

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name: H<sub>2</sub>S in South Carolina**

**From: 6/1/23  
12:00 AM  
EST**

**To: 6/1/23  
11:59 PM  
EDT**

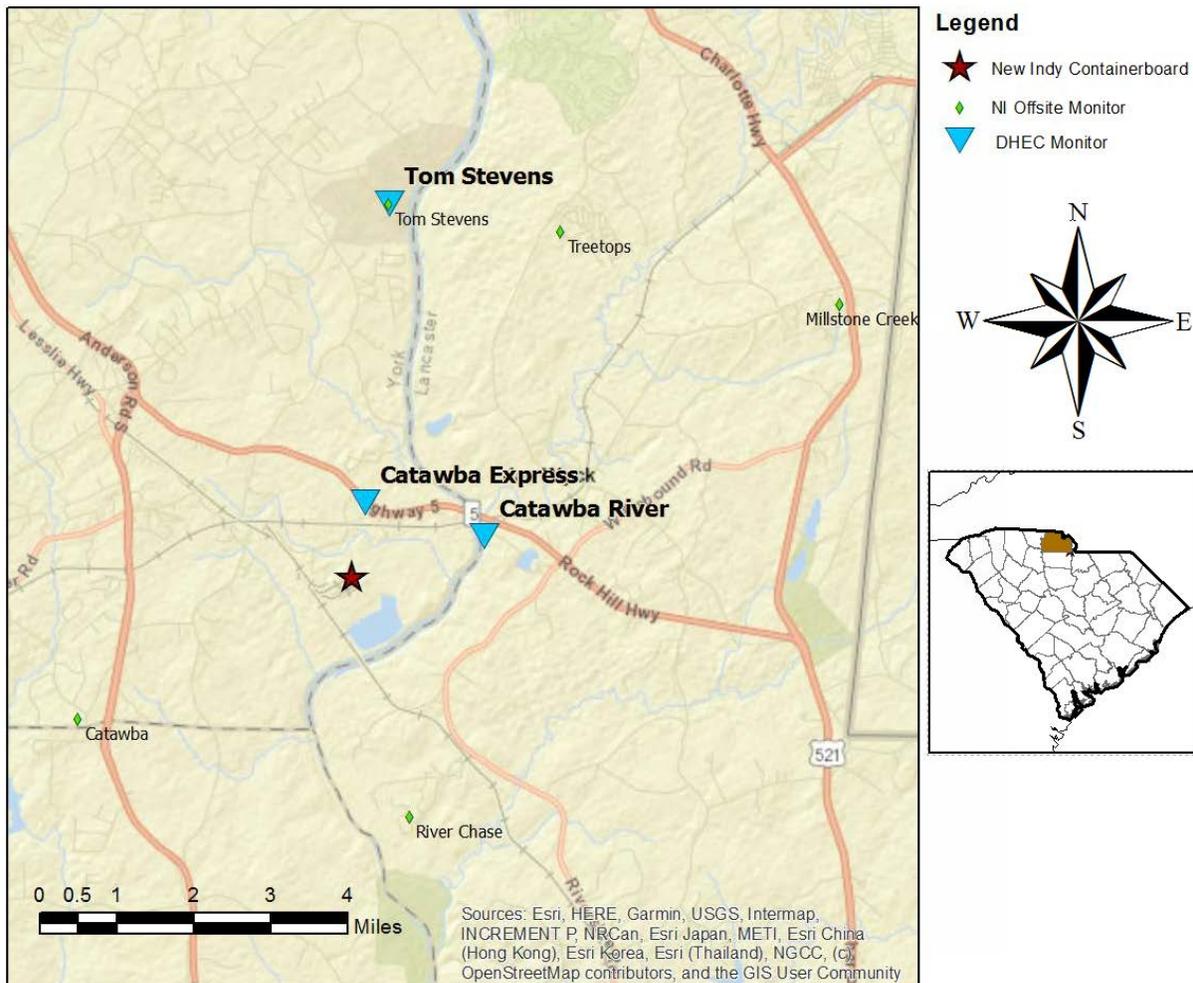
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

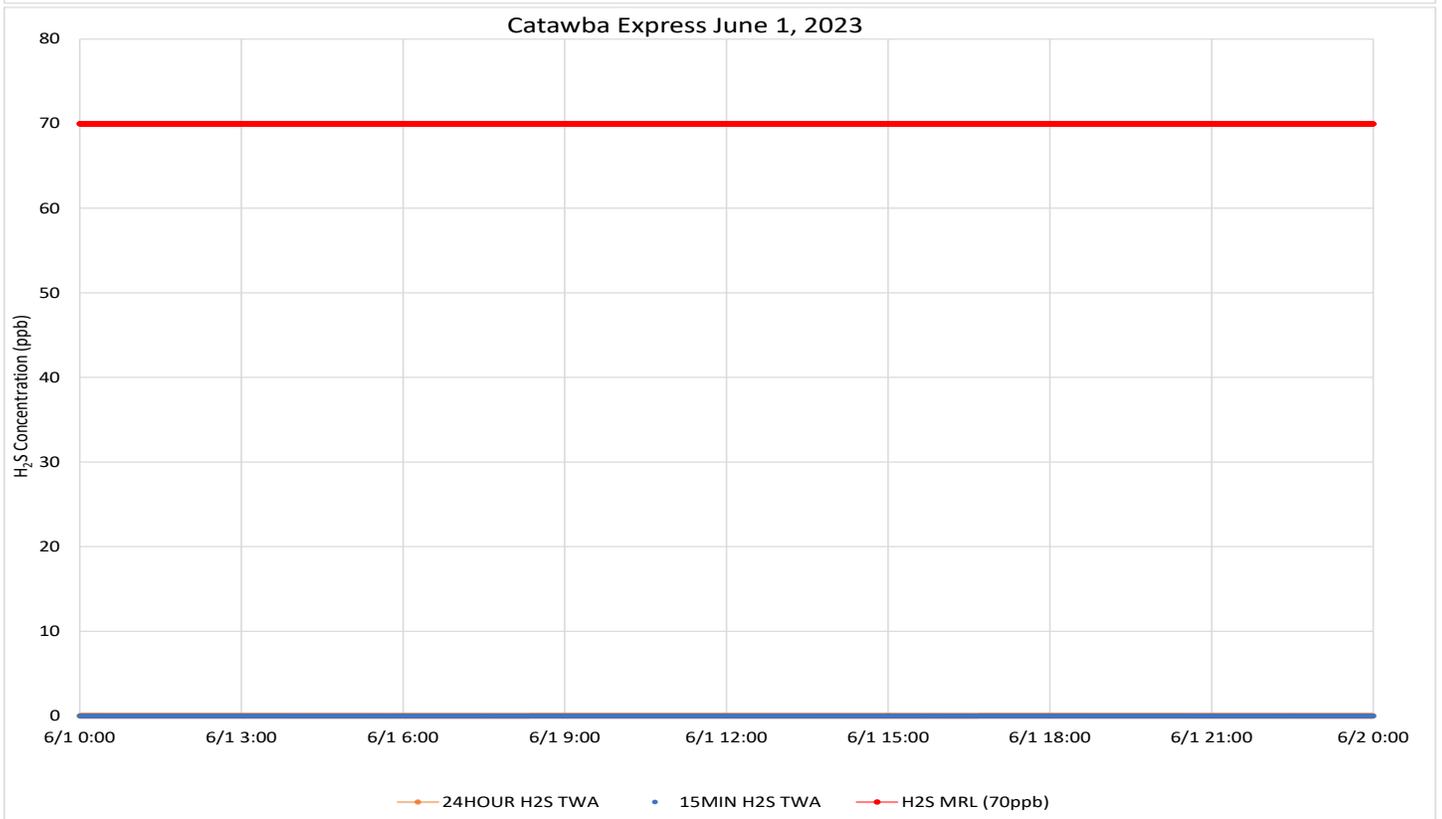
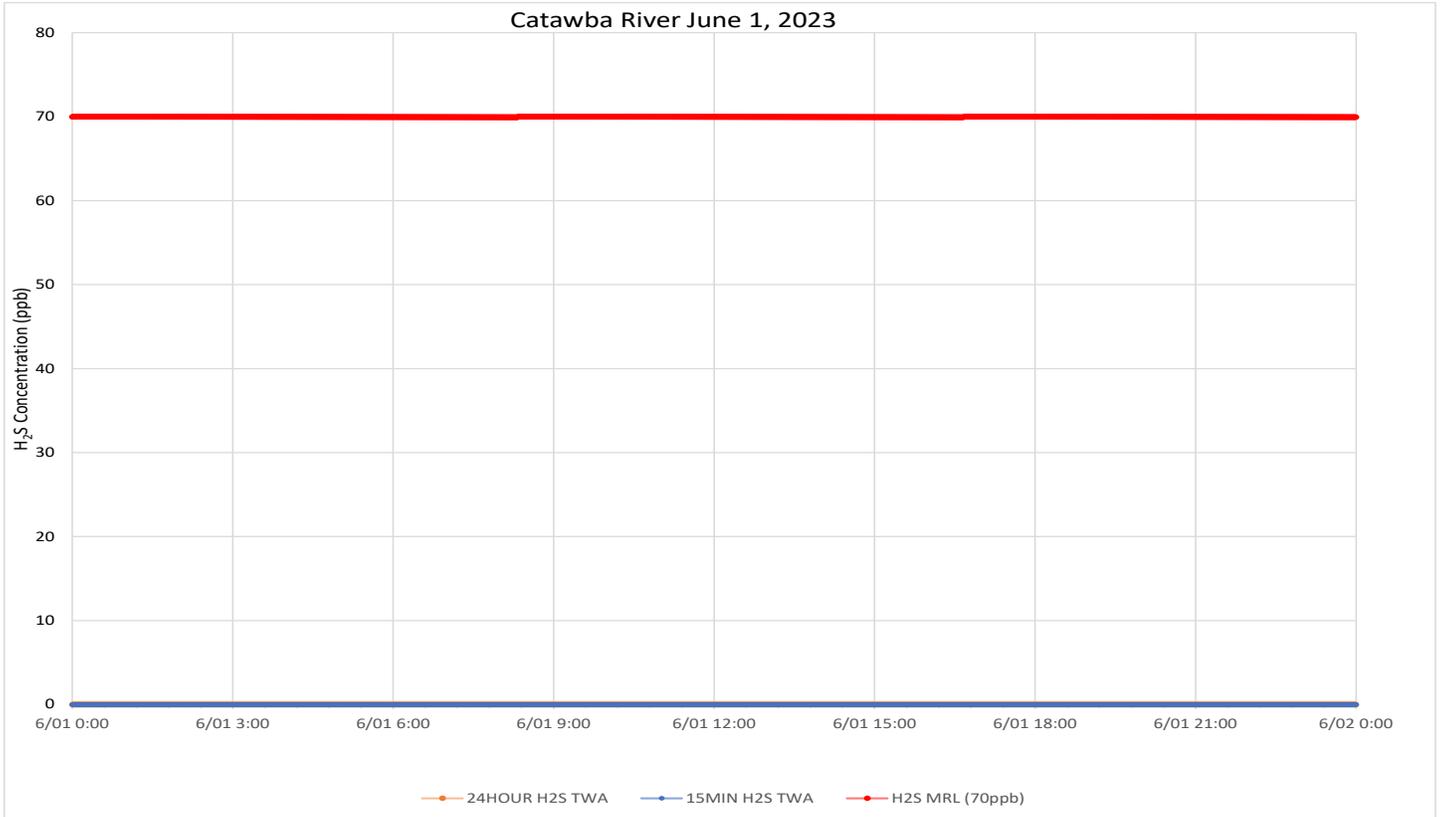
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

When detected, wind came from the north northeast through northeast. Wind was variable during short periods throughout the day, with calm periods before sunrise and late night.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/2/23  
12:00 AM  
EST

**To:** 6/2/23  
11:59 PM  
EDT

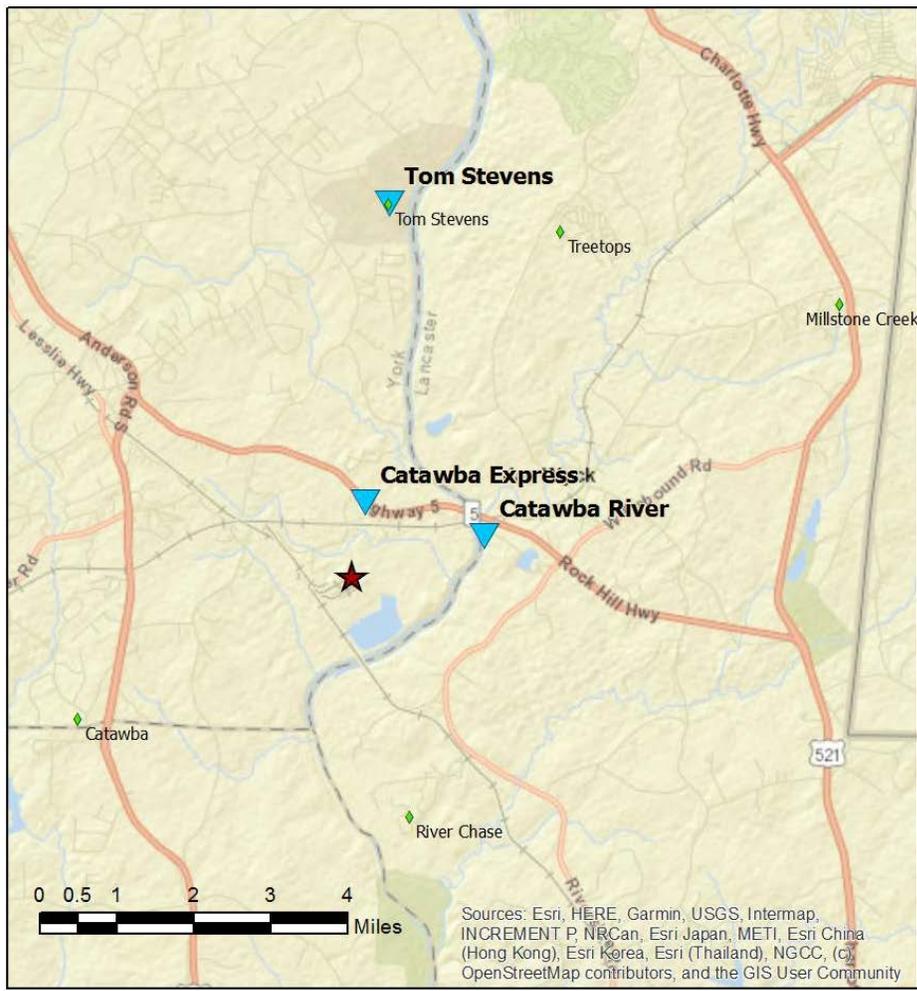
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

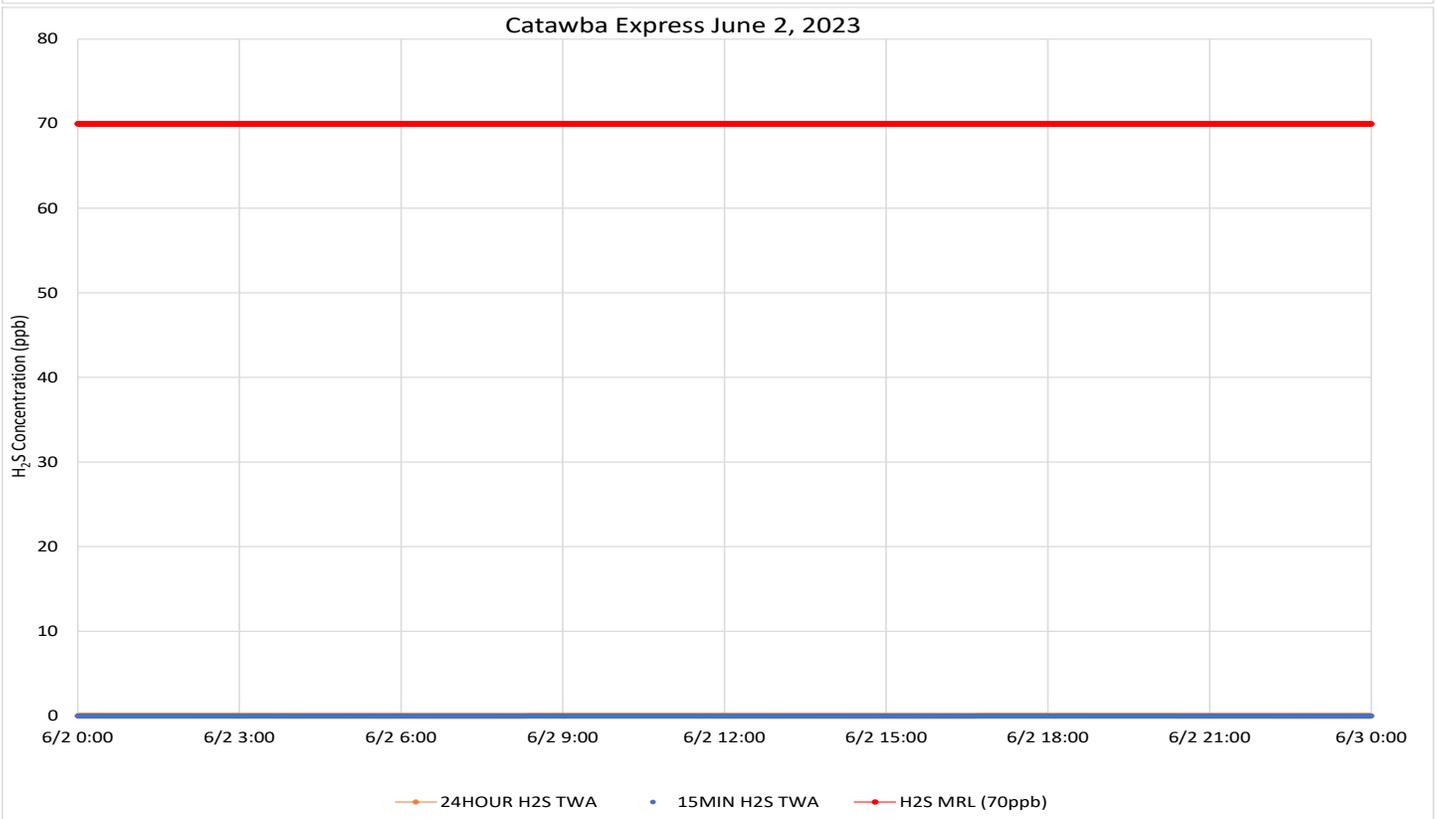
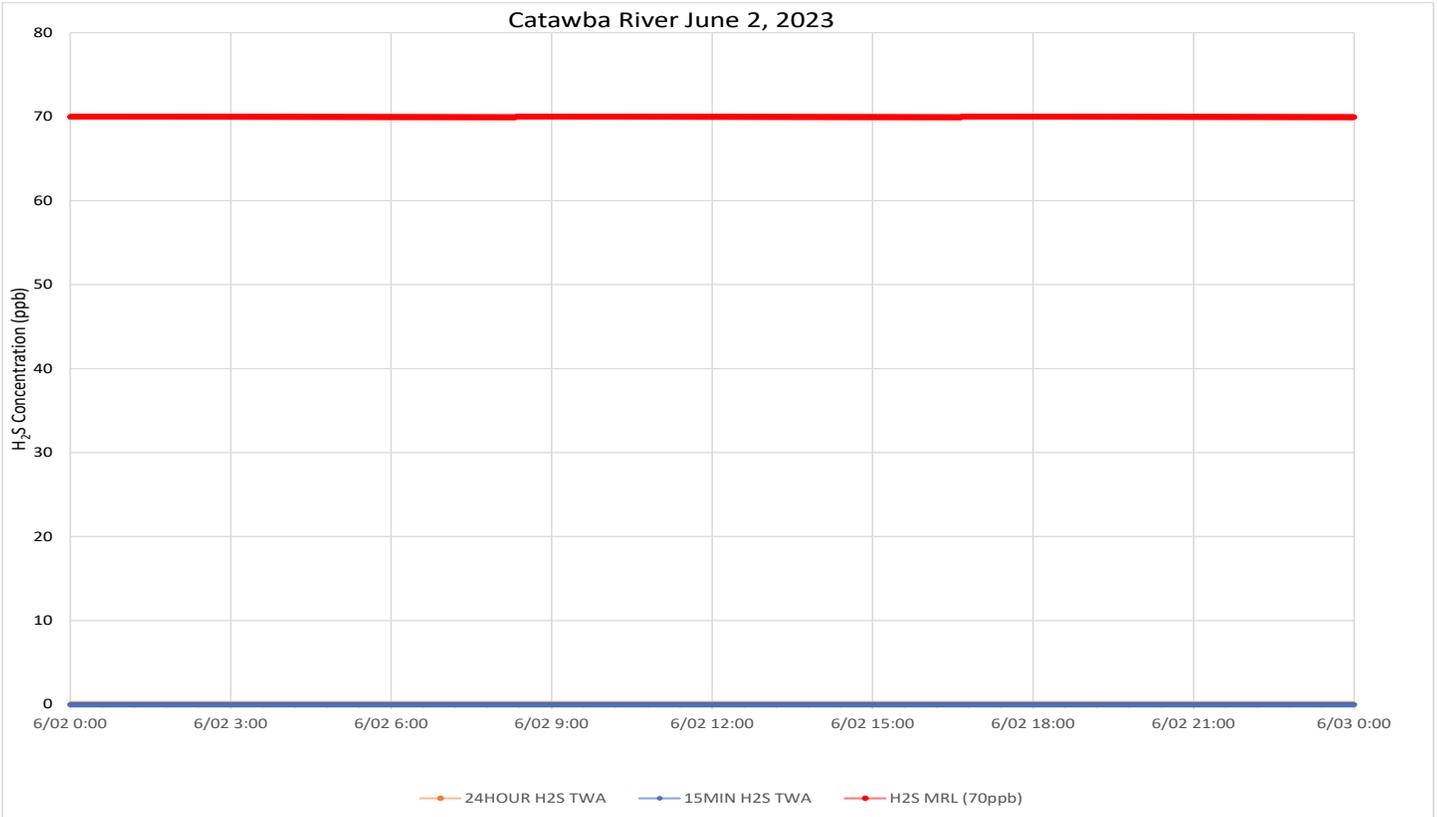
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

When detected, wind came from the north through east northeast. Wind was variable during short periods throughout the day, with calm periods before sunrise and again in the evening through late night.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name: H<sub>2</sub>S in South Carolina**



**From: 6/3/23**  
**12:00 AM**  
**EST**

**To: 6/3/23**  
**11:59 PM**  
**EDT**

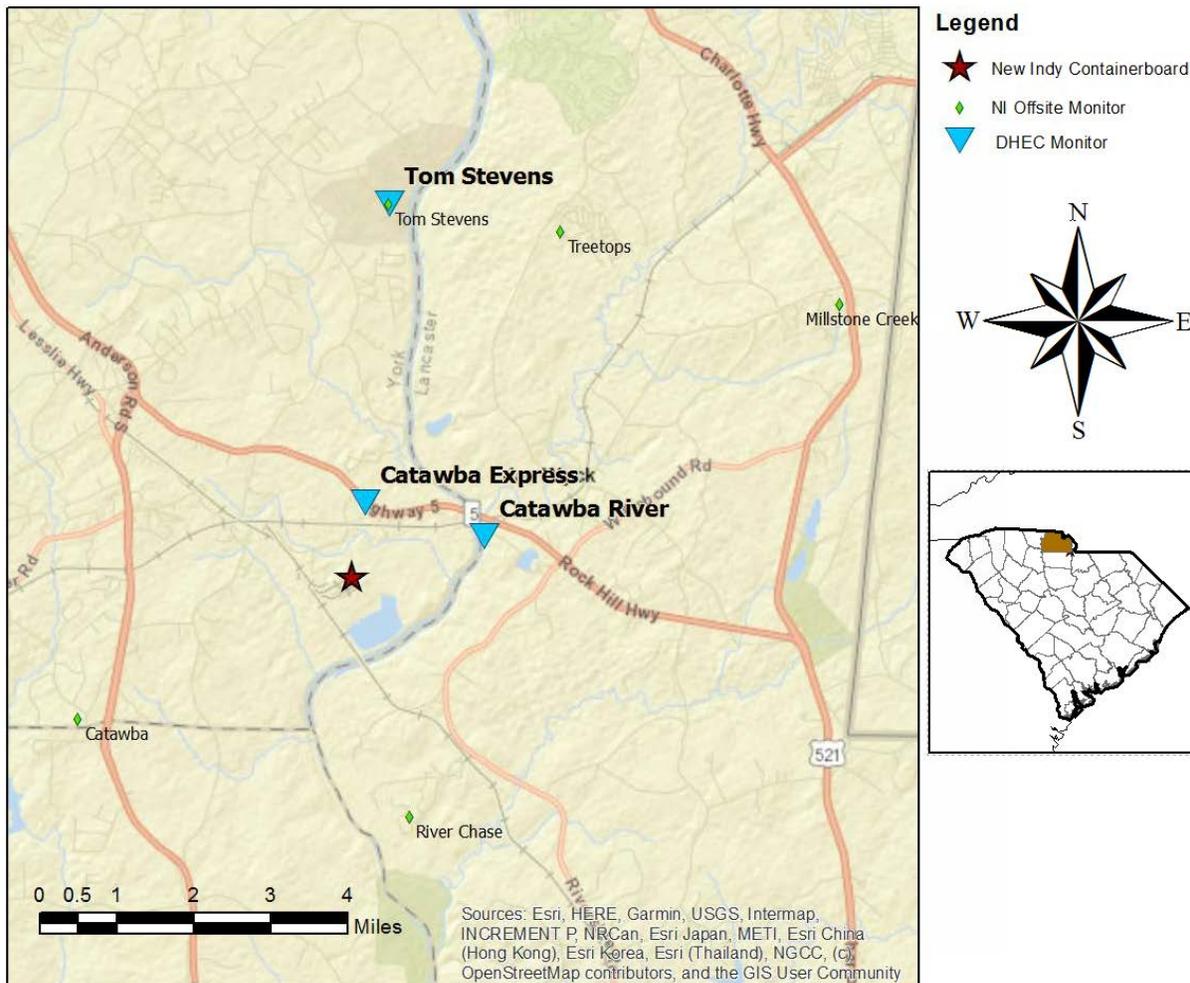
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

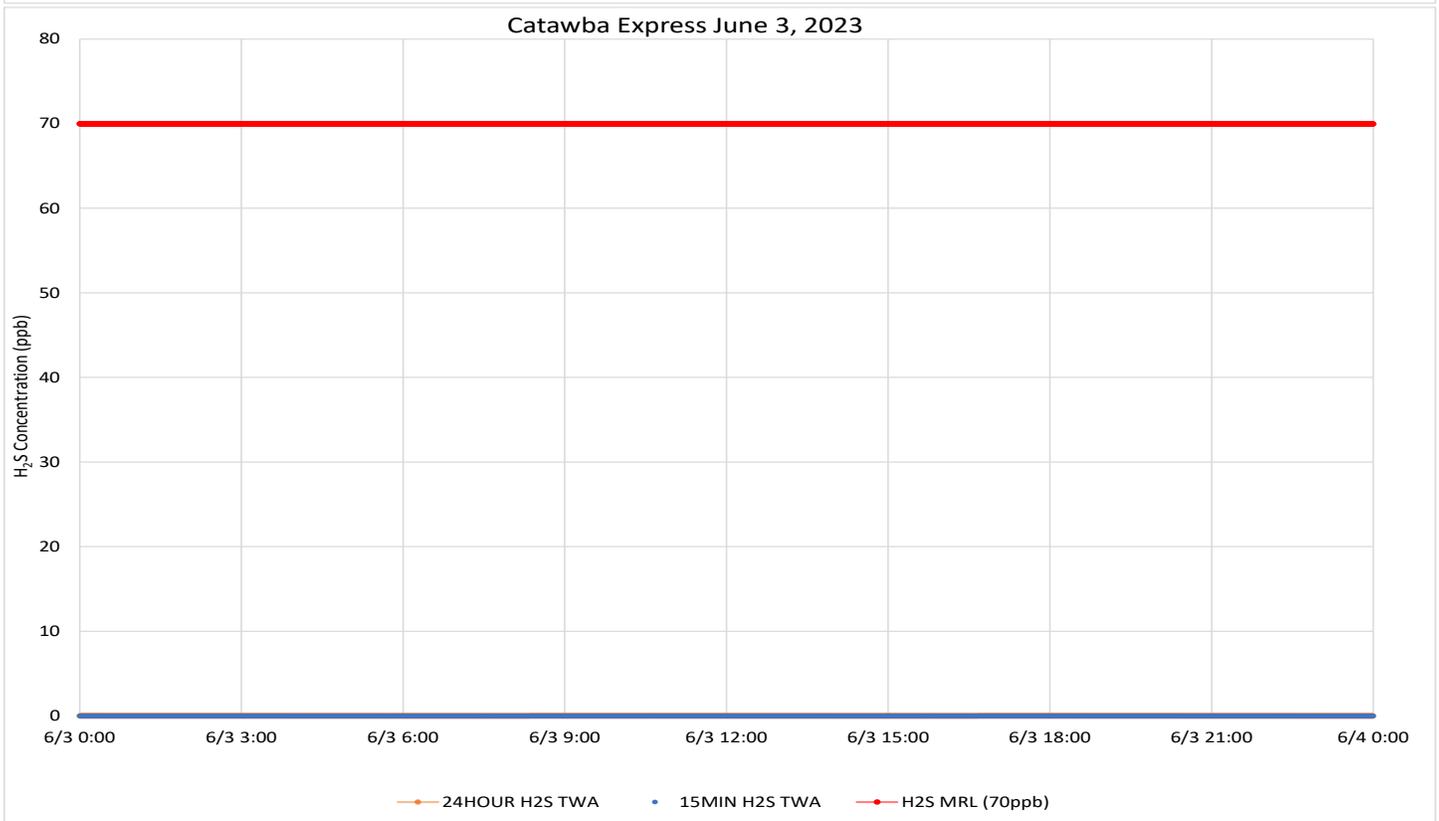
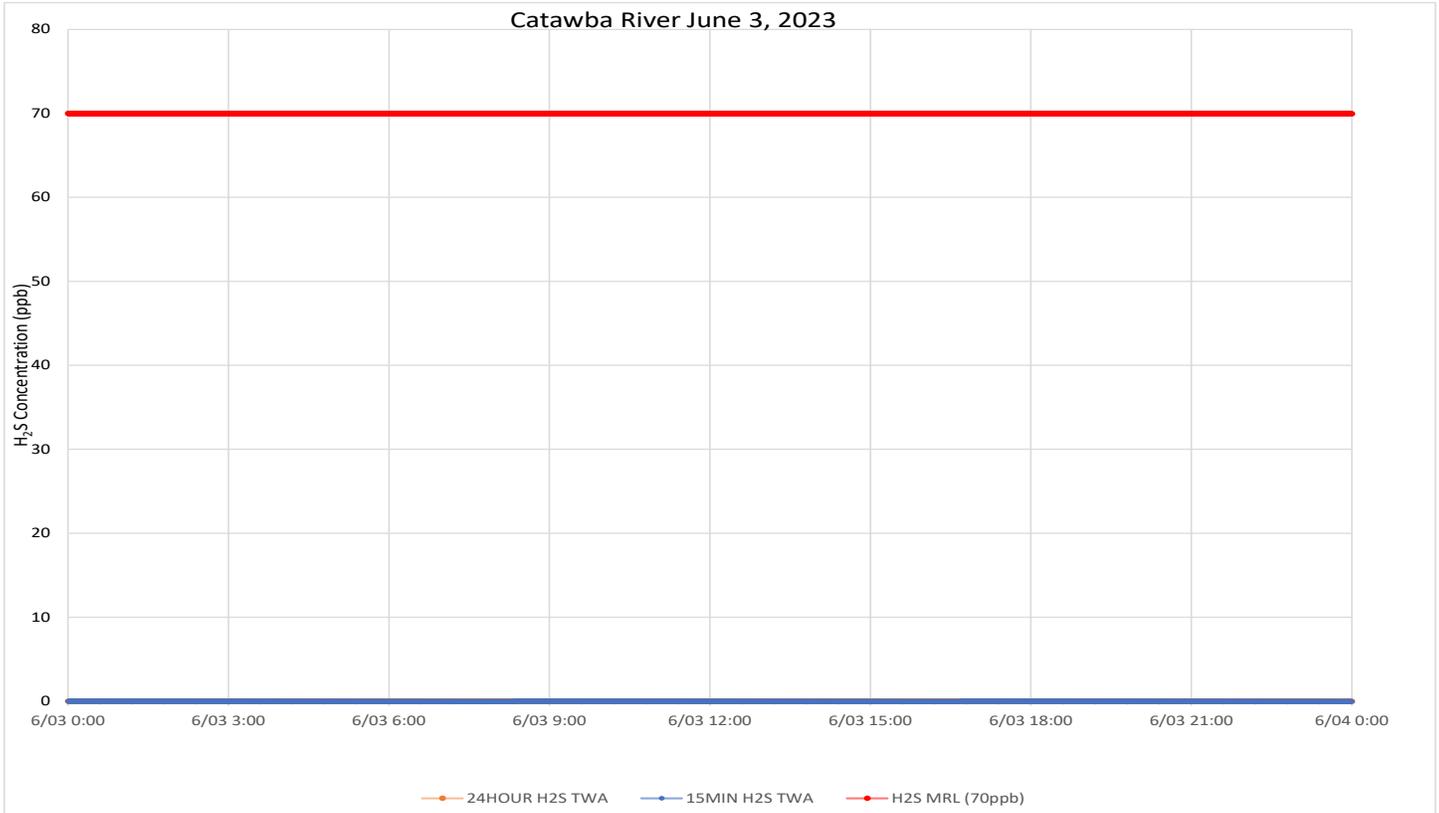
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was variable through most of the period with calms more often before sunrise and during the late night. When detected, wind came from north northeast through northeast.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/4/23  
12:00 AM  
EST

**To:** 6/4/23  
11:59 PM  
EDT

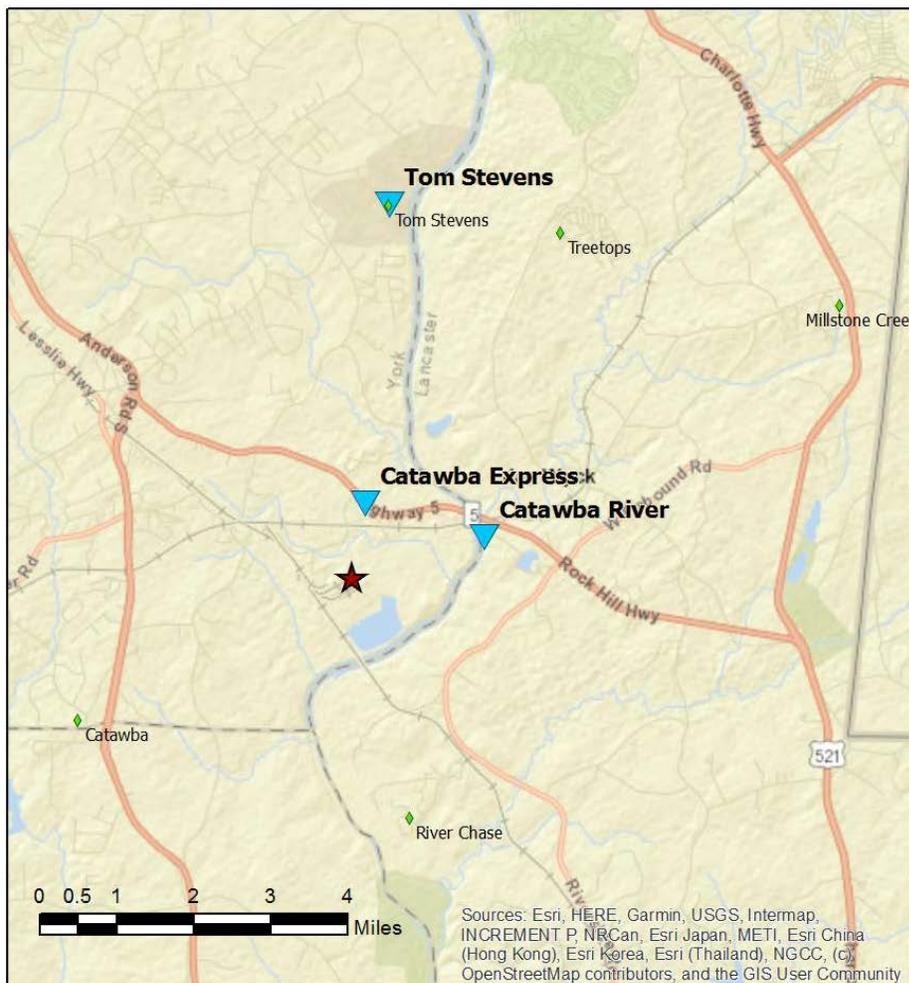
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

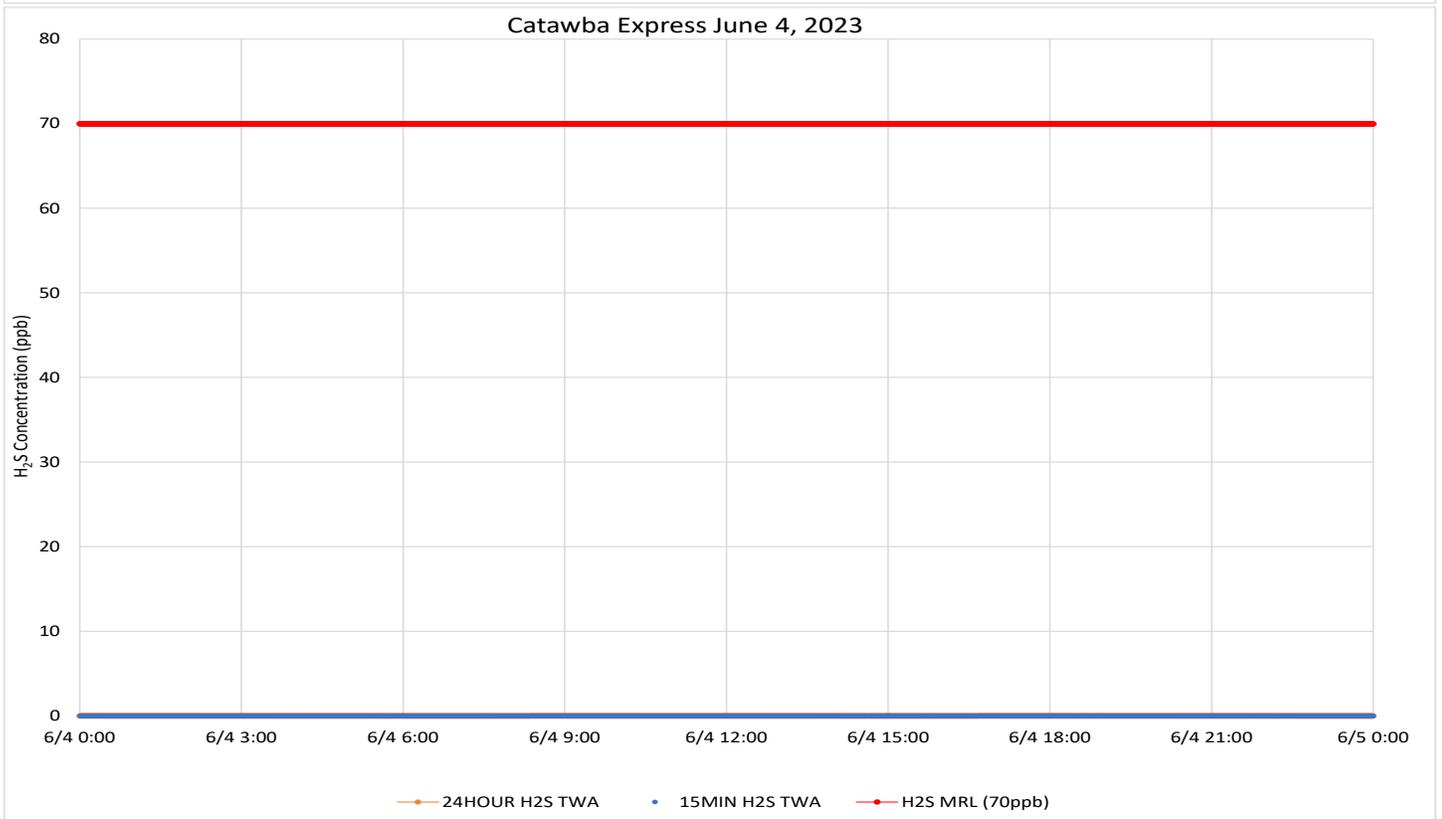
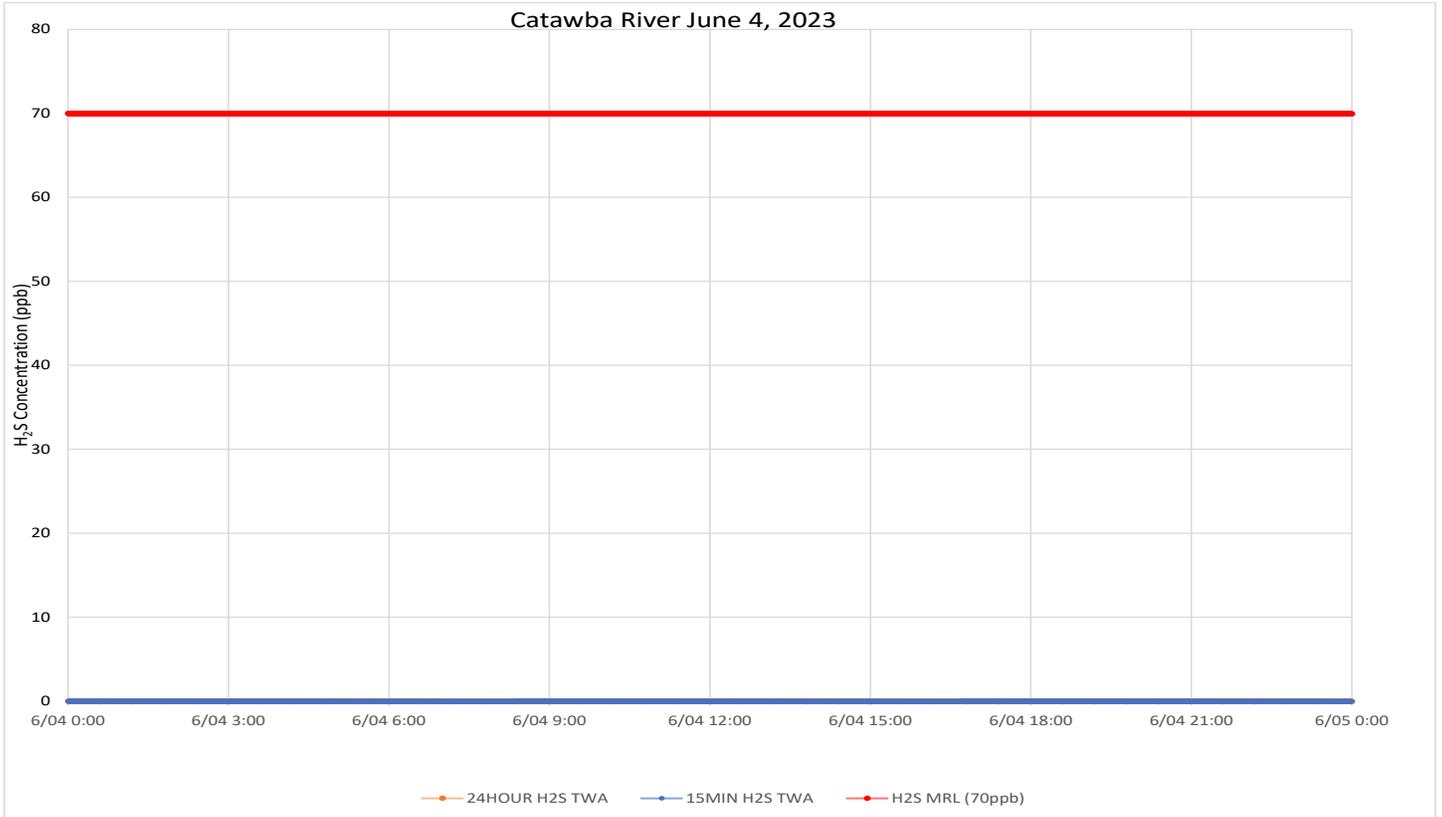
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind came from north northeast through east northeast through late afternoon when it became more variable, then calm by early evening.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/5/23  
12:00 AM  
EST

