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Telfair Odor Investigation Community Meeting

January 26, 2026

www.des.sc.gov/TelfairCommunity

Telfair Odor Investigation
Community Meeting Sign in



Community References

- Facility Names
 - Coastal Waste and Recycling, LLC
 - Barnwell Landfill
 - Pro Disposal USA
- Neighboring Areas
 - Telfair Community
 - Royal Pines
 - Other adjacent areas

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Air Quality

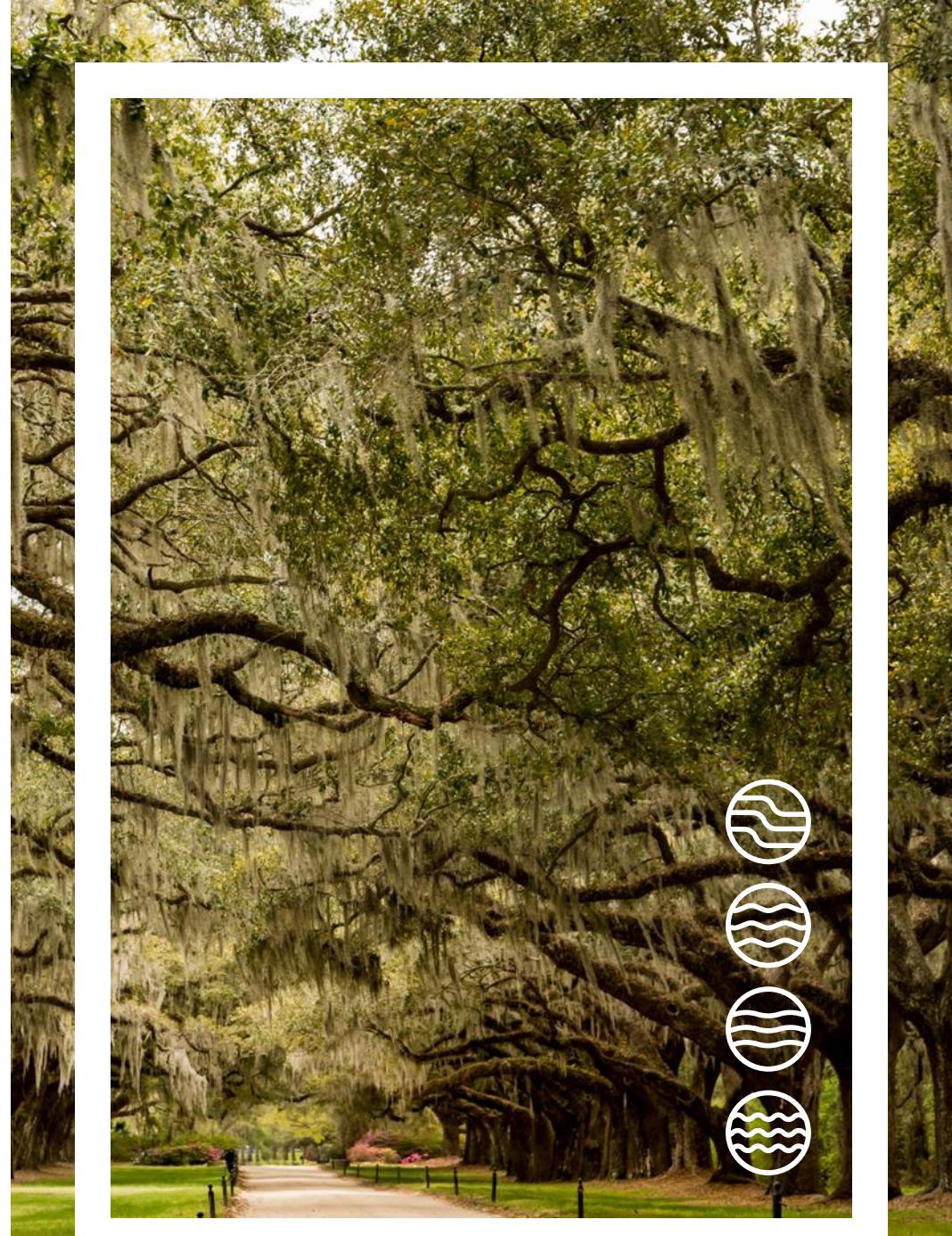
Land & Waste Management

Coastal Management

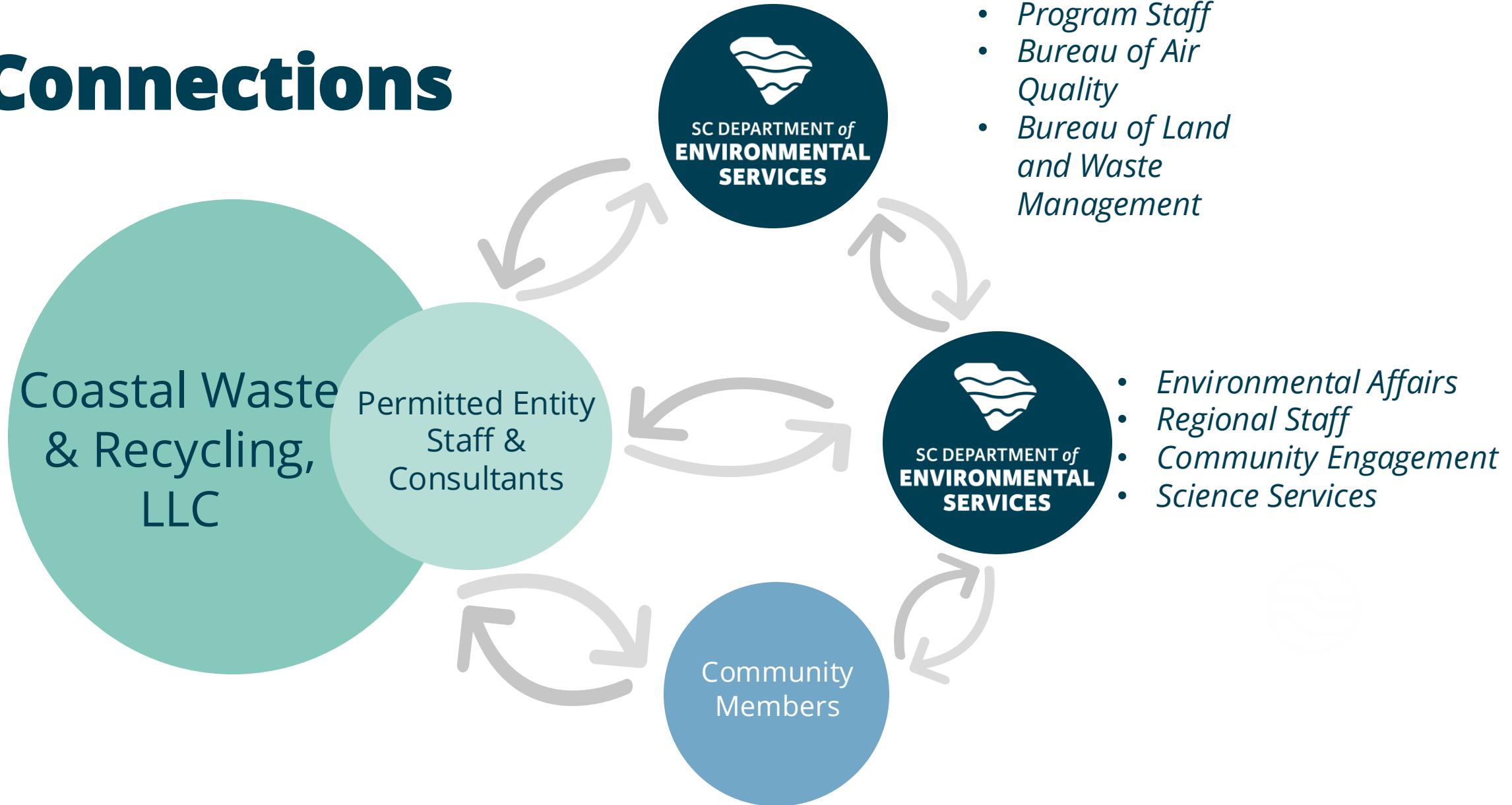
Water

Regional & Laboratory Services

Science • Service • Sustainability



Connections





Tonight's Meeting

- Share information from our SCDES team about our ongoing odor investigation and response in the Telfair, Royal Pines and surrounding areas
 - Justin Koon
 - Connie Turner
 - Other SCDES Team Members
- Hear from Coastal Waste & Recycling, LLC staff
- Hear your concerns and questions.



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Barnwell Resources Class 2 Landfill

January 26, 2026



General Information

- Located at 490 Brickyard Point Road on Lady's Island in Beaufort, SC
- Class 2 Landfill – Construction and Demolition Debris
- Permitted Footprint of ~57.3 acres
- Overall Permitted Disposal Volume of ~3.4 million cubic yards
- Remaining Disposal Volume of ~2.4 million cubic yards
- Remaining ~16 years of airspace
 - Remaining life fluctuates year-to-year based on how much waste is disposed in a year

Permitting History

October 31, 1988

- Permit CWP-006 Issued

August 23, 1994

- C&D Permit 072410-1201 Issued to Barnwell Resources, Inc.

March 20, 2000

- Vertical Expansion Approved

February 27, 2003

- Annual Disposal Rate Increase Approved (156,000 tons per year)

