ENTSORGA West Virginia

A BioHiTech Company

(NASDAQ: BHTG)
2020

BioHiTech Global

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- BioHiTech Global controls the licensing and development of the patented High Efficiency Biological Treatment (HEBioT™) technology in 11 northeast states
- BioHiTech Global is actively engaged in the development and implementation of technologies focused on achieving landfill diversion, production of an alternative fuel, and reclamation of recyclable materials.
- The 1st US production facility (Entsorga West Virginia) is in the commissioning phase in Martinsburg, Berkeley County, West Virginia
- Entsorga Italia was founded in 1997 and is the owner and licensor of the HEBioT™ technology
  - Successfully designed and built 11 Mechanical Biological Treatment (MBT) facilities throughout the UK, Europe, Africa and Asia.

HEBioT/MBT Overview

- Entsorga Italia has developed a patented technology process, HEBioT™, that uses proprietary technologies to process residential and commercial waste into high quality solid recovered fuel (SRF).
- HEBioT™ takes the traditional MBT process several steps further by incorporating a range of existing technologies and combining them with unique innovations that improve treatment, automate processes, reduce processing times, and enhance recycling and recovery of materials.
- The HEBioT™ system is recognized as a market leader in terms of:
  - Landfill diversion rates / recyclable recovery
  - Low staffing levels / high mechanical automation
  - Low operating cost
  - Low maintenance costs
  - Quality of the Solid Recovered Fuel produced
- HEBioT™ is a proven technology currently being used in 11 facilities throughout the world with an installed annual capacity of over 1 million tonnes.

HEBioT Technology Locations

The Deco Plant, Cheti, Italy

Plant throughput	296,920 tonnes of MSW per year
SRF Produced	130,680 tonnes per year

1st United States Facility

Began receiving waste	March 29, 2019
First Fuel	May 10, 2019
Designed Capacity	110,000 tons per year

