STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

VERIFICATION OF CONTINUED ATTAINMENT FOR THE HILLSBOROUGH-POLK COUNTY SULFUR DIOXIDE (SO_2) MAINTENANCE AREA

FINAL 2026 ANNUAL REPORT

July 1, 2026

Table of Contents

Background

Effective March 23, 2020, the U.S. Environmental Protection Agency (EPA) approved Florida's redesignation request and maintenance plan for the Hillsborough-Polk sulfur dioxide (SO_2) maintenance area. 85 Fed. Reg. 9,666 (February 20, 2020). The maintenance plan includes a section regarding verification of ongoing attainment, which requires the Florida Department of Environmental Protection (Department) to provide an annual report to EPA on or before July 1 of each year, which certifies whether the area is continuing to attain the 2010 SO_2 national ambient air quality standard (NAAQS). This annual report must include:

1) The status of ongoing compliance with the SO_2 emission limits for the Mosaic New Wales and Mosaic Bartow facilities;
2) A review of annual emissions data for these two facilities;
3) A review of the air dispersion modeling inputs and assumptions identified by EPA in coordination with the Department;
4) A certification that there are no changes in the air dispersion modeling inputs and assumptions that could result in a modeled violation; and
5) All supporting documentation and data evaluated by the Department in preparing its annual report.

This annual report addresses the items listed above to demonstrate that the Hillsborough-Polk maintenance area continues to attain the 2010 SO_2 NAAQS.

Status of Ongoing Compliance with the SO_2 Emission Limits

The Department based Florida's attainment modeling demonstration on permitted SO_2 emissions caps of 1,090 pounds per hour (lb/hr) for the five sulfuric acid plants (SAPs) at New Wales and 1,100 lb/hr for the three SAPs at Bartow, calculated on a 24-hour average as determined by continuous emission monitoring systems (CEMS) data. These SO_2 emissions limits have been incorporated into Florida's State Implementation Plan (SIP) to make the limits permanent and federally enforceable.

Except for one instance stemming from a malfunction during start-up on December 27, 2024, at Mosaic Bartow, which coincided with a monitored exceedance at the Department's Sikes Elementary monitor in Polk County (Monitor No. 12-105-6005), Mosaic has been in compliance with the 24-hour block average SAP emissions for each facility since the limits became effective on August 31, 2019. **Appendix A** provides all of the 24-hour averages from January 1, 2025, through December 31, 2025. All 24-hour averages are below the respective limits for each facility, demonstrating that Mosaic continues to comply with the SO_2 emissions limits at both facilities, as required to ensure maintenance of the NAAQS.

Review of Annual Emissions Data

Table 1 shows the 2025 annual emissions from New Wales and Bartow in relation to the potential to emit from each facility. The Department used each facility's potential to emit in Florida's attainment modeling demonstration. Each facility continues to emit considerably less SO_2 than the Department used in Florida's attainment modeling demonstration.

Table 1: 2025 annual SO_2 emissions from New Wales and Bartow compared to the potential to emit.

Facility	2025 Actual Emissions (TPY)	Potential to Emit (TPY)	Percentage of Potential to Emit
New Wales SAPs 1-5	2,878	4,774	60.3
Bartow SAPs 4-6	2,061	4,818	42.8

Review of Air Dispersion Modeling Inputs and Assumptions

The Department coordinated with EPA to determine which modeling inputs and assumptions used in the attainment modeling demonstration should be reviewed to determine whether there have been any changes that could result in a modeled violation of the 2010 SO_2 NAAQS.

Source-Specific Modeling Inputs and Assumptions

The stack parameters for each SAP at New Wales and Bartow have not changed since the Department submitted its attainment modeling demonstration. There has not been any construction or new buildings added at New Wales or Bartow that could change building downwash parameters.

Operations of the SAPs at both New Wales and Bartow have not changed and continue to reflect what was modeled in the attainment modeling demonstration. Therefore, no change in the temporal or spatial distribution of SO_2 emissions or concentrations is expected.

Meteorology

The Department analyzed the meteorology and wind rose data for the most recent five years of available data (2021-2025) and compared these data to the meteorology and wind rose data for the five years used in the attainment modeling demonstration (2012-2016). **Figure 1** shows the wind roses for these two periods and shows that the wind pattern is very similar between the two periods.

