Permit Modification at United Material Management of Leominster (UMML)

November 13, 2024

WASTE INNOVATIONS

Agenda

UMML Permit Modification Public Information Meeting

- Introduction & safety announcement
- About WIN Waste Innovations and UMML
- The state of waste in Massachusetts
- About the project
- Project benefits
- Impact studies completed
- Mitigation measures
- Alternative analysis
- Next steps
- Questions

United Material Management of Leominster

A Transfer Station in Leominster, Massachusetts

About WIN Waste Innovations

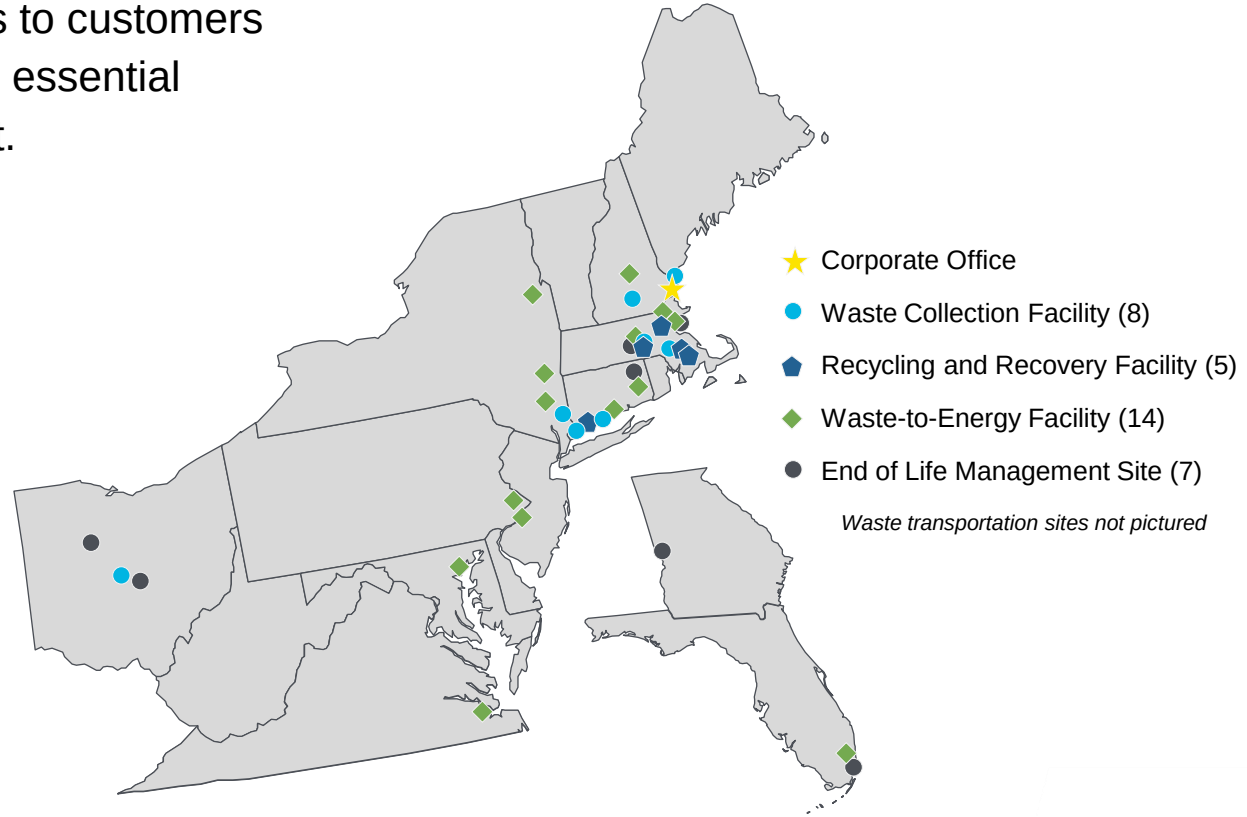
Sustainable Waste Handling

WIN Waste Innovations is a private waste management company committed to delivering essential waste management solutions to customers and communities across the Northeast and Ohio.

WIN Waste brings sustainable waste handling services to customers and renewable energy to the electric grid, providing an essential service while helping create a greener, healthier planet.