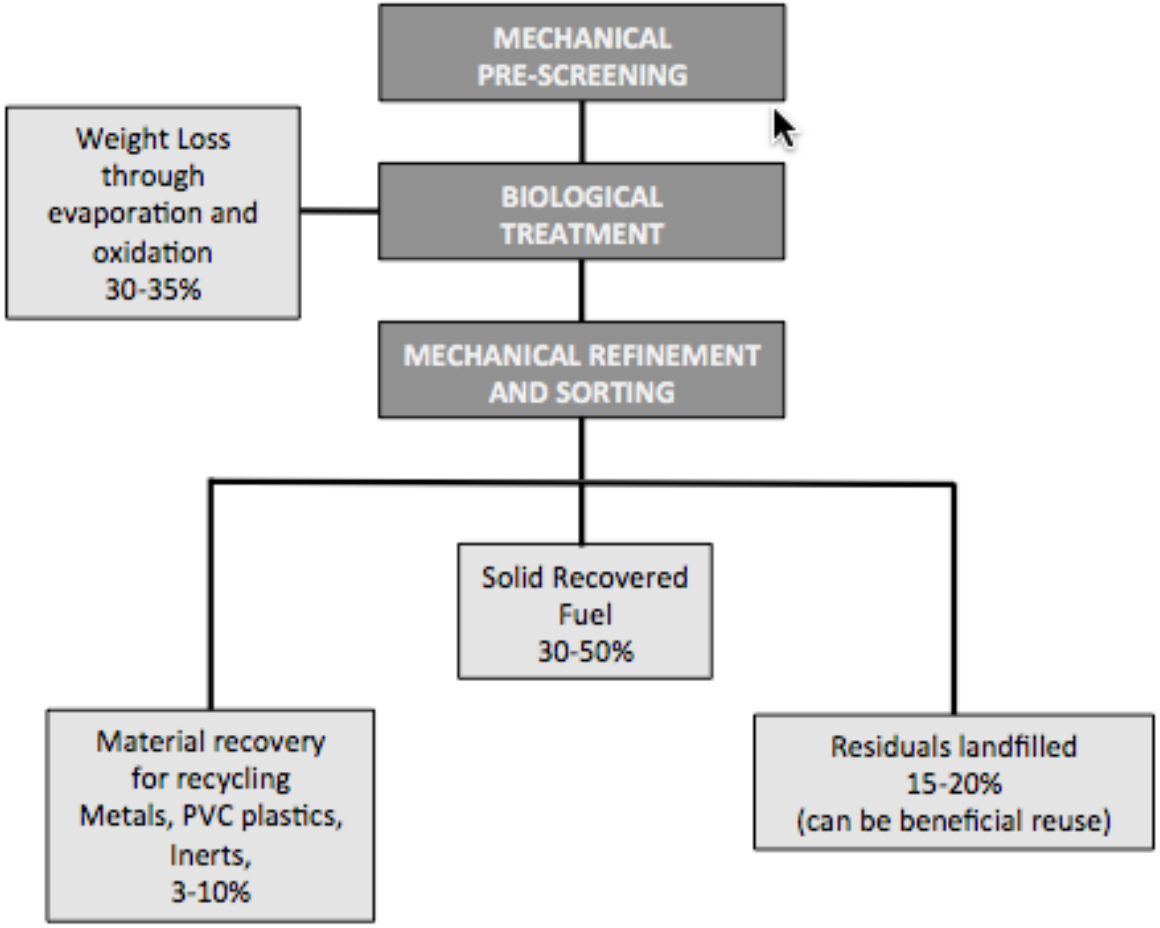
HEBioT Goals

- Reprocess to create a valuable commodity (SRF)
- Diverting waste from landfills
- Reclaim usable metals
- Create an alternative to fossil fuel

What HEBioT Does

- Utilizes mechanical and biological treatments to convert municipal solid waste into an EPA recognized alternative renewable fuel called Solid Recovered Fuel (SRF)
- SRF is marketed to off-site industrial and utility users
- Does not combust the waste in the manufacturing process
- Uses a combination of automated sorting equipment, enhanced biological composting, and mechanical refinement

The Mechanical Biological Process



HEBioT Benefits

- Reduced carbon footprint
- Produce an EPA recognized alternative Solid Recovered Fuel
- High calorific value – one ton of coal is equivalent to approximately one and a half tons of SRF
- Can be compacted, shipped loose, or baled depending on the requirements of the off-take partner
- Can be transported via truck, rail, or water

Sustainable, Renewable Fuel

Off-Take Partners

- Fossil fuel burning industries are located throughout the United States
  - Cement Industry
  - Lime Kilns
  - Co-generation power plants
  - Steel mills

Who is the Technology Right For

Counties, States & Municipalities

- No landfill capacity.
- Facing end-of-life landfill issues.
- Achieves a more sustainable and modern waste management system.
- Increases recycling rates.
- Creates construction and operating jobs.
- Improved working conditions for local workers
    - Fully automated process
    - No exposure to foul odors
    - No worker exposure to waste

Private Landfill Operators

- With limited landfill capacity.
- Need to extend the existing life of landfills.
- Facing end-of-life landfill issues.

Hauling Companies

- Seeking an alternative to landfilling.
- Differentiates their service offerings.
- Approaches a zero landfill alternative.

