

Situation Assessment

Janesville Disposal Facility Superfund Site



Janesville Disposal Facility Superfund Site
Janesville, Wisconsin
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FINAL

U.S. EPA Region 5

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Forward

EPA's primary responsibility at Superfund sites is to ensure the protection of human health and the environment. Consideration of a site's potential future use is an important part of this responsibility under the National Contingency Plan (NCP). The Superfund Redevelopment Initiative (SRI) was created by EPA in 1999 to help communities and stakeholders in their efforts to return environmentally impaired sites to protective and productive use. Conducting a reuse assessment that engages site owners and other stakeholders in evaluating future use options for a site can help facilitate site stewardship and support the long-term effectiveness of the remedy.

Executive Summary

The Janesville Disposal Facility (JDF or Site) is located on approximately 65 acres of land in the City of Janesville in Rock County, Wisconsin. The facility consists of four disposal sites: two Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) sites and two Resource Conservation and Recovery Act (RCRA) sites. Since the impacts from the four sites are commingled, they are combined as the Janesville Disposal Facility and are being addressed jointly under CERCLA and RCRA. The City has a strong interest in developing a productive reuse of the JDF. The reuse of the JDF and adjoining parcels provides an opportunity to create a new economic draw or a regional attraction for the City of Janesville and the local community. If the type and location of site restrictions and opportunities can be clarified, the JDF could be redeveloped to support community recreation, new industry, wildlife habitat or a combination of all three uses.



Site Vicinity Map

Introduction

At the request of EPA Region 5, E² Inc. conducted a site visit of the JDF in Janesville, Wisconsin on Thursday, April 15, 2010 to determine the site reuse potential and assess the need for reuse planning services. E² Inc. met with representatives from EPA Region 5 and the City of Janesville, reviewed local planning documents, and participated in a tour of the Site. The purpose of the interview, meeting and site visit was to discuss reuse goals for the property, to identify relevant planning initiatives for the area, and to outline preliminary considerations, opportunities and challenges for returning the Site to productive reuse.

Meeting Participants included:

- Mike Payne, Engineering Manager, City of Janesville, Wisconsin
- Carl Weber, Director of Public Works, City of Janesville, Wisconsin
- Karissa Chapman, Civil Engineer, City of Janesville, Wisconsin
- Larry Buetzer, Primary Responsible Party (PRP) Project Manager, City of Janesville, Wisconsin
- Duane Cherek, Manager of Planning Services, City of Janesville, Wisconsin
- Tom Presny, Parks Director, City of Janesville, Wisconsin
- John Whitcomb, Operations Director, City of Janesville, Wisconsin
- Tom Bloom, Superfund Reuse Coordinator, EPA Region 5
- Linda Mangrum, Reuse Project Coordinator, EPA Region 5
- Casey Williams, E² Inc.
- Matt Robbie, E² Inc.

Summary of Site Conditions

The JDF is located on approximately 65 acres of land in the City of Janesville in Rock County, Wisconsin. JDF consists of four separate disposal units: the Ash Beds, the 1963 Landfill, the 1978 Landfill, and the 1985 Landfill. The Ash Beds are addressed under both CERCLA and RCRA, the 1978 Landfill is regulated under CERCLA, and the 1985 Landfill is regulated under RCRA. The 1963 Landfill is not addressed under either the CERCLA or RCRA program.

The facilities have contributed to exceeded air and ground water quality standards. Methane gas was detected in the air at the JDF and volatile organic compounds (VOCs) were detected in the ground water. Small amounts of contaminants have been found in the surface water resources of the Rock River and the onsite pond.

History of the Site

From 1952 until 1985, the City of Janesville operated the four separate units that make up the JDF. Except for the Ash Beds waste treatment unit, the landfills operated one after the other, each closing as it reached design capacity. The 1978 and 1985 Landfills are known to have accepted both municipal and

industrial wastes, including drummed solvents, used oils, paints and paint thinners, and dried sludges from the Ash Beds site. The general disposal history for each unit is summarized below.

