Air Monitoring Summary Tables

The table below summarizes monitoring data collected using a portable wireless remote monitoring system.
All times in Eastern Standard Time (EST).

From: **11/06/23 12:00 am** ***To:*** **11/06/23 11:59 pm**

Offsite Monitors

Instrument	Analyte	ATSDR MRL 14-day Avg Reached?	Concentration Range Detected [a]	24-hr Average [a]	7-day Average	ATSDR 14-day MRL
Catawba Headstart						
Acrulog PPB	H_2S	No	0 – 12 ppb	1.49 ppb	0.21 ppb	70 ppb
Treetops						
Acrulog PPB	H_2S	No	0 – 0 ppb	0.00 ppb	0.00 ppb	70 ppb
Liberty Hill						
Acrulog PPB	H_2S	No	0 – 0 ppb	0.00 ppb	0.00 ppb	70 ppb
Riverchase Estates						
Acrulog PPB	H_2S	No	0 – 4 ppb	0.69 ppb	1.51 ppb	70 ppb
Millstone Creek						
Acrulog PPB	H_2S	No	0 – 0 ppb	0.00 ppb	0.00 ppb	70 ppb

Onsite Fenceline Monitors

Instrument	Analyte	30-min AEGL Reached?	Concentration Range Detected [a]	24-hr Average [a]	7-day Average	30-min AEGL
Station 1						
TAPI Analyzer	H_2S	No	0 – 58 ppb	8.70 ppb	12.07 ppb	600 ppb
Station 2						
TAPI Analyzer	H_2S	No	0 – 6 ppb	1.24 ppb	0.70 ppb	600 ppb
Station 3						
TAPI Analyzer	H_2S	No	0 – 15 ppb	2.80 ppb [b]	0.68 ppb	600 ppb

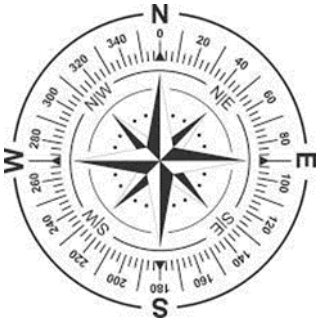
[a] Based on 30-minute averages.

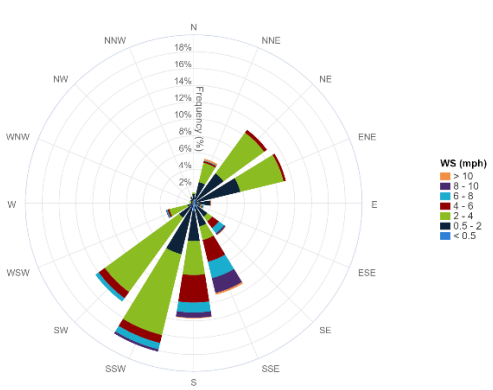
[b] The 24-hr average at Station 3 is not represented by the full 24-hr period; a total of 11 30-minute average are missing from the reported period due to routine multi-point verification and calibration work performed at this location.

