

Public Meeting
York County Public Works
March 23, 2016

Groundwater Analytical Results from the York County Closed MSW Landfill

York County's Action Plan and
Information for Residents

Purpose and Summary

PURPOSE

- ▶ Inform Residents of What We Know
- ▶ Understand Residents' Concerns & Questions

SUMMARY

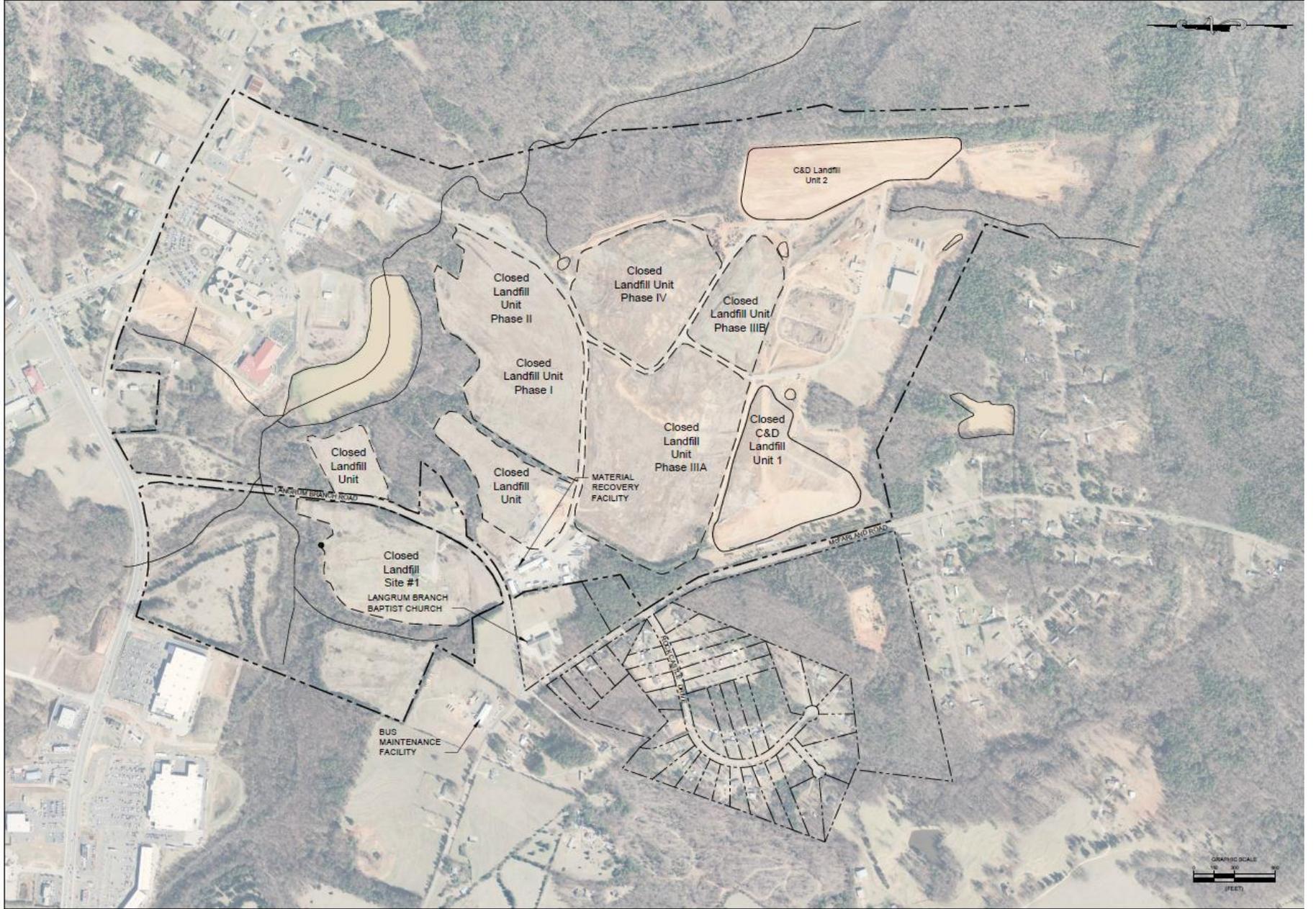
- ▶ Groundwater Monitored at Landfill to Detect Impacts Early
 - 43 Monitoring Wells
 - Analyze for 46 Compounds & 15 Metals
- ▶ 1 Compound Detected Requiring Additional Investigation
- ▶ Federal Drinking Water Standards Have NOT Been Exceeded
- ▶ Sampling 39 Residential Wells
- ▶ Ensure Clean Water Supply for Residents

Brief History of Landfill Regulations and the York County Landfill

- ▶ **1950s: Began Operation as Municipal Solid Waste (MSW) Landfill**
- ▶ **1965: Landfills Regulated per Federal Solid Waste Disposal Act**
- ▶ **1971: S.C. Board of Health Regulation**
 - **Prohibited Open Dumps (Abandoned Piles of Trash)**
 - **Established Standards for Landfills**
 - **York County Landfill Met These Standards**

