

Texas Commission on Environmental Quality Response to Public Comments Received on the August 2016 Proposed Delisting of APWL 1002 – Sulfur Dioxide/Beaumont, Jefferson County, Texas

The public comment period for the August 2016 proposed delisting of sulfur dioxide (SO₂) and Beaumont from the Air Pollutant Watch List (APWL) ended on September 2, 2016. The Texas Commission on Environmental Quality (TCEQ) received public comments from a private citizen, the South East Texas Regional Planning Commission (SETRPC), the Texas Association of Manufacturers (TAM), the Southeast Texas Plant Managers' Forum, and the Texas Chemical Council (TCC). The TCEQ appreciates the effort put forth to provide comments on the proposed delisting of APWL 1002. The goal of the TCEQ is to protect human health and welfare based on the most scientifically-defensible approaches possible, and evaluation of these comments furthered that goal. The received public comments and TCEQ responses are provided below.

Comment 1 – Private Citizen, received August 1, 2016

Comment:

Please do not de-list. Sulfur dioxide irritates the skin and mucous membranes of the eyes, nose, throat, and lungs. High concentrations of SO₂ can cause inflammation and irritation of the respiratory system, particularly during heavy physical activity. The resulting symptoms may include pain when taking a deep breath, coughing, throat irritation, and breathing difficulties. High concentrations of SO₂ can affect lung function, worsen asthma attacks, and aggravate existing heart disease in sensitive groups. This gas can also react with other chemicals in the air and convert to a small particle that can lodge in the lungs and cause similar health effects.

TCEQ Response:

The TCEQ agrees that at sufficiently high concentrations, sulfur dioxide can cause respiratory symptoms. However the monitored levels of sulfur dioxide in the Beaumont area have been below the state 30 minute regulatory standard since 2012, and exposure to concentrations below the state 30 minute regulatory standard would not be expected to cause adverse health or welfare effects. The Beaumont-Port Arthur area has also been meeting the federal sulfur dioxide standard since 2011. Although the area is being removed from the APWL, sulfur dioxide monitoring will continue to be evaluated, and the state and federal sulfur dioxide standards will continue to be enforced.

Comment 2 – SETRPC, received August 30, 2016

Comment:

The South East Texas Regional Planning Commission (SETRPC) endorses the Texas Commission on Environmental Quality (TCEQ) recommendation to remove Beaumont from the Air Pollutant Watch List (APWL) for the air toxic SO₂.

The data shows that industry has committed to, and achieved, good progress in reducing emissions from their facilities and the current measured levels of SO₂ in the Beaumont area demonstrate the success of their efforts.

The SETRPC recognizes the ongoing need to continue to protect the health of the Beaumont community, and ongoing monitoring efforts continue to provide data in that regard.

- The Beaumont area has been attaining the new EPA 1-hour SO₂ NAAQS since 2011
- There have been no exceedances of the TCEQ SO₂ regulatory standard measured at the Beaumont Mary site from 2010 to 2015 and none at the Beaumont Downtown site from 2012 to 2015
- There have been no exceedances of the TCEQ SO₂ regulatory standard measured at the two industry-sponsored monitors from 2011 to 2015
- The major source of sulfur dioxide emissions in the Beaumont area has made significant changes to its operating procedures which has reduced sulfur dioxide emissions
- The reported SO₂ emissions in the Beaumont area have decreased from 3454 tons per year in 2005 to 828 tons per year in 2014, a 76% reduction

TCEQ Response:

The TCEQ appreciates the supportive comments submitted by the SETRPC.

Comment 3 – TAM, received August 30, 2016

Comment:

The Texas Association of Manufacturers (TAM) supports the delisting of Air Pollutant Watch List (APWL) 1002 – Sulfur Dioxide (SO₂) in Beaumont, Jefferson County, Texas as proposed by the Texas Commission on Environmental Quality (TCEQ).

TAM represents over 500 large and small companies from every manufacturing sector, employing more than 894,000 Texans with an average compensation of \$79,350 a year (the highest in the private sector). Manufactured goods account for 94.6 percent of all Texas exports, and Texas has held the distinction as the number one exporting state in the United States for several consecutive years.