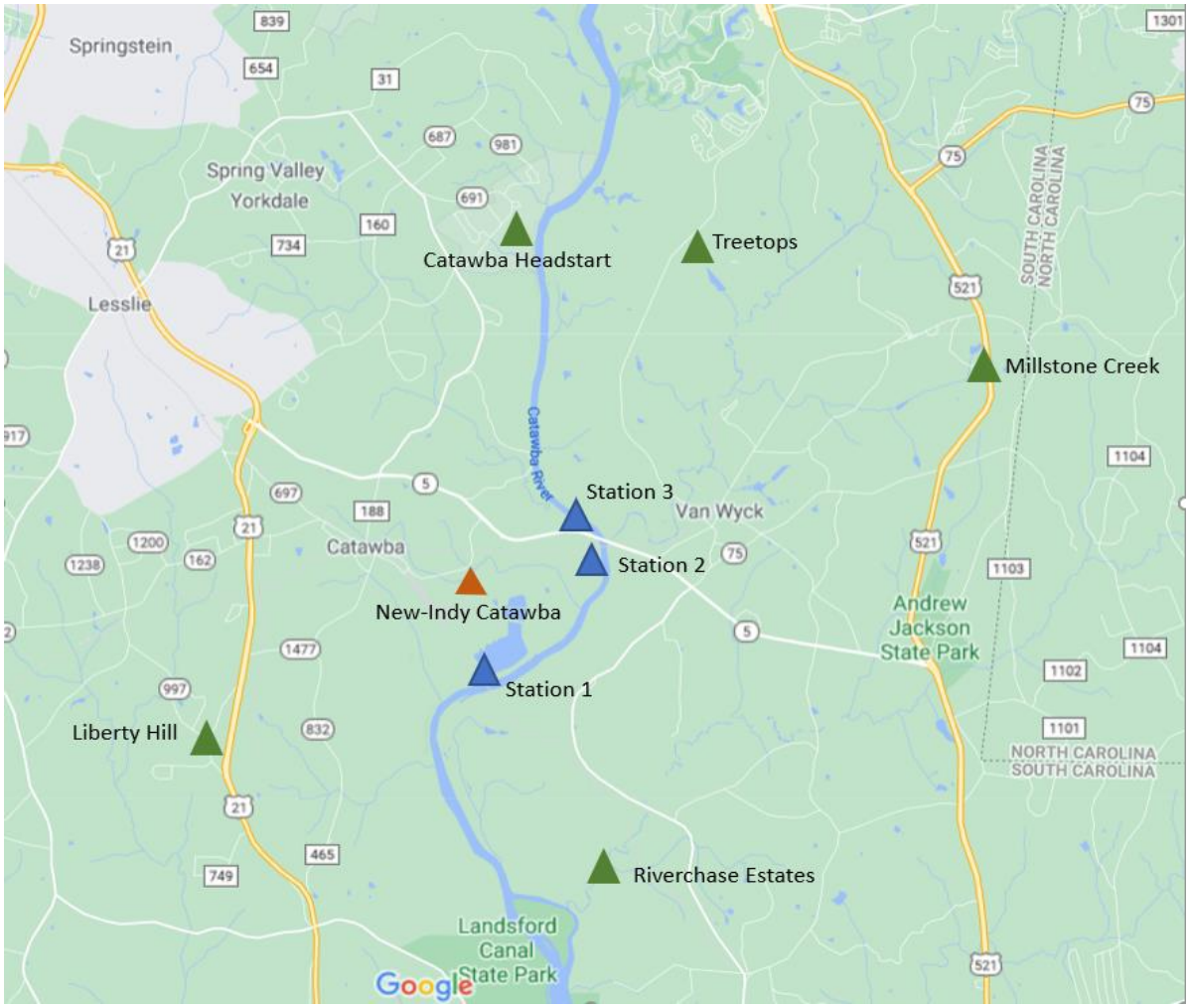
Notes:

ATSDR MRL	Agency for Toxic Substances and Disease Registry Minimal Risk Level (MRL)
AEGL	EPA Acute Exposure Guidelines Levels
H_2S	Hydrogen Sulfide
TAPI	Teledyne API H_2S Analyzer
hr	Hour
min	Minute
ppb	Parts per billion
MRL Limit	Limit defined as a 14-day average value.

Station 1 Wind Rose – Shows the direction the wind is coming from, the monitoring station being at the center of the rose.







Legend

Offsite Fixed Monitoring Locations

Onsite Fixed Monitoring Locations

New-Indy Catawba

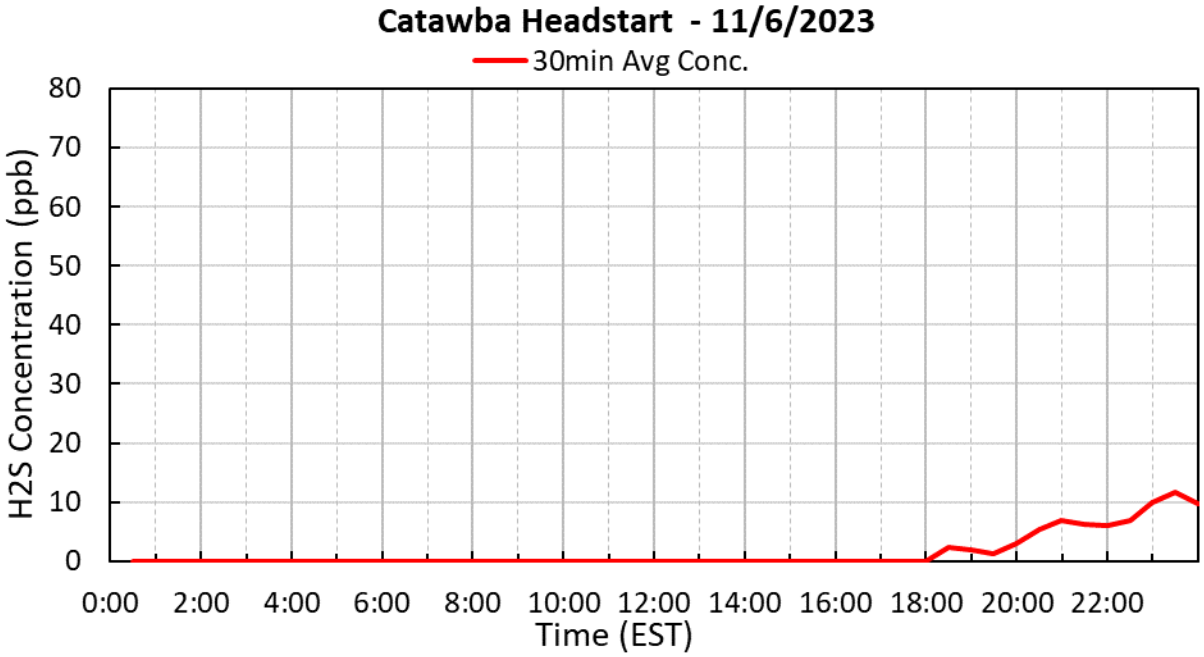
Period H_2S Monitoring
Hydrogen Sulfide Offsite Monitors

