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

lem.	<u> </u>	-
	C	hec

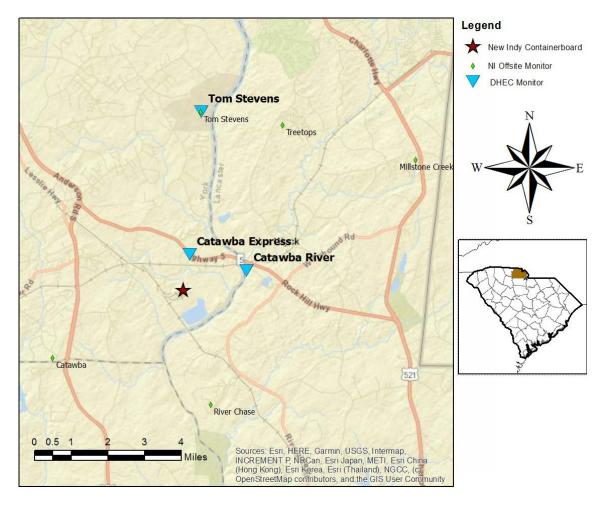
	From:	5/1/23	To:	5/1/23	
		12:00 AM		11:59 PM	
_		EST		EDT	
	Catawha River				

Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL			
SPM Flex 3	H2S	No	2880	419	0 - 3 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	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb			

Notes:

ATSDR MRL	Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
H₂S	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



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

Winds were from the west northwest for several hours in the early morning, but shifted to coming from the west through southwest for the remainder of the period.



There is a gap in the data collected at the Catawba River site that lasted approximately 1 hour. The reported summary data is valid.

### **Air Monitoring Summary Tables**

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

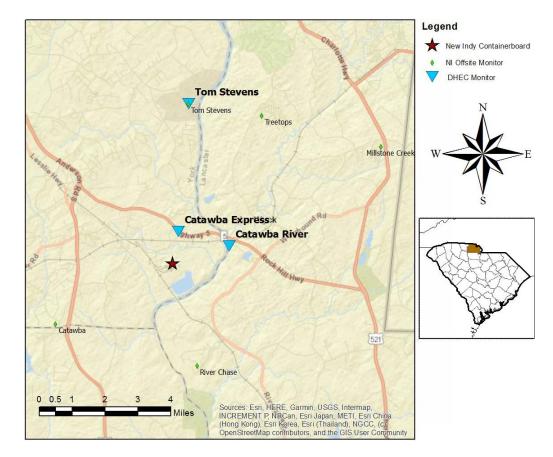
Project Name: From:	H <sub>2</sub> S in South Car 5/2/23 12:00 AM	rolina	To:	5/2/23 11:59 PM		V	dhec
	EST			EDT			
Catawba River	0000-1135,1235-239	9					
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Partial Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2760	970	0 - 3 ppb	0.42 ppb	70 ppb

Catawba	Express	5

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	1	0 - 1 ppb	0 ppb	70 ppb				

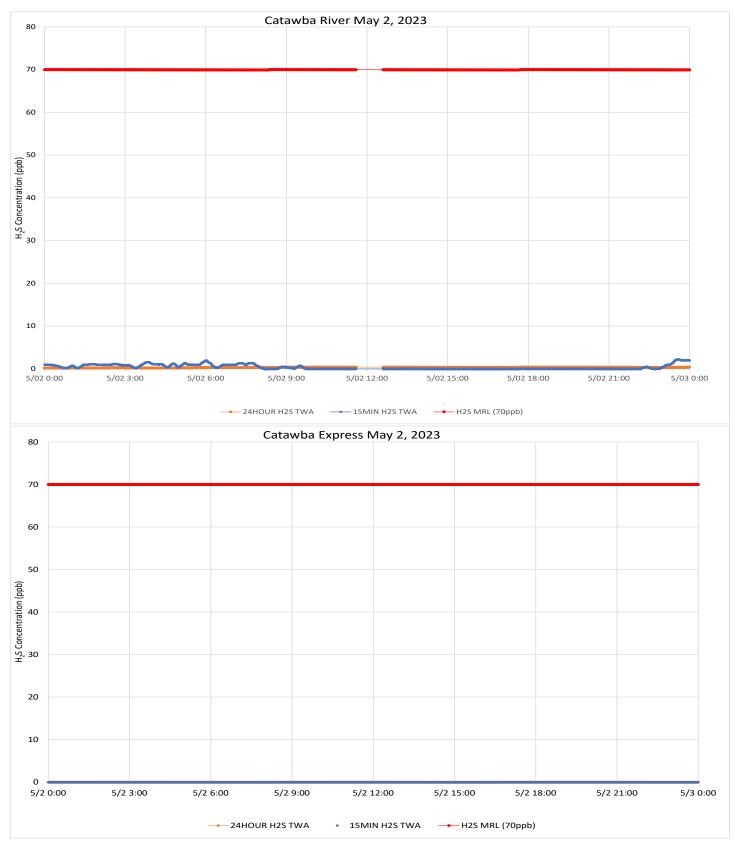
Notes:

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



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

Winds were generally from the southwest, trending to more from the west northwest during the period.



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

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d	he	<b>PC</b>

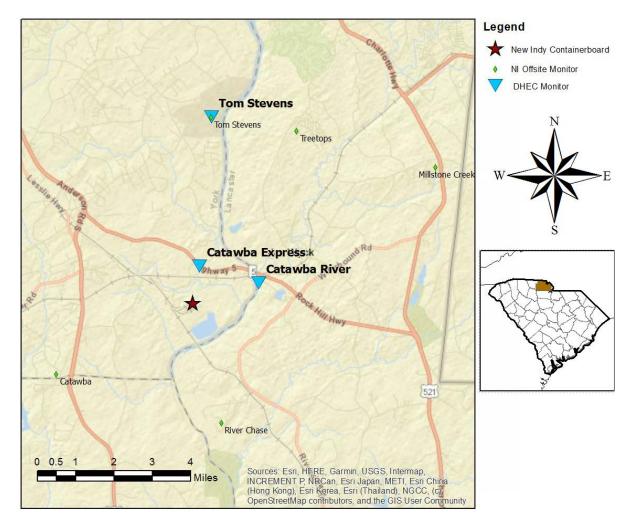
From:	5/3/23 12:00 AM	To:	5/3/23 11:59 PM	U	IEC
	EST		EDT		
Catawha Biyar					

Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL			
SPM Flex 3	H2S	No	2880	734	0 - 4 ppb	0.4 ppb	70 ppb			

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

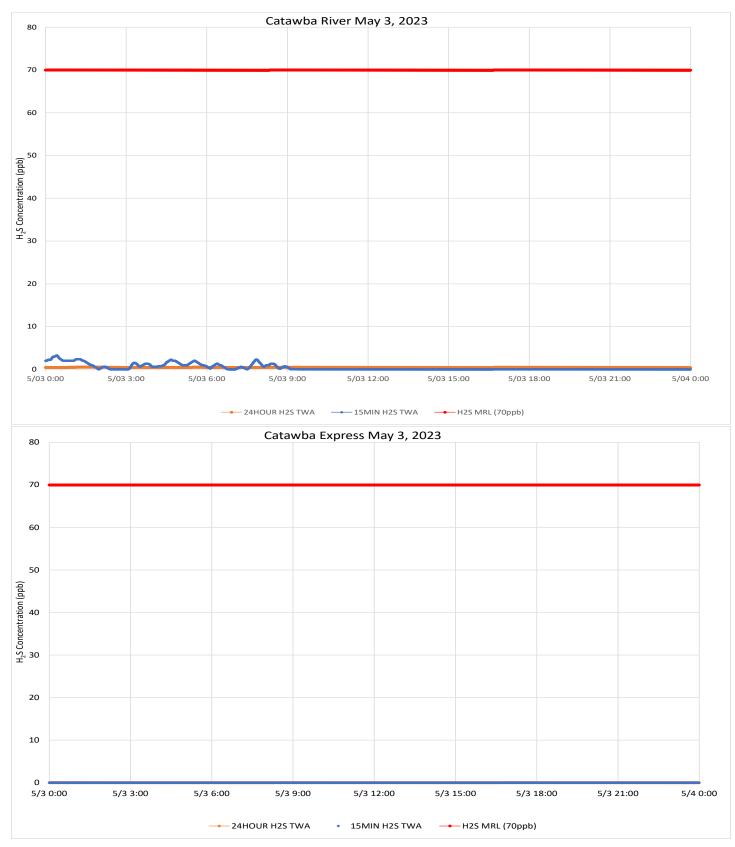
Notes:

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
TWA	Time Weighted Average



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

Wind direction varied, starting from the west northwest, becoming more from the west around daybreak, from the southwest in the morning, from the west midday and on to coming from the northwest to north by the end of the period.



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

d	hec

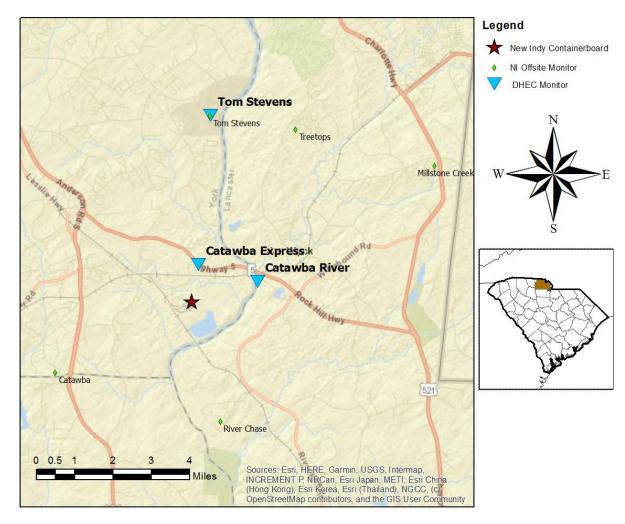
From:	5/4/23	To:	5/4/23	
	12:00 AM		11:59 PM	
	EST		EDT	
Catawba River				

Catawba Kiver							
Instrument	Instrument Analyte	ATSDR MRL	Number of	Number of	Concentration Range	Period Average	ATSDR MRL
matument	Allalyte	Exceedance?	Readings	Detections	concentration Range	Fellou Avelage	ATSONMINE
SPM Flex 3	H2S	No	2880	737	0 - 4 ppb	0.43 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	383	0 - 4 ppb	0.27 ppb	70 ppb

Notes:

ATSDR MRL H₂S	Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days) 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



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

Wind was variable to calm through much of the period. In the early morning, wind was generally from the south southwest and when measurable in the late afternoon and early evening, from the north west quadrant.



