhood.

Immediately, Kim knew what he was talking about. The Crawford Plant -- the one closest to her neighborhood. Its smokestacks jutted up into the sky. So tall, travelers flying in and out of Chicago could see them, with their blinking lights up top.

*Kim Wasserman:* They were huge smokestacks, and on Crawford, there was two of them. One had red painting on it with like stripes, white and red stripes on it. And, you know, they looked unassuming. They look like just big pipes that really steam because of what came out of there was white. It was white, fluffy clouds. They referred to the plant as the cloud factory because what came out of it looked like clouds.

Lauren Rosenthal: The cloud factory. There was much smoke, from burning coal, poured out of the stacks, that people in the neighborhood thought it looked like real clouds.

*Kim Wasserman:* And so, I came back home with my kid and started to ask my parents a lot of questions about the coal power plant and just wanted to understand, like, why is it that something like this could be in our neighborhood?

Lauren Rosenthal: Kim didn't have any special training or a college degree -- but she was too invested in her family and her community to let this go. She started learning more about the plant.

*Kim Wasserman:* It was completely unacceptable for there to be a permanent coal power plant. Again, just so close -- feet, feet! In some cases, a street, a rail line, an alley, and then people's homes. You know, I mean, so like a stone's throw away from people's homes. Yeah, no, sorry (*laughs*)

Lauren Rosenthal: Kim still gets fired up when she talks about this. It's either laugh or get mad, and that's what Kim did. She got mad and started to get organized. Kim went door to door --- with her baby -- to talk to neighbors about why the plant had been allowed to operate so close to their homes. She had no experience, but she had passion.

*Kim Wasserman:* Going into the coal powerplant campaign, I had no clue about public policy. I had no clue about land use. I had no clue about planning and urban development -- like that. Those are things that I had. I was simply a mom with a kid who was trying to understand why this polluter was allowed to do what they could do.

Lauren Rosenthal: Along the way, Kim learned that coal-powered plants are huge contributors to climate change.

According to the EPA, the Crawford and Fisk plants alone sent more than 4 million metric tons of carbon dioxide into the atmosphere in a single year. That was in 2010. And it meant that the plants were Chicago's *largest sources of carbon dioxide*, which traps heat and is a major driver of our changing climate.

But that's not all. There were more immediate effects—on human health. - Kim heard about a Harvard study that tied more than 550 emergency room visits, 2,800 asthma attacks and 40 premature deaths to the two plants closest to her neighborhood.

Kim kept meeting people, forming a coalition, as she continued to collect research. Until finally, one day she discovered she actually had something on her side: timing.

Marketing video: in 2016, the world's athletes will enjoy the magic of Chicago, where they will compete in the center of the city, in the heart of a nation...

Lauren Rosenthal: Chicago was hoping to bid on hosting the 2016 Olympics. And with that increased scrutiny, Kim's coalition kicked into gear. They attended hearings and led "Toxic Tours" to the plant sites.

*Quote from activist:* This is the Crawford plant, it's at a very intense moment, there's been community meetings the last month or so with the company and the community of little village. This struggle continues.

Lauren Rosenthal: They even had a "Coal Olympics" to attract media attention.

And it worked. Kim remembers the day she heard the news. The Crawford plant – the one right on the edge of Little Village - was shutting down. And it wouldn't take ten or fifteen years either.

The phone rang, and it was a partner at the Sierra Club.

*Kim Wasserman:* And she's like, you know, are you can you talk? Know, I was like, yeah, of course. And so I stepped out into the hallway and she told me that they had committed to shutting down within one or two years. That the best we could do was one or two years. And I had – my voice still breaks talking about it. And yeah, that was just such a, um, I remember I will remember that day until I die, because it just was such a full circle moment for me.

Lauren Rosenthal: Kim's scrappy neighborhood group had taken on a huge opponent – and they had won.

The Crawford Plant closed in 2012. In fact, during a six-month period, all *three* coal-fired plants in the Chicago area - Crawford, Fisk Street, and the State Line Generating Station all closed abruptly. And this was after decades – of steady, continuous operation.

*Reporter:* We stay now in Chicago, where the city has announced an agreement to close two of the nation's oldest and dirtiest coal plants...

Lauren Rosenthal: To this day, Kim Wasserman still can't quite believe what the community partners were able to pull off.

