



SOUTH WAKE LANDFILL  
WAKE COUNTY BOARD OF  
COMMISSIONERS MEETING – 3/9/20

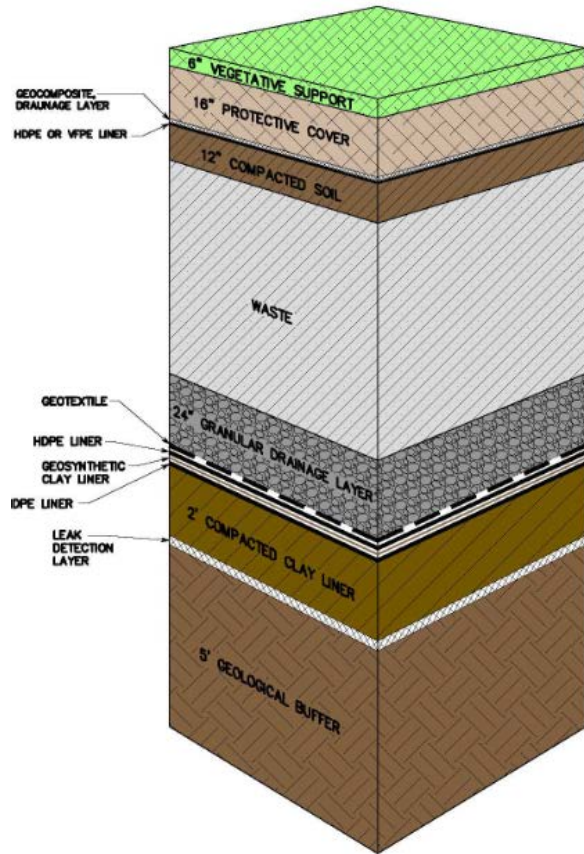
## INTRODUCTIONS

Travis Hitchcock – Regional  
Vice President - Waste  
Industries/GFL

Ben Habets – Area Vice  
President – Waste  
Industries/GFL

Bryan Wuester – Corporate  
Landfill Director – Waste  
Industries/GFL

# GFL CONTRACTUAL RESPONSIBILITIES



## Contracted to design, build, operate and maintain landfill

- New cell design and construction
- Quality and assurance of design contract
- Receiving and placing waste daily
- Site compliance - leachate, storm water, erosion control

## Leachate management

- Design and construct leachate collection system
- Treatment and disposal through WWTP

## Work face operations and daily closure

- Waste receiving, placement and compaction
- Closure through forms of alternate daily cover (ADC)
- Erosion control and general site maintenance

# SITE COMPLIANCE



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Site is regularly inspected by NC DWM and DEQ

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No Notice of Violations issued



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Site regularly commented by visitors/inspectors to be one of the best run/cleanest/most organized in the state

# COMMUNITY INVOLVEMENT AND OUTREACH EFFORTS

- On December 12<sup>th</sup>, members of our Landfill Operations group participated in a food distribution to those in need at the Holly Springs Food Cupboard
- In addition to volunteering, we presented HS Food Cupboard with a Full Circle monetary donation of \$5,500
- GFL is actively participating with County Staff on community communications such as:
  - Newsletters
  - Citizens Committee Meetings
  - Surrounding HOA Board Meetings
  - Vendor/Resource suggestions from the Town of Holly Springs



## South Wake LF Odor Mitigation Timing

Since February of 2008, GFL has utilized posi shell as our primary form of ADC (Alternate Daily Cover)

August of 2017 – GFL and Wake County partnered and purchased an Odor Vaporizing System

April of 2019 – GFL begins adding Odor Neutralizing product to posi shell application

November of 2019 – GFL started a pilot with a foaming product called RUSMAR as another form of ADC

January of 2020 – GFL added a misting applicator to its waste compactor to apply odor neutralizer on the waste

## What is Posi-shell?



Posi-shell is a common Alternative Daily Cover used by landfills all over the country.



Comprised of a bentonite based material mixed with water and the recycled paint received thru Wake Counties HHW program.



