

Marathon County, WI Solid Waste Department: Pulling Back the Curtain—From Trash to Community Treasure



With a goal of being their community's integrated waste management system of choice, fostering economic development and protecting the environment and public health, the Marathon County Solid Waste Department works hard to engage the next generation of leaders while changing perceptions and actions.

Located in central Wisconsin, the Marathon County Solid Waste Department has a mission of providing the residents, businesses and organizations of the region with a cost-effective, comprehensive and integrated waste management system. Marathon County Solid Waste Department offers programming, education and consulting services on waste reduction, recycling, composting and hazardous waste management, along with landfill disposal and landfill-gas-to-energy production. Its vision is to be the integrated waste management system of choice, fostering economic development, while protecting the environment and public health.

The Solid Waste Department began its life in 1978—the year the county transitioned from numerous town dumps to managing waste in one place. Marathon County was asked by municipal leaders to take on waste disposal responsibility as the dumps closed. A solid waste management board was charged to find property suitable for a landfill, hire staff and build the facility. In 1980, the first landfill was built, Area A—a non-subtitle D landfill that operated until 1994. Area A was approximately 27 acres in size. It was developed in four phases and took 13 years to fill, reaching its capacity in November 1993. It contains about 1.5

Marathon County Solid Waste manages nearly 200,000 ton annually, from over a dozen counties in central and northcentral Wisconsin. It does so with 9 FTE, which includes business management and scale staff. Onboard all Bomag compactors a data management systems guides operation staff in compaction maximization and lift development. Photos courtesy of Marathon County Solid Waste Department.





Marathon County Solid Waste Department staff with 2015 interns.

million tons of waste. The refuse disposal areas for Area A have a 5-foot thick liner consisting of 4 feet of clay and 1 foot of sand for leachate drainage. Area A was capped with a 1-foot grading layer, 2 feet of clay, and 6" of topsoil.

In 1993, just as Area A was closing, the Area B landfill was completed. Currently, it is an active landfill at the facility; however, it is scheduled to close in 2019. With approximately 31.5 acres and an estimated capacity of 2.4 million tons, Subtitle D standards were used in its construction. While Area A was primarily a county landfill, Area B served as a regional landfill for a number of counties.

Opened in 2014, Bluebird Ridge is the Department's current landfill, named for the glacial terrain found at the site and the 54 Bluebird nest boxes dotted around the 580 acres site. The next box program has fledged more than 800 bluebirds over the course of the last 20+ years. In addition, over 1,600 swallows have also fledged out of the nest boxes.

Currently, with nine employees, Marathon County Solid Waste Department provides service for 15 different counties in central, west-central and north central Wisconsin. They serve companies as far west as Menomonee, which is about an hour and a half out of the twin cities in Minnesota, as far north as Ashland, which is

near Lake Superior, as far South as Stevens Point, which is in the center of Wisconsin and as far East as Shawano, which is about 45 minutes from Green Bay.

The facility, under the operational leadership of Dave Hagenbucher, manages nearly 200,000 ton of waste per year and nearly 16 ton of household hazardous waste. The Department functions as an enterprise fund, using no county tax dollars for its \$4 to \$6 million-dollar budget. Earnings are used to support a host of community programs and future development projects.

Landfill Gas Management

In July 1989, a landfill gas extraction and flaring system went online. This \$1,000,000 facility was one of the first in the State of Wisconsin. The landfill gas system in the Area A landfill currently only produces 50 cfm because it is an old landfill and most of the decomposition has already taken place. While still regulated under an EPA air permit, the Area A gas system operates under an approved "alternative operating scenario," where certain parameters may be exceeded without penalty.

Area B has a full gas system (24 wells) that produces from 400 to 700 cfm, depending on the weather and other conditions. "We



Top: The Marathon County Solid Waste Department crew bulking paints and other flammable items. Left: The local fair where interns staffed an educational booth.

are also going to be installing four wells at Bluebird Ridge this summer,” says Director Meleesa Johnson of the Marathon County Solid Waste Department. All landfill gas is extracted and sent to a vendor that uses the landfill gas to produce electricity. “The power being produced is sent out to the Wisconsin Public Service grid, so it becomes their product and they are sending it out to their residential and commercial customers,” explains Johnson.

A Community Resource: Recreation and Wildlife Habitat

The Solid Waste Department property consists of 580 contiguous acres, much of which is wildlife habitat and a recreational area. The site is home to Bald Eagles, several varieties of hawks and owls, whitetail deer, fox, wolves, coyote, an occasional bear and more. A large wetland area is home to a Blue Heron rookery, which is growing larger with each year.

The property has a number of wetland, open prairies, acres of mixed hardwood forests and an established trail system, all of which offer residents many recreational opportunities. Currently, the site is host to the National Scenic Ice Age Trail and the state’s Mountain Bay Trail, which stretches from central Wisconsin to Green Bay. This summer, the Ice Age Trail Alliance will use the

site for its Ice Age Trail University, a program that teaches of the importance of the trail and how to preserve and build this important national treasure.

