



Air Pollutant Watch List Public Comment Form

Date received: March 6, 2009

APWL Site Under Consideration

County: Jefferson and Harris

Cities: Port Neches and Milby Park Area

TCEQ Region: 10 (Beaumont) and 12 (Houston)

APWL Site Number (for existing sites): APWL 1004 and APWL 1207

Pollutant(s): 1,3-butadiene

Comment(s):

The Texas Chemical Council (TCC) is pleased to submit these comments on the Texas Commission on Environmental Quality's (TCEQ) proposal to remove 1,3-butadiene from the Air Pollution Watch List (APWL) at Houston's Milby Park Area and at Port Neches in Jefferson County.

TCC is a statewide trade association representing approximately 77 chemical manufacturers at over 200 Texas facilities. Our industry has invested more than \$50 billion in physical assets in the State and pays over \$1 billion annually in state and local taxes. TCC's members provide approximately 75,000 direct jobs and over 500,000 indirect jobs to Texans across the State.

TCEQ's Toxicology Section (TS) recently published a proposal to make several modifications to the APWL. Among these proposals were to remove 1,3-butadiene from the Port Neches APWL in Jefferson County and the APWL in Houston's Milby Park area.

TCEQ's predecessor agency, Texas Natural Resource Conservation Commission (TNRCC), placed 1,3-butadiene on the Port Neches APWL in Jefferson County in 1999 and established a trilateral agreement with area industrial facilities to conduct monitoring. Plant fence-line monitors were instrumental in identifying otherwise obscure emissions sources and activities with the potential to impact emissions at the fence-line and in the community. This afforded the industry the opportunity to proactively address such sources and dramatically reduce their impact on fence-line emissions. Based on TCEQ's monitoring results in the community outside the facilities, the annual average levels of butadiene have been maintained below 2 ppb for several years running - a concentration that is well below TCEQ's long term Effects Screening Level (ESL) of 9.1 ppb.

Similarly, in 2005, concern over measured levels of 1,3-butadiene in Houston's Milby

Park Area led to establishing individual Voluntary Emissions Reductions Agreements (VERAs) between TCEQ and the nearby operating industrial facilities. These VERAs required specific emissions reductions in 1,3-butadiene emissions through capital projects and installation and operation of fence-line monitoring equipment. The monitoring, again, was instrumental in allowing the facilities to pinpoint sources of emissions and to correct them. The result was a substantial decrease in 1,3-butadiene levels at TCEQ's Milby Park monitoring station. Again, monitoring results in recent years show sustained levels less than 2 ppb compared to TCEQ's long term ESL.

These are great success stories for the APWL process, and stand as examples of how industry and the Agency can work together to drive environmental improvements in air toxics with the existing APWL process.

We understand TCEQ will continue to operate the 1,3-butadiene monitoring stations at Port Neches in Jefferson County and in Houston. These monitoring systems will be effective tools to ensure that 1,3-butadiene levels do not increase in these communities in the future.

In addition to the substantial reductions in 1,3-butadiene concentrations effected by industry in the Houston Milby Park and Port Neches areas, the process used by TCEQ to set the ESLs was another factor in allowing TCEQ to propose removing 1,3-butadiene from the APWL in these areas. Texas Chemical Council applauds TCEQ's process for setting these ESLs, prioritizing the chemical list for setting ESLs in a risk-based fashion, relying on all of the scientific evidence available to propose appropriate levels for ESLs, and using a third party peer review panel whose members have established stature and credentials in their fields of expertise.

TCC agrees with and strongly supports the proposal from TCEQ to remove 1,3-butadiene from the APWL at Port Neches in Jefferson County and at Houston's Milby Park Area. Please contact me if you are in need of additional information or have any questions.