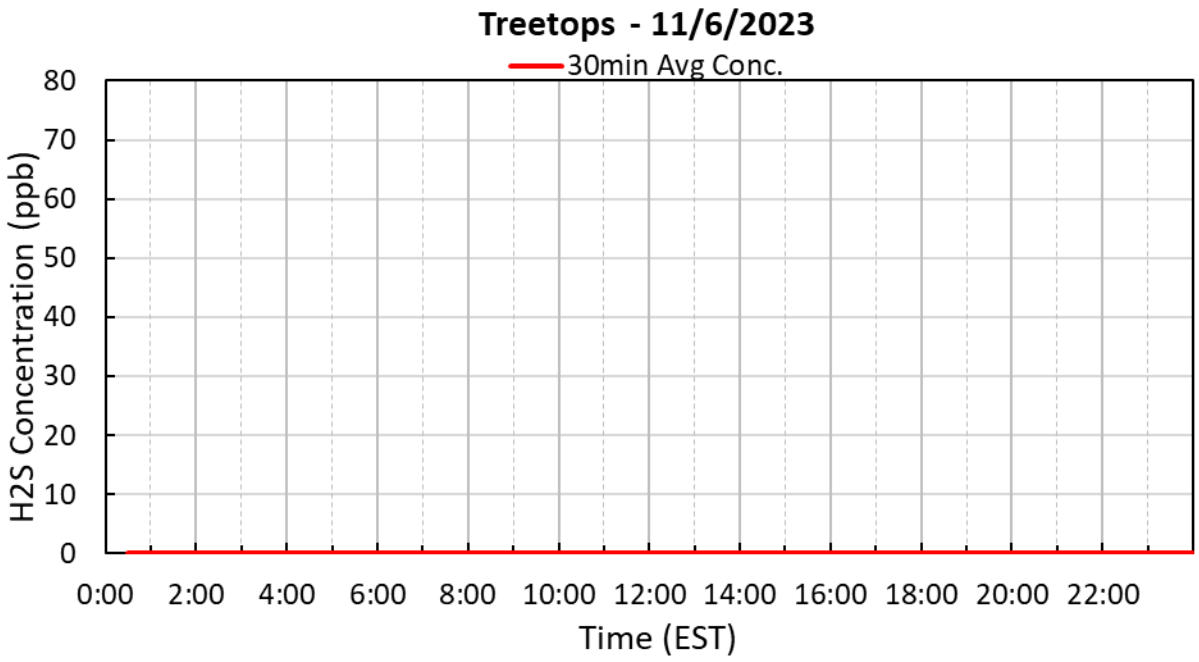
Below are graphs for offsite locations where hydrogen sulfide (H_2S) was detected during the current reporting period.