April 15, 2013

- Vertical Expansion Approved

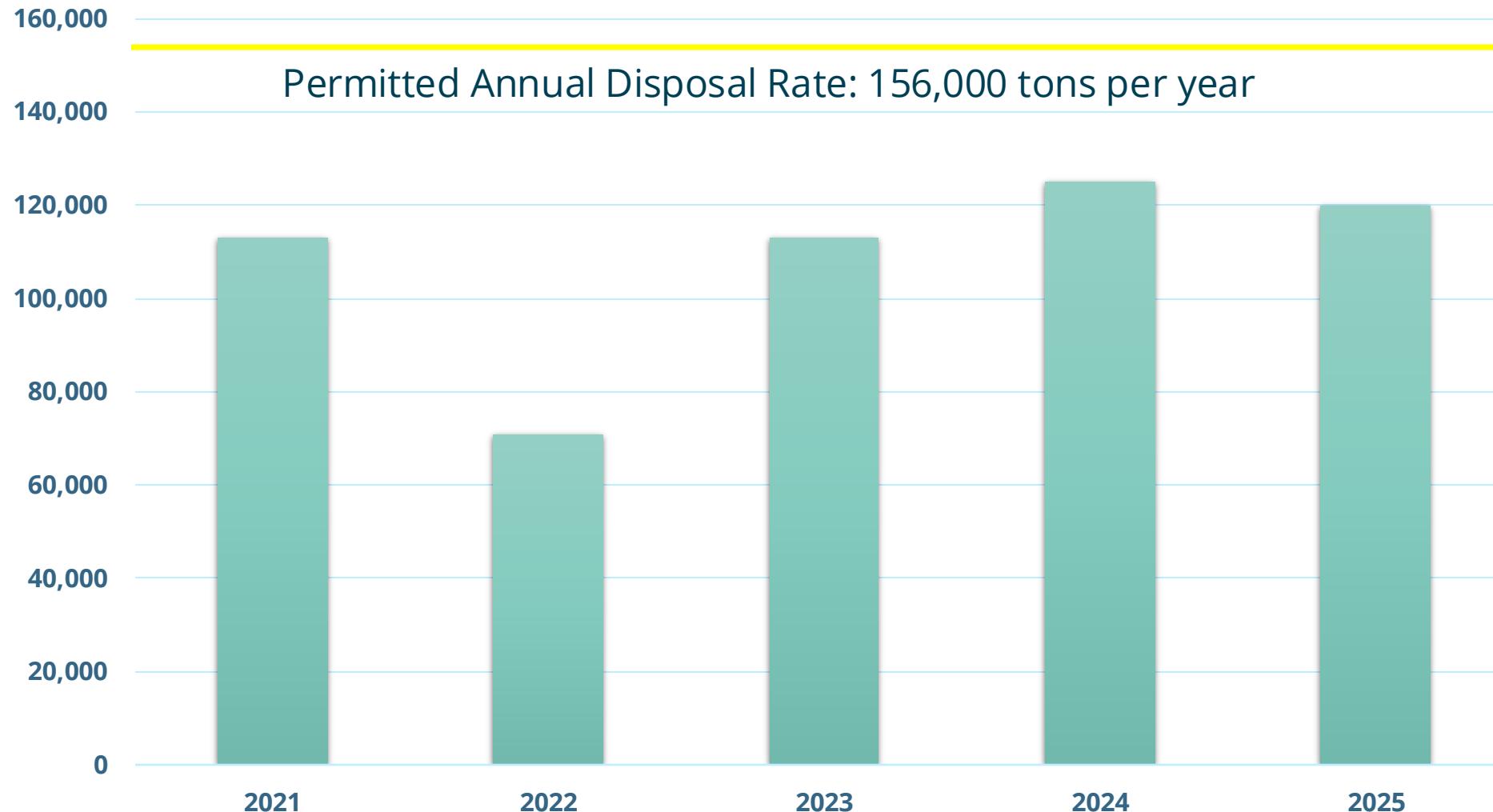
August 29, 2022

- Transfer of ownership to Pro Disposal USA, LLC

July 24, 2023

- Coastal Waste & Recycling, LLC acquired Pro Disposal USA

Facility Annual Disposal Rates (in tons)



Wastes Allowed in a Class 2 Landfill

See Appendix I of Reg. 61-107.19

- Includes (but not limited to):
 - construction & demolition debris, including asphalt, concrete, bricks, and drywall
 - land-clearing debris and wood
 - box springs and mattresses
 - packaging materials
 - glass
 - shingles



Hydrogen Sulfide

- Hydrogen sulfide at a landfill is generated when gypsum (drywall) becomes saturated under anaerobic conditions, which leads to sulfate-reducing bacteria thriving and producing hydrogen sulfide.
- The incoming waste is not typically a source of the odor at a landfill because new waste is under aerobic conditions, not anaerobic.
- Water management is key to reducing the probability of hydrogen sulfide production.
 - Maintaining a small working face
 - Applying cover as required
 - Maintaining positive drainage across the landfill
- Management strategies include using cover materials, applying clean soil, and/or implementing a gas collection system.

Odor Issues at the Site and Steps Taken

- **Late 2015**

- Began after excessive rainfall associated with low pressure system that interacted with Hurricane Joaquin
- Odor Assessment Plan submitted and approved
- Moved the Operational Area
- Placed additional cover
- Repaired washouts
- Maintained a hydrogen sulfide log for 16 months using a handheld monitor

- **Late 2018**

- Began after excessive rainfall associated with Hurricanes Florence and Michael
- Repaired washouts
- Reduced working face
- Maintained a hydrogen sulfide log for ~4 months

Recent Odor Issues and Steps Taken

- **Summer 2025 to Present**

- Began after excessive rain events in 2024 and an isolated rain event in August 2025

- **Actions by SCDES**

- Required an Odor Assessment Plan and Odor Abatement Plan
- Increased inspections & site visits
- Established communications with community
- Conducted H2S monitoring and weekly reports to track trends

- **Actions by Coastal Waste**

- Moved the Operational Area
- Reduced working face
- Placed additional cover
- Regrading parts of the landfill
- Repaired washout
- Seeded sideslopes
- Drilled bar holes to begin gas study

Inspection Notes Over the Last 2 Years

Noted on Inspection Reports

- Frequency of cover and short-term cover
- Size of working face
- Litter control
- Erosion and/or washouts of side slopes
- Ditches need to be cleaned
- Detection of hydrogen sulfide odors at working face and along Middle Road

Corrections Made

- Reduced the size of the working face
- Purchased a new compactor and dozer
- Corrected slopes
- Cleaned Ditches
- Rented extra haul truck to assist with cover
- Addition of cover soils