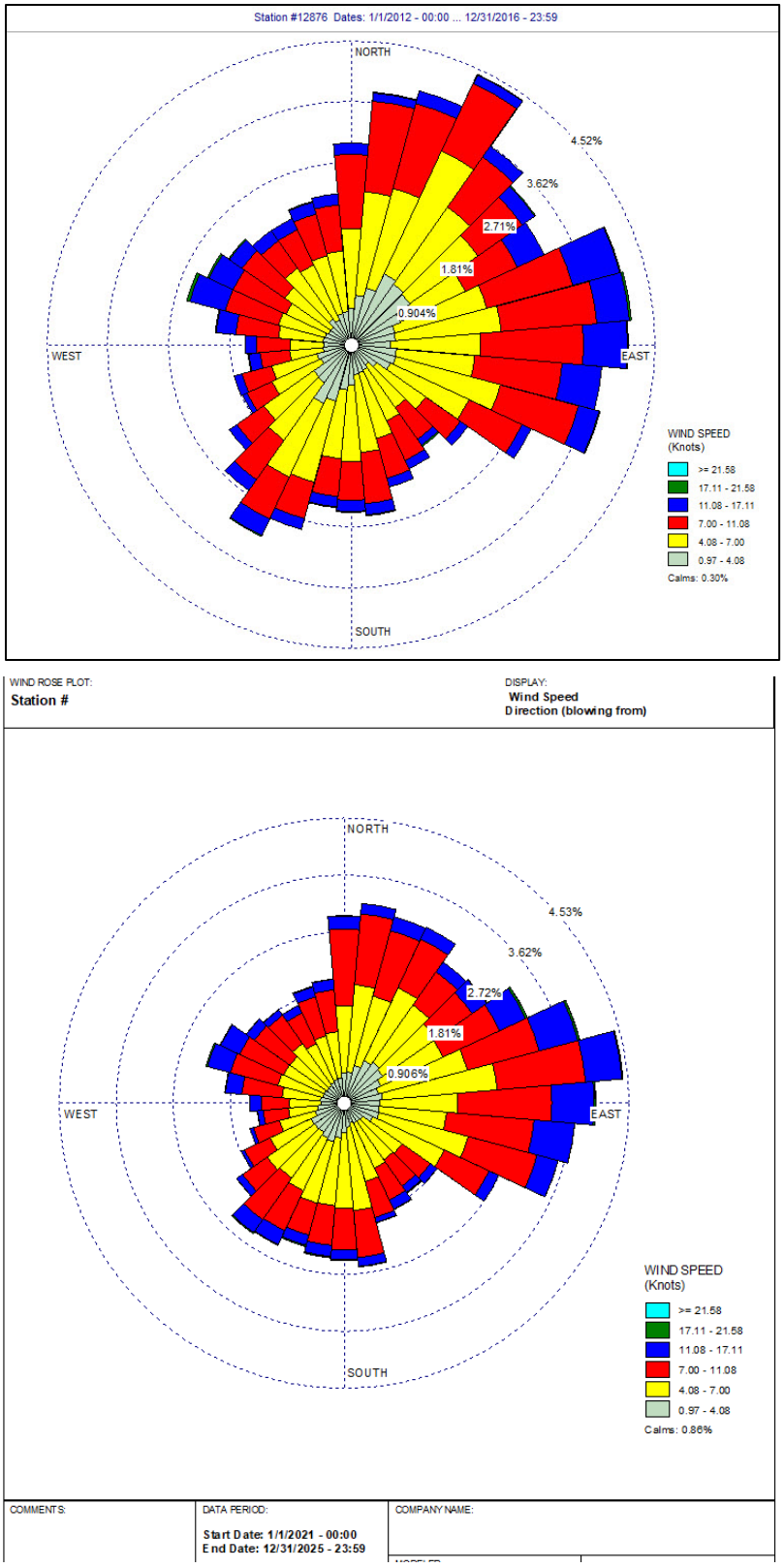

Figure 1. Wind rose data for the KGIF Winter Haven Regional Airport ASOS station for the years 2012-2016 (top) and 2021-2025 (bottom).

The most important wind direction to analyze is when the wind is traveling from Bartow towards New Wales. This wind direction results in the maximum modeled concentrations because it includes impacts from both the New Wales facility and the Bartow facility. Bartow is approximately 45 degrees northeast of New Wales, so the Department assessed times during which the wind direction was in the range of 0 to 90 degrees. This range conservatively covers all potential periods when Bartow emissions could be contributing to modeled SO_2 concentrations near New Wales.

Table 2 compares the percentage of time that winds were from 0-90 degrees in the 2012-2016 meteorology dataset and the 2021-2025 meteorology dataset. There is a slight decrease in the percentage of time that winds blow from Bartow towards New Wales in the 2021-2025 dataset, which would be expected to cause a slight, but probabilistically insignificant, decrease in modeled concentrations.

Table 2. Percentage of time wind direction is from 0 to 90 degrees.