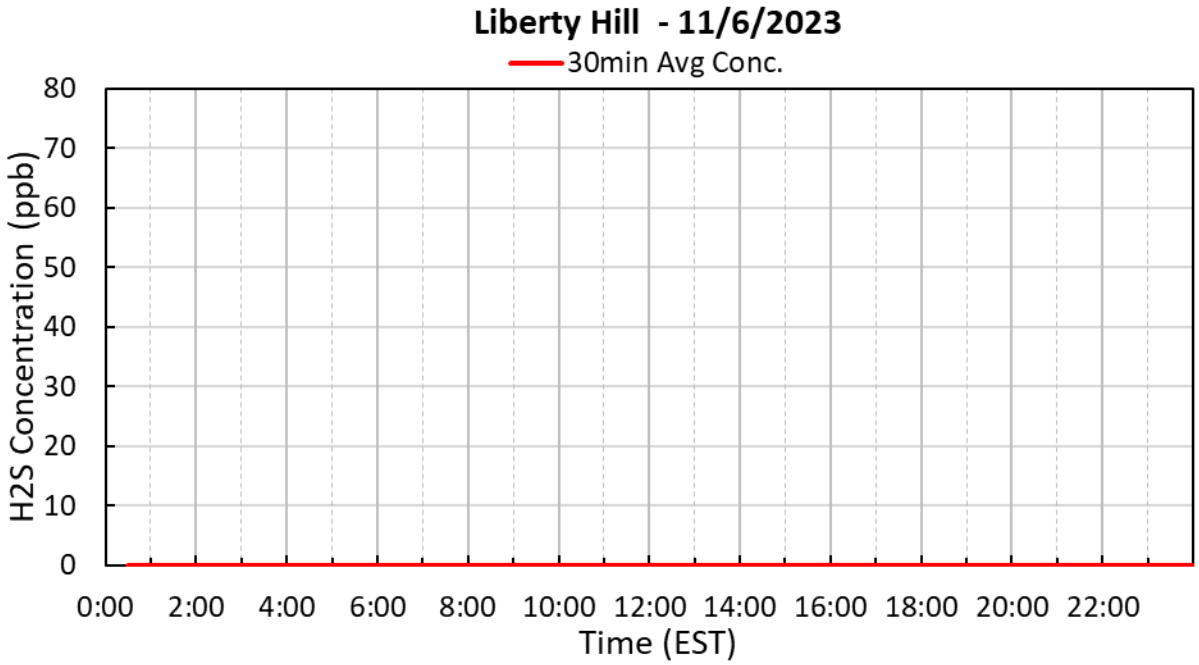
The five stand-alone H_2S monitoring stations correlate with five previous EPA's Viper monitoring system which includes areas to the north-northeast and south-southwest of the New-Indy Catawba Mill.

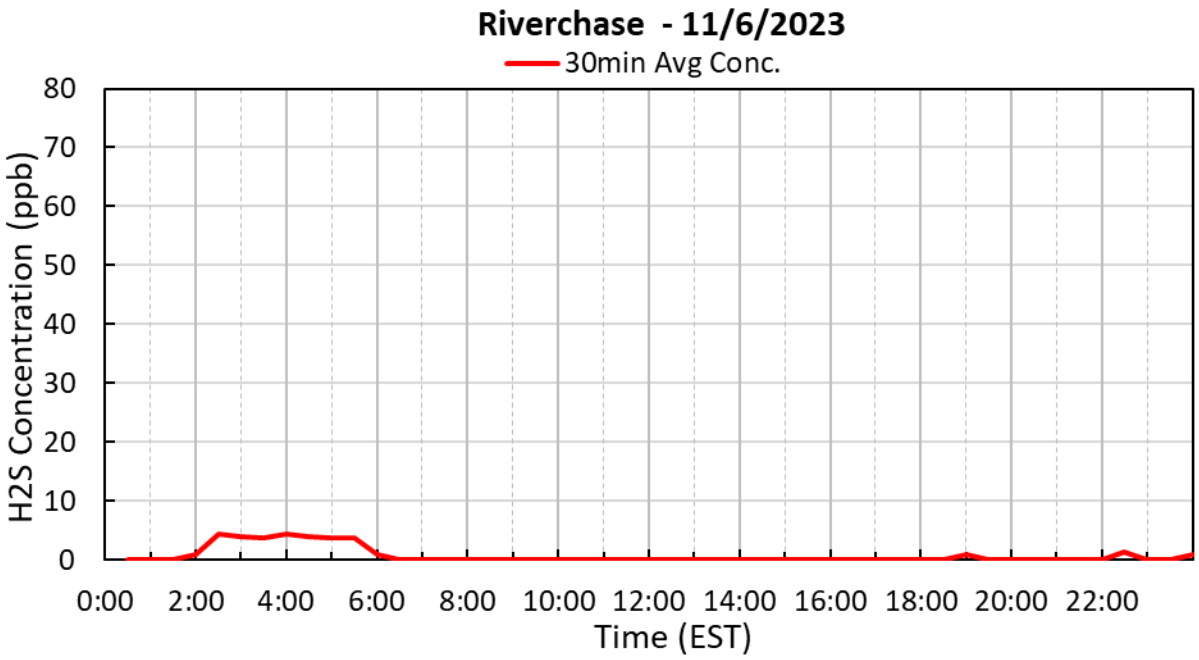
Winds were coming from a variable direction throughout the day at 1 to 11 mph.