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Get in touch

Justin Koon // Manager

Justin.Koon@des.sc.gov

803.898.1339

des.sc.gov

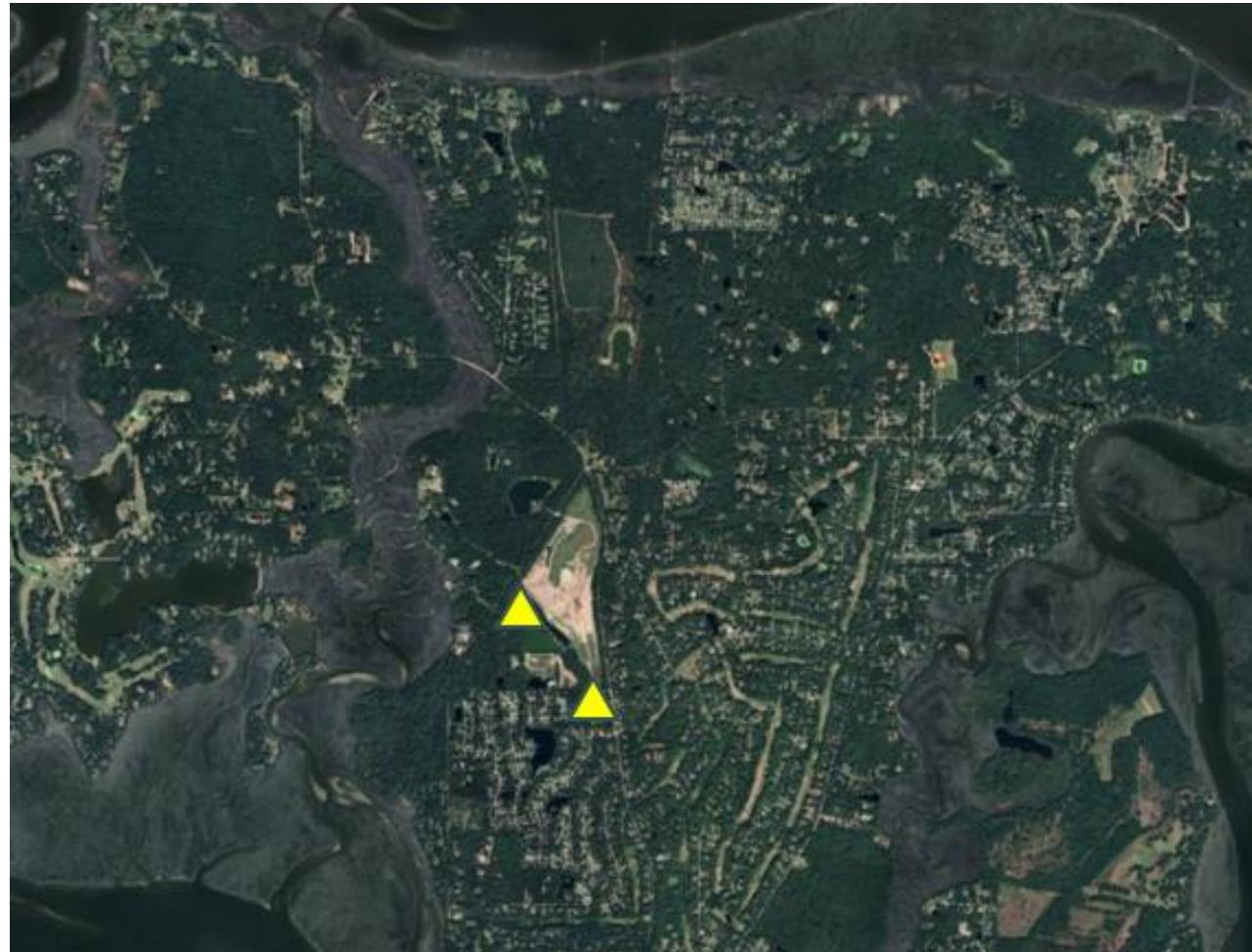
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Community Information Guided the Odor Investigation

- Information Provided
 - Locations
 - Times
 - Dates
 - Notes on the odors
- How Your Information Helped

H2S Monitoring



Weekly Summary Reports

- Sensor Data
- Weather Data
- Reported Odors



Weekly Report

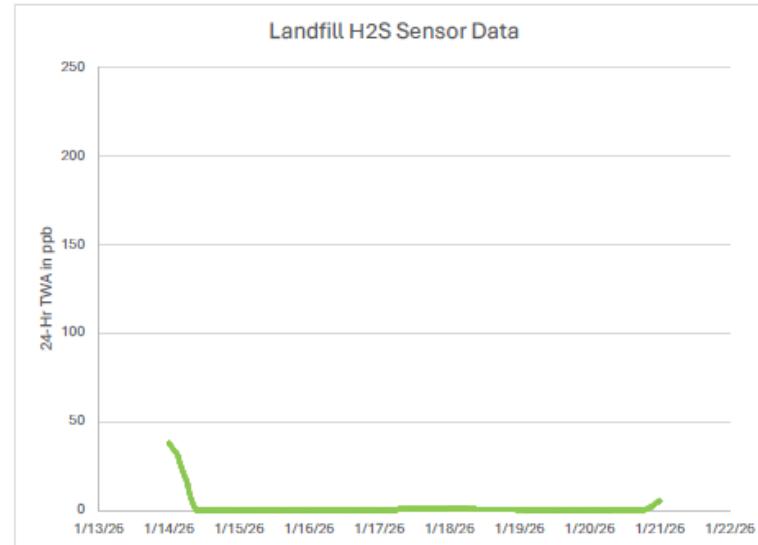
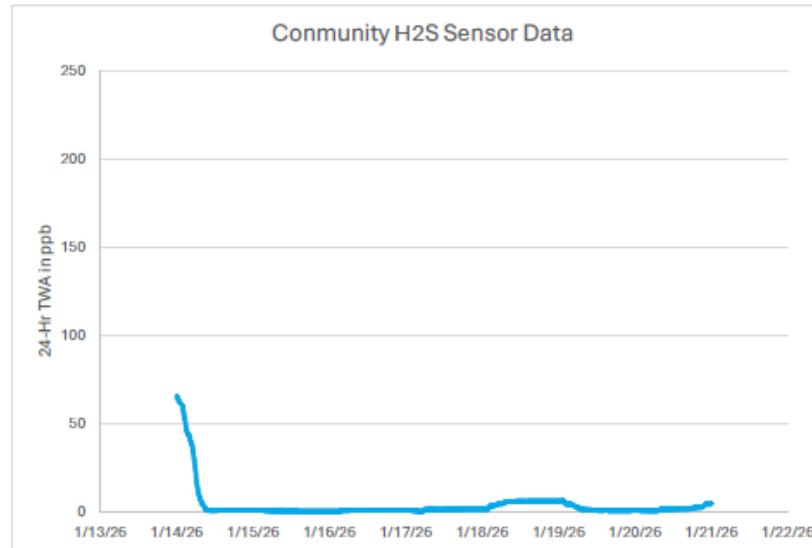