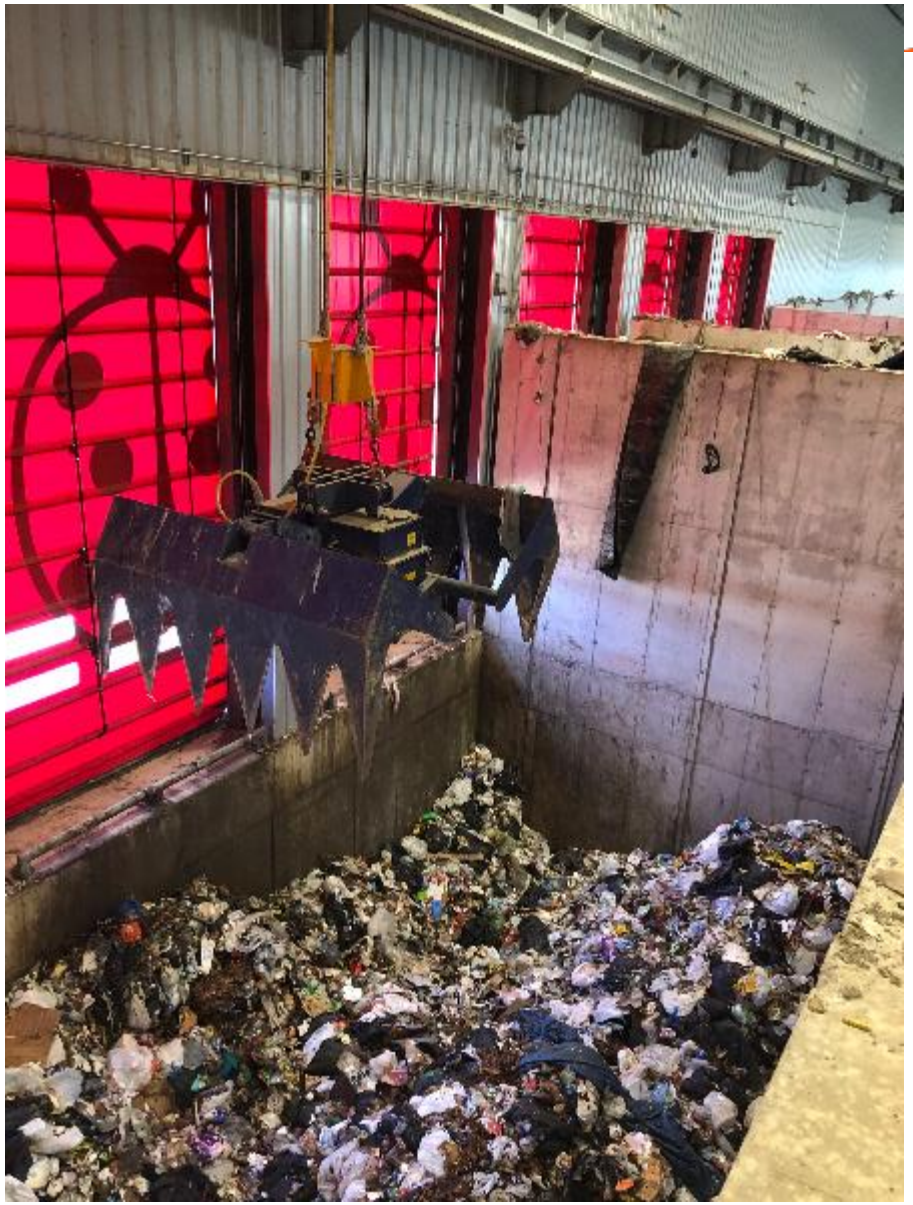
EWV – How it came to be

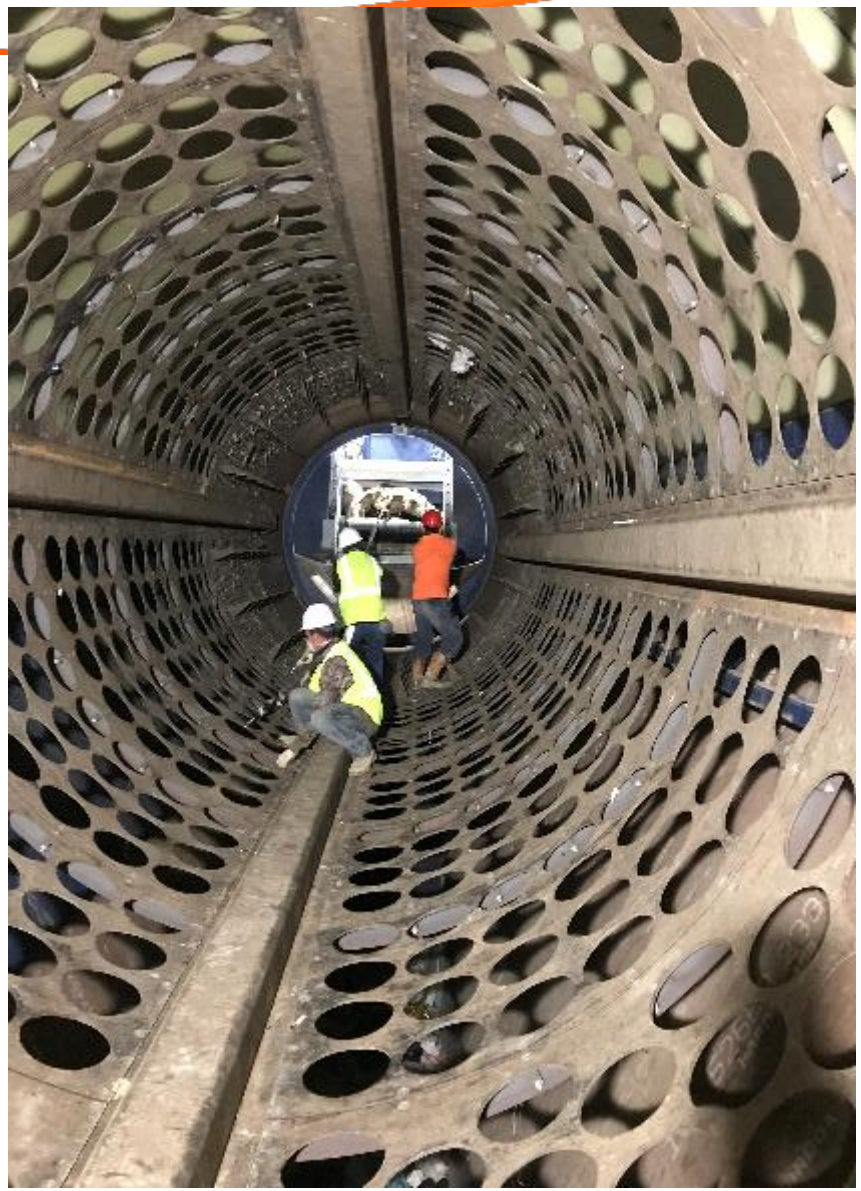
- Entsorga Italia wanted to bring the successful technology to the US and made contact with the Berkeley County Solid Waste Authority (BCSWA).
- Having a local authority as a champion makes a big difference in getting the support for permitting
- Permitting anything for the first time is a challenge, but an opportunity to educate regulators and the public
- US EPA Comfort Letter – a three-year process which resulted in a letter that takes the cement industry out of the Commercial and Industrial Waste Incinerator rule.
- Construction woes and successes