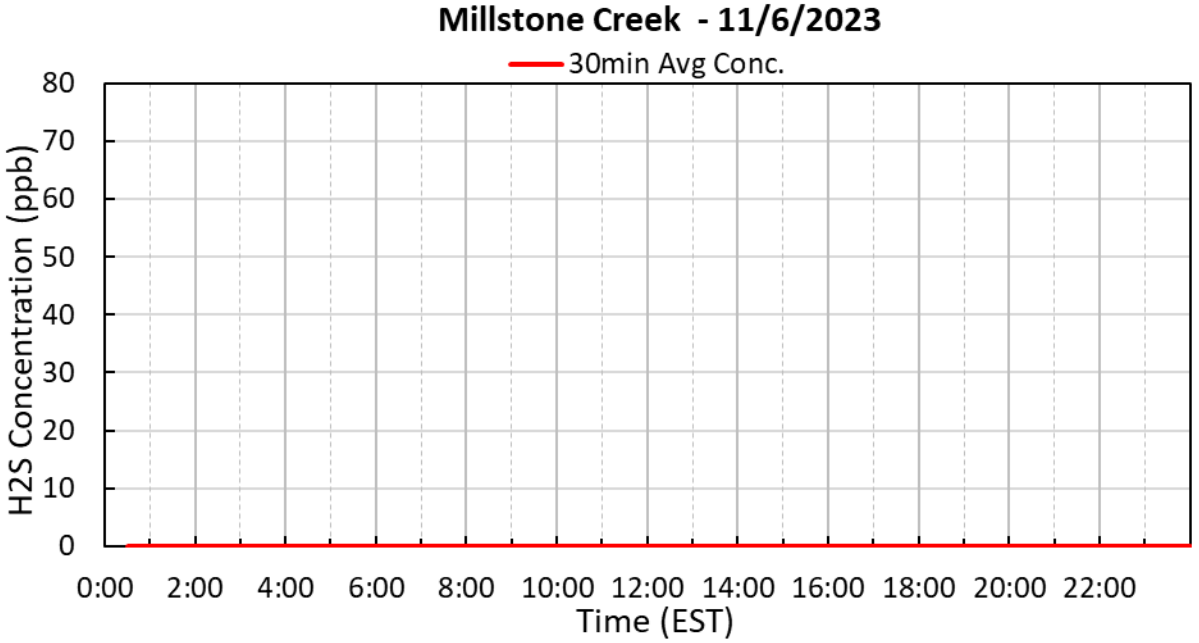
See wind rose diagram with aerial map figure for full wind data during this reporting period.




Treetops - 11/6/2023
30min Avg Conc.
H2S Concentration (ppb)
80
70
60
50
40
30
20
10
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Time (EST)


Liberty Hill - 11/6/2023
30min Avg Conc.
H2S Concentration (ppb)
80
70
60
50
40
30
20
10
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Time (EST)


Riverchase - 11/6/2023
30min Avg Conc.
H2S Concentration (ppb)
80
70
60
50
40
30
20
10
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Time (EST)


Millstone Creek - 11/6/2023
30min Avg Conc.
H2S Concentration (ppb)
80
70
60
50
40
30
20
10
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
Time (EST)