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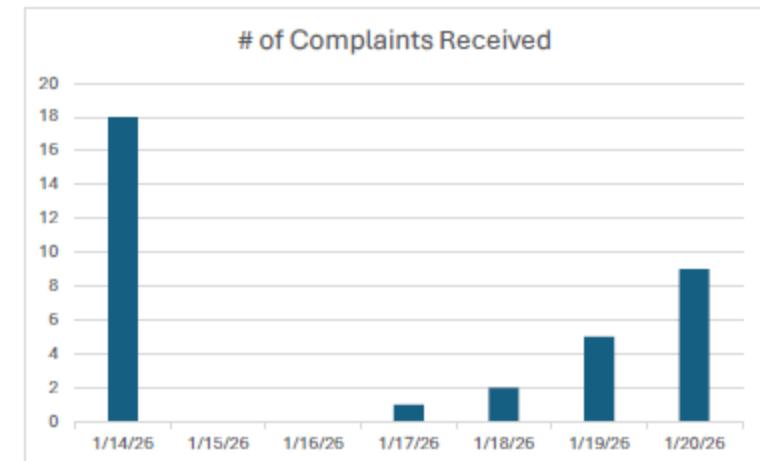
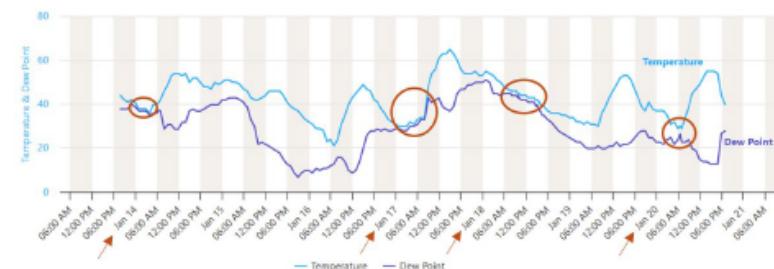
Telfair Weekly Air Monitoring Summary Report: 1/14/2026 – 1/20/2026

The information provided below is qualitative in support of the ongoing investigation into odor complaints received by SCDES. Because there are no ambient air quality standards for H2S which apply here, this data is being used to evaluate trends and support the on-going odor investigation. The values shown in the graphs below are 24-hour time weighted averages (TWA).