A Day in the Life

RECEPTION

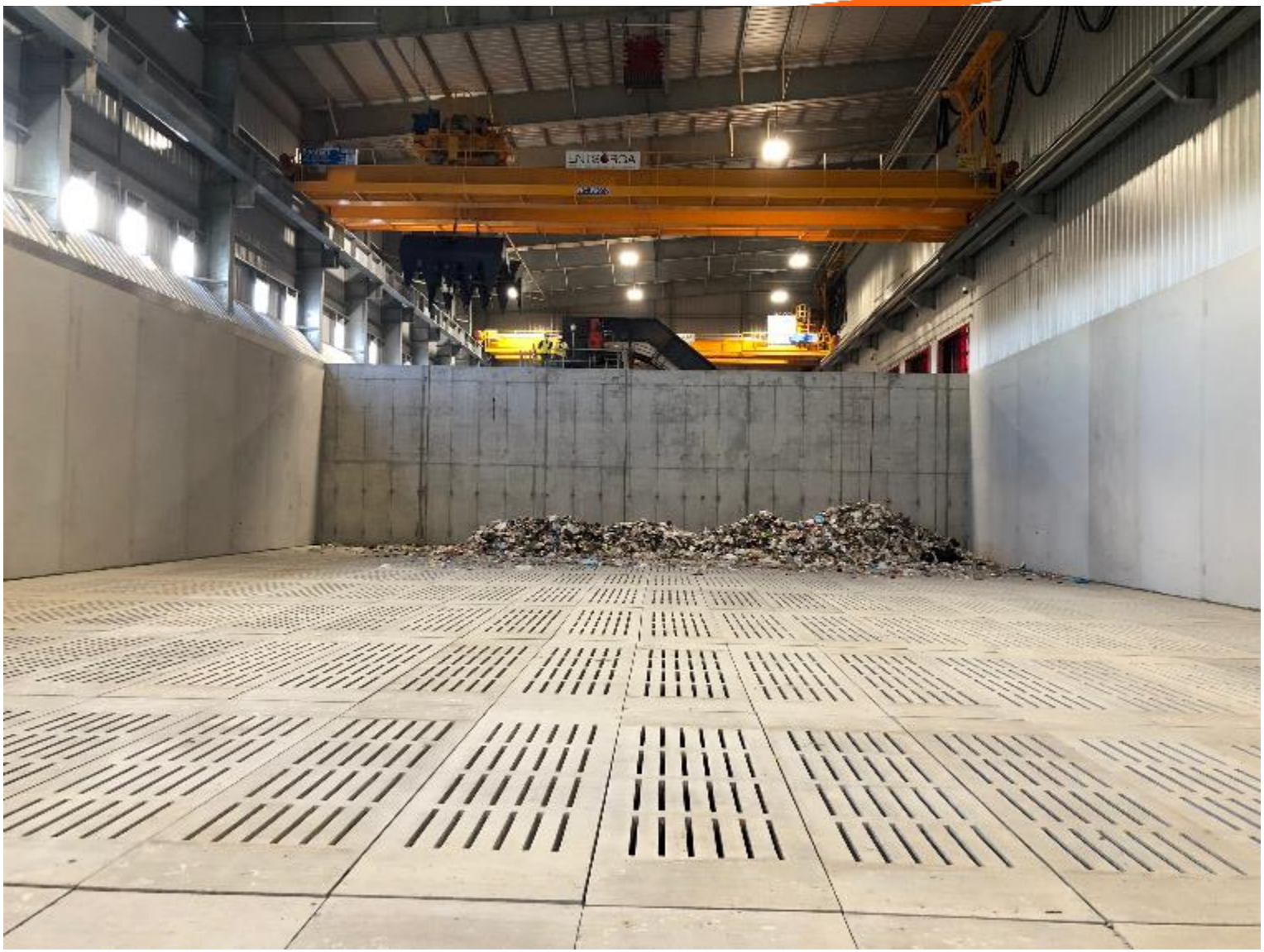
Pretreatment



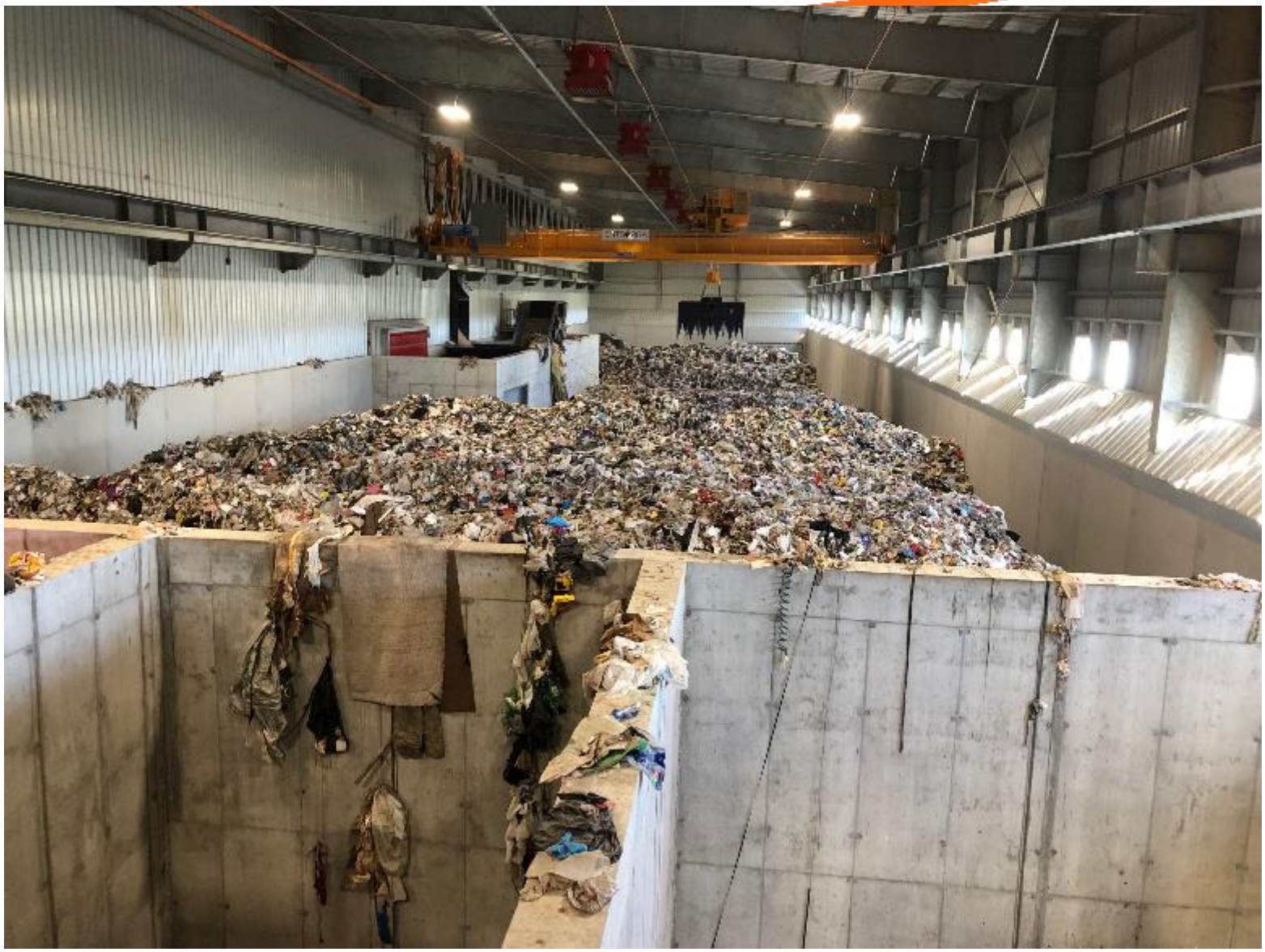


Trommel/Sorting

BioOxidation Hall
BEFORE



Biooxidation NOW



BioFilter

Refinement

Refinement

The Falcon

SRF LOADOUT

Baghouse

First Year Operational Data

- Incoming MSW
  - Apple Valley Waste
  - Republic Waste Services
  - City of Shepherdstown
  - Shepherd University
- Incoming Commercial and Industrial
  - HUB Labels – a Zero Waste Company
  - Volvo Manufacturing – A Zero Waste Company
  - Ecolabs
  - Land O Lakes Butter
  - Apple Valley Waste Material Recovery Facility Residuals
  - Berkeley County Recycling Residuals

Lessons Learned

- Permitting Process
  - 18-24 months for permitting with local and state agencies.
  - Being the 1st creates challenges and opportunities
- Construction
  - The good, the not so good, and the ugly
  - European vs US approaches to construction
- Estimated costs

Operational Lessons Learned

- US waste stream is very different than European waste stream
  - What are the impacts?
    - Moisture at reception and leachate collection
    - Timing in the biooxidation hall – changes production timing
    - Higher metals content
    - Higher PVC content

- Process changes – simple things can make the biggest improvements
  - Pretreatment
  - Reception
  - Sampling Procedures/Equipment


DO YOU HAVE ANY QUESTIONS?
I'D LOVE TO HEAR THEM!
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