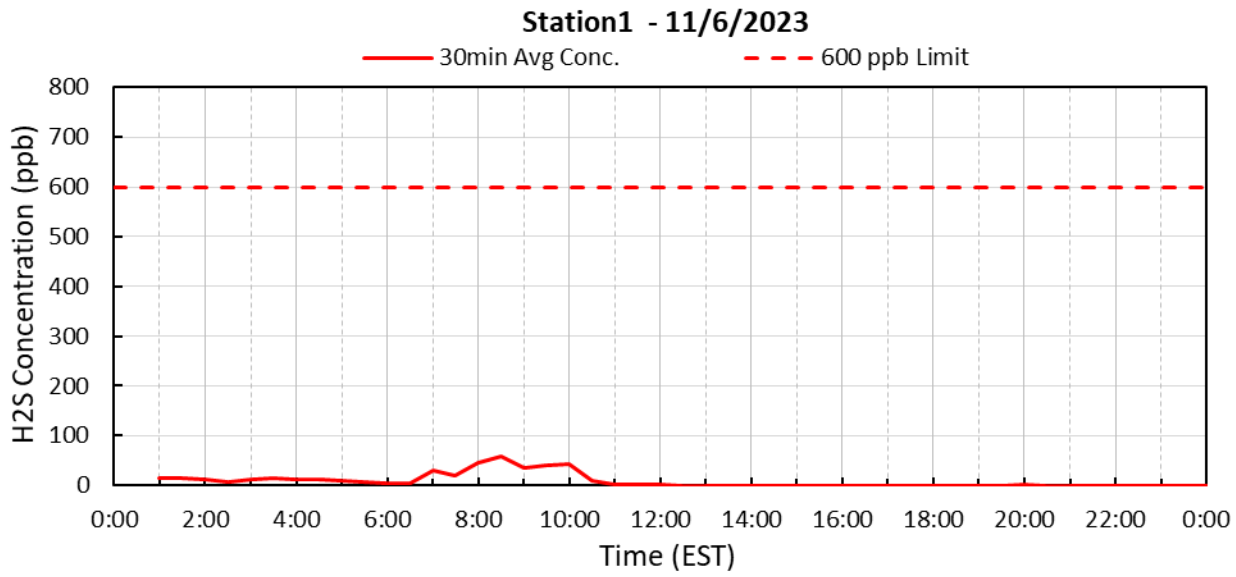
Period H_2S Monitoring
Hydrogen Sulfide Onsite Monitors

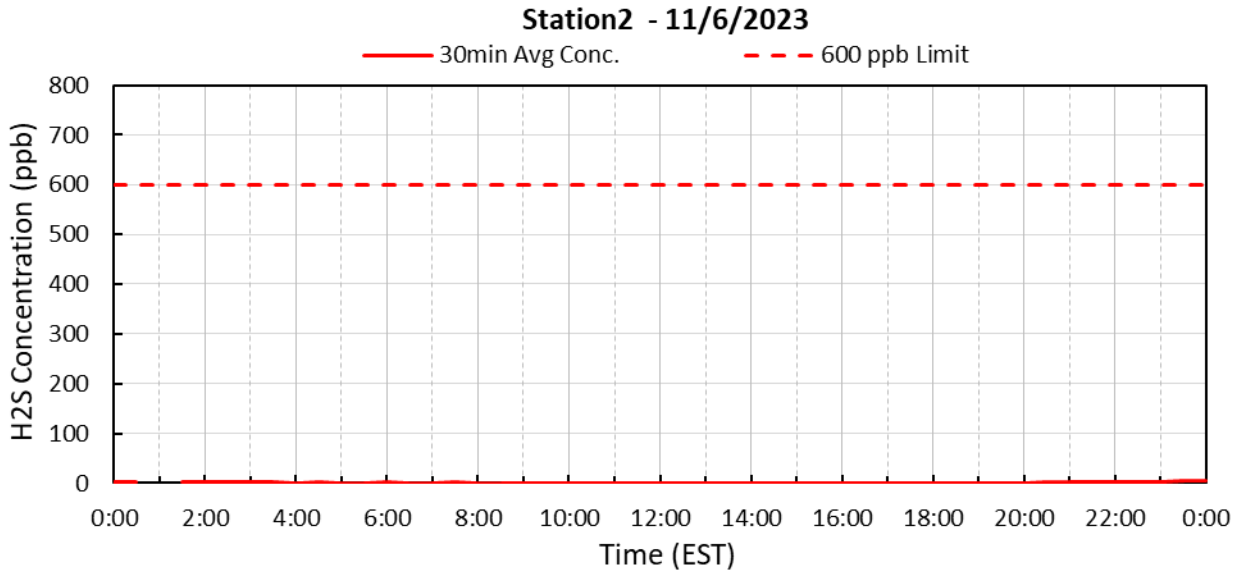
Below are graphs for onsite locations during the current reporting period.