*Kim Wasserman:* I mean, you're talking about taking out a multibillion-dollar corporation, an energy fossil fuel company. Hell, no. I mean, we never.... I mean, that was our goal. We were going to get there, but some days it just felt like we were never going to get there. And then other days, it felt like we were making moves.

*Sarah Komisarow:* Yeah, so this project is actually sort of personal in that I was living in Chicago during the time when these coal fired power plants closed, and it was something that I read about and became aware of, and I thought that it would make for a really interesting research project

Lauren Rosenthal: This is Sarah Komisarow, a faculty member at the Sanford School of Public Policy at Duke. Sarah was impressed by the environmental win here. – But she was really curious about something else –

*Sarah Komisarow:* Our idea was to look at the way that these power plants impacted human health. But we took sort of a unique angle and approach in that we measured absences from school.

Lauren Rosenthal: School absences. – That's because researchers wanted to know if shutting down the plants had other benefits, beyond helping the climate. They wondered if closing the plants affected kids' health. If kids were absent from school – that might be a way to try and measure it.

*Sarah Komisarow:* They happened to close, sort of close to being in between school years. So, we had really -- from a very nerdy data perspective, we had very clean measurement of students absences in the school years before the closures and in the school year following with not, you know, not too much overlap in between.

Lauren Rosenthal: It was good clean data – which is ideal for research.

*Sarah Komisarow:* And so, our idea was to use data that was collected routinely as part of the public school system, you know, keeping track of how frequently children are absent from school. And we decided to take advantage of the fact that that had already been collected on a very large scale in the years before and after the closures.

Lauren Rosenthal: The researchers used data from 15 Illinois school districts. They looked at schools near the plants that closed – schools that were no more than 10 kilometers away. They used schools a bit further out as a control group.

*Sarah Komisarow:* We found that school absences in schools near the plants declined by about 6%.

Lauren Rosenthal: 6 percent. That may not sound like a lot – but if you scale it up over a whole community, it really adds up. It's hours and days where kids could have been in school instead of home sick or at the ER with an asthma flareup or some other issue.

After the plants closed, researchers found there were fewer kids going to the hospital for asthma-related conditions in areas near the three plants.

This might seem obvious but being in school is really important.

*Sarah Komisarow:* School absences are something that really matter in terms of thinking about student learning, because, of course, when you're not in school, you miss out on instruction, on peer relationships, on all the other things that are happening as part of your school day. But what other economist have pointed out is that absences are costly not only to you as the individual, but also costly to your peers in that when you come back to school, your teacher or some other, usually it's the teacher, has to spend time sort of bringing you back up to speed. And that sort of takes away from instructional time for the rest of your classmates. And so, I think of it as sort of a problem in education that is beyond just the individual and that it actually is costly for everyone when children miss school.

Lauren Rosenthal: The study has gotten some big attention.

*Yuki Terada:* My name is Yuki Terada, and my position is research editor at Edutopia, which is part of the George Lucas Educational Foundation.

Lauren Rosenthal: Edutopia called this research about school absences “stunning” – it was named to a top 10 list of significant studies that the site compiled.

*Youki Teruda:* Yeah, I mean is a stunning study because it's very easy to get lost in the day-to-day interactions within the classroom. But when you start to see that bird's eye view and you start to see the impact of what air pollution does to kids, you start to connect the dots and you start to see a bigger picture emerge of how all these environmental factors can affect learning.

Lauren Rosenthal: The original study by Sarah Komisarow and her colleagues actually calculated the health benefits of closing the plants for students in schools that were close by. Which got Youki Terada thinking – that plant closures could affect kids on a much bigger scale.

(Music)

*Youki Teruda:* According to the study, there are there are 2.3 million children in the U.S. who attend a public elementary school located within ten kilometers of a of a coal-fired plant.

Lauren Rosenthal: Did you catch that number? 2.3 million elementary-age children – that's a lot of kids growing up in the shadow of coal-fired plants. Dealing with potential asthma and other respiratory issues that could cause them to miss school. And because plants like this tend to be located in poorer neighborhoods or those with more Black and brown families, the risks are much higher for some kids than for others.

*Youki Teruda:* And to me, that's staggering. This is something that impacts them to such a high degree. So, to me, a question like this really has to do with equity. It really has to do with where kids are growing up and what kind of conditions they live in and how those conditions can affect their learning.

*Emily Pakhtigian:* I thought what a cool context in which we can study the impacts of this important change in air quality.

Lauren Rosenthal: Emily Pakhtigian is a co-author of the original study. She was a PhD student in public policy at Duke while working on the research and now she's a faculty member at Penn State.