- The 1963 Landfill operated from 1952 until 1963 and occupies an approximately 15-acre former gravel pit. General refuse and unknown wastes were deposited into the unlined gravel pit. The unit is not on the NPL but included in the remediation of the area because the Ash Beds lie over the northwest portion of the fill.
- The 1978 Landfill operated from 1963-1978. This 18-acre unit is on the NPL. The facility accepted municipal and industrial wastes. Prior to waste disposal, the site was a sand and gravel pit and has no liner of any kind. The unit has a clay cap and active gas collection.
- The 1985 Landfill operated from 1978 to 1985. This 16-acre unit is located on the east side of the property and accepted municipal and industrial wastes. This landfill is not on the NPL but is regulated under RCRA. The unit has a clay liner, a clay cap, a leachate collection system, and active gas collection.
- The Ash Beds operated from 1974 to 1985 and accepted industrial liquids and sludges. The sludges were deposited in a series of five ash beds located in a 300 x 300 square foot area in the northwest section of the former 1963 Landfill, where they were allowed to evaporate. The resultant dried sludge was then disposed in either the 1978 or 1985 Landfills. Upon closure of the landfills, waste was hauled offsite and disposed at a hazardous waste facility.



View across lake to 1978 Landfill

Interim Remedial Action

Prior to closure of the Ash Beds, the City of Janesville excavated several thousand tons of contaminated material from the Ash Beds. Some material was incorporated into neighboring landfills and some was disposed at private hazardous waste facilities. The City of Janesville back-filled the Ash Beds with sand and capped the area with two feet of clay and a two-foot vegetative layer. The 1978 and 1985 Landfills were also capped with two feet of clay and a two-foot vegetative layer.

Selection of Remedy

In 1987, EPA issued an order requiring the City of Janesville and 60 industrial parties to initiate a Remedial Investigation/Feasibility Study (RI/FS) for the JDF. The RI/FS confirmed the presence and nature of hazardous constituents in the Landfills and Ash Beds.

In December 1989, EPA issued a Record of Decision (ROD) for the JDF. The remedy consisted of both source control and ground water control components, including:

- Landfill caps to control direct contact to waste materials and minimize water infiltration into the waste mass.
- Landfill gas collection and treatment in select portions of the facility.
- Institutional controls to control future uses of the JDF and access to ground water between the disposal site and Rock River.
- A ground water extraction and treatment system.
- Periodic sampling of the monitoring well network to evaluate improvements in ground water quality.

In December 1991, EPA and the group of PRPs signed a Consent Decree under joint RCRA/CERCLA authorities to complete the remedial design and remedial action for cleanup of the JDF. The remedial action was complete at the end of 1996.

Long-term Stewardship

In 1997, EPA issued, with concurrence from the Wisconsin Department of Natural Resources (WDNR), an Explanation of Significant Difference (ESD) documenting a change in the ground water remedy. Based on ground water monitoring data collected from 1987 - 1997, EPA determined that source control actions had addressed primary threats to ground water and revised the remedial approach to Monitored Natural Attenuation.



View of Janesville Ash Beds

On September 18, 1997, EPA signed a preliminary close-out report, documenting that all construction activities for the JDF were completed and "No Further Response Action" anticipated.

Due to elevated levels of methane in gas probes near the perimeter of the 1978 unit, the landfill gas recovery system was evaluated and upgraded in 2005. The second Five-Year Review of the JDF was completed by the WDNR in September 2006 and concluded that the remedies at the JDF remain protective of human health and the environment.

Land Use Considerations

Below is a set of considerations about site conditions, surrounding land uses and future land use planning initiatives.