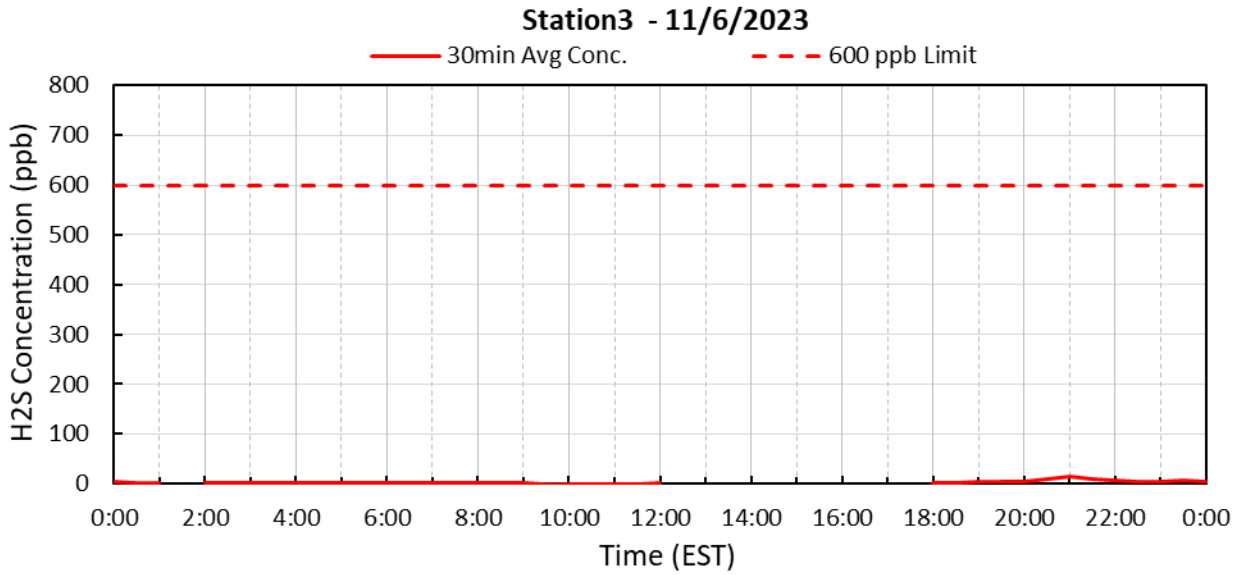
Depending on wind direction, the H_2S measured at the onsite fence line locations may not exit the mill property at reported concentrations. Wind directions from offsite locations, blowing onto mill property, will disperse ambient concentrations to lower levels prior to exiting the plant site.

Winds were coming from a variable direction throughout the day at 1 to 11 mph.

See wind rose diagram with aerial map figure for full wind data during this reporting period.






Station3 - 11/6/2023
30min Avg Conc.
600 ppb Limit
H2S Concentration (ppb)
800
700
600
500
400
300
200
100
0
0:00
2:00
4:00
6:00
8:00
10:00
12:00
14:00
16:00
18:00
20:00
22:00
0:00
Time (EST)