**To:** 6/5/23  
11:59 PM  
EDT

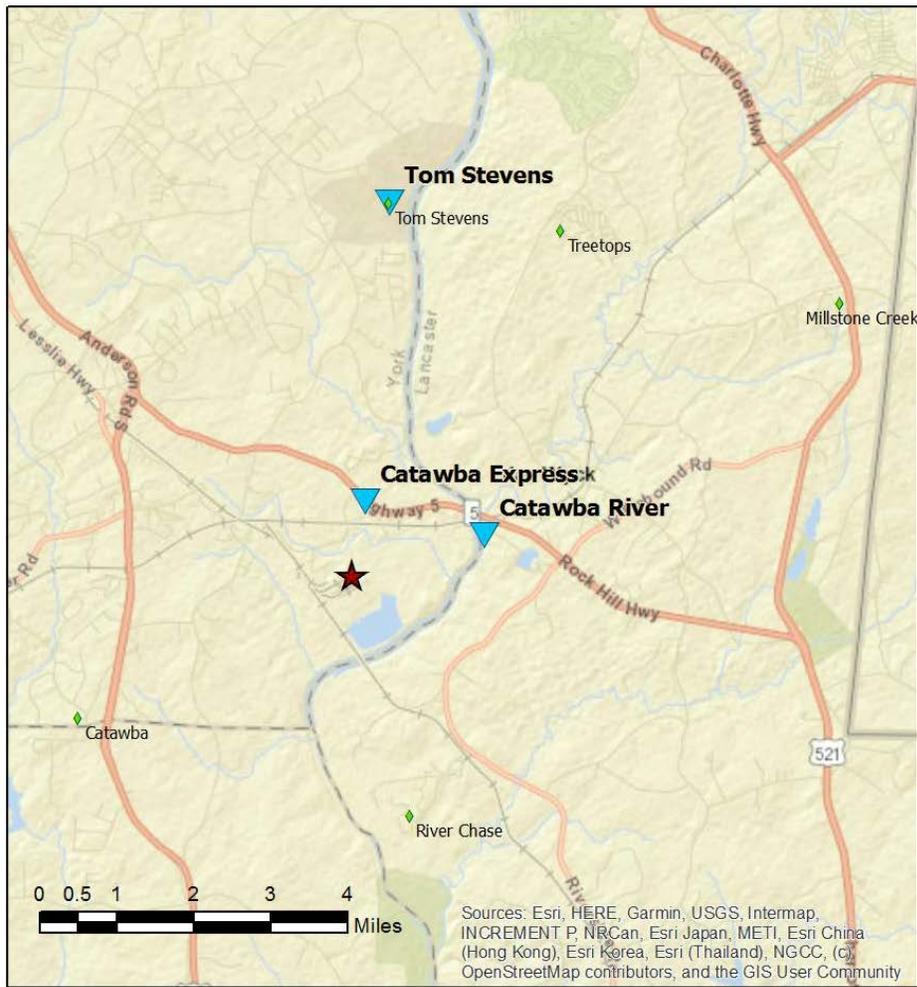
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	119	0 - 3 ppb	0.09 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

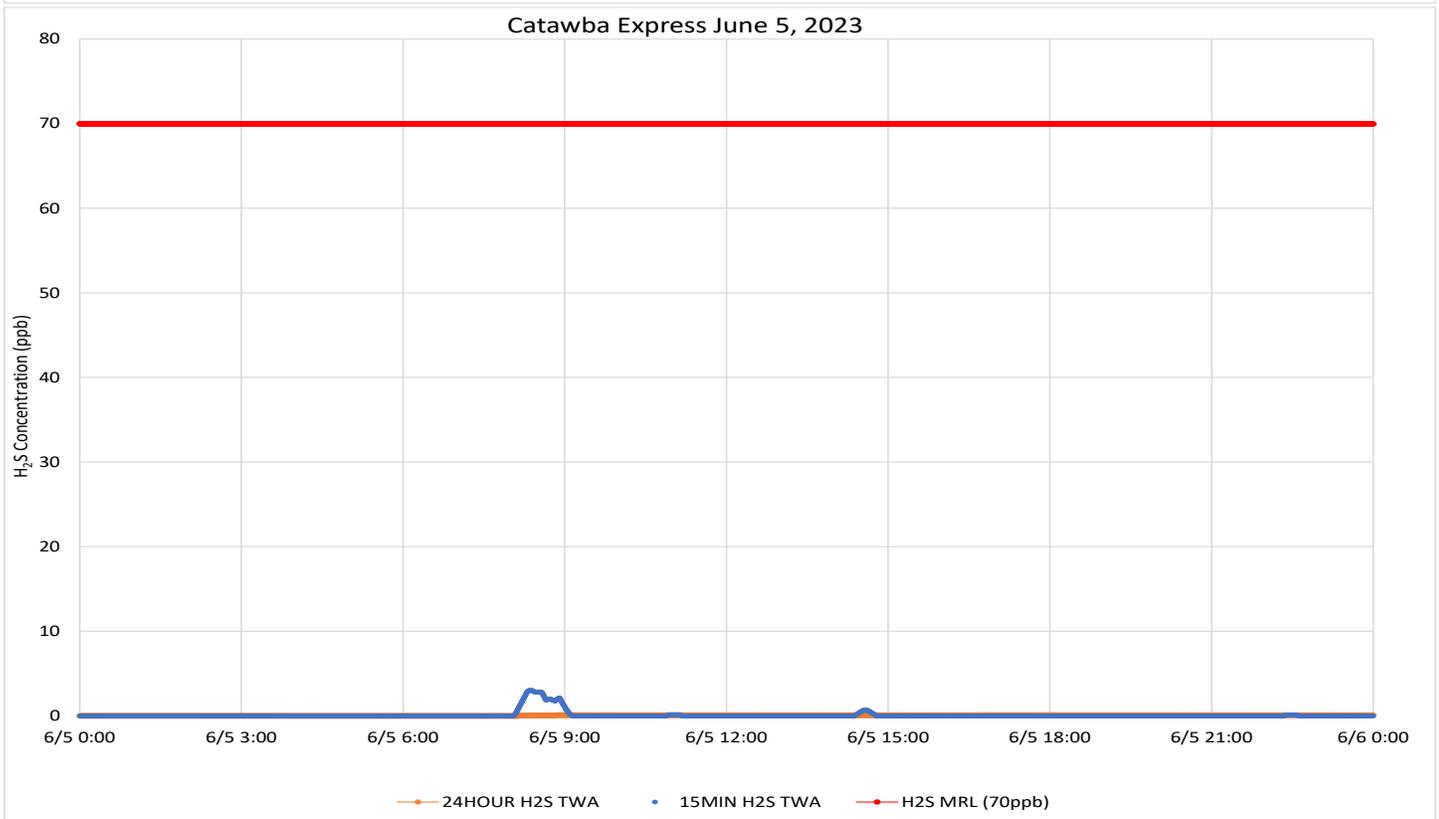
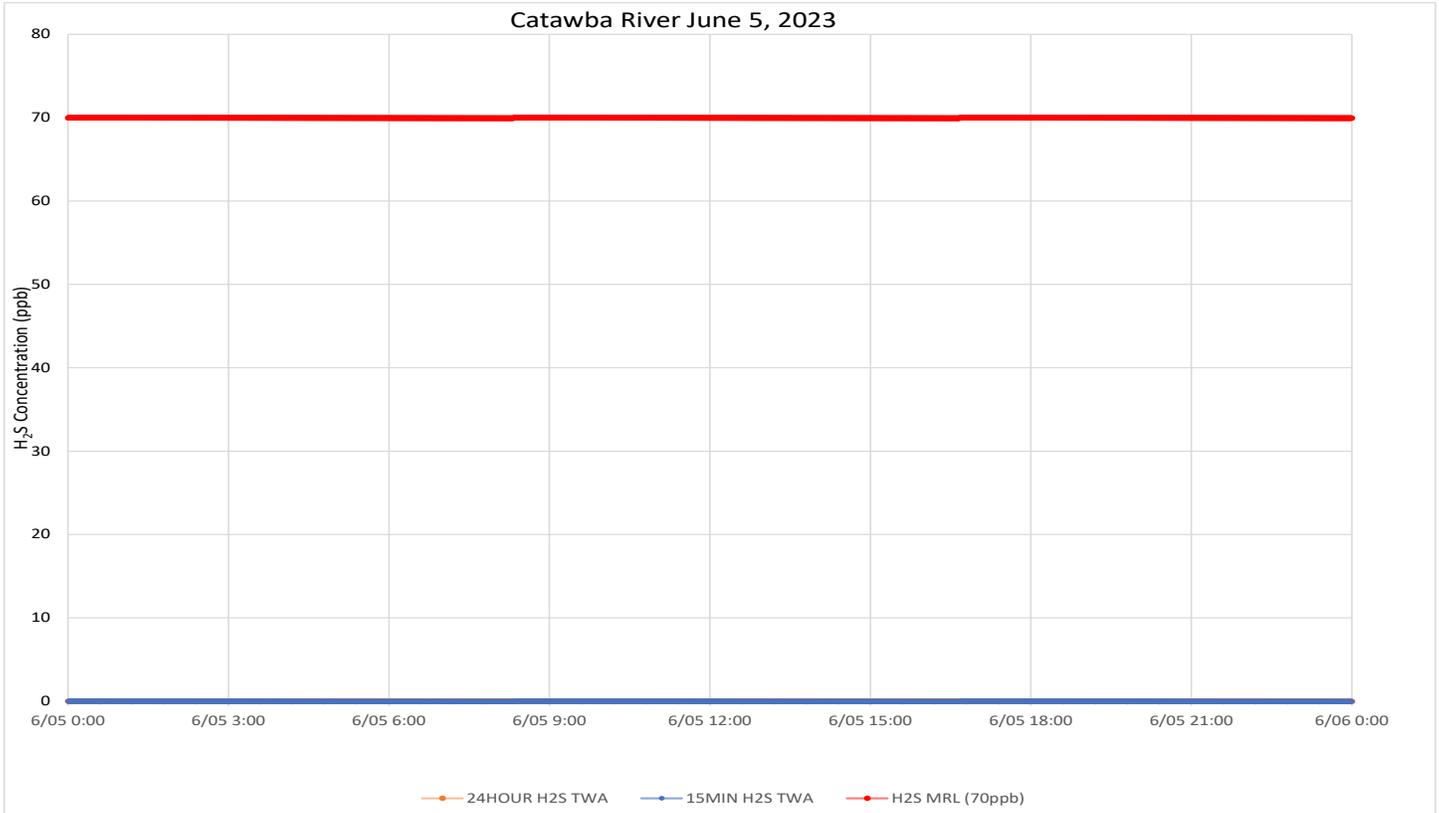
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind were calm until sunrise, and while light and variable with occasional calm periods, was consistently from the southwest through south southwest when detected.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/6/23  
12:00 AM  
EST

**To:** 6/6/23  
11:59 PM  
EDT

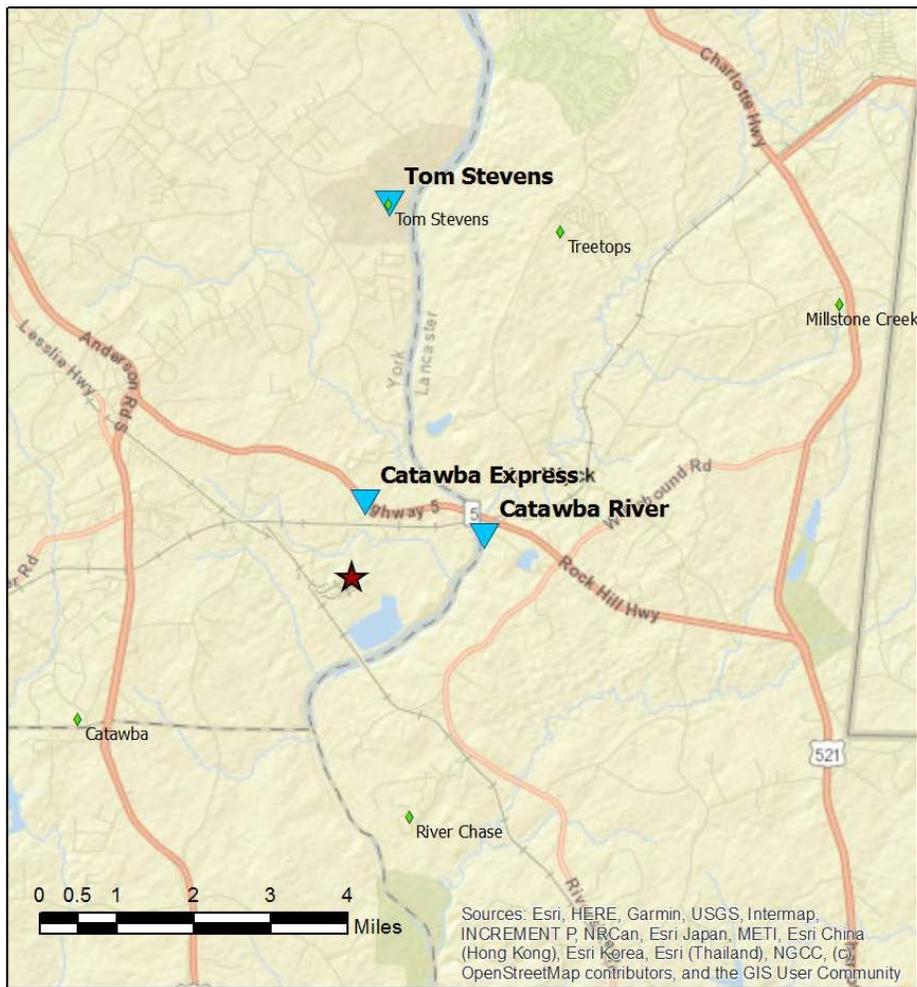
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	414	0 - 3 ppb	0.22 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	504	0 - 6 ppb	0.45 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

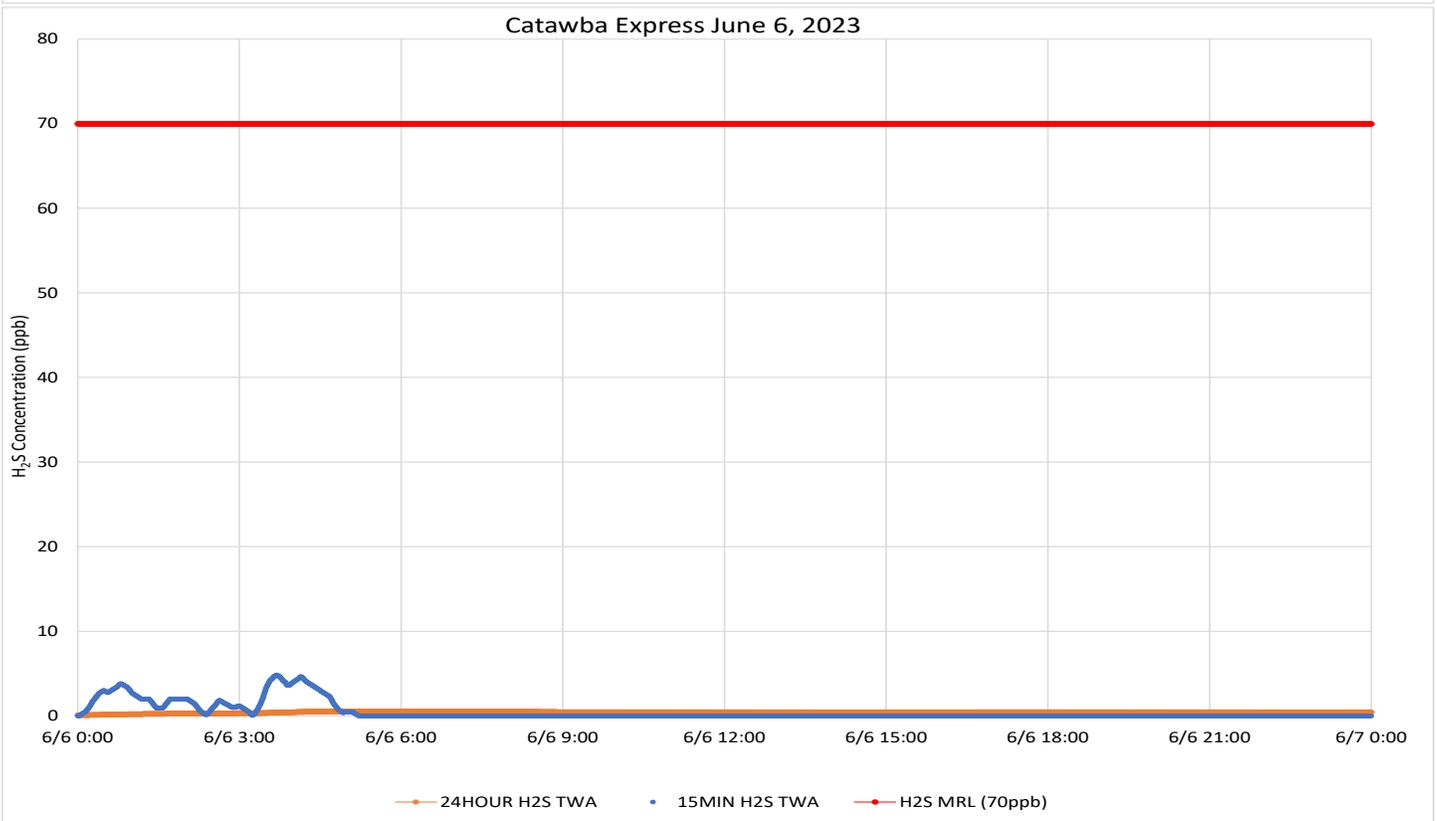
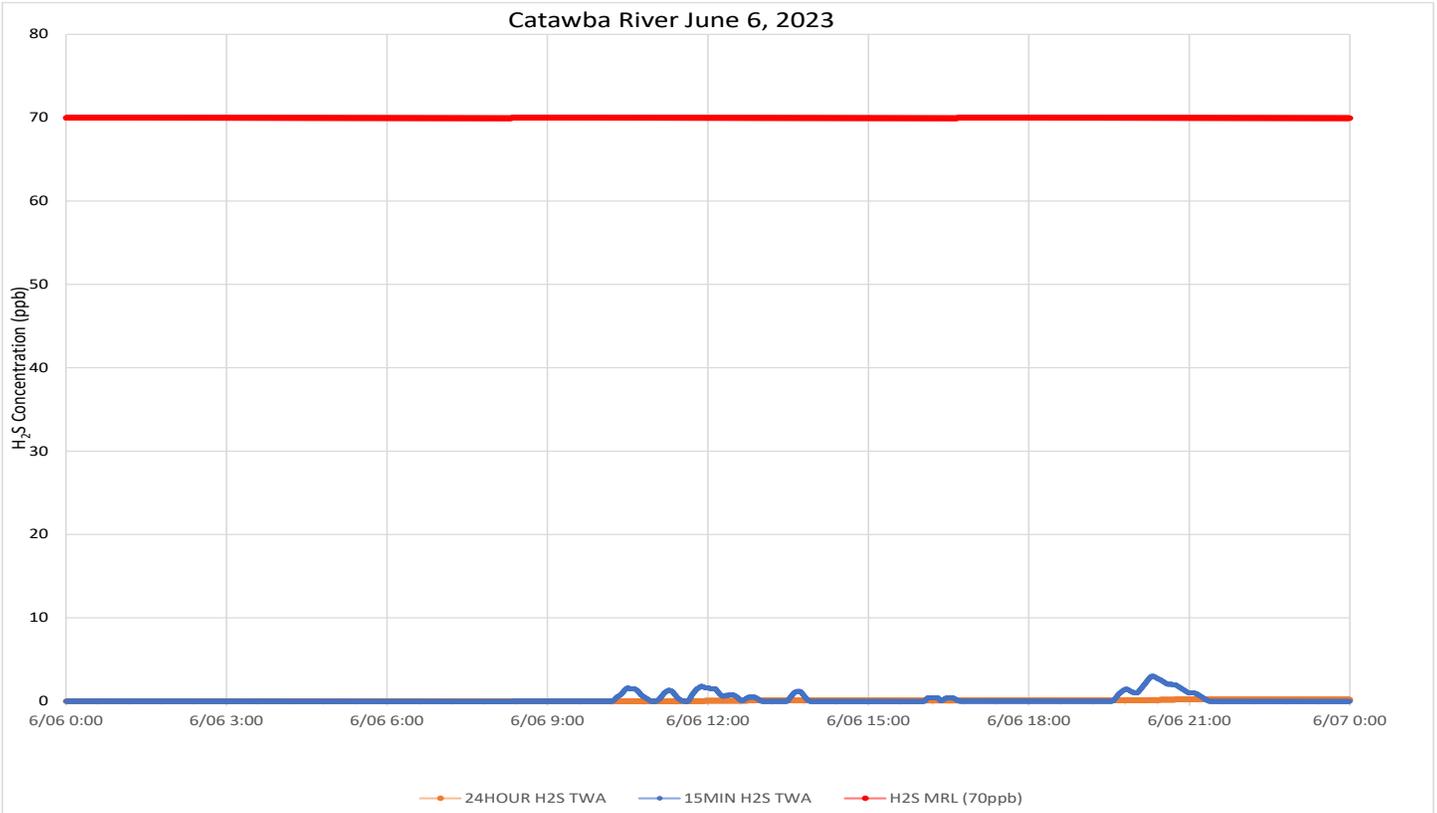
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were light and from the west southwest through midday. After noon, winds shifted to come from the north northwest through west northwest before becoming calm in the late evening.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/7/23  
12:00 AM  
EST

**To:** 6/7/23  
11:59 PM  
EDT

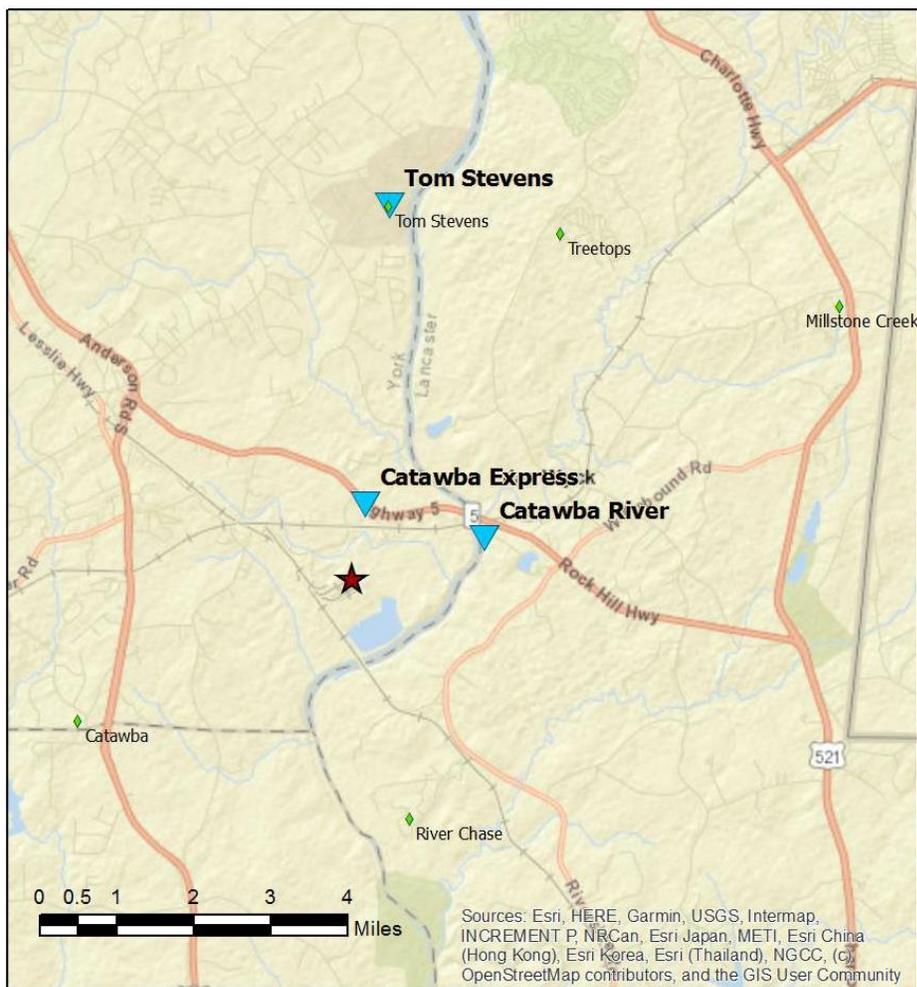
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	577	0 - 20 ppb	0.71 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	597	0 - 5 ppb	0.48 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

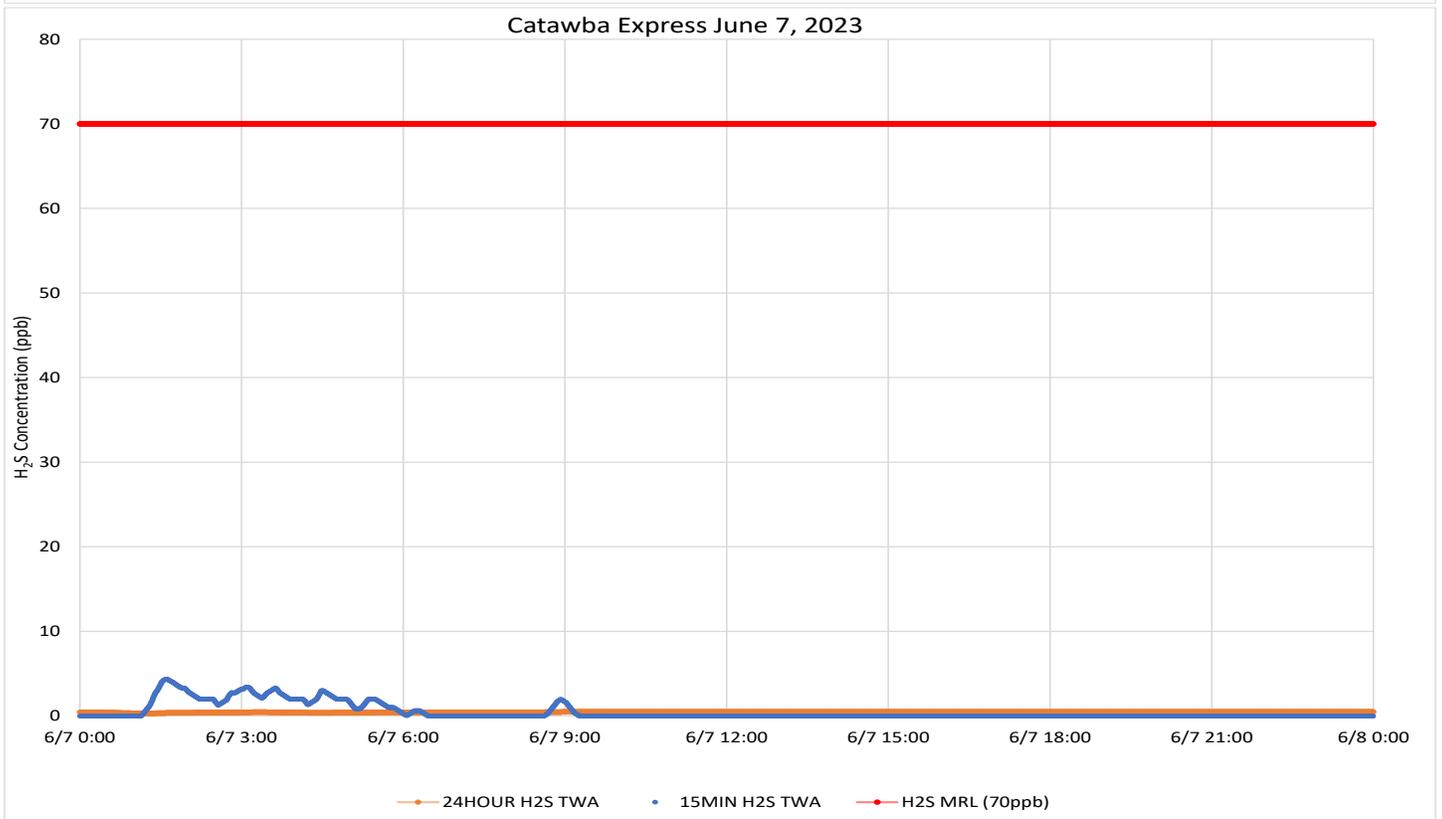
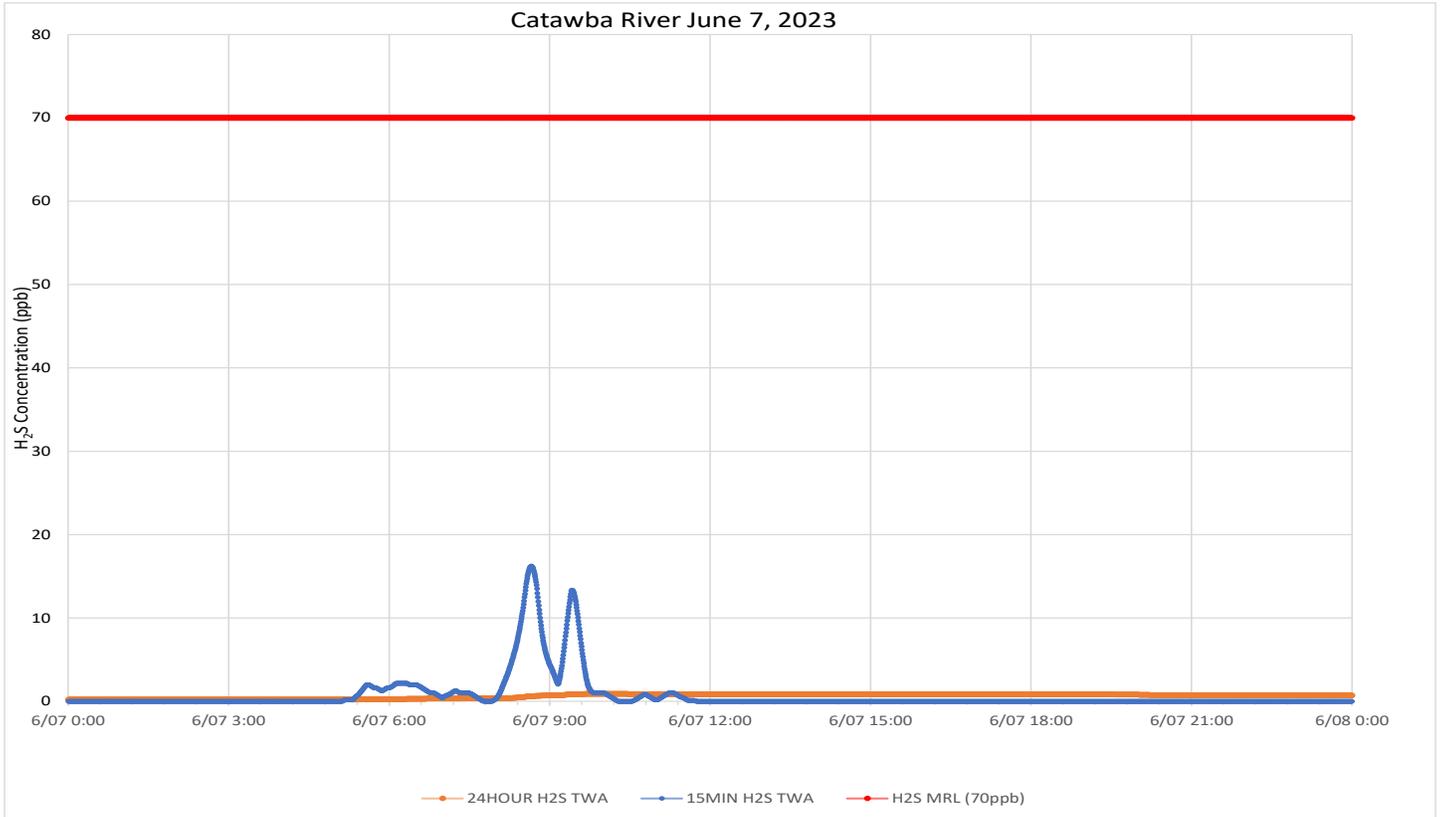
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds generally calm before dawn, freshening from the west and shifting steadily to end the period coming from the northeast.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/8/23  
12:00 AM  
EST

**To:** 6/8/23  
11:59 PM  
EDT

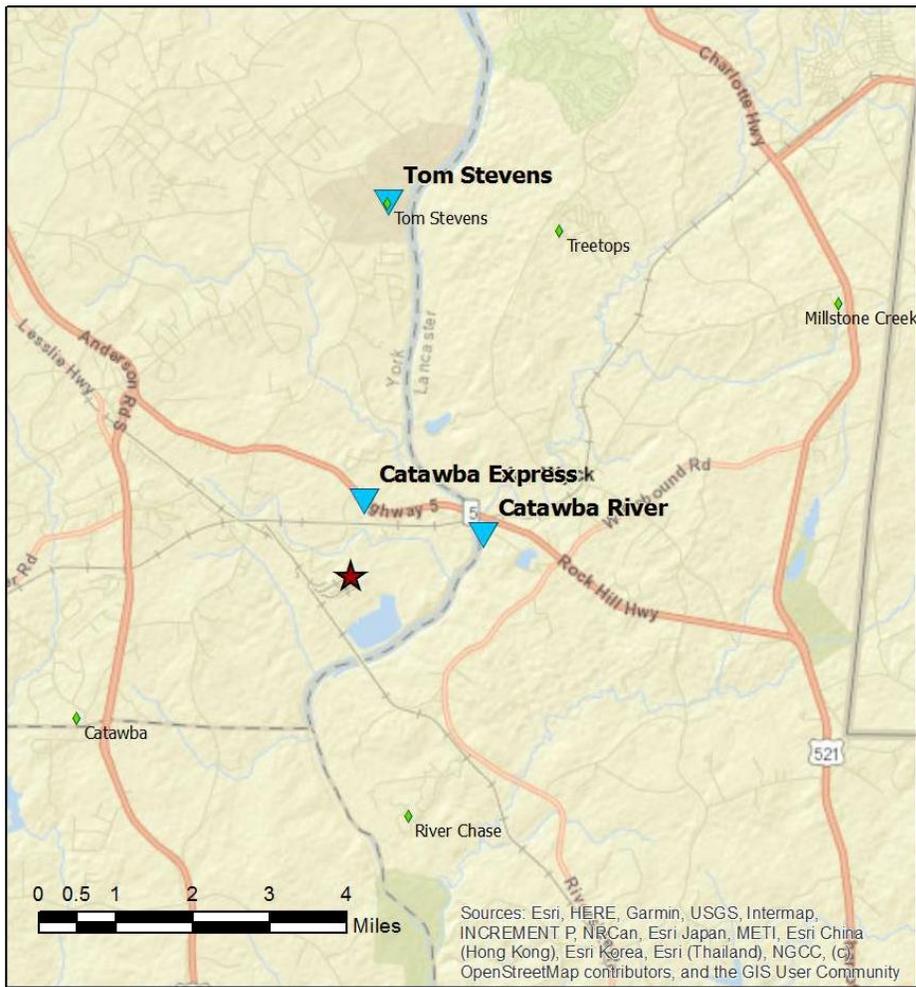
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	311	0 - 5 ppb	0.23 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2877	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