Years	**Wind Direction 0-90º**
2012-2016	33.51%
2021-2025	33.30%

Land-Use in the Area

Land use in the area, which can affect the meteorological parameters, has not changed since the area attained the NAAQS.

Ambient Background Concentrations

The Department evaluated ambient background concentrations of SO_2 at the Department's Sydney monitoring location (12-057-3002). The Department used 2014-2016 data from the Sydney monitor to calculate background SO_2 concentrations used in the attainment modeling demonstration.

Table 3 shows that the one-hour SO_2 design value at the Sydney monitor has decreased from 13 ppb to 5 ppb since the 2014-2016 period.

Table 3. SO_2 1-hour design values at the Sydney monitor.

Period	Design Value
2014-2016	13 ppb
2015-2017	10 ppb
2016-2018	9 ppb
2017-2019	9 ppb
2018-2020	9 ppb
2019-2021	6 ppb
2020-2022	6 ppb
2021-2023	6 ppb
2022-2024	6 ppb
2023-2025	5 ppb

The Department also recalculated the background SO_2 concentrations averaged by season and hour for the most recent three years of available data (2022-2024). **Table 4** and **Table 5** show the background concentrations for the 2014-2016 period, which the Department used in the attainment modeling demonstration, and the 2023-2025 period, respectively. The maximum background SO_2 value for 2014-2016 is 7.33 ppb. The maximum background SO_2 value for 2023-2025 is 4.15 ppb, a significant decrease.

Table 4. Background SO_2 concentrations (ppb) used in the Department's attainment modeling demonstration (2014-2016).

Hour	Winter	Spring	Summer	Fall
0:00	1.00	1.33	0.67	2.33
1:00	2.00	1.33	1.00	2.00
2:00	1.67	1.33	0.67	2.67
3:00	1.33	1.67	1.00	2.33
4:00	1.33	1.67	1.00	3.33
5:00	1.33	1.67	0.67	3.00
6:00	1.00	2.33	1.00	1.33
7:00	1.67	2.67	2.33	3.00
8:00	2.33	3.00	2.33	7.33
9:00	4.00	3.33	3.67	6.00
10:00	3.00	3.00	3.33	3.67
11:00	3.00	3.00	3.00	3.33
12:00	3.33	2.67	2.33	2.67
13:00	3.00	2.00	2.00	2.33
14:00	3.67	2.33	2.67	1.67
15:00	2.33	2.67	2.00	2.33
16:00	3.33	3.00	1.67	2.67
17:00	3.33	2.67	1.33	2.00
18:00	2.33	3.67	1.00	1.67
19:00	2.67	5.33	1.00	2.33
20:00	2.67	3.00	0.67	1.67
21:00	1.67	2.67	1.00	2.00
22:00	2.00	1.33	1.33	2.33
23:00	1.33	1.00	1.00	1.33

Table 5. Background SO_2 concentrations (ppb) for the most recent three years (2023-2025).

Hour	Winter	Spring	Summer	Fall
0:00	0.91	0.68	0.54	0.68
1:00	1.12	0.78	0.60	0.55
2:00	0.78	0.57	0.54	0.53
3:00	0.69	0.75	0.47	0.54
4:00	0.69	0.75	0.46	0.53
5:00	1.39	0.67	0.52	0.51
6:00	1.00	0.72	0.64	0.60
7:00	1.09	0.88	0.66	0.59
8:00	1.04	1.49	1.22	0.64
9:00	1.74	1.77	1.38	1.02
10:00	2.13	2.09	1.51	1.04
11:00	1.80	1.52	1.37	1.02
12:00	1.52	1.53	1.26	1.00
13:00	1.83	1.50	1.20	1.03
14:00	1.59	1.54	0.99	1.02
15:00	2.00	1.49	0.98	0.86
16:00	2.21	1.95	1.17	0.81
17:00	3.29	1.90	1.08	0.80
18:00	3.67	2.90	1.55	0.98
19:00	4.15	3.15	1.32	0.84
20:00	2.74	1.89	1.07	0.68
21:00	1.28	1.46	0.71	0.55
22:00	1.00	0.85	0.62	0.73
23:00	1.04	0.80	0.56	0.69

Critical Emissions Value

The critical emissions value (CEV) is the emissions level (lb/hr) at which the maximum modeled concentration is equal to the NAAQS. The CEVs that the Department calculated in the attainment demonstration modeling for New Wales and Bartow were 1,118 lb/hr and 1,163 lb/hr, respectively. The emissions data that the Department submitted with the redesignation request and attainment modeling demonstration from August 31, 2019 (the attainment date), through October 2, 2019, exceeded the CEV 2.8 percent of the time at New Wales, and 1.0 percent of the time at Bartow, while still maintaining the permitted emissions limits.

