

# Monmouth County Reclamation Center

## Progress Report on Odor Control Measures



**Public Meeting - May 13, 2019**  
**Tinton Falls Municipal Building**



# Odor Sources at Landfills

## Waste Composition

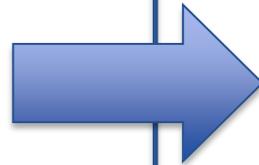
- Household waste
- Commercial waste

## Landfill Environment

- Biological decay
- Environmental factors
- Operations
  - Landfill Gas
  - Leachate
  - Working face
- Waste Processing

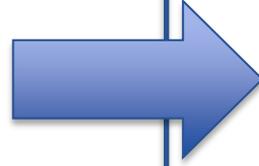
# Sequence of Events

Odor



- Significant rainfalls
- Increased infiltration
- Inefficient LFG system
  - Leachate seeps
  - Slope repair

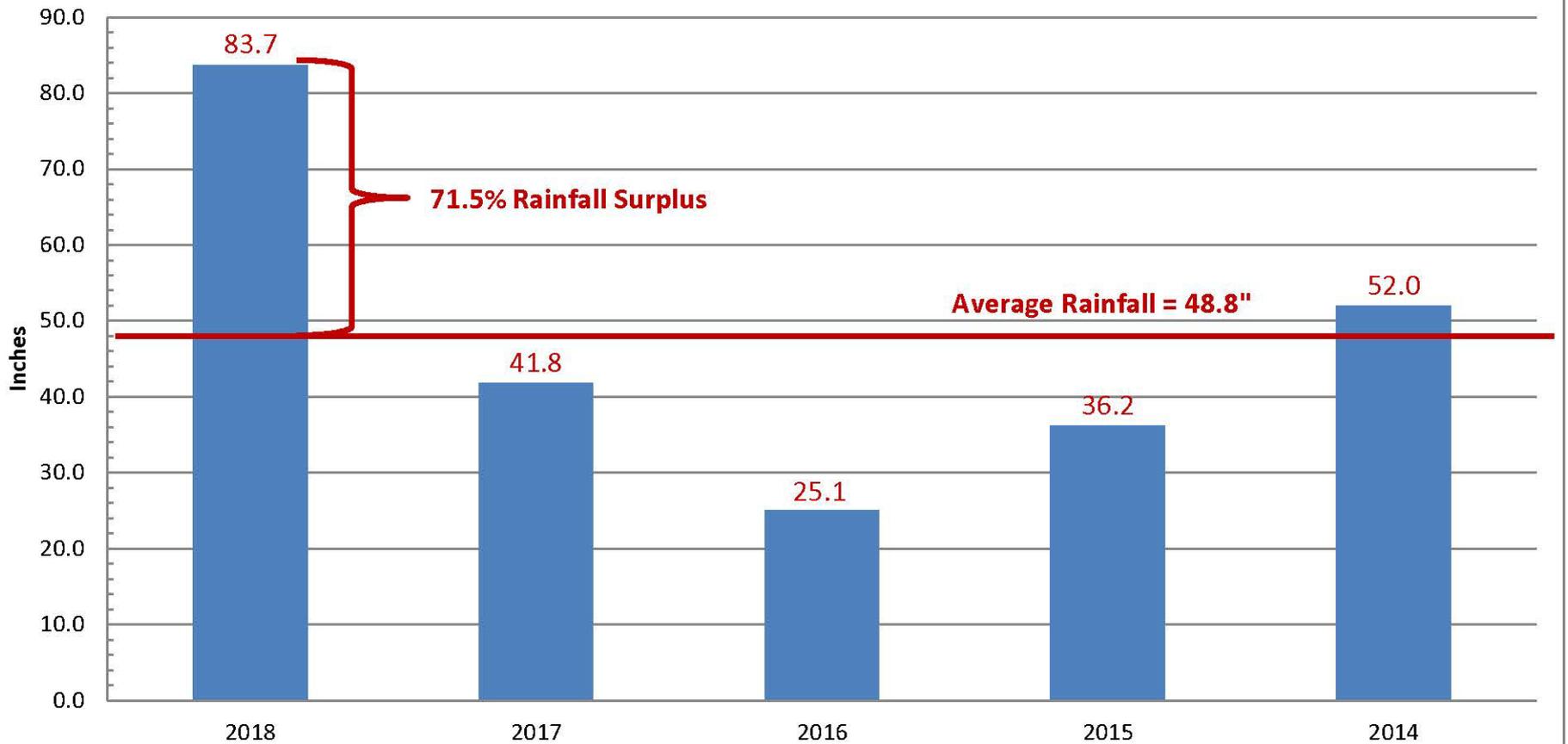
Remedies



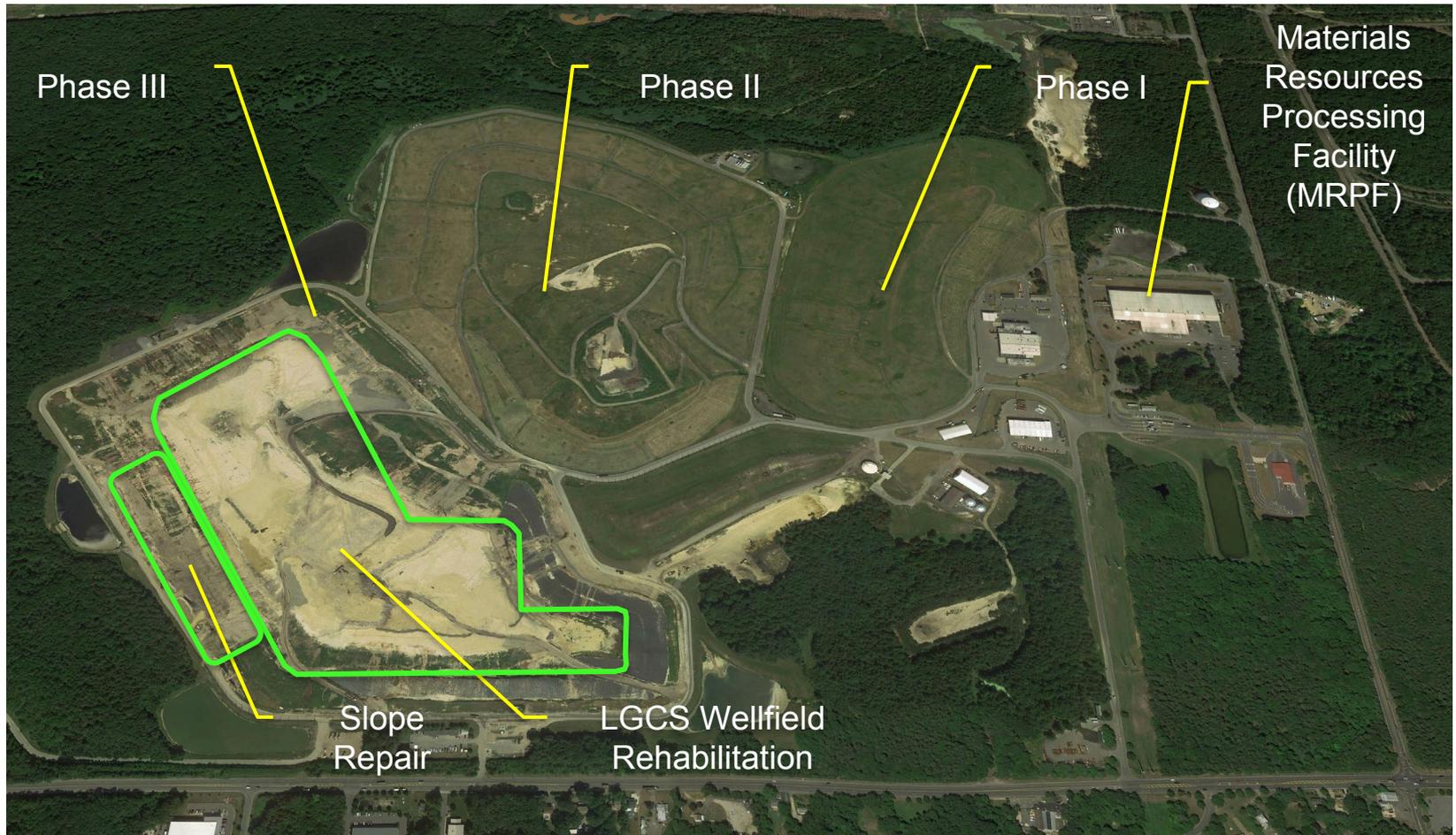
- Installation of a new Landfill Gas Collection System (LGCS):
  - Wellfield build-out
  - Increase LFG collection
    - Dewatering
- Changes in operations

