Buzzing with Life: Environmental Education and Stewardship

THE CHEMICAL COMMODITIES, INC. SUPERFUND SITE IN OLATHE, KANSAS

Introduction

In Olathe, Kansas, a former chemical recycling, storage, repackaging and distribution facility is now a remarkable ecological and environmental education resource. Community partnerships with diverse organizations and strong working relationships with site agencies and the site's potentially responsible parties (PRPs) have made reuse of the Chemical Commodities, Inc. (CCI) Superfund site possible. Coordination and collaboration led to a cleanup that finished a year ahead of schedule and under budget.

Several years ago, however, cleanup and reuse faced significant challenges. EPA, the Kansas Department of Health and Environment (KDHE), the City of Olathe, community residents and the site's PRPs struggled to communicate effectively. Meanwhile, the site's long-time zoning for industrial uses and proximity to a rail line posed privacy, safety and noise concerns for nearby residents. Protection of public health and the environment were primary local priorities.

To help address these issues:

- The CCI Citizens Advisory Group formed. It provided community input throughout the cleanup process and worked to restore the area as a community asset.
- The Boeing Company, one of the site's responsible parties, stepped forward to lead the site's cleanup, working closely with site agencies and the community.
- Kansas State University and the CCI Citizens Advisory Group incorporated community feedback into a reuse plan for the site. The plan focused on opportunities for habitat restoration, environmental education and recreation.
- The City of Olathe updated local zoning to permit open space and recreation at the site.
- Project partners, including the CCI Citizens Advisory Group, EPA, KDHE, the City of Olathe, Monarch Watch and the Pollinator Partnership, collaborated to plan for the site's reuse and make it happen.

The CCI site is located in Olathe, a suburb of Kansas City, Missouri. About 130,000 people live in the community.

Today, the remedy is in place and the Olathe Pollinator Prairie is now located at the site. The garden provides thriving habitat and serves as an educational and recreational resource. Site reuses reflect several community priorities:

Habitat: Planted with native plants and trees, the Olathe Pollinator Prairie supports a pollinator migration corridor with habitat resources for bees, birds and butterflies.

Education and Recreation: The garden's walking trail features educational signs and resources. An area for tagging migrating Monarch butterflies helps researchers to learn more about their migration patterns and survival rates.

Nuisance Mitigation: Trees and plants on site provide sound and privacy barriers for homes located near adjacent railroad tracks.

This case study explores the award-winning strategies and working relationships that led to the successful cleanup and reuse of the CCI Superfund site. The following pages trace the evolution of cleanup and reuse efforts, highlighting local planning efforts and coordination with site agencies in the 2000s and ongoing cleanup and reuse activities through 2014. The case study provides information and lessons learned to parties interested in the ecological and recreational reuse of Superfund sites and how to address remedy and reuse considerations throughout the Superfund process.

Over 100 volunteers helped plant the new pollinator prairie habitat garden at the site in 2012.

30244586

Site History, Contamination and Remediation

A chemical recycling, storage, repackaging and distribution facility operated at the 1.5-acre site from 1951 until 1989. Poor handling and storage practices led to chemical spills and leaks that contaminated site soils and groundwater with heavy metals, pesticides and other chemicals. Some of these substances migrated off site via air, surface water runoff and groundwater movement.

The CCI site is located next to a rail line in a residential area near downtown Olathe.

EPA completed short-term cleanups called removal actions between 1989 and 1991. Activities included disposal of chemicals and contaminated soil, demolition of an on-site facility and installation of a groundwater treatment system. EPA placed the site on Superfund's National Priorities List (NPL) in June 1994.

Beginning in 1998, EPA worked with the site's PRP group on additional cleanup activities. From 2000 until 2002, indoor air sampling in homes near the site identified increasing contaminant levels. EPA put ventilation systems in 45 homes between 2003 and 2007 to address indoor air impacts.

One of the residential ventilation systems installed near the site.

In 2005, EPA issued a Record of Decision (ROD) selecting the final remedy for the site, addressing remaining soil and groundwater contamination. The remedy included excavation and off-site disposal of contaminated soil, backfilling of excavated areas, a clay soil cap, demolition of remaining structures, a perimeter trench to intercept and treat groundwater, air and groundwater monitoring, institutional controls, and operation and maintenance of residential ventilation systems.