Response to APWL Comment Submitted by Texas Chemical Council

Date: March 24, 2009

APWL Site Under Consideration

County: Jefferson and Harris

Cities: Port Neches and Milby Park Area

TCEQ Region: 10 (Beaumont) and 12 (Houston)

APWL Site Number (for existing sites): APWL 1004 and APWL 1207

Pollutant(s): 1,3-Butadiene

Response for Comments on APWL 1004 and APWL 1207:

The TCEQ Toxicology Division thanks TCC for participating in the public comment period and appreciates TCC's support of the TCEQ's proposal to remove 1,3-butadiene from APWL 1004 and APWL 1207.



Air Pollutant Watch List Public Comment Form

Date Received: March 5, 2009

APWL Site Under Consideration

County: Jefferson and Harris

Cities: Port Neches and Milby Park Area

TCEQ Region: Region 10 (Beaumont) and Region 12 (Houston)

APWL Site Number (for existing sites): APWL 1004 and APWL 1207

Pollutant(s): 1,3-Butadiene

Comment(s):

Texas Petrochemicals is pleased to submit these comments on TCEQ's proposal to remove 1,3-butadiene from the Air Pollution Watch List (APWL) at Houston's Milby Park Area and in Jefferson County. Texas Petrochemicals is a Houston-based company, with operating facilities in Houston's East End (Milby Park Area), Port Neches (Jefferson County), and Baytown. We have approximately \$2 billion in annual sales revenue, and employ nearly 800 full time employees and contractors. TCEQ's Toxicology Section (TS) recently published a proposal to make several modifications to the APWL. Among these proposals were to remove 1,3-butadiene from the APWL at both Jefferson County and Houston's Milby Park Area. In 1999, Huntsman Petrochemicals (former owner of Texas Petrochemicals' Port Neches Operations) initiated fenceline monitoring for 1,3-butadiene emissions under terms of a Trilateral Agreement with TNRCC (TCEQ's predecessor agency). The monitoring system has been instrumental in identifying otherwise obscure emissions sources and activities with the potential to impact emissions at the fenceline and in the community. This has afforded Texas Petrochemicals the opportunity to proactively address such sources and dramatically reduce their impact on fenceline emissions. TCEQ's long-term monitoring program confirms that annual average concentrations of 1,3-butadiene in the community of Port Neches have been maintained at a level well below the Agency's Long Term Effects Screening Level (ESL) for several years.

Texas Petrochemicals continues to operate the monitoring system, recognizing its value as an important tool for managing facility emissions. Similarly, in 2005, concern over measured levels of 1,3-butadiene in Houston's Milby Park Area led to establishing individual Voluntary Emissions Reductions Agreements (VERAs) including one between TCEQ and Texas Petrochemicals. Texas Petrochemicals' VERA required specific emissions reductions in 1,3-butadiene emissions through capital projects and installation and operation of advanced technology fenceline monitoring. The monitoring, again, was instrumental in allowing Texas Petrochemicals to pinpoint sources of emissions and to correct them. The ongoing use of the monitoring system coupled with a handheld infrared

camera (FUR) have driven culture change and changed behaviors throughout the Texas Petrochemicals facility, creating a sensitivity and awareness to emissions and to implementing rapid and effective corrective actions. The result was a substantial decrease in 1,3-butadiene levels at TCEQ's Milby Park monitoring station. Again, monitoring results in recent years show sustained levels less than 2 ppb compared to TCEQ's current Long Term ESL of 9.1 ppb.

These are great success stories for the APWL process and stand as examples of how industry and the Agency can work together within the existing APWL process to continue to drive reductions in air toxics.

We understand TCEQ will continue to operate the 1,3-butadiene monitoring stations in Jefferson County and in Houston. Similarly, Texas Petrochemicals continues to operate our fenceline monitoring systems. These monitoring systems will be effective tools to ensure that 1,3-butadiene levels do not increase in these communities in the future.

In addition to the substantial reductions in 1,3-butadiene concentrations effected by industry in the Houston Milby Park and Jefferson County areas, the process used by TCEQ to set the ESLs was another factor in allowing TCEQ to propose removing 1,3-butadiene from the APWL in these areas.

