

Civil & Environmental Consultants, Inc.

# **Henson Recycling Campus Transfer Station Local Siting Hearing Overview and Evaluation of Criteria 1 and 8**

Presented By Civil & Environmental Consultants, Inc.

November 2023

## John Hock, P. E.

- B.S., Chemical Engineering from the Ohio State University
- Professional Engineer in six States, including Illinois
- Currently Vice President of Civil & Environmental Consultants, Inc. (CEC)
- CEC consists of about 1,400+ employees in 29 cities
- Have served as the solid waste practice lead for CEC and office lead for CEC's Naperville office
- Member of National Waste and Recycling Association



## John Hock, P. E. (cont.)

- Over 36 years of experience in the solid waste business, both in industry and consulting
- Have been involved with the development of a variety of solid waste management facilities with an expertise in the design and permitting of transfer stations
- Was the principal engineering witness at the local siting hearing for four other transfer stations



## The Applicant – Lakeshore Recycling Systems, LLC (LRS)

- Founded over 20 years ago in Morton Grove, IL
- Began with local recycling and hauling operations
- Currently has over 2,000 employees at approx. 60 locations in the Midwest
- Remains privately owned
- LRS owns Henson Disposal, LLC







## **LRS Services**

- Residential and commercial waste collection and transfer
- Construction & demolition debris (C&D) recycling
- Portable restroom services
- Street sweeping services
- Single-stream recyclable processing
- Solid waste disposal





## The Site – Henson Recycling Campus Transfer Station

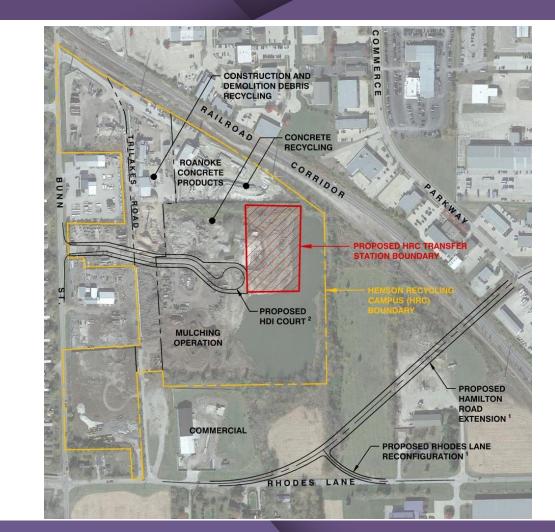
- Located on an approximately 3.09acre parcel within unincorporated McLean County
- Located south of Veterans Parkway, near the south-central part of the City of Bloomington





## **Existing Operations**

- Setback from public within the approx. 42 acre Henson Recycling Campus (HRC), and includes:
  - The area's only general construction or demolition debris (C&D) recycling facility
  - A woody waste mulching and recycling operation
  - A concrete recycling operation
  - A concrete batch plant



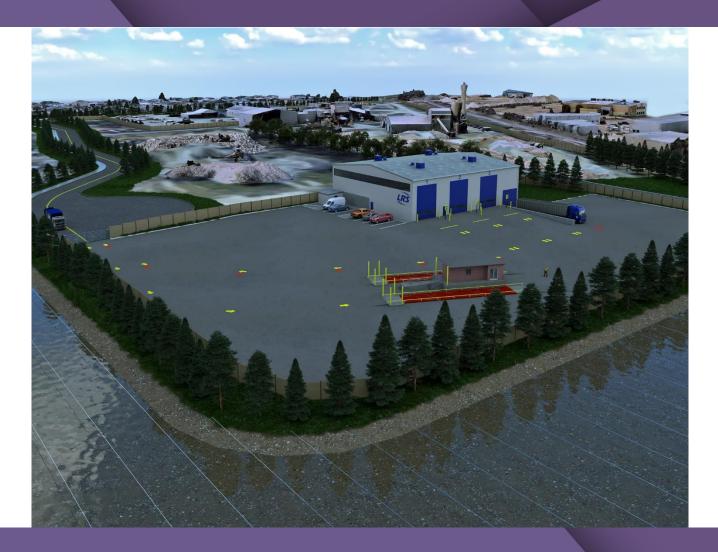


## **Proposed Facility Improvements**

- Building to transfer residential and commercial waste (otherwise known as municipal solid waste or MSW) and single-stream recyclables (SSR)
- Scale for weighing vehicles
- Stormwater management system
- Related infrastructure (e.g., utilities)