Throughout planning and cleanup, EPA, KDHE and site PRPs worked with the CCI Citizens Advisory Group and other community members to incorporate community feedback into the Superfund process. For example, after the community and KDHE shared concerns about the site's initial proposed soil remedy, additional investigations led to the comprehensive soil cleanup approach finalized in the site's ROD. The site's final remedy was also consistent with community plans to reuse the area for green space. Construction of the site's final remedy finished in January 2012. Long-term groundwater treatment and monitoring are ongoing.

The site before cleanup in the 1970s.

Project History

The Early 2000s

Establishing Trust, Building Relationships

By the early 2000s, EPA's short-term cleanups had addressed immediate risks to public health in the community. However, final, long-term cleanup plans were needed to address remaining soil and groundwater contamination. The Boeing Company, one of the site's PRPs, stepped forward to lead the PRP group.

"We were working with EPA, the state, the community, and over a dozen other parties that had sent waste to the site," recalled Boeing Remediation Manager Adam R. Boettner. "We realized early on that coordinating between that many parties wasn't going to be the most efficient or effective way to clean up the site. So Boeing took the lead." In 2001, with planning for the site's long-term remedy underway, the community also came together to form the CCI Citizens Advisory Group.

Despite these developments, everyone recognized there was still a long way to go. "At the beginning, the site was in terrible shape, and people who came to the meetings were afraid," recalled Advisory Group Co-Chair Glen Andrews. "They were afraid they had been exposed to something that caused diseases, they were afraid their property values were worthless, they were afraid that [contaminants] might get in their drinking water." Early community meetings with Boeing, EPA and KDHE were tense.

"The Advisory Group's formation was critically important," noted EPA Project Manager Jeff Field. "It provided a public forum for community members to learn about the site and share their concerns. It also provided input and feedback to the project team on site cleanup, offering a key opportunity for EPA to hear and consider community perspectives on site plans and activities."

To make sure the Advisory Group was as informed as possible, EPA provided independent technical assistance through its Technical Outreach Services for Communities (TOSC) program. In addition to reviewing technical documents and helping the Advisory Group provide comments on site reports, TOSC staff from Kansas State University also helped the community begin thinking about the future.

"The remedy was everyone's top priority," recalled TOSC Technical Assistance Specialist Terrie Boguski. "But we also knew that neighbors and the community were tired of living near an overgrown eyesore. It was a good time to plan for the future."

The CCI Citizens Advisory Group met regularly between 2002 and 2013.

Advisory Group Mission Statement

"The CCI Citizens Advisory Group is composed of a group of your neighbors concerned with the health and economic wellbeing of our neighborhood.

We united in a common purpose: to share information and be proactive in seeking timely resolution and effective remediation of the Chemical Commodities, Inc. EPA Superfund site."

EPA and Technical Assistance

EPA has been providing educational and technical assistance services to communities for two decades. EPA's TOSC program assisted communities between 1994 and 2006. Since then, EPA's Technical Assistance Services for Communities (TASC) program has assisted more than 100 communities nationwide.

Across the TASC and TOSC programs, EPA's goal has been to provide high-quality, independent educational and technical assistance services to communities. Informed, engaged communities are vital partners in ensuring EPA's mission to protect human health and the environment.

The Bigger Picture: EPA and Reuse

Efforts to address future land use considerations at the CCI site fit in well with emerging nationwide interest in the revitalization of contaminated areas, including Superfund sites. With the creation of EPA's Superfund Redevelopment Initiative in 1999 and its Land Revitalization Agenda in 2003, EPA's Office of Solid Waste and Emergency Response launched a new EPA initiative focusing on promoting land reuse and revitalization at contaminated sites.

In 2002, the Small Business Liability and Brownfields Revitalization Act also became law. The Act was designed to make the acquisition and redevelopment of contaminated properties like Superfund sites easier by addressing the liability concerns associated with these sites. EPA's Office of Site Remediation Enforcement has a team devoted to facilitating and implementing these liability protections. See the Resources section for more information.

2004 – 2008

Laying the Foundations for Reuse

Advisory Group meetings soon included a focus on reuse as well as cleanup. Initial reuse discussions focused on information gathering and identification of potential obstacles. Discussions with city government revealed, for example, that while the site property remained zoned for industrial uses, Olathe's Master Plan outlined residential development in the area in the future. The Advisory Group then conducted a survey to identify community preferences for the future use of the site property after cleanup.

The community's 2006 reuse plan included a southern access point and trees around the site's perimeter.