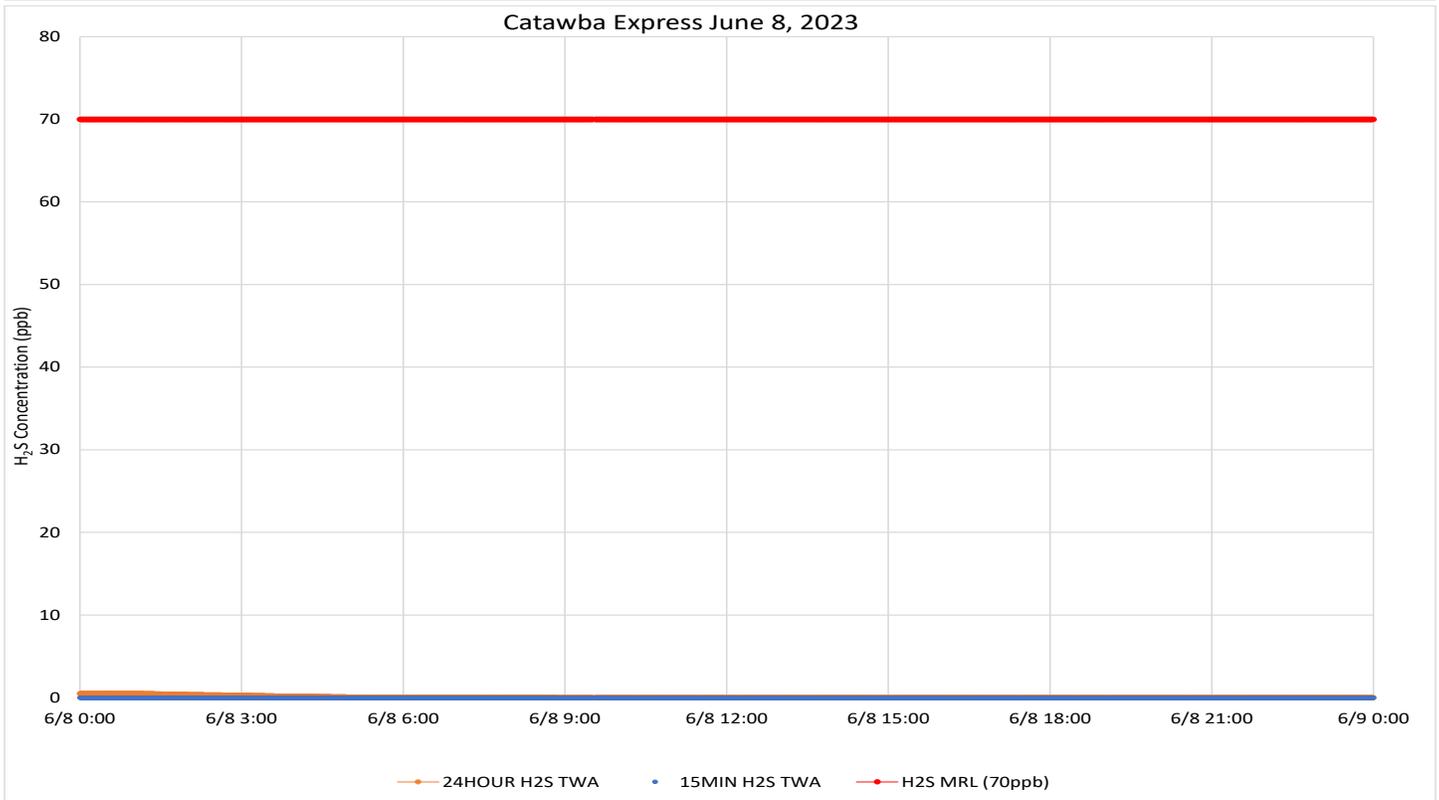
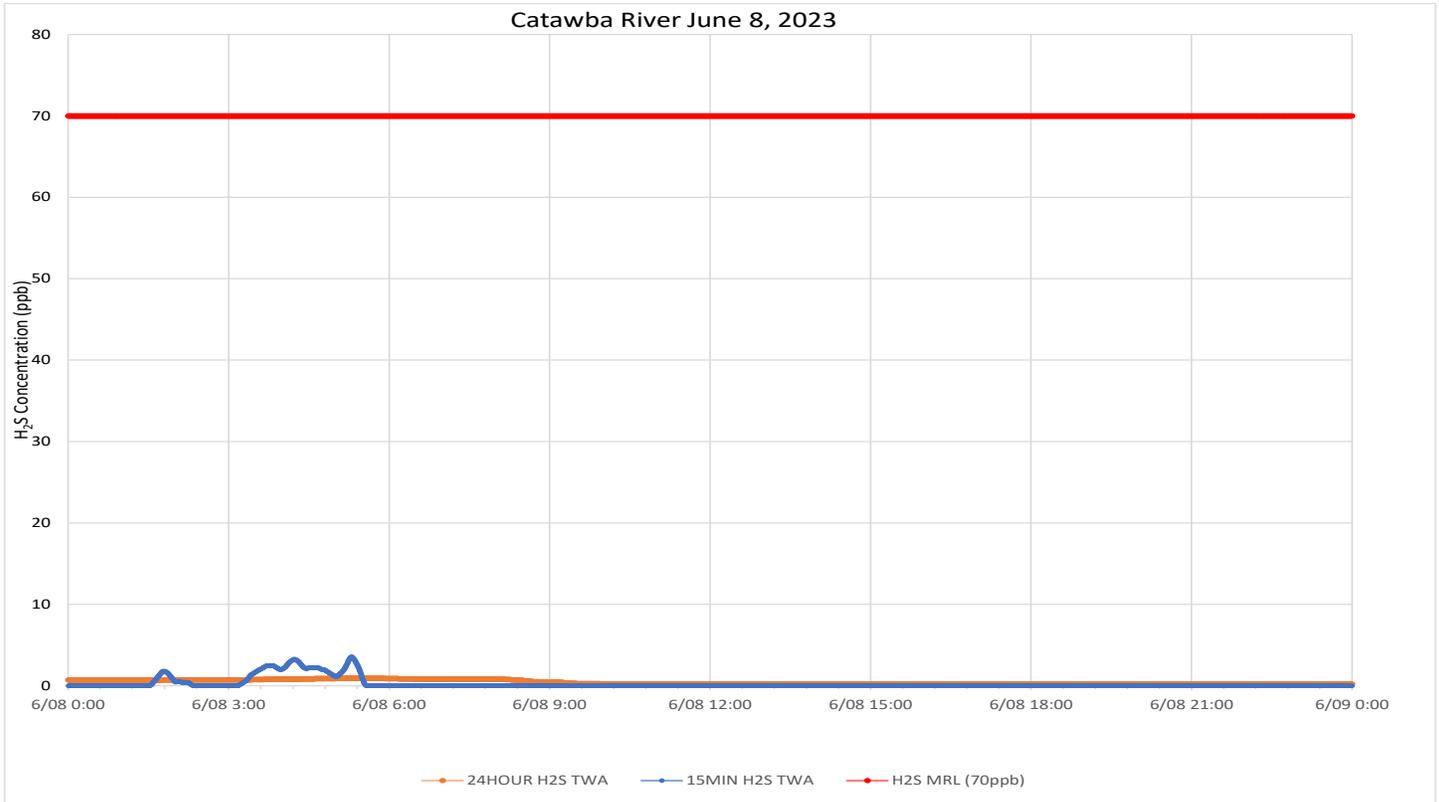
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (C) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were light and variable with some calm periods in the early morning and late night. Before dawn, wind was from the southwest, shifting northwest around sunrise and then more often from the north northwest through north northeast when detected the rest of the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/9/23  
12:00 AM  
EST

**To:** 6/9/23  
11:59 PM  
EDT

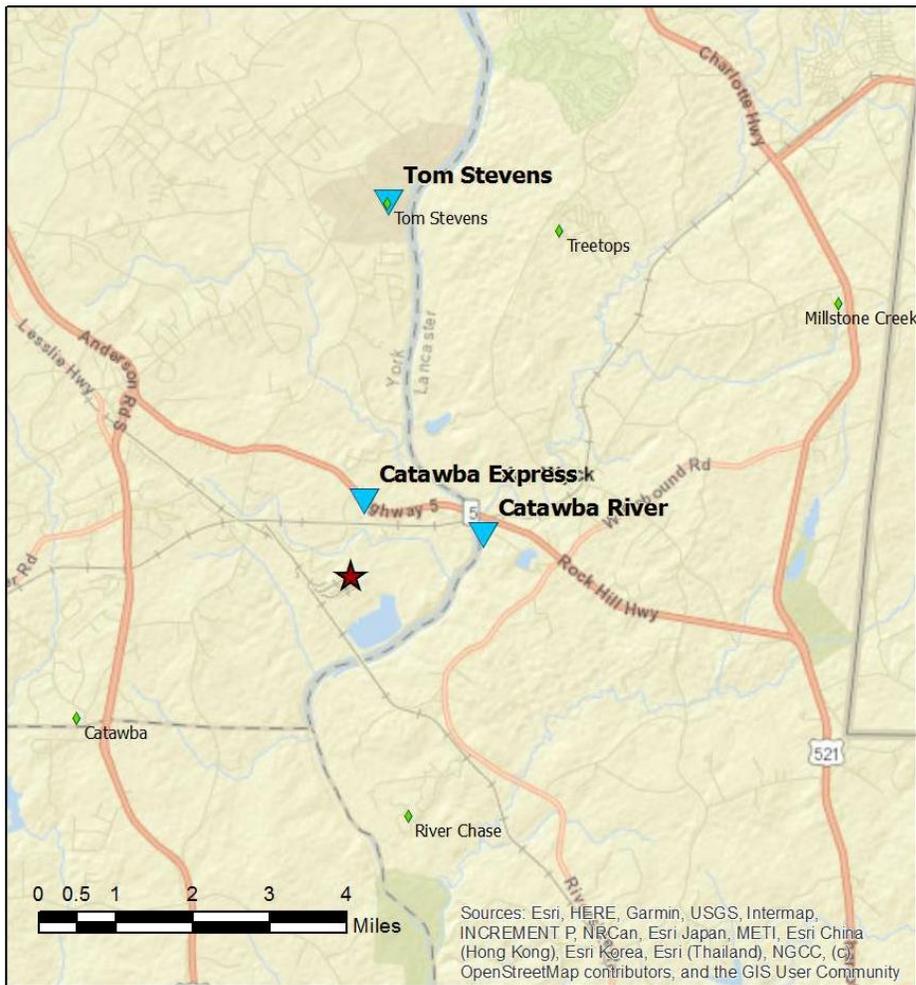
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	258	0 - 5 ppb	0.29 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



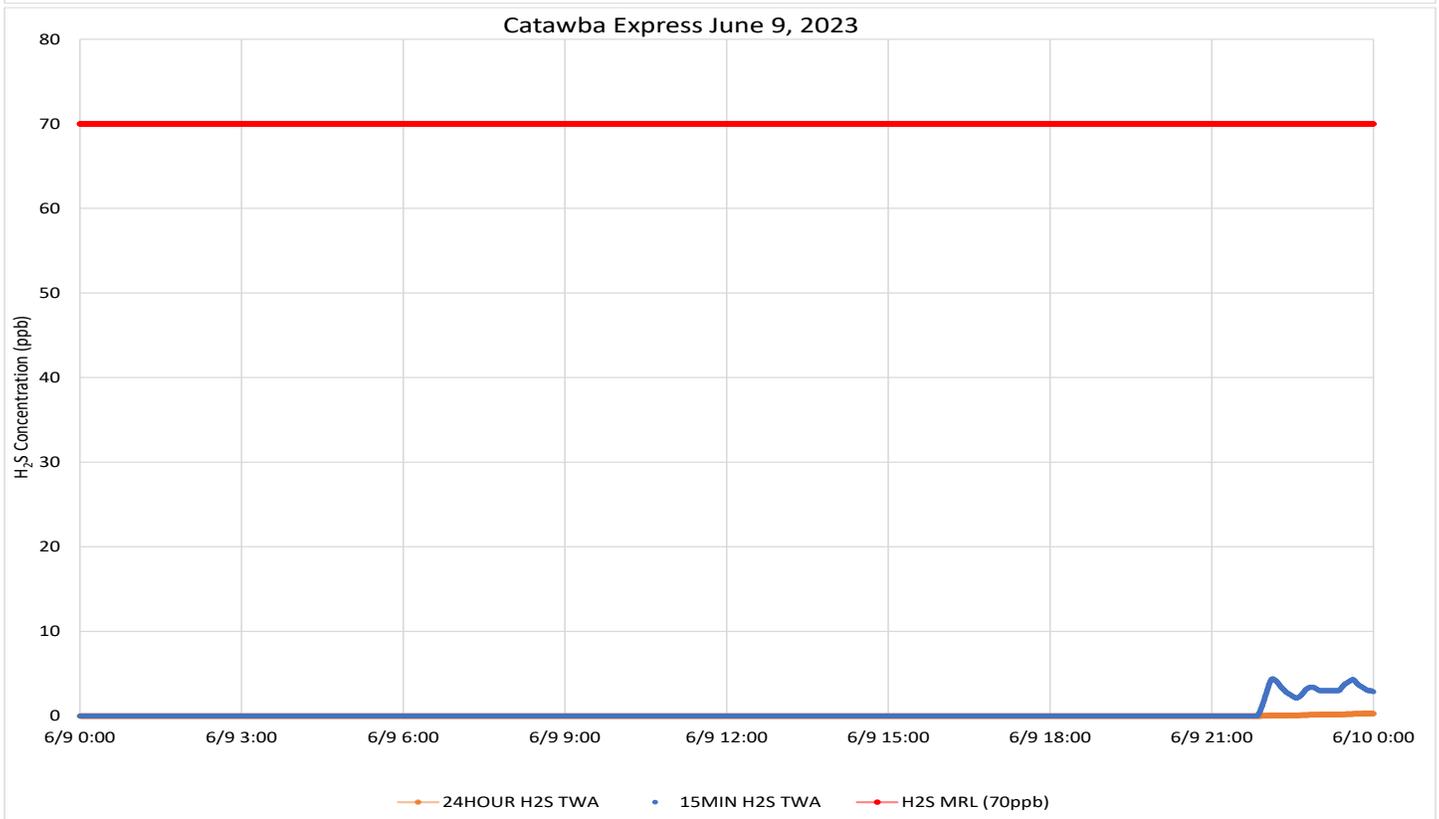
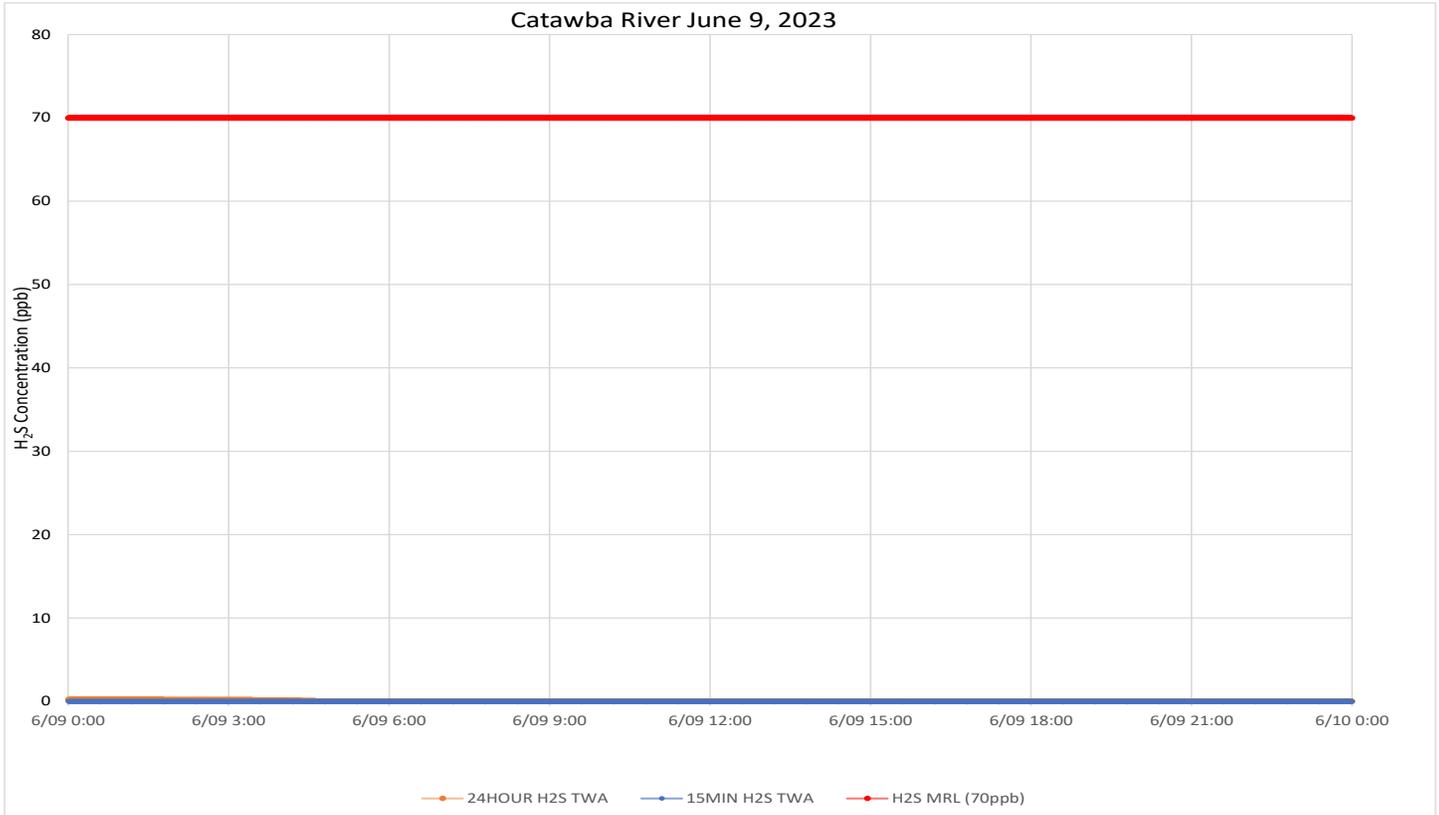
**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▼ DHEC Monitor

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were light and variable to calm for most of the period. Winds were calm before sunrise and after sunset. During the day, when detected, wind was generally from the north northeast through northeast.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/10/23  
12:00 AM  
EST

**To:** 6/10/23  
11:59 PM  
EDT

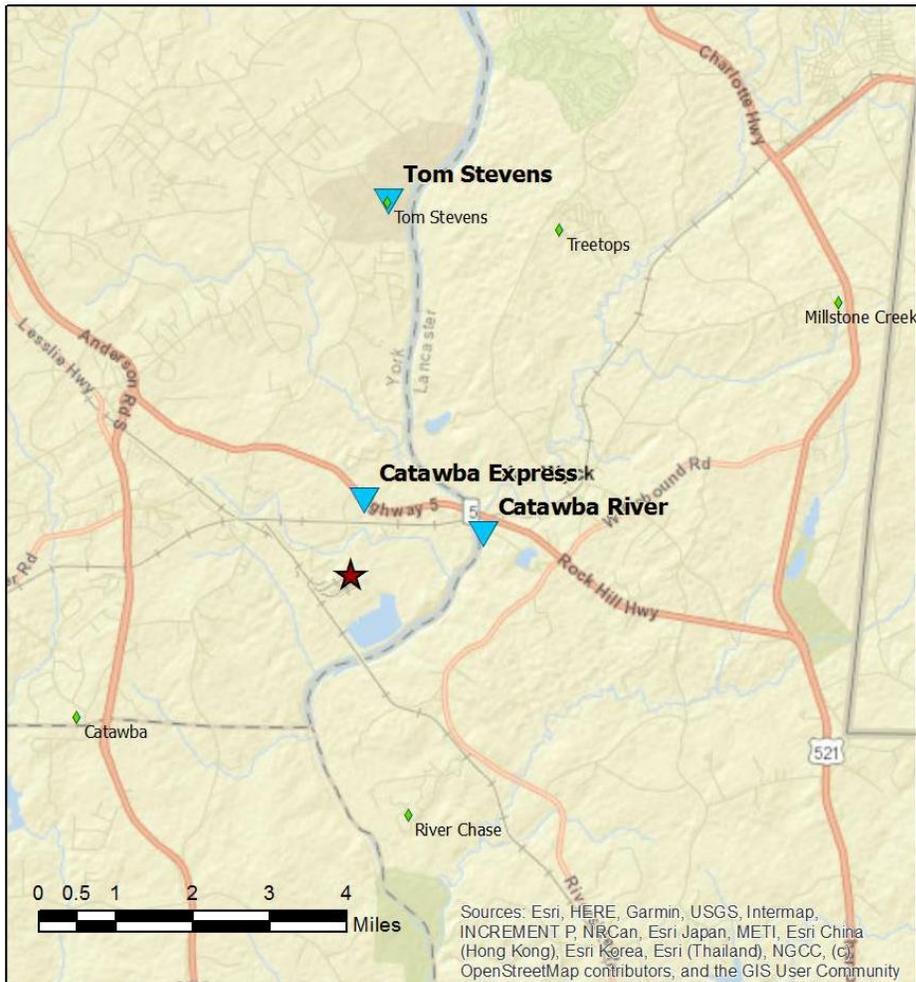
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	246	0 - 7 ppb	0.16 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	937	0 - 15 ppb	1.53 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



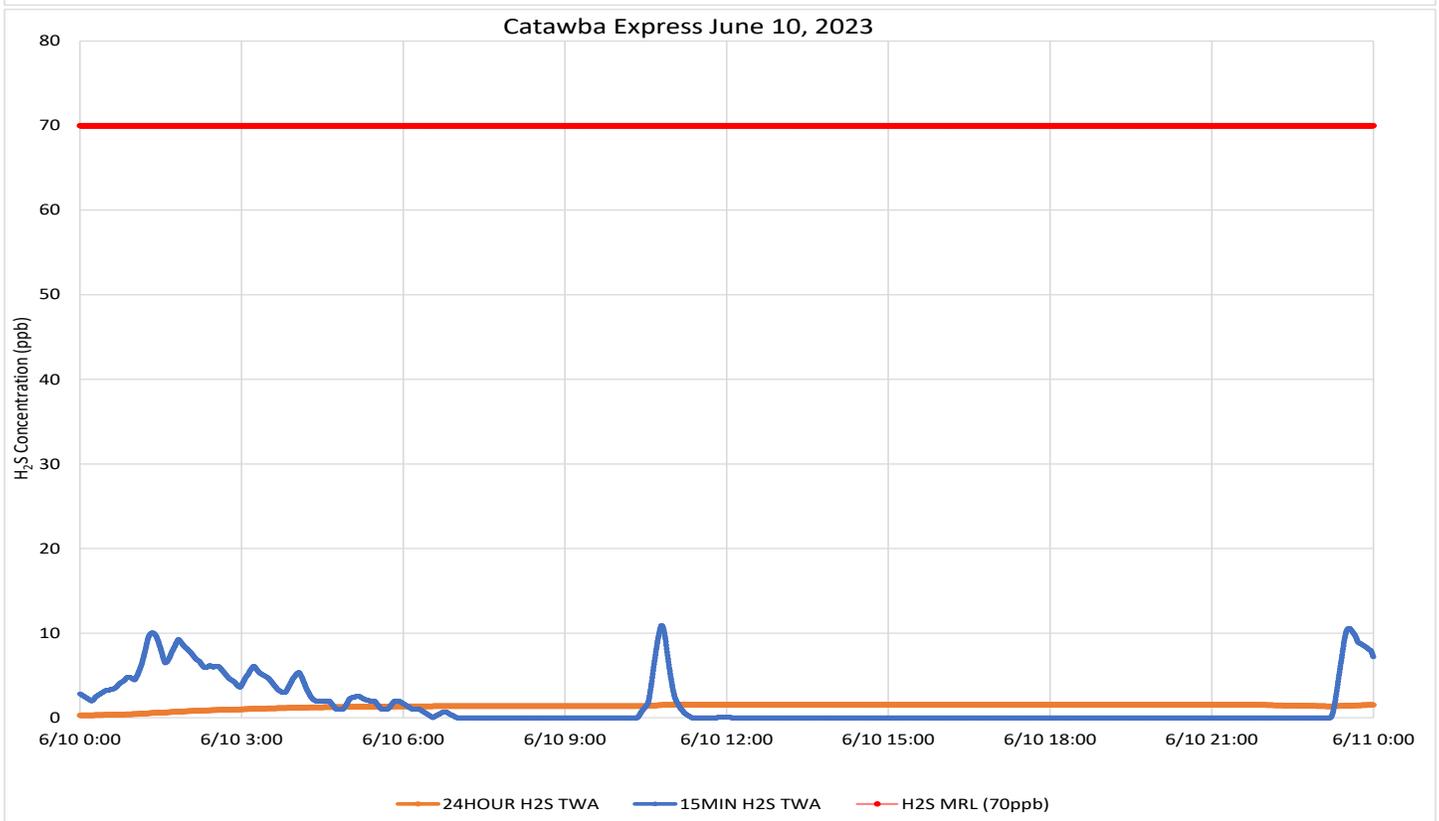
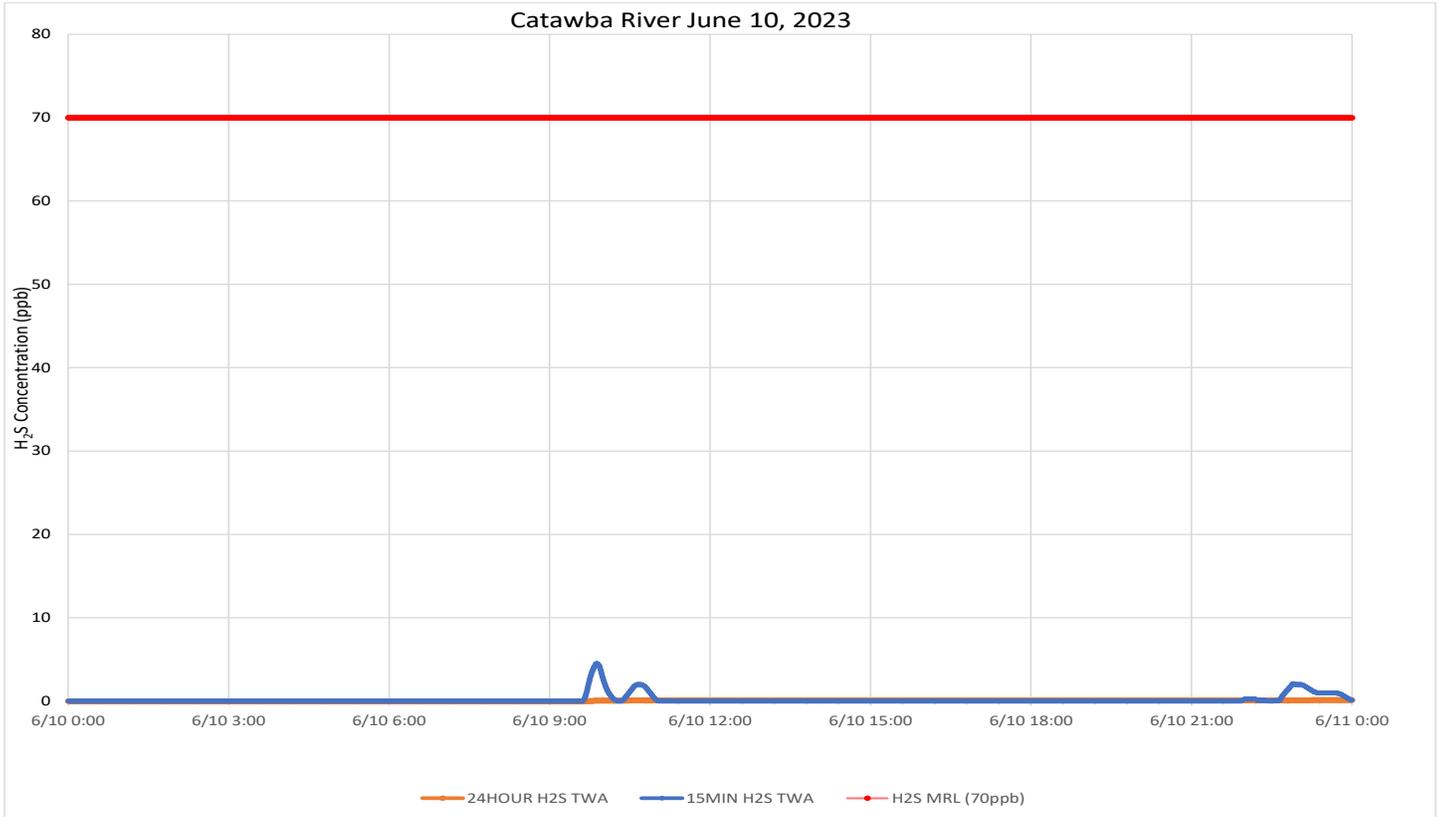
**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▼ DHEC Monitor

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were calm through mid-morning. During the day, wind direction was variable, but primarily from the south southwest through west southwest, becoming calm more often after sunset.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

The pump in the monitor at the Catawba River site failed at approximately 3:15 PM on June 11. The summary data for that site is only representative of the period prior to the pump failure.

## Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/11/23  
12:00 AM  
EST

**To:** 6/11/23  
11:59 PM  
EDT

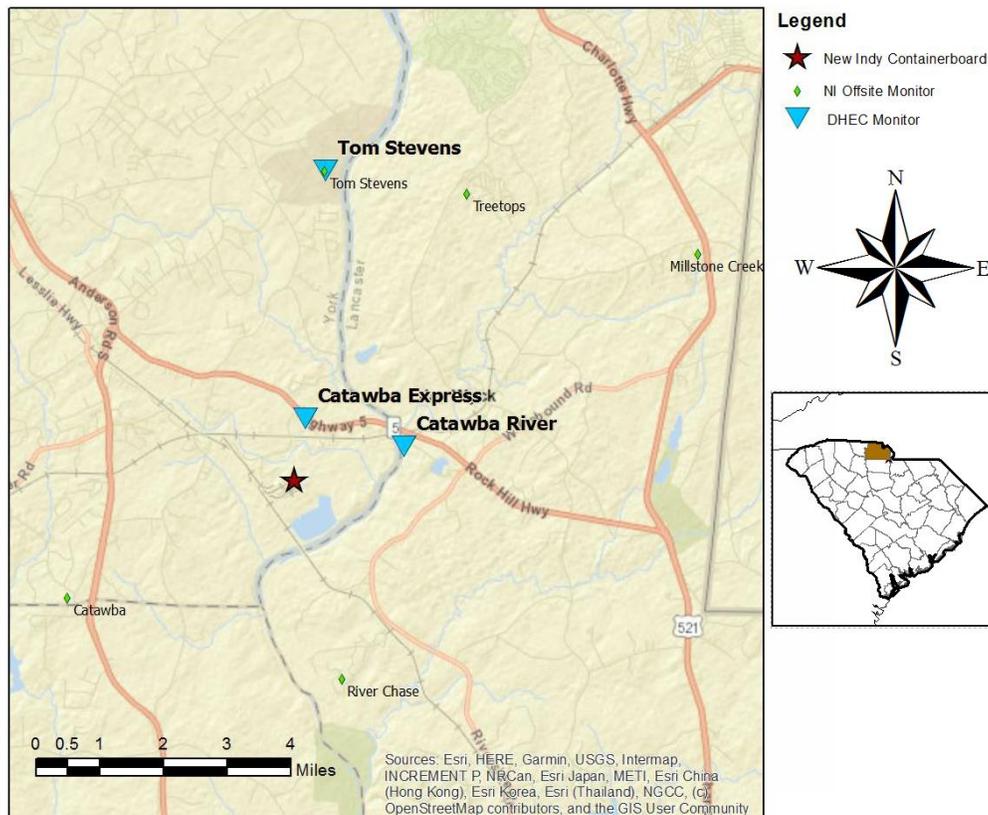
Catawba River 0000-1519							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Partial Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	1838	196	0 - 5 ppb	0.19 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	2030	0 - 15 ppb	2.53 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

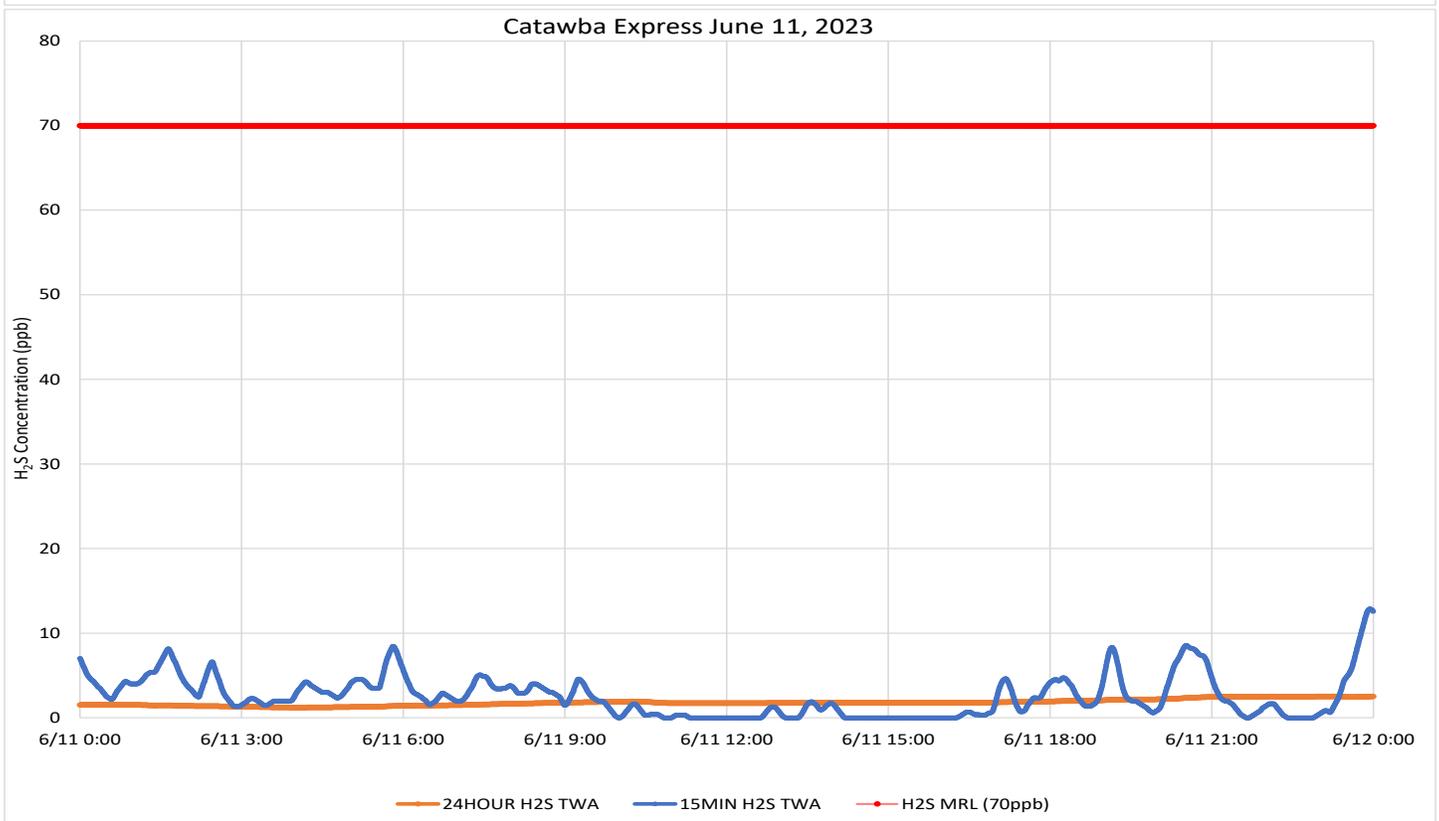
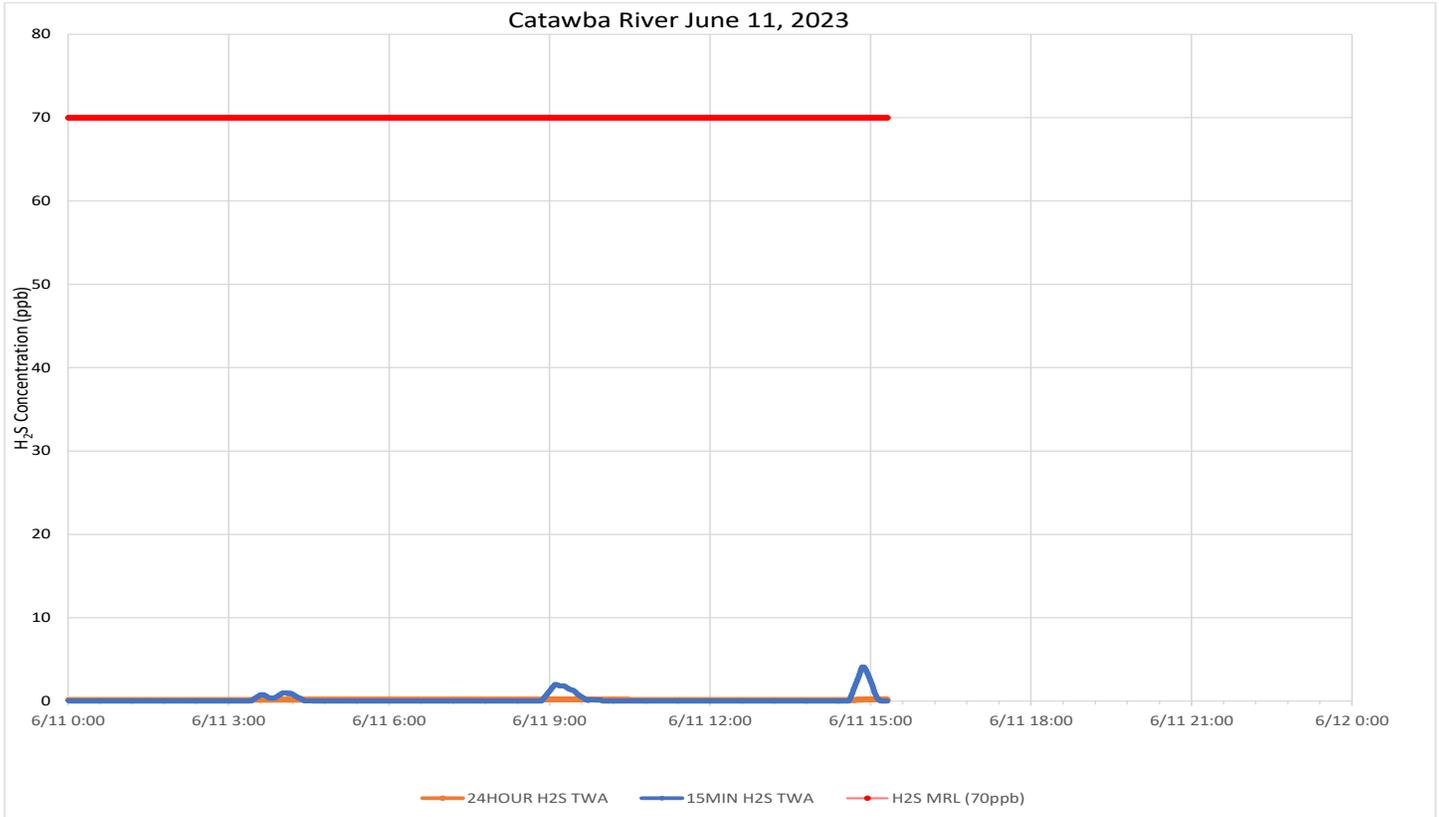
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were calm for periods into the mid-morning. Wind direction was occasionally variable, but primarily from the south southwest to south throughout the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

The monitor at the Catawba River site was replaced at approximately 12:10 PM on June 12. The summary data for that site is only representative of the period after the monitor replacement.

## Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/12/23  
12:00 AM  
EST

**To:** 6/12/23  
11:59 PM  
EDT

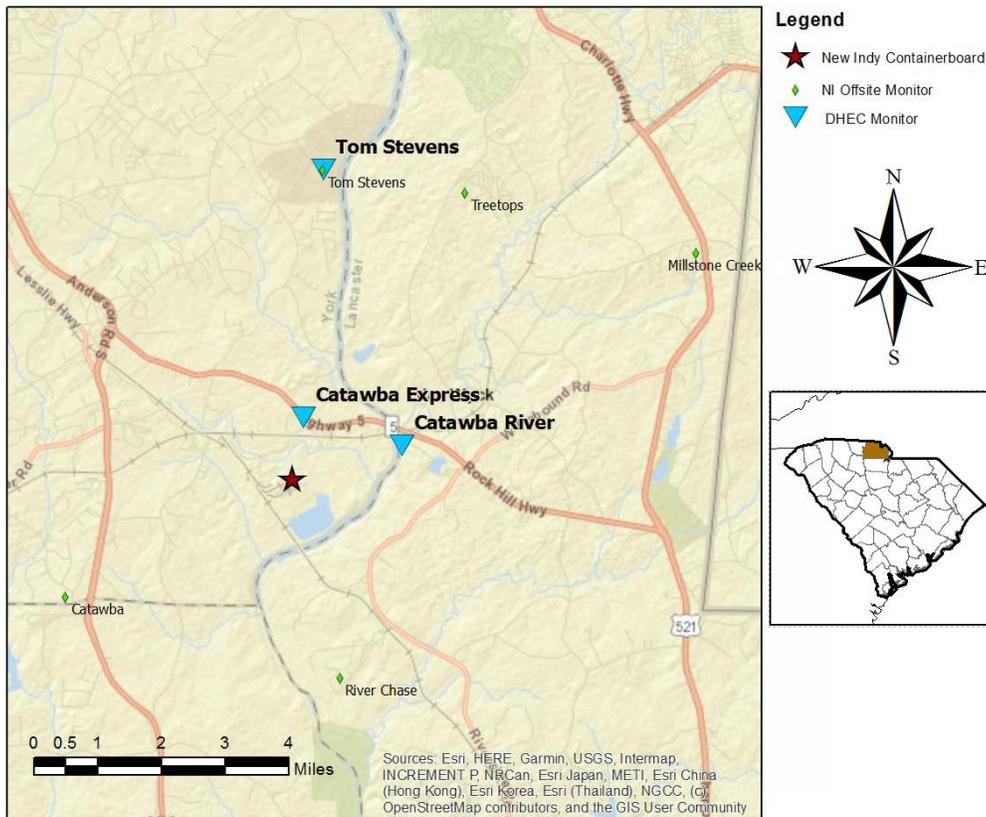
Catawba River 1209-2359							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Partial Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	4323	1325	0 - 3 ppb	0.53 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2879	265	0 - 9 ppb	0.2 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

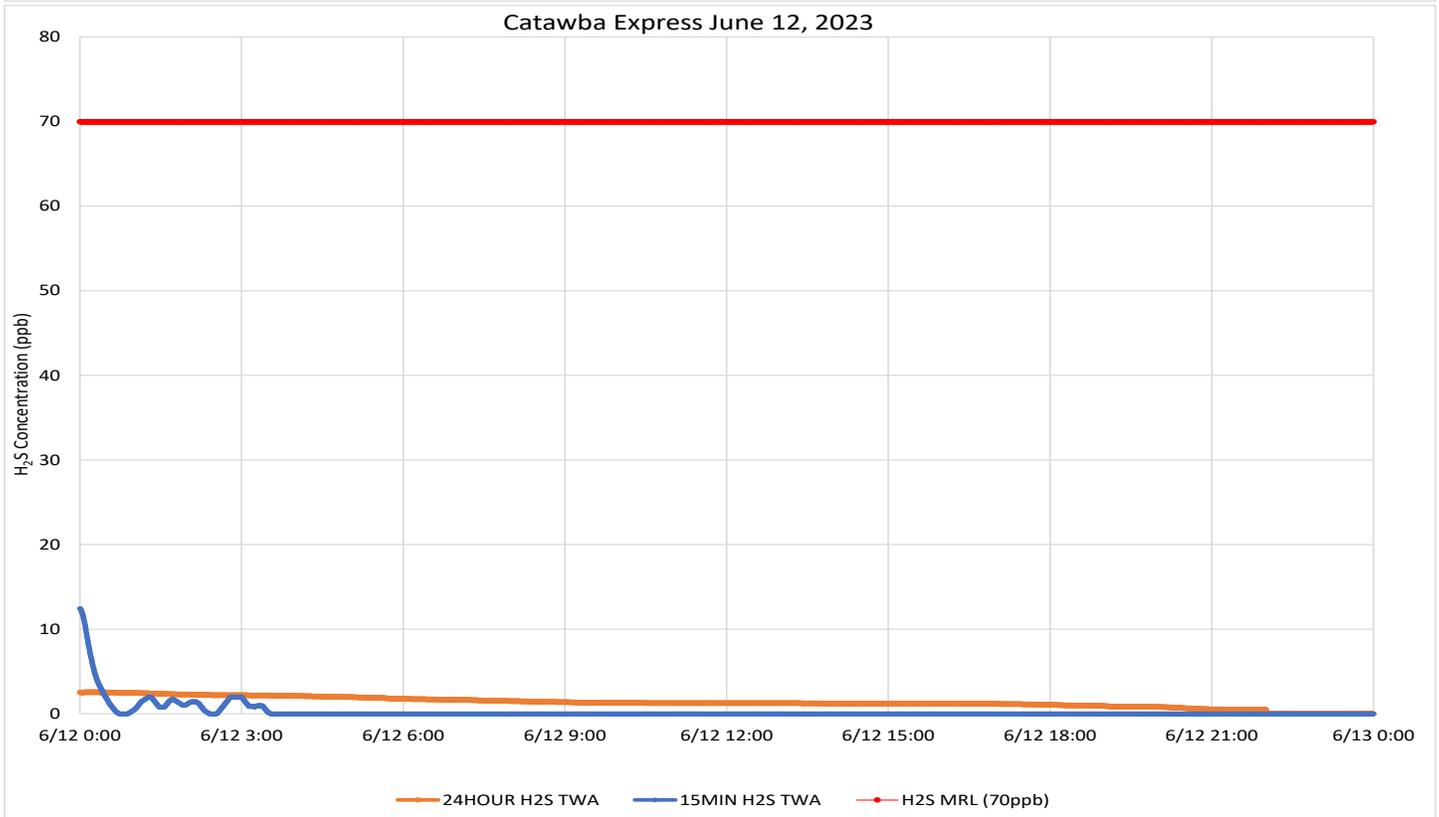
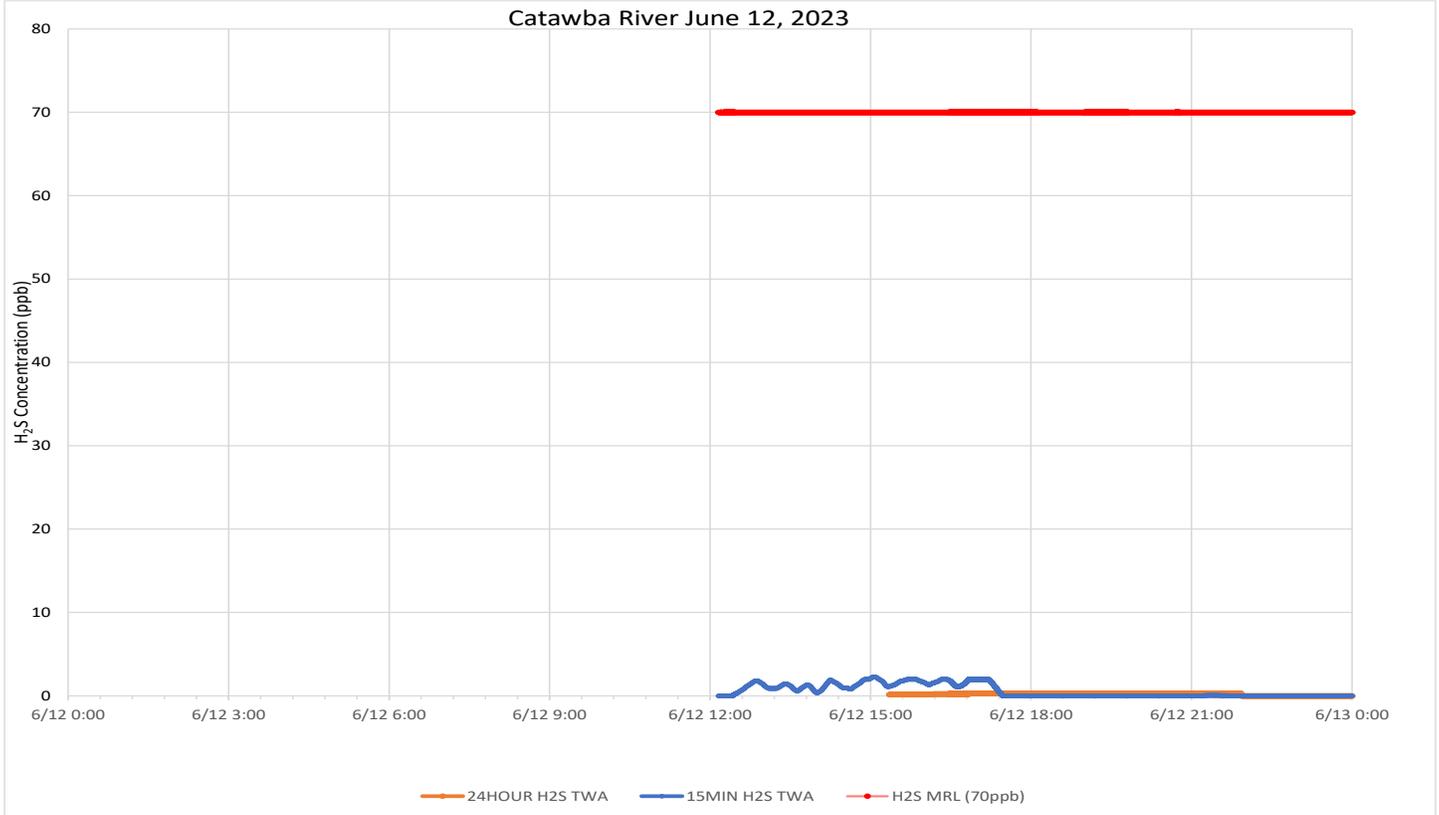
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was from the south at the beginning of the period and slowly shifted to coming from the southwest, west, and northwest, ending the period coming from the north.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

Data from the Catawba Express monitor was interrupted for approximately 15 minutes (2328-2344) on June 13. The summary data for that site is valid.

## Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/13/23  
12:00 AM  
EST

**To:** 6/13/23  
11:59 PM  
EDT

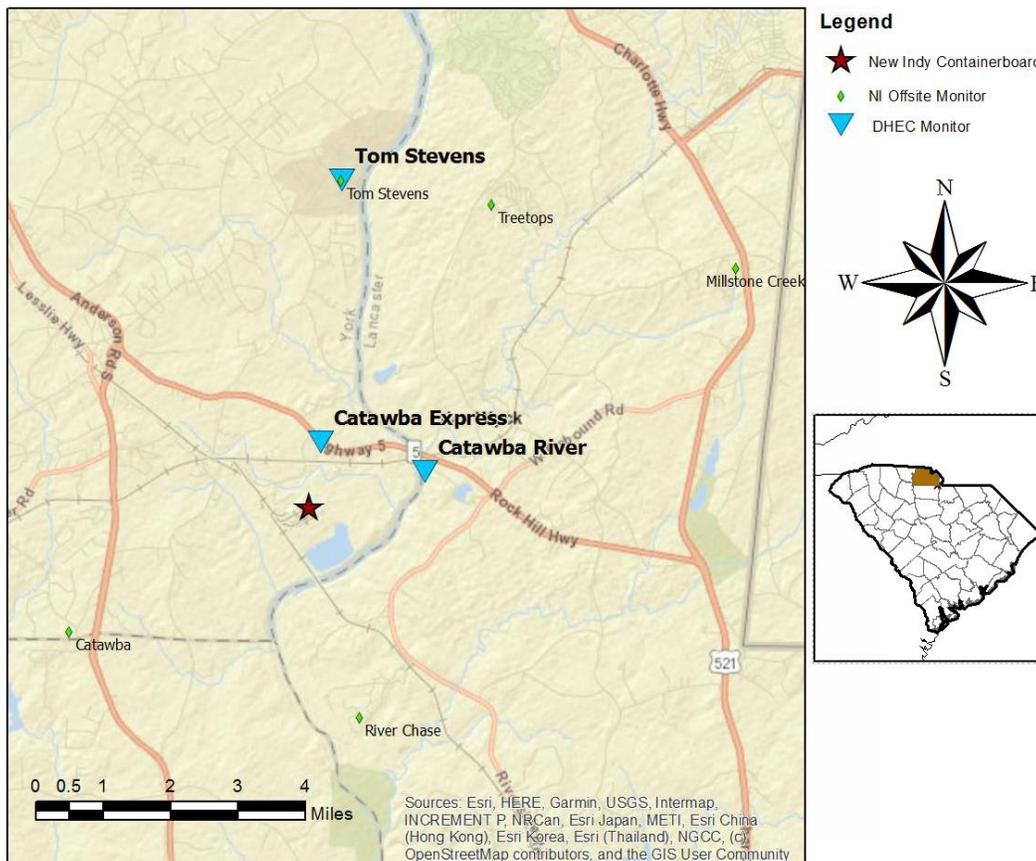
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	9734	1034	0 - 4 ppb	0.14 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2861	266	0 - 11 ppb	0.38 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

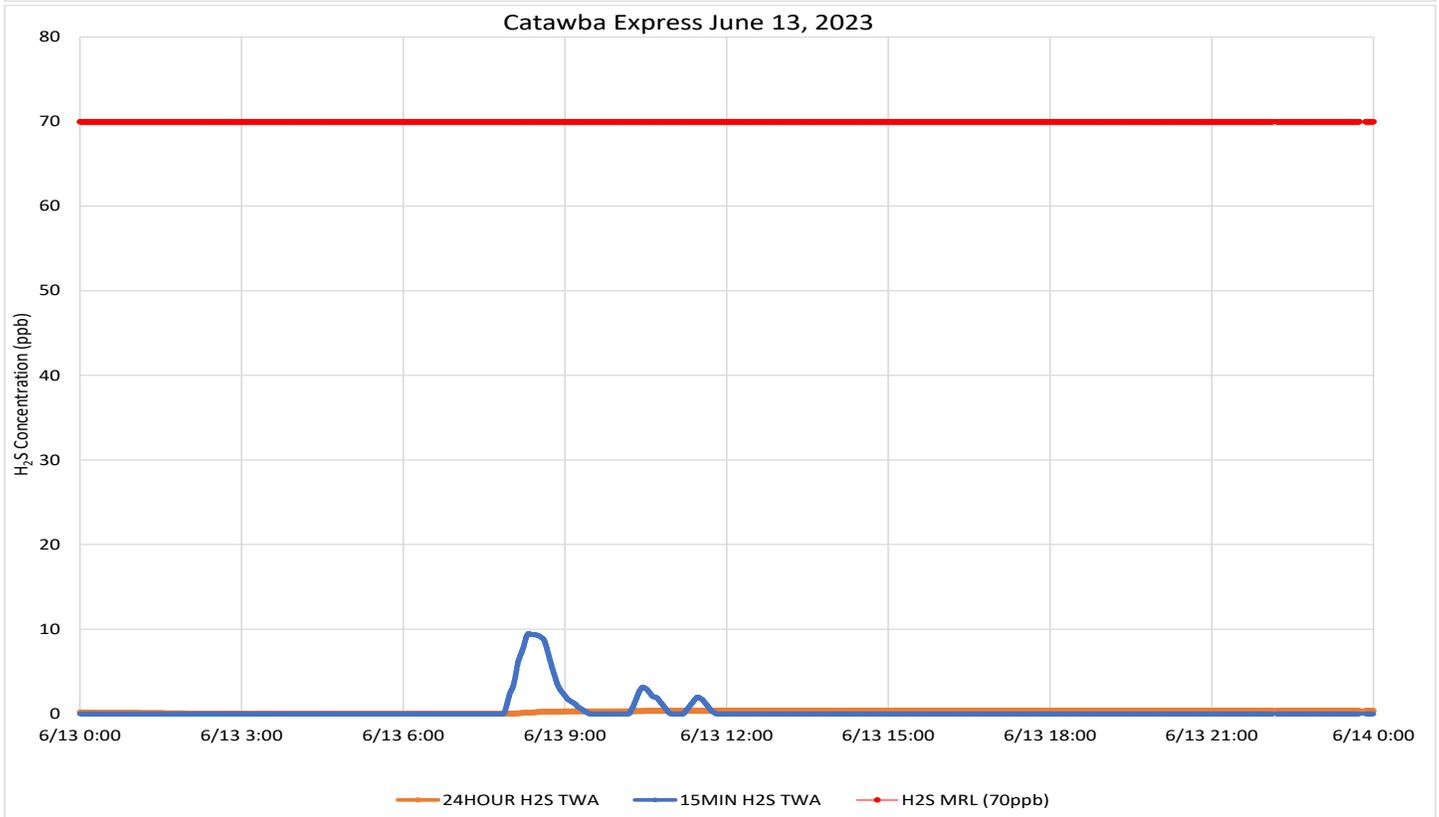
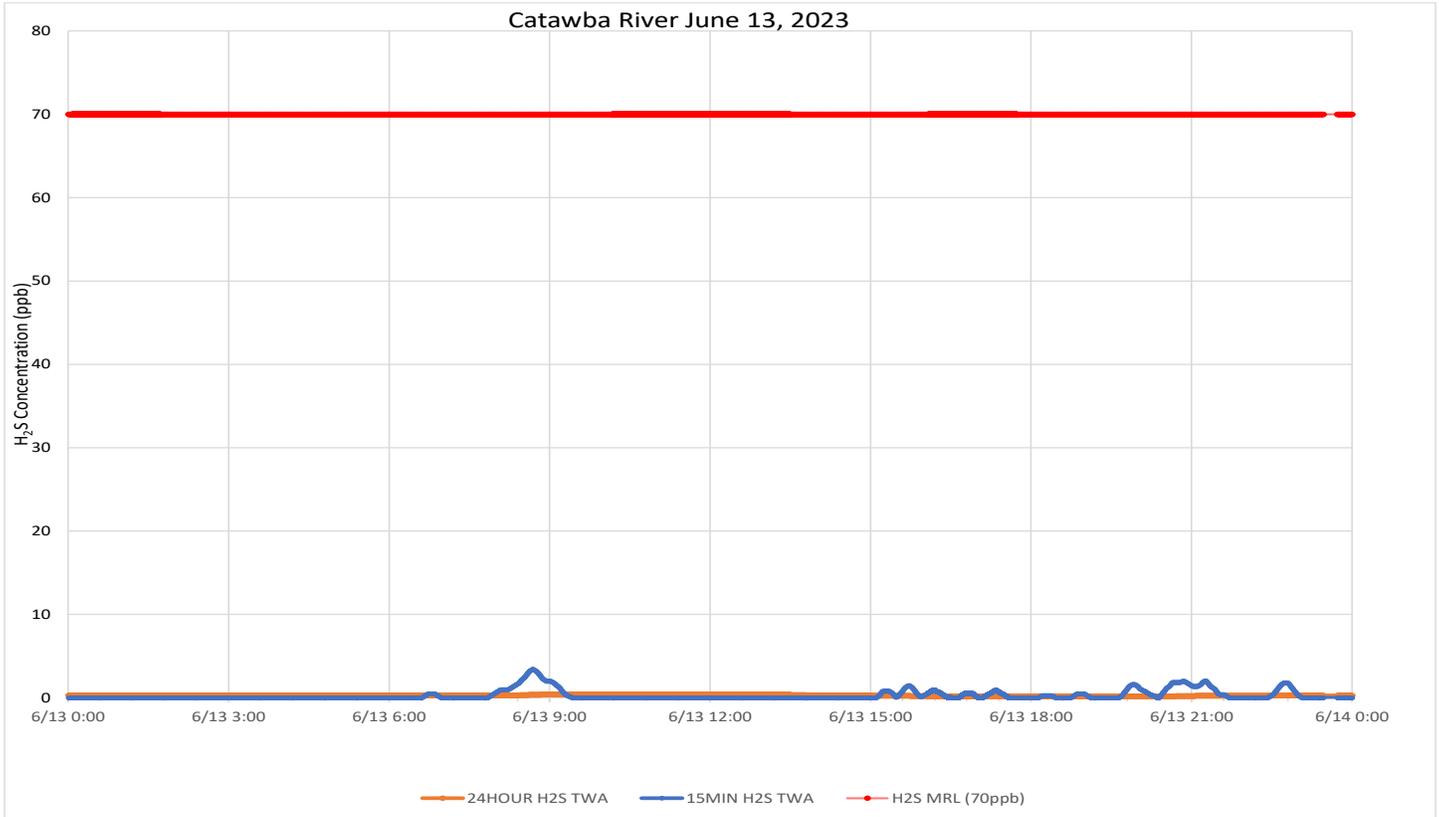
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were generally calm before sunrise and into late morning. Wind remained variable for the rest of the period ranging from the south southwest to coming from the west.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/14/23  
12:00 AM  
EST

**To:** 6/14/23  
11:59 PM  
EDT

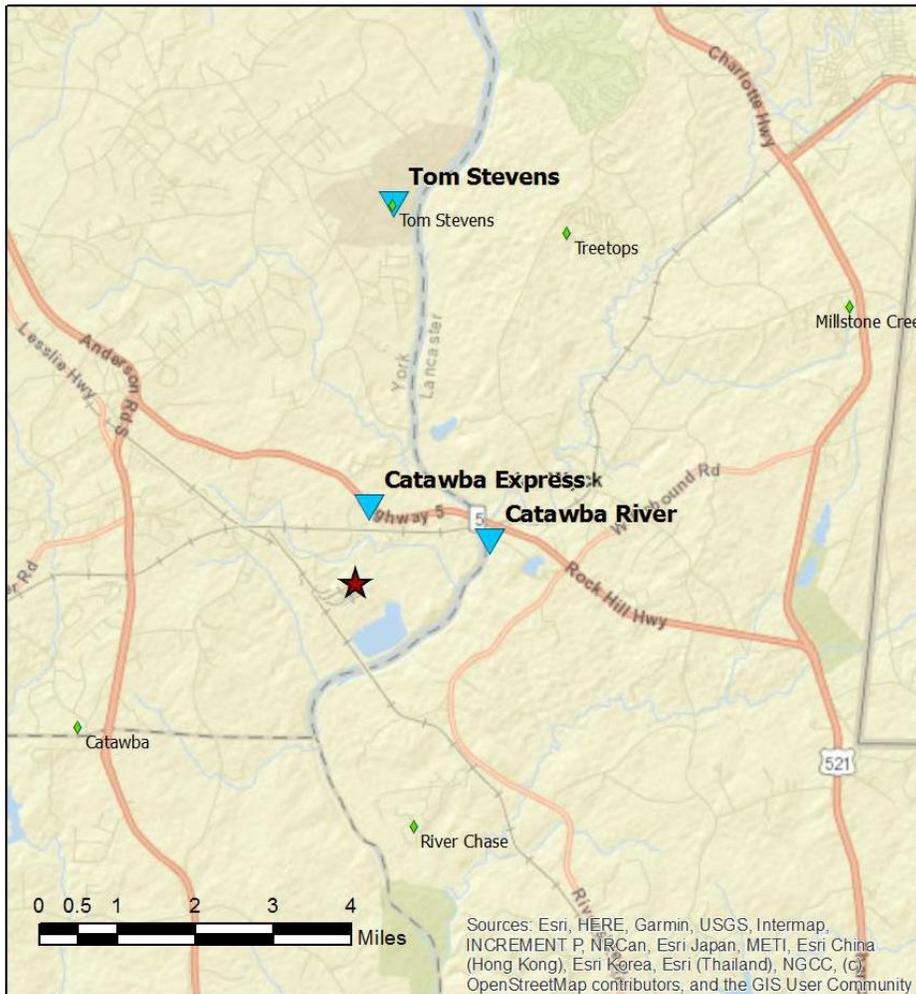
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	3744	898	0 - 7 ppb	0.47 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

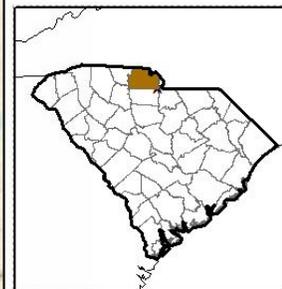
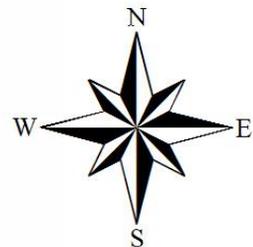
Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL      Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S            Hydrogen Sulfide
- hr              Hour
- ppb            Parts per billion
- MRL Exceedance   Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM            Single Point Monitor
- TWA            Time Weighted Average



**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

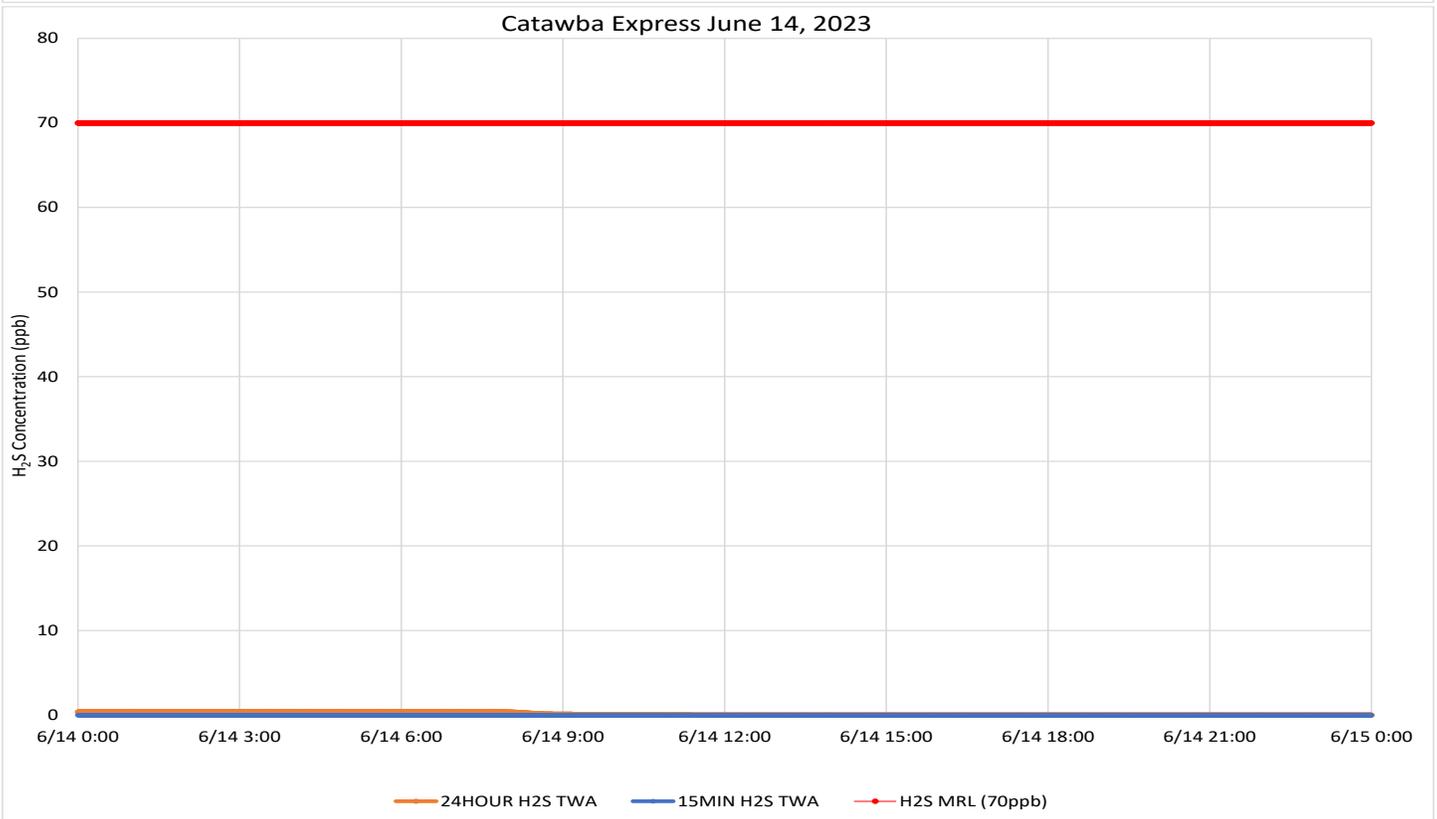
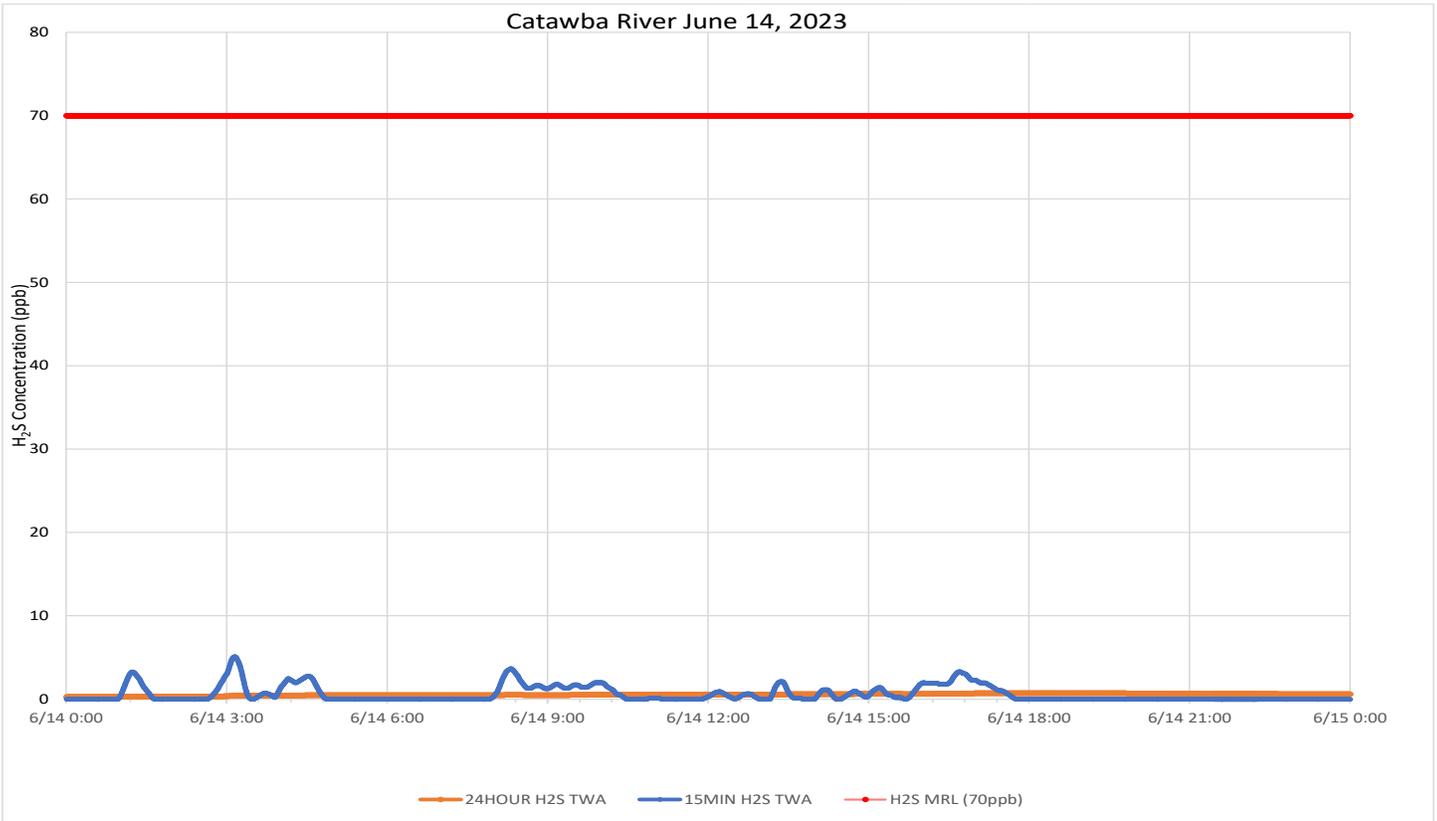


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was from the southwest through west throughout the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/15/23  
12:00 AM  
EST

**To:** 6/15/23  
11:59 PM  
EDT

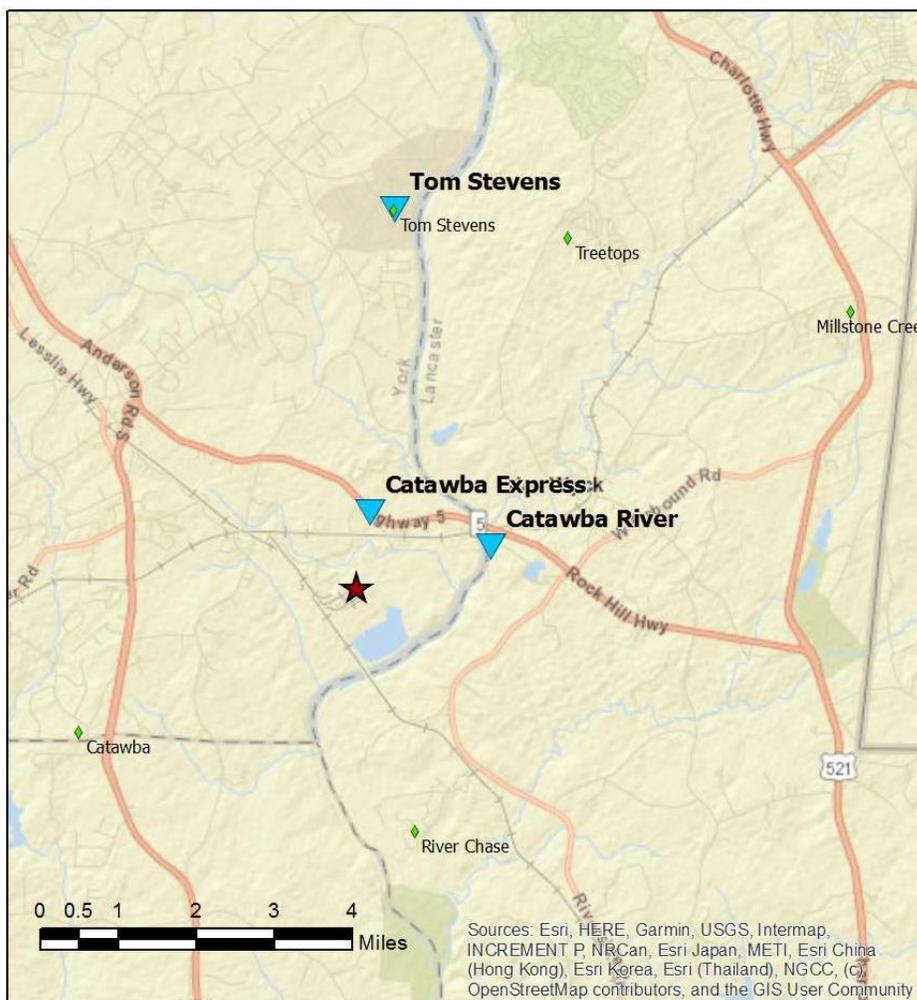
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	10552	1831	0 - 10 ppb	0.51 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	183	0 - 4 ppb	0.11 ppb	70 ppb

**Notes:**

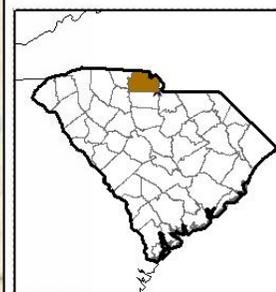
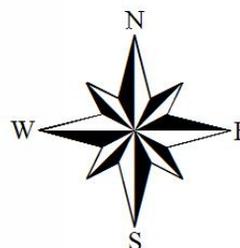
Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

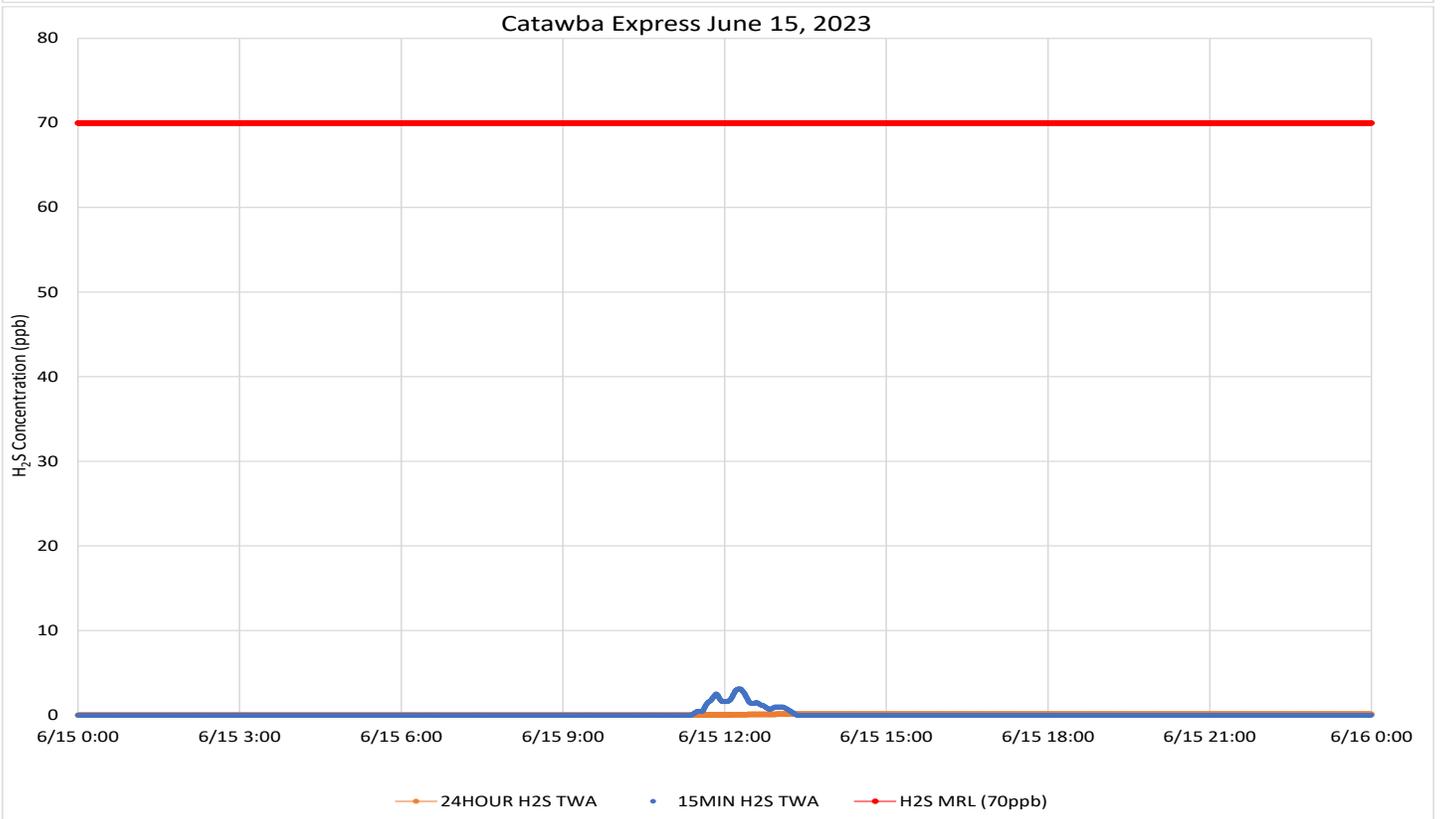
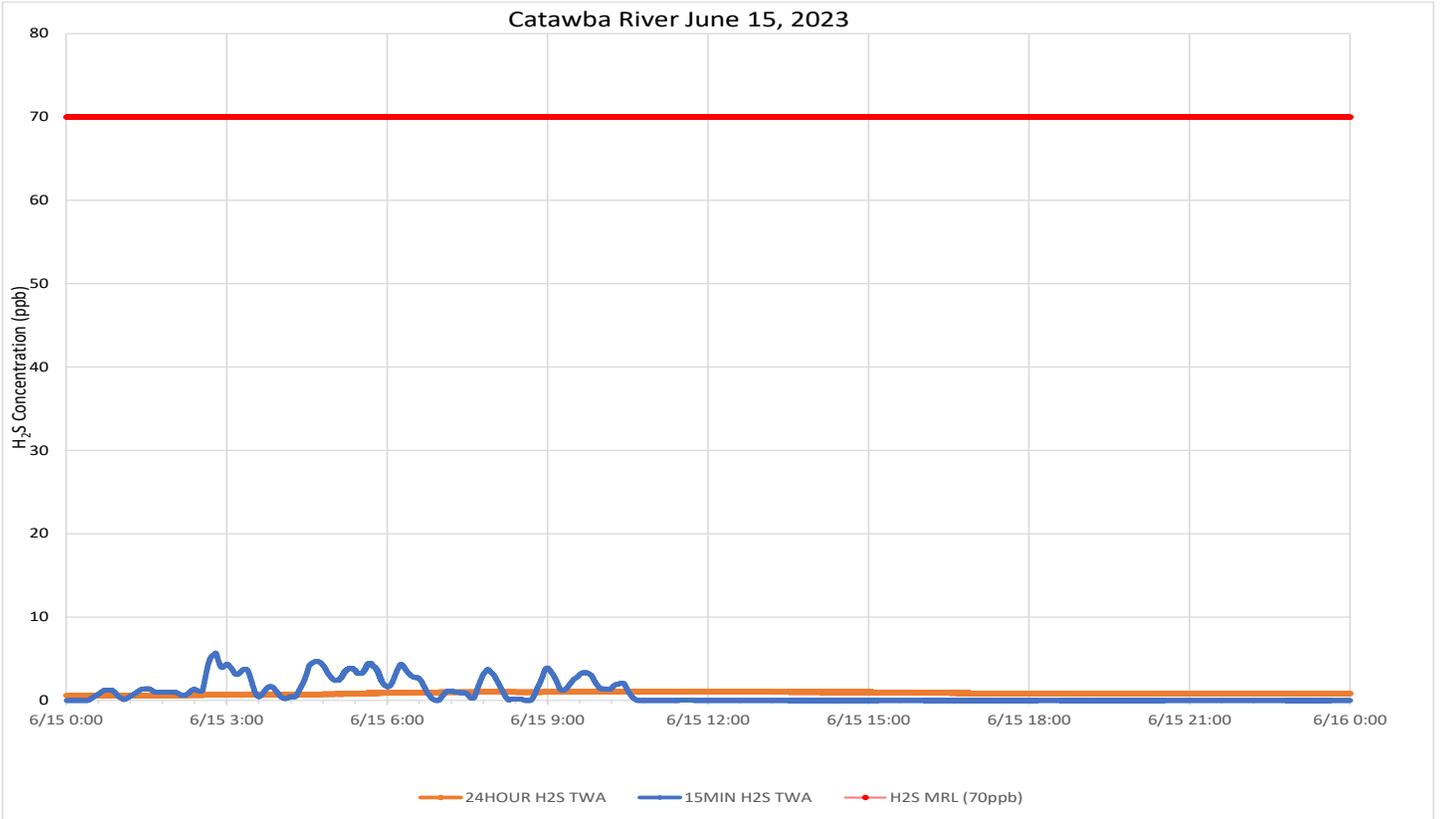


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind direction was variable throughout the period ranging between coming from the south southwest to west northwest.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/16/23  
12:00 AM  
EST

**To:** 6/16/23  
11:59 PM  
EDT

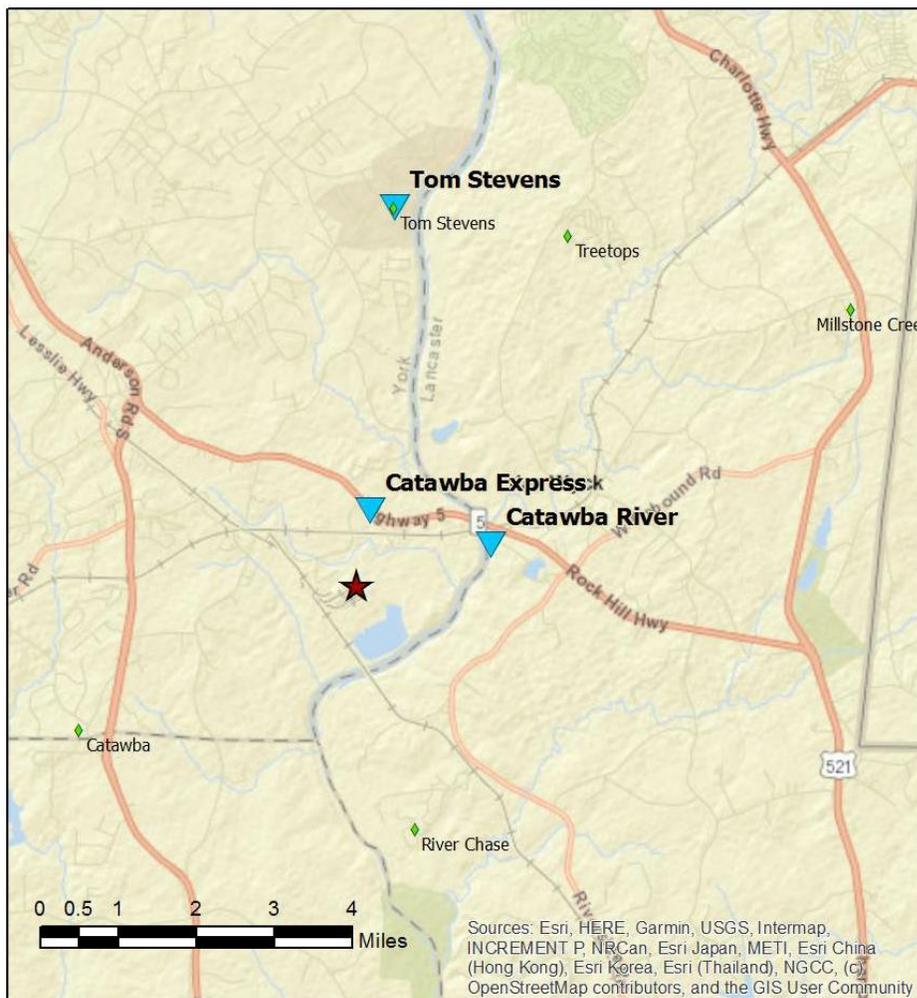
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	6378	4046	0 - 7 ppb	1.21 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	Yes	2880	55	0 - 130 ppb	0.73 ppb	70 ppb