EST

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:	5/5/23
	12:00 AM

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

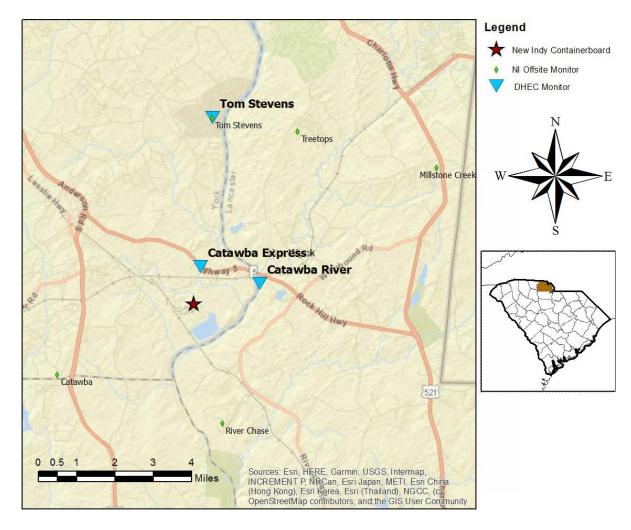


Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	34	0 - 3 ppb	0.02 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL	Number of	Number of	Concentration Range	Period Average	ATSDR MRL
		Exceedance?	Readings	Detections			
SPM Flex 2	H2S	No	2880	207	0 - 3 ppb	0.11 ppb	70 ppb

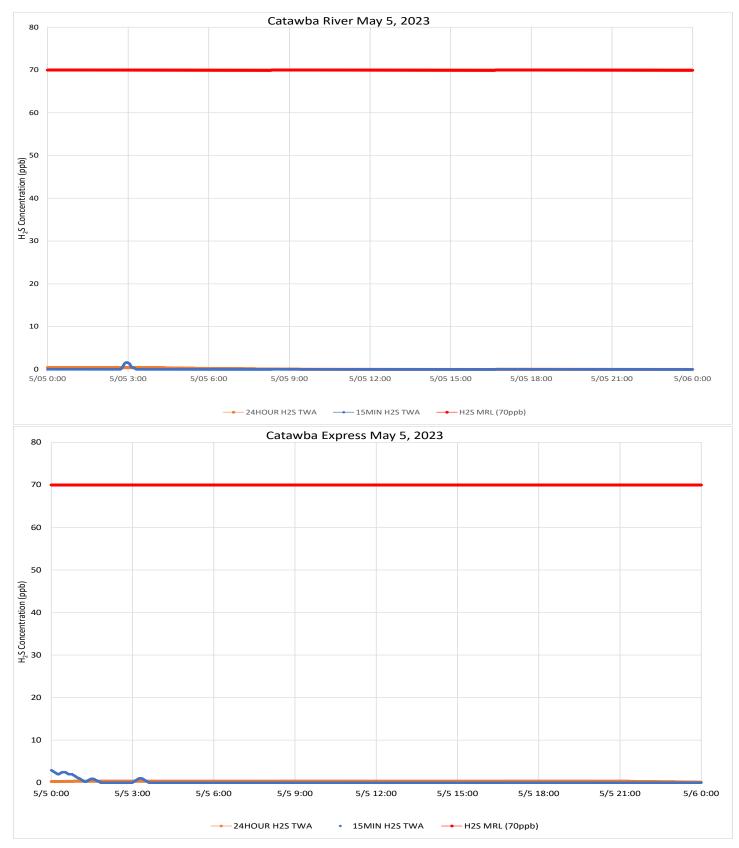
Notes:

ATSDR MRL H₂S	Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days) 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



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

Wind was variable to calm through much of the period. When detected, wind came from the northeast in the morning, west southwest midday, and south southwest in the late evening.



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:	5/6/23
	12:00 AM

To:	5/6/23
	11:59 PM

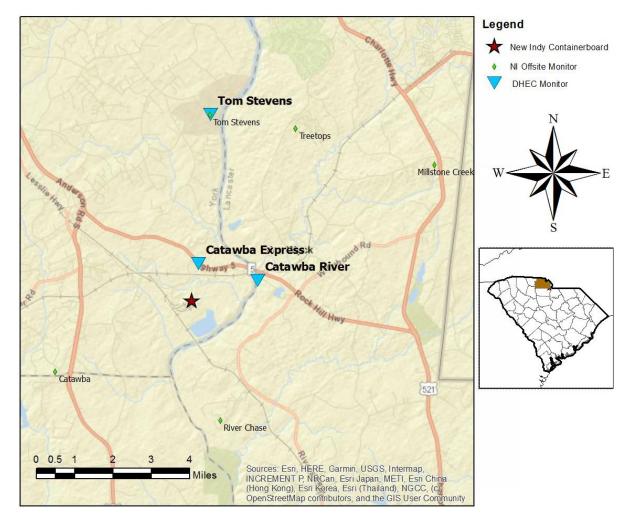


Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	137	0 - 2 ppb	0.06 ppb	70 ppb

Catawba Express							
Instrument	Analyte	ATSDR MRL	Number of	Number of	Concentration Range	Period Average	ATSDR MRL
		Exceedance?	Readings	Detections			
SPM Flex 2	H2S	No	2880	548	0 - 3 ppb	0.28 ppb	70 ppb

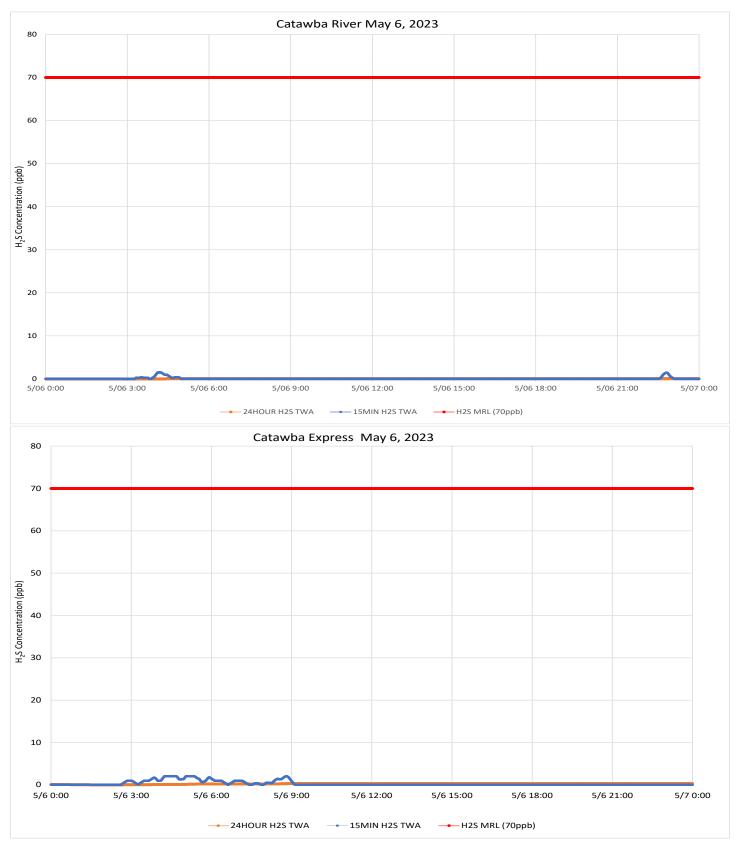
#### Notes:

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



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

Wind was variable to calm until midday. After noon, winds were generally from the southwest through west southwest.



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

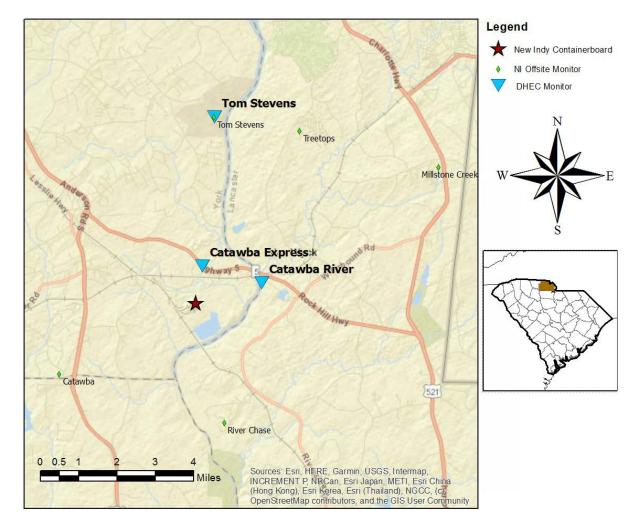
hac
hec

From:	5/7/23 12:00 AM EST		To:	5/7/23 11:59 PM EDT			anec
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	361	0 - 3 ppb	0.17 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	97	0 - 3 ppb	0.06 ppb	70 ppb	

Notes:

ATSDR MRL	Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
H₂S	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



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

Wind was from the south west to west southwest throughout the period.



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

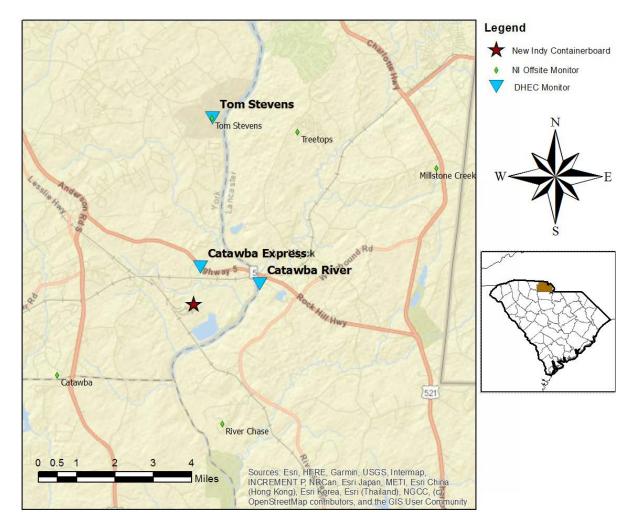
stem.			
Ň		h	
	U	he	

M
EDT
of Concentration Range Period Average ATSDR MRL
0 - 3 ppb 0.24 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

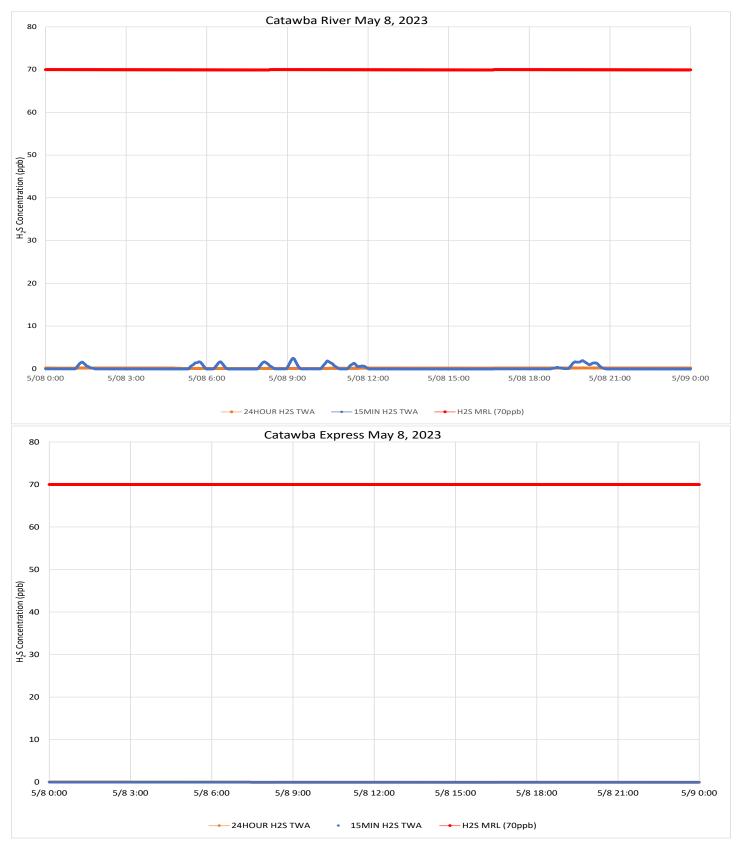
Notes:

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



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

Winds were variable but generally from the south southwest through west during this period.