The Department analyzed the frequency that each facility's emissions exceeded their respective CEVs from January 1, 2025, through December 31, 2025 (see **Appendices A** and **B**). Emissions

from New Wales exceeded the CEV 0.8 percent of the time, and emissions from Bartow exceeded the CEV 0.3 percent of the time, while still maintaining the permitted emissions limits. It is expected that these occasional spikes above the CEV, which can occur with longer-term limits such as 24-hour average limits, are unlikely to have a significant impact on air quality, as they are unlikely to occur repeatedly at the same time as meteorological conditions conducive to high ambient concentrations of SO_2.

In addition, considering that the ambient background concentrations of SO_2 at the Sydney monitor have decreased since the 2014-2016 period, it is evident that the CEVs of 1,118 lb/hr and 1,163 lb/hr for New Wales and Bartow are conservative. If the CEVs were recalculated with updated modeling, the updated CEVs would be higher, and the frequency with which the hourly emissions would exceed the CEVs may be reduced.

Certification of Continued Attainment

The Department certifies that there are no changes in the air dispersion modeling inputs and assumptions that could result in a modeled violation. The Department recommends, therefore, that no additional action or information is necessary to verify continued attainment. The Department expects that the Hillsborough-Polk maintenance area will continue to maintain the 2010 SO_2 NAAQS.

Appendix A
New Wales and Bartow Facilities 24-Hour Block Average SAP Emissions

NAAQS SO2 lb/hr Daily CAPs

Mosaic

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
1/1/2025	600	648
1/2/2025	583	653
1/3/2025	561	668
1/4/2025	555	687
1/5/2025	608	675
1/6/2025	913	708
1/7/2025	955	721
1/8/2025	845	664
1/9/2025	640	586
1/10/2025	723	585
1/11/2025	813	266
1/12/2025	851	440
1/13/2025	846	474
1/14/2025	805	335
1/15/2025	768	405
1/16/2025	583	284
1/17/2025	593	557
1/18/2025	809	225
1/19/2025	829	137
1/20/2025	696	200
1/21/2025	564	157
1/22/2025	430	190
1/23/2025	195	169
1/24/2025	246	192
1/25/2025	296	184
1/26/2025	267	207
1/27/2025	432	223
1/28/2025	487	175
1/29/2025	313	169
1/30/2025	271	169
1/31/2025	489	160
2/1/2025	579	180
2/2/2025	491	174
2/3/2025	451	200
2/4/2025	432	122
2/5/2025	512	27
2/6/2025	649	34
2/7/2025	491	34
2/8/2025	552	31
2/9/2025	442	37
2/10/2025	474	374
2/11/2025	536	203
2/12/2025	542	320

NAAQS SO2 lb/hr Daily CAPs

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
2/13/2025	487	300
2/14/2025	603	258
2/15/2025	854	112
2/16/2025	654	128
2/17/2025	741	163
2/18/2025	603	155
2/19/2025	307	142
2/20/2025	423	121
2/21/2025	436	82
2/22/2025	609	187
2/23/2025	842	135
2/24/2025	477	55
2/25/2025	561	131
2/26/2025	546	298
2/27/2025	405	344
2/28/2025	563	361
3/1/2025	678	271
3/2/2025	676	285
3/3/2025	539	244
3/4/2025	600	272
3/5/2025	649	186
3/6/2025	631	203
3/7/2025	613	207
3/8/2025	711	539
3/9/2025	766	597
3/10/2025	740	559
3/11/2025	478	524
3/12/2025	452	444
3/13/2025	550	440
3/14/2025	656	426
3/15/2025	687	535
3/16/2025	861	504
3/17/2025	890	465
3/18/2025	879	566
3/19/2025	925	592
3/20/2025	745	405
3/21/2025	605	367
3/22/2025	560	548
3/23/2025	724	404
3/24/2025	757	490
3/25/2025	690	588
3/26/2025	682	642
3/27/2025	579	628