Brief History of Landfill Regulations and the York County Landfill

- ▶ **1991 “Subtitle D” Amendment to the Resource Conservation and Recovery Act (RCRA)**
 - Requirements for Location, Design, Operation and Closure of MSW Landfills
 - States Responsible to Implement and Enforce
 - Required Lining of New Landfills
- ▶ **1998: Stopped Receiving MSW**
 - Closed MSW Landfill (October)
 - Accepts Only Construction & Demolition (C&D) Waste
- ▶ **MSW Transfer Station and Recycling Facility**



Recent Monitoring Results York County Landfill

- ▶ **43 Monitoring Wells Sampled Semiannually at Landfill**
- ▶ **1,1-Dichloroethane (1,1-DCA) Detected in MW-27**
 - Well Closest to Travis Acres
- ▶ **DHEC Requested Additional Wells**
 - To Investigate Extent of 1,1-DCA
- ▶ **Dec. 2015: Sampled MW-48, MW-49, and MW-50R**
 - 1,1-DCA Detected in MW-48
- ▶ **February 2016: Resampled Wells**
 - 1,1-DCA Confirmed in MW-48
- ▶ **March 2016: County & DHEC Meeting**

1,1-Dichloroethane (1,1-DCA)

USES / SOURCES:

- ▶ **Manufacture of Rubber**
- ▶ **Solvent for Plastics, Oils, and Fats**
- ▶ **Previously Used as Anesthetic**
- ▶ **Manufacture of Chemicals**
 - Vinyl Chloride and 1,1,1-Trichloroethane
- ▶ **Breakdown of 1,1,1-Trichloroethane**
 - Solvent for Cleaning Metal Parts, Circuit Boards, Photographic Film, Inks, Paints, Adhesives
 - Cutting Fluid Additive, Insecticidal Fumigant, and in Liquid Paper

1,1-Dichloroethane (1,1-DCA)

REGULATORY LIMITS:

- ▶ EPA Maximum Contaminant Level (MCL) or Drinking Water Standard
 - Not Established for 1,1-DCA
- ▶ EPA Regional Screening Limit (RSL)
 - 2.8 $\mu\text{g}/\text{L}$ (parts per billion)
 - Not Health-Based Limit
 - Trigger for Further Investigation to Understand Potential for Exposure



| Analyte | Collection Date | MW-27 | MW-48 | MW-49 | MW-50R |
|--|----------------------|---------------------------------------|--------------|----------|----------|
| 1,4-Dichlorobenzene MCL= 75 µg/L | 12/17/15 02/04/16 | ND NS | 0.69 0.50 | ND ND | ND ND |
| 1,1-Dichloroethane RSL = 2.8 µg/L | 12/17/15 02/04/16 | 2.00 NS | 7.90 5.30 | ND ND | ND ND |
| 1,2-Dichloroethane MCL= 5 µg/L | 12/17/15 02/04/16 | ND NS | 0.37 0.41 | ND ND | ND ND |
| cis-1,2-Dichloroethene MCL= 70 µg/L | 12/17/15 02/04/16 | 0.45 NS | 1.90 1.20 | ND ND | ND ND |
| Trichloroethene MCL= 5 µg/L | 12/17/15 02/04/16 | ND NS | 1.40 0.49 | ND ND | ND ND |
| All concentrations are reported in micrograms per liter (µg/L) = parts per billion | | | | | |
| ND = Not detected above the laboratory detection limit | | MCL = USEPA Maximum Contaminant Level | | | |
| NS = Not sampled | | RSL = USEPA Regional Screening Limit | | | |

York County's Action Plan

- ▶ **Sample All Residential Wells in Travis Acres Neighborhood**
 - Analyze Samples for 61 Volatile Organic Compounds
- ▶ **Immediately Supply Any Affected Residents with Bottled Water**
- ▶ **Install Individual Treatment Systems for Affected Homes**
- ▶ **Conduct Further Investigation to Determine Extent of Contamination**
- ▶ **Work with DHEC to Establish and Implement a Corrective Action Plan**
 - To Clean Up Groundwater
 - Prevent Further Spreading of Contamination

Next Steps

- ▶ **Complete and Sign the Well Sampling Access Forms**
- ▶ **Leave Signed Forms Here**
 - Need by 5:00PM Friday, March 25
- ▶ **Residential Sampling Begins Tomorrow (March 24th)**
- ▶ **Sample Results Will Be Provided To You Within 10 Days**
- ▶ **Questions?**
 - York County Public Works at (803) 628-3200
 - DHEC (Larry Leblang) at (803) 898-1308 or leblanlm@dhec.sc.gov

***York County Is Committed to Protecting
the Health and Well Being of Its Residents, and
to Keeping You Informed of the Situation.***