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

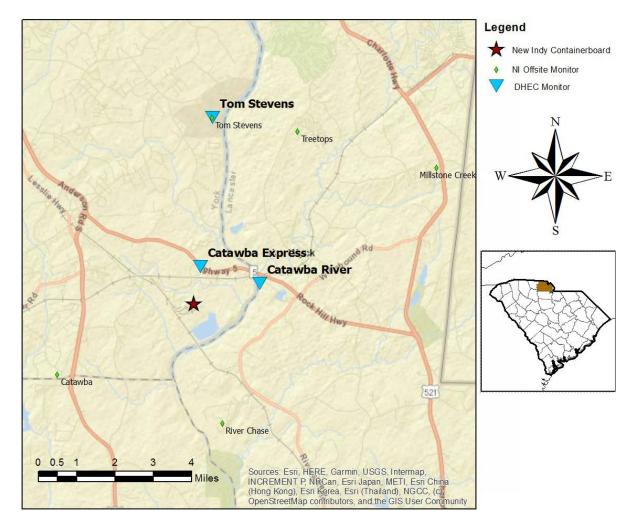
<		
d	h	<b>BC</b>

From:	5/9/23 12:00 AM EST		То:	5/9/23 11:59 PM EDT			anec
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	591	0 - 6 ppb	0.42 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	13	0 - 2 ppb	0.01 ppb	70 ppb

Notes:

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



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

Winds were from the west southwest to west until noon, then shifting to coming from the northwest, and at the end of the period, from the east northeast.



Data recovery was interrupted in the early morning for short periods (Approximately 6 minutes) at both sites. The reported summary data is valid.

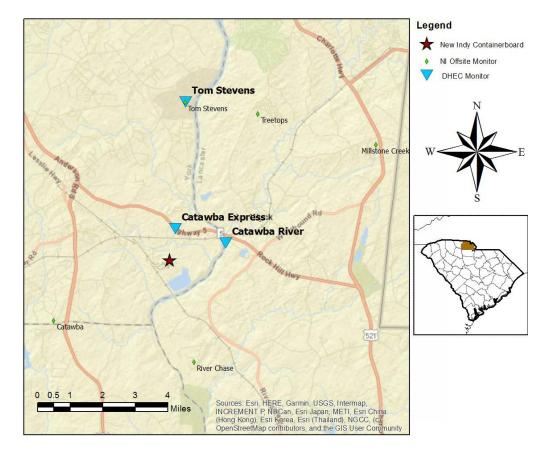
### **Air Monitoring Summary Tables**

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 Car	olina					dhaa
From:	5/10/23 12:00 AM		To:	5/10/23 11:59 PM			dnec
	EST			EDT			
Catawba River	0000-0234, 0240-2399						
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Partial Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2868	0	0 - 0 ppb	0 ppb	70 ppb

Catawba Express	0000-0423, 0430-2399						
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Partial Period Average	ATSDR MRL
SPM Flex 2	H2S	No	2866	0	0 - 0 ppb	0 ppb	70 ppb

Notes:



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

Winds were variable to calm for much of the period. When detected, wind came from the north northeast to east northeast in the morning and after noon, were more often from the east southeast.



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

	dł	ne	C

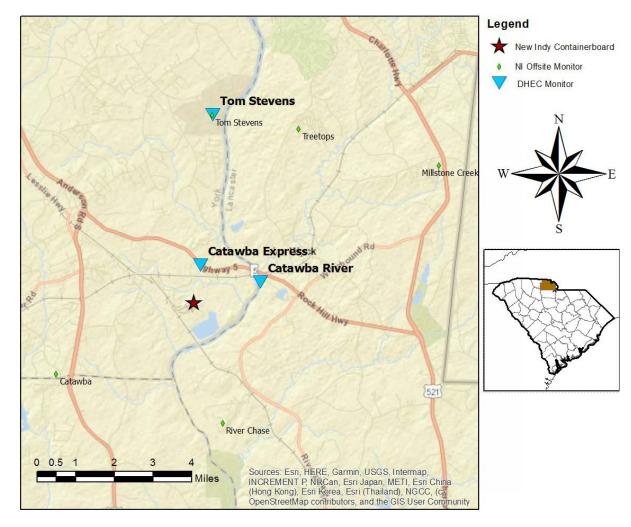
From:	5/11/23 12:00 AM EST		To:	5/11/23 11:59 PM EDT			unec
Catawba River	ESI		Number of				
Instrument	Analyte	ATSDR MRL	Number of	Number of	Concentration Range	Period Average	ATSDR MRI

mətrument	Analyte	Exceedance?	Readings	Detections	concentration Range	Fellou Average	ATSON MILE
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 895 0 - 9 ppb 1.1 ppb 70 ppb	Cututiou Express							
	Instrument	Analyte				Concentration Range	Period Average	AT SDR MRL
SPM Flex 2 H2S No. 2880 895 0 - 9 ppb 1.1 ppb 70 ppb			Exceedance?	Readings	Detections			
	SPM Flex 2	H2S	No	2880	895	0 - 9 ppb	1.1 ppb	70 ppb

Notes:

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



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

Winds were variable to calm through midday and light and variable until sundown. When detected, winds were generally from the southeast.



H<sub>2</sub>S – Hydrogen Sulfide N

MRL – Minimal Risk Level

H2S

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

No

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

	<u> </u>		
N	d	he	С

70 ppb

0.15 ppb

From:	5/12/23 12:00 AM EST		То:	5/12/23 11:59 PM EDT			unec
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL

190

0 - 5 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	2875	983	0 - 5 ppb	0.75 ppb	70 ppb

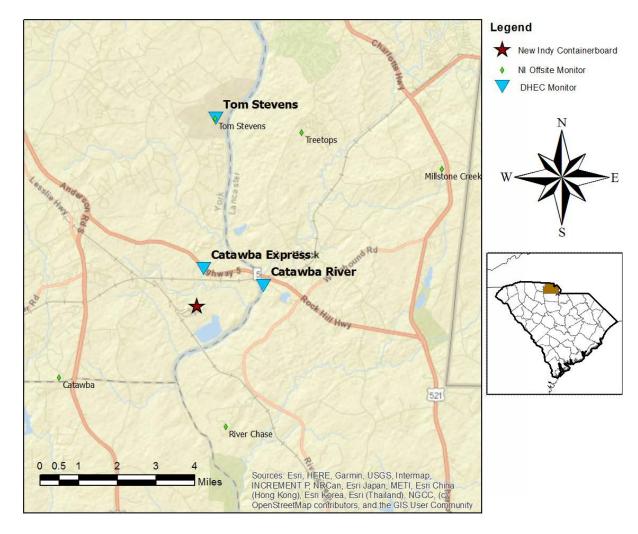
Notes:

SPM Flex 3

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.

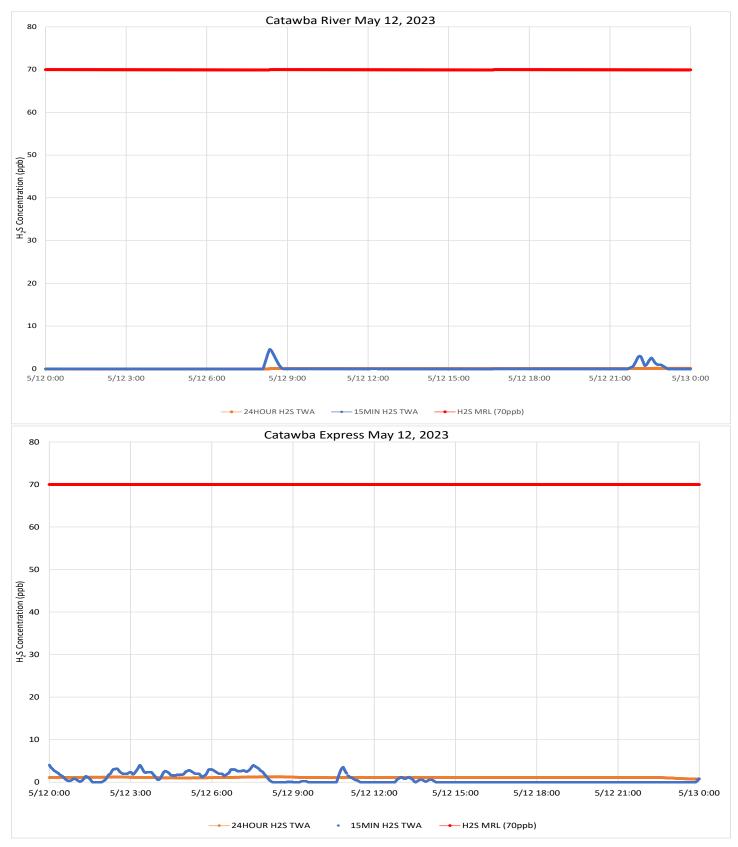
2880

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



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

Winds were from the south before dawn ,shifting to coming generally from the southwest for the remainder of the period.