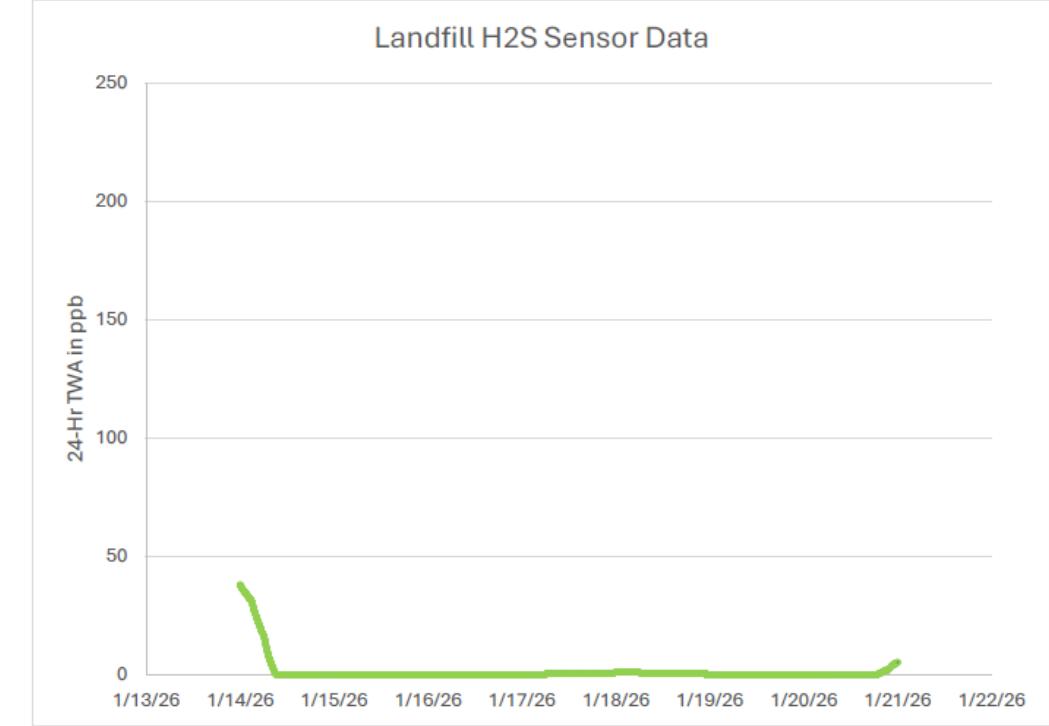
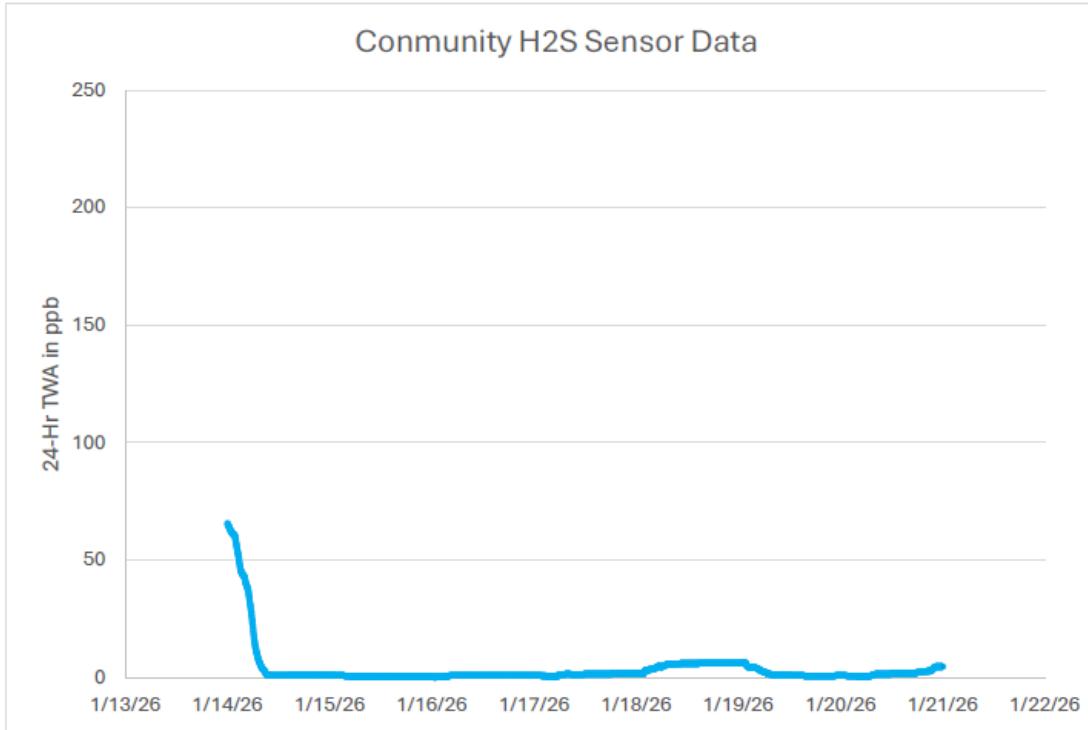
The first two graphs show the 24-hour TWA for the two sensor locations: one sensor is located in the community (Community) south of the landfill; the other sensor is located on the southwest portion of the landfill (Landfill).



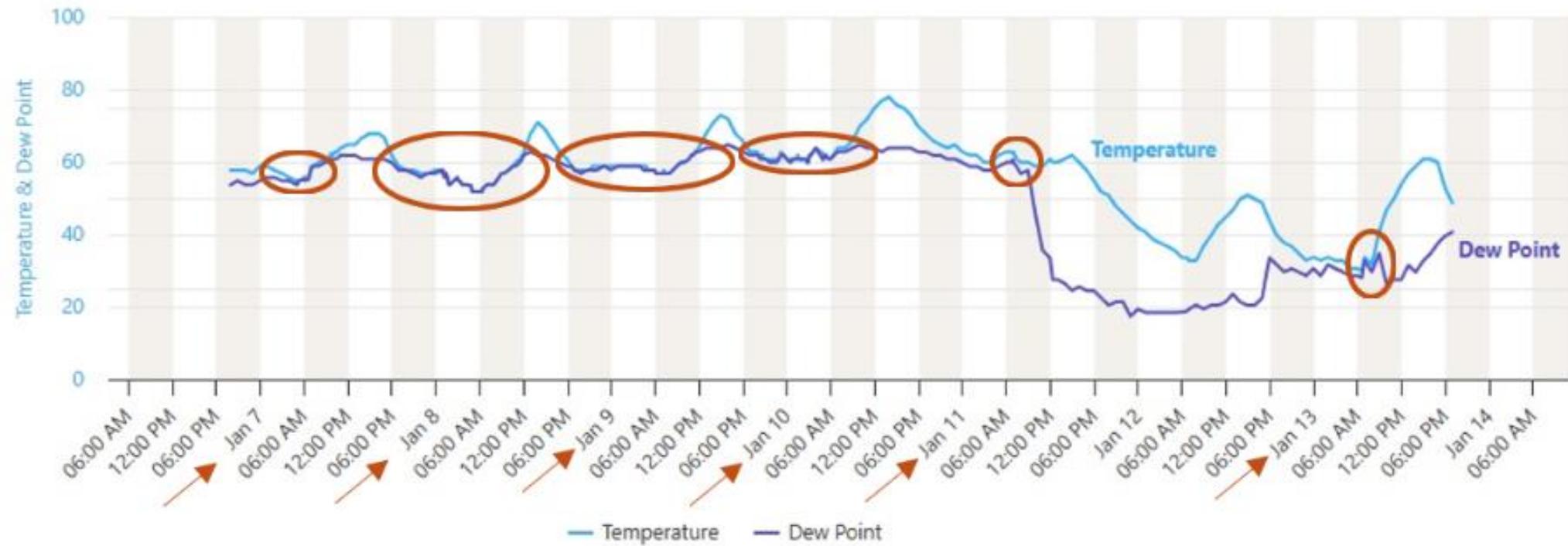
Meteorological data displayed below was obtained from the National Weather Service (weather.gov) Beaufort Marine Corps Air Station (MCAS). The graph below shows potential temperature inversions. When the temperature drops overnight, especially in the winter, the surface cools quicker than the surrounding air and a temperature inversion is likely. This creates a stable environment where pollution may become trapped below warmer air aloft. When this occurs, odors may be more noticeable, particularly when winds are light or calm. Wind speed and direction can also affect odor levels. The weekly temperature and dew point ("Meteorological Data") graph has arrows pointing to the dates an inversion was likely.