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
3/28/2025	648	660
3/29/2025	795	685
3/30/2025	944	723
3/31/2025	573	635
4/1/2025	533	703
4/2/2025	615	650
4/3/2025	454	618
4/4/2025	641	610
4/5/2025	798	607
4/6/2025	824	594
4/7/2025	581	440
4/8/2025	920	138
4/9/2025	825	173
4/10/2025	644	653
4/11/2025	758	524
4/12/2025	1,014	598
4/13/2025	1,020	555
4/14/2025	978	147
4/15/2025	876	346
4/16/2025	500	599
4/17/2025	506	589
4/18/2025	518	543
4/19/2025	832	527
4/20/2025	777	541
4/21/2025	555	560
4/22/2025	660	518
4/23/2025	582	600
4/24/2025	549	288
4/25/2025	654	310
4/26/2025	571	404
4/27/2025	698	462
4/28/2025	488	517
4/29/2025	387	557
4/30/2025	477	643
5/1/2025	720	598
5/2/2025	846	582
5/3/2025	791	592
5/4/2025	849	626
5/5/2025	913	593
5/6/2025	643	423
5/7/2025	524	513
5/8/2025	344	600
5/9/2025	476	482

NAAQS SO2 lb/hr Daily CAPs

Mosaic

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
5/10/2025	644	552
5/11/2025	914	526
5/12/2025	893	618
5/13/2025	643	668
5/14/2025	872	449
5/15/2025	715	713
5/16/2025	452	571
5/17/2025	373	588
5/18/2025	380	576
5/19/2025	565	594
5/20/2025	392	514
5/21/2025	255	577
5/22/2025	392	642
5/23/2025	303	610
5/24/2025	339	489
5/25/2025	327	453
5/26/2025	460	697
5/27/2025	563	682
5/28/2025	696	645
5/29/2025	503	645
5/30/2025	571	653
5/31/2025	701	709
6/1/2025	896	632
6/2/2025	874	664
6/3/2025	563	324
6/4/2025	666	674
6/5/2025	713	713
6/6/2025	788	607
6/7/2025	962	705
6/8/2025	1,019	752
6/9/2025	1,060	702
6/10/2025	889	741
6/11/2025	934	752
6/12/2025	817	530
6/13/2025	470	629
6/14/2025	574	722
6/15/2025	829	818
6/16/2025	707	786
6/17/2025	790	724
6/18/2025	520	426
6/19/2025	455	552
6/20/2025	641	562
6/21/2025	751	597

NAAQS SO2 lb/hr Daily CAPs

Mosaic

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
6/22/2025	889	584
6/23/2025	854	616
6/24/2025	593	601
6/25/2025	551	552
6/26/2025	278	557
6/27/2025	533	527
6/28/2025	781	582
6/29/2025	777	551
6/30/2025	554	587
7/1/2025	565	582
7/2/2025	399	342
7/3/2025	577	538
7/4/2025	776	594
7/5/2025	942	490
7/6/2025	1,006	568
7/7/2025	1,014	574
7/8/2025	1,059	514
7/9/2025	790	508
7/10/2025	494	227
7/11/2025	287	265
7/12/2025	310	258
7/13/2025	354	290
7/14/2025	489	618
7/15/2025	408	690
7/16/2025	406	681
7/17/2025	426	949
7/18/2025	720	750
7/19/2025	561	716
7/20/2025	591	750
7/21/2025	419	749
7/22/2025	157	750
7/23/2025	277	689
7/24/2025	555	766
7/25/2025	459	780
7/26/2025	426	875
7/27/2025	535	872
7/28/2025	573	810
7/29/2025	593	525
7/30/2025	505	355
7/31/2025	329	226
8/1/2025	359	311
8/2/2025	438	544
8/3/2025	335	637

NAAQS SO2 lb/hr Daily CAPs

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
8/4/2025	696	636
8/5/2025	573	562
8/6/2025	674	712
8/7/2025	759	838
8/8/2025	767	733
8/9/2025	739	851
8/10/2025	659	857
8/11/2025	745	914
8/12/2025	528	651
8/13/2025	550	757
8/14/2025	436	922
8/15/2025	658	934
8/16/2025	767	403
8/17/2025	502	514
8/18/2025	701	570
8/19/2025	987	564
8/20/2025	637	580
8/21/2025	924	465
8/22/2025	896	540
8/23/2025	925	544
8/24/2025	949	406
8/25/2025	1,014	786
8/26/2025	967	788
8/27/2025	543	789
8/28/2025	697	643
8/29/2025	671	766
8/30/2025	666	799
8/31/2025	706	716
9/1/2025	767	664
9/2/2025	789	631
9/3/2025	756	627
9/4/2025	872	641
9/5/2025	860	651
9/6/2025	861	685
9/7/2025	882	684
9/8/2025	887	680
9/9/2025	782	540
9/10/2025	865	492
9/11/2025	828	469
9/12/2025	796	525
9/13/2025	903	643
9/14/2025	782	616
9/15/2025	829	599