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

A	h		C
U		C	

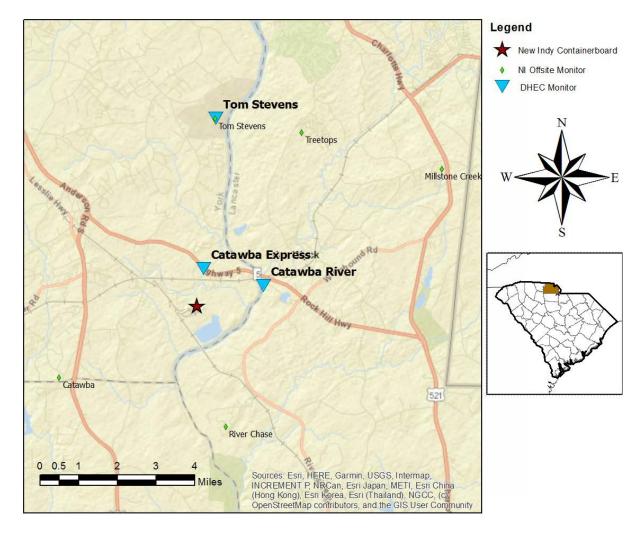
	From:	5/13/23 12:00 AM	То:	5/13/23 11:59 PM	<b>U</b> lec
		EST		EDT	
<b>C</b>	And the Diver				

Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL	
SPM Flex 3	H2S	No	2880	99	0 - 4 ppb	0.08 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	294	0 - 7 ppb	0.3 ppb	70 ppb	

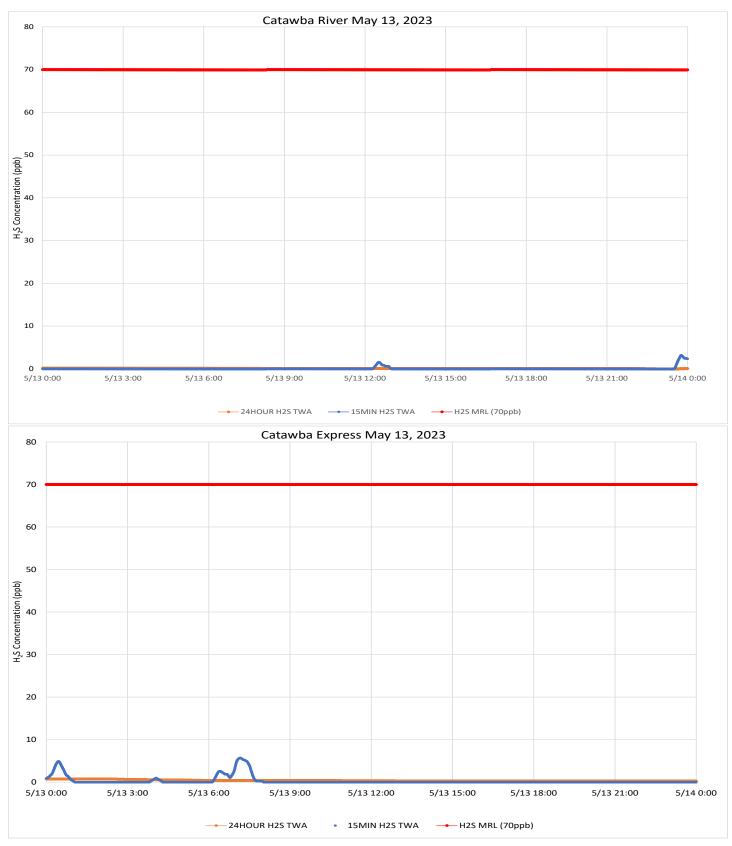
Notes:

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
SPM	Single Point Monitor



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

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



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

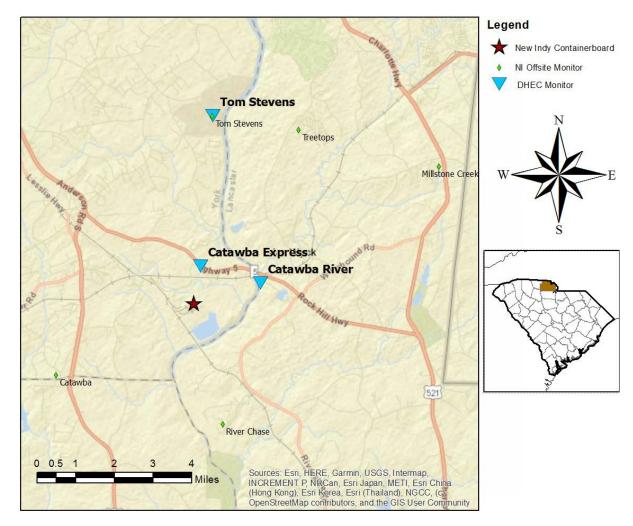
From:	5/14/23	
	12:00 AM	

	EST			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	300	daa 6 - 0	0.13 ppb	70 ppb

To: 5/14/23 11:59 PM dhec

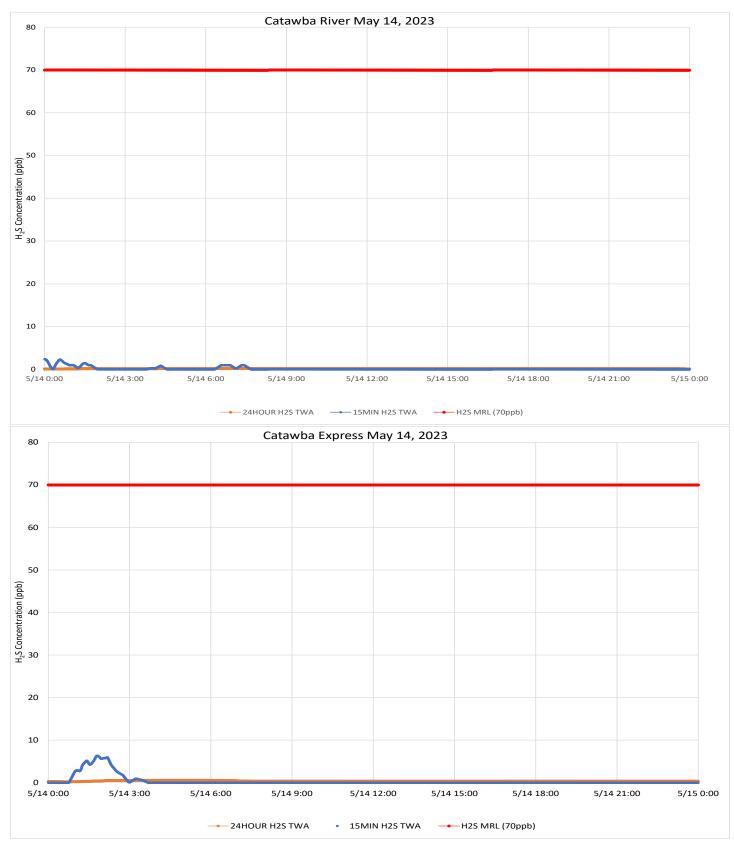
Catawba Express								
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL	
SPM Flex 2	H2S	No	2880	285	0 - 8 ppb	0.35 ppb	70 ppb	

Notes:



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

Winds were variable and light to calm throughout the period. Before dawn, when detected, the wind was from the southwest. When detected during the day, the wind was from the north northeast.



H2S

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

No

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

	<u> </u>		
N	d	he	С

70 ppb

0 ppb

From:	5/15/23 12:00 AM		To:	5/15/23 11:59 PM			unec
	EST			EDT			
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL

0

0 - 0 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	351	0 - 8 ppb	0.4 ppb	70 ppb

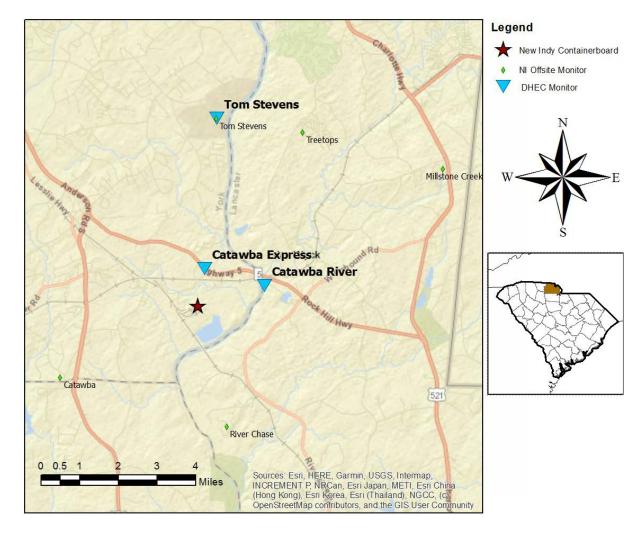
Notes:

SPM Flex 3

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.

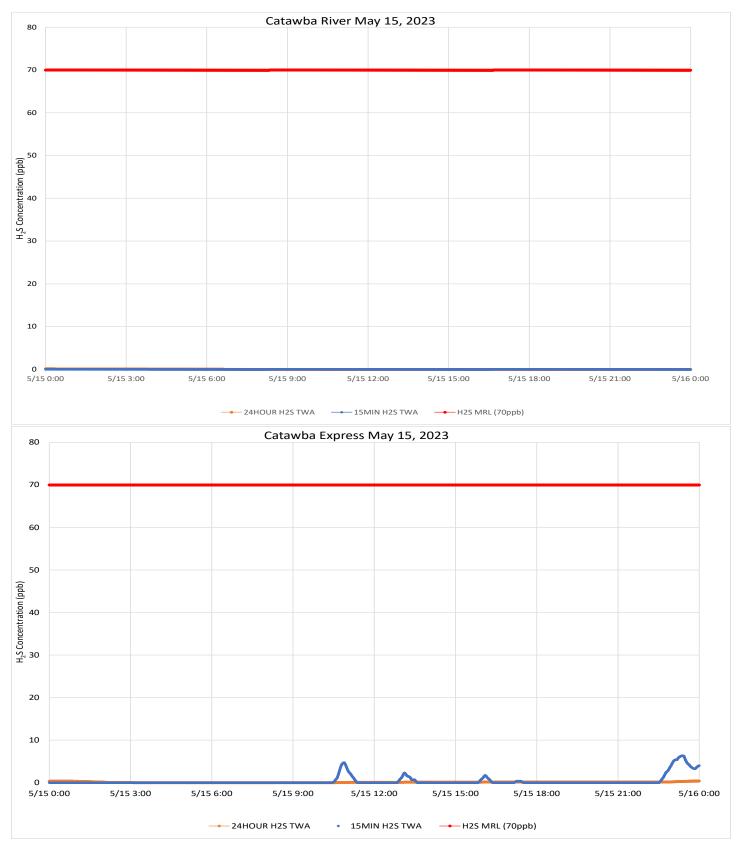
2880

ATSDR MRL H₂S	Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days) 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
	5 5



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

Winds were calm – primarily when the sun was down – for most of this period. During the day, winds were variable but generally from the southeast.