Results from the survey, part of a community visioning process supported by Kansas State University through EPA's TOSC program, included several key findings. "A majority of the respondents prefer site development after cleanup with some form of planned open space characterized by landscaping, possibly including walkways, benches or lights," the July 2005 survey report concluded. "Given the relationship of the site to the railroad, development should address the needs of safety, noise abatement and privacy to provide a buffer and screen from rail activity. Based on the size of the property and the proximity to residences, the options for development are limited."

Based on the site's remedial investigation and feasibility study, Boeing and site agencies were able to confirm that the final remedy would likely not be compatible with residential uses, but could support a community park or open space. EPA then selected the site's final remedy in September 2005.

"The proposed remedy and the community's reuse priorities fit well together," recalled Boeing's Adam Boettner. "At the end of the day, they really wanted for the site to be something they could use. That resonated well with all of the people on the project team, all of the responsible parties, EPA and the state. It allowed us to rally around a vision for the property and to make sure that end stage was considered when we were making decisions, and that we had our eye on the big picture."

The community's visioning process culminated in a May 2006 conceptual reuse plan developed by Kansas State University. The plan focused on the site's reuse as a natural area, with trees and grasses as buffer between residential areas and the rail line east of the site. Promoting awareness of the site's industrial history and cleanup was also a community priority.

"It was a general, big-picture plan," said Advisory Group member Janell Andrews. "We didn't want to get too specific, because we knew things could change during cleanup. At the same time, we wanted to provide [the project team] with as much guidance as possible. Our priority was low-maintenance green space that would beautify the neighborhood."

Around the same time, the City of Olathe also removed a key reuse obstacle, rezoning the site to allow for green space and recreation. In addition, city officials announced that the City would help maintain the overgrown, fenced area around the site. Finally, in March 2006, the City placed an environmental covenant on the site property, limiting land uses to recreational uses and restricting groundwater use. Together, these efforts laid the foundation for habitat and recreational reuse at the site. In August 2008, after Boeing and other site PRPs signed a Consent Decree with EPA to complete the site's cleanup, it was time to design the remedy and move toward returning the site to productive use.

2009 – 2014+

Going Above and Beyond…

During the design of the site's remedy, Boeing came to the community and site agencies with a fresh idea. As part of its global Environmental Action Agenda, the company was looking to reduce its environmental impacts and support innovation. Boeing had the idea to make the site into a usable open space, and it searched for experts that helped the company come up with the Pollinator Prairie.

"[Boeing] had this idea of trying to take things another step further, and make something environmentally friendly [at the site]," said Advisory Group Co-Chair Glen Andrews. A pollinator prairie would provide the green space requested by the community, while also offering opportunities for habitat restoration, environmental education and recreation.

"Boeing was really proactive," EPA Project Manager Jeff Field noted. "Saying, look, we have this green space, it's 1.5 acres, it's not really conducive to ballparks and things like that." The prairie – essentially a habitat garden made up of plants found across Kansas – would be planted on top of the site's soil cap, helping keep it in place.

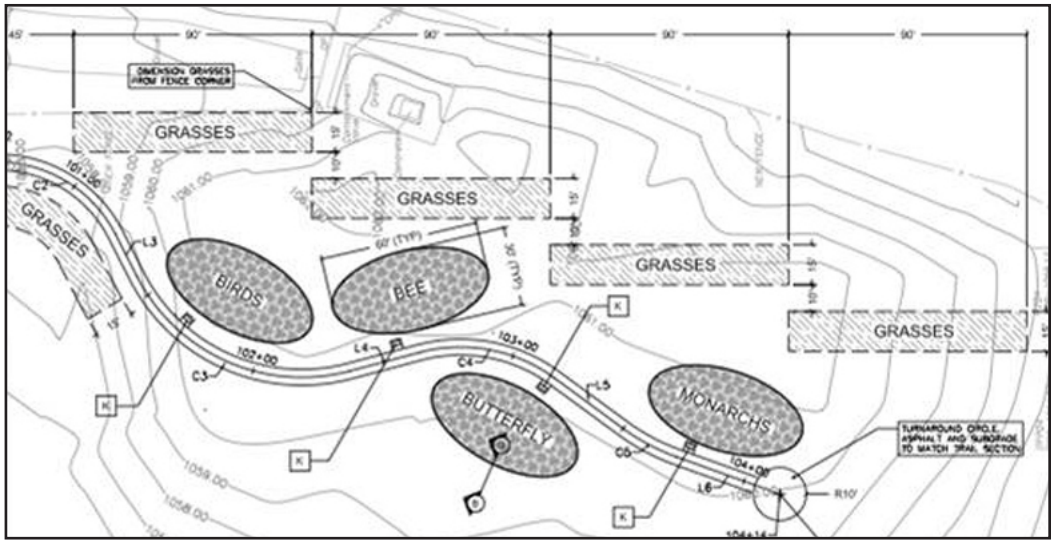
A Pollinator Prairie Is…

Ecological habitat consisting of native plants that provide pollinators – bees, birds, butterflies – with sources of food, shelter and safe areas for breeding.