NAAQS SO2 lb/hr Daily CAPs

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
9/16/2025	842	586
9/17/2025	885	376
9/18/2025	904	532
9/19/2025	774	665
9/20/2025	825	585
9/21/2025	763	695
9/22/2025	766	126
9/23/2025	762	296
9/24/2025	726	365
9/25/2025	801	743
9/26/2025	622	605
9/27/2025	790	375
9/28/2025	907	429
9/29/2025	897	485
9/30/2025	895	506
10/1/2025	707	761
10/2/2025	594	689
10/3/2025	831	765
10/4/2025	890	794
10/5/2025	827	809
10/6/2025	860	611
10/7/2025	885	299
10/8/2025	850	470
10/9/2025	879	562
10/10/2025	915	724
10/11/2025	884	705
10/12/2025	648	788
10/13/2025	831	613
10/14/2025	922	427
10/15/2025	661	541
10/16/2025	947	700
10/17/2025	862	605
10/18/2025	746	687
10/19/2025	587	673
10/20/2025	617	630
10/21/2025	488	557
10/22/2025	437	566
10/23/2025	570	607
10/24/2025	642	593
10/25/2025	679	740
10/26/2025	645	682
10/27/2025	776	219
10/28/2025	343	260

NAAQS SO2 lb/hr Daily CAPs

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	New Wales Cap 1,090 PPH	Bartow Cap 1,100 PPH
10/29/2025	171	149
10/30/2025	247	112
10/31/2025	465	34
11/1/2025	650	49
11/2/2025	666	47
11/3/2025	446	46
11/4/2025	674	41
11/5/2025	688	124
11/6/2025	716	20
11/7/2025	524	23
11/8/2025	279	19
11/9/2025	348	18
11/10/2025	419	19
11/11/2025	638	67
11/12/2025	532	21
11/13/2025	339	52
11/14/2025	782	34
11/15/2025	905	36
11/16/2025	644	38
11/17/2025	832	57
11/18/2025	932	35
11/19/2025	850	44
11/20/2025	595	53
11/21/2025	819	76
11/22/2025	864	172
11/23/2025	854	184
11/24/2025	863	256
11/25/2025	799	272
11/26/2025	719	158
11/27/2025	771	421
11/28/2025	755	352
11/29/2025	741	266
11/30/2025	566	277
12/1/2025	582	156
12/2/2025	600	129
12/3/2025	589	122
12/4/2025	469	381
12/5/2025	410	351
12/6/2025	456	400
12/7/2025	610	413
12/8/2025	634	335
12/9/2025	625	229
12/10/2025	578	365

NAAQS SO2 lb/hr Daily CAPs

Mosaic

Table 2. CY 2025 SO_2 lb /hour, 24-hour block average (6:00 a.m. to 6:00 a.m.)

Date	*New Wales Cap 1,090 PPH*	*Bartow Cap 1,100 PPH*
12/11/2025	484	369
12/12/2025	438	321
12/13/2025	797	422
12/14/2025	1,050	457
12/15/2025	967	485
12/16/2025	816	492
12/17/2025	506	518
12/18/2025	348	429
12/19/2025	267	284
12/20/2025	208	324
12/21/2025	238	726
12/22/2025	593	686
12/23/2025	894	807
12/24/2025	779	801
12/25/2025	675	856
12/26/2025	626	833
12/27/2025	366	859
12/28/2025	826	500
12/29/2025	858	121
12/30/2025	617	273
12/31/2025	782	210

Appendix B:
New Wales and Bartow Frequency of SO_2 Emissions over the CEV

Table 1. New Wales Sulfuric Acid Plants –
Hours Over the Critical Emission Value (CEV)

Month	Hours Over CEV (hr)	Hours Over CEV Using a 1,000 PPM (hr)	Operating Hours (hr)	Percent Over CEV	Percent Over CEV Using a 1,000 PPM
January 2025	5	0	743	0.7%	0.0%
February 2025	1	1	667	0.1%	0.1%
March 2025	0	0	744	0.0%	0.0%
April 2025	3	1	720	0.4%	0.1%
May 2025	12	4	744	1.6%	0.5%
June 2025	16	4	720	2.2%	0.6%
July 2025	10	0	744	1.3%	0.0%
August 2025	16	0	744	2.2%	0.0%
September 2025	0	0	720	0.0%	0.0%
October 2025	6	0	744	0.8%	0.0%
November 2025	0	0	720	0.0%	0.0%
December 2025	1	0	744	0.1%	0.0%
Total	**70**	**10**	**8,754**	**0.8%**	**0.1%**

Table 2. Bartow Sulfuric Acid Plants –
Hours Over the Critical Emission Value (CEV).