Texas Chemical Council applauds TCEQ's process for setting these ESLs, prioritizing the chemical list for setting ESLs in a risk-based fashion, relying on all of the scientific evidence available to propose appropriate levels for ESLs, and using a third party peer review panel whose members have established stature and credentials in their fields of expertise. Texas Petrochemicals agrees with and strongly supports the proposal from TCEO to remove 1,3-butadiene from the APWL at Jefferson County and at Houston's Milby Park Area.



Response to APWL Comment Submitted by Texas Petrochemicals

Date: March 24, 2009

APWL Site Under Consideration

County: Jefferson and Harris

Cities: Port Neches and Milby Park Area

TCEQ Region: Region 10 (Beaumont) and Region 12 (Houston)

APWL Site Number (for existing sites): APWL 1004 and APWL 1207

Pollutant(s): 1,3-Butadiene

Response for Comments on APWL 1004 and APWL 1207:

The TCEQ Toxicology Division thanks TPC for participating in the public comment period and appreciates TPC's support of the TCEQ's proposal to remove 1,3-butadiene from APWL 1004 and APWL 1207.



Air Pollutant Watch List Public Comment Form

Date: March 6, 2009

APWL Site Under Consideration

County: Harris

City: Milby Park Area

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): 1,3-Butadiene

Comment(s):

The Goodyear Tire & Rubber Company Houston Chemical Plant supports the Texas Commission on Environmental Quality (TCEQ) decision to remove 1,3-butadiene from Air Pollutant Watch List (APWL) 1207. As noted in your proposal, the annual average 1,3-butadiene concentration has remained below 2 ppb_v since 2005, which is significantly below the long term Effects Screening Level (ESL) of 9.1 ppb_v. The Goodyear Houston plant entered into a Voluntary Emission Reduction Agreement (VERA) with the TCEQ in August 2005 to reduce 1,3-butadiene emissions. The actions implemented by Goodyear in connection with the VERA in the past 3 years have significantly reduced the 1,3-butadiene concentrations measured at the Milby Park monitor and our continuing actions will ensure that the annual average 1,3-butadiene concentration will remain at or below 1 ppb_v in the future.



Response to APWL Comment Submitted by Goodyear Tire & Rubber Company

Date: March 18, 2009

APWL Site Under Consideration

County: Harris

City: Milby Park Area

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): 1,3-Butadiene

Response for Comments on APWL 1207:

The TCEQ Toxicology Division thanks Goodyear Tire & Rubber Company for participating in the public comment period and appreciates Goodyear Tire & Rubber Company's support of the TCEQ's proposal to remove 1,3-butadiene from APWL 1207.



Air Pollutant Watch List Public Comment Form

Date: 6 March 2009

APWL Site Under Consideration

County: Harris

City: Milby Park Area

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): 1,3-butadiene

Comment(s):

I appreciate the efforts of the TCEQ, City of Houston, and Texas Petrochemicals to reduce the concentration of 1,3-butadiene in the Milby Park Area.

I realize that identification of an area and pollutant on an APWL increases agency scrutiny of that pollutant in the specified area. With the limited information I have, it is unclear what the consequences will be of removing 1,3-butadiene from the APWL.

While significant improvements have been made, there still may be health risks associated with the current concentrations of 1,3-butadiene in the area. As noted by the City of Houston, the USEPA's Integrated Risk Information System sets the 1 in 100,000 risk level for 1,3-butadiene at 0.13 ppb_v, well below .896 ppb_v annual average concentration recorded at Milby Park in 2008.

My concern is that monitoring frequency for 1,3-butadiene in Milby Park is not reduced or detection limits increased as a result of this change in classification. I believe it is important that monitoring of 1,3-butadiene levels in this area continues and that this information is available to the public.

I support the proposal to add styrene to the APWL.



Response to APWL Comment Submitted by a Private Citizen

Date: March 18, 2009

APWL Site Under Consideration

County: Harris

City: Milby Park Area

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): 1,3-butadiene

- 1) Comment:** I realize that identification of an area and pollutant on an APWL increases agency scrutiny of that pollutant in the specified area. With the limited information I have, it is unclear what the consequences will be of removing 1,3-butadiene from the APWL.