COMPANY STATS

- Generating **3.3M MWh** of renewable energy to the grid to power over **340K homes** annually
- Providing jobs for over **2,250 team members**
- Delivering essential services to over **109K customers** and managing **11M tons** of waste from residential households and businesses annually



WIN Waste in Massachusetts

14 Facilities in the Bay State

Massachusetts by the numbers

Construction & Demolition Recycling & Transfer Stations:
Brockton, Fitchburg, Leominster, Millbury, Stoughton, Taunton

Waste-to-Energy Facilities: Millbury, North Andover, Saugus

Materials Recovery Facility: Billerica

Hauling Sites: Worcester, New Bedford, Norton

Numbers based on annual operations

United Material Management of Leominster

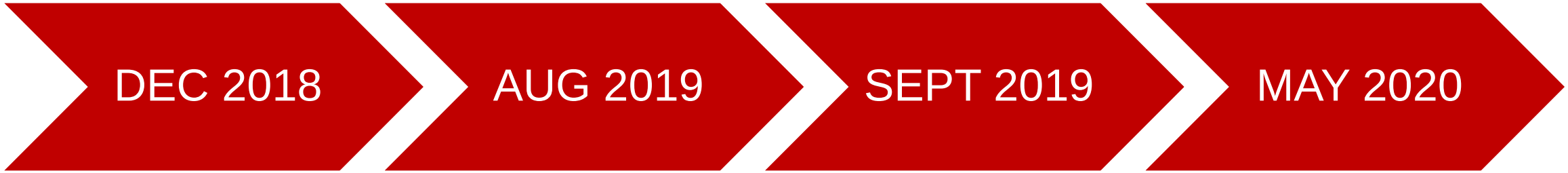
A Transfer Station in Leominster, Massachusetts

- State-of-the-art waste handling and transfer station with an integrated rail line
- Specializes in the recycling of construction & demolition (C&D) waste and the transfer of municipal solid waste (MSW) and residuals for responsible end disposal
- Recovers hundreds of tons of recyclables each month
- Recyclables are sent to recycling facilities for reuse in new products
- What cannot be recycled is transferred to its final disposal by rail – the lowest carbon mode of land transport

United Material Management of Leominster

Facility History

- Operations set in motion a host community fee with City of Leominster for mutual benefit
- Has operated efficiently and in full compliance of all permit requirements since inception



Leominster BOH issued Site Assignment approval

MassDEP issued Authorization to Construct

Construction commenced

Operation commenced

United Material Management of Leominster

City Benefits

- Pays City of Leominster approximately $70K each year via tax payments and host community royalty payments
  - $34K in taxes
  - $35K+ in host community royalties
- Provides ~25 local jobs
- Long-term, reliable partner: 10-year disposal agreement with the City of Leominster

Permit Modification at UMML to Increase TPD

About the Project

Permit modification increases region's critical disposal capacity

- In order to meet the growing demand for waste handling in Massachusetts, UMML is proposing a project to increase UMML's permitted daily capacity
- The facility is currently permitted to handle up to 1,000 TPD
- This project would increase daily capacity to 1,500 TPD
- The increase of daily capacity will not require any building expansion to accommodate the increase in daily handling
- Capacity increases are subject to Massachusetts Environmental Policy Act (MEPA), Massachusetts Department of Environmental Protection (MassDEP), and City of Leominster reviews/approvals

The State of Waste in Massachusetts

UMML Helps Meet Regional Demand, Growing Population, & Changing Waste Patterns

The Massachusetts 2030 Solid Waste Master Plan reports:

- Landfill capacity for MSW and C&D is projected to decline to virtually zero by the end of the next decade
- Most waste transfer facilities do not increase overall waste management capacity because they are not able to deliver waste beyond Massachusetts and our neighboring states, where disposal capacity is also limited
- Given the lack of future waste management capacity, exportation will be the primary method of waste disposal in Massachusetts

Given UMML's access to the rail, the facility can export waste to any facility in the U.S. that is also connected to the rail.

Project Benefits

Essential to the Local & Regional Waste Management Infrastructure

Meets local and regional demand:

- Recent and inevitable closures of large landfills in MA causing a disposal capacity shortage
- Statewide systems already struggling to meet demand
- Increasing capacity at existing UMML facility helps meet that demand

Integrated rail provides access to disposal outlets:

- Direct access to rail
- Unique ability to move waste where there is capacity
- Alleviates state's declining disposal capacity
- Region better served using low carbon rail transport for disposal instead of long-haul trucking

Project Benefits

Delivers a More Sustainable Waste Management Solution

Enhanced recycling:

- UMML recovers hundreds of tons of recyclables each month
- Recyclables are sent to recycling facilities for reuse in new products
- Conserves resources for future generations
- Increased permitted capacity could expand recycling quantities

Reduces greenhouse gas emissions (GHG):

- Consolidating waste before transport, utilizing rail over traditional trucking, and diverting waste from near-capacity landfills all reduce GHG emissions
- Moving waste by rail is four times more fuel efficient than trucks on a highway
- Rail transport has the lowest carbon footprint per ton of waste transported, reducing GHG emissions by up to 75%

Project Benefits

Delivers a More Sustainable Waste Management Solution

Existing facility located in an industrial zoned area:

