

**APPENDIX B**  
**NWS DISCUSSIONS**

**EXCEPTIONAL EVENTS DEMONSTRATION FOR 2022 PM<sub>2.5</sub>  
EXCEEDANCES AT HARRISON COUNTY, TRAVIS COUNTY, AND  
KLEBERG COUNTY**

**February 7, 2025**

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
P.O. BOX 13087  
AUSTIN, TEXAS 78711-3087**

## APPENDIX B: NWS DISCUSSIONS

### B.1: GROUP 1 - JANUARY 1, 2022

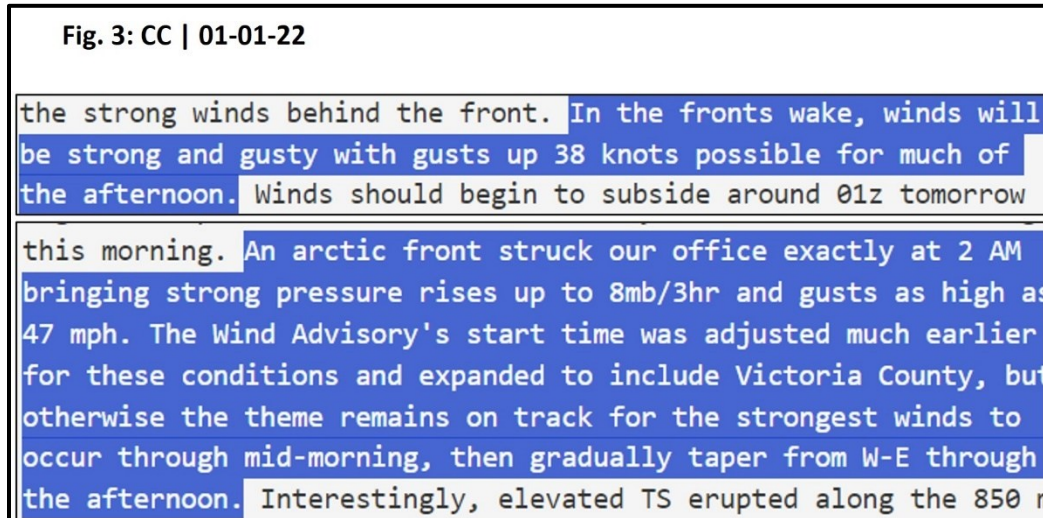


Figure B-1: NWS forecast from the Corpus Christi NWS Weather Forecast Office for January 1, 2022

### B.2: GROUP 2 - JANUARY 21, JANUARY 22, AND JANUARY 23, 2022

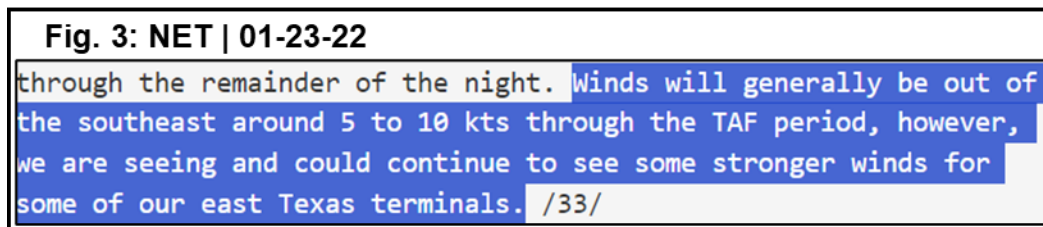


Figure B-2: NWS forecast from the Shreveport NWS Weather Forecast Office for January 23, 2022

### B.3: GROUP 3 - MARCH 25, 2022

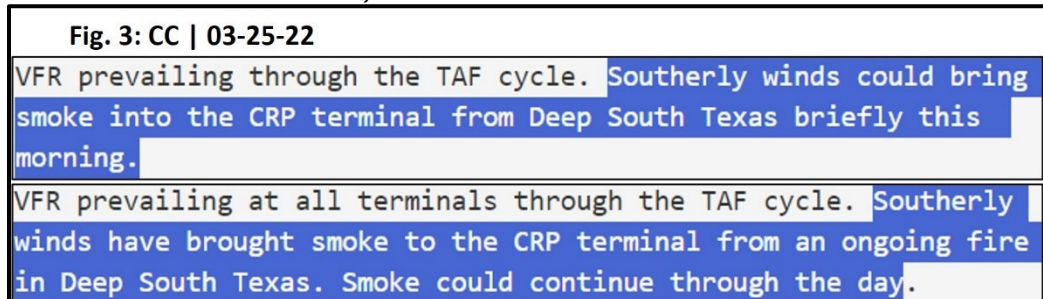


Figure B-3: NWS forecast from the Corpus Christi NWS Weather Forecast Office for March 25, 2022