Response: The APWL, as mentioned in your letter, is a method the Agency uses to prioritize its resources in areas where the Toxicology Division determines there is a potential for health or welfare effects. When a pollutant and/or area is removed from the APWL, the Agency will re-focus some of its resources to other areas of concern. For example, facilities within an APWL area must go through an additional, more stringent review of any air permits, including permits-by-rule which are typically not strictly reviewed. If this area were removed from the APWL, the Agency would no longer require this additional permit review for these facilities. Similarly, facilities in the area would be less of a priority for action from the Pollution Prevention Section and Monitoring Operations Division.

Non-APWL areas, however, are not exempt from Agency attention and scrutiny and the removal of a pollutant and/or area does not indicate that the Agency will remove its resources. The TCEQ constantly evaluates monitoring resources and priorities to make sure its monitors are appropriately located. The Agency also continually works toward implementing responsible operational strategies in its review and authorization of permits and reinforces these practices through investigations and administrative orders by the Field Operations and Enforcement Divisions. None of these methods is dependent on an area's placement on the APWL.

- 2) **Comment:** While significant improvements have been made, there still may be health risks associated with the current concentrations of 1,3-butadiene in the area.

Response: In addition to monitoring the continued decline of these ambient concentrations of 1,3-butadiene in the Milby Park neighborhood, the TCEQ has done extensive work to more fully elucidate and address the health risks associated with air pollutants. The TCEQ made a great stride in this process with the finalized guidelines for developing ESLs and ReVs (ESL guidelines, see <http://www.tceq.state.tx.us/files/rg-442.pdf> 4237940.pdf), published in 2006. The new ESL guidelines underwent an extensive external scientific peer review by internationally renowned scientists, along with two rounds of public comment. ESLs and ReVs were set to both prevent adverse health effects, including cancer, respiratory diseases, and eye/respiratory irritation in even the most sensitive members of the population, including children, the elderly, and asthmatics; as well as prevent adverse welfare effects such as effects on vegetation and nuisance odors.

Using the new ESL guidelines, the TCEQ published its own cancer and noncancer evaluation of 1,3-butadiene in August 2008 and set the long-term cancer ESL at 9.1 ppb (see http://tceq.com/assets/public/irnp/implementationtox/dsd/final/butadiene_1-3-10699-0_final.pdf). The 1,3-butadiene screening levels also underwent external scientific peer review (see http://www.tera.org/peer/TCEQ_1,3butadiene.html) and several public comment periods, in which the City of Houston participated. The resulting screening levels represent the state-of-the-science for evaluation of potential health risks associated with exposure to 1,3-butadiene. This is further substantiated by the November 2008, Science Discussion Document on the Development of an Air Standard for 1,3-Butadiene, written by the Ontario, Canada Ministry of the Environment. In the document, the Canada Ministry of the Environment deemed the assessment published by the TCEQ as the most current, scientifically-sound after reviewing chemical assessments from Health Canada and Environment Canada, the Province of Quebec, the USEPA, the Swedish Institute of Environmental Medicine, the United Kingdom, and the World Health Organization, and the States of California, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, and Texas. The sizable breadth of both scientific studies and reviews suggesting the appropriateness of the current ESLs and ReVs for 1,3-butadiene, coupled with the continued decline in ambient concentrations, provide the TCEQ a high level of confidence in its determination that 1,3-butadiene is no longer considered of potential health concern in the Milby Park Area.

- 3) **Comment:** As noted by the City of Houston, the USEPA's Integrated Risk Information System sets the 1 in 100,000 risk level for 1,3-butadiene at 0.13 ppb_v, well below .896 ppb_v annual average concentration recorded at Milby Park in 2008.