H2S

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

No

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

m.		
	<b>Ih</b>	ec
		こし

70 ppb

From:	5/16/23 12:00 AM EST		То:	5/16/23 11:59 PM EDT			unec
Catawba River							
Instrument	Analyte	AT SDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL

SPM Flex 3	H2S	No	2880	312	0 - 3 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

563

0 - 5 ppb

0.31 ppb

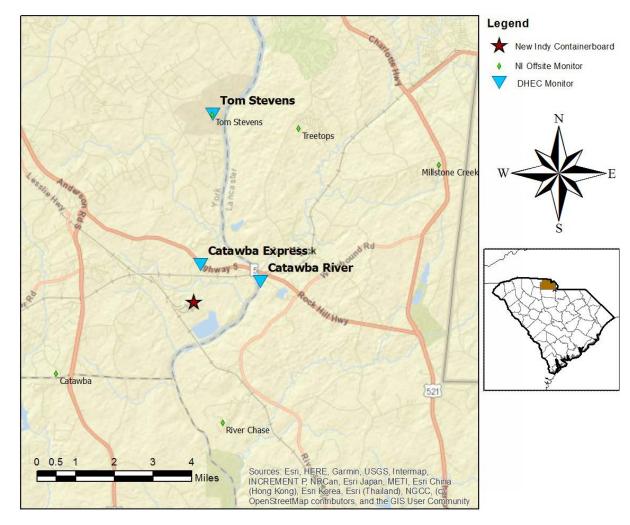
Notes:

SPM Flex 2

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.

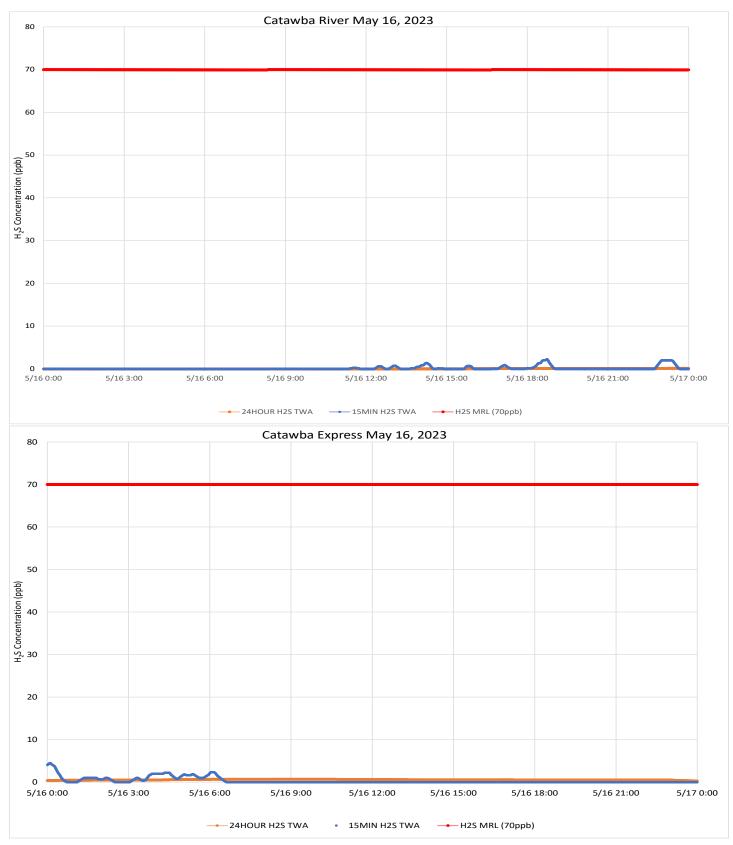
2880

ATSDR MRL	Agency for Toxic Substances and Disease Registry Minimal Risk Level - Acute Exposure (<14 days)
H₂S	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



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

Winds began the period generally from the south and through the day, shifted to more from the west southwest.



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

	200
	nec

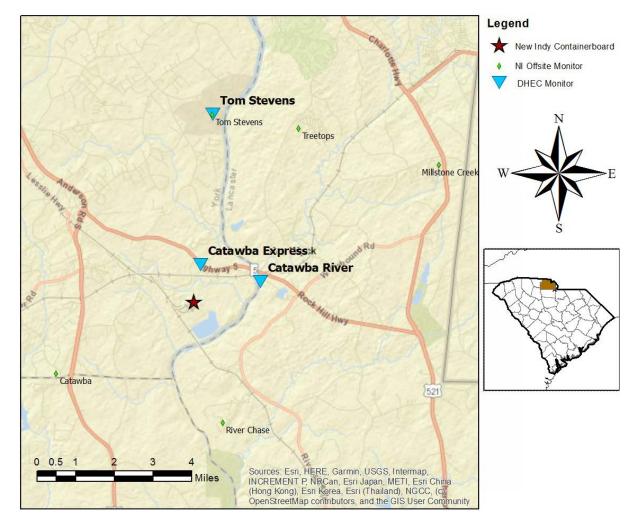
From:	5/17/23	To:		
	12:00 AM		11:59 PM	
	EST		EDT	

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	561	0 - 14 ppb	0.58 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

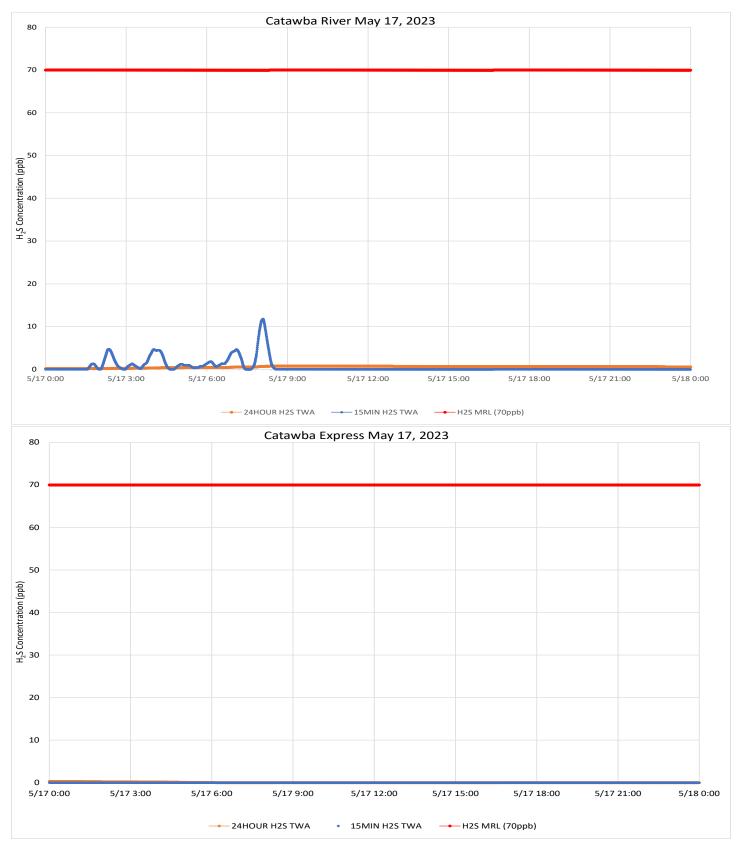
Notes:

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



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

The period began with wind generally from the west southwest, but direction shifted to coming from the north northeast by mid-morning.



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:	5/18/23
	12:00 AM

To:	5/18/23
	11:59 PM
	EDT

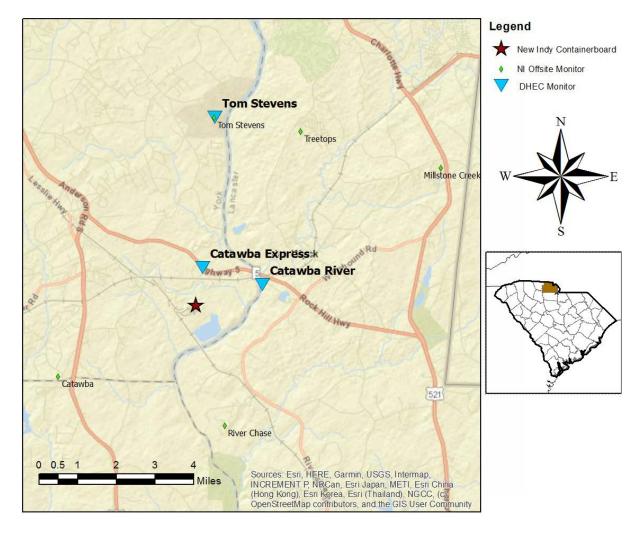


	EST			EDT			
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb
ST WITTER S		110	2000	v	0 0 0 000	0 990	, o bbo

Catawba Express							
Instrument	Analyte	ATSDR MRL	Number of	Number of	Concentration Range	Period Average	AT SDR MRL
		Exceedance?	Readings	Detections	concentration nange		AT OBIT INC
SPM Flex 2	H2S	No	2880	48	0 - 3 ppb	0.03 ppb	70 ppb

Notes:

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



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

Wind was calm during the early morning and late evening. During the day, wind was light and variable, most often indicated coming from the northeast through east northeast.



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

12:00 AM

EST

From: 5/19/23

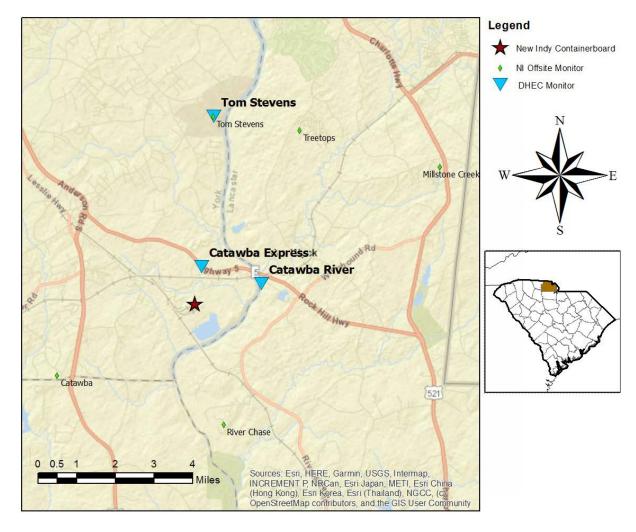
inia	To:	5/19/23	dhec
		11:59 PM	
		EDT	

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

Notes:

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
	5



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

Winds were calm to light and variable throughout the period. When present, winds came from the north northeast through northeast.