Boeing had two goals: to complete construction of the final cleanup remedy in 2011, a full year ahead of schedule, and to return the site to the community for reuse in the spring of 2012. For years, site investigations and cleanup planning had been a collaborative effort involving site agencies, PRPs and the community. Now, it was time to bring in additional expertise.

…Turning Plans into Reality

Boeing began working with two organizations – Monarch Watch and the Pollinator Partnership – to help design the Olathe Pollinator Prairie. Monarch Watch is a nonprofit education, conservation, and research program at the University of Kansas that focuses on the monarch butterfly, its habitat and its spectacular fall migration. The Pollinator Partnership (P2) is a nonprofit headquartered in San Francisco. P2 works to protect the health of managed and native pollinating animals vital to North American ecosystems and agriculture. The organizations worked closely with the community, site agencies, Boeing and other conservation groups to develop plans for the habitat garden that would mesh well with the site's cleanup. While the



Detailed technical drawings guided development of the pollinator prairie.

site property was relatively small, both groups saw the area as a valuable opportunity to illustrate how urban areas can support species conservation. “Here in the United States alone we are losing 6,000 acres of habitat a day to development. That’s a lot of habitat to lose, and there’s got to be some way to bring some of that habitat back,” said Orley “Chip” Taylor, Monarch Watch’s Founder and Director.

“One of the really nice features of this site is its educational possibilities,” he continued. “Not only can people walk down a pathway and learn something from the kiosks and learn something from their teachers about pollination, they can actually visit the gardens, take pictures, learn about the plants, learn about the pollinators. At the site, we tried to illustrate what it takes to provide the resources that Monarch butterflies and other pollinators need. As it matures, we’re going to have much more complete habitat there.”

In its design work at the site, P2 focused on building connections between plants, people and pollinators. “We want to revitalize ecosystems by helping with native plantings, bringing the pollinators into the system, and then opening it up for people to enjoy,” said P2 Plant Ecologist Mary Rager. “We worked with other scientists on selecting native plants appropriate for the region and also developing the outreach materials and kiosks that you see throughout the garden.”

To fully implement the site’s remedy, Boeing also acquired and demolished six homes next to the site. By the summer of 2011, the site’s remedy was in place. By the summer of 2012, Monarch Watch and P2 were on site, working with the community to develop the path, beds and educational materials for the habitat garden.

Over 100 volunteers helped plant the pollinator prairie’s garden habitat.

Milkweed plugs, ready for planting.

Conserving Biodiversity

The Olathe Pollinator Prairie provides vital habitat for the Monarch butterfly. The species is in decline due to habitat loss and widespread herbicide use.

- Designated a Monarch waystation, the garden includes milkweed and other plants to sustain butterflies as they migrate across the United States, Canada and Mexico to overwintering areas.
- The garden helps visitors learn about how they can provide resources for migrating Monarchs in their own backyards.
- A Monarch tagging area in the garden helps researchers gather data on butterfly migration patterns and survival rates.

The efforts at the Olathe Pollinator Prairie demonstrate how strategic reuse of urban sites can support species conservation.

"We weren't sure until the public, the community really embraced it," recalled P2's Mary Rager. "That's when we knew we really hit on something, and the pollinators have come, so from all angles, it has been successful – for plants, for people and for pollinators."

Once all site preparation activities were complete, it was time to plant the prairie. On September 22, 2012, local residents, community organizations, project partners and city officials came together. In total, 115 volunteers planted 1,100 plants in 55 minutes.