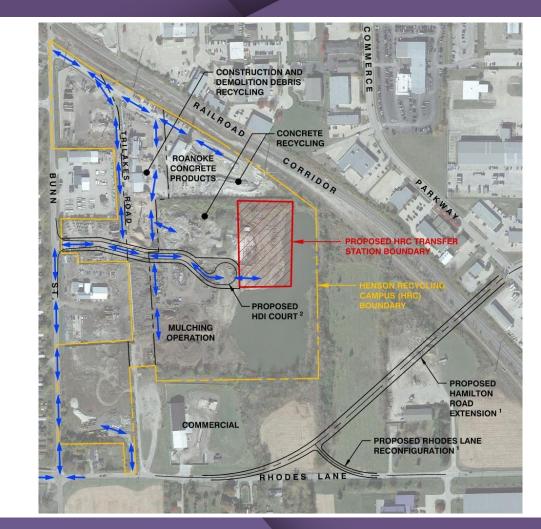
### **Proposed Facility Improvements - Rendering**





## **Proposed Facility Improvements (cont)**

- Development of a new public road (HDI Court) meeting City of Bloomington requirements including a sidewalk and utility corridor
- HDI Court will:
  - Be dedicated to the public following the same process as a typical subdivision
  - Serve the HRC Transfer Station, the mulching operation and other potential users





#### **Acceptable Materials**

- Residential Waste garbage from households
- Commercial Waste garbage from businesses and institutions
- Residential and Commercial Recyclables Various recyclables (e.g., paper, cardboard, bottles, cans) that are mixed together in a single bin/ container



## The Operation

- All existing operations would continue (e.g., C&D recycling, woody waste mulching, concrete recycling)
- Loads of residential and commercial waste from collection vehicles will be consolidated into larger loads for transport to an area landfill for disposal
  - All waste handling will occur indoors
  - Three to four incoming collection vehicles = one larger load
  - Waste on-site for a only a short time (e.g., first-in, first-out)
- Loads of recyclables from collection vehicles will be consolidated into larger loads for transport to a material recovery facility (MRF) for separation and re-use as a commodity





## **The Benefits**

- Improved pricing for waste and recycling management
- Improved level of service for waste and recycling management
- Funding for community
- Highest level of environmental protection and safety
- Ideal location
- Minimal impacts on traffic



#### Section 39.2 of the Act : Criterion 1

• "the facility is necessary to accommodate the waste needs of the area it is intended to serve"