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

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d	he	9C

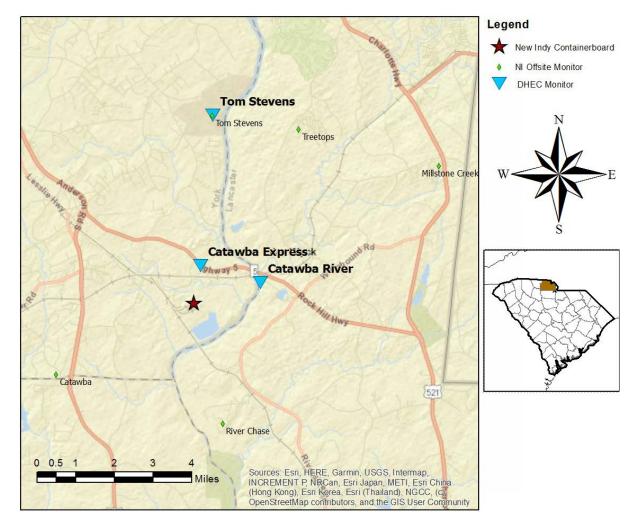
From:	5/20/23	To:	5/20/23	
	12:00 AM		11:59 PM	
	EST		EDT	
Catawba River				

Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	192	0 - 5 ppb	0.13 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	178	0 - 3 ppb	0.08 ppb	70 ppb				

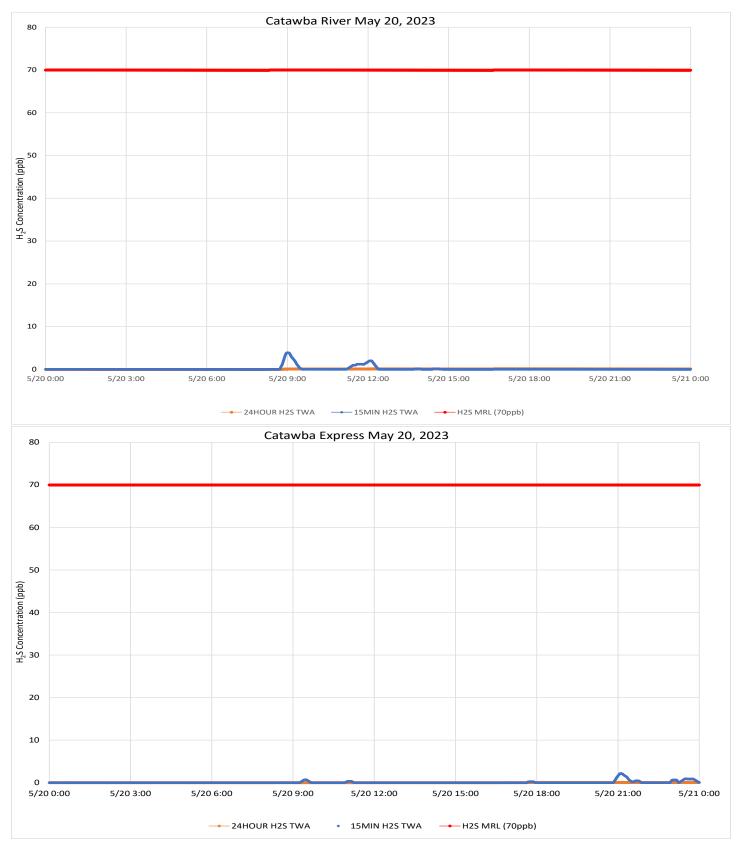
Notes:

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



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

Winds were calm to light and variable throughout the period. Wind was generally from the northeast before dawn and when detected, was generally from the southwest for the remainder of the period.



Sulfide MRL-

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

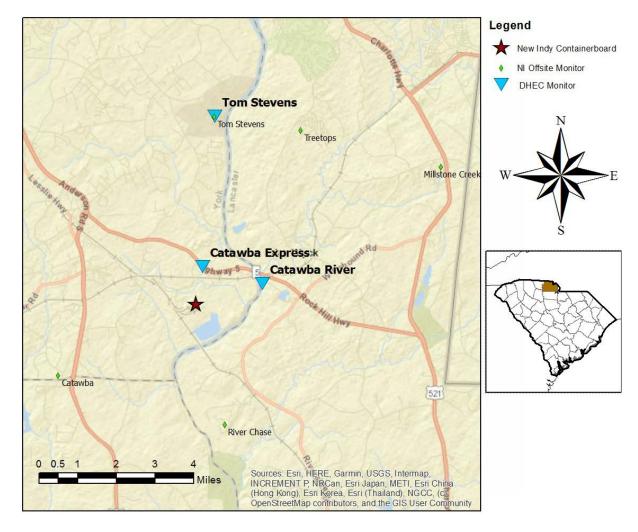
From:	5/21/23 To 12:00 AM	<b>)</b> :	5/21/23 11:59 PM	<b>V</b> dhec
	EST		EDT	

Catawba River											
Instrument	Analyte	ATSDR MRL Number of Number of		Concentration Range	Period Average	ATSDR MRL					
		Exceedance?	Readings	Detections	_	-					
SPM Flex 3	H2S	No	2880	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	95	0 - 3 ppb	0.07 ppb	70 ppb				

Notes:

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



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

Winds were calm to light and variable throughout the period, with calms primarily before dawn and after sunset. When detected, wind generally came from the north northeast through east.



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

	L			
From:	5/22/23	To:	5/22/23	N dhe
	12:00 AM		11:59 PM	
	EST		EDT	

0/

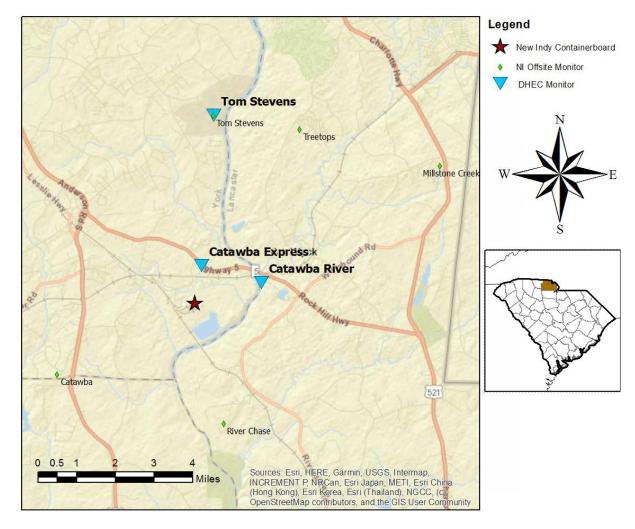
\_\_\_

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	4	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		

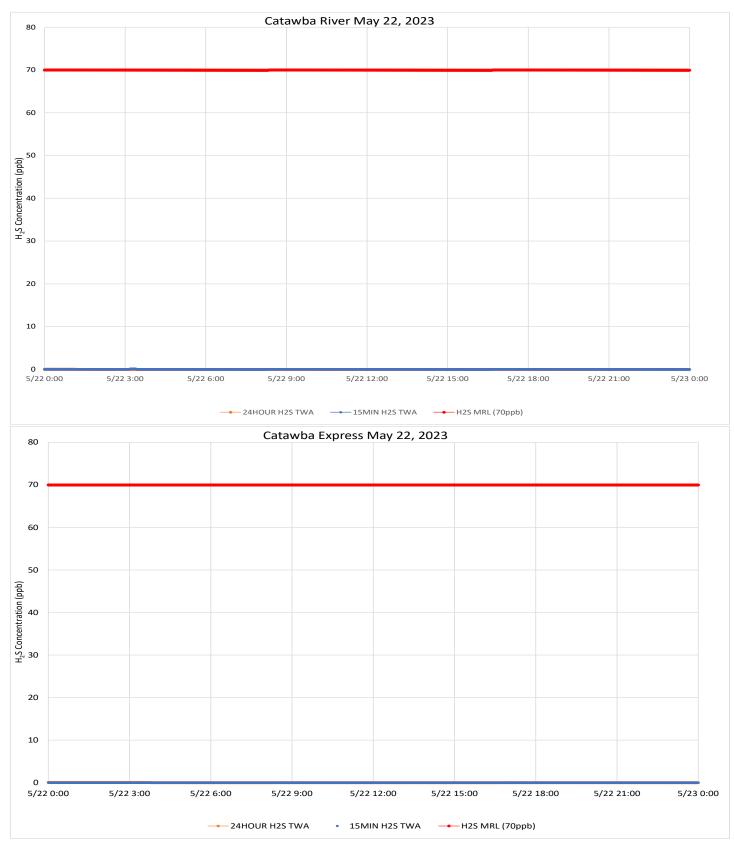
Notes:

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



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

Winds were calm to light and variable throughout the period. When detected, wind generally came from the north northeast through northeast.



H2S

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

system.				
	V	d	ne	С

70 ppb

0 ppb

From:	5/23/23	To: 5/23/23					
	12:00 AM			11:59 PM			
	EST			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	AT SDR MRL		

0

0 - 0 ppb

Notes:

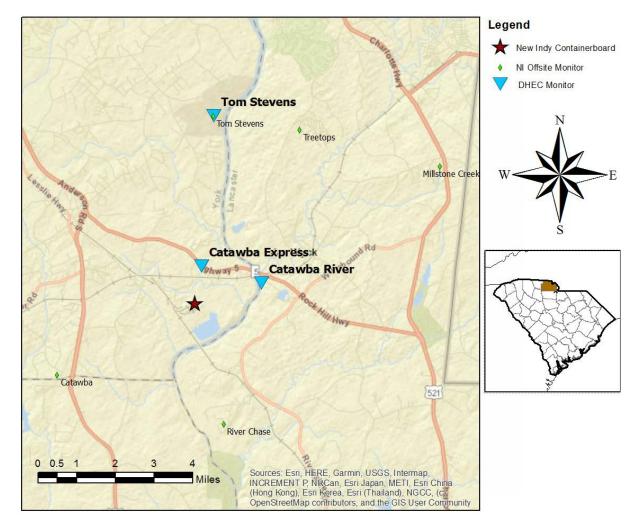
SPM Flex 2

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.

2880

No

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



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

Winds were calm to light and variable throughout the period. When detected, wind generally came from the north northeast through east northeast.