- Existing UMML facility has adequate separation to any designated open space
- Outside of mapped habitats with designed separation from residential areas
- Allows the region to increase disposal capacity without the need for new construction or additional land space

Supports the local economy

- Generates revenue for the City of Leominster in the form of taxes and royalties
- Encourages local investment, and increases revenue for Leominster
- Location near source of waste reduces disposal costs for local waste haulers

Impact Studies Completed

Odor, Traffic, Noise, and Air Quality

Completed four comprehensive studies to determine the impact on human health and the environment

- The facility provides a local outlet for locally generated waste so that vehicles already travelling on local roads won't have to travel as far to dispose/recycle waste materials, which saves fuel and reduces emissions
- The only potential impacts are expected to be limited to that associated with traffic, mainly at the facility with minimal impact to the surrounding areas

Impact Studies Completed

Odor Study

Odor study results

- Odor modeling analyses completed with and without additional odor controls in place and for worst-case scenarios
- Under both scenarios modelling determined no significant adverse impact to nearby receptors
- The facility has operational controls in place to control potential odor including a misting system, overhead doors, first in - first out policy, limiting storage of MSW, multiple hauling methods, etc.

Impact Studies Completed

Traffic Study

Traffic study results

- 500 TPD increase with active rail service generates an average of 55 trucks entering and exiting
  - Approximately 5 trucks per hour
- Projected traffic in the future, in terms of intersection function and wait times, is the same with or without the added trucks for this project
- Study concluded there will be minimal impact to overall traffic conditions and the proposed capacity increase will not constitute a danger to public health, safety or the environment which taking into consideration traffic congestion, pedestrian and vehicular safety, etc.

For real time comparison, New Lancaster Road has 16,000, Route 12 has 30,000 and Interstate 190 has 53,000 vehicles per day.

Impact Studies Completed

Noise Study

Noise study results

- Future maximum sound levels were modeled at 22 locations surrounding the facility
- Modeling results demonstrate the facility complies with the MassDEP Noise Policy
- This study demonstrated that the facility with the proposed increase in throughput, pursuant to 310 CMR 16.40(4)(g), will not cause a nuisance sound condition which would constitute a danger to the public health, safety, or the environment

Impact Studies Completed

Air Quality Study

Air quality study results

- The UMML facility meets, and is well below, the U.S. EPA's National Ambient Air Quality Standards for both coarse and fine particulate matter (PM_{10} & $PM_{2.5}$)
- In February 2024, the U.S. EPA implemented lower National Ambient Air Quality Standards for fine particulate matter (Not yet implemented in Massachusetts)
- UMML facility is ready and able to meet those lower standards when the new regulations are implemented in Massachusetts
- The dispersion modeling analysis of the UMML facility concludes that there will be no adverse air quality effects on the closest neighbors to the site with the increase in tonnage proposed

Best Management Practices

We're committed to environmental compliance and operational excellence under the strict regulations of the MassDEP.

1. Enclosing all tipping, handling, and loading operations within the handling building.
2. Utilizing a misting system in the handling building to control dust and odor.
3. Conducting daily cleanups and sweeping.
4. Using covered transportation for trucks/trailers with solid tarps and railcars using Posi Shell.
5. Applying first in/first out procedures to reduce the time municipal solid waste (MSW) remains on site, minimizing the potential for nuisance conditions.
6. Using two vehicle scales to increase efficiency and minimize time trucks are on site.
7. Railcar inspection and repair as needed prior to use.

Alternatives Analysis

Alternative – No tonnage increase at UMML

- Excess MSW or C&D beyond current daily capacity would need to be transported to other disposal outlets via long-haul trucking
- Will place even more pressure on statewide disposal outlets already struggling to meet local and regional disposal demands
- Current landfills in state are reaching capacity and closure is inevitable
  - Bourne (2028), Nantucket (2028), Crapo Hill (2029), Middleborough (2031), Fitchburg-Westminster (2032), Sturbridge (unknown)
- Most landfills in the state have already closed
- Increased haul distances to reach disposal outlets will result in increased air pollution