Timeline of Events

1951-1989	CCI operates chemical recycling, storage, repackaging and distribution facility
1960s and 1970s	Fires and explosions on site
Early 1980s	EPA investigations begin
May 1985	CCI removes three leaking underground storage tanks, following EPA Administrative Order on Consent (AOC)
1989	EPA Unilateral Administrative Order requires that CCI clean up the site
1989-1991	EPA time-critical removal actions address immediate threats to public health and the environment
1991	CCI files for bankruptcy
1993	Settlement agreement between EPA and CCI requires company to use remaining assets to partially reimburse EPA for its cleanup costs
June 1994	EPA lists site on NPL
1997 - 2003	Additional removal actions by EPA
1998	EPA signs AOC with site PRPs for removal of water treatment system and interceptor trench operation
2001	CCI Citizens Advisory Group forms
2000 - 2002	Indoor air sampling of residential homes near the site
2003 - 2007	Ventilation systems installed in 45 homes with trichloroethylene (TCE) levels exceeding action levels
June 2003	EPA time-critical removal action demolishes on-site warehouse building and takes away debris and stockpiled contaminated soils
2004	Community develops site reuse plan
September 2005	EPA issues Record of Decision (ROD) documenting site's long-term cleanup plan
January 2012	All parts of site remedy are in place
May 2012	EPA presents 2012 National Notable Achievement Award for Citizen Excellence in Community Involvement to CCI Citizens Advisory Group
September 2012	Over 100 volunteers help plant site's pollinator prairie
October 2012	EPA Region 7 presents LEAFS award to project partners
January 2013	Olathe Mayor presents City's Community Pride Award to Advisory Group members
August 2016	Scheduled completion of groundwater treatment

The CCI Site: The Story in Pictures

Pre-Cleanup

During Cleanup

Excavation of site soils.

Equipment making large-diameter borings for monitoring.

Final top soil grading.

Revegetation.

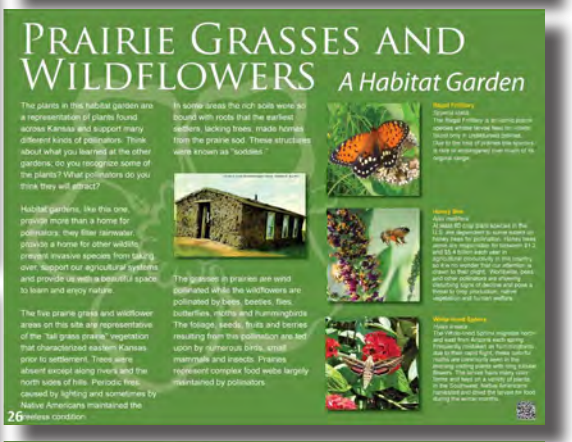
In Reuse – The Pollinator Prairie

An educational event in June 2014 brought area schoolchildren to the site to learn about natural systems and pollination.

"The cleanup at the Chemical Commodities, Inc. site is a great example of the hard work and effort demonstrated by Boeing, the Olathe community, and federal, state and local partnerships to address hazardous waste … the site has been cleaned up and is now ready for reuse. I commend Boeing, the Olathe community and all others involved in the cleanup for making this project a success."

– EPA Region 7 Administrator Karl Brooks

Educational signs across the site welcome visitors to the pollinator prairie and introduce them to native plants and key pollinators.



The Olathe Pollinator Prairie: An Overview*

The five prairie grass and wildflower areas at the site are representative of the "tall grass prairie" vegetation that characterized eastern Kansas prior to settlement. They support many different kinds of pollinators, including bees, beetles, flies, butterflies, moths and hummingbirds.

Habitat gardens like this one also provide more than a home for pollinators. They filter rainwater, provide a home for other wildlife, prevent invasive species from taking over, support our agricultural systems and provide people with a beautiful space to learn and enjoy nature.

Project Partners

Monarch Watch.org
Education · Conservation · Research

United States Environmental Protection Agency

POLLINATOR PARTNERSHIP

BOEING

OLATHE KANSAS

What is Pollination?

Pollination is the process of moving a pollen grain from the anther (male part) of a flower to the stigma (female part). This can happen through wind or water pollination or through the work of animal helpers (pollinators) that move pollen within the flower and from bloom to bloom. This is the first step in a process that produces seeds, fruits and the next generation of plants.

Who are the Pollinators?