TAM appreciates the diligence of the agency in working with industry to monitor and improve the state's APWL areas. TAM supports the proposed delisting based on the monitoring data which indicates that no exceedances of the TCEQ SO₂ standard were measured at the Beaumont Mary monitoring site from 2010 through 2015, or at the Beaumont Downtown monitoring site from 2012 through 2015. Furthermore, no exceedances of the standard were measured at the two industry-sponsored community monitors from 2011 through 2015. Finally, the SO₂ emissions in the area have decreased 90 percent since 2004, and all air toxic levels in the area are consistently below TCEQ's health effects screening levels. The data supports the strong and productive relationship between TCEQ and industry in their joint efforts to improve the Beaumont region's air quality, and TAM applauds the collaborative effort and continuous improvements made in the area.

TCEQ Response:

The TCEQ appreciates the supportive comments submitted by the TAM.

Comment 4 – Plant Managers’ Forum, received September 3, 2016

Comment:

The Plant Managers’ Forum (“Forum”) is pleased to provide comments on the Texas Commission on Environmental Quality (“TCEQ”) recommendation to remove Beaumont from the Air Pollutant Watch List (“APWL”) for the air toxic SO₂. The Forum consists of over fifty-three (53) member companies representing refining, petrochemical, specialty chemical, steel, paper mill, electrical generation, pipeline, terminal and manufacturing industries located in Jefferson, Orange and Hardin counties in the state of Texas. Our members supply consumers with a wide variety of products and services that are used daily in homes and businesses. These products include gasoline, diesel fuel, home heating oil, jet fuel, asphalt products, utilities: paper products, building supplies and the chemicals that serve as “building blocks” in making plastics, clothing, medicine and computers.

Our main focus has been, and continues to be, the safe operation of our facilities, improving plant reliability by upgrading older facilities with new pollution control technology, implementing robust mechanical integrity programs, and recruiting and retaining trained and committed people. We have also implemented stringent leak detection and repair programs. Infrared cameras are now being employed within industry to help quickly identify leaks and make more timely repairs. As a result of these efforts, reportable SO₂ emissions in the Beaumont APWL area have decreased from 3454 tons per year in 2005 to 828 tons per year in 2014, representing a 76% reduction.

For more than 20 years, the Industry of South East Texas has provided financial support through voluntary contributions to the South East Texas Regional Planning Commission (SETRPC) to supplement the TCEQ air monitoring in our area with additional monitors. The data reflects the achievement and continued commitment of industry and the current measured levels of SO₂ in the Beaumont area demonstrate these achievements.

- The Beaumont area has been attaining the new EPA 1-hour SO₂ NAAQS since 2011.
- There have been no exceedances of the TCEQ SO₂ regulatory standard measured at the Beaumont Mary site from 2010 to 2015 and none at the Beaumont Downtown site from 2012 to 2015.
- There have been no exceedances of the TCEQ SO₂ regulatory standard measured at the two industry-sponsored monitors from 2011 to 2015.
- The major source of sulfur dioxide emissions in the Beaumont area has made significant changes to its operating procedures which has reduced sulfur dioxide emissions.
- The reported SO₂ emissions in the Beaumont APWL area have decreased from 3454 tons per year in 2005 to 828 tons per year in 2014, a 76% reduction.

The Forum agrees with and strongly supports the proposal from TCEQ to remove Beaumont from the APWL for the air toxic SO₂.

TCEQ Response:

The TCEQ appreciates the supportive comments submitted by the Plant Managers’ Forum.

Comment 5 – TCC, received September 7, 2016

Comment:

On behalf of the Texas Chemical Council (TCC), I am writing to support the Texas Commission on Environmental Quality's (TCEQ) proposed de-listing of sulfur dioxide in the Beaumont, Texas Air Pollutant Watch List (APWL) area ("APWL 1002").

TCC is a statewide trade association representing over 70 chemical manufacturers operating approximately 200 Texas facilities. The Texas chemical industry has more than \$75 billion in physical assets in the state, and pays over \$1 billion annually in state and local taxes and over \$20 billion in federal income taxes. TCC's members provide over 75,000 direct jobs and over 450,000 indirect jobs to Texans across the state. TCC member companies manufacture products that improve the quality of life for all Americans and millions of people around the world.