**Notes:**

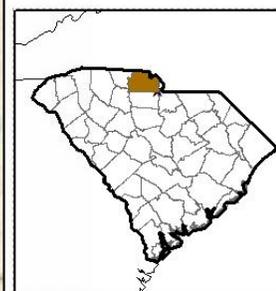
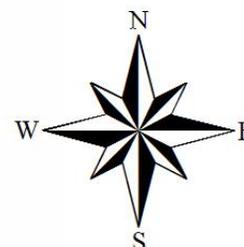
Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

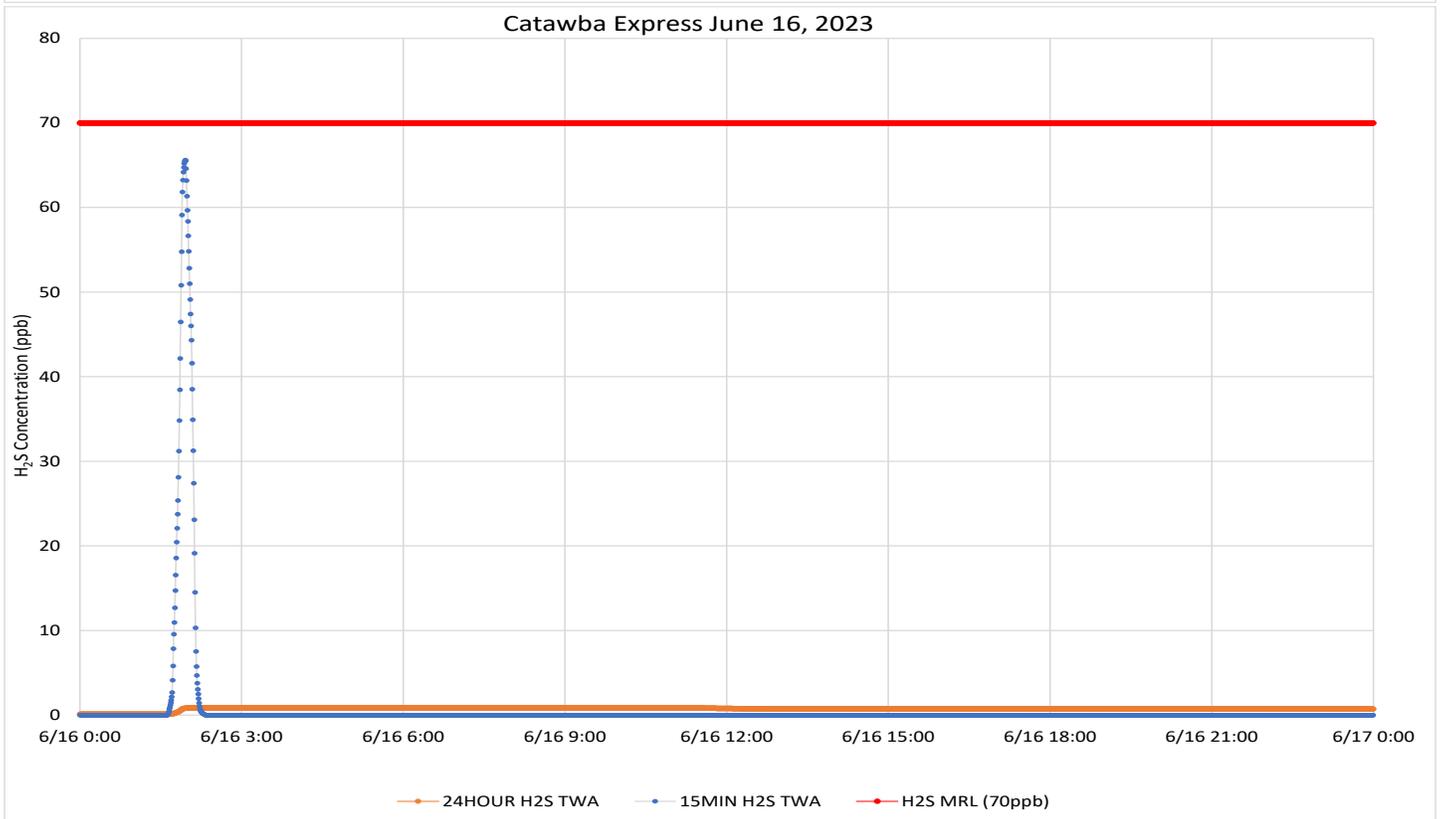
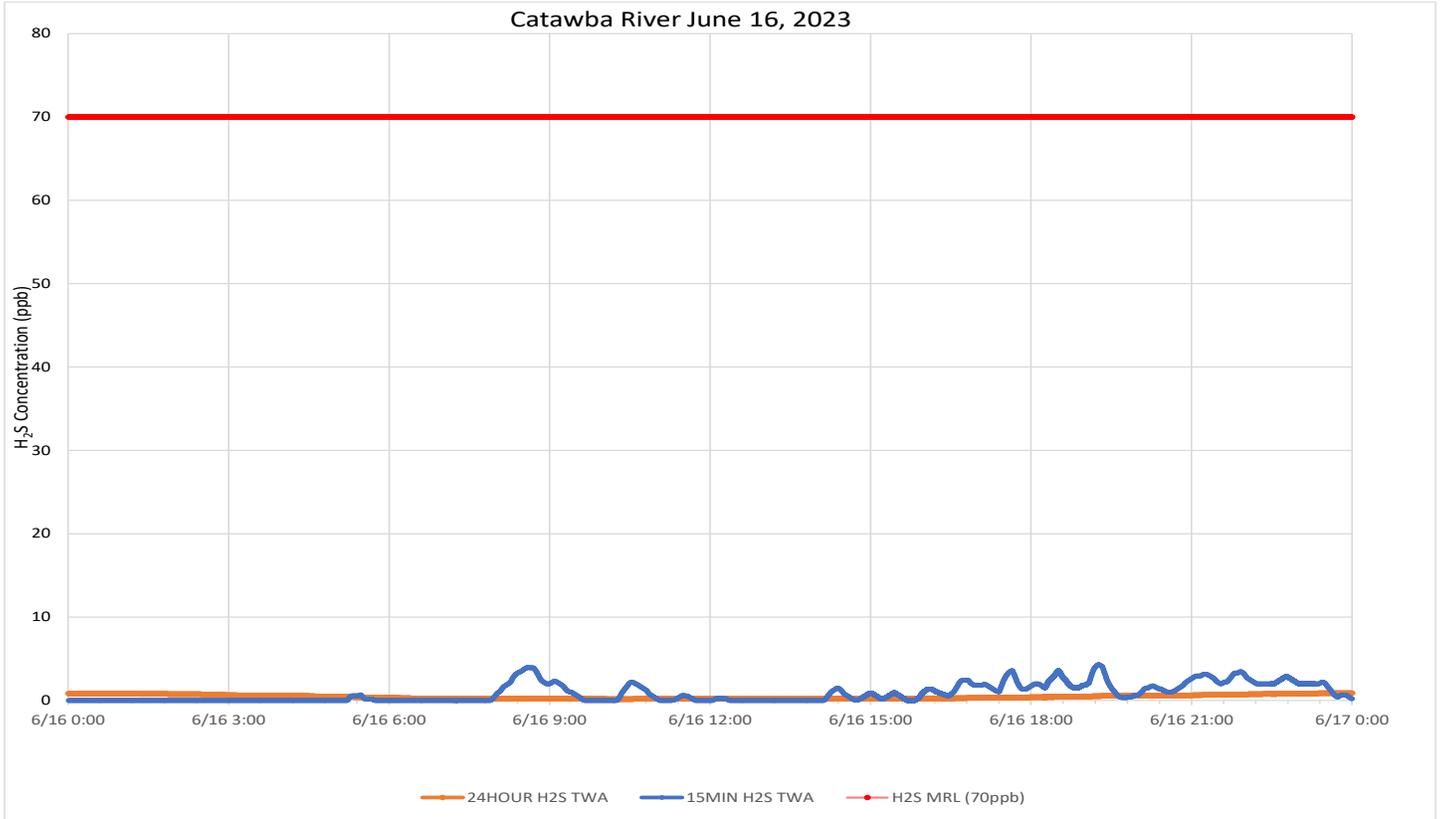


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind direction was variable throughout the period ranging between coming from the south southwest to west northwest.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/17/23  
12:00 AM  
EST

**To:** 6/17/23  
11:59 PM  
EDT

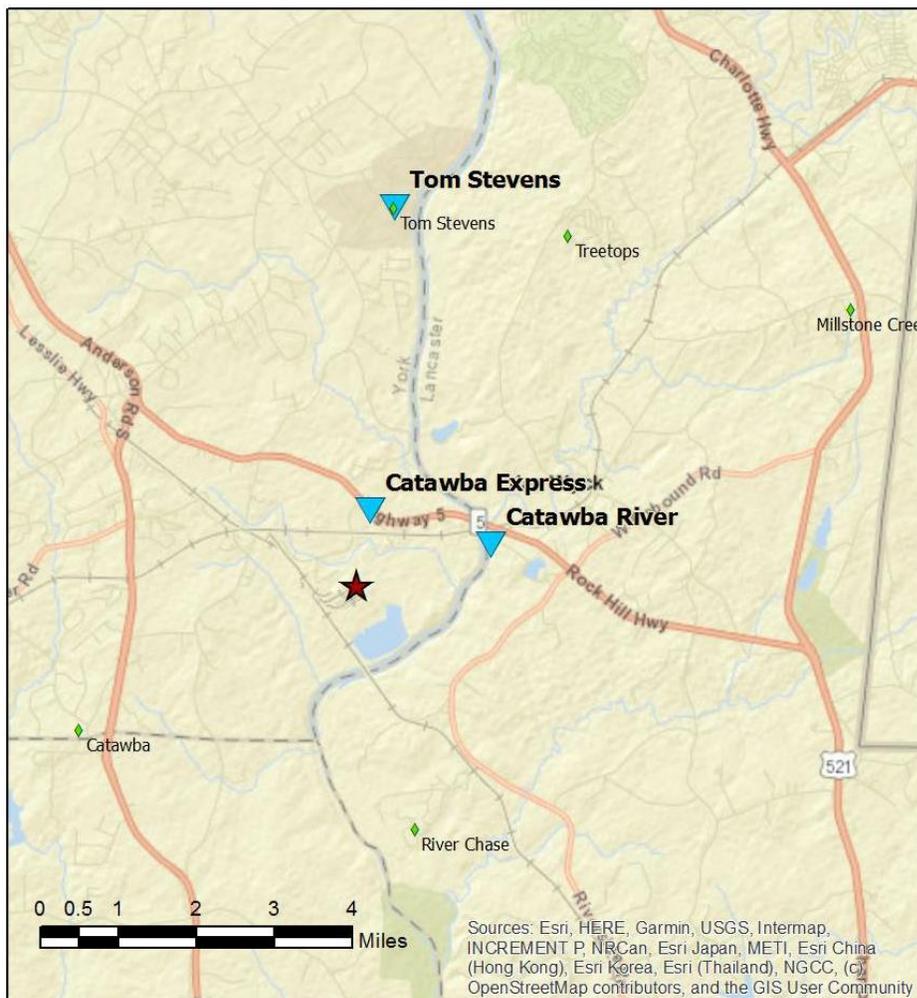
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	39	0 - 1 ppb	0.01 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	120	0 - 3 ppb	0.08 ppb	70 ppb

**Notes:**

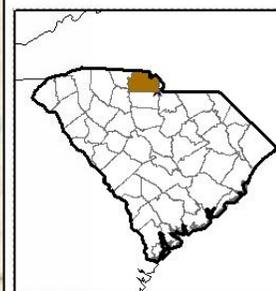
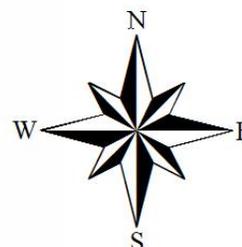
Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

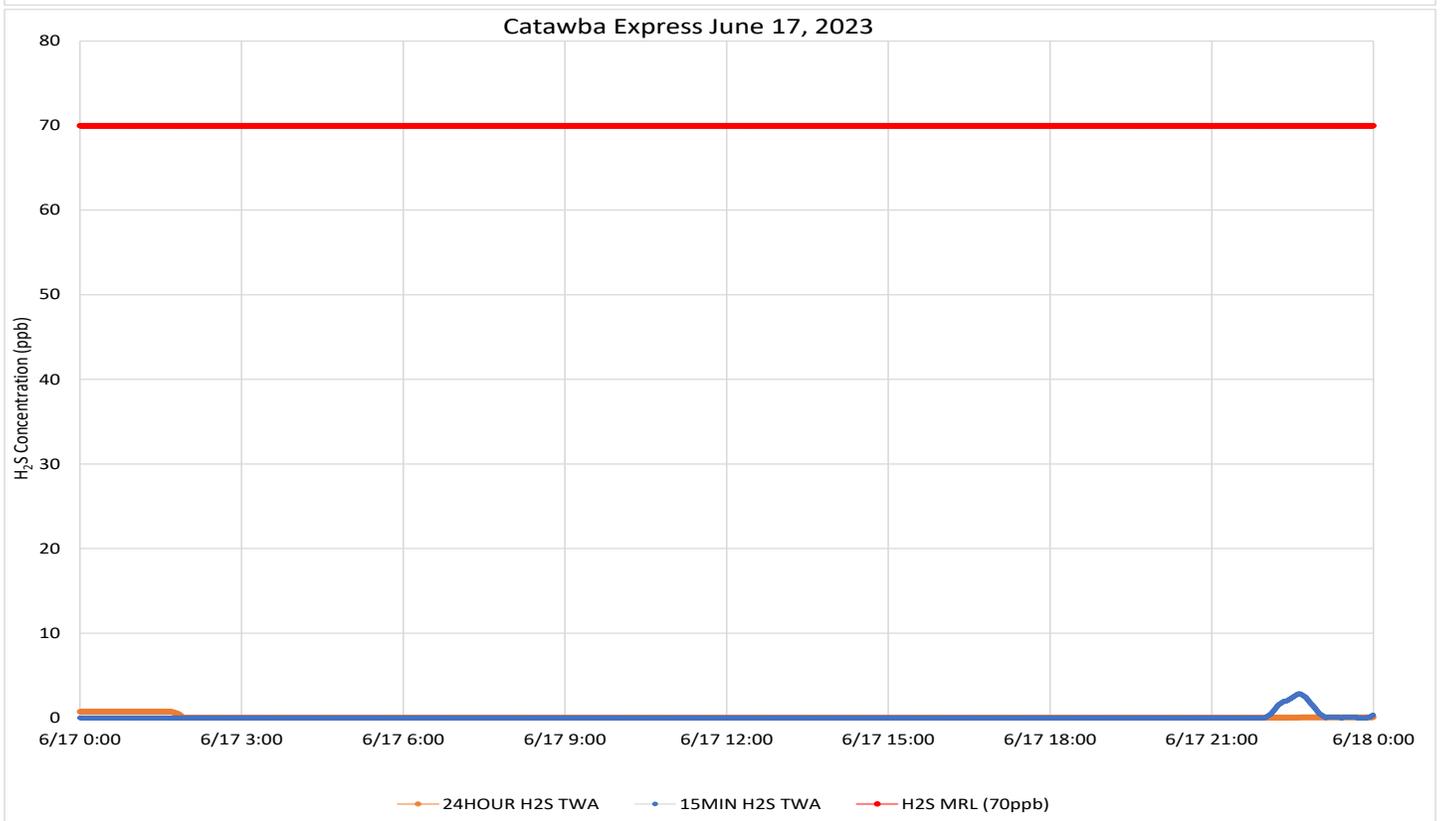
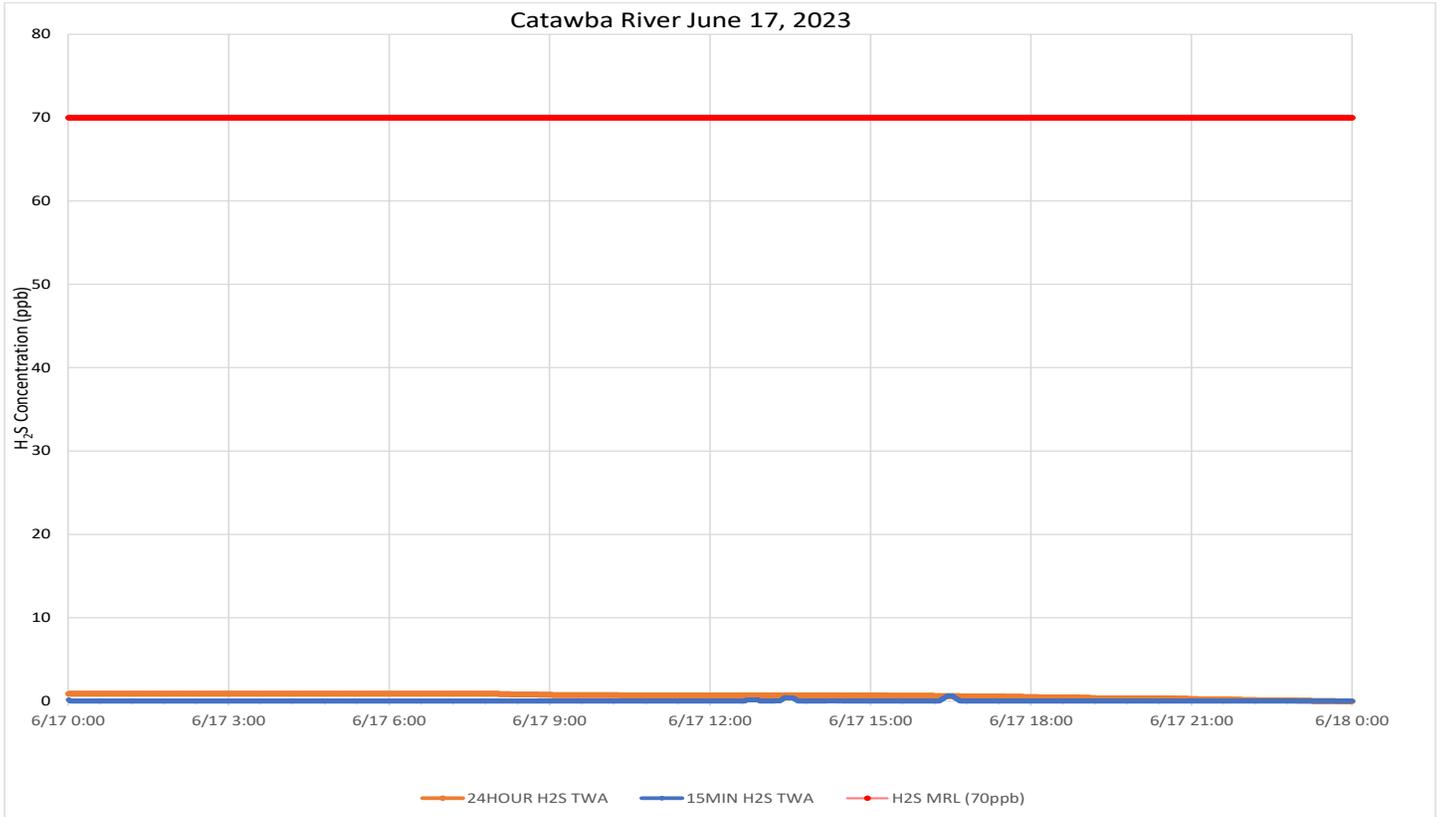


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind direction was variable with calm periods throughout the period. When detected, wind direction ranged from coming from the north northeast to northeast before midday to from the west to west northwest in the late afternoon.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/18/23  
12:00 AM  
EST

**To:** 6/18/23  
11:59 PM  
EDT

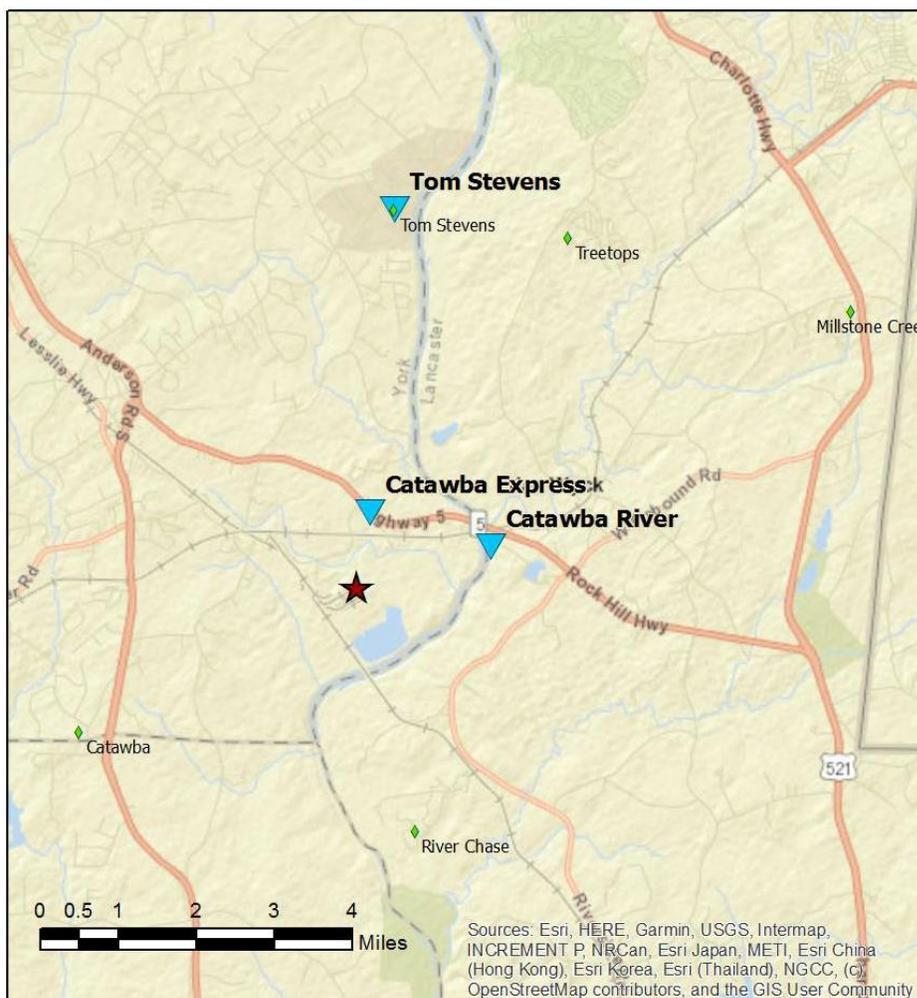
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2978	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	850	0 - 10 ppb	0.84 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

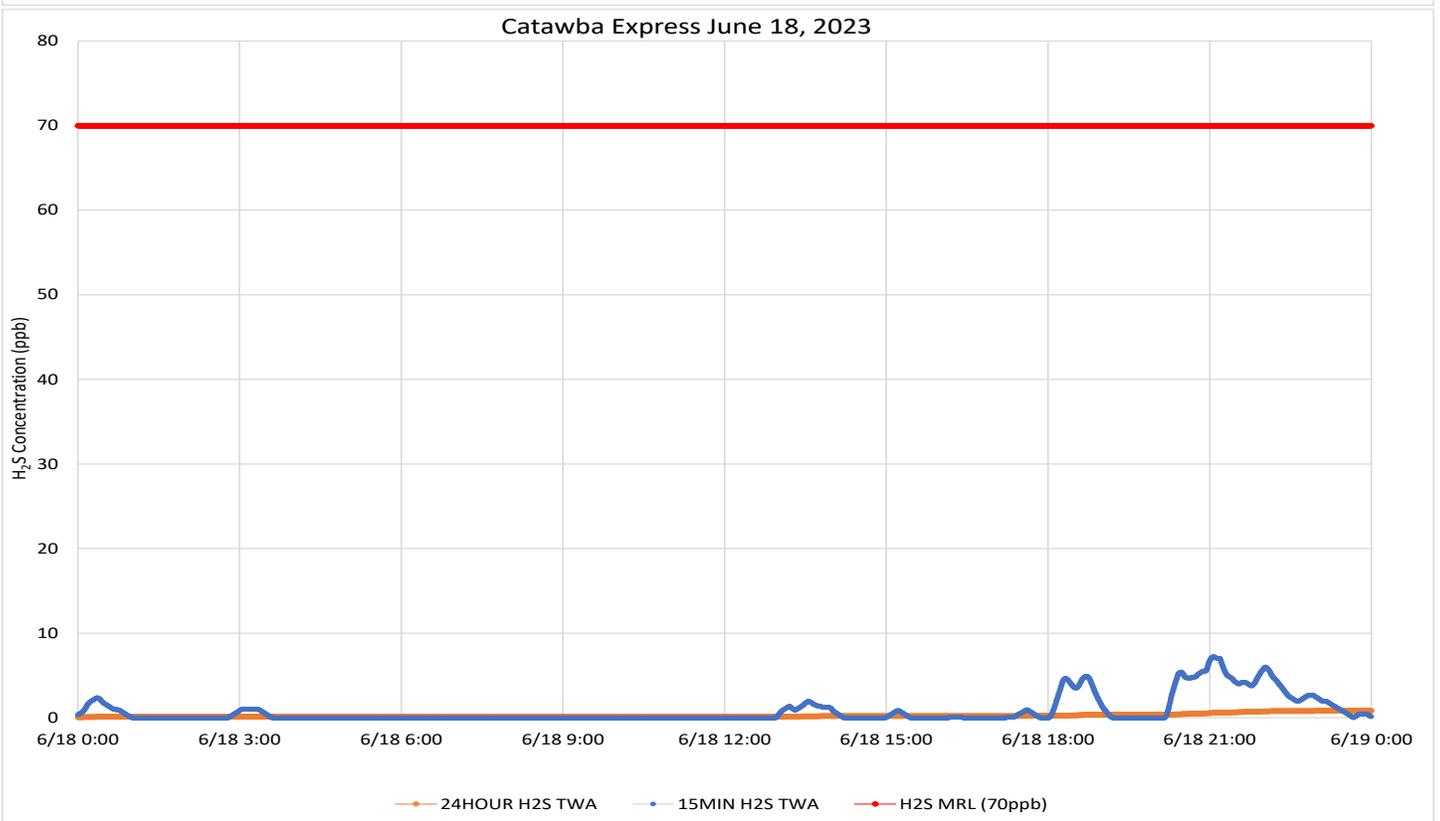
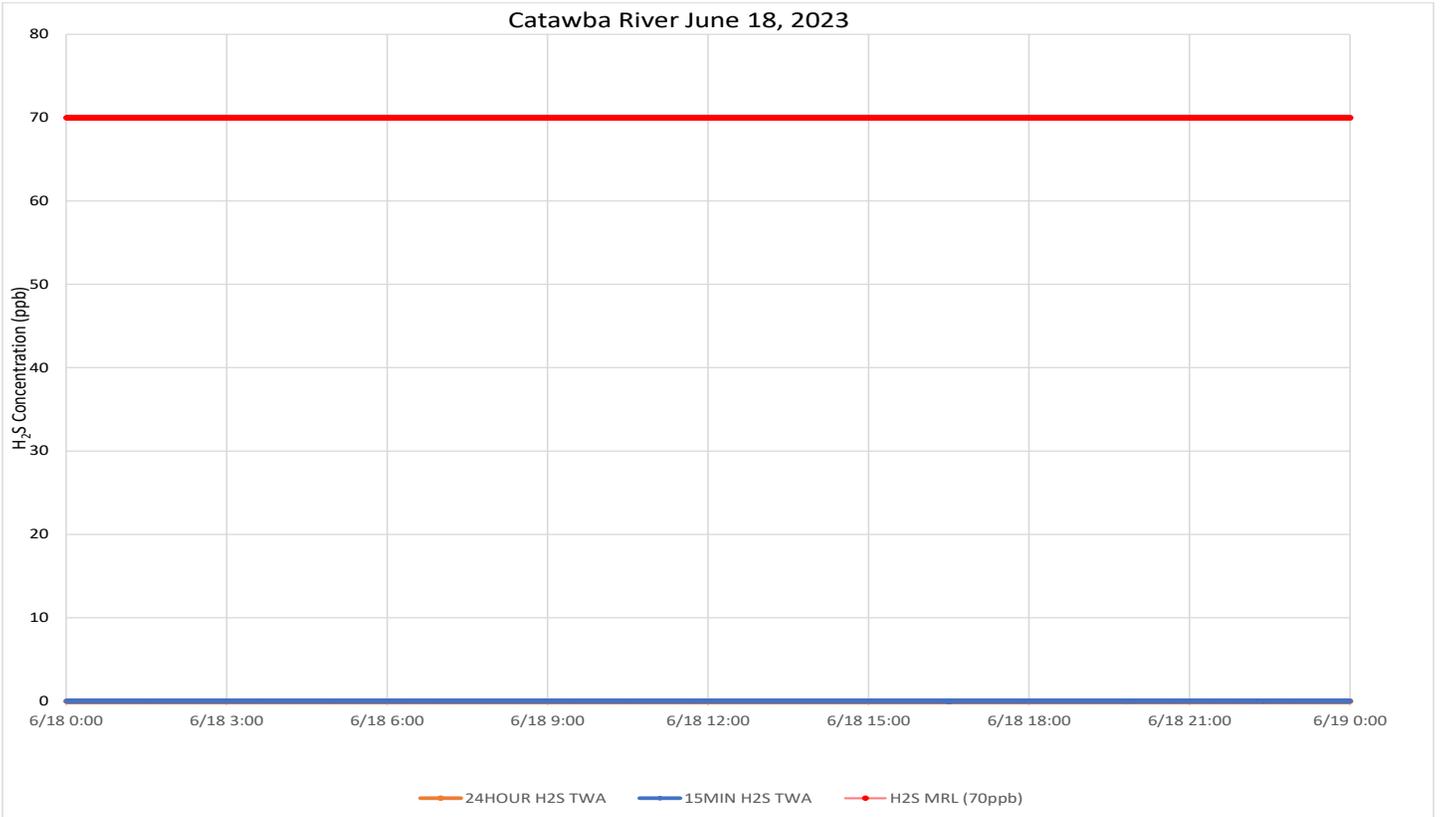
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind direction was variable and often calm throughout the period. When detected, wind direction ranged from coming from the northeast to east before midday and from the south southwest to west southwest in the late afternoon to evening.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/19/23  
12:00 AM  
EST

**To:** 6/19/23  
11:59 PM  
EDT

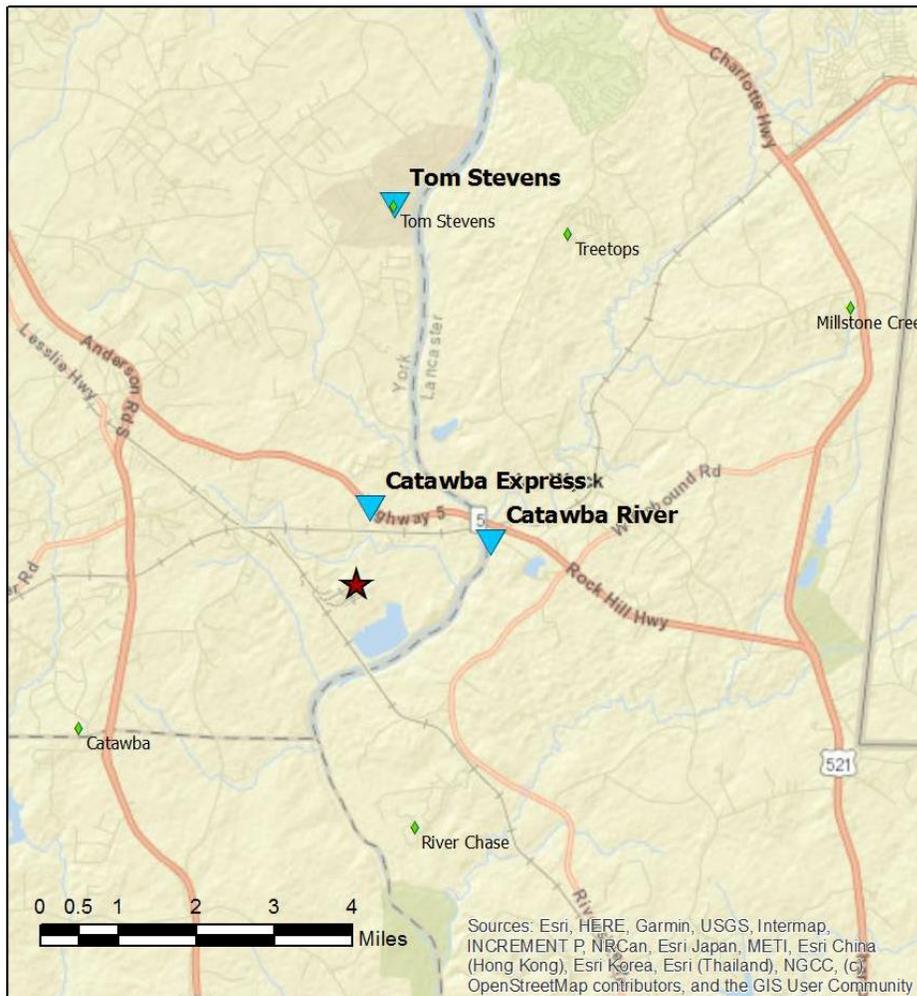
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	94	0 - 3 ppb	0.07 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	1844	0 - 17 ppb	2.19 ppb	70 ppb

**Notes:**

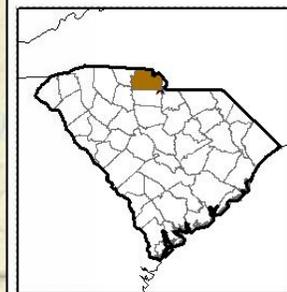
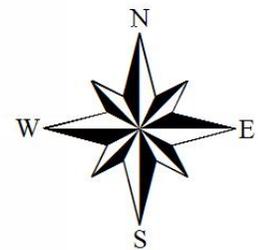
Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL      Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S            Hydrogen Sulfide
- hr               Hour
- ppb             Parts per billion
- MRL Exceedance   Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM             Single Point Monitor
- TWA             Time Weighted Average



**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

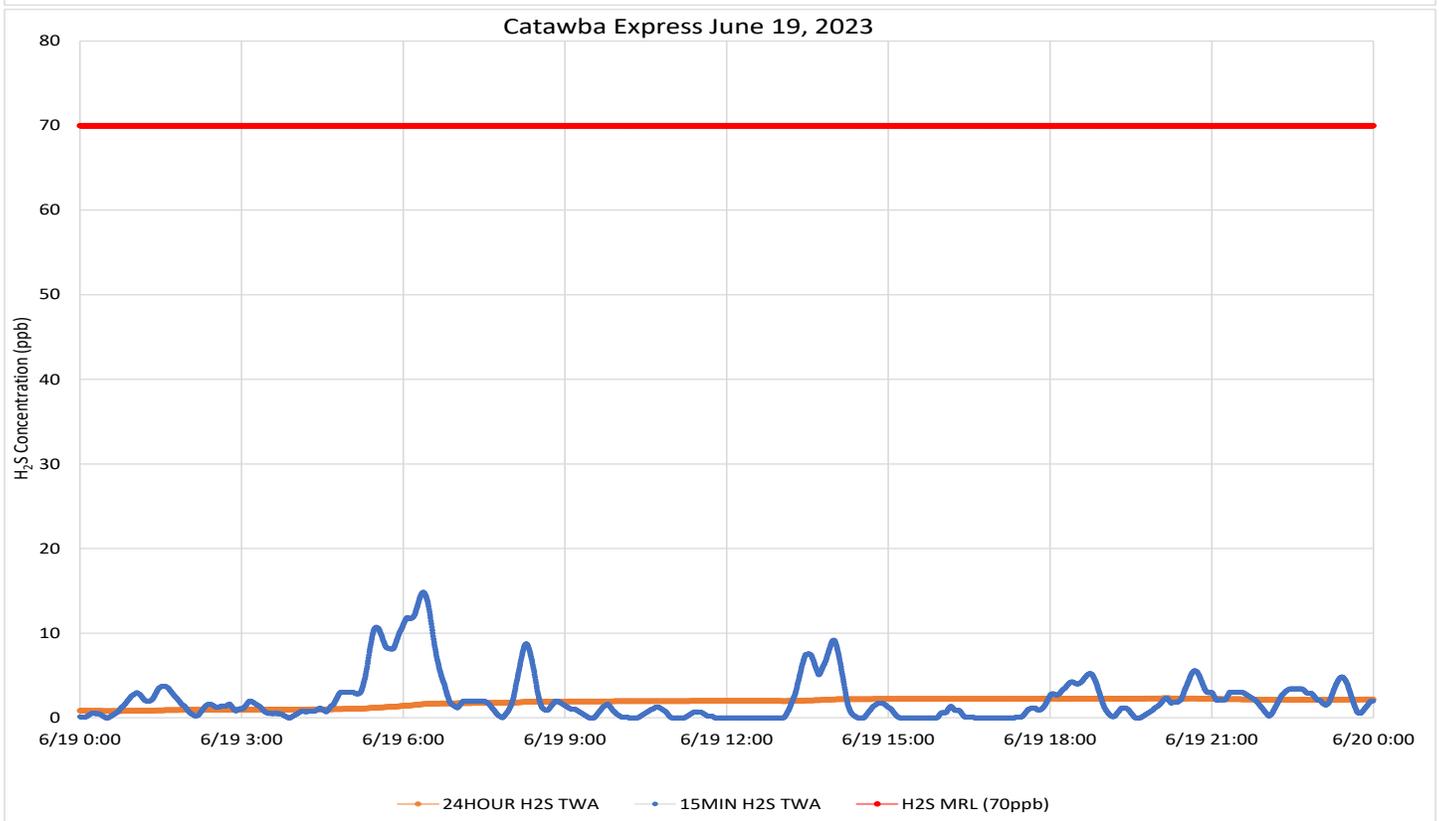
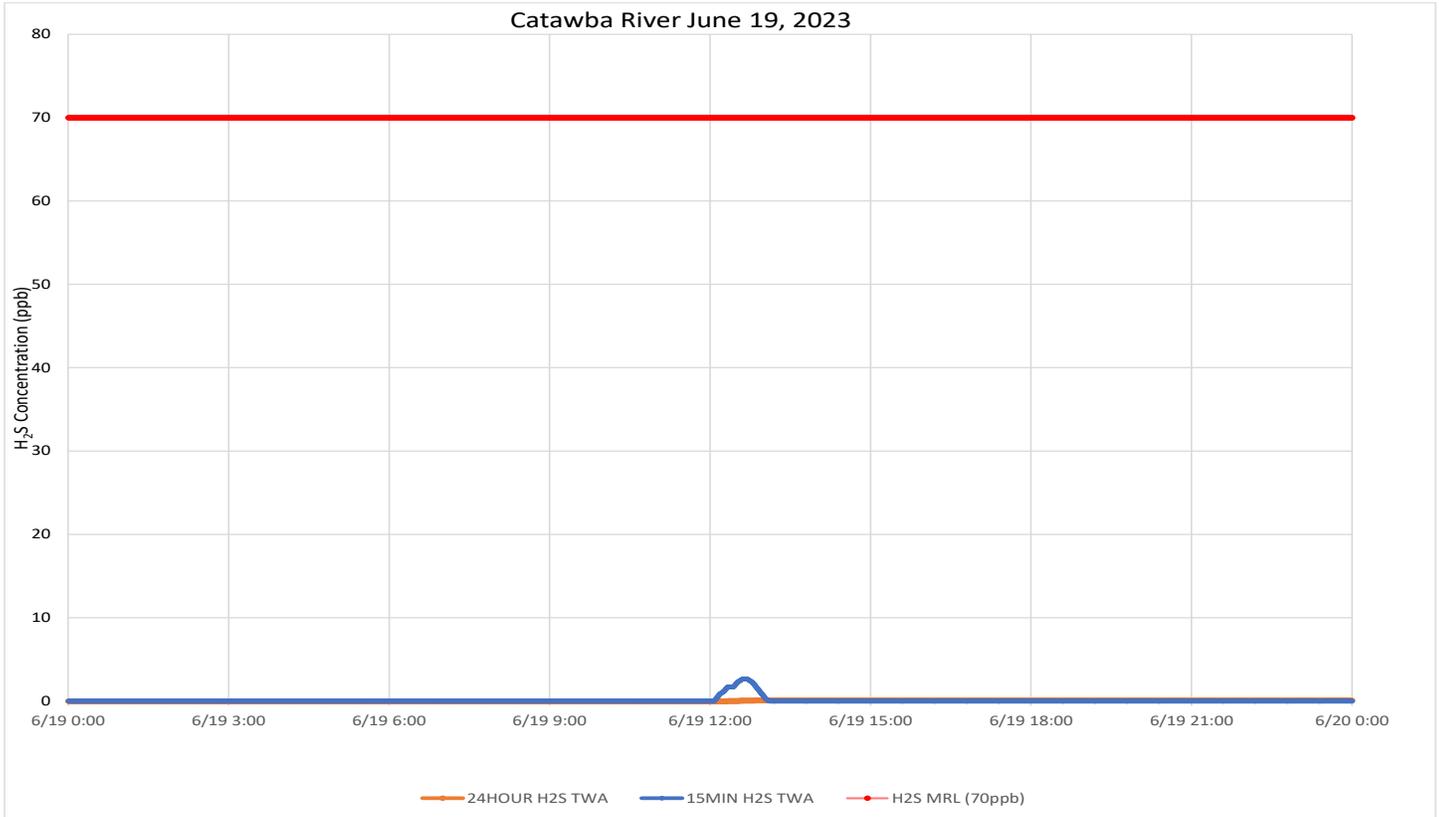