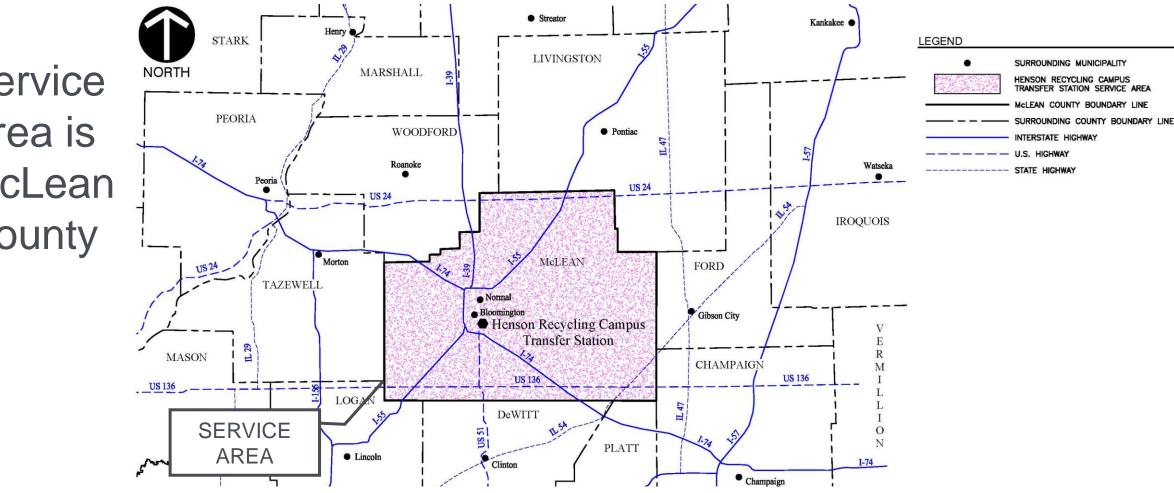
#### Methodology

- Define the Service Area for Henson Recycling Campus (HRC) Transfer Station
- Evaluate municipal solid waste generation and disposal volumes for the Service Area
- Characterize the current waste disposal system
- Evaluate trends in the waste disposal system
- Evaluate benefits of the HRC Transfer Station



#### **HRC Transfer Station Service Area**

• Service Area is **McLean** County





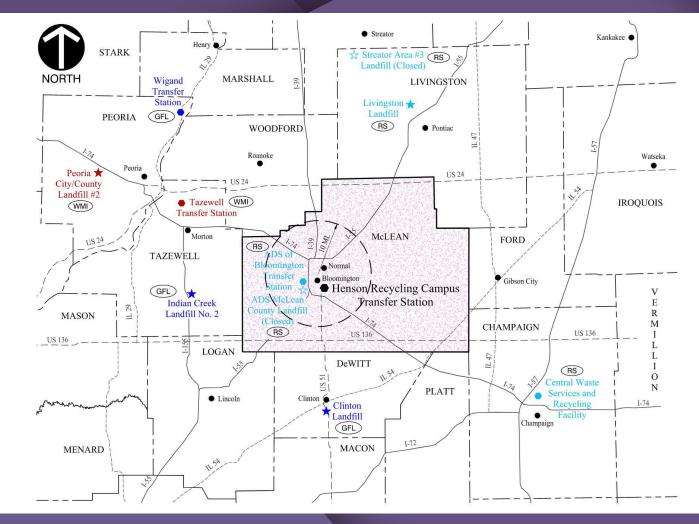
#### **MSW Generation and Disposal Volumes**

- Service Area estimated to generate 500 tons per day (tpd) of MSW requiring disposal as of 2022
- No active landfills in Service Area
- Only one active MSW transfer station in Service Area (Republic Services Bloomington Transfer Station) accepting approx. 300 tpd
- Estimated 200 tons per day of MSW currently being managed by transfer stations or landfills not located in the Service Area (i.e., shortfall/ need)



## Waste Disposal System – Operational Facilities

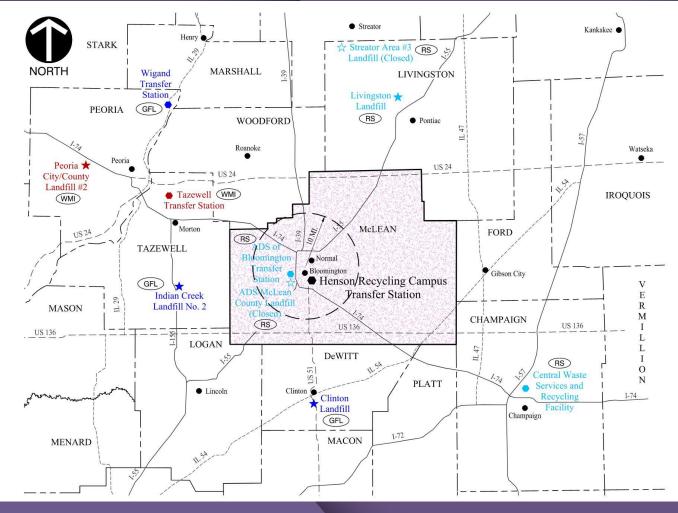
- Republic Services has a transfer station in the Service Area, and a proximate landfill and another transfer station
- Waste Management has a proximate transfer station
- GFL Environmental (GFL) has two proximate landfills
- All offer collection services





