

# Brownfields Success Story

## From Cement Mill to Calamityville® Fairborn, Ohio

For almost 90 years, the 53-acre site at 506 East Xenia Drive in Fairborn, Ohio, produced cement, an ingredient critical to building infrastructure, for the region. Today, the property functions as a training venue where emergency first responders build their skills.

The old cement manufacturing plant is now home to the National Center for Medical Readiness and Calamityville®, an education, training, product-testing and research facility for medical and nonmedical civilian and military personnel. Operated by Wright State University, the facility features training zones with real-world props to recreate disaster scenarios, from plane crashes and floods to hostage situations and mass casualty events.

However, going from manufacturing plant to training and research facility was no small feat, in part due to the presence of environmental contamination at the site. Helmed by Fairborn City Manager Deborah McDonnell, the job of aligning the stakeholders, navigating the legal hurdles, cleaning up the site and transitioning the property to its new owner took nearly seven years. But the effort breathed new life into an abandoned industrial site near the heart of downtown.

### The Opportunity

Built in 1924, the cement plant flourished throughout much of the 20th century, taking advantage of the large local source of limestone and nearby rail infrastructure for transporting product. At its peak, the plant churned out 700,000 tons of portland and masonry cements each year. By the late 1990s, however, the main plant had moved out of town, leaving behind an office complex, various processing and maintenance buildings, and eight storage silos that sat idle. City officials were eager to find a new use for the site.

Just weeks after taking the job as city manager, McDonnell, along with Fire Chief Mike Riley, met with two Wright State University doctors who identified a need to train for disaster response in a lifelike setting. Both had served on the front lines, providing emergency medical services after the 9/11 attacks, Hurricane Katrina and



Police conduct a hostage rescue and extraction exercise on a school bus at the Calamityville® training facility.



View of the old cement manufacturing plant in 1926.

**EPA Grant Recipient:**

City of Fairborn

**EPA Grant Type:**

Brownfields Cleanup Grant

**Former Use:**

Cement manufacturing plant

**Current Use:**

National Center for Medical Readiness and Calamityville® at Wright State University



Crews demolish an old warehouse on the property.

“One of the unique features of the site is the ability to research and test new technologies, clothing and equipment used at disaster scenes to improve safety for responders and enhance medical treatments, without having to rely on trial and error during a real disaster.”

*Deborah McDonnell  
City Manager  
City of Fairborn, Ohio*

the 2010 earthquake in Haiti. These experiences helped confirm for them the need for personnel to receive specialized training that would help them provide medical services at the scene of a major disaster and bridge the communication gaps between military and civilian responders.

First responders need to make decisions on the fly. “When they arrive at the scene of an incident,” McDonnell says, “they have to assess the situation and determine what care to provide in the field and who goes to the hospital. The hospital itself can become a disaster area when emergency room doctors, nurses and staff are not trained to accommodate large numbers of patients all at once.”

The proximity to Wright-Patterson Air Force Base, Wright State University and hospitals in the Dayton region made the old cement plant an ideal location for a medical training facility. These stakeholders could help transform emergency medical training to better prepare first responders for disasters and provide an opportunity for civilian and military responders to work cooperatively at the scene.

## The Challenges

After securing support from local firefighters, McDonnell’s team developed a business plan and pitched it to Wright State University. Officials with the university embraced the idea and the opportunity for creating a national response center, though the contamination at the site was a concern. Environmental assessments had identified asbestos; metals; volatile organic compound, including trichloroethylene; and underground storage tanks on the property. The city’s efforts to secure a “no further action” letter, however, helped provide assurances that once the site was remediated, the university would not have to assume liability for any preexisting contamination.

CEMEX, Inc., the cement plant’s most recent owner, agreed to donate the property to the city for research and development. By donating the property, the company received a tax write-off, and the city was able to save and reuse some of the structures—and put the property back into productive use. To access brownfield funding from the state, the city agreed to oversee the cleanup and then donate the property to the university.

“Everyone had to agree at the same time,” McDonnell says. “That was a big challenge. The lesson here is never give up, regardless of setbacks.”

## The Cleanup

Funding for the site remediation came from a \$200,000 Brownfields Cleanup Grant from the U.S. Environmental Protection Agency (EPA), \$1 million from Wright State University and \$2.8 million from the Clean Ohio Fund.

The cleanup process took approximately two years to complete. Some of the old buildings were demolished. Asbestos was removed from the inside and outside of buildings that would remain, including some underground tunnels. Workers removed trichloroethylene from the soil in an area where train cars used to be cleaned. Remnants of the old manufacturing plant were removed from the site, as were a few abandoned underground fuel tanks. Workers also cleaned up some remaining oil in the mechanic’s garage. Although the on-site groundwater is not potable, it was repurposed for use in an energy-saving geothermal system for heating and cooling.



A backhoe removes asbestos-containing materials from the site.



## The Rebirth

Today, the property is the home office of the National Center for Medical Readiness, along with a tactical training facility known as Calamityville®. It is the first research and training facility focused on the medicine of emergency disaster response.

What remains of the old cement plant is a massive, nine-story, 300-foot-long industrial building that now features a crashed airplane training piece embedded in its side. Full-size school buses, military troop transports and other equipment facilitate reenacting emergencies, such as responding to an armed hijacking or rescuing survivors in an overturned vehicle. The acres of open space are ideal for staging large-scale vehicle pileups, and state-of-the-art classrooms and labs offer venues for pre- and post-scenario discussions. The university even secured a piece of steel from the World Trade Center for an onsite 9/11 memorial.

“The vision is to prepare fire, police and health care professionals for their ‘worst day,’” McDonnell says. “The facility is open to everyone and provides an opportunity to train in a safe environment that looks just like a disaster they may face on any given day.” Already, the center has training agreements with the state and local police and the nearby Air Force base.

## The Benefits

The project is poised to deliver a variety of benefits for the region. Due to the property’s proximity to a state highway and downtown, McDonnell expects the site to become a viable economic driver. For example, 16 permanent jobs have been created. “There is huge economic potential now that the facility is up and running,” she says.

“The keys to success are finding an end user for the land and having a vision to help market the site you’re going to clean up,” McDonnell says. “And allow for flexibility in the business plan for when unexpected issues arise.”



Military and civilian emergency responders conduct joint exercises at the National Center for Medical Readiness.



A 9/11 memorial, made from steel from the World Trade Center, stands in front of the center’s offices.



Fire and emergency medical services staff participate in high-altitude rescue training on repurposed storage silos.

*EPA Brownfields Grant funds are not used for redevelopment of sites assessed or cleaned up with Brownfields funds, and projections for future reuse and redevelopment of sites and anticipated benefits are subject to change based on local conditions.*

### For more information:

Visit the EPA Brownfields website at [www.epa.gov/brownfields](http://www.epa.gov/brownfields) or contact Brad Bradley at (312) 886-4742 or [Bradley.Brad@epa.gov](mailto:Bradley.Brad@epa.gov).