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind direction was often variable during the period. Wind direction was generally from the south to southwest until mid afternoon then shifted to more from the south southeast to southeast for the remainder of the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/20/23  
12:00 AM  
EST

**To:** 6/20/23  
11:59 PM  
EDT

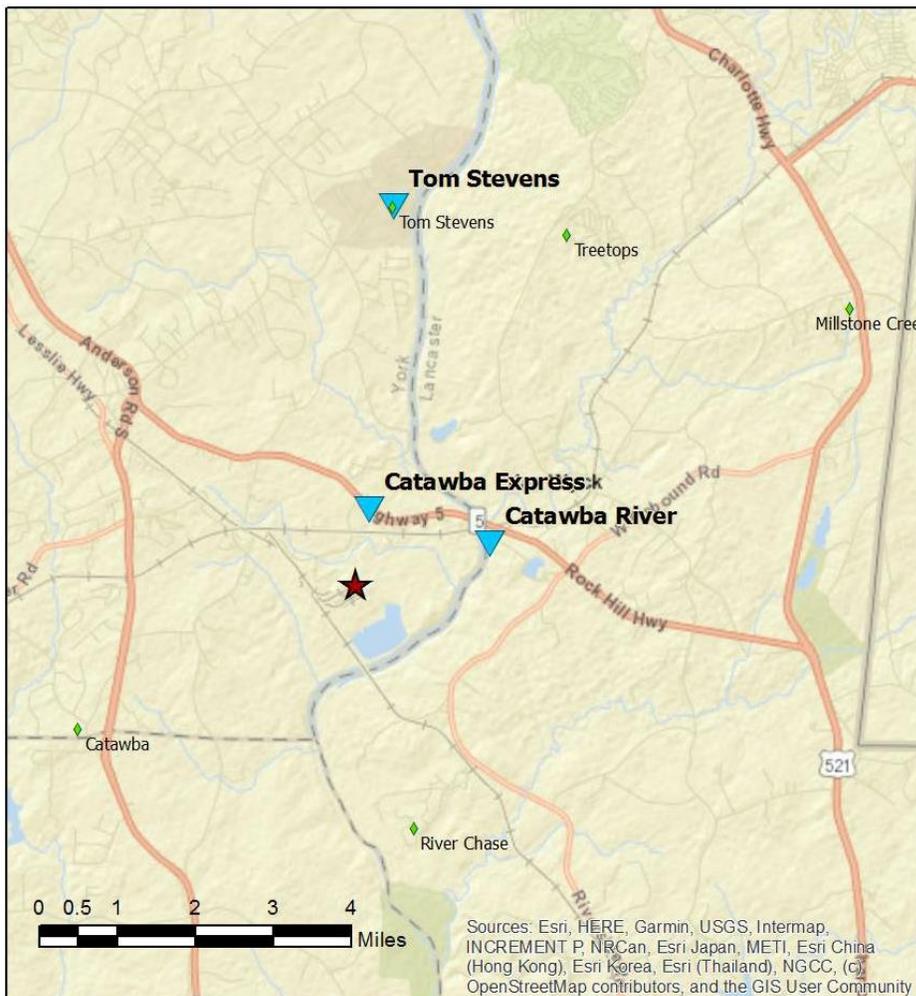
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	760	0 - 13 ppb	1.01 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

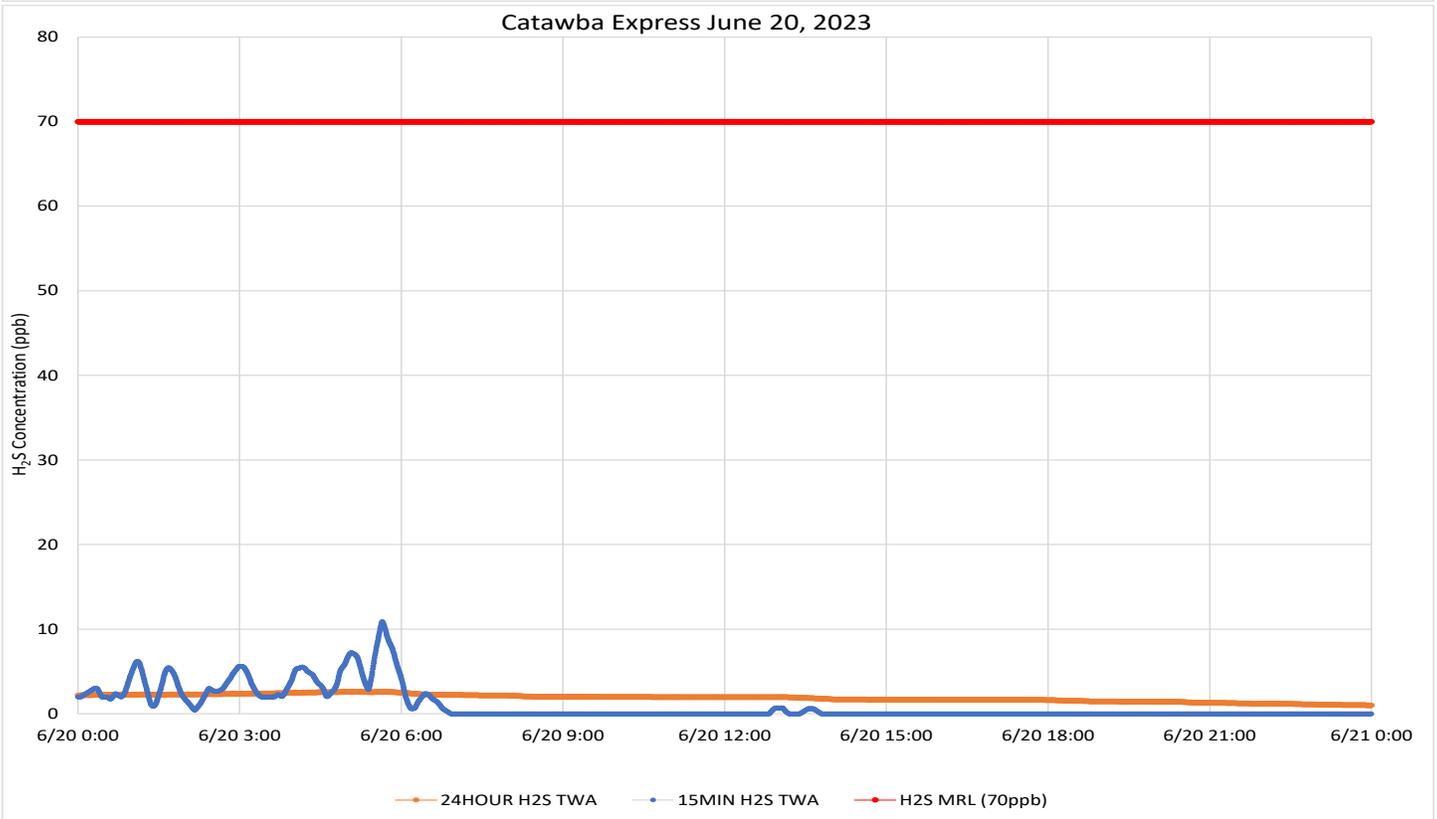
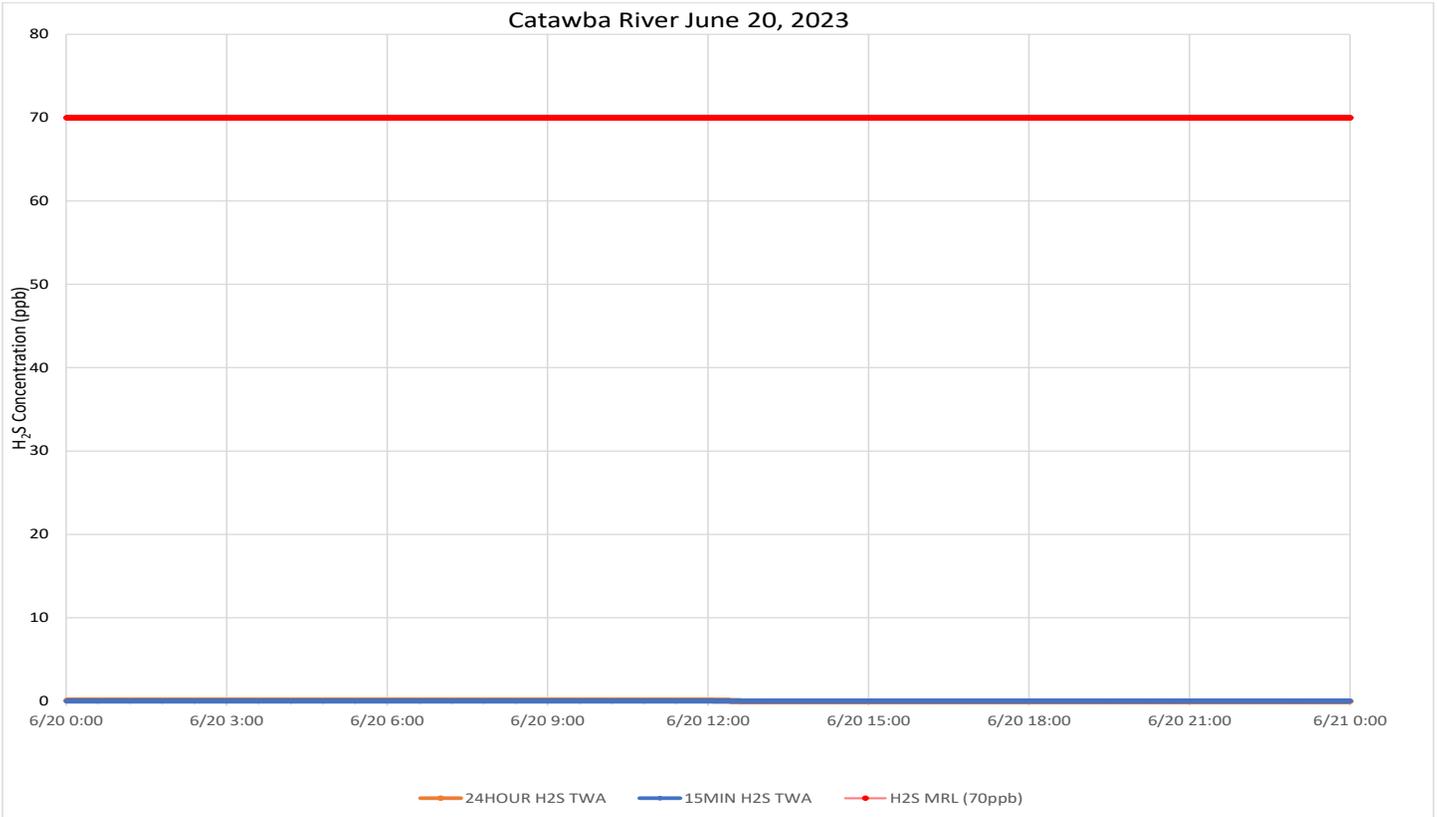
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind direction was variable during the period. When detected, wind direction was generally from the southeast shifting to be more from the east as the period progressed.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/21/23  
12:00 AM  
EST

**To:** 6/21/23  
11:59 PM  
EDT

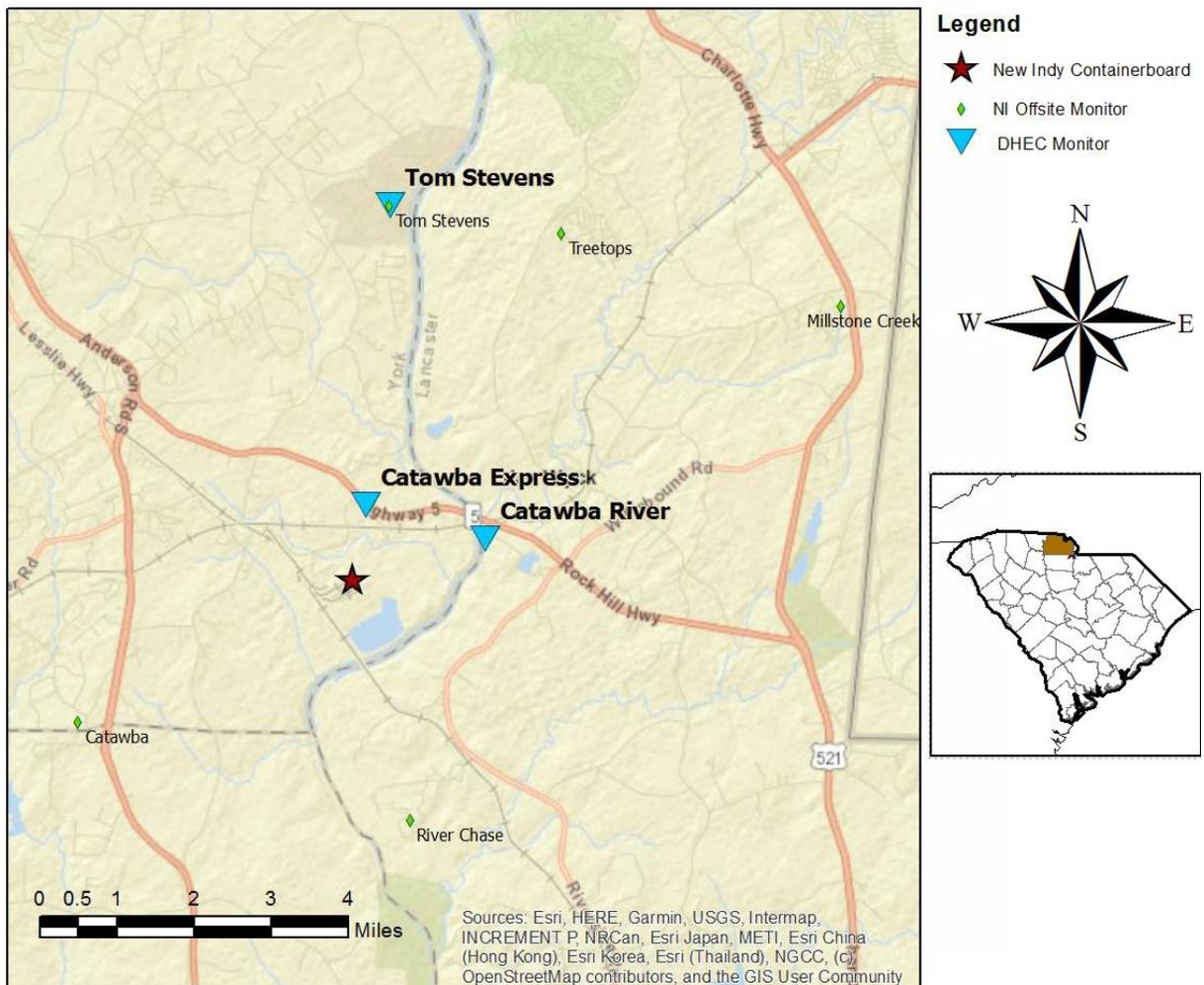
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

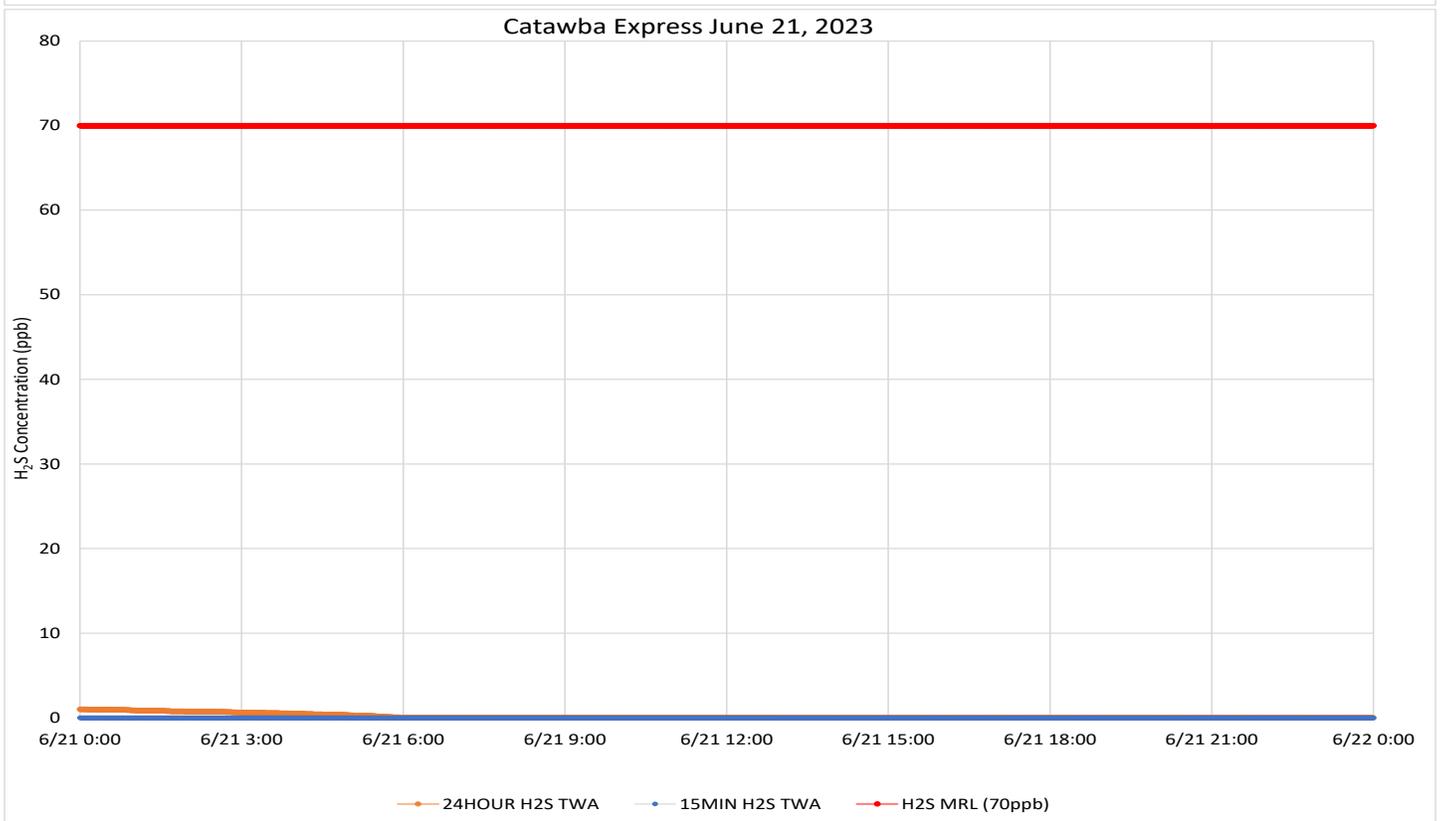
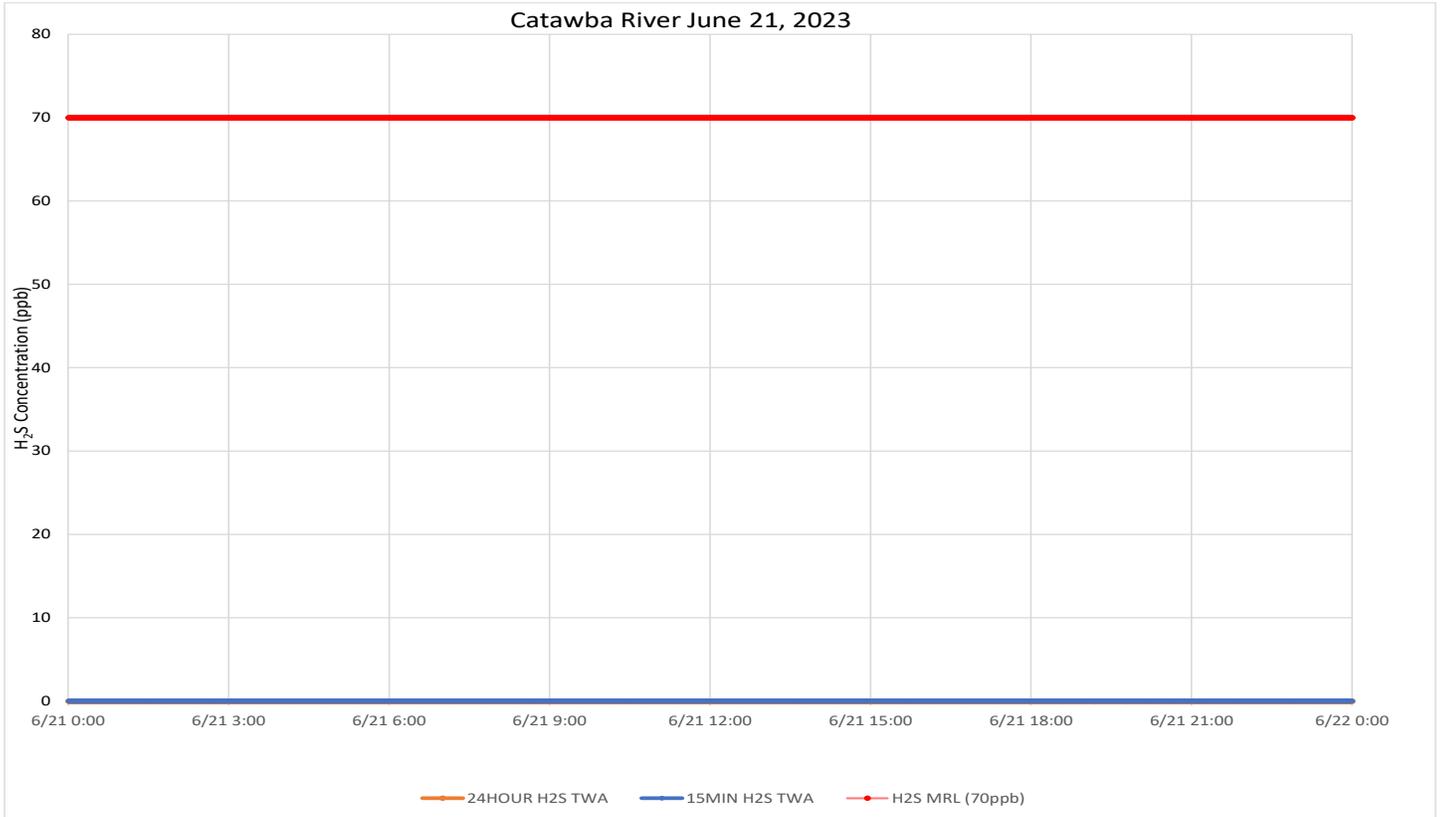
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was light and variable, generally from the east northeast to east through early afternoon. Afternoon and evening wind was light and generally from the northeast.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/22/23  
12:00 AM  
EST

**To:** 6/22/23  
11:59 PM  
EDT

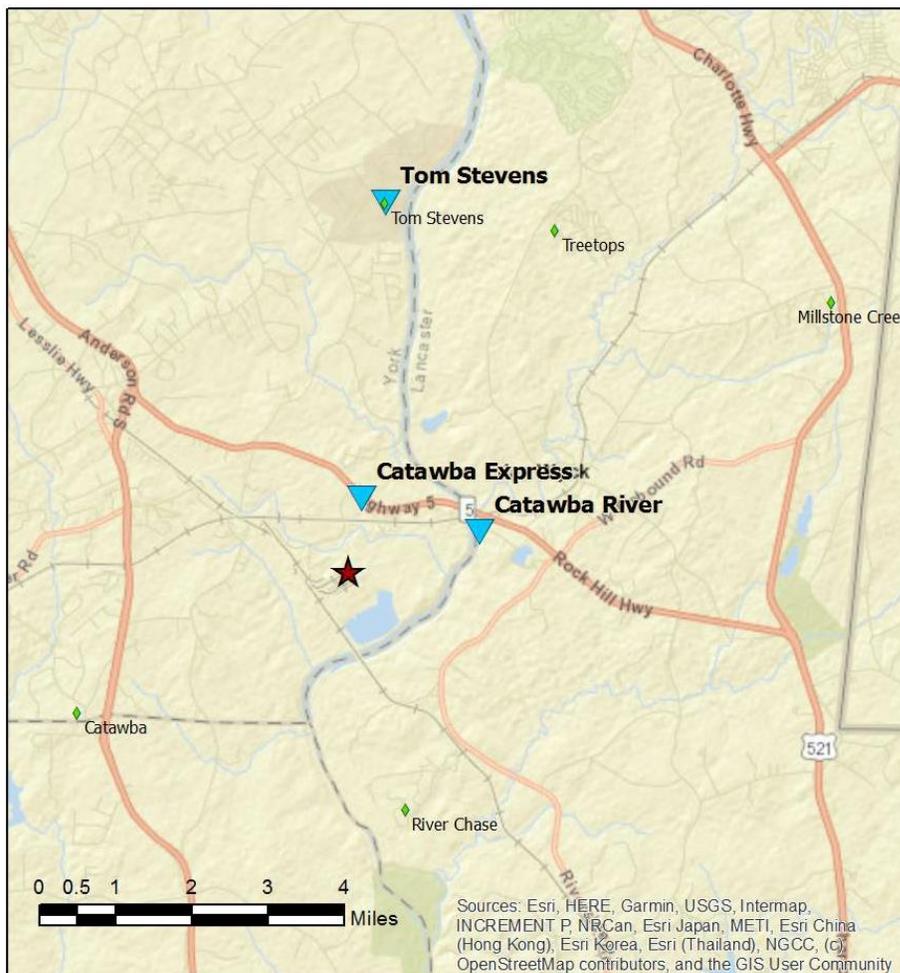
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	3802	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL      Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S            Hydrogen Sulfide
- hr               Hour
- ppb             Parts per billion
- MRL Exceedance   Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM             Single Point Monitor
- TWA             Time Weighted Average



**Legend**

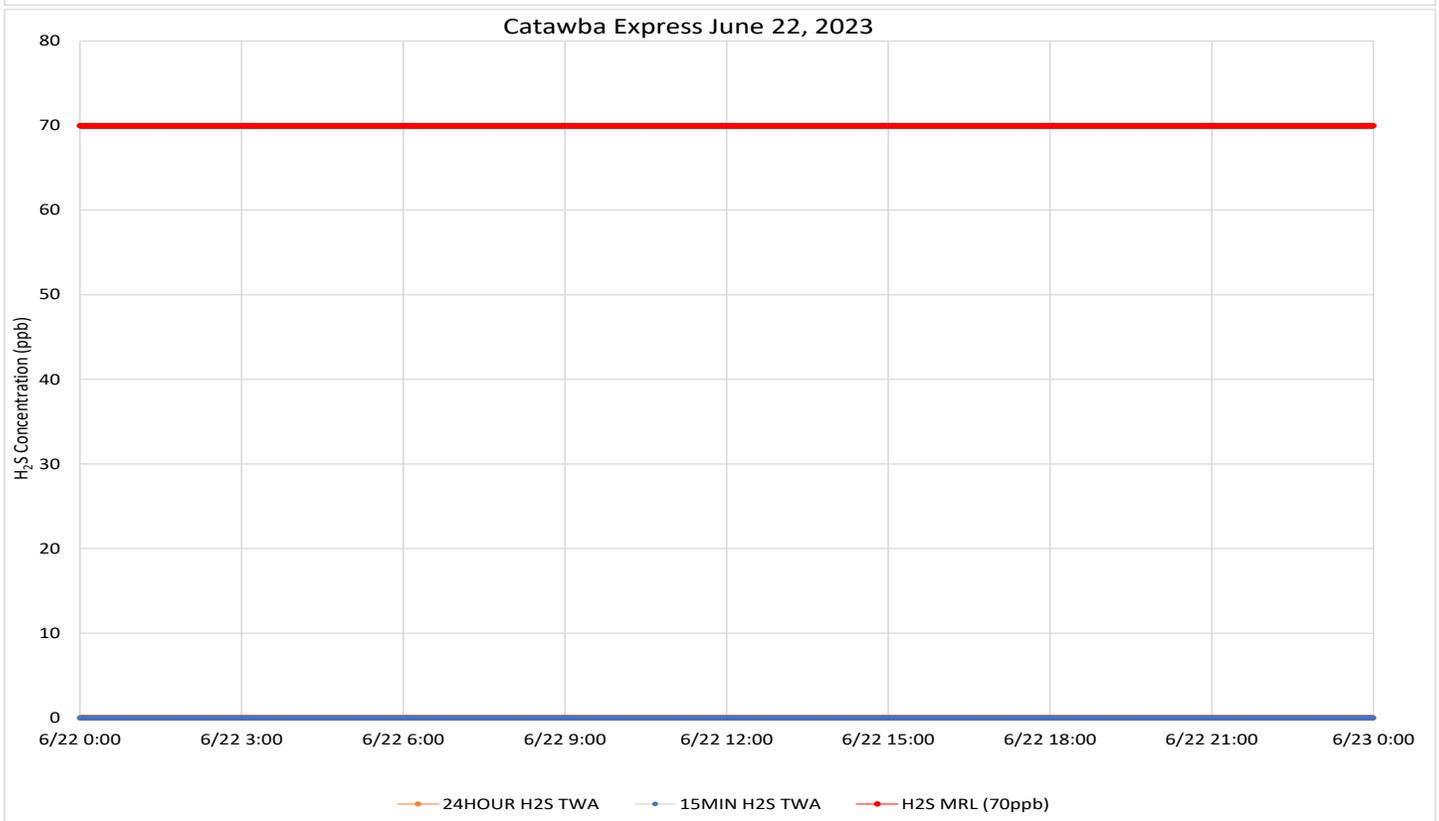
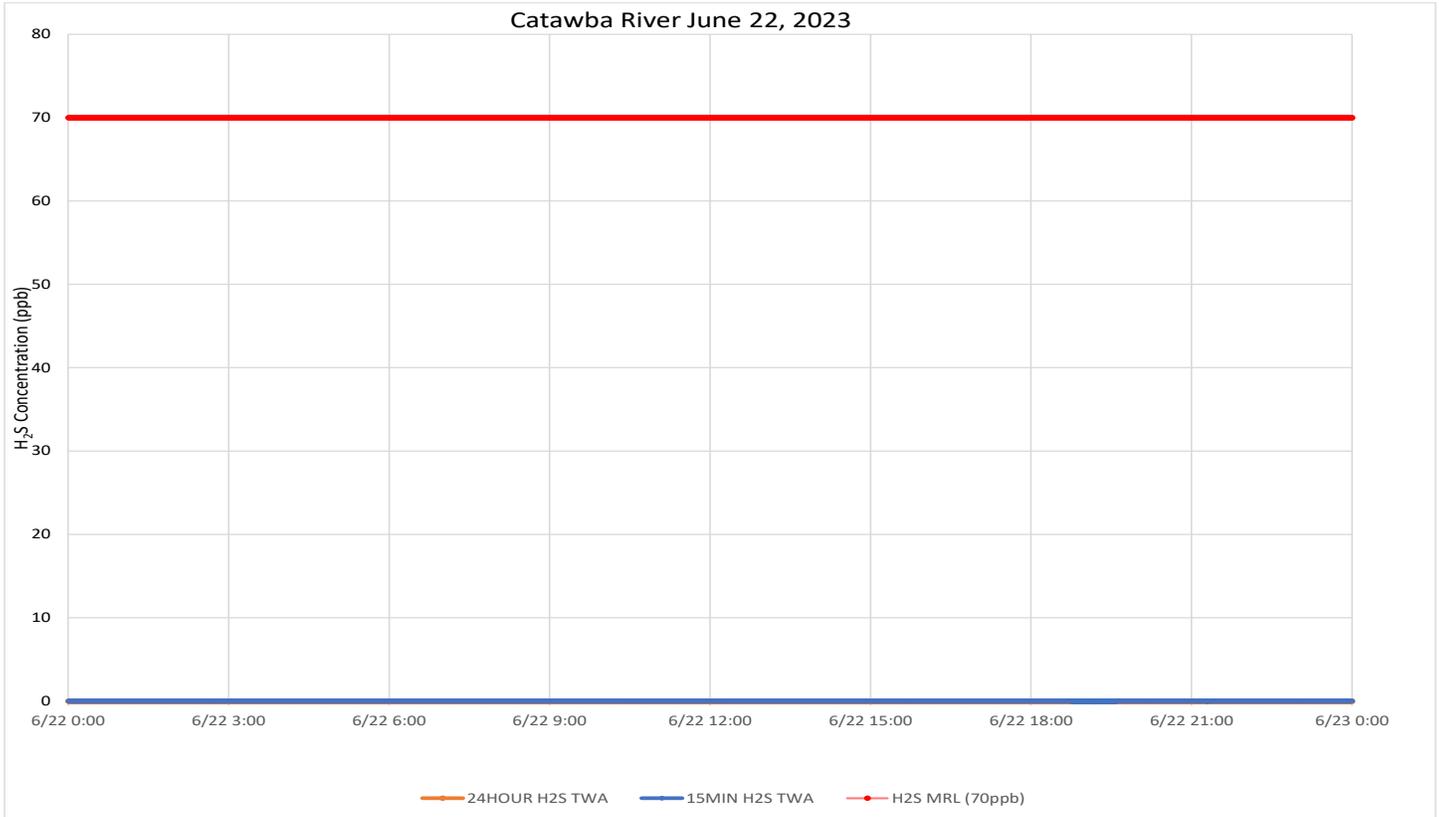
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was light and variable. When detected, wind generally came from the north northeast through northeast throughout the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/23/23  
12:00 AM  
EST

**To:** 6/23/23  
11:59 PM  
EDT

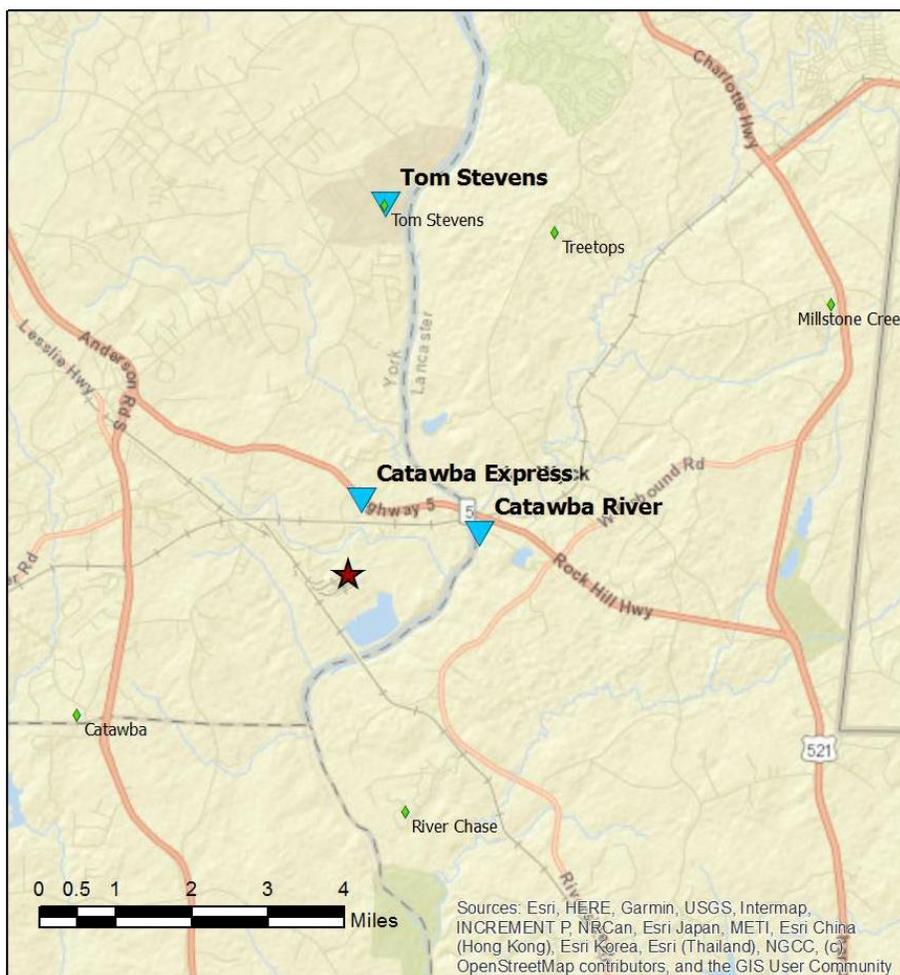
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	8750	465	0 - 3 ppb	0.1 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	295	0 - 6 ppb	0.29 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

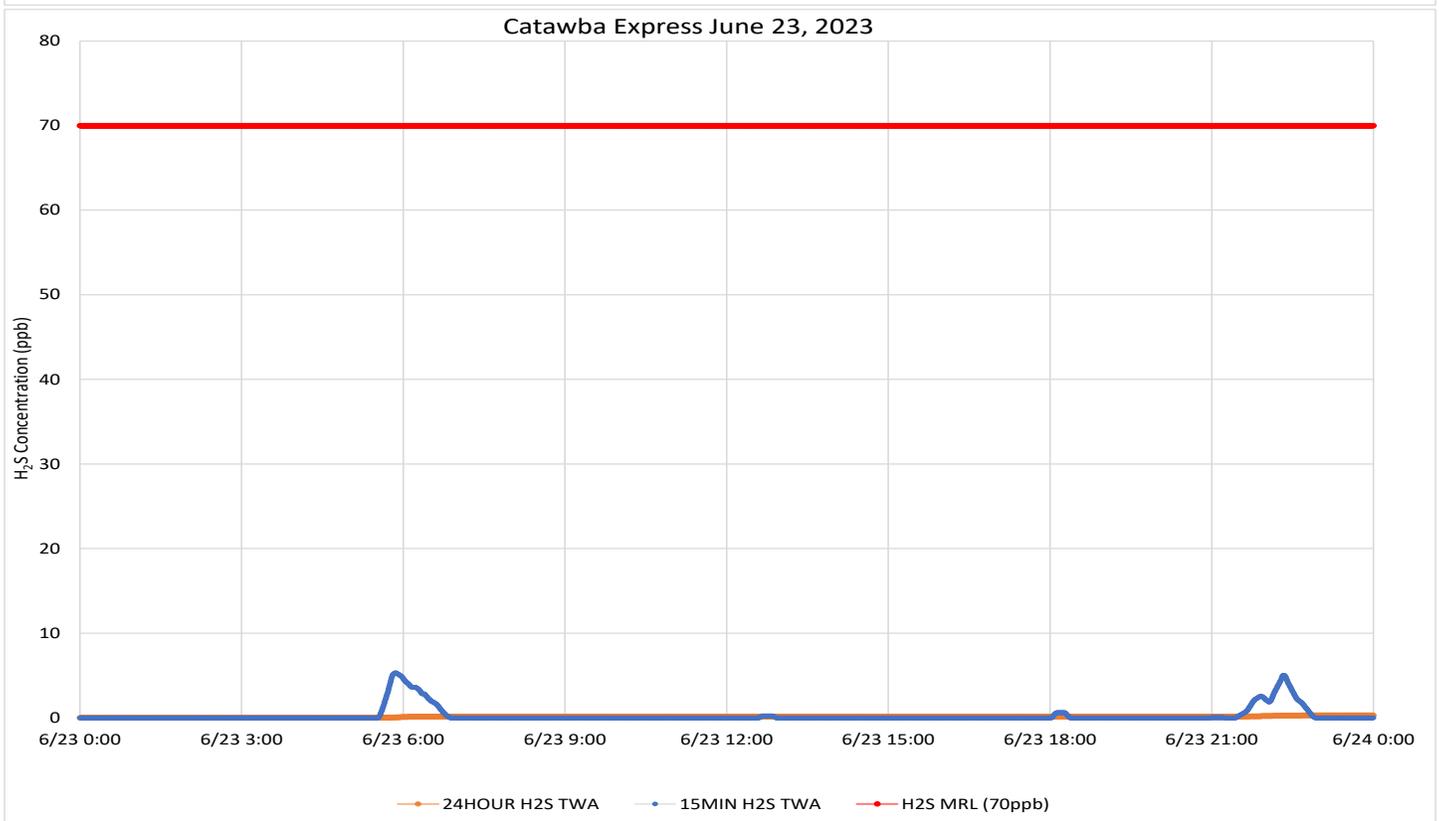
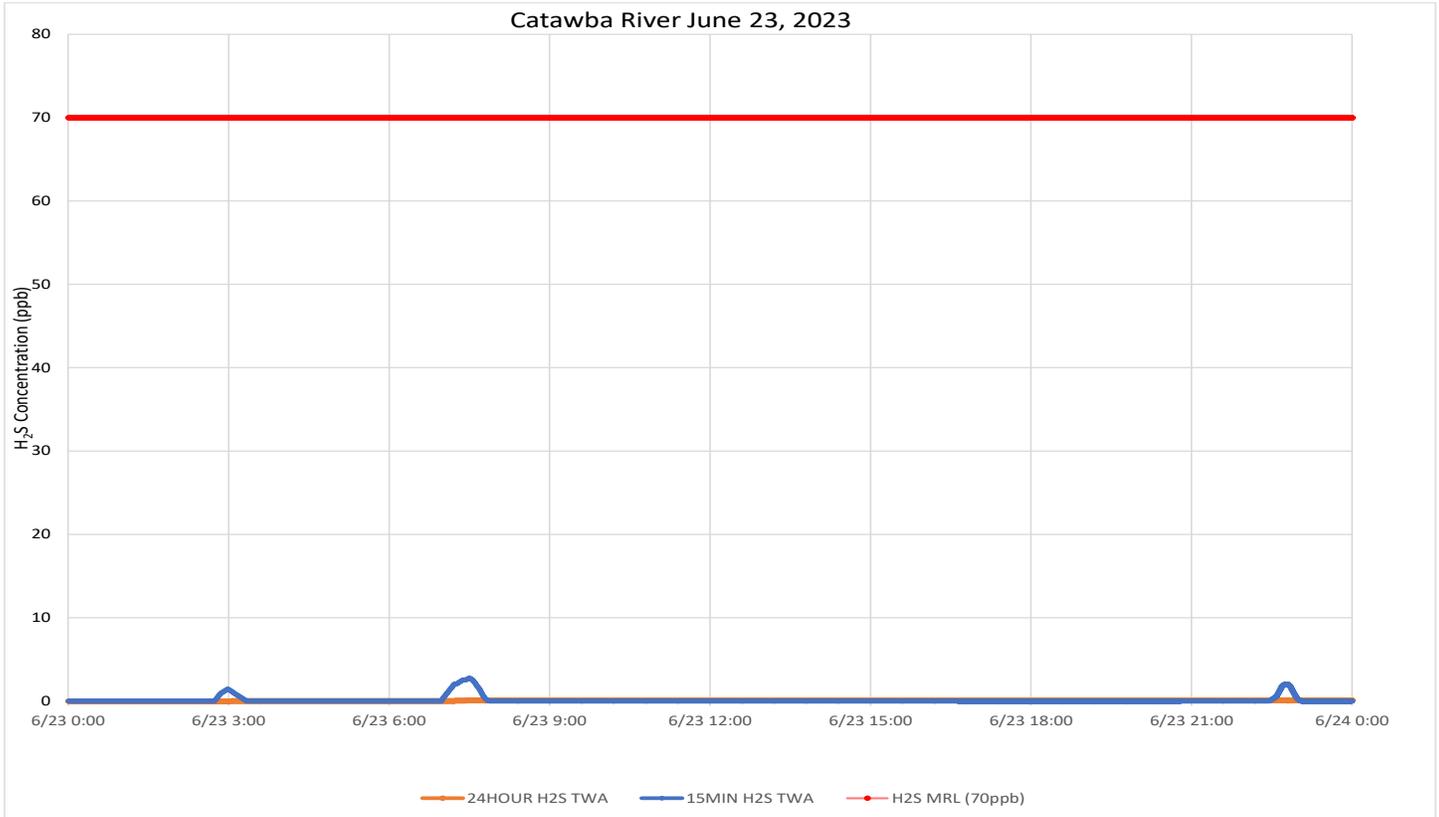
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▼ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was light and variable with significant calm periods before midday. When detected, wind generally came from the northwest before midday and from the southwest to south through the end of the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/24/23  
12:00 AM  
EST