**B.4: GROUP 4 - APRIL 11, APRIL 12, AND APRIL 13, 2022**

<b>Fig. 3: ARR</b>
Very low relative humidity and gusty southwest winds are expected today behind the dryline across portions of the Rio Grande Plains and southern Edwards Plateau. Minimum RH values around 10% 04-12-22

**Figure B-4: NWS forecast from the Austin/San Antonio NWS Weather Forecast Office for April 12, 2022**

<b>Fig. 4: CC &amp; LAR</b>
Updated to issue a High Wind Warning for Nueces county 04-11-22
Strong winds will persist this afternoon, especially through the coastal bend. Winds are currently gusting over 50 mph at CRP airport, which has seen the strongest winds today. Other 04-11-22
Scattered showers and isolated thunderstorms are developing over the Coastal Bend at this time with the approach of an upper level disturbance. Convection will move northeast through the morning hours, with gusty winds possible. Expect the activity will 04-12-22
the dryline will lead to hot temperatures today. Gusty northwest winds will develop late this morning into the afternoon behind the dryline. This will lead to critical fire danger conditions 04-13-22

**Figure B-5: NWS forecast from the Corpus Christi NWS Weather Forecast Office for April 11, 2022, through April 13, 2022**

<b>Fig. 5: MEM</b>
aerodromes this evening. In addition...low clouds and haze will reduce ceilings/visibilities across the RGV tonight. Last but not
Gulf waters today into this evening with elevated seas and moderate to occasional strong winds. A Small Craft Advisory
haze will continue off and on. Winds will remain gusty this afternoon, mainly across BRO and HRL. This evening all aerodromes

**Figure B-6: NWS forecast from the Brownsville NWS Weather Forecast Office for April 13, 2022**

## B.5: GROUP 5 - MAY 6 AND MAY 7, 2022

Fig. 3: MEM & LRG	
the region 5 to 7 degrees above normal for overnight lows. Also, the wind will attempt to go calm in some places, which could allow for some patchy fog to form across Deep South Texas and the Rio Grande Valley.	05-06-22
back off on Tuesday. Slightly drier conditions are expected the later in the work week, which could lead to elevated fire weather concerns in western portions of the Brush Country and Upper Rio Grande Valley along with all of the Rio Grande Plains;	05-08-22

Figure B-7: NWS forecast from the Brownsville NWS Weather Forecast Office for May 6, 2022, and May 8, 2022

Fig. 4: CC & LAR	
For fire weather concerns, looks like there could be near elevated fire danger conditions over the Brush Country Sunday afternoon.	05-05-22
remaining in place. Light winds combined with the low level moisture may produce patchy fog and low CIGs with IFR/MVFR conditions overnight. Clouds are expected to decrease Friday morning with VFR conditions developing by mid to late	05-05-22
is expected to decrease below 30% across portions of the Brush Country and Rio Grande Plains in the afternoons from Thursday to Saturday, this may lead to a few hours of elevated fire weather conditions.	05-07-22

Figure B-8: NWS forecast from the Corpus Christi NWS Weather Forecast Office for May 5, 2022, and May 7, 2022

## B.6: GROUP 6 - MAY 20, 2022

across southwest Texas. MVFR conditions will prevail late tonight into early Sat morning as low clouds and haze reduce ceilings and visibilities. In addition...low level	Fig. 4   MEM & LRG   05-20-22
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Figure B-9: NWS forecast from the Brownsville NWS Weather Forecast Office for May 20, 2022

For the 20/00Z TAFs, widespread high clouds and thin smoke persist throughout area airspace this evening.	Fig. 5   NET   05-20-22
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Figure B-10: NWS forecast from the Shreveport NWS Weather Forecast Office for May 20, 2022



B.7: GROUP 7 - JUNE 11, 2022 THROUGH JUNE 17, 2022

Fig. 3: CC   06-11-21	
centering over Northwest Texas. Meanwhile, the Saharan dust surges from the south overnight and will continue into the extended period causing hazy conditions. Exposure to dust for an extended	
The Saharan dust will also likely lead to hazy conditions through the extended period.	

