



Department of
Environmental
Conservation

Li-Cycle Inc
Boulter Storage Facility
Eastman Business Park – Spoke 2 Facility
Waste Management Procedures

Matthew Gillette, PE
NYSDEC Region 8 Division of Materials Management/RCRA

September 14, 2021

Boulter Storage Facility

Town of Webster, Monroe County
September 2020

Industrial Park
Rural Setting

~37,000 SF Storage
~1/3 of Existing Space



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Boulder Storage Facility

- Receive and store lithium-ion batteries/components
 - 5,000 mt/year based on Spoke 2 capacity
- Ship lithium-ion batteries to Eastman Business Park location for processing
- Receive products from Eastman Business Park location
- Large Quantity Handler of Universal Waste
 - Notification and EPA ID
 - Storage < 1 year
 - Appropriate Containers
 - Proper Labeling
 - Spill Management
 - Training – UW Management and Emergency Procedure
 - Transport of UW to Handler, Destination, Export
 - Records – Three years all UW shipments sent and received



Battery Materials Accepted

Li-Ion Batteries and Battery Components from approved customers US/Canada

- Small Format – consumer electronics/tools
- Large Format – vehicles and high voltage energy storage
- Unassembled battery components/manufacturing scrap

Batteries are accepted in the following containers:

- 55 gallon open top steel drums – small format
- Cubic Yard Gaylord Boxes - components
- Shrink wrapped/palletized - components
- Manufacturer-specific containers – small/large format



Materials Pre-Acceptance Procedures

Approved Supplier Prior to Shipment

- Shipping Checklist
 - SDS/Material Description
 - Manufacturer Instructions
 - Documentation/photos of container and interior packaging
 - Proper Labeling
 - Container Lining/packing materials
 - Battery Packaging



Materials Acceptance Procedures

- o Containers Screened for Condition/IR Thermometer
- o Containers Inspected for Proper Shipping Materials/Labels
- o Shipment Logged into Inventory Management System/Weighed
- o Contents Compared to Shipping Documents

Rejected Materials

- o Materials are not Lithium-Ion Batteries/Components
- o Rejected Back to Supplier, Documented in Report



Materials Storage Procedures

Full-Time Warehouse Staffing

Daily Inspections of Containers (Visual and Temperature)

- o Documentation of Inspections
- o Single Level Storage Currently/No Racking
- o Palletized Drums/Gaylord with Aisle Space
- o Damaged/At Risk Materials Isolated



Emergency Response Procedures

Initial and Annual Facility Training Plan

- o UW Requirements, Spill Response, Emergency (Fire)

Emergency Response

- o Primary Emergency Coordinator
- o Webster Volunteer Fire Department

Fire Protection

- o Fire Detection System
- o Alarm Systems
- o Fire Suppression (Sprinklers) Throughout Facility
- o Available Class ABC and Class D Fire Extinguishers
- o Access to Water for Submerging Batteries