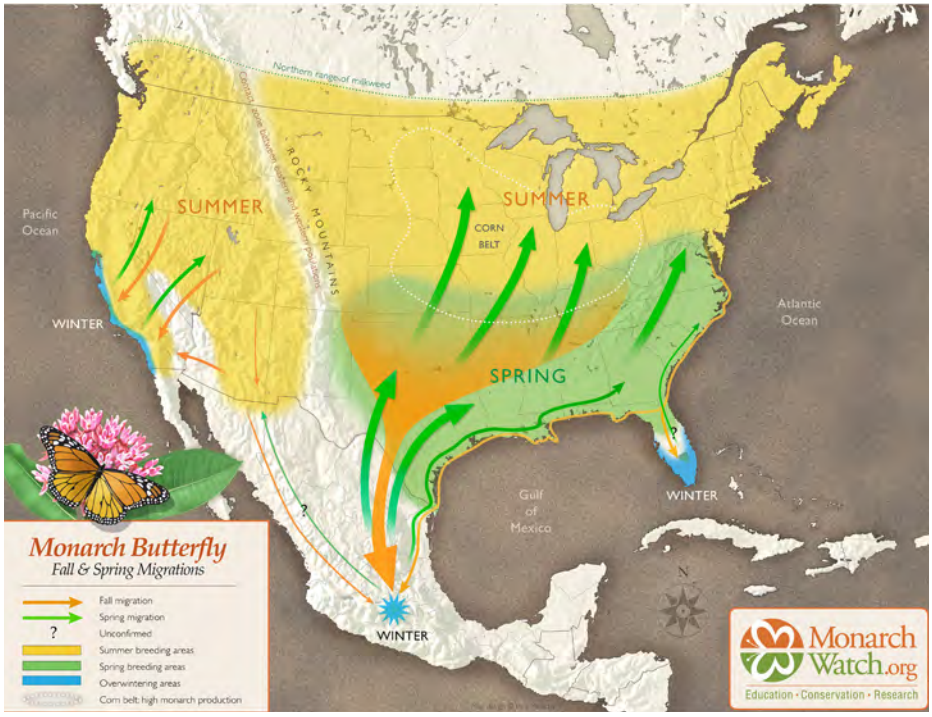
Birds, bats, butterflies, moths, flies, beetles, wasps, small mammals and, most importantly, bees are pollinators. Pollinators visit flowers to feed on nectar, pollen or both. When moving from flower to flower, they transfer pollen. Bees gather pollen to feed their larvae.

Did You Know?

- There are an estimated 20,000 bee species worldwide, 3,500 bee species in the United States and over 200 bee species in Kansas.
- The fastest butterfly, a skipper species from south-central Kansas, reaches speeds of 40 miles per hour.

Monarch Butterflies: Nature's Great Migratory Wonder

Each fall, monarchs migrate to central Mexico, where they overwinter in large clusters on trees in the mountains. They return in the spring, with the site on their migration route, with females laying eggs on milkweeds, the only plant on which monarch larvae feed. At summer's end, after three to four generations, the migration starts again.



** All information on this page comes from educational materials at the Olathe Pollinator Prairie.*

Conclusions

Building on the Past, Looking to the Future

Since the pollinator prairie opened, it has become a valuable community resource and an important resource for pollinators. Neighbors take walks through the garden. Students from area schools visit on field trips to learn about habitat restoration and species conservation. Nature enthusiasts come from across Kansas to enjoy the pollinator prairie, which provides much-needed habitat for many species, including the Monarch Butterfly. Boeing continues to maintain the prairie as well as the site's remedy; efforts are also underway to identify local stewards to help maintain the habitat garden.

Recognition

The project is now a national success story, with project partners recognized locally and nationally for their remarkable efforts and collaboration.

In early 2012, EPA recognized the CCI Citizens Advisory Group with its Citizen Excellence in Community Involvement Award. This award is given to a person or group who has actively participated and shown exceptional dedication in working with EPA to clean up a Superfund site.

In October 2012, project partners received EPA Region 7's Leading Environmentalism and Forwarding Sustainability (LEAFS) award, which recognizes innovative thinking, sustainable practices and environmental stewardship. "It was an honor and a privilege to be one of the first awardees of the LEAFS award from Region 7," said Boeing's Adam Boettner. "It was really exciting to Boeing and me personally, and a great recognition of the team's hard work over many years on this project."

In January 2013, Olathe's Mayor presented the Advisory Group with the City's Community Pride Award in recognition of the group's leadership and contributions to the community.

Advisory Group members Glen and Janell Andrews credit the community's long-term dedication and commitment to getting the site cleaned up. "Enough people were involved and saying this is what we need to have happen," Glen Andrews recalled. "There was constant pressure to move it forward and move it forward, and people cared about it. EPA stood behind it all the way, and Boeing stepped up to work with us." Janell Andrews agreed. "There's pride in the neighborhood now," she said. "The whole process was treated with so much dignity and respect. I would tell people elsewhere to hang in there, because it is a feeling of accomplishment you can pass on."