Surrounding Land Use Considerations

- The JDF is owned by the City of Janesville and is bordered on the north by a closed landfill, on the west and southwest by commercial property, on the south by a pond, on the east by public recreational areas, and on the southeast and northeast corner by residential neighborhoods. The JDF is bisected by an active rail line, part of the Chicago and North Western Railway.
- There are no private residential wells or municipal supply wells in the direction of the ground water plume between the landfill and the primary ground water discharge point, the Rock River, 1200 feet west of the JDF.
- A recycling center is in operation adjacent to the former Ash Beds. The City conducted a survey in 1973 to delineate the Ash Beds, and the balance of the site became another parcel, which was purchased and developed by the recycling facility.
- The former Parker Pen Company facility lies just beyond the deactivated rail line that defines the western boundary of the JDF. Parker Pen was a known source of VOC ground water contamination in the area, but remedial efforts have reduced contaminate concentrations in the ground water. The company closed 12 years ago and the site was purchased by a local business six years ago, who rezoned the parcel to allow for uses beyond pure industrial.
- A former concrete pipe and brick manufacturing plant located south of the JDF is now owned by Janesville Sand and Gravel and is inactive.
- The Janesville Youth Baseball organization currently operates several baseball fields on the eastern border of the JDF. They have a desire to sell the land to generate funds for the construction of a new facility across town.
- The surface water pond along the southern boundary of the JDF was created when the area was excavated as part of the former sand and gravel operation. The pond depth varies according to ground water levels.
- The JDF is available for passive recreation. The City is aware that local youth use the eastern portion of the JDF for sledding and tubing in the winter.



A baseball field adjacent to the JDF

Future Land Use Considerations

- The City’s Comprehensive Plan recognizes the existing land use of the area encompassing the 1978 and 1985 Landfills as Parks and Open Space, the area encompassing the 1963 Landfill as heavy industrial, and the Ash Beds as a Community Facility.
- The City’s Future Land Use Plan designates the JDF, as well as the area of completed landfill activity to the north, as Parks, Open Space and Environmental Corridors. The combined sites are referred to as the “Black Bridge Hills Recreation Area” in the Janesville Existing and Future Community Facilities Map (on right).



Janesville Existing and Future Community Facilities Map

- The City of Janesville has a fairly extensive system of parkland but lacks adequate public sports fields and community amenities.
- New development of public resources has been directed towards the perimeter of the City in recent years. The central city is generally neglected in terms of parkland and open space. While new developments have parkland dedication requirements, the central city could benefit from a recreational complex that includes multiple uses and activities.
- The City has a disc golf course and is getting requests for additional courses. The City is also inundated with requests for off-leash dog park areas.
- In another 50 years, as mining operations move farther north, the City is looking at the potential for creating a big lake in the existing sand and gravel mining area that includes connections to other green space areas and corridors.

Stakeholder Reuse Goals and Considerations

Below is a set of preliminary reuse goals and considerations based on initial discussions with City Staff who were available during the site visit.

City of Janesville

- Redevelopment on the JDF can take advantage of the existing infrastructure, including roads, gas, water, storm and sanitary sewer.

- The surrounding road network and adjacent rail line provides excellent access to the JDF.
- The City owns a flat, wooded and uncontaminated piece of property to the east of the JDF and to the north of the baseball fields that provides access, including visual access, to the landfill. This area has served as a buffer to the JDF in the past, but the Janesville Comprehensive Plan designates this area as appropriate for future mixed residential use. The profits from the sale of this land could help to finance a future recreational amenity on the JDF.



The redevelopment of this flat, wooded and uncontaminated piece of property could complement the future use of the JDF site

Alternatively, a recreational amenity on the JDF could increase the value of this relatively flat piece of developable land. A City staff member suggested that with great views looking west towards the Rock River, the area may be an ideal location for a three to four story condo with underground parking notched into the hillside.