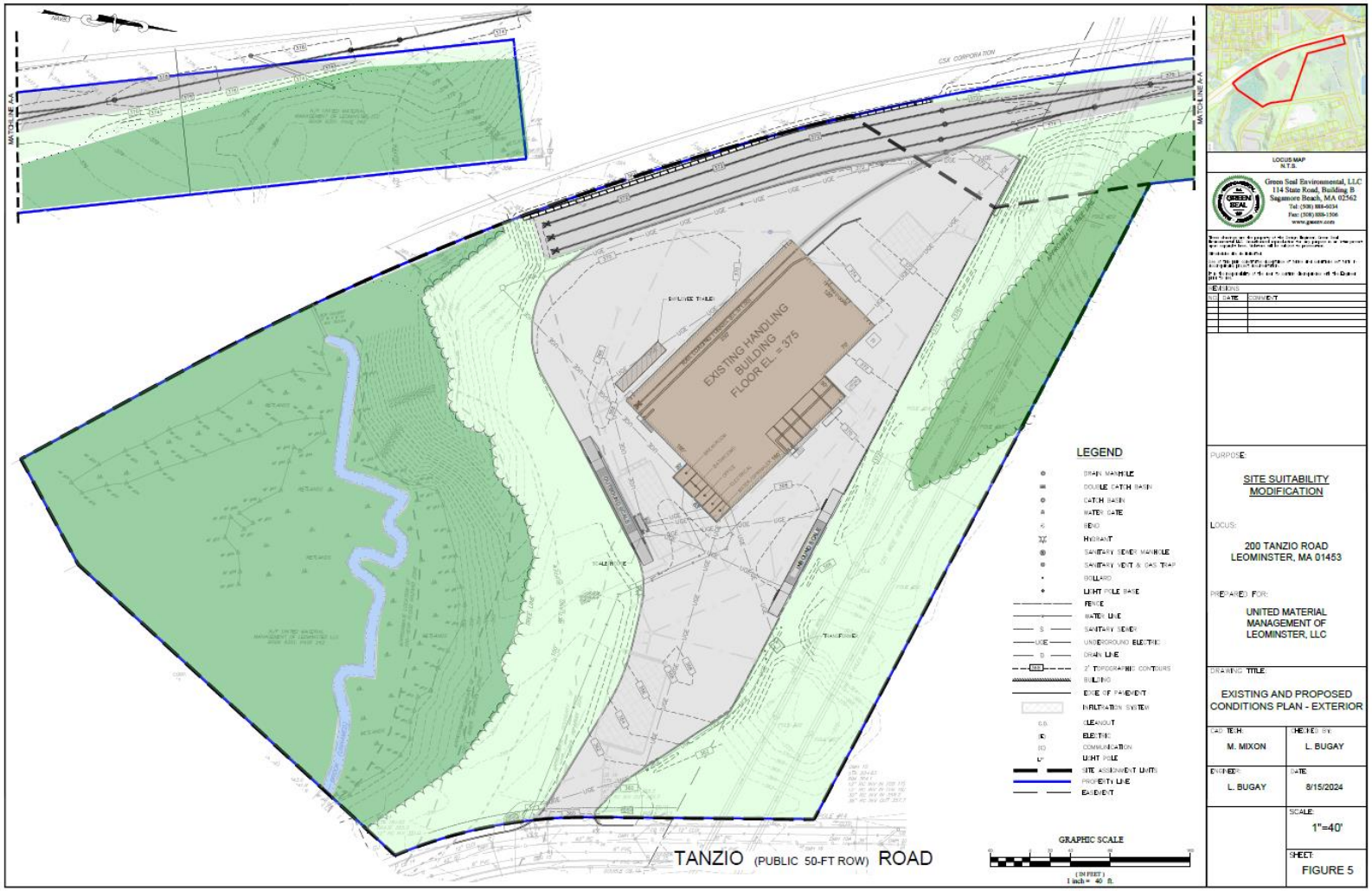
Tonnage Increase at Existing UMML Remains the Best Option

Application Process

- September 2024: submitted an Environmental Notification Form (ENF) to the Secretary of Energy & Environmental Affairs, which initiated the formal MEPA review
- The Secretary of Energy & Environmental Affairs published public notice of the ENF in the Environmental Monitor
- November 13: A site visit and/or remote consultation session on the project scheduled
- November 29: MEPA public comment deadline
- All persons wishing to comment on the project, or to be notified of a site visit and/or remote consultation session, can email MEPA@mass.gov or the MEPA analyst listed in the Environmental Monitor

Questions?

Site Plan


EXISTING HANDLING BUILDING FLOOR EL.= 375
TANZIO (PUBLIC 50-FT ROW) ROAD
LEGEND
GRAPHIC SCALE
LOCUS MAP
N.T.S.
Green Seal Environmental, LLC
114 State Road, Building B
Sagamore Beach, MA 02562
PURPOSE:
SITE SUITABILITY MODIFICATION
LOCUS:
200 TANZIO ROAD
LEOMINSTER, MA 01453
PREPARED FOR:
UNITED MATERIAL MANAGEMENT OF LEOMINSTER, LLC
DRAWING TITLE:
EXISTING AND PROPOSED CONDITIONS PLAN - EXTERIOR
CAD TECH:
M. MIXON
DRAWN BY:
L. BUGAY
ENGINEER:
L. BUGAY
DATE:
8/15/2024
SCALE:
1"=40'
SHEET:
FIGURE 5