She says the researchers continue to see positive effects on kid's health - long after the Illinois plants closed. Those effects are actually growing over time.

*Emily Pakhtigian:* You know, the year following the closures, there are some improvements to school attendance. But a few years out, there are even larger improvements to attendance.

Lauren Rosenthal: They also found striking health results for preschool kids — from the time they're born until they're about 4.

*Emily Pakhtigian:* We find declines in emergency department visits for asthma related incidents among the very youngest children using a really similar research design. So among children living in zip codes that are located close to these plants, once they've closed down rates of emergency department visits for asthma related incidents decline.

Lauren Rosenthal: Put it all together – and considering the fact that more than 2 million kids in the U.S. still live near coal-fired power plants — Emily says the research suggests we need to make different choices.

As we move away from coal towards other way to generate electricity, it's important to think about where we build new plants:

*Emily Pakhtigian:* Avoiding making similar, you know, perhaps mistakes in electricity generation or in the siting of industrial sites might be lessons that we could take from studies that look at coal retirements or coal opening coal power plant openings.

(Music)

Lauren Rosenthal: Back in Chicago – we wondered what's next for Kim Wasserman, the community organizer who led the battle to close the plants. Well, it turns out the victory was short lived.

*Kim Wasserman:* You know, yeah, we've been fighting -- like I thought --- my, my thought, my time with that site was done but apparently it was not. And so, the saga continues. *(laughs)*

Lauren Rosenthal: When the coal-fired plant bordering Kim's neighborhood shut down in 2012, she was elated. She thought her group had won a lasting victory.

Kim and others in the coalition, her friends and neighbors - all started to dream about what could come next - what would replace the Crawford plant, which bordered Little Village. They envisioned a company moving in to manufacture solar panels on the old site, or maybe someone would open a mercado - an indoor market.

*Kim Wasserman:* You know just really thinking of the strength of our local economy and what you could do with the site of injustice for so long, and how to have it actually bring justice and help heal our community...



Lauren Rosenthal: That's not what happened. Instead, neighbors watched as a giant warehouse took shape.

*Kim Wasserman:* What we got instead was a 1 million square foot warehouse that currently Target leases in which we have hundreds of diesel trucks coming in and out of our community now. And so, whereas we thought we had won this amazing victory, we now seem to have traded coal for diesel.

Lauren Rosenthal: While the community doesn't have a power plant in the backyard anymore, they now have a million square-foot warehouse with lots of diesel trucks, driving by, releasing exhaust.

According to the EPA, diesel emissions are also bad for the environment and human health. Emissions contribute to acid rain and other environmental concerns. And exposure to diesel exhaust can – you guessed it – and I'm quoting here - “lead to serious health conditions like asthma and respiratory illnesses especially in children and the elderly.”

Kim and her team are now fighting this new threat. And just like she did with the coal-fired power plants, she is becoming an expert in other areas. Kim had to learn a lot about diesel exhaust. But she says the bigger issue is land use practices and policies.

She says that her team has decided they can't continue to fight industries one by one. Their new goal is to get tougher limits on how land can be used – especially land that's so close to people's neighborhoods.

Kim says her community shouldn't have to suffer because of land-use policies that were set by someone else. To Kim, that doesn't feel like justice.

*Kim Wasserman:* We've done our part to try to solve the climate problem. We're on the front lines of feeling the effect of things that we contribute to the least. And so right now, our main goal is to figure out when the shit hits the fan, because it constantly does how to be able to provide and protect our community because we're all we have.

(Music)

Lauren Rosenthal: For her efforts to get two of the country's oldest and dirtiest coal plants shut down, Kim Wasserman won the prestigious Goldman Environmental Prize in 2013. She continues to work with the Little Village Environmental Justice Organization.

We'll have a link to Sarah Komisarow and Emily Pakhtigian's report on our website. [Ways-and-means-show-dot-org](http://ways-and-means-show-dot-org).

Ways & Means is produced by Carol Jackson and Alison Jones. Thanks to our contributor in Chicago, Jackson Roach.

Thanks as well to Hannah Otos, Kirsten Khire, and Duke students Akshay Gokul, Annika Aristimuno, and Joy Liu.

Our engineer is Johnny Vince Evans.

And I'm your host, Lauren Rosenthal. Thank you for listening – and if you've found our series on Climate Change Solutions interesting, please tell a friend!

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