# Waste Disposal System – Operational Facilities (cont.)

 Republic Services is the only company in the Service Area to be fully vertically integrated (e.g., providing hauling, operating an available transfer station and operating a proximate landfill)





#### Waste Disposal System – Subsidiaries of National Companies

- Republic Services = Allied Waste Industries = American Disposal Services of Illinois (ADS)
- GFL = Peoria Disposal Company = Area Disposal
- Waste Management (WM) = Advanced Disposal



#### Waste Disposal System – One Disposal Option for Bloomington-Normal

- The City of Bloomington (Bloomington) and Town of Normal (Normal) public works provides the collection services for residences in their respective municipality
- Bid specifications indicated that the transfer station (or landfill) must be located within a ten-mile radius of the intersection of Main and Division Streets
- Only the Republic Services Bloomington Transfer Station meets this specification, which creates a monopoly
- GFL and Henson/ LRS were precluded from bidding due to specs.
- GFL indicated that they would offer a "very competitive rate" if they would consider using the Clinton Landfill



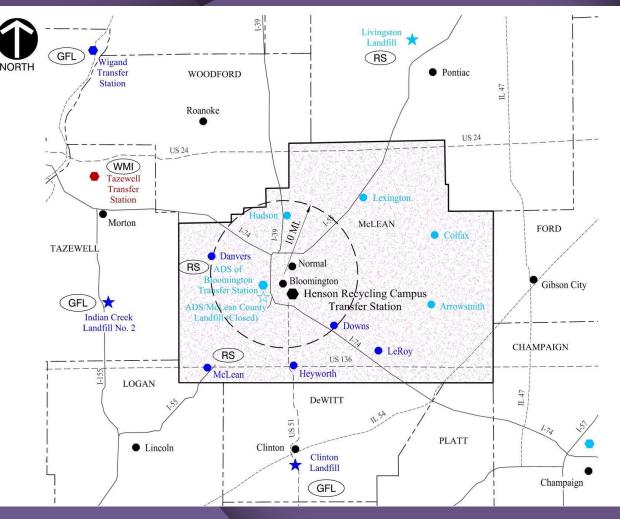
#### Waste Disposal System – Collection Services

- Republic Services and GFL provide contracted collections services for various rural municipalities
- Multiple communities do not contract the residential collection services to a particular company
- Multiple companies provide services to non-municipally contracted residential, commercial and industrial customers including Republic Services, GFL, Waste Management, LRS and others



## Waste Disposal System – Republic Services Bloomington Transfer Station

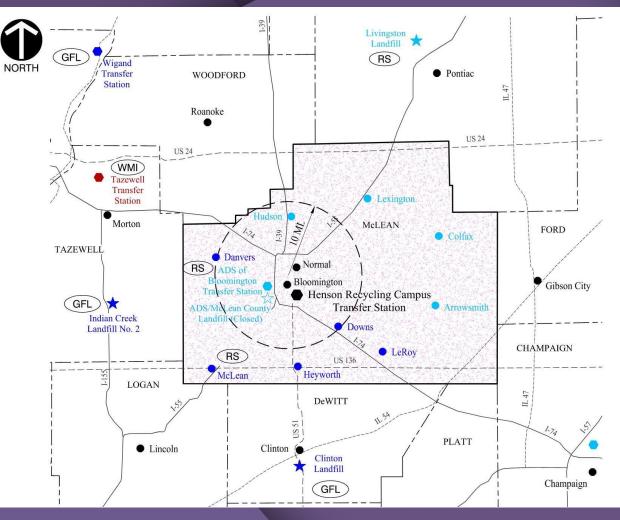
- CEC observations on March 30, 2023
  - Bloomington/ Normal approx. 90 tons (residential waste)
  - Republic Services approx. 160
    tons
  - LRS approx. 30 tons (known to be primarily residential waste from unincorporated and rural areas)
  - Other small haulers approx. 20 tons
  - GFL and WM did not use