- Another participant suggested that the inactive rail line along the western boundary of the JDF be converted to a greenway trail connecting the Site to Traxler Park on the bank of the Rock River.
- Another suggestion included enhancing the wildlife habitat around the pond and developing areas for wildlife viewing and fishing to serve the community.
- The City expressed interest in integrating an educational component that informs the community on the functions and environmental and financial benefits of landfills, including why they are important, how they are constructed, and what resources and opportunities they can provide.
- The City could take advantage of some of the Site's steep slopes by integrating an outdoor performance area or amphitheater (such as the Alpine Valley Music Theater). Space for public parking is currently limited and would need to be considered.
- Some City staff may like to see parts of the JDF redeveloped as industrial use but are unsure how to make industrial reuse compatible with site restrictions. The 1963 Landfill and Ash Beds are particularly good candidates for industrial reuse since the two areas are subject to little settlement. The City's Comprehensive Plan could be amended to allow for this future industrial use, if it is desired and feasible.
- The City was approached by a model airplane club in 2001 interested in using the JDF for flying model airplanes. The idea was supported by EPA, but the club needed help from the City to construct the landing strip, which the City was not able to provide at the time. There was also concern from the nearby neighborhood about noise associated with the flying field, but the City

noted that noise would likely be minimal compared to noise generated by the existing batch plant and mining operations adjacent to the neighborhood. The City is interested in revisiting the idea of a model airplane flying field and assessing if interest still exists.

- The gas generated by the landfills at the JDF is past its peak in terms of quality and quantity for producing heat or energy but may be useful for small generator sets. A

participant noted that the earthen berm that runs along Black Bridge

Road prevents those who travel by the JDF from seeing its vast open space. If the JDF was more visible and welcoming, the local community may have a greater appreciation for the green space and potential amenities the JDF could offer.

- The City is concerned about the resources needed to build and maintain a recreational area. The City does not currently have resources available to invest in redevelopment of the JDF unless they can be certain the Site is going to generate tax revenue in the immediate future or they can take advantage of state or federal grants.
- The City proposed combining reuse planning efforts for the JDF with the closed and active landfills to the north and the Youth Baseball and City-owned uncontaminated property to the east. Together, the sites provide a land base that could host several new uses that serve not just the surrounding neighborhoods, but the entire Janesville community.



Birds and wildlife are attracted to the habitat created by the pond and surrounding wetland

Wisconsin Department of Natural Resources

Mike Schmoller, the project lead from WDNR, provided comments about the reuse potential of the JDF by phone.

- WDNR believes that, given the location and current condition of the sites, it could be beneficial to make some improvements to the Site. The state sees the JDF as being a good candidate for passive, low intensity use, such as for walking trails or a disc golf course. While some of the slopes may be too steep for running or skiing, the topography could lend itself to a fitness course that includes exercise stations along the way. This type of course could be popular with local high schools and fire department personnel.
- The State would like to see former landfill sites provide enhanced wildlife habitat when possible.
- Given that methane gas and potential vapor intrusion are no longer an issue, WDNR could support the development of slab on grade recreational structures. WDNR has concerns however

about a structure that needs footings or supports that may penetrate and potentially compromise the cap.

- WDNR's Remediation and Redevelopment and Waste & Materials Management programs have jointly developed a process and guidance for development on closed landfill sites. More information is available at http://dnr.wi.gov/org/aw/rr/rbrownfields/historic_fill.htm

Remedy Considerations

- The City would like clarification on what reuse limitations are in place and where the restrictions apply so they can start narrowing down the list of possible future uses. This information will enable the City to talk with community groups about feasible reuse options for the JDF (e.g., what vegetation can be planted where, what areas can be regraded, etc.).



Gas extraction wells are scattered across the 1978 and 1985 Landfills

- Gas extraction wells and ground water monitoring wells are scattered throughout the JDF and are scheduled to be in place for the required 30 years of long-term care, which concludes in 2026. EPA is willing to work with the City or private developers interested in converting the above ground well pipes to a flush mount system. The City or a developer could also petition to have specific wells delisted from the remediation program to accommodate a new use.