Technical Assistance Specialist Terrie Boguski identified another key factor. "Everyone understood it was going to be a team effort – no one could do this alone. EPA and the state reached out to the community, Boeing went above and beyond what they were required to do, and making the pollinator prairie required the skills of Monarch Watch and the Pollinator Partnership."

Looking back, the project has been guided and spurred by a spirit of collaboration and innovation, coordination among local, state and federal partners, and community leadership. The outcome is the successful cleanup and ecological reuse of the Chemical Commodities, Inc. Superfund site.

Project partners with EPA Region 7's LEAFS award at a community celebration in October 2012.

Olathe Community Pride Award Citation

"The CCI Citizens Advisory Group worked closely with EPA to ensure effective communication and collaborative problem-solving throughout various cleanup phases at the site.

The group actively participated in meetings, helped distribute information, and identified ways the EPA site team could work more effectively with the community. Their efforts to promote better understanding and participation in the Superfund process resulted in residents becoming engaged and supportive of EPA efforts to address the site.

The Advisory Group also worked successfully with EPA to gather input on future land use. This resulted in development of the Olathe Pollinator Prairie butterfly habitat. The City can take great pride in the success and positive impact of the Citizens Advisory Group and its dedication to working with EPA to go above and beyond in the revitalization and reuse of the CCI site."

Advisory Group members receiving the City of Olathe's Community Pride Award from Olathe Mayor Michael Copeland.

A combination of significant factors has contributed to the project's successful outcomes.

- The site's industrial legacy and proximity to residential areas and downtown Olathe meant that cleanup and reuse were high priorities.
- The CCI Citizens Advisory Group was an engaged project partner who brought community perspectives to the table and made sure community priorities were well represented.
- EPA and KDHE reached out to the community and engaged them consistently during the Superfund process. EPA also provided technical assistance support to the CCI Citizens Advisory Group.
- EPA and KDHE understood the community's redevelopment priorities in the context of the site's remedy, enabling decision documents and a cleanup that reflected remedy and reuse considerations.
- Boeing stepped up to represent the site's PRP group and supported reuse plans that went above and beyond its cleanup responsibilities.
- The City of Olathe updated the site's zoning, placed an environmental covenant on the site property and maintained the perimeter of the area, supporting cleanup and redevelopment.
- All parties involved were patient and flexible, recognizing that cleanup and redevelopment are complex processes reliant on available resources, multiple parties, site contamination and other factors.

Lessons Learned

While these site-specific conditions created an ideal climate for successful reuse outcomes, a range of broader lessons learned can also help guide similar projects at contaminated lands across the country.

EPA works closely with communities, site owners and other stakeholders to support reuse outcomes that are compatible with site cleanups.

The Agency places a high priority on supporting the return of contaminated sites to productive and beneficial uses. In Olathe, the community was able to work with EPA, KDHE and Boeing to develop site reuse plans that reflected site conditions, cleanup plans and community priorities.

While EPA provides tools and resources to support Superfund reuse, communities and public- and private-sector organizations make it happen.

EPA's mission is to protect human health and the environment. EPA relies on engaged community stakeholders to bring their future land use goals and priorities to the table so that this information can be incorporated into the remedial process, linking cleanup and redevelopment. In Olathe, the CCI Citizens Advisory Group identified local reuse priorities and coordinated closely with site agencies and Boeing to make it happen. The community's coordinated long-term effort to transform the site into a community asset was essential to its successful reuse. "Taking the time to consider reuse is worth it," said EPA Project Manager Jeff Field. "The long-term benefits of having this site cleaned up and returned to use are immeasurable. Instead of an environmental eyesore, the community now has beautiful beds of flowers and lush, growing grass."

Effective reuse planning projects are inclusive, information-based and focused on targeted outcomes.

Community-based reuse planning processes can be most effective when they engage diverse stakeholders, including responsible parties, are based on detailed site and community information, and lead to implementable strategies and next steps. Community engagement was a central component of reuse planning efforts for the CCI site.

"It's an outstanding piece of work. A diverse and committed team that included government agencies and responsible parties came together with the community and created something really special."

– Adam R. Boettner, Boeing Remediation Manager

Think long-term.

It can take many years to remediate contamination that has accumulated over decades of site activities. However, this lengthy process also provides a time window for stakeholders to build partnerships and identify resources, coordinate with EPA and state agencies, and develop a strategy for returning a site to use while protecting future users. The CCI Citizens Advisory Group worked with site agencies, local government and Boeing for a decade to put in place the pieces needed to make the pollinator prairie a reality.