# Rainfall Totals

## Monmouth County Reclamation Center Historical Rainfall



# Monmouth County Reclamation Center

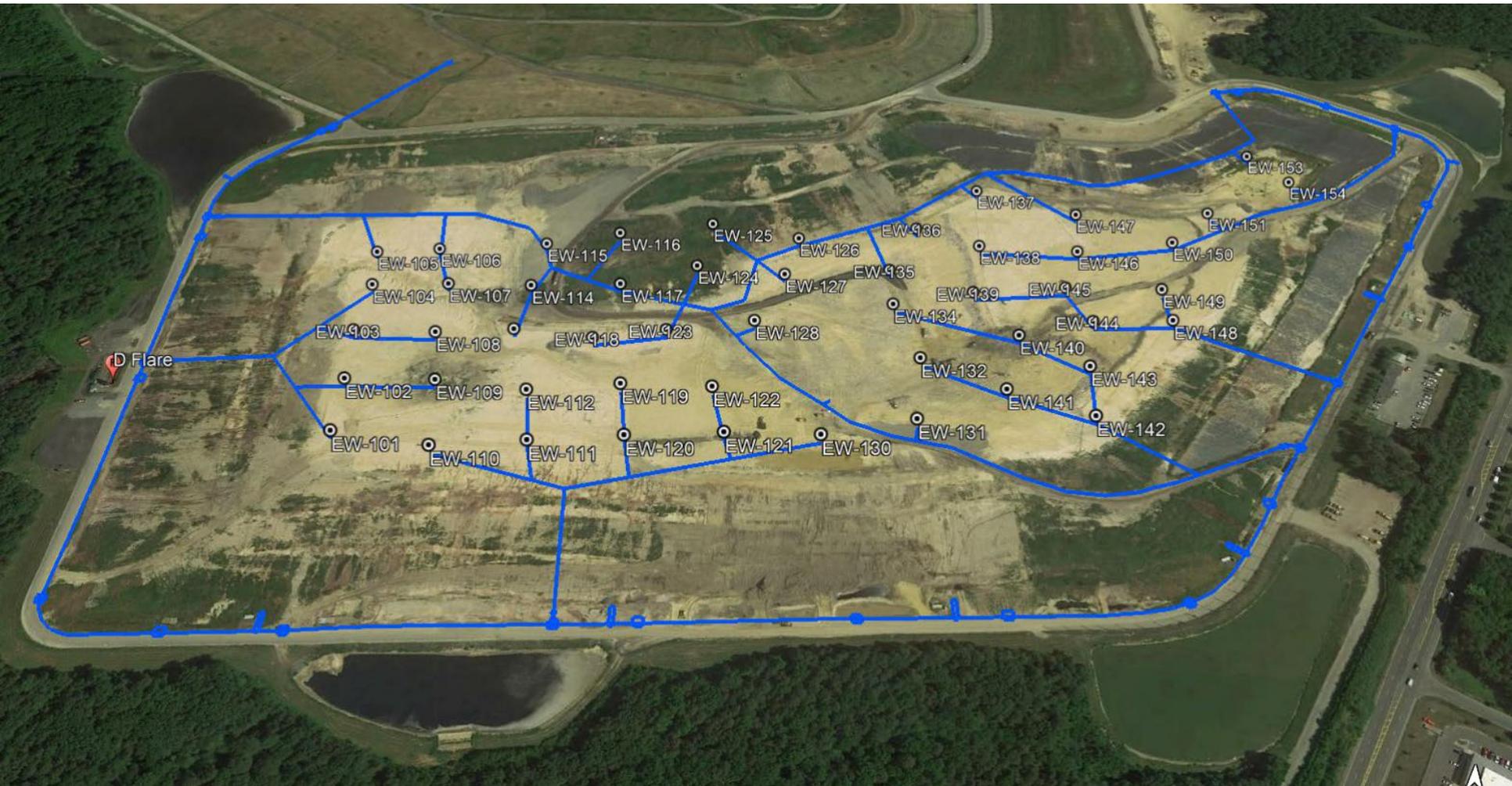


# NJDEP Air Quality Surveys

## Odor and Hydrogen Sulfide (H<sub>2</sub>S) monitoring

<b>H<sub>2</sub>S Odor Threshold:</b>			<b>30 ppb</b>	
<b>Date</b>	<b>Readings</b>	<b>Hits</b>	<b>Max. Reading</b>	<b>Odor Notes</b>
Jan 25, 2019	11	0		1 offsite location
Feb 8, 2019	12	5	5 ppb	3 offsite locations
Feb 13, 2019	16	9	7 ppb	3 offsite locations