Month	Hours Over CEV (hr)	Hours Over CEV Using a 1,000 PPM (hr)	Operating Hours (hr)	Percent Over CEV	Percent Over CEV Using a 1,000 PPM
January 2025	5	5	744	0.7%	0.7%
February 2025	0	0	657	0.0%	0.0%
March 2025	3	3	734	0.4%	0.4%
April 2025	1	1	720	0.1%	0.1%
May 2025	1	1	744	0.1%	0.1%
June 2025	1	1	719	0.1%	0.1%
July 2025	2	0	728	0.3%	0.0%
August 2025	2	2	744	0.3%	0.3%
September 2025	3	3	696	0.4%	0.4%
October 2025	1	1	744	0.1%	0.1%
November 2025	0	0	699	0.0%	0.0%
December 2025	3	3	744	0.4%	0.4%
Total	**22**	**20**	**8672**	**0.3%**	**0.2%**

Bartow Sulfuric Plants
1,163 lb SO2/hr 1-hr Critical Emission Value

Table 5. CY 2025 Detailed Summary - Hours Over CEV

Timestamp	#4 SO2 Lbs/Hr Hrly Avg	#5 SO2 Lbs/Hr Hrly Avg	#6 SO2 Lbs/Hr Hrly Avg	Combined SO2 Lbs/Hr Hrly Avg	1,000 PPM Span Exceeded?
1/7/2025 18:00	251	668	265	1,184	Yes
1/7/2025 19:00	279	839	228	1,347	Yes
1/10/2025 6:00	180	1,125	265	1,570	Yes
1/10/2025 7:00	191	723	251	1,165	Yes
1/17/2025 19:00	209	957	0	1,166	Yes
3/8/2025 14:00	299	142	887	1,328	Yes
3/8/2025 15:00	263	141	856	1,260	Yes
3/15/2025 11:00	179	143	966	1,287	Yes
4/22/2025 19:00	214	128	999	1,342	Yes
5/7/2025 17:00	188	93	1,056	1,336	Yes
6/10/2025 2:00	278	141	813	1,232	Yes
7/6/2025 7:00	848	82	250	1,179	No
7/17/2025 20:00	255	97	1,218	1,569	No
8/25/2025 16:00	678	192	368	1,239	Yes
8/25/2025 17:00	691	192	366	1,250	Yes
9/4/2025 3:00	194	717	371	1,282	Yes
9/18/2025 14:00	0	291	937	1,228	Yes
9/21/2025 3:00	567	343	365	1,275	Yes
10/8/2025 13:00	182	739	271	1,191	Yes
12/21/2025 19:00	234	698	292	1,224	Yes
12/21/2025 20:00	232	662	297	1,191	Yes
12/21/2025 21:00	234	660	297	1,190	Yes

New Wales Sulfuric Plants

1,118 lb SO2/hr 1-hr Critical Emission Value

Table 6. CY 2025 Detailed Summary - Hours Over CEV

Timestamp	#1 SO2 Lbs/Hr Hrly Avg	#2 SO2 Lbs/Hr Hrly Avg	#3 SO2 Lbs/Hr Hrly Avg	#4 SO2 Lbs/Hr Hrly Avg	#5 SO2 Lbs/Hr Hrly Avg	Combined SO2 Lbs/Hr Hrly Avg	1,000 PPM Span Exceeded?
1/8/2025 0:00	131	309	335	169	232	1,177	No
1/8/2025 2:00	136	318	323	155	202	1,134	No
1/8/2025 3:00	132	325	321	158	201	1,137	No
1/8/2025 4:00	134	322	308	189	190	1,143	No
1/8/2025 5:00	131	315	317	219	194	1,176	No
2/10/2025 22:00	103	0	916	226	103	1,347	Yes
4/8/2025 1:00	179	-	674	195	100	1,147	Yes
4/12/2025 8:00	197	-	412	264	258	1,131	No
4/13/2025 17:00	194	-	316	389	229	1,127	No
5/5/2025 0:00	212	256	198	248	297	1,209	Yes
5/5/2025 1:00	210	263	204	277	738	1,692	Yes
5/5/2025 2:00	213	252	207	243	406	1,321	Yes
5/5/2025 3:00	211	252	199	240	264	1,166	Yes
5/12/2025 2:00	243	222	369	220	100	1,153	No
5/12/2025 3:00	235	248	348	228	107	1,166	No
5/12/2025 6:00	249	272	324	236	104	1,185	No
5/12/2025 7:00	248	272	307	239	104	1,170	No
5/12/2025 8:00	246	291	323	236	112	1,209	No
5/12/2025 9:00	243	299	331	244	109	1,227	No
5/12/2025 10:00	265	290	327	237	129	1,248	No
5/12/2025 11:00	250	297	264	246	159	1,216	No
6/2/2025 8:00	152	258	276	292	163	1,141	No
6/2/2025 9:00	138	258	292	323	165	1,176	No
6/2/2025 11:00	258	253	237	268	173	1,190	No
6/8/2025 12:00	-	344	445	281	86	1,156	No
6/8/2025 16:00	-	398	352	282	103	1,135	No
6/8/2025 17:00	-	406	413	289	132	1,241	No
6/8/2025 19:00	-	396	349	277	100	1,122	No
6/8/2025 20:00	-	407	358	289	122	1,176	No
6/9/2025 14:00	-	358	323	258	179	1,118	No
6/9/2025 19:00	-	389	335	297	177	1,199	Yes