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:

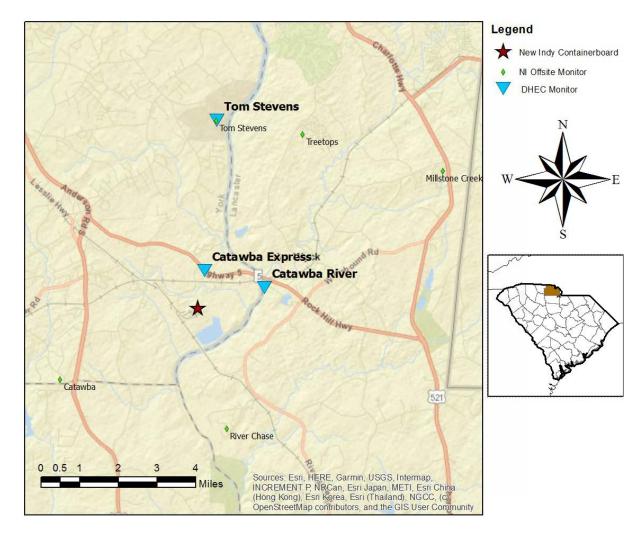
5/24/23	To: 5/24/23		•
12:00 AM	11:59 PN	M	
EST	E	EDT	

Catawba River									
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	AT SDR 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		

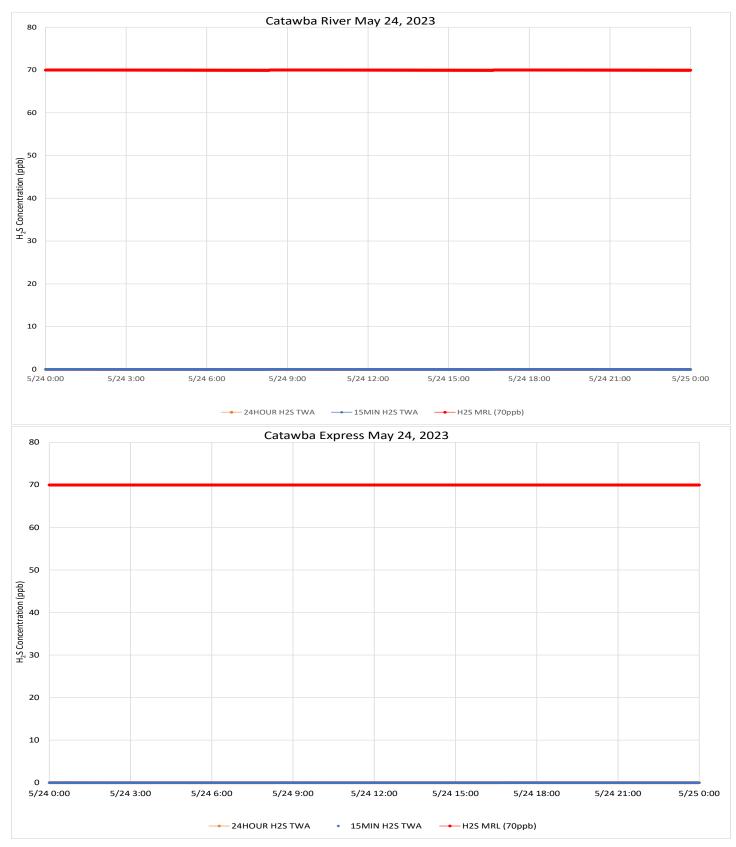
Notes:

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



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

Winds were calm to light and variable in the early morning and evening. When detected, wind generally came from the north northeast through northeast.



H<sub>2</sub>S – Hydrogen Sulfide MRL – M

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

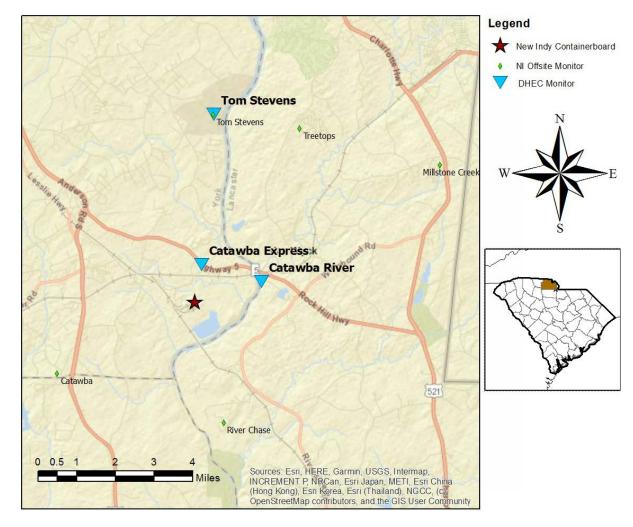
m.		
		~~
	C	ec

From: 5/25/23			To: 5/25/23			<b>U</b>		
	12:00 AM			11:59 PM				
	EST			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	

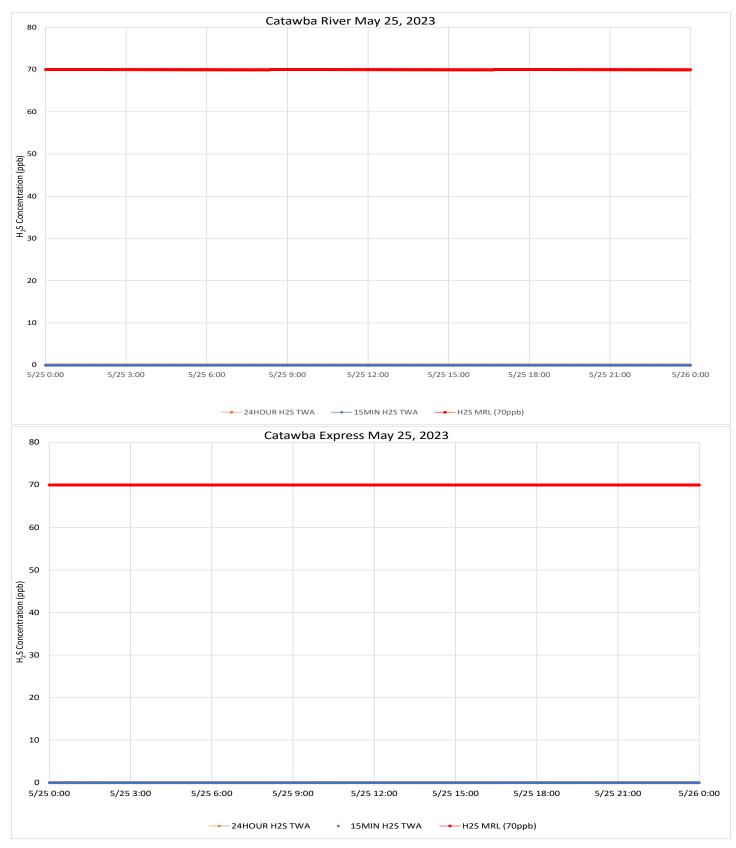
Notes:

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



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

Winds were calm to light and variable throughout the period. When detected, wind generally came from the north northeast (morning) and east (after noon).



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:	5/26/23	To:	5/26/23
	12:00 AM		11:59 PM

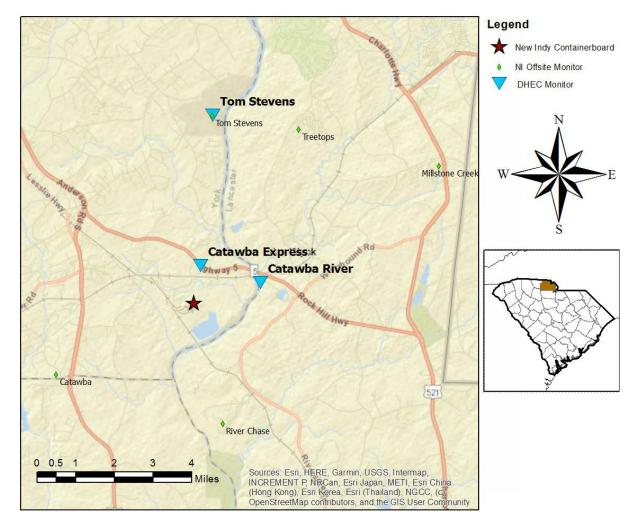


	EST			EDT			
Catawba River							
Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

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:

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



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

Winds were lighter and variable in the early morning and late evening. During the day, winds came from the northeast through east northeast.



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

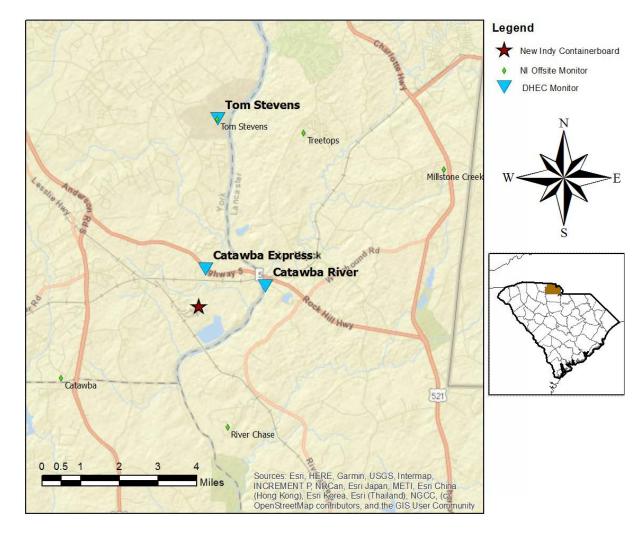
system	d	he	С

From:	5/27/23		To:	5/27/23			
	12:00 AM			11:59 PM			
	EST			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	Number of	Number of	Concentration Range	Period Average	AT SDR MRL
		Exceedance?	Readings	Detections	concentration nunge	T CHOU ATCINGC	ATSDICINC
SPM Flex 2	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb

Notes:

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



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

Winds were generally consistent, with a slight shift from morning to evening, beginning the period coming from the northeast and finishing more from the north northeast.



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

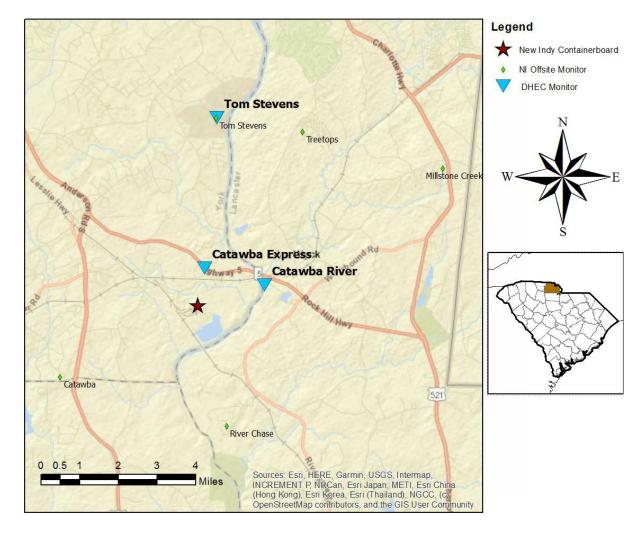
X	d	nec

From:	5/28/23		To:	5/28/23			unec
	12:00 AM			11:59 PM			
	EST			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		