TCC appreciates the continuous work by TCEQ and industry to reduce the level of sulfur dioxide (SO₂) in the Beaumont APWL area. We credit TCEQ's continued use of monitoring, diligence in air permitting, compliance investigations, enforcement, along with responsible operations by regulated entities by companies located in the Beaumont APWL area. We also applaud industry – and TCC member companies specifically – for their voluntary measures to effectively reduce the emissions of this pollutant.

The U.S. Environmental Protection Agency (EPA) is charged with setting national ambient air quality standards (NAAQS) for criteria pollutants, including sulfur dioxide. The current primary standard, designed to be protective of human health, was set in 2010 as a 1-hour standard of 75 parts per billion (ppb). Attainment is achieved when the three-year average of the annual 99th percentile of monitored concentrations is below 75 ppb. The Beaumont area has achieved this level as evidenced by the Texas Governor recommending that the Beaumont area be designated attainment. Final designations are require EPA approval based on acceptance of the certified data.

Additionally, as part of its state implementation plan (SIP) strategy designed to help Texas meet the NAAQS standard and ensure protection of public health and welfare, TCEQ adopted rules in 1992 to limit ground-level sulfur dioxide concentrations. The health-based state standards, listed in 30 Texas Administrative Code (TAC) §112.3 ("Net Ground Level Concentrations"), dictate that "no person in Jefferson or Orange County may cause, suffer, allow, or permit emissions of SO₂ from a source or sources operated on a property or multiple sources operated on contiguous properties to exceed a net ground level concentration of 0.32 ppmv averaged over any 30-minute period." This state regulatory standard is more restrictive than the federal NAAQS standard.

Sulfur dioxide levels in the Beaumont area exceeded the TCEQ regulatory standard at the former stationary monitoring site, Carroll St. Park, for a total of 9 days from 1998 to 2002, and measured above the state regulatory standard during a mobile monitoring trip in 2003, all of which prompted the area being listed on the APWL.

In response to being listed on the APWL, industry has taken swift and deliberate action, and has instituted various strategies to reduce emissions of sulfur dioxide to meet the state regulatory standard in the Beaumont area. For instance, industry has made large and extensive capital investments in the area to ensure reductions, and has achieved a 90% reduction in sulfur dioxide emissions in the APWL area since 2004. Some of the strategies that have been implemented by industry in Southeast Texas and the Beaumont area to reduce air emissions include the following:

- Flare Gas Recovery System Installation and Upgrades;
- Electrical System Upgrades;
- Installation of Wet Gas Scrubber; and
- Installations to Reduce Fugitive Gas Emissions.

Some of these strategies have even been incorporated into individual company's air quality permits, ensuring that they are permanent and enforceable by TCEQ.

Since this time, the area has been in attainment with all NAAQS standards, and has shown continuous improvements with emissions levels. As indicated by TCEQ, many point sources are required to report annual emissions to the state emissions inventory (E.I.), including all authorized and unauthorized emissions. All companies within an APWL are required to submit an E.I. Report. The E.I. data over the past decade show that the overall amount of sulfur dioxide emissions has reduced significantly over time, and continues to do so.

There were no exceedances of the state regulatory standard measured from 2010 through 2015 at the Beaumont Mary monitoring site, nor from 2012 through 2015 at the Beaumont Downtown monitoring site. Further, industry has continued to voluntarily financially support and collect air monitoring data from two community monitors in the area to track sulfur dioxide levels, which have not shown any exceedances from 2011 through 2015.

Because TCEQ believes that all appropriate measures are in place to ensure with reasonable expectation that the levels of sulfur dioxide in the Beaumont APWL will remain below state regulatory levels, TCC fully supports the delisting of sulfur dioxide from the Beaumont APWL area. It is clear that sufficient emissions reductions of sulfur dioxide have been secured in the area, and will continue to ensure no exceedances of the state regulatory standard will occur.

TCEQ Response:

The TCEQ appreciates the supportive comments submitted by the TCC.