In April of 2019 we began adding an odor mitigation element to the Posi-shell



Used due to recycled paint use and long term landfill benefits

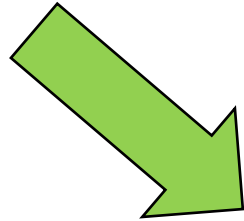


Fairly costly with limited odor mitigation





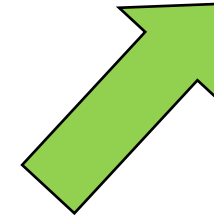
Product and Mixer



Applicator



Applied to working face





## Rusmar Foam Cover



## Compactor Misting Applicator



# GFL ADC/ODOR MITIGATION INVESTMENT OVERVIEW

## 2017

- Vapor System implementation - \$50k+ annually

## 2018

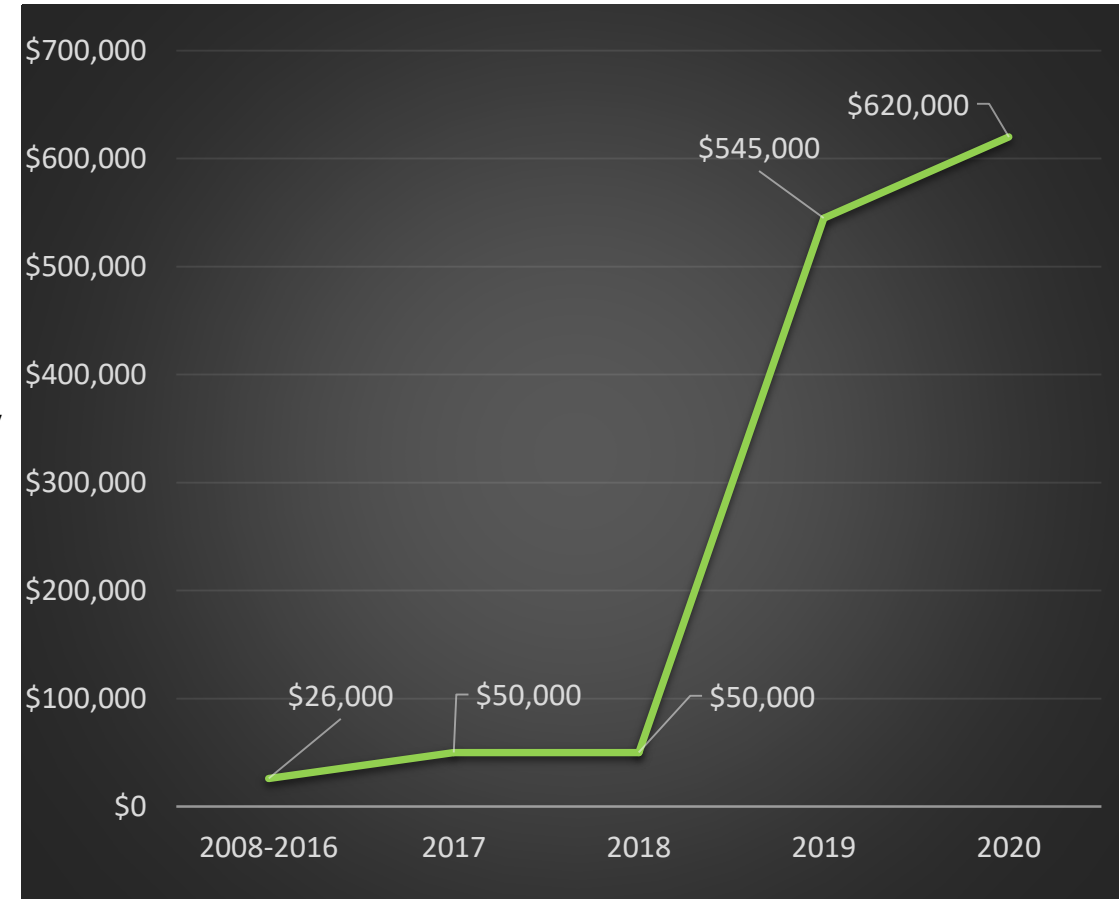
- Vapor System - \$50k+ annually

## 2019

- Vapor system - \$50k+ annually
- Odor Neutralizer added to posi shell - \$55k annually
- Rusmar Foam - \$250k+ annually
- Gas well leachate management - \$190k annually

## 2020 and beyond

- Soil Cover and Tarp deployment - \$350k annually
- Compactor Odor Misting Applicator - \$30k annually
- Vent/solar flaring application - \$50k annually
- Misting applicator on compactor - \$30k annually
- Gas well leachate management - \$190k annually