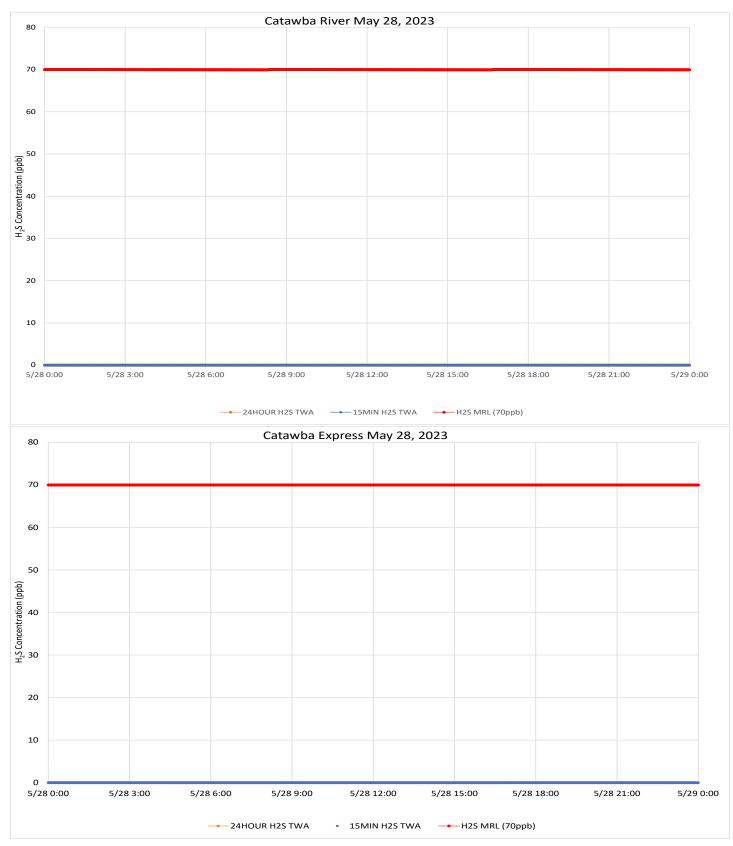
Notes:

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



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

Winds were generally consistent, with a shift around midday, beginning the period coming from the northeast to north northeast and after noon and through the evening, more from the north to north northwest.



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

		<b>V</b> dhec
To:	5/29/23	
	11:59 PM	

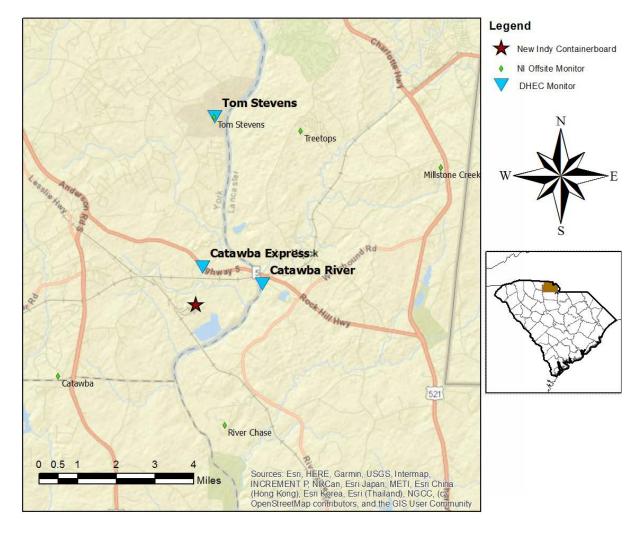
From:	5/29/23	To:	5/29/23		UILEC
	12:00 AM		11:59 PM		
	EST		EDT		
Catawba River					
		Muumb an af	Manage and		

Instrument	Analyte	ATSDR MRL Exceedance?	Number of Readings	Number of Detections	Concentration Range	Period Average	ATSDR MRL
SPM Flex 3	H2S	No	2880	290	0 - 3 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	H2S	No	2880	0	0 - 0 ppb	0 ppb	70 ppb		

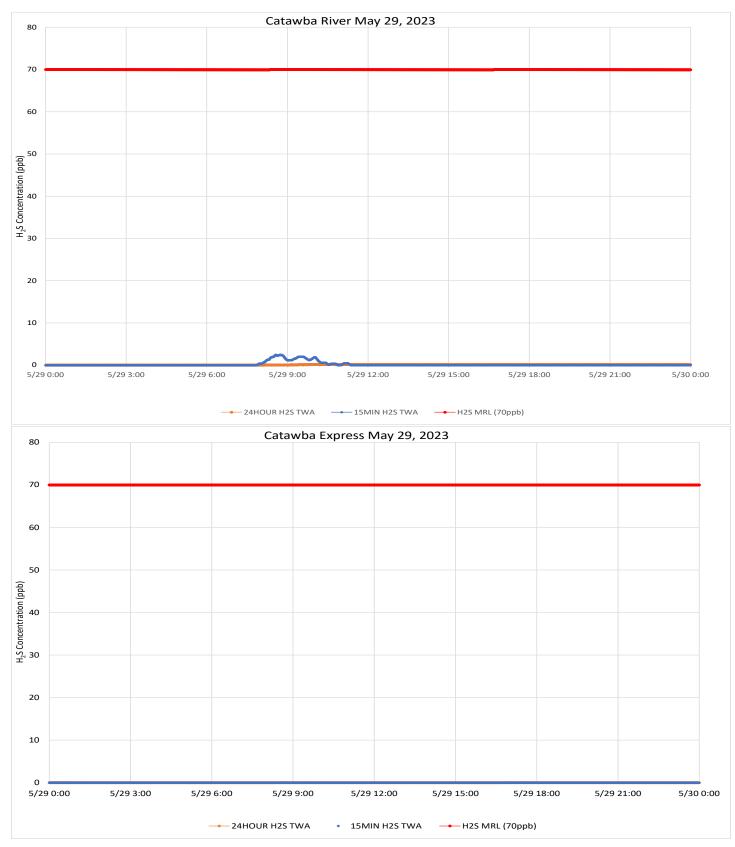
Notes:

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



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

For most of the period, winds were from the northwest quadrant, with several hours from the west mid-morning. The wind direction shifted to coming from the north northeast in the early afternoon and winds became calm after sundown.



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

	Mhec
23	<b>V</b> anec
PM	

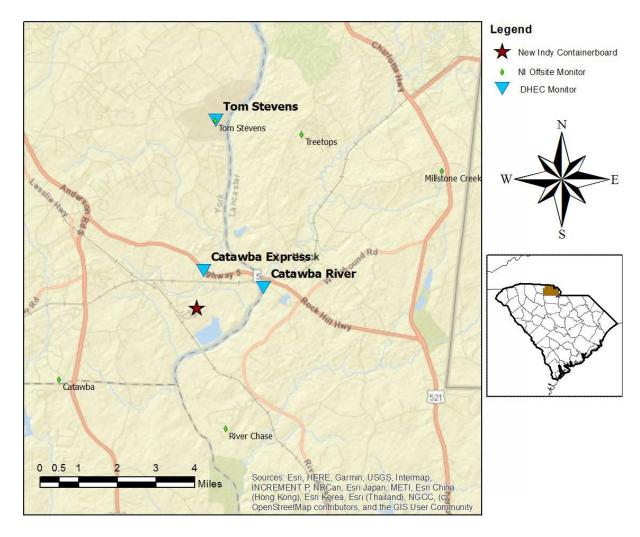
From:	5/30/23	To:	5/30/23	
	12:00 AM		11:59 PM	
	EST		EDT	
Catawha River				

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

Catawba Express							
Instrument	Analyte	ATSDR MRL	Number of	Number of	Concentration Range	Period Average	ATSDR MRL
	-	Exceedance?	Readings	Detections	_	-	
SPM Flex 2	H2S	No	2880	60	0 - 2 ppb	0.04 ppb	70 ppb

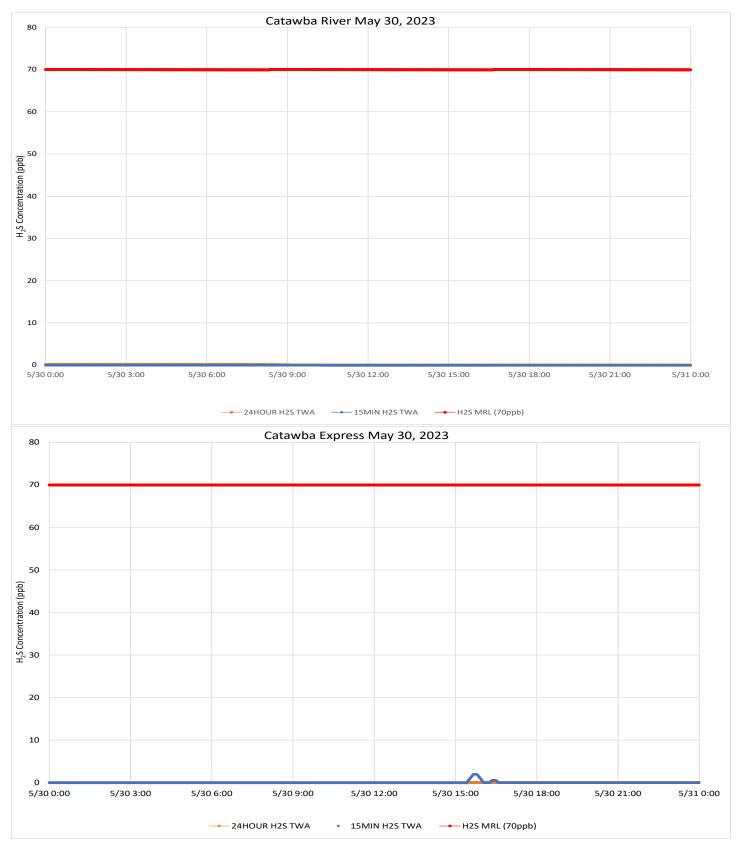
Notes:

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



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

Winds were from the north northeast to east northeast throughout the period, but generally light and variable with occasional calm periods.



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

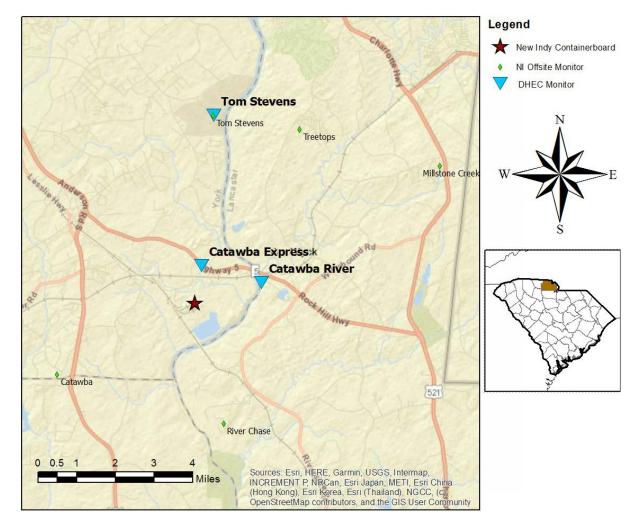
From:	5/31/23 12:00 AM	To:	5/31/23 11:59 PM	u iec
	EST		EDT	

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:

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



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

When detected, wind was from the northeast. Wind was variable during much of the day and became calm starting in the early evening.