**To:** 6/24/23  
11:59 PM  
EDT

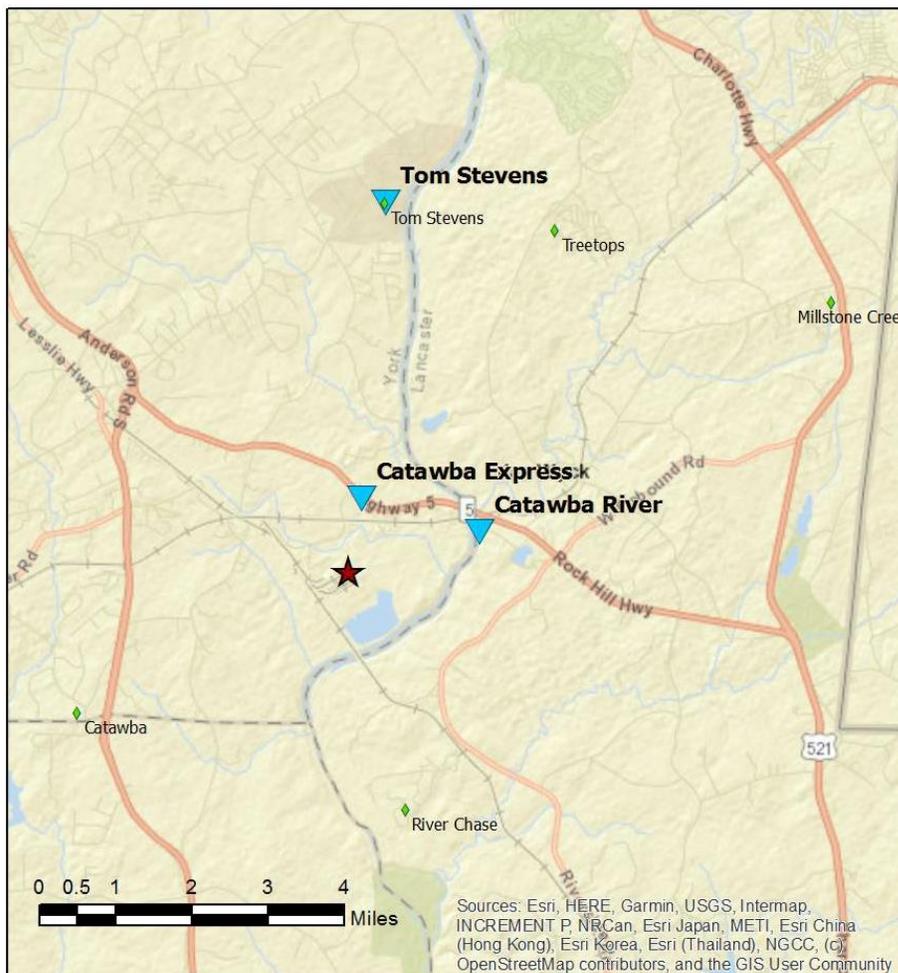
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	5738	768	0 - 10 ppb	0.27 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	94	0 - 2 ppb	0.03 ppb	70 ppb

**Notes:**

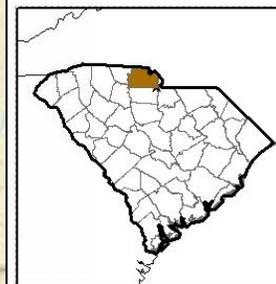
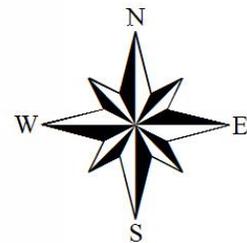
Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

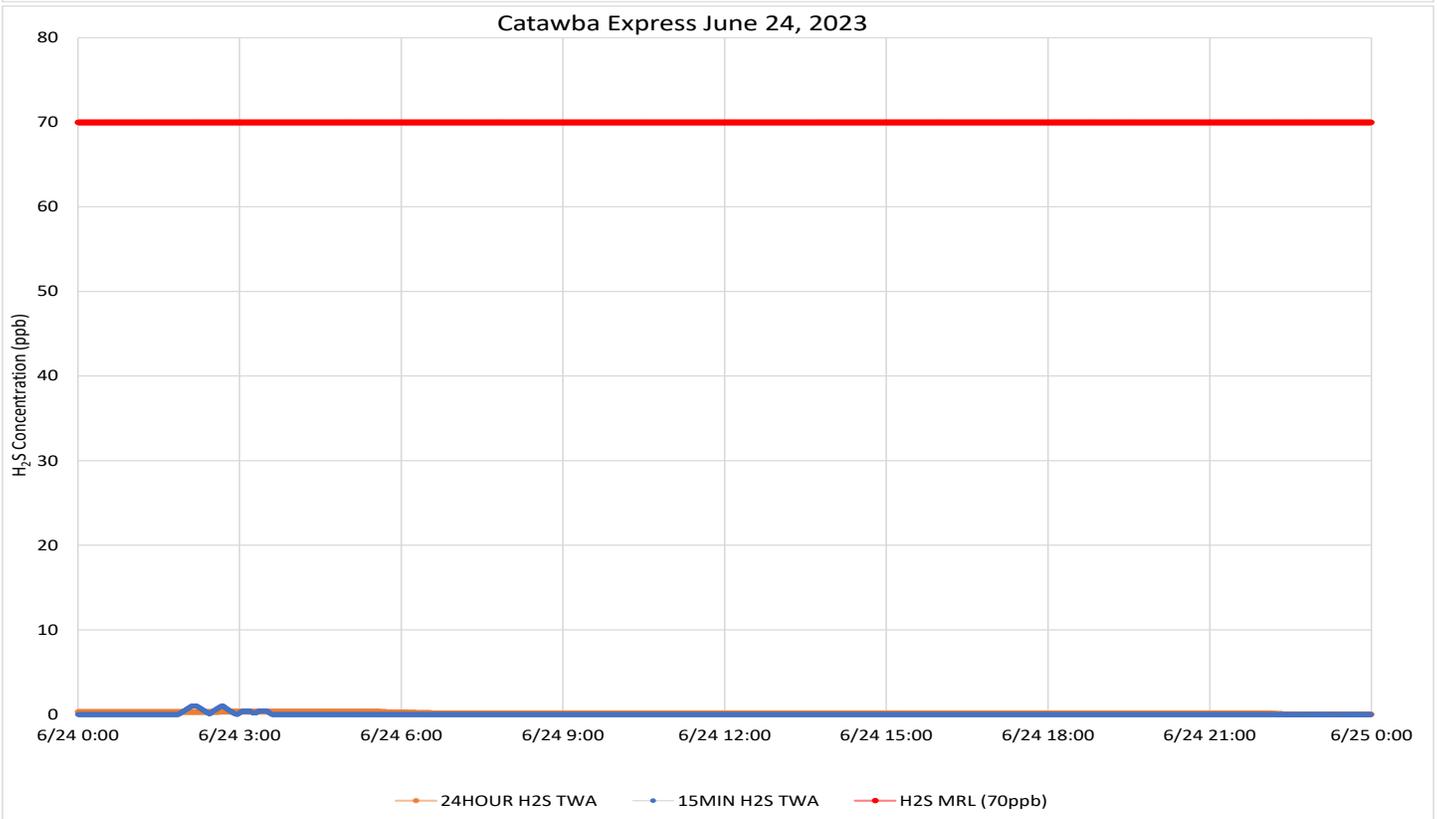
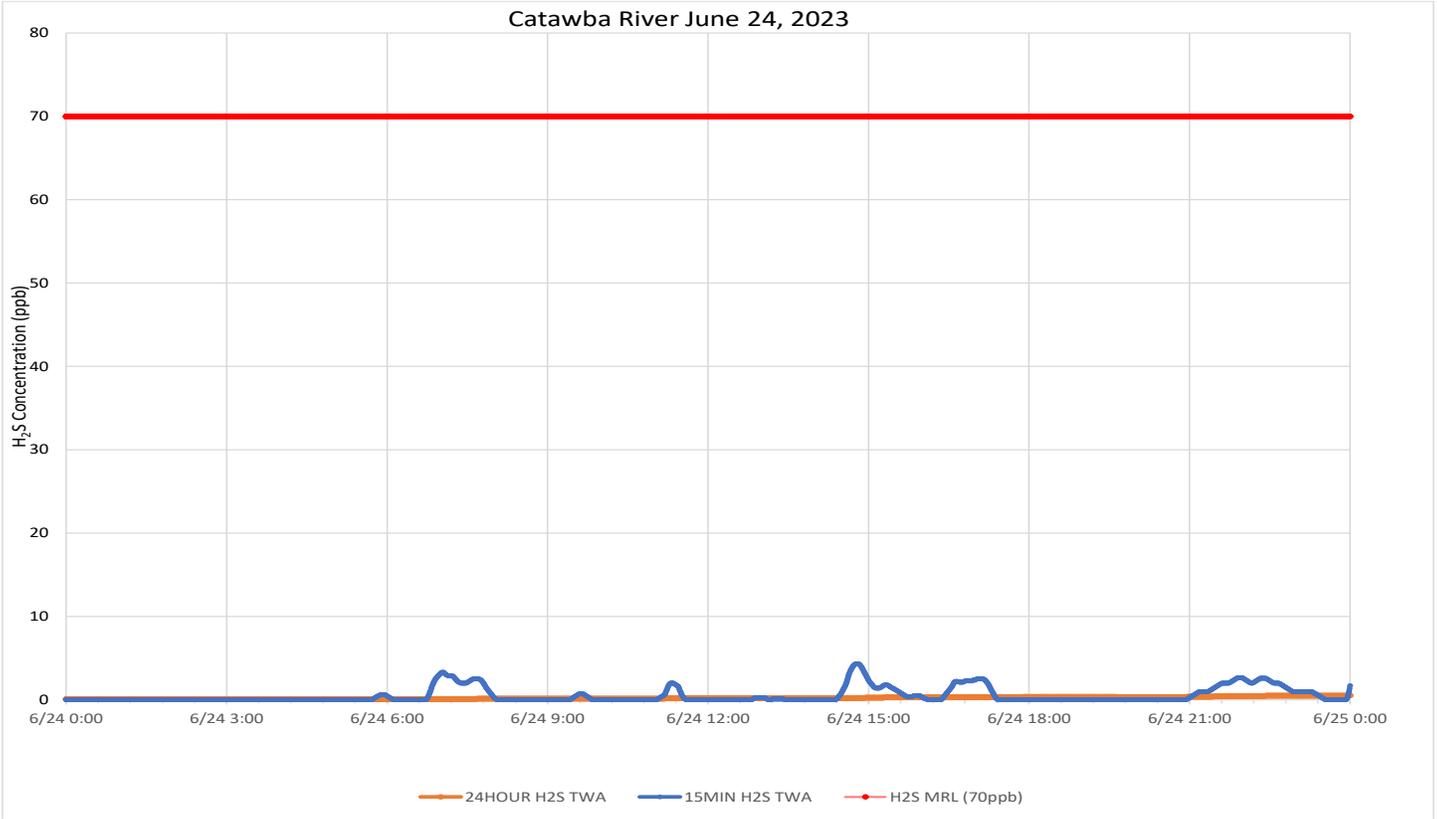
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▼ DHEC Monitor



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Wind was light to calm for periods before midday and late at night and highly variable in direction. Winds were from the north to north northeast, from the northwest to west and from the south, southwest and west at different times during the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/25/23  
12:00 AM  
EST

**To:** 6/25/23  
11:59 PM  
EDT

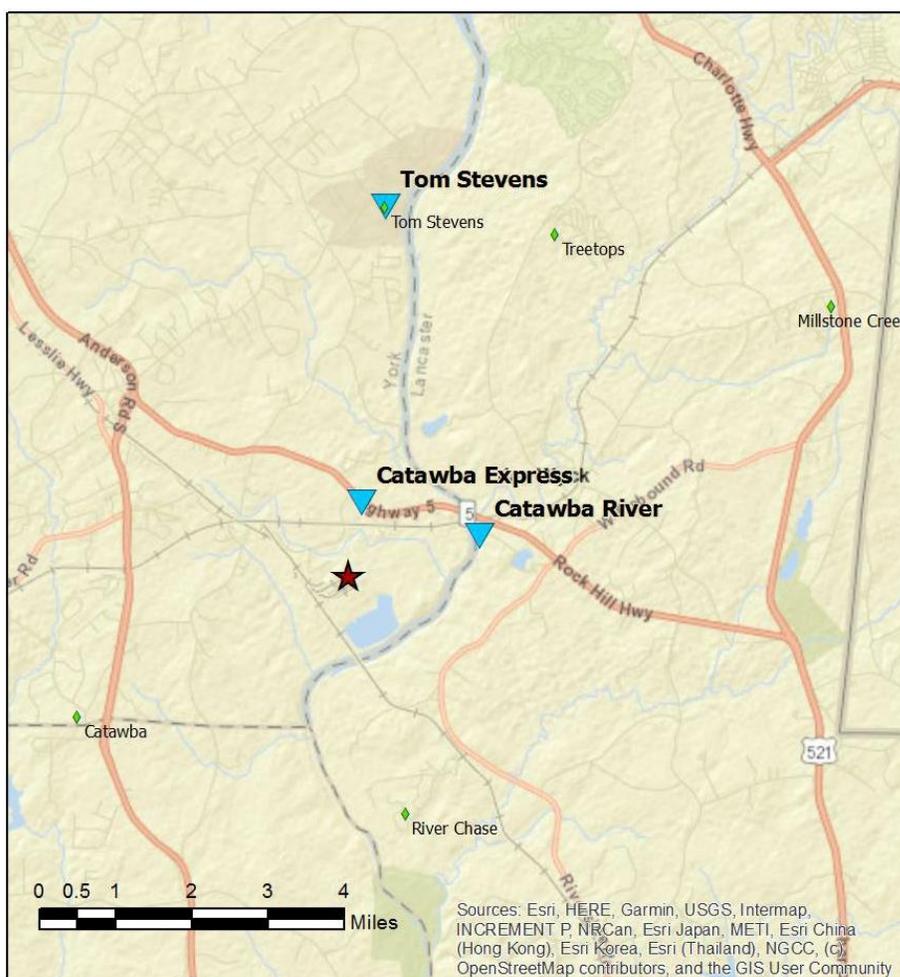
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	7315	2092	0 - 14 ppb	0.61 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

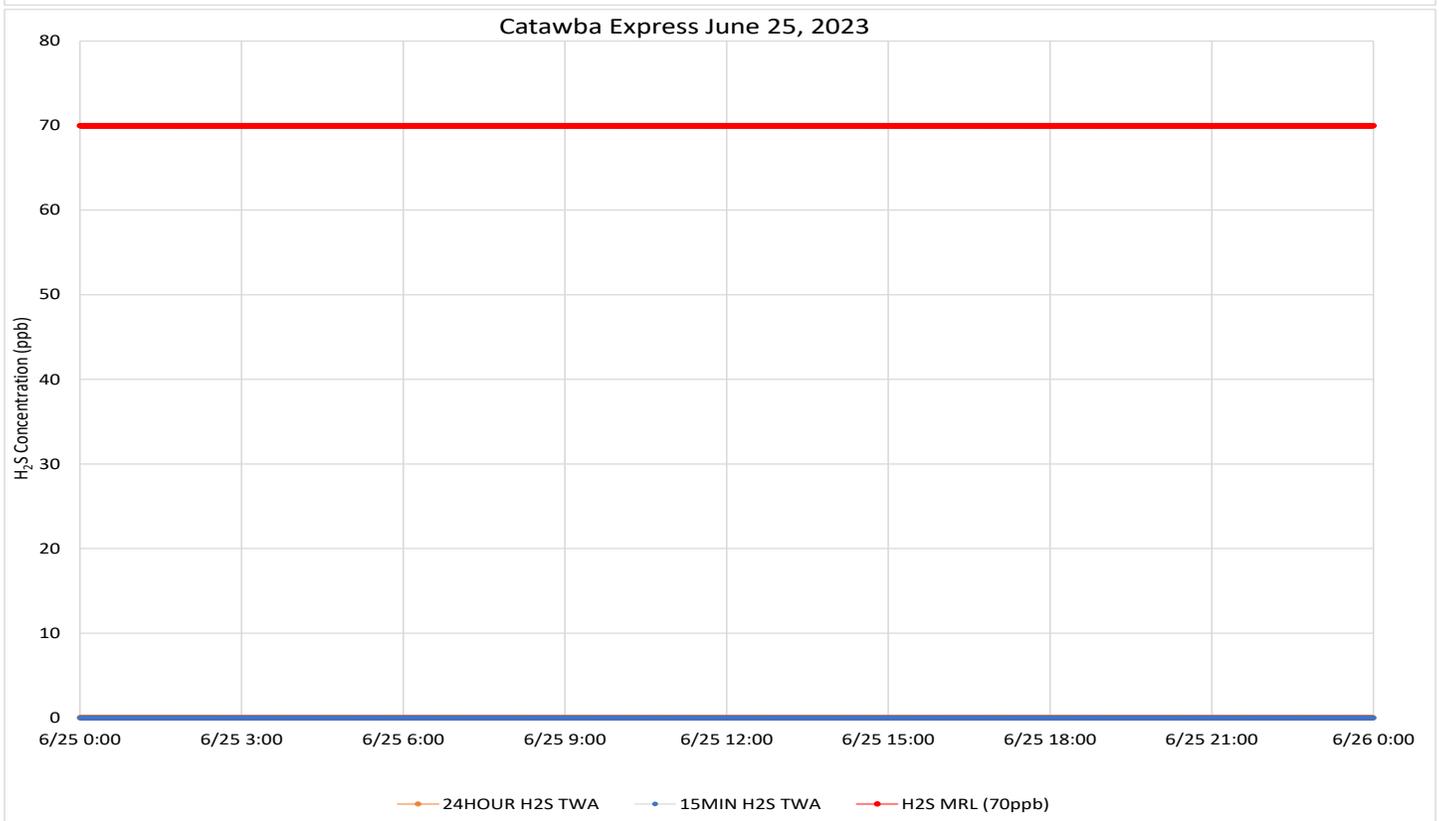
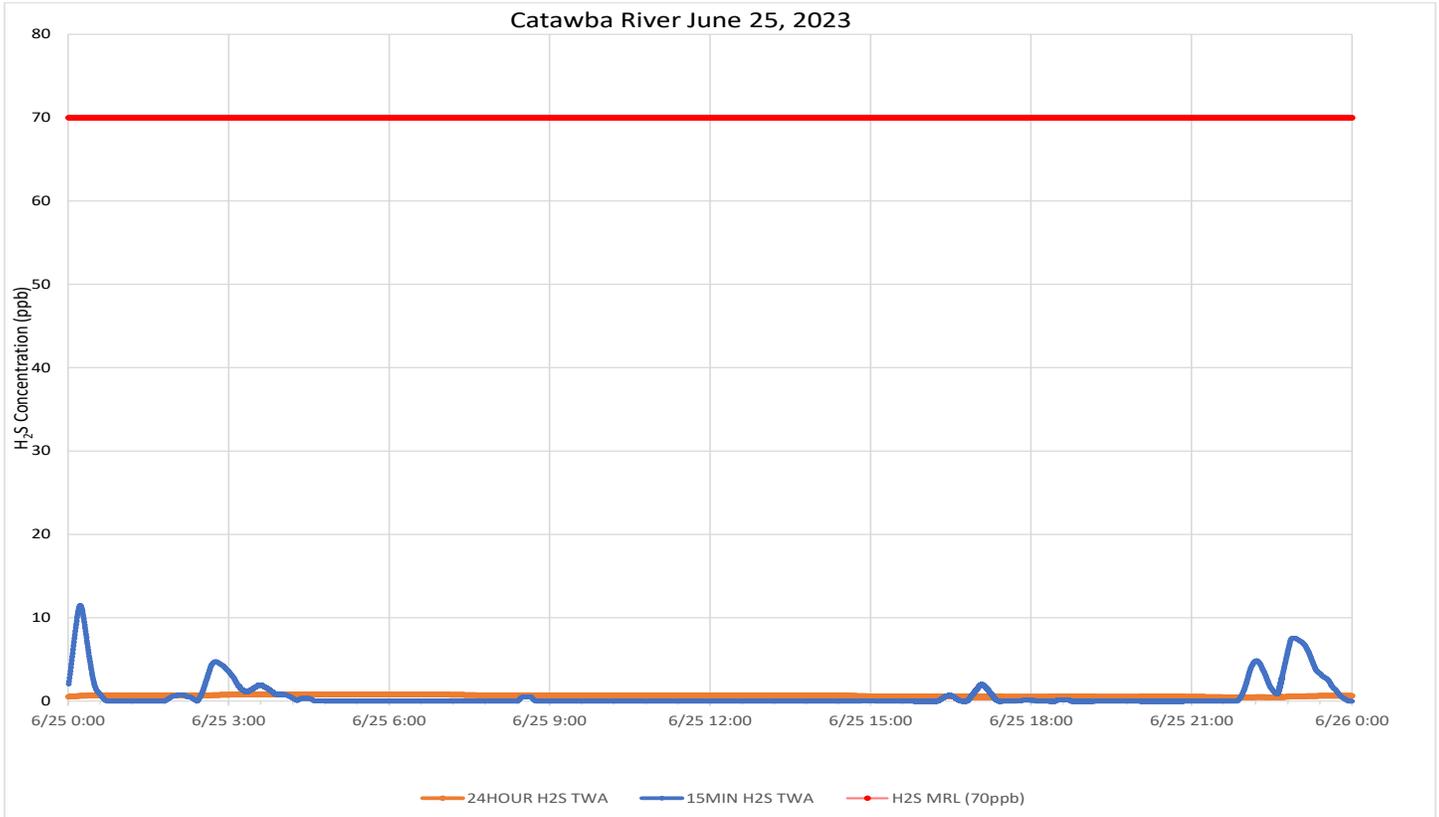
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were calm before midday. After noon, winds were generally from the northwest, shifting to coming from the west southwest to southwest by the end of the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/26/23  
12:00 AM  
EST

**To:** 6/26/23  
11:59 PM  
EDT

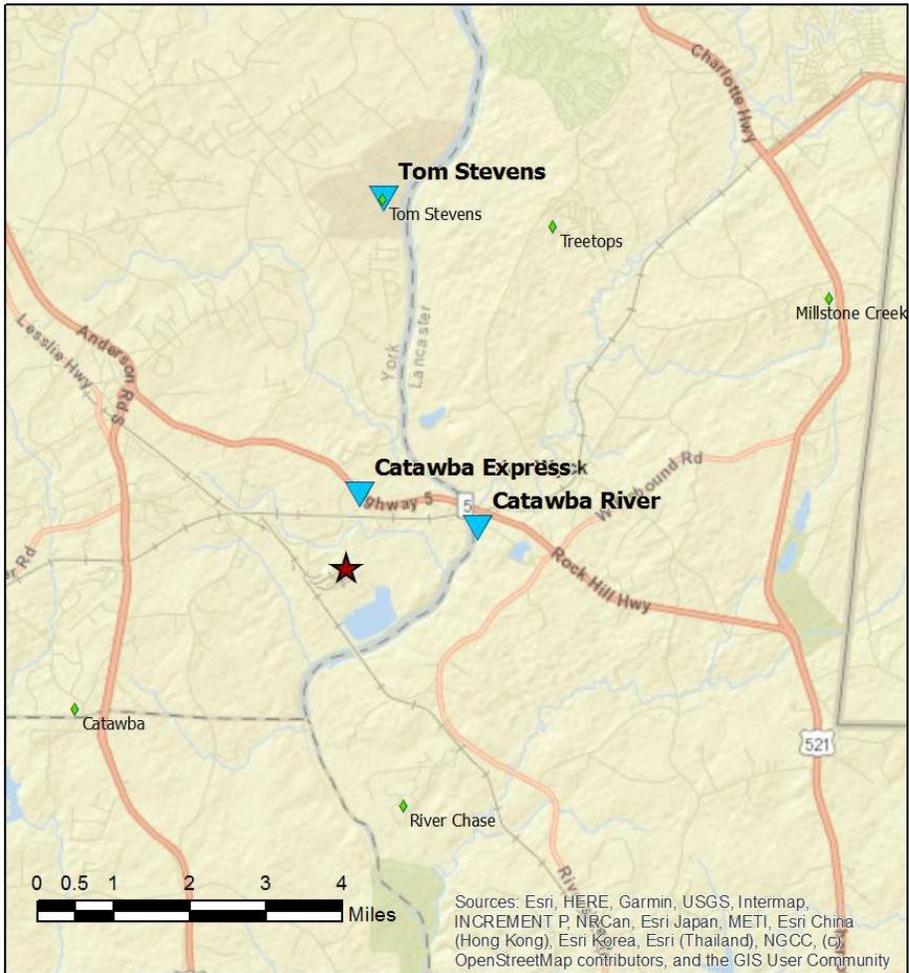
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	6626	838	0 - 6 ppb	0.32 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2880	18	0 - 2 ppb	0.01 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



**Legend**

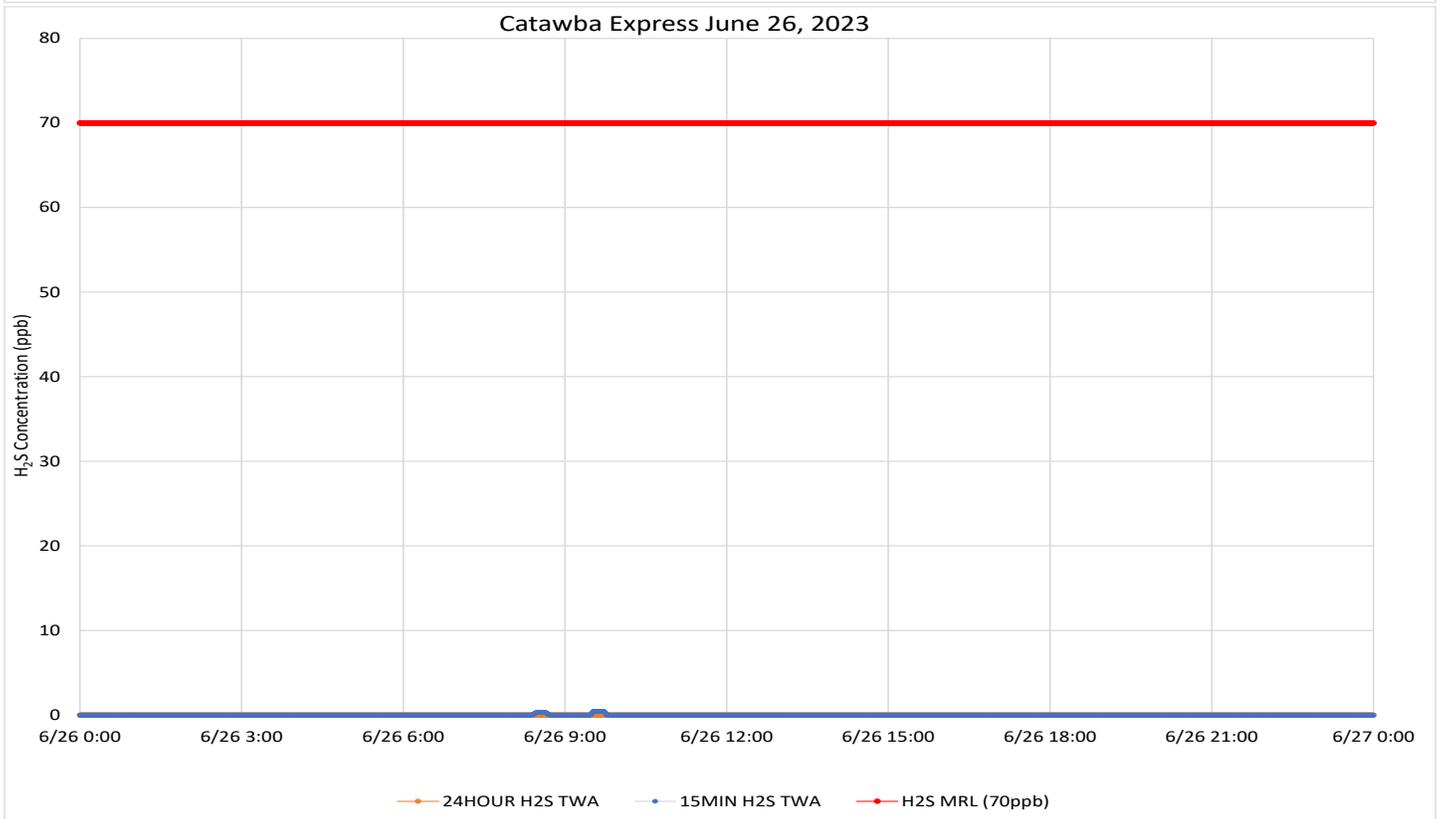
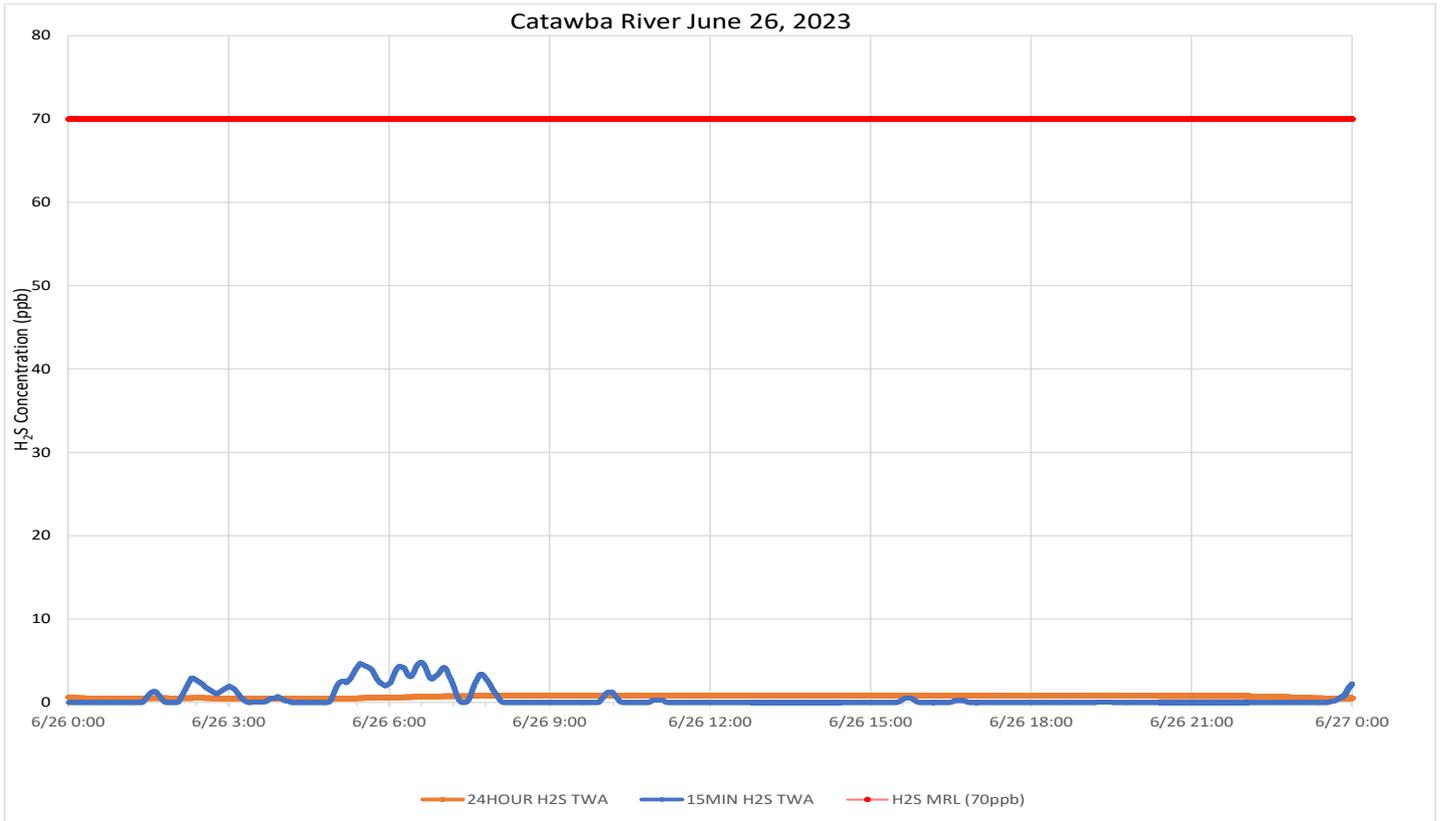
- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▲ DHEC Monitor

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were generally from the west through the south southwest throughout the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/27/23  
12:00 AM  
EST

**To:** 6/27/23  
11:59 PM  
EDT

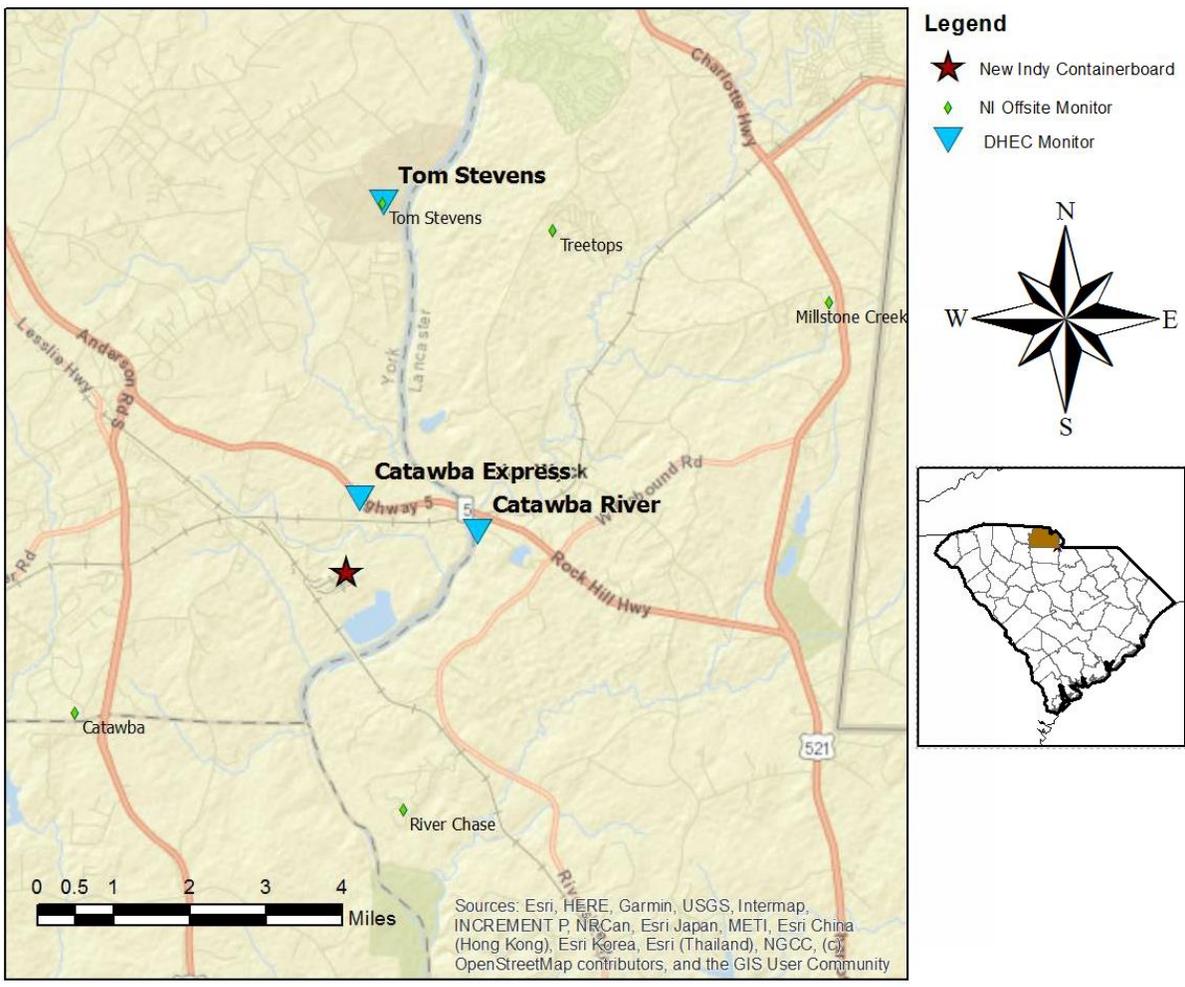
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	7840	2757	0 - 11 ppb	1.02 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	334	0 - 7 ppb	0.45 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