Collaborative development between GFL and Wake County on an Odor Management Plan

Revised Closure and Opening Procedures

Solar Gas Flare Installation

Other advanced forms of odor mitigation

Geo-membrane Temporary Closure Evaluation

# Odor Management Plan Initiatives

Optimizing closure  
efforts in the evening

Minimize the amount of  
working area of  
exposed waste with  
purchasing additional  
assets to move dirt

GFL adding additional  
staff to assist with dirt  
movement and  
application

Continue to evaluate  
new approaches to  
landfill design and  
operation that may  
assist with odor  
abatement



Utilization of Dirt to  
minimize exposed  
waste footprint



Tarp  
Application on  
less than half  
an acre of  
remaining  
exposed waste  
footprint

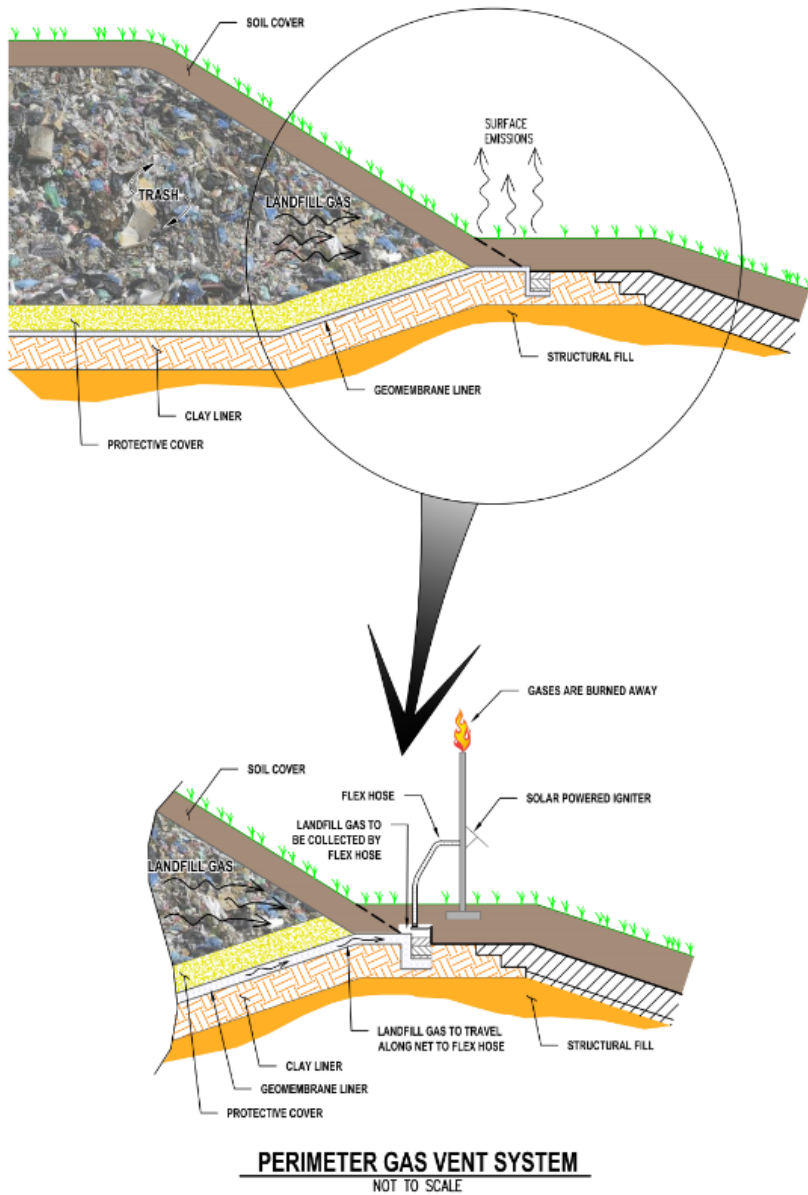




# TARPOMATIC WITH ODOR NEUTRALIZING SYSTEM



# Solar Flare - Gas Collection System



GFL is constructing this system to be utilized to assist with new cell construction. Additionally GFL has committed to construct additional system to assist with other areas at the site

Can assist with capturing escaping gas in areas where gas collection system is inefficient

System can be relocated around site based on needs



THANK YOU

ANY QUESTIONS?



# Geo-Membrane Caps

- Temporary Caps utilize an exposed geo-membrane liner to encapsulate and/or cover buried waste
- Benefits include:
  - Leachate Minimization
  - Odor and Erosion Control
  - Can increase Gas Quality