## Waste Disposal System – Disposal Locations by Hauler

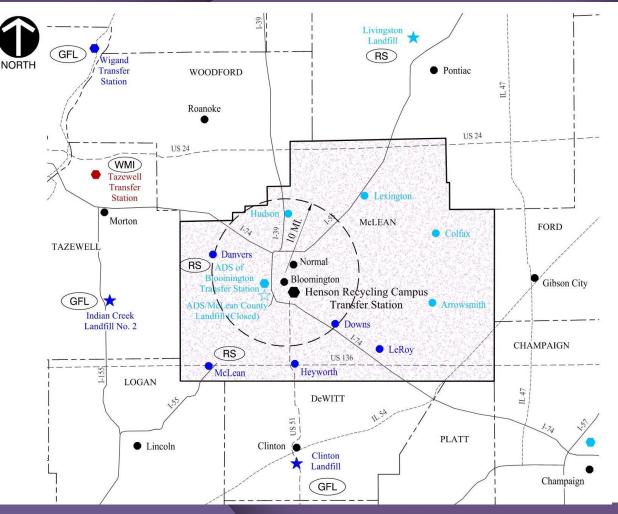
 Republic Services is hauling waste they collect primarily to their Bloomington Transfer Station and then all waste from the transfer station to their Livingston Landfill (i.e., vertically integrating) due to multiple inherent advantages, including cost control





## Waste Disposal System – Disposal Locations by Hauler (cont.)

- GFL is believed to be primarily direct hauling waste they collect to their own out-of-county landfills
- GFL precluded from advantages of transfer stations in the Service Area
  - Waste volume in 1 transfer trailer = 3-4 collection vehicles
  - Gas mileage of transfer trailer is more than 2 times greater than gas mileage for collection vehicle
  - Less wear and tear and quicker unloading (as recognized by Bloomington-Normal)





### Trends in the Waste Disposal System – Decreasing Number of Landfills

- Number of active landfills in Illinois has decreased by nearly 40% since 1995
- Streator Landfill in Livingston County closed in approx. 2008
- Republic Services McLean County Landfill closed in 2018



## Trends in the Waste Disposal System – Ongoing Consolidation

- Republic Services acquired Allied Waste Industries which acquired American Disposal Services of Illinois (ADS)
- Waste Management acquired Advanced Disposal, whose divestitures introduced GFL to Illinois market
- GFL acquired Peoria Disposal Company which owns Area Disposal



### Trends in the Waste Disposal System – Importance of Vertical Integration

- The MSW waste disposal system in the Service Area includes:
  - Driving the collection vehicle (CV) from the parked location to the collection route
  - Collecting the waste from the generation location (e.g., homes, businesses)
  - Driving the collection vehicle to and off-loading the MSW at a transfer station
  - Transferring the MSW into a transfer trailer (TT) [1 TT = 3 CV]
  - Transporting the MSW to a landfill [TT mpg >> CV mpg]
  - Disposing the waste at the landfill



### Trends in the Waste Disposal System – Importance of Vertical Integration (cont.)

- Most of the waste collected by the publicly traded companies is disposed in their own landfills
- Vertical integration has a number of advantages in the waste industry, including control of transfer and disposal pricing
- Hauling contracts predominantly include disposal in the pricing so, if a company is unable to establish their own disposal pricing, they are at a significant competitive disadvantage



# Example of Importance of Vertical Integration

- Collection companies in the Service Area must pay fees to Republic Services (which is a competitor), which reduces their margins and improves Republic Service's margins
- The inability for LRS and other companies in the Service Area to control all of their costs:
  - Creates a significant unknown cost factor when bidding on MSW hauling contracts
  - Creates hurdles for making capital investments
  - Causes operational inefficiencies



## Benefit 1 – Increase Competition and Transfer Capacity

- McLean County relies on a single transfer station to transport non-recyclable waste and MSW to out-of-county landfills, resulting in an effective monopoly.
- The HRC Transfer Station would provide additional capacity and competition to the single other transfer station in the county, which has been proven to control costs and improve services.