Feb 22, 2019	10	1	1 ppb	
March 6, 2019	<b>Commence GCCS Construction</b>			
Mar 20, 2019	0			
Mar 28, 2019	12	2	2 ppb	
Apr 5, 2019	6	0		
Apr 23, 2019	14	0		

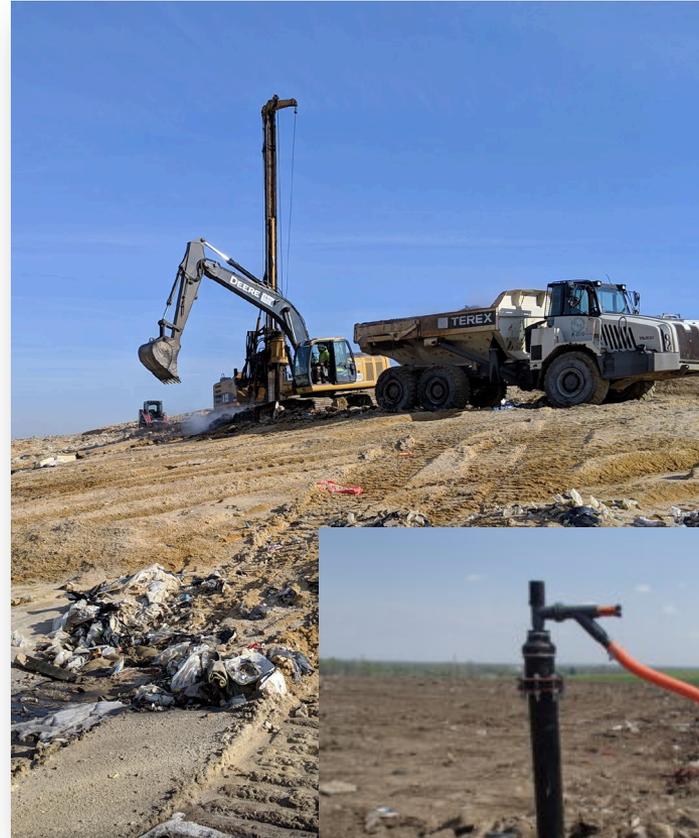
# New Gas Collection and Control System



# The New LGCS in Numbers

Parameter	Quantity
Gas wells	49
Total drilled depth	3,962 ft
Max. drilled depth	116 ft
Average drilled depth	83 ft
Duration of Construction	36 days
24-inch Header	7,600 ft
Laterals (6 to 18) inch	15,900 ft
Leachate lines	23,300 ft
Air lines	23,300 ft