The Solid Waste Department recently partnered with the Central Wisconsin Off-Road Cycling Coalition (CWOC) to expand those opportunities. CWOC is a group of off-road cycling enthusiasts who have identified the site as an ideal location to build an off-road cycling course. The craggy terrain and pockmarked pockets of boulders, left by the glacier, is perfect for the type of trail valued by single-track cyclists. By the end of summer 2018, the site will have 10 miles of course snaking throughout the facility. The off-road cycling course will have a beginner’s level course, an intermediate course and an advanced course. CWOC intends to host tournaments and other activities at the Solid Waste Department, as well. “This is very exciting because not only will this trail make it the fourth trail on the site, but it also is really a comprehensive opportunity for outdoor recreation. From watching Bluebirds raise their young to exploring the variety of wildflower of the site, we see our site as a beautiful place to visit. Our goal is to have our entire facility, except for active operations areas, be an outdoor recreational area,” says Johnson.



Intern preparing to sort household hazardous waste.



A driver from a local independent hauler who helped save a chicken found at the landfill.

A Community Resource: Programs and Services

Marathon County offers a wide array of programs and services, with a focus of always working to fulfill its mission. Much of the programming started around the time in which Area B was built. During the early 1990s, Wisconsin legislators passed what is now referred to as the Recycling Law, which included landfill disposal bans for a wide variety of materials. The former solid waste director built recycling programs to support implementation of the law including a drop-off collection for tires, scrap metal, lead-acid batteries, electronics, waste oil and standard recyclables.

Prior to this time, some municipalities did small recycling programs, but they were limited. After the recycling law was implemented, every municipality in the state of Wisconsin had to provide some level of recycling services for its citizens. While the most populated areas had curbside recycling, in the rural areas, many of the small municipalities had town drop-offs or limited service. The Department's programs help support those municipal services.

Marathon County began operating a Household Hazardous Waste (HHW) Collection Facility in May 1997. At that time, the HHW facility was part-time and only available a few months of the year and was located in a warehouse 15 miles from the Department. Because the limited service did not meet the full-time hazardous waste needs of the community, in 2010 the Department expanded

service to 52 weeks a year, relocating to a new facility at the Solid Waste Department

A waste reduction strategy of the HHW program is *Choose to Reuse*. This popular program diverts still-good household chemicals and cleaners into a "free" shopping area. From insecticides and weed killer to paints and pool chemicals, the shelves are generally stocked and ready for "shopping" by visitors to the site. "At times, we have people leave with more household hazardous waste than they came with!" Johnson notes with humor.

In 2000, the Marathon County Solid Waste Department also co-sponsored the county's first computer recycling event with Industrial Recyclers of WI and Marathon County's Health Department. More than 19.5 tons were collected and sent for reuse and recycling. While these events no longer occur, during the 10 years they were held, more than 580,000 pounds of electronics were recycled. A full-time electronics recycling program continues today during regular operational hours.

"What we've done is to be a one-stop-shop. If you are coming out here for landfill disposal options and you are cleaning out the house, etc., we want to make sure that we have that full line of services, whether it is landfill disposal or a computer that needs to be recycled, some tires, etc. We make sure that we've got some level of service to make sure those things are not sent to the landfill," says Johnson.

Other services offered by Marathon County Solid Waste Department include waste audits and general solid waste and recycling consulting. “Solid waste management is a key part of economic development and we help businesses look at their waste streams and how they can reduce waste and recycle more,” says Johnson.

A 2009 project, involved a local paper mill that partnered with a utility to build a 50 MW biomass power plant adjacent to the mill. This project exemplifies how the Department works to find ways to reduce waste management costs for its customers. During the early construction process, the Solid Waste Department staff worked with everyone involved to develop a soils management plan that diverted low-level contaminated and non-contaminated soils from the construction to the landfill location for beneficial use. This collaboration saved the project more than \$2 million.

Currently, the Solid Waste Department is in the process of working with a growing company in Central Wisconsin—an aluminum anodizing plant that makes windows and door frames used around the world. “With the growth in their business comes a growth in the need for sludge disposal. The company reached out early on in their expansion process to ensure the Department could effectively and efficiently handle the waste stream. They told us that our affordable rates and willingness to work with them on a schedule for sludge deliveries helped them make their business model work,” Johnson says, adding, “We want them to stay in central Wisconsin and use local employees. We want them to look at the Department as a resource for their economic growth.”

Johnson also tells of a massive redevelopment project along with Wisconsin River in the city of Wausau (county seat). By working right from the start with the city, environmental consultants and excavation contractors, the Department has helped develop a streamlined process for review and approval of the contaminated soils that were part of the project. “When municipalities and contractors are ready to run with a project, we need to be set with a good plan for not only approval of contaminated soils, but also a logistical plan here at the site that quickly turns around trucks ... we are here to serve our customers!” exclaims Johnson.

A Community Resource: Beyond the Front Gate

Marathon County Solid Waste Department has a broad marketing and outreach strategy that focuses on connecting with not only large corporate haulers, but also independent haulers and small roll-off companies as well. This diverse portfolio strategy ensures the success of Marathon County’s business plan and also gives all players in the market equal access to disposal services.