# Benefit 1 – Established Benefits of Competition

- The Federal Trade Commission Bureau of Competition advances United States government policies that protect consumers and promote competition. Their website states:
  - Competition in America is about price, selection, and service. It benefits consumers by keeping prices low and the quality and choice of goods and services high.
  - Competition also encourages businesses to offer new and better products.
  - Competition makes our economy work



## Benefit 1 – Example of Benefits of Increased Competition

- Prior to 2020, the WM Joliet Transfer Station was the only permitted MSW transfer station in Will County, and had a similar "monopoly" as the Republic Services Bloomington Transfer Station
- A new transfer station (the Moen Transfer Station or MTS) was proposed which is located approximately 1.25 miles from the WM Joliet Transfer Station
- WM vehemently opposed the local siting of the MTS



# Benefit 1 – Example of Benefits of Increased Competition (cont.)

- The Village of Rockdale recognized the same competition benefits discussed in this local siting application and approved the MTS
- Due to demand from outside haulers, the capacity of the transfer station has been increased from 350 tpd to 1,080 tpd, and observations by CEC indicate that the MTS regular accepts 600 to 800 tpd



## Benefit 1 – Another Example of Benefits of Increased Competition (cont.)

- The Waste Connections DuKane Transfer Station is the only permitted MSW transfer station in DuPage County and is located in West Chicago
- In February 2023, West Chicago approved the local siting of the West DuPage Recycling and Transfer Station or West DuPage RTS, which is operated by LRS and is located approximately 0.5 miles from the DuKane Transfer Station



# Benefit 1 – Another Example of Benefits of Increased Competition (cont.)

- The local siting application demonstrated that the West DuPage RTS will increase competition and available transfer capacity in the service area
- LRS bid on the West Chicago hauling contract, which was awarded to Waste Connections, but resulted in a five-year savings of approximately \$1.7M compared to the previous contract (or approximately \$300 for each single-family unit) and included additional services



# Trends in the Waste Disposal System -Recycling Challenges

- The McLean County recycling rate goal was raised from 25% to 40% in 2017
- In April 2016, "bulky" curbside waste, meaning furniture, remodeling materials, shingles, and similar larger trash items, began being sent to the Henson C&D recycling facility which pushed the overall recycling rate beyond 40% for the first time ever
- The significant impact of this single strategy greatly emphasized that a much more strategic and holistic approach is necessary



# Trends in the Waste Disposal System -Recycling Challenges

- Six key strategies are based on the identified challenges and system deficiencies: multi-family housing recycling, commercial recycling, C&D materials recycling, organics, household hazardous waste, and increased outreach and technical assistance
- An estimated 21% of C&D waste is currently recycled. Because of the cost savings and economic benefit, including lower tipping fees, C&D recycling should be increased by all means possible



# Trends in the Waste Disposal System -Recycling Challenges

- The following recycling rate goals were set that increase automatically every five years, independent of the success of reaching the earlier goal.
  - 2002 Recycling Rate Goal: 40% -- 40% rate exceeded in 2016 thru 2022
  - 2022 Recycling Rate Goal: 50%
  - 2027 Recycling Rate Goal: 60%
  - 2032 Recycling Rate Goal: 70%
  - 2037 Recycling Rate Goal: 80%



# Benefit 2 – Facilitate Recycling in the Service Area

- LRS will be able to better and more efficiently serve the recycling needs of its commercial and rural residential customers through the acceptance of single-stream and source-separated recyclables
- Infrastructure and operational improvements will provide efficiencies and synergies at the HRC that will increase the capacity and/or efficiency of C&D recycling



# Benefit 3 – Direct Benefits to McLean County

- The county solid waste management plan recognizes the need for additional funding due to the closure of the ADS/ McLean County Landfill, and that new waste transfer stations provide the possibility of a new revenue source through host fees
- LRS executed a host agreement with McLean County in November 2022 (Host Agreement)
- The Host Agreement between LRS and McLean County includes a host benefit fee of \$1.00 for each ton of waste transferred to a landfill or other disposal facility with 50% of the host fee to support recycling