Response: It was unanimous among the external, internationally-renowned expert peer reviewers that the updated epidemiological studies conducted by the University of Alabama at Birmingham (UAB) researchers, upon which the TCEQ derived its unit risk factors, were superior to the outdated epidemiological studies used by EPA in its derivation of the inhalation unit risk (Delzell 1995, 1996). As science continues to advance, so must the policy decisions based on that science. Therefore, the lack of an updated cancer assessment by USEPA should not prevent TCEQ from conducting an updated cancer assessment for 1,3-butadiene based on advancements in science. Accordingly, the TCEQ will continue to set its screening levels and air quality goals based on the most up-to-date, scientifically-defensible data available which, in the case of 1,3-butadiene, is the UAB study.

- 4) **Comment:** My concern is that monitoring frequency for 1,3-butadiene in Milby Park is not reduced or detection limits increased as a result of this change in classification. I believe it is important that monitoring of 1,3-butadiene levels in this area continues and that this information is available to the public.

Response: There are currently no plans to change the monitoring or analytical methods (i.e., detection limits) employed in the Milby Park Area. Again, removing a pollutant from the APWL does not mean that all TCEQ resources are relocated. A good example of maintaining monitoring in a non-APWL area is the 34th Street monitor in Texas City, Texas. The area surrounding the monitor (APWL1203) was removed from the APWL in 2007, but the monitor is still providing hourly data in 2009.



Response to APWL Comment Submitted by a Private Citizen

Date: June 8, 2009

APWL Site Under Consideration

County: Harris

City: Houston

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): Styrene

Comment: I support the proposal to add styrene to the APWL.

Response: The TCEQ appreciates your interest in the Milby Park area. During the public comment period for the proposal to add styrene to the Milby Park APWL, new information that was not previously considered has come to the Toxicology Division's attention. Numerous proactive steps have been taken by Goodyear Tire and Rubber Company during 2008 to address the source of the elevated styrene emissions detected at the Milby Park monitor (CAMS 169, 2201A Central St.). Specifically, Goodyear has altered its operational practices, amended their permit to include a 25% reduction in allowable styrene emissions, and signed a voluntary emissions reduction agreement with the TCEQ. As a result of these efforts, there was only one exceedence of the odor-based effects screening level for styrene between July and December 2008 and the monitoring data available for 2009 show a consistent decreasing trend. Therefore, due to the new information provided by Goodyear Tire and Rubber Company, the latest available monitoring data, and concurrence from other divisions within the TCEQ, styrene will not be added to APWL 1207, but the TCEQ will continue to monitor styrene concentrations at CAMS 169 for improvements.



Air Pollutant Watch List Public Comment Form

Date: 4 February 2009

APWL Site Under Consideration

County: Harris

City: Milby Park Area

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites) APWL 1207

Pollutant(s): 1,3-Butadiene

Comment(s):

The City of Houston applauds the dramatic drop in ambient air levels of 1,3-butadiene at the Milby Park monitor from 1.53 ppb_v in 2005 to .93 ppb_v in 2008. This decline is due in substantial part to aggressive efforts by TCEQ and the City of Houston to work with one facility that emitted large volumes of 1,3-butadiene. Through agreements with the company, significant emission reductions were made after an investment in capital and operational improvements, coupled with objective verification including auditing and fence line monitoring.

The City of Houston understands that the placement on and removal from the APWL are determined in large part by whether the ambient air levels exceed TCEQ's ESLs. The long-term ESL for 1,3-butadiene is 4.5 ppb_v, well above the former or current ambient air levels of this pollutant in the Milby Park Area. In the context of the ESL, then, removal of the Milby Park Area from the APWL is understandable. We are concerned, however, that despite the reductions in 1,3-butadiene, there is still a health risk associated with the current ambient levels and that TCEQ must continue to take action to further drive down the levels.

The USEPA's Integrated Risk Information System (IRIS), which is a nationally accepted health risk assessment protocol, sets the 1 in 100,000 risk level for 1,3-butadiene at 0.13 ppb_v. We would recommend that TCEQ set this level as its goal for the Milby Park monitor. TCEQ's ESL for benzene falls within the IRIS risk range; its ESL for 1,3-butadiene falls far outside of the IRIS risk range. The need to reduce the ambient level below the current level is reflected in the agreement between TCEQ and the large 1,3-butadiene emitter, which set a goal of a net fence line measurement of ppb_v. A recent study published in a peer reviewed journal shows a significant association between childhood cancers and proximity to high concentrations of 1,3-butadiene.