- EPA is willing to consider a partial delisting of the RCRA portion of the property or a deletion on the CERCLA portion that has a desired reuse, but the Department of Justice insists on that Five Year Reviews continue to be conducted as long as waste remains in place on the Site.
- Since contamination trends continue to decrease due to natural attenuation, the City would like to eliminate ground water monitoring as part of the next Five Year Review. EPA has indicated they will work with the City to evaluate the possibility of eliminating or reducing the ground water monitoring requirements, while still ensuring the protectiveness of the remedy at the JDF.

Recommendations and Next Step

The City has a strong interest in developing a productive reuse of the JDF, and the JDF has a number of reuse opportunities. If the type and location of restrictions and opportunities can be clarified, the JDF could be redeveloped to support industrial reuse, recreational use, wildlife habitat or a combination of all three. The JDF and the adjoining parcels could benefit from a documentation of stakeholder future land use goals and further analysis of remedial and planning considerations that will likely shape future use. A reuse analysis that documents relevant reuse constraints and locations for potential future use could inform the City of Janesville's future planning, marketing and fundraising initiatives. Potential next steps could include:

1. Conduct a Reuse Assessment

The JDF could benefit from a set of maps highlighting remedial constraints and use restrictions, physical characteristics (e.g., wetlands, steep slopes), parcel boundaries, access, and adjacent land use. This step could include conducting a series of interviews and reviewing local land use plans to clarify future use goals for the Site. A community meeting could provide an opportunity to inform citizens on the protectiveness of the Site, the potential for reuse, and build a foundation for stakeholder support in the redevelopment of the area.

2. Develop a Reuse Framework

Based on the reuse assessment maps and the stakeholder reuse goals, a reuse framework could be developed to illustrate the locations of potential future uses. The framework could serve as a tool for discussion among the City, EPA, and WDNR, and it could help to clarify the compatibility of site reuse proposals and the Site's remedy and use restrictions. The reuse framework could also provide a road map for the City's short and long-term Site reuse plans and a tool for more strategic discussion with community groups, potential purchasers and potential funders.

3. Provide Tools to Facilitate Reuse

Public perception and liability concerns may create obstacles for meeting the reuse goals of the JDF Site. Several tools are available to assist the site owner in addressing stigma and liability concerns related to site reuse, such as an Environmental Covenant, a Ready for Reuse determination, a Comfort Letter, and Bonafide Prospective Purchaser Agreements. The City could benefit from additional information about the nature and use of these tools. EPA has indicated their willingness to take steps to explain the protectiveness of the Site to the community and to work with potential purchasers to shelter them from Superfund liability.

Stakeholder Contacts

<i>Name</i>	<i>Affiliation</i>	<i>Phone</i>	<i>Email</i>
<i>U.S. EPA Region 5</i>			
Tom Bloom	Superfund Reuse Coordinator	(312) 886-1967	bloom.thomas@epa.gov
Linda Mangrum	Reuse Project Coordinator	(312) 353-2071	mangrum.linda@epa.gov
<i>Wisconsin Department of Natural Resources</i>			
Mike Schmoller	Project Manager	(608) 275-3303	michael.schmoller@wisconsin.gov
<i>City of Janesville, Wisconsin</i>			
Larry Buetzer	PRP Project Manager	(608) 214-8194	Buetherhillfarm@wekz.net
Karissa Chapman	Civil Engineer	(608) 755-3163	chapmank@ci.janesville.wi.us
Duane Cherek	Manager of Planning Services	(608) 755-3084	Cherek.d@ci.janesville.wi.us
Mike Payne	Engineering Manager	(608) 755-3164	Payne.m@ci.janesville.wi.us
Tom Presny	Director of Parks and Recreation	(608) 755-3026	presnyt@ci.janesville.wi.us
Carl Weber	Director of Public Works	(608) 755-3160	weberc@ci.janesville.wi.us
John Whitcomb	Operations Director	(608) 755-3110	whitcombj@ci.janesville.wi.us