Submitted Fenceline H_2S and Met 30-minute Data

30-Minute Avgs	Station 1			Station 2			Station 3		
	H2S	Met		H2S	Met		H2S	Met	
11/6/2023	30min Avg H2S Conc.	30min Avg WS	30min Avg WD	30min Avg H2S Conc.	30min Avg WS	30min Avg WD	30min Avg H2S Conc.	30min Avg WS	30min Avg WD
Date / Time	ppb	mph	degrees	ppb	mph	degrees	ppb	mph	degrees
11/6/2023 0:30	AX	1.9	40	3.5	0.9	51	2.1	0.7	30
11/6/2023 1:00	13.7	1.2	159	AX	0.5	17	1.8	0.6	50
11/6/2023 1:30	14.2	1.8	202	1.9	0.4	15	AX	0.3	328
11/6/2023 2:00	12.1	2.2	91	1.6	1.0	25	2.2	0.6	50
11/6/2023 2:30	5.9	1.9	166	1.6	0.7	284	2.0	0.5	246
11/6/2023 3:00	11.7	2.0	198	1.3	0.2	339	1.6	0.4	215
11/6/2023 3:30	13.7	1.6	191	1.1	0.3	8	1.2	0.2	62
11/6/2023 4:00	12.2	1.4	191	0.9	0.2	3	0.9	0.2	6
11/6/2023 4:30	11.2	0.6	164	1.1	0.5	39	0.8	0.4	30
11/6/2023 5:00	9.3	1.0	82	1.0	0.6	30	1.1	0.6	62
11/6/2023 5:30	5.9	2.9	51	0.9	1.2	10	1.6	0.3	54
11/6/2023 6:00	4.2	2.0	56	1.1	0.9	346	1.4	0.3	75
11/6/2023 6:30	5.2	0.9	54	1.0	0.6	347	1.1	0.2	341
11/6/2023 7:00	30.3	1.0	50	1.0	0.5	34	1.1	0.3	36
11/6/2023 7:30	18.9	2.6	50	1.4	0.7	18	0.7	0.9	46
11/6/2023 8:00	45.9	2.0	47	0.9	0.7	9	0.5	0.4	52
11/6/2023 8:30	58.0	1.7	55	0.8	0.4	15	0.5	0.9	24
11/6/2023 9:00	34.5	3.3	57	0.9	0.4	19	0.5	0.3	8
11/6/2023 9:30	41.2	3.4	59	1.0	0.4	34	0.2	0.9	355
11/6/2023 10:00	42.6	2.5	57	0.9	1.0	19	0.2	1.1	7
11/6/2023 10:30	9.7	1.9	44	0.7	1.3	7	0.2	1.0	36
11/6/2023 11:00	0.9	1.3	355	0.6	1.7	334	0.2	1.1	80
11/6/2023 11:30	2.1	2.6	199	0.6	2.0	237	0.2	1.8	81
11/6/2023 12:00	0.5	4.3	179	0.8	2.6	202	1.7	1.7	203
11/6/2023 12:30	0.2	4.0	185	0.5	3.6	206	BC	3.1	231
11/6/2023 13:00	0.2	5.7	159	0.6	2.9	200	BC	2.0	227
11/6/2023 13:30	0.2	4.9	177	0.6	3.1	235	BC	2.5	219
11/6/2023 14:00	0.2	5.9	206	0.5	3.3	202	BC	2.4	181
11/6/2023 14:30	0.2	5.1	202	0.6	2.8	185	BC	3.1	185
11/6/2023 15:00	0.2	6.2	164	0.6	3.1	171	BC	2.8	174
11/6/2023 15:30	0.2	5.6	177	0.5	3.0	183	BC	3.0	180
11/6/2023 16:00	0.2	6.7	161	0.4	2.9	182	BC	3.1	181
11/6/2023 16:30	0.2	6.5	158	0.5	2.6	175	BC	2.8	182
11/6/2023 17:00	0.2	4.9	170	0.5	2.1	194	BC	1.8	181
11/6/2023 17:30	0.2	3.7	179	0.5	1.2	169	BC	1.0	202
11/6/2023 18:00	0.2	2.8	190	0.5	0.3	67	1.6	0.3	277
11/6/2023 18:30	0.2	2.3	206	0.5	0.3	95	2.0	0.3	305
11/6/2023 19:00	0.2	10.5	123	0.6	0.3	284	3.1	0.4	208
11/6/2023 19:30	0.2	3.1	217	0.8	0.6	53	3.1	0.5	16
11/6/2023 20:00	0.6	1.7	209	1.0	0.5	136	3.6	0.4	291
11/6/2023 20:30	0.2	2.3	223	1.7	0.3	254	10.2	0.2	360
11/6/2023 21:00	0.2	3.0	220	2.2	0.2	113	15.2	0.2	137
11/6/2023 21:30	0.2	2.9	228	2.1	0.5	67	9.7	0.4	122
11/6/2023 22:00	0.2	2.0	225	1.2	0.5	71	6.5	0.6	45
11/6/2023 22:30	0.2	2.3	232	1.2	0.3	53	4.0	0.3	72
11/6/2023 23:00	0.2	2.1	213	3.3	0.4	63	5.6	0.4	68
11/6/2023 23:30	0.2	2.3	220	6.1	0.2	8	6.7	0.2	118
11/7/2023 0:00	0.2	2.6	223	4.5	0.2	99	5.6	0.2	85

AQS Null Data Codes	
Qualifier Code	Item Description
AB	TECHNICIAN UNAVAILABLE
AC	CONSTRUCTION/REPAIRS IN AREA
AD	SHELTER STORM DAMAGE
AE	SHELTER TEMPERATURE OUTSIDE LIMITS
AI	INSUFFICIENT DATA (CAN'T CALCULATE)
AM	MISCELLANEOUS VOID
AN	MACHINE MALFUNCTION
AO	BAD WEATHER
AP	VANDALISM
AS	POOR QUALITY ASSURANCE RESULTS
AT	CALIBRATION
AU	MONITORING WAIVED
AV	POWER FAILURE (POWR)
AW	WILDLIFE DAMAGE
AX	PRECISION CHECK (PREC)
AY	Q C CONTROL POINTS (ZERO/SPAN)
AZ	Q C AUDIT (AUDT)
BA	MAINTENANCE/ROUTINE REPAIRS
BB	UNABLE TO REACH SITE
BC	MULTI-POINT CALIBRATION
BD	AUTO CALIBRATION
BE	BUILDING/SITE REPAIR
BF	PRECISION/ZERO/SPAN
BJ	OPERATOR ERROR
BK	SITE COMPUTER/DATA LOGGER DOWN
EC	EXCEED CRITICAL CRITERIA