We also want to thank you for adding styrene to the APWL for the Milby Park Area. We appreciate the opportunity to share our data with you and look forward to working

alongside TCEQ as we address this problem. It is our desire to see the styrene levels drop quickly, and to receive notice that it, too, has been removed from the APWL!



Response to APWL Comment Submitted by the City of Houston

Date: March 17, 2009

APWL Site Under Consideration

County: Harris

City: Houston

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): 1,3-Butadiene

- 1) Comment:** We are concerned that despite the reductions in 1,3-butadiene, there is still a health risk associated with the current ambient levels and that TCEQ must continue to take action to further drive down the levels.

Response: As was noted in your letter, ambient air concentrations of 1,3-butadiene have, indeed, been drastically reduced through concerted efforts to curb emissions in the Milby Park Area. In fact, 1,3-butadiene levels at the Milby Park monitor were 78% lower in 2008* than in 2004. Furthermore, although the 2008 data have not yet been fully validated, it appears that concentrations measured during 2008 might be below the interim goal of 1 ppb set for Milby Park in 2005. In addition to monitoring the continued decline of these ambient concentrations of 1,3-butadiene in the neighborhood, the TCEQ has also done extensive work to more fully elucidate and address the health risks associated with air pollutants. The TCEQ made a great stride in this process with the finalized guidelines for developing ESLs and ReVs (ESL guidelines, see <http://www.tceq.state.tx.us/files/rg-442.pdf> 4237940.pdf), published in 2006. The new ESL guidelines underwent an extensive external scientific peer review by internationally renowned scientists, along with two rounds of public comment. ESLs and ReVs were set to both prevent adverse health effects, including cancer, respiratory diseases, and eye/respiratory irritation in even the most sensitive members of the population, including children, the elderly, and asthmatics; as well as prevent adverse welfare effects such as effects on vegetation and nuisance odors.

Using the new ESL guidelines, the TCEQ published its own cancer and noncancer evaluation of 1,3-butadiene in August 2008 and set the long-term cancer ESL at 9.1 ppb (see [http://tceq.com/assets/public/irnp/implementationtox/dsd/final/butadiene, 1-3- 10699-](http://tceq.com/assets/public/irnp/implementationtox/dsd/final/butadiene,1-3-10699-)

0 final.pdf). The 1,3-butadiene screening levels also underwent external scientific peer review (see http://www.tera.org/peer/TCEQ_1,3butadiene.html) and several public comment periods, in which the City of Houston participated. The resulting screening levels represent the state-of-the-science for evaluation of potential health risks associated with exposure to 1,3-butadiene. This is further substantiated by the November 2008, Science Discussion Document on the Development of an Air Standard for 1,3-Butadiene, written by the Ontario, Canada Ministry of the Environment. In the document, the Canada Ministry of the Environment deemed the assessment published by the TCEQ as the most current, scientifically-sound after reviewing chemical assessments from Health Canada and Environment Canada, the Province of Quebec, the USEPA, the Swedish Institute of Environmental Medicine, the United Kingdom, and the World Health Organization, and the States of California, Louisiana, Massachusetts, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, and Texas. The sizable breadth of both scientific studies and reviews suggesting the appropriateness of the current ESLs and ReVs for 1,3-butadiene, coupled with the continued decline in ambient concentrations, provide the TCEQ a high level of confidence in its determination that 1,3-butadiene is no longer considered of potential health concern in the Milby Park Area.

- 2) **Comment:** We would recommend that TCEQ set [the USEPA's IRIS] level as its goal for the Milby Park monitor. TCEQ's ... ESL for 1,3-butadiene falls far outside of the **IRIS** risk range.