Johnson explains the strategy as being about creating a level playing field for all. “We have found a way to have a partnership with the large corporate haulers and we have a lot of independent haulers who do not have their own landfills, but they have transfer facilities. Those are the ones that we see their business growing because they have access. Because we are municipally-owned, we treat all haulers fairly and level the playing field.”

Although Johnson started out doing some forms of advertising, including local television and print, the Marathon County Solid Waste Department’s services and educational programs have

spread more rapidly through word of mouth. The Department has also hired a local marketing company, Flapjack Creative, who has worked to develop the brand. The ‘What Do You Do With Experts’ branding has lent itself to the fun, and memorable tagline, “We’ll Tell You Where To Put It!” Marketing collateral, from t-shirts to print ads carry that brand.

The Department has also implemented a toll-free Solid Waste and Recycling Information Line that goes to a contract organization, Recycling Connections Corporation, of Stevens Point, just south of Wausau. Thousands of inquiries are answered annually. Says Johnson, “We are the community resource for all things waste and recycling. We want to plant that seed so that anytime you have a question, we are the people you want to call.”

Recycling Connections Corporation also helps to coordinate their county-wide recycling education program on learning how to recycle right, what things need to go in the garbage and what needs to be recycled. The company ensures that all of the Department’s education curricula is really meaningful and the program is developed effectively. In addition, Recycling Connections Corporation helps the Department develop their composting workshops offered throughout the county. “Our goal is to help municipalities and their citizens recycle more, recycle right and waste less. We have this comprehensive outreach program to achieve those goals. When I get a call to come out and hold a presentation, whether it is a school, assisted living facilities, etc., the first questions I ask are: how old are the members of the group and what are your curriculum goals? Are there cognitive challenges within the group? We want to learn about the audience before we get there and then we design the educational program around them,” explains Johnson.

With this in mind, kindergartners are not blasted with talking points about the National Sword issue and how its impacting the sale of plastics, and more mature groups receive a message that is a bit more complex and holistic. Johnson adds, “In elementary school, they are working on environmental education, specifically with recycling, and we try to help them understand the step-by-step process, so we’ll do different activities or engage them as part of the discussion. We have found that kindergartners and 80-year olds generally have the same level of enthusiasm. In Junior High and High School, we challenge their creative thinking, such as what would you do differently, what are some other solutions? Then, we start engaging that conversation with them.” In the classroom, Johnson shows a lot of ways that young people can make a difference, such as how a group of Baltimore students came up with a way to collect plastics out of the harbor. “That generally starts the process of the students strategizing ways to move to the next generation of ideas for managing waste.”

While Johnson typically goes out and does the education program for service groups, the Department’s operations manager and his staff have developed a process at the facility for working with the students who come to visit onsite. On the facility tour, they get to see everything, starting with the hazardous waste facility, emphasizing that those types of materials are not banned from landfills, but are not well-suited for landfill disposal and can be harmful to the environment. The Department wants to help



the students understand that they can help share the word of how managing waste starts with choices they make in their lives. Says Johnson, “Our philosophy is to change the discussion because we will never get people to think about waste or think about making a different choice if we keep hiding waste facilities. If they are invisible, no one will know about it. They need to see the effects of their choices and experience that monumental impact.”

Pulling Back the Curtain

Johnson gets upset when people say that she works at the “the dump”. She points out that it is a solid waste department providing a variety of solid waste services and the landfill is a highly engineered structure designed to protect human health and the environment. “I started in the industry in 2003 and I have worked hard to bring to the people, customers, schools, anyone who will listen that the solid waste industry is a noble profession and if you don’t think so, go somewhere else where waste is not managed at this level. We just make it look easy because we magically take it away and then hide the cost of it in the local taxes. Landfills are located in remote locales, MRFs and transfer stations are screened from the public, so this is an invisible world. My goal has been to pull back the curtain and share this magnificent story about the great people working in this industry to protect human health and the environment. We impact people’s lives in a positive way every day and I get very passionate about what we do.”

Johnson is excited to point out that as a part of that passion, she and her colleagues from the Associated Recyclers of Wisconsin, SWANA Badger Chapter and the Wisconsin Counties Solid Waste Management Association have hired the producers of Discover Wisconsin to create a television program to tell the solid waste story in Wisconsin, hopefully airing on public television. A matching curriculum will be sent out to the schools across Wisconsin so that they can start making the waste and recycling industry more visible and educate more people about what goes on.

Changing Perceptions

Johnson is especially proud of continuing to change people’s perception of the Marathon County Solid Waste Department, looking at it as a community resource. “As the perception has changed, it has really boosted our business and our ability to do more work in the community. It is a huge accomplishment to go from this very negative dump concept to a community resource,” says Johnson. “By working together and engaging the next generations of leaders, not only will perceptions change, but actions as well. Waste avoidance will be seen as a top priority so that we can build a sustainable waste management future.” | **WA**

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