Figure B-11: NWS forecast from the Corpus Christi NWS Weather Forecast Office for June 11, 2022

Fig. 4: CC & LAR	
70s. Drier conditions over the Brush Country with relative humidity less than 30% and 20ft winds nearing 20 MPH will lead to elevated fire weather concerns in the afternoon.	06-12-22

Figure B-12: NWS forecast from the Corpus Christi NWS Weather Forecast Office for June 12, 2022

Fig. 4: CC & LAR	
The Saharan dust will also maintain hazy conditions.	06-13-22
Model trends with respect to the Saharan dust continue to show the dust to remain in the region through the week. This will lead to hazy skies as well as air quality concerns, especially for sensitive	06-14-22
As the Saharan dust continues to affect the area the hazy conditions will continue through at least Saturday morning.	06-15-22
for the next week with warm to hot high temperatures and dry conditions. Saharan dust will diminish slightly over the weekend, but another plume of Saharan dust will move over South Texas and continue through the work week. Air quality may be affected through	06-16-22
Otherwise, a large plume of Saharan dust will continue to lead to hazy skies across South Texas as we head into the weekend.	06-17-22

Figure B-13: NWS forecast from the Corpus Christi NWS Weather Forecast Office for June 13, 2022, through June 17, 2022

<b>Fig. 3: ARR</b>	
identical setup. Saharan dust at higher levels may inhibit low cloud formation as it could slow radiational cooling, but think this will be offset by strong southeasterly sfc winds advecting low level moisture in rather quickly this evening. Winds should back	06-13-22
seems worth mentioning, however, with the large being related to Saharan dust plume currently situated over the area. As	06-14-22
25 mph along the Rio Grande. One more thing to mention for today is the hazy skies due to Saharan dust lingering across the	06-17-22

Figure B-14: NWS forecast from the Austin/San Antonio NWS Weather Forecast Office for June 13, 2022, June 14, 2022, and June 17, 2022

<b>Fig. 8: NET</b>	
pressure is suppressing all convection and for days to come yet with Saharan dust mixing in the lower atmosphere is not	06-13-22
at times across our far western zones or east Texas, however, confidence is not that high that this will happen. Saharan Dust continues to filter into the area which will bring HZ to the area at times but should not impact visibility below 6SM for	06-14-22
Easterly trade winds continue to bring in a plume of Saharan Dust across the Atlantic into our region. Look for this to continue through the short-term period, which could lead to reduced	06-15-22
The continuing presence of Saharan dust looks to contribute to keeping air temperatures below the century mark again	06-16-22

Figure B-15: NWS forecast from the Shreveport NWS Weather Forecast Office for June 13, 2022, through June 16, 2022

#### B.8: GROUP 8 - JULY 16 THROUGH JULY 18, 2022

<b>Fig. 5: CC &amp; LAR</b>		07-16-22
gusty winds. Saharan dust is likely to move into the region today providing hazy conditions. Not sure if it will be enough to limit		
yesterday for the Brush Country. NASA GMAO shows region of Saharan dust will remain over south Texas through this evening providing hazy conditions.		07-17-22
around 107 across the Brush Country. Heat indices today will top out in the 105-109 range. Otherwise for today, the tail end of a large plume of Saharan dust that influenced South Texas over the weekend will push into South-Central Texas by mid day.		07-18-22

Figure B-16: NWS forecast from the Corpus Christi NWS Weather Forecast Office for July 16, 2022, through July 18, 2022

**Fig. 3: ARR**

In addition to the warmth and dryness, another batch of Saharan dust is pushing into the region and although it shouldn't reduce visibility, it will reduce visibility. 07-17-22

**Figure B-17: NWS forecast from the Austin/San Antonio NWS Weather Forecast Office for July 17, 2022**