**More than 11 miles of pipe will be installed.**

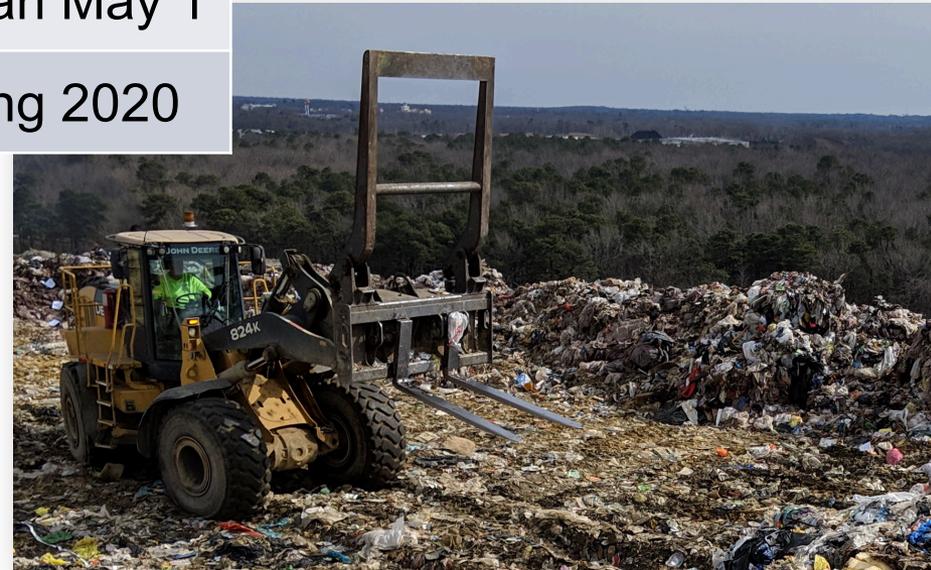


# Action Plan: Improvements

Action	Status
Slope Repair	Completed, December 21, 2018
Odor Neutralization	Completed, operational since February 15, 2019
LGCS Wellfield Build-out	Completed, March 6 through April 11, 2019
LGCS Extraction (interim)	Completed, May 10, 2019
LGCS & Liquid Extraction (permanent)	Scheduled, May 20 through June 26, 2019

# Action Plan: Operations

Action	Status
Relocated working face	In progress
Smaller working face	In progress
Phase-out of waste baling	Began May 1
Faster fill-to-grade	Began May 1
Final cover for areas at grade	Spring 2020



# Groundwater Monitoring

- Federal Requirements for Groundwater Monitoring and Corrective Action:
  - **Detection Monitoring**
  - Assessment Monitoring
  - Corrective Action
- Detection Monitoring
  - Semi-annual sampling for 62 chemical parameters
  - Statistical Analysis of Groundwater Monitoring Data performed at Solid Waste Facilities
  - Standard: Statistically Significant Increase



# Progress Comparison



Mid-slope seep and pooled leachate  
(November 16, 2016)



Erosion rills and berm to control run-off  
(March 27, 2017)

# Progress Comparison



Side slope prior to regrading  
(November 16, 2016)



Regraded slope with intermediate cover  
(July 19, 2018)

# Progress Comparison



Toe of Slope prior to stormwater swale grading (August 6, 2018)



Down-slope view toward Basin 6 with intermediate cover in place (August 14, 2018)

# Progress Comparison



Upslope access road with intermediate cover (August 14, 2018)



Intermediate cover in place (August 24, 2018)

# Progress Comparison



Side-by-side view of intermediate cover and stabilized and seeded area (November 6, 2018)



Construction of stormwater swale (December 11, 2018)

# Odor Complaint Process

- Call the NJ DEP complaint hotline: 1-877-WARN-DEP
- Monmouth County Health Department inspectors will respond first
- Middlesex County responds in the event of an emergency circumstance

# Notices of Violation for Odor

- Three notices received for January 12, 18 and 25, 2019
- Assessed a fine for odor violation (\$3,000)
- NOV and Notice of Fine sent to Montauk, the County vendor for the LGCS, per contract
- Corrective Action Plan is in progress as discussed earlier in this presentation

# Notices of Violation

- New Jersey Department of Environmental Protection
  - January 30, 2019
    - Lack of fire watch and failure to inspect fire suppression system (MRPF)
  - February 5, 2019
    - Failure to amend-permit for insignificant source (Neutralene vapor system)

# Host Community Agreement

- Currently in negotiations with the Borough of Tinton Falls
- Legislation provides for compensation for the host town
- Legislation does not allow for the town to determine any actions regarding the landfill

# Ad hoc Committee

- One Representative per Condo Association:
  - Fox Chase
  - Park Place
  - Seabrook
- One Representative from the Waste Industry
- One Municipal Representative from Borough of Tinton Falls
- Two Resident Representatives from Borough of Tinton Falls