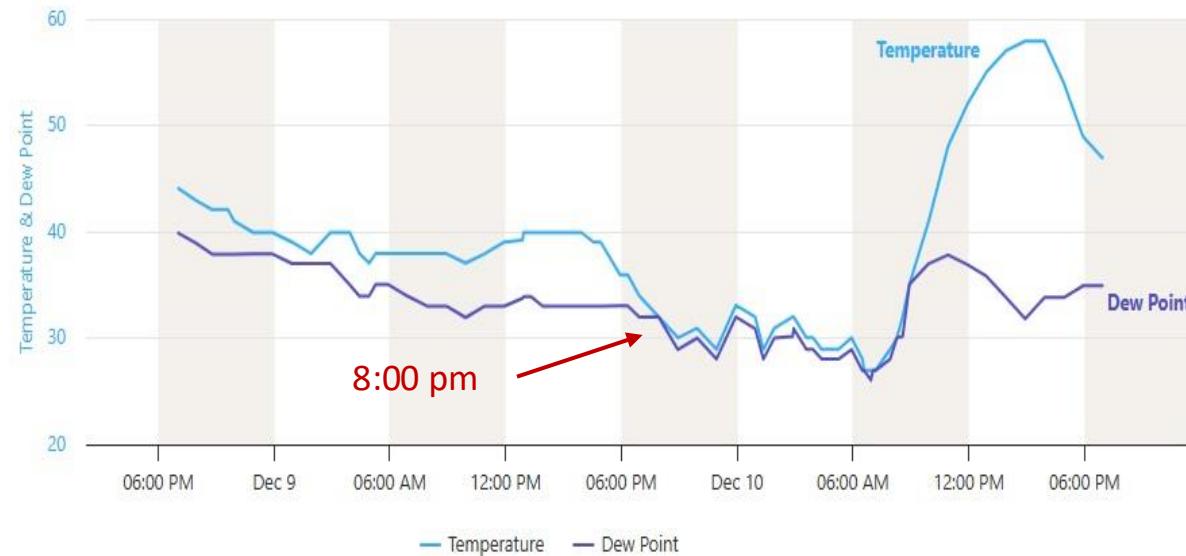
Sensor Data



Meteorological (Weather) Data



Meteorological Data



Weather conditions for:
 Beaufort, Marine Corps Air Station, SC (ASOS/AWOS - [CHS](#))
 Elev: 36.0 ft; Lat/Lon: 32.49361/-80.70306

[Get Yearly Precip Total \(non QA/QC'd data\)](#)
[Get Water Year Precip Total \(non QA/QC'd data\)](#)
 For selected observations near this location: [click here](#)