Seize opportunities.

Reuse plans and cleanup approaches are often updated over time. Such changes provide further opportunities to integrate remedy and reuse considerations. In Olathe, the community's 2006 reuse plan identified general community reuse preferences for the site. During the design of the site's remedy, the community was then able to work with Boeing to develop detailed plans for the pollinator prairie. "If you're not involved, nothing will happen. You need to get involved, get your neighbors involved too, and get all the professional help you can," urged Advisory Group member Glen Andrews.

Look to the future, recognize the past.

For almost four decades, the site was an industrial area. Approaching the redevelopment process, the community recognized that times had changed. The neighborhood had grown around the site and residents needed green space and recreation opportunities to enhance local quality of life. At the same time, the community wanted to recognize the area's history. A plaque documents the site's return to productive use.

Develop partnerships. Projects at contaminated lands can be complex undertakings that require diverse expertise.

Each party involved at the CCI site had valuable expertise to bring to the table. Everyone shared ideas, identified possible options and next steps, and addressed challenges flexibly and creatively. The process enabled uncertainties to be addressed and led to new approaches that met the needs of all parties. Once the community had identified local priorities and worked with site agencies and Boeing, for example, the project was still far from finished. Monarch Watch and the Pollinator Partnership provided key guidance to help the project team reach the finish line.

EPA and Reuse: Lessons Learned

Since the inception of the Superfund program, EPA has been building on its expertise in conducting site characterization and remediation to ensure that contamination is not a barrier to the reuse of property. Today, consideration of future use is an integral part of EPA's cleanup programs, from initial site investigations and remedy selection through to the design, implementation, and operation and maintenance of a site's remedy.

"At older sites, EPA did not focus on taking reuse considerations into account early in the cleanup process," reflected EPA's Matthew Mankowski, a former project manager at Superfund sites. "Today, that has changed. Superfund cleanups can be very creative and flexible in allowing for future site uses, but that information needs to be plugged in early to be as effective as possible."

Parties at the CCI site charted new territory in coordinating the site's cleanup and reuse. Today, thanks to the bona fide prospective purchase (BFPP) provisions of the 2002 Brownfields Revitalization Act, the availability of environmental insurance, and EPA tools such as Ready for Reuse (RfR) Determinations, resources for redevelopment are more widely available. Prospective purchasers can contact EPA site teams to learn more, or see the Resources section for additional information.

EPA also works with site stakeholders to consider how future land use considerations can inform the implementation and long-term stewardship of site remedies as well as cleanup planning. At some sites, for example, reuse considerations can inform the future location of groundwater monitoring wells and other operation and maintenance equipment that might inadvertently hinder redevelopment efforts. At other sites, detailed site reuse plans have provided additional benefits that save time and reduce redevelopment costs. For example, future infrastructure corridors or building footers can be installed in coordination with site cleanup activities.

Sources and Resources

Sources

Images and maps for this case study came from EPA Region 7, Boeing, Monarch Watch and the Pollinator Partnership.

Resources

EPA CERCLIS site profile, including site decision documents:
http://cfpub.epa.gov/supercpad/cursites/csitinfo.cfm?id=0401395

EPA's Superfund Redevelopment Initiative:
http://www.epa.gov/superfund/programs/recycle

EPA's TASC program:
http://www.epa.gov/superfund/community/tasc

Kansas Department of Health and Environment site page:
http://kensas.kdhe.state.ks.us/certop/ISL_Detail?id=C404600010

State and Local Government Activities and Liability Protections:
http://www2.epa.gov/enforcement/state-and-local-government-activities-and-liability-protections

2002 Brownfields Revitalization Act and BFPP information:
http://www.epa.gov/brownfields/aai/aaicerclafs.pdf

Environmental insurance information:
http://www.epa.gov/brownfields/insurance

City of Olathe:
http://www.olatheks.org

The Pollinator Partnership and the Pollinator Prairie:
http://www.pollinator.org/pollinator_prairie.htm

Monarch Watch
http://www.monarchwatch.org

Kansas State University TOSC (archival page):
http://www.engg.ksu.edu/chsr/pastprojects/tosc

Buzzing with Life: Environmental Education and Stewardship

THE CHEMICAL COMMODITIES, INC. SUPERFUND SITE IN OLATHE, KANSAS

United States
Environmental Protection
Agency

EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219

June 2015