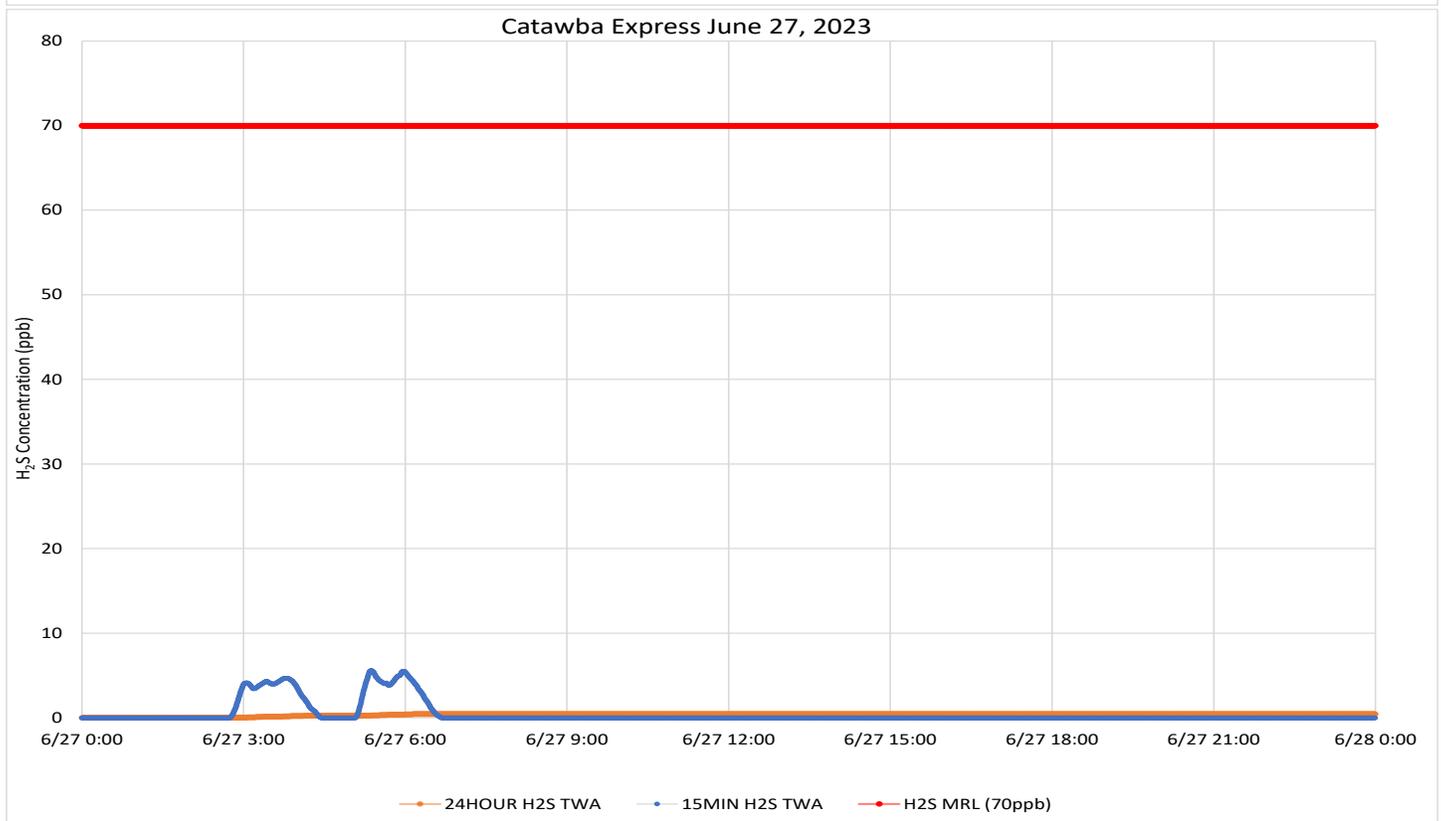
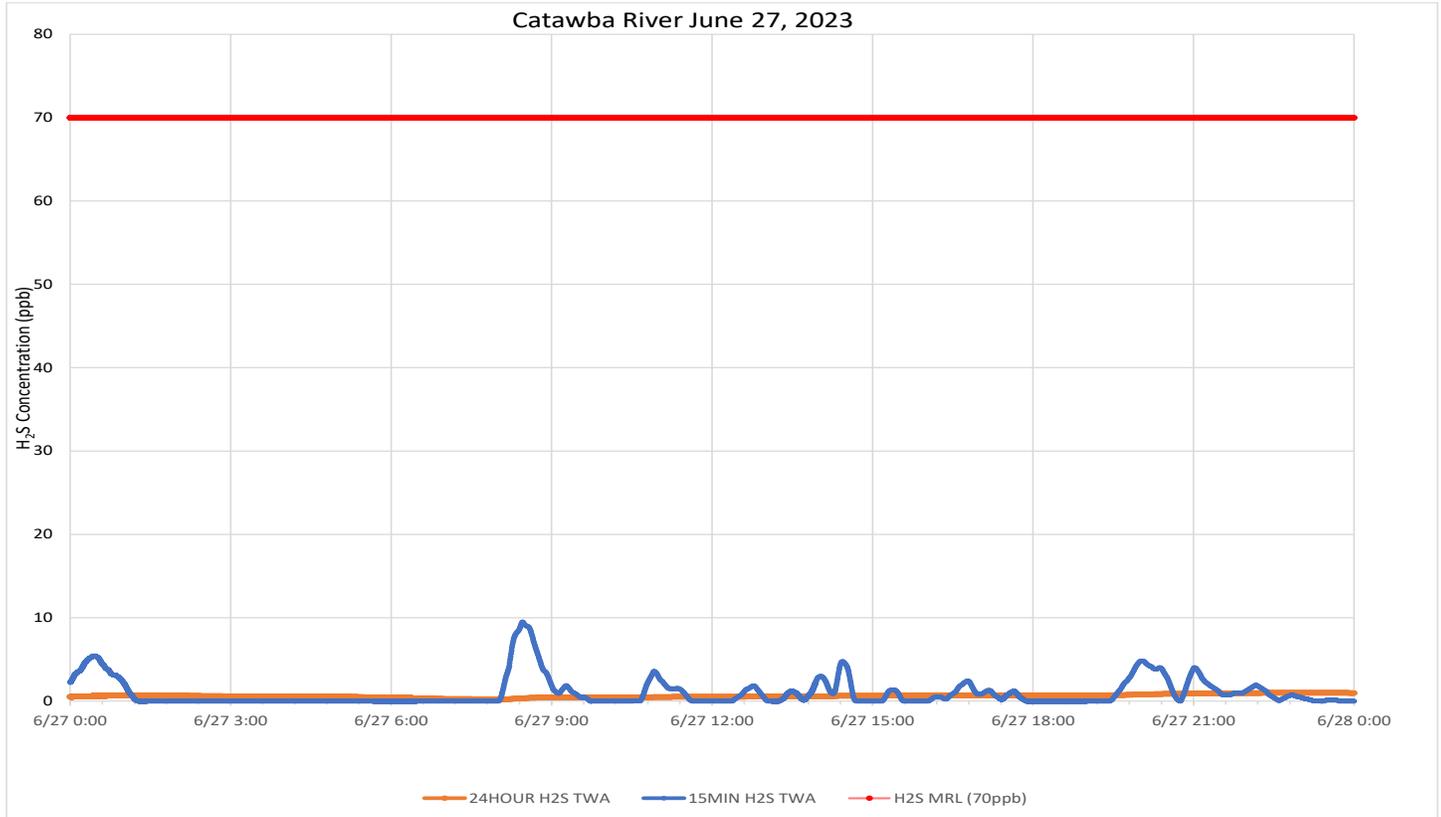
- ATSDR MRL      Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S            Hydrogen Sulfide
- hr               Hour
- ppb             Parts per billion
- MRL Exceedance   Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM             Single Point Monitor
- TWA             Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were generally from the southwest before sunup and from the west northwest through northwest for the remainder of the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.



**Project Name:** H<sub>2</sub>S in South Carolina

**From:** 6/28/23  
12:00 AM  
EST

**To:** 6/28/23  
11:59 PM  
EDT

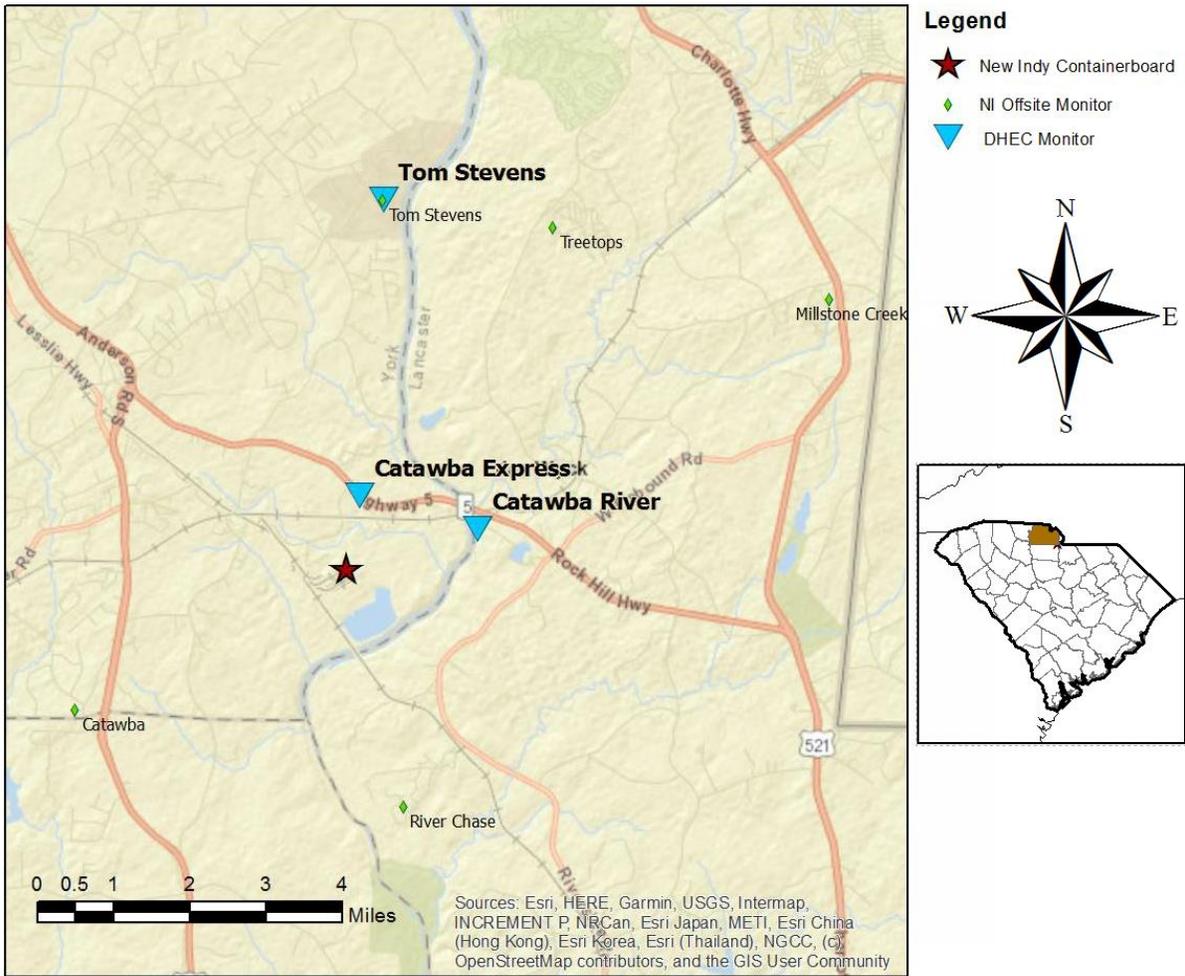
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	5455	6	0 - 1 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

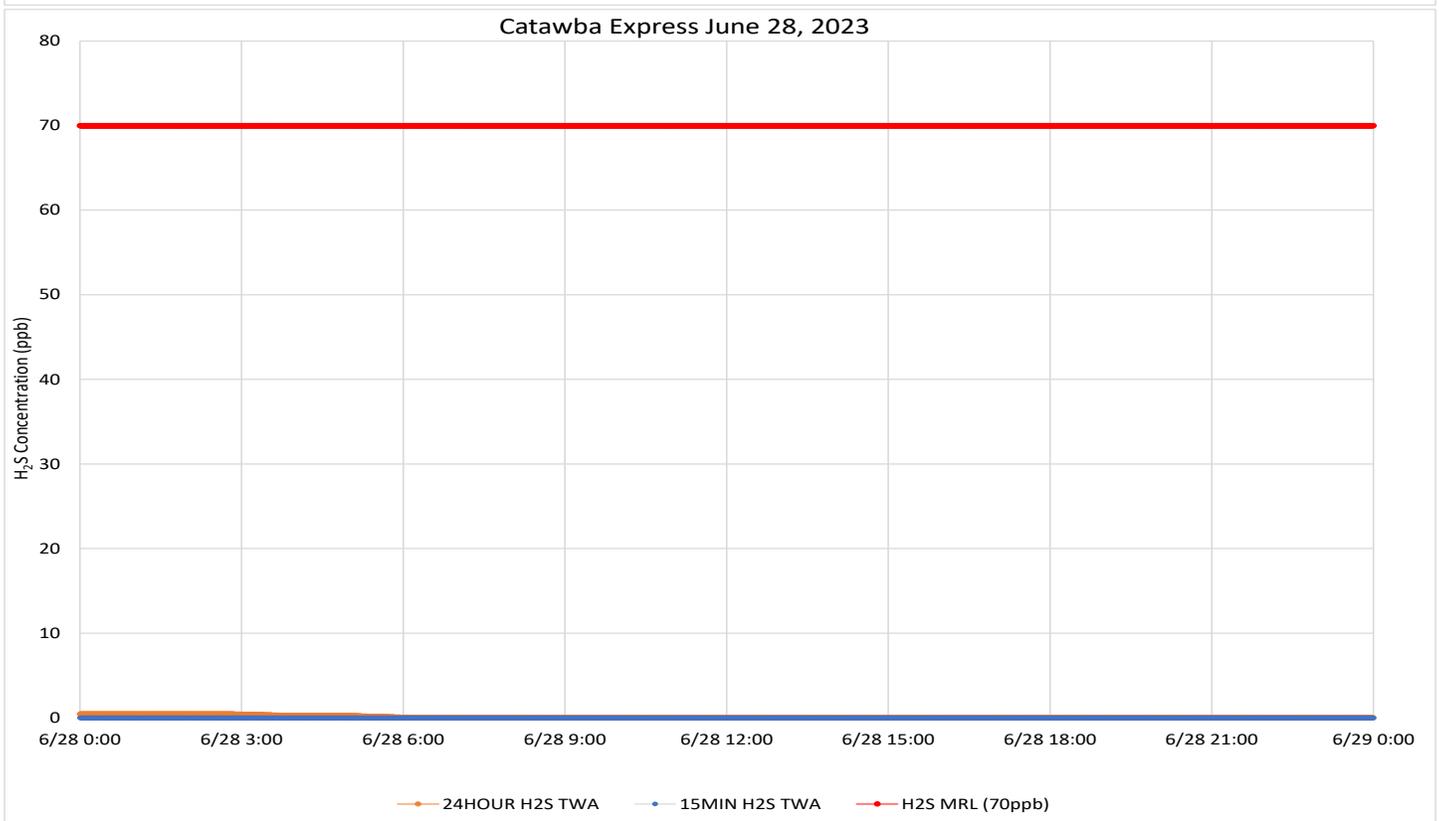
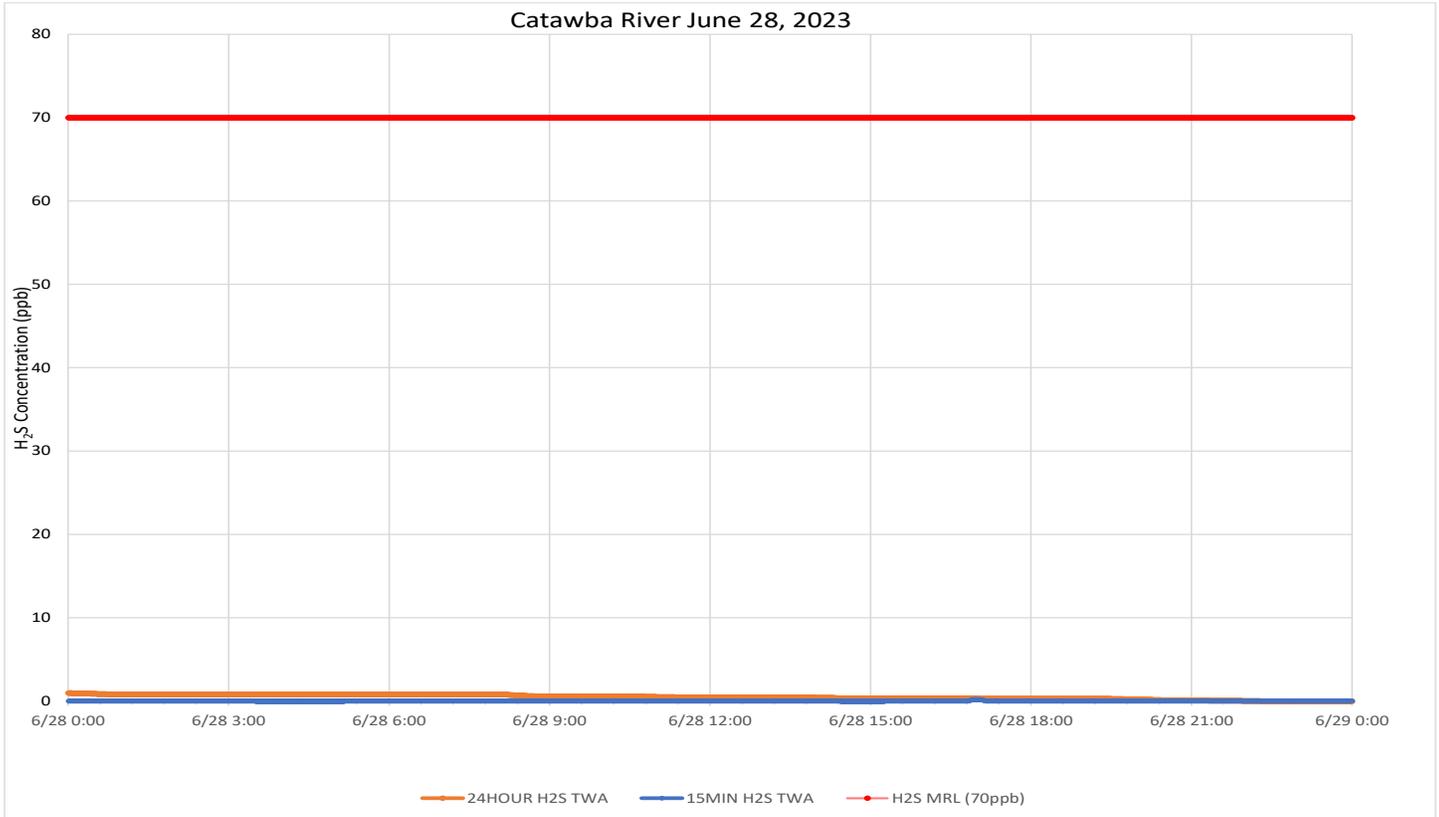
- ATSDR MRL Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S Hydrogen Sulfide
- hr Hour
- ppb Parts per billion
- MRL Exceedance Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM Single Point Monitor
- TWA Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were generally light and from the north northeast through northwest, becoming calm in the evening and through the end of the period.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/29/23  
12:00 AM  
EST

**To:** 6/29/23  
11:59 PM  
EDT

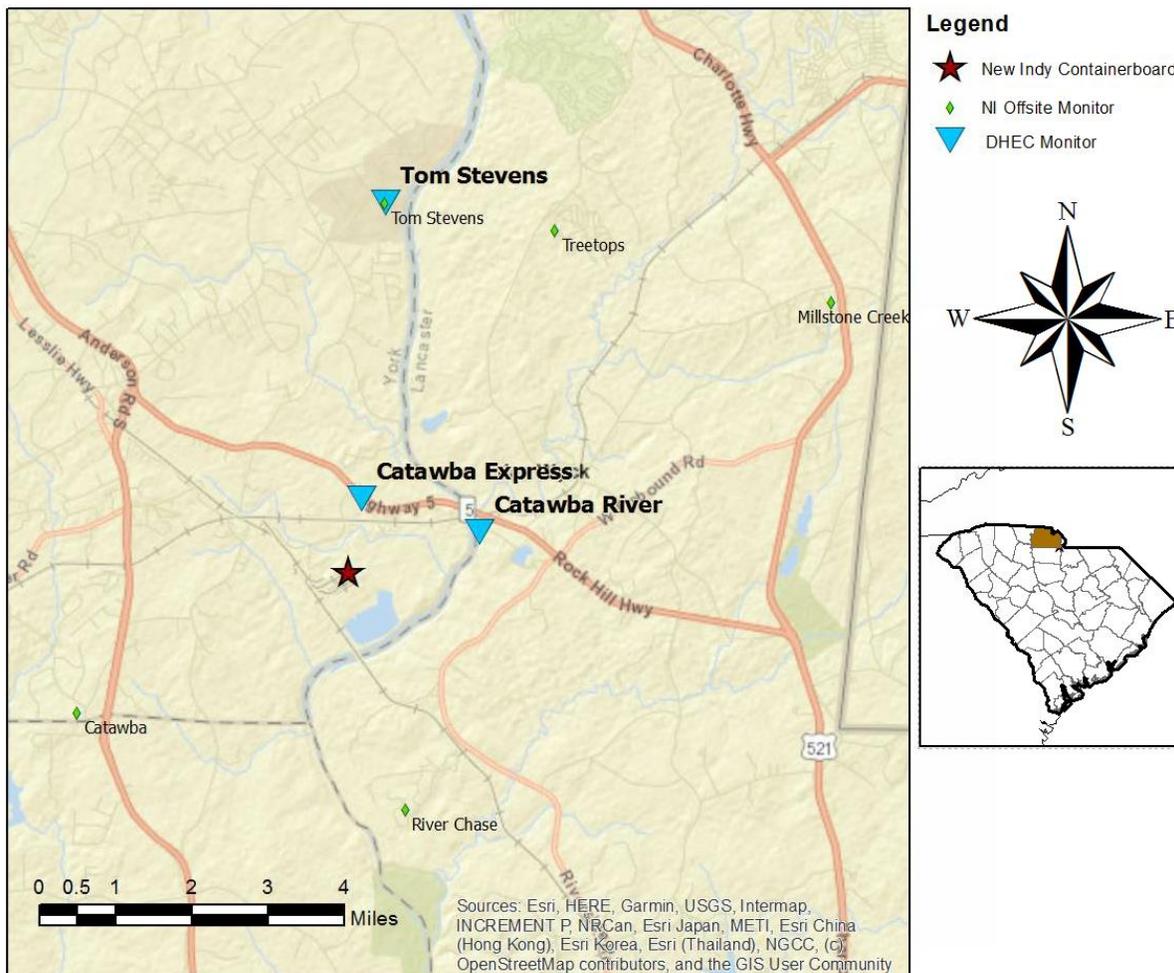
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	3737	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	296	0 - 6 ppb	0.27 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

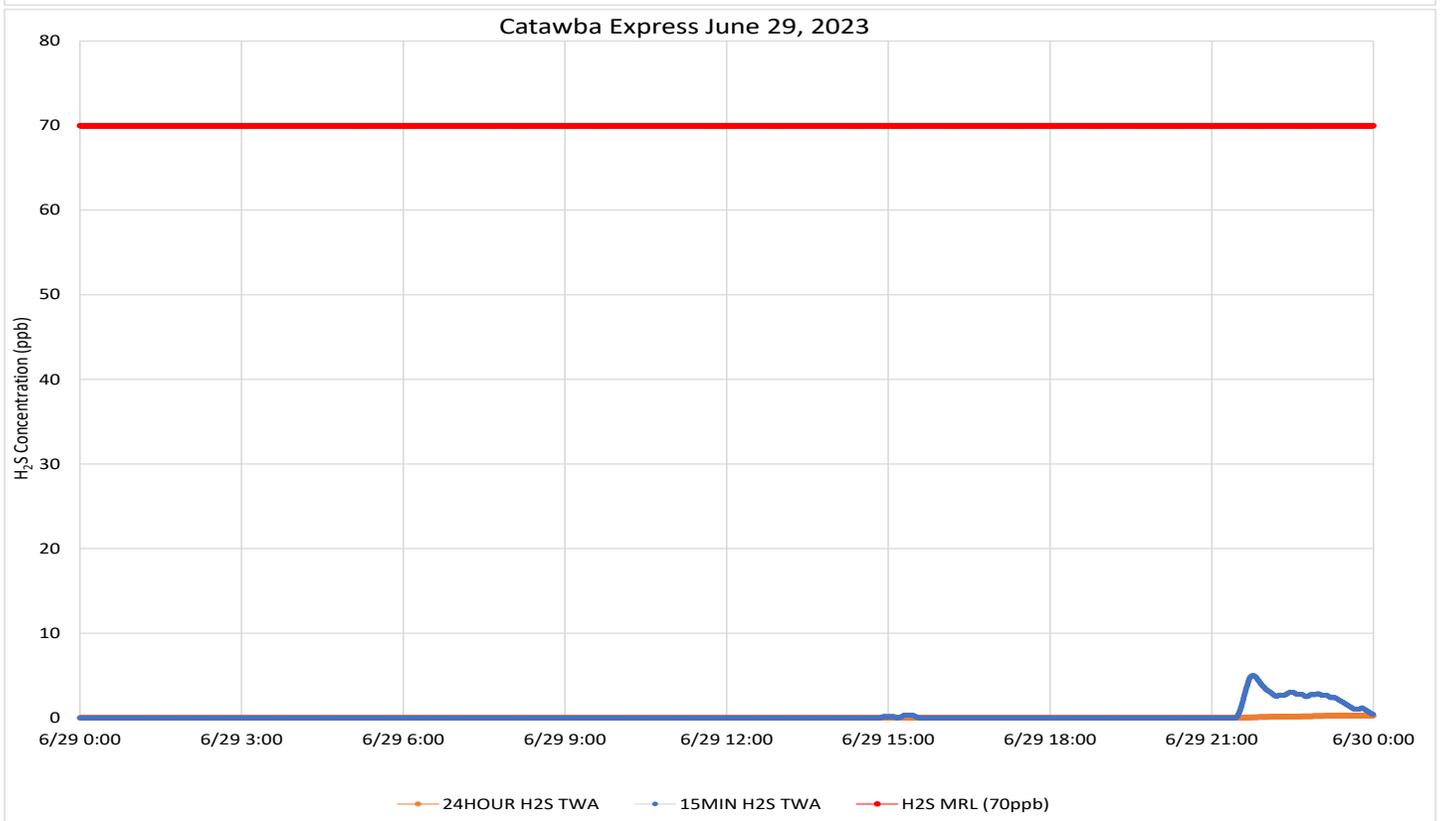
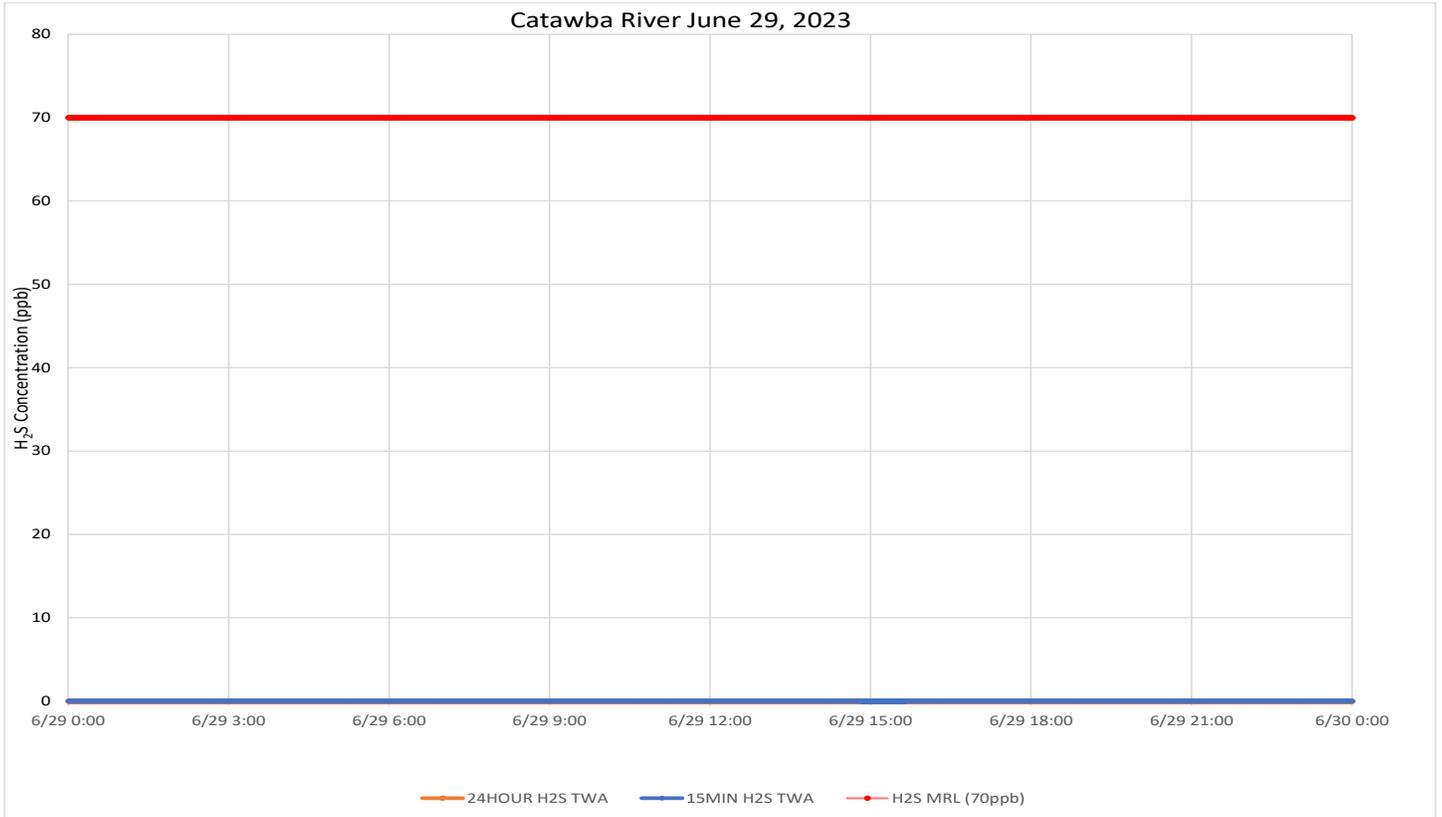
- ATSDR MRL      Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S            Hydrogen Sulfide
- hr               Hour
- ppb             Parts per billion
- MRL Exceedance   Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM             Single Point Monitor
- TWA             Time Weighted Average



# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were calm for most of the period. Around dawn and in the early evening, light winds were detected from the north northeast and west, respectively.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA

# Air Monitoring Summary Tables

This table summarizes monitoring data collected using DHEC monitors and EPA's Viper wireless remote monitoring system.

**Project Name:** H<sub>2</sub>S in South Carolina



**From:** 6/30/23  
12:00 AM  
EST

**To:** 6/30/23  
11:59 PM  
EDT

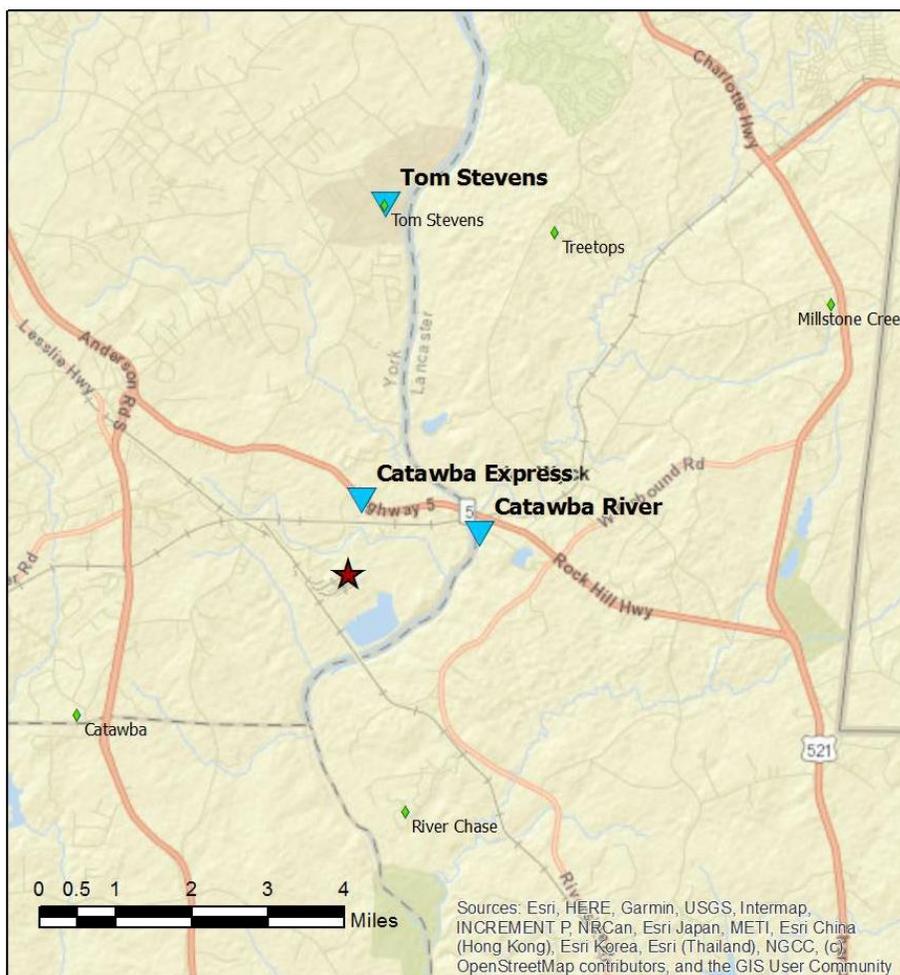
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H <sub>2</sub> S	No	8452	989	0 - 4 ppb	0.19 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 2	H <sub>2</sub> S	No	2880	1549	0 - 18 ppb	2.38 ppb	70 ppb

**Notes:**

Hydrogen sulfide concentrations presented in this data summary table are converted from parts per million, the instrument readout units, to parts per billion. The SPM FLEX Minimum Detectable Limit (MDL) is 1 ppb of Hydrogen Sulfide.

- ATSDR MRL      Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
- H<sub>2</sub>S            Hydrogen Sulfide
- hr               Hour
- ppb             Parts per billion
- MRL Exceedance   Defines if the 24-hr TWA exceeded the MRL at any time during the period of this report
- SPM             Single Point Monitor
- TWA             Time Weighted Average



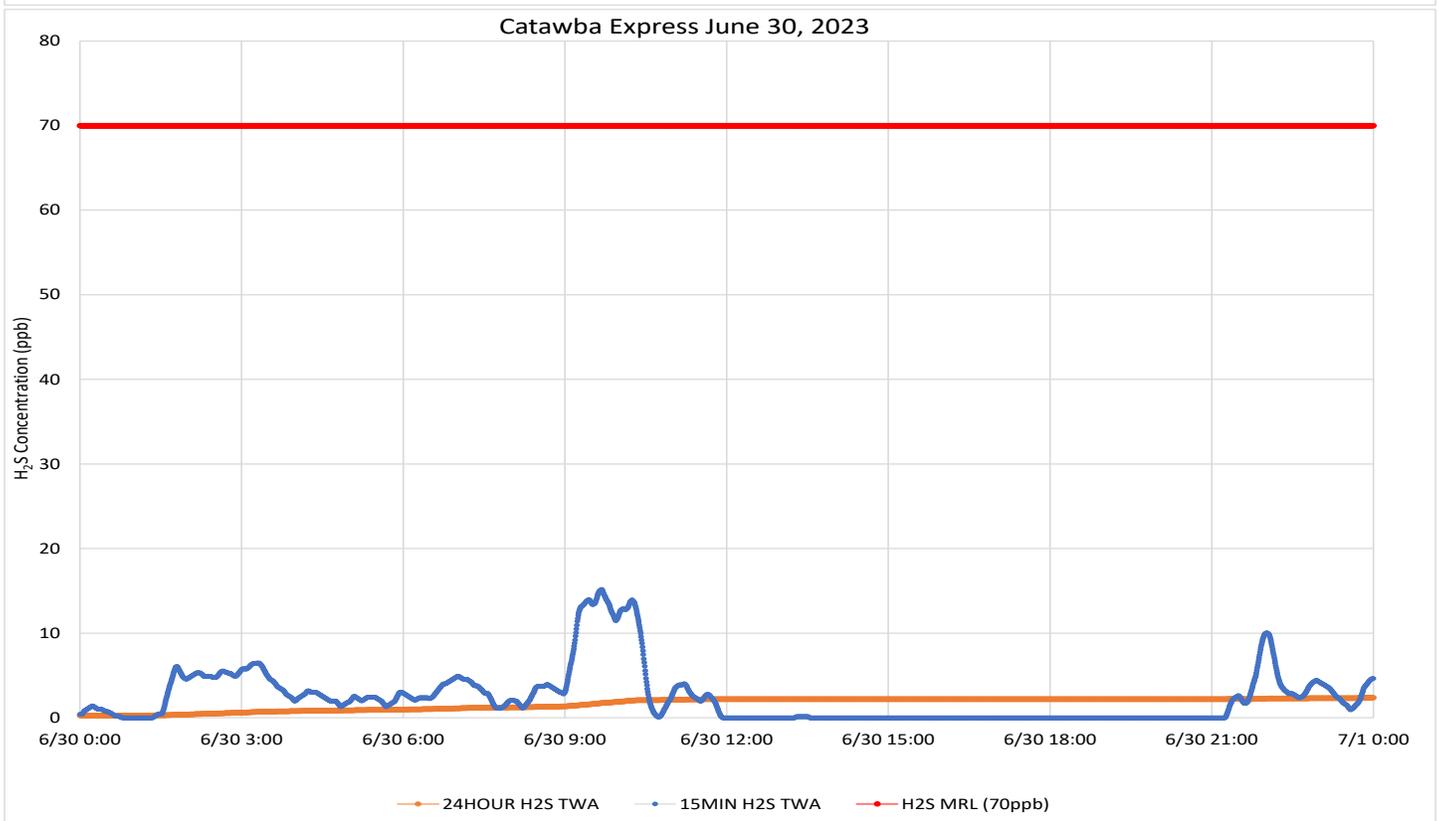
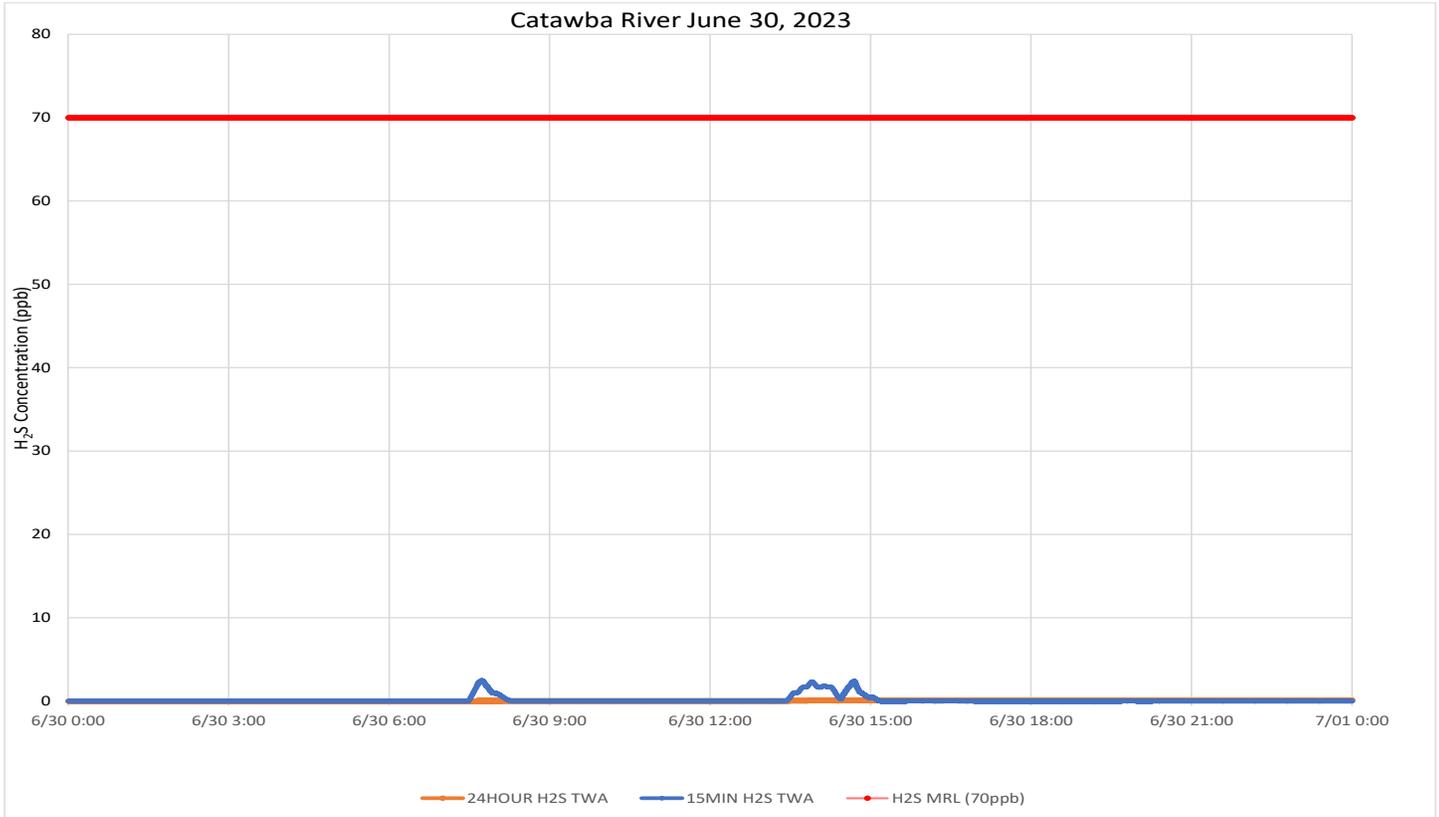
**Legend**

- ★ New Indy Containerboard
- ◆ NI Offsite Monitor
- ▼ DHEC Monitor

# H<sub>2</sub>S in South Carolina

## Hydrogen Sulfide 15-min and 24-hr Time Weighted Average Graphs

Winds were calm before dawn and in the late evening. During the day, wind direction was variable, but generally from the southwest early, shifting to become more from the west in the early evening.



Notes: Time is Eastern Daylight Time H<sub>2</sub>S – Hydrogen Sulfide MRL – Minimal Risk Level ppb – Parts per billion Wind data for KUZA