Date/Time (L)	Temp. (°F)	Dew Point (°F)	Relative Humidity (%)	Wind Chill (°F)	Wind Direction	Wind Speed (mph)	Visibility (miles)	Weather
Dec 10, 6:56 pm	47	35	63	44	SW	6	7.00	
Dec 10, 5:56 pm	49	35	59	47	SSW	5	7.00	
Dec 10, 4:56 pm	54	34	47		WSW	7	7.00	
Dec 10, 3:56 pm	58	34	40		SW	8	7.00	
Dec 10, 2:56 pm	58	32	37		SW	14	G21	7.00
Dec 10, 1:56 pm	57	34	42		SW	9	G20	7.00
Dec 10, 12:56 pm	55	36	48		WSW	9	7.00	
Dec 10, 11:56 am	52	37	57		W	8	7.00	
Dec 10, 10:56 am	48	38	68	45	WSW	7	7.00	
Dec 10, 9:56 am	41	37	86	38	WSW	5	7.00	
Dec 10, 8:56 am	35	35	100		N	0	7.00	
Dec 10, 8:35 am	32	30	93		N	0	7.00	
Dec 10, 8:17 am	30	30	100	26	WSW	3	0.50	Mist
Dec 10, 7:56 am	29	28	96		N	0	0.50	
Dec 10, 7:10 am	27	27	100		N	0	7.00	Fog
Dec 10, 7:03 am	27	27	100		N	0	7.00	
Dec 10, 6:56 am	27	26	96	23	WSW	3	7.00	
Dec 10, 6:35 am	27	27	100		N	0	7.00	
Dec 10, 6:30 am	28	27	96		N	0	10.00	Mist
Dec 10, 5:56 am	30	29	96		N	0	10.00	Mist
Dec 10, 5:15 am	29	28	96		N	0	5.00	Mist
Dec 10, 4:56 am	29	28	96		N	0	10.00	Mist
Dec 10, 4:44 am	29	28	96		N	0	0.00	Mist
Dec 10, 4:23 am	29	28	96		N	0	10.00	Mist
Dec 10, 3:56 am	30	29	96		N	0	10.00	Mist
Dec 10, 3:36 am	30	29	96		N	0	10.00	Mist
Dec 10, 2:56 am	32	31	96		N	0	10.00	Mist
Dec 10, 2:53 am	32	30	93		N	0	10.00	Mist
Dec 10, 1:56 am	31	30	96		N	0	10.00	Mist
Dec 10, 1:22 am	29	28	96	25	SW	3	10.00	Mist
Dec 10, 12:56 am	32	31	96		N	0	10.00	Mist
Dec 9, 11:56 pm	33	32	96		N	0	10.00	Mist
Dec 9, 10:56 pm	29	28	96		N	0	6.00	Mist
Dec 9, 9:56 pm	31	30	96		N	0	7.00	
Dec 9, 8:56 pm	30	29	96		N	0	7.00	
Dec 9, 7:56 pm	32	32	100		N	0	7.00	
Dec 9, 6:56 pm	34	32	92		N	0	7.00	
Dec 9, 6:20 pm	36	33	89	31	NNW	6	7.00	
Dec 9, 5:56 pm	36	33	89	31	N	6	7.00	
Dec 9, 4:56 pm	39	33	79	34	NNE	7	7.00	
Dec 9, 4:34 pm	39	33	79	35	N	6	7.00	
Dec 9, 3:56 pm	40	33	76		N	0	7.00	

Temperature Inversions

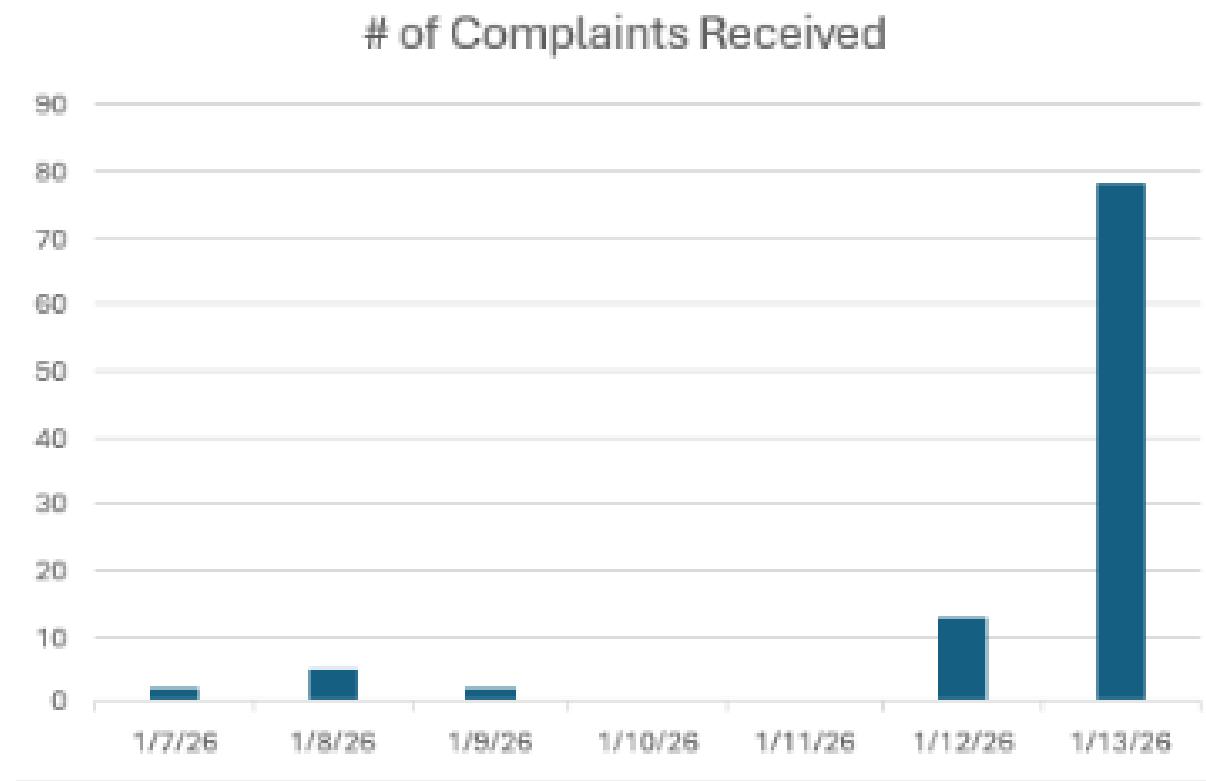


Early morning fog



Smoke settling over the lake at dusk

Odor Report Form



Key Observations

- People can smell H₂S at very low concentrations.
- The sensors confirm the community odor reports.
- Odors are most noticeable at the sensors when winds are from the North or West and calm.
- Sensor data, wind direction, and inversion conditions align with the number of odor reports.
- As expected, the number of odor reports increases as the concentrations increase.



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Get in touch

Connie Turner // Senior Scientist

Connie.Turner@des.sc.gov

803.898.3305

des.sc.gov

@SouthCarolinaDES



Facilitated Questions & Answers





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