# **Benefit 4 – Direct Benefits to Bloomington**

- The property owner of the HRC Transfer Station executed a utility agreement with the City of Bloomington (Utility Agreement) in January 2023 which contains provisions for:
  - Henson to construct utilities to serve the HRC Transfer
    Station
  - Economic benefits to be provided to Bloomington including a host benefit fee of \$1.00 for each ton of waste transferred to a landfill



#### Summary

- The HRC Transfer Station will increase competition and available transfer capacity in the service area, which has been clearly recognized to help control price increases and maintain a high quality of service in both the residential and commercial sectors
- The HRC Transfer Station will facilitate recycling in the service area by expanding the HRC service offerings, and increasing the capacity and/or efficiency of C&D recycling



#### Summary

- The HRC Transfer Station will provide direct benefits to McLean County as detailed in the Host Agreement with McLean County
- The HRC Transfer Station will provide direct benefits to the City of Bloomington as detailed in the Utility Agreement with Bloomington



#### **Opinion – Criterion 1**

 It is my professional opinion that the Henson Recycling Campus Transfer Station meets the requirements of Criterion 1 as it is "necessary to accommodate the waste needs of the area it is intended to serve."



#### Section 39.2 of the Act : Criterion 8

 "if the facility is to be located in a county where a county board has adopted a solid waste management plan consistent with the planning requirements of the Local Solid Waste Disposal Act or the Solid Waste Planning and Recycling Act, the facility is consistent with that plan"



# **County Solid Waste Planning**

- Each county in the State must adopt a twenty-year plan for managing the MSW generated within its boundaries
- The plan is required to include a recycling program designed to achieve at least a 25% recycling rate
- The plan is required to be updated and reviewed every five years



# McLean County SWMP - Background

- The original McLean County Solid Waste Management Plan (SWMP) was approved in 1992, with five-year updates approved in 1997, 2002, 2007, and 2012
- In 2017, the Ecology Action Center coordinated the process to create a new solid waste plan
- The new plan considered improvements in recycling strategies and systems, fluctuations in commodity markets, contemporary perspectives and behaviors by residents on waste issues, and new and emerging technologies for more efficient waste management



# McLean County SWMP – Background (cont.)

- The new plan, dated December 2017, was approved separately by the Town of Normal, the City of Bloomington and McLean County (2017 Twenty-Year Plan)
- The 2017 Twenty-Year Plan supersedes the previous SWMP and updates



# McLean County SWMP – Additional Revenue/ Funding

- SWMP The 2017 Twenty-Year Plan recognizes the need for additional funding, and that new waste transfer stations provide the possibility of a new revenue source through host fees
- Conclusion The HRC Transfer Station will provide additional funding to both McLean County and Bloomington through host fees from agreements with each entity



# McClean County SWMP – Increasing C&D Recycling

- SWMP The 2017 Twenty-Year Plan recognizes the benefits of increasing the amount of C&D waste that is recycled in the community
- Conclusion The HRC Transfer Station will provide efficiencies and synergies at the Henson Recycling Campus that will increase the capacity and/or efficiency of C&D recycling



## McLean County SWMP – Economic Benefits

- SWMP The 2017 Twenty-Year Plan recognizes that the establishment of additional waste transfer stations could have multiple economic benefits including increased competition resulting in more beneficial waste disposal rates
- Conclusion The HRC Transfer Station would provide competition to the single other transfer station in the county, which has been proven to control costs and improve services



# McLean County SWMP – Additional Transfer Station

- SWMP The Host Agreement between Henson and McLean County reiterates that the development of an additional transfer facility (if approved by the county and developed and operated in accordance with all applicable requirements) would be consistent with recommendations in the 2017 Twenty-Year Plan
- Conclusion The HRC Transfer Station would be an additional transfer station, and is proposed to be designed, constructed and operated in accordance with all applicable requirements



# **Opinion – Criterion 8**

 It is my professional opinion that the Henson Recycling Campus Transfer Station is consistent with the SWMP and all provisions in effect at the time of the submittal of this Siting Location Application