Response: It was unanimous among the external, internationally-renowned expert peer reviewers that the updated epidemiological studies conducted by the University of Alabama at Birmingham (UAB) researchers, upon which the TCEQ derived its unit risk factors, were superior to the outdated epidemiological studies used by EPA in its derivation of the inhalation unit risk (Delzell 1995, 1996). As science continues to advance, so must the policy decisions based on that science. Therefore, the lack of an updated cancer assessment by USEPA should not prevent TCEQ from conducting an updated cancer assessment for 1,3-butadiene based on advancements in science. Accordingly, the TCEQ will continue to set its screening levels and air quality goals based on the most up-to-date, scientifically-defensible data available which, in the case of 1,3-butadiene, is the UAB study.

- 3) **Comment:** The need to reduce the ambient level below the current level is reflected in the agreement between TCEQ and the large 1,3-butadiene emitter, which set a goal of a net fence line measurement of 0 ppb_v.

Response: The TCEQ commends Texas Petrochemicals LP (TPC) on their commitment to the voluntary emissions reduction agreement signed in 2005. The efforts of this and other companies in the Milby Park Area are responsible for the dramatic decline in ambient concentrations of 1,3-butadiene measured at the Milby Park monitor. However, the goal of 0 ppb 1,3-butadiene at TPC's fence line mentioned in the letter was not dependent upon Milby Park's presence on the Air

Pollutant Watch List (APWL) or the screening levels used by the TCEQ but, rather, was a policy-driven agreement. In contrast, the placement or removal of areas and/or pollutants on the APWL has and will continue to be based on potential risks of adverse health effects to the public living in the area, not upon policy decisions such as voluntary agreements for emission reductions. Therefore, TCEQ's agreement with TPC will not alter the proposal to remove 1,3-butadiene from the APWL. Conversely, the proposal to remove 1,3-butadiene from the APWL will not alter TCEQ's agreement with TPC.

- 4) Comment:** A recent study published in a peer reviewed journal shows a significant association between childhood cancers and proximity to high concentrations of 1,3-butadiene.

Response: Whitworth *et al.* (2008) was an ecological epidemiologic study. Though this type of study can be useful in directing future research, the study design is inadequate to quantify the dose-response relationship between 1,3-butadiene and leukemia. Among the many confounding factors mentioned by the authors in their own document, the study utilized modeled concentrations of 1,3-butadiene coupled with benzene and did not consider the effects of 1,3-butadiene as a single pollutant, which leads to inaccurate characterization of exposure. Because of the many limitations of the study, it is inappropriate for use in development of screening levels, as outlined in the ESL guideline document.

*2008 monitoring data have not been fully validated and there was less than 75% data return due to power outages from Hurricane Ike.



Response to APWL Comment Submitted by the City of Houston

Date: June 8, 2009

APWL Site Under Consideration

County: Harris

City: Houston

TCEQ Region: 12 (Houston)

APWL Site Number (for existing sites): APWL 1207

Pollutant(s): Styrene

Comment: We also want to thank you for adding styrene to the APWL for the Milby Park Area. We appreciate the opportunity to share our data with you and look forward to working alongside TCEQ as we address this problem. It is our desire to see the styrene levels drop quickly, and to receive notice that it, too, has been removed from the APWL!

Response: The TCEQ appreciates the City of Houston's interest in the Milby Park area. During the public comment period for the proposal to add styrene to the Milby Park APWL, new information that was not previously considered has come to the Toxicology Division's attention. Numerous proactive steps have been taken by Goodyear Tire and Rubber Company during 2008 to address the source of the elevated styrene emissions detected at the Milby Park monitor (CAMS 169, 2201A Central St.). Specifically, Goodyear has altered its operational practices, amended their permit to include a 25% reduction in allowable styrene emissions, and signed a voluntary emissions reduction agreement with the TCEQ. As a result of these efforts, there was only one exceedence of the odor-based effects screening level for styrene between July and December 2008 and the monitoring data available for 2009 show a consistent decreasing trend. Therefore, due to the new information provided by Goodyear Tire and Rubber Company, the latest available monitoring data, and concurrence from other divisions within the TCEQ, styrene will not be added to APWL 1207, but the TCEQ will continue to monitor styrene concentrations at CAMS 169 for improvements.