Eastman Business Park – Spoke 2 Facility

March 2021

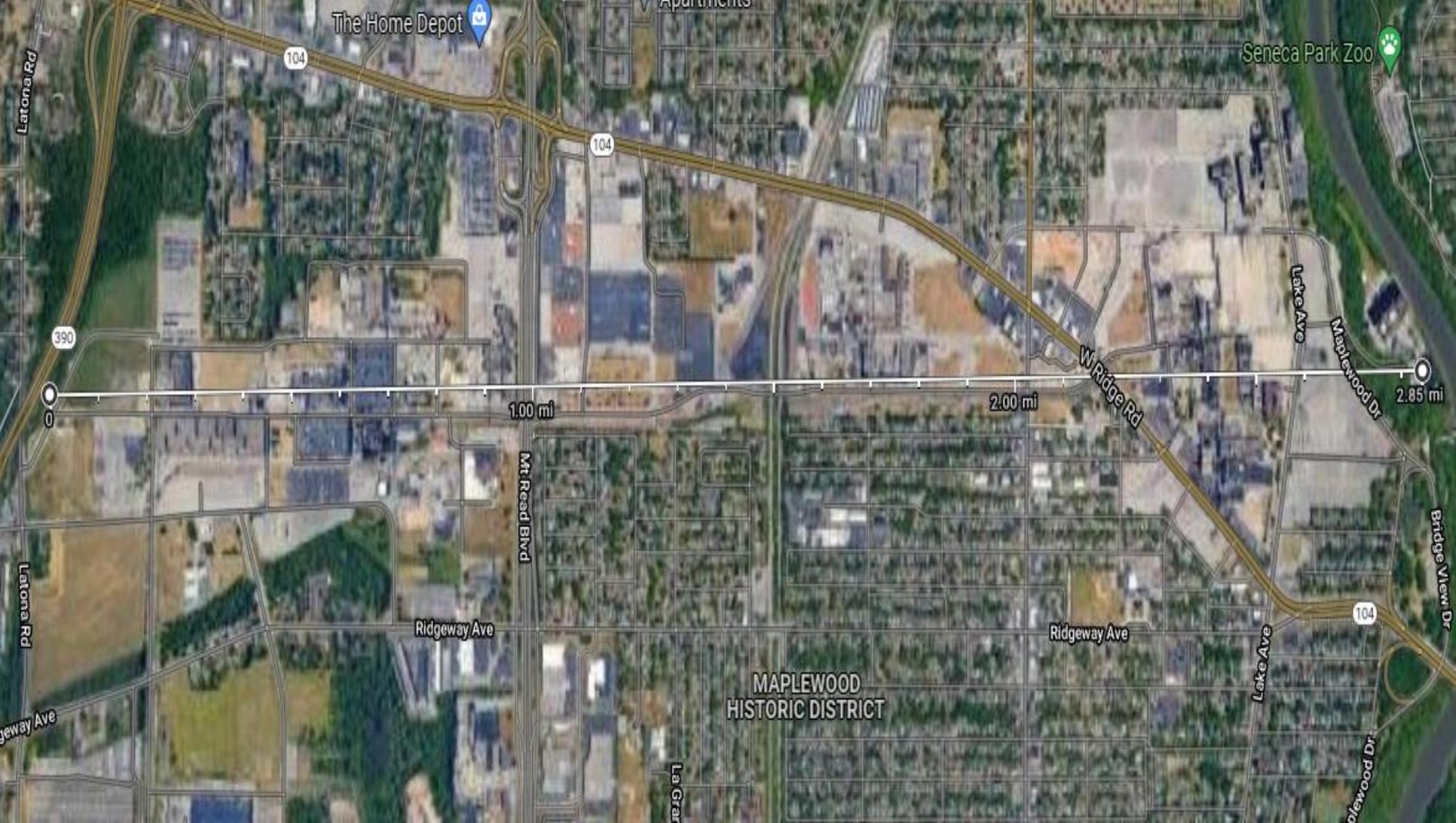
Town of Greece, Monroe County

Large Industrial Park

Residential to North



Department of
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Conservation



The Home Depot

Seneca Park Zoo

104

390

1.00 mi

2.00 mi

2.85 mi

MAPLEWOOD
HISTORIC DISTRICT

Latona Rd

Latona Rd

Jewey Ave

Mt. Read Blvd

Ridgeway Ave

Ridgeway Ave

Lake Ave

Lake Ave

Maplewood Dr

104

Bridge View Dr

Maplewood Dr

EBP Spoke 2 Facility

- Receive Lithium-Ion Batteries from Boulder Storage Location
- Receive Hazardous Waste Directly – Damaged Batteries
- Processing of Lithium-Ion Batteries for Material Recovery – 5,000 mt/year
- Universal Waste Destination Facility
 - Notification and EPA ID
 - Manifesting, Recordkeeping, Reporting
 - Permitting – Part 373
 - No Storage Prior to Processing (Same shift, 1-3 days)
 - Management of Other Wastes – Part 360 Solid Wastes



Materials Pre-Acceptance/Acceptance Procedures

Approved Supplier Prior to Shipment – Damaged Batteries

- o Shipping Checklist
- o Hazardous Waste Manifest
- o Shipment Screening
- o Damaged Battery Shipments Processed Upon Receipt
- o Rejected Materials Follow Hazardous Waste Manifest Procedures



Materials Processing Procedures

Materials Manually Removed from Containers

- o Non Lithium-Ion Battery Materials Removed

Pb Acid, NiCd, NiMH, Li Metal, Consumer Electronics

- o Rejected Materials Returned per Shipment

Process is Closed Loop Wet Crushing

- o Plastics, Foils, Black Mass
- o Gravity Feed to Supersacks



Emergency Response Procedures

Initial and Annual Facility Training Plan

- o UW Requirements, Spill Response, Emergency (Fire)

Emergency Response

- o Primary Emergency Coordinator
- o Eastman Business Park Fire Department
- o Town of Greece/City of Rochester



Fire Protection

- o Fire Detection System
- o Alarm Systems
- o Fire Suppression (Sprinklers) Throughout Facility
- o Available Class ABC and Class D Fire Extinguishers
- o Access to Water for Submerging Batteries



Moving Forward

- o Morris Industrial Fire – June 29-30, 2021
 - 184,000 lbs of Li Batteries, Residential Evacuations
 - [Site Profile - Morris Lithium Battery Fire - EPA OSC Response](#)
 - o Li-Cycle Response
- o Hub Operations
 - o Hydrometallurgical Recovery of Metals - EBP
- o Town of Greece Bi-Weekly Meetings
 - o Greece, NYSDEC, Li-Cycle/Consultant
- o International Fire Code - Lithium Battery Storage





Thank You

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