New Wales Sulfuric Plants

1,118 lb SO2/hr 1-hr Critical Emission Value

Table 6. CY 2025 Detailed Summary - Hours Over CEV

Timestamp	#1 SO2 Lbs/Hr Hrly Avg	#2 SO2 Lbs/Hr Hrly Avg	#3 SO2 Lbs/Hr Hrly Avg	#4 SO2 Lbs/Hr Hrly Avg	#5 SO2 Lbs/Hr Hrly Avg	Combined SO2 Lbs/Hr Hrly Avg	1,000 PPM Span Exceeded?
6/10/2025 1:00	-	383	359	199	206	1,147	No
6/10/2025 2:00	-	381	384	195	226	1,185	No
6/10/2025 5:00	-	398	372	209	148	1,127	No
6/22/2025 18:00	694	151	284	217	120	1,466	Yes
6/22/2025 19:00	480	154	324	257	118	1,332	Yes
6/23/2025 20:00	263	238	274	269	168	1,212	Yes
7/5/2025 21:00	231	279	303	244	118	1,175	No
7/5/2025 22:00	250	284	288	243	115	1,180	No
7/6/2025 0:00	232	263	274	232	131	1,133	No
7/6/2025 17:00	139	278	316	243	149	1,125	No
7/8/2025 1:00	235	279	264	164	180	1,123	No
7/8/2025 8:00	234	254	277	165	197	1,127	No
7/8/2025 23:00	244	274	358	231	20	1,127	No
7/9/2025 0:00	242	298	371	234	31	1,175	No
7/9/2025 1:00	239	287	341	237	28	1,133	No
7/9/2025 2:00	232	279	339	238	37	1,125	No
8/19/2025 17:00	242	196	258	225	282	1,203	No
8/19/2025 18:00	242	193	275	262	158	1,130	No
8/20/2025 1:00	241	175	282	254	179	1,131	No
8/20/2025 2:00	248	173	294	267	268	1,250	No
8/25/2025 19:00	248	285	121	267	221	1,141	No
8/25/2025 20:00	267	288	202	260	149	1,166	No
8/26/2025 0:00	260	288	231	255	138	1,172	No
8/26/2025 1:00	260	285	295	254	141	1,234	No
8/26/2025 2:00	264	291	260	248	140	1,203	No
8/26/2025 3:00	265	285	222	249	141	1,161	No
8/26/2025 7:00	264	289	169	267	137	1,125	No
8/26/2025 8:00	253	291	239	273	132	1,188	No
8/26/2025 9:00	257	304	256	276	132	1,225	No
8/26/2025 13:00	248	237	241	257	224	1,206	No
8/26/2025 14:00	256	227	165	262	564	1,475	No

New Wales Sulfuric Plants

1,118 lb SO2/hr 1-hr Critical Emission Value

Table 6. CY 2025 Detailed Summary - Hours Over CEV

Timestamp	#1 SO2 Lbs/Hr Hrly Avg	#2 SO2 Lbs/Hr Hrly Avg	#3 SO2 Lbs/Hr Hrly Avg	#4 SO2 Lbs/Hr Hrly Avg	#5 SO2 Lbs/Hr Hrly Avg	Combined SO2 Lbs/Hr Hrly Avg	1,000 PPM Span Exceeded?
8/26/2025 16:00	260	259	123	283	202	1,127	No
10/14/2025 8:00	288	226	179	273	155	1,121	No
10/14/2025 10:00	269	263	227	280	166	1,206	No
10/16/2025 22:00	265	281	189	193	209	1,136	No
10/17/2025 2:00	273	294	200	145	212	1,124	No
10/17/2025 5:00	267	301	194	160	207	1,129	No
10/17/2025 6:00	283	300	196	151	209	1,138	No
12/13/2025 22:00	264	218	350	240	48	1,120	No