

# PETROLOGISTICS

PL Propylene LLC  
9822 La Porte Freeway  
Houston, TX 77017

January 7, 2012

Ms. Charlotte Horn  
Texas Commission on Environmental Quality  
Office of Legal Services, MC 205  
P.O. Box 13087  
Austin, Texas 78711-3087

Re: Submittal of Comments –Rule Project 2009-009-101-AI  
Chapter 101, General Air Quality Rules

Dear Ms. Horn:

PL Propylene, LLC (PL Propylene) appreciates the opportunity to comment on the proposed rules implementing the collection of the fee required under Section 185 of the federal Clean Air Act. PL Propylene operates a single facility in Harris County, which produces olefins using natural gas.

PL Propylene appreciates the efforts of staff and the Commission to fashion a rule that is approvable under EPA rules and guidance, while maximizing flexibility for facilities and air quality for the citizens of the Houston Galveston area. However, PL Propylene has found that its very unusual situation will preclude the company from availing itself of much of the flexibility contained in the rule, aside from the alternative baseline contained in proposed 30 TAC §101.106(b). Absent the ability to use the alternative baseline, the facility's baseline would be zero under the proposal, resulting in an assessment of over \$2,000,000 per year on its operations. Based on the preamble and rule language, it seems that the Commission would not intend this outcome for a facility existing prior to the attainment year with the misfortune of being temporarily shut down during that year. This outcome seems particularly inappropriate when, as was the case for PL Propylene, the facility was restarted with updated equipment resulting in a reduction in actual emissions.

PL Propylene therefore requests confirmation that the facility is eligible to use 101.106(b) in the calculation of its baseline. In the alternative, PL Propylene requests that language be added to the rule clarifying that facilities temporarily idled in the attainment year qualify as "irregular, cyclical, or otherwise vary[ing] significantly from year to year."

## *Facts*

PL Propylene is an olefins facility formerly owned by Exxon Chemical. The plant has been in operation for several decades, with emissions varying significantly over its operating life. For example, in the 2000 to 2005 period, the plant saw NOx emission ranging from approximately 417 tons in 2000 to 194 tons in 2002. VOC emissions also varied dramatically, going from a high of 149 tpy in 2000 to 67 tpy in 2002. A table of the recent past emission trend is attached. The plant was temporarily idled for several years, reflecting a period of high natural gas prices and changes in the olefins market. This idle period included

# PETROLOGISTICS

the 2007 attainment year. During the idle period, the plant was purchased and transferred from the prior owner, Exxon Chemical, to PL Propylene, and the facility was modified to produce a more targeted olefins product. As part of this modification, emissions of ozone precursors were substantially reduced, and some existing equipment was replaced with newer and more efficient technology.

As a result, the emissions inventory for the attainment year reflects no emissions for PL Propylene. Under the standard baseline calculation in proposed 30 TAC §101.106(a), PL Propylene's baseline would be zero, resulting in the assessment of the fee on all emissions of ozone precursors, an amount estimated to be over \$2,000,000 per year at current emissions levels.

## *Interpretation of 30 TAC §101.106(b)*

The language in 101.106(b) is based on EPA guidance issued March 21, 2008 by William Harnett, Director of the Air Quality Policy Division. In that memo, EPA noted,

In some cases...the amount calculated for a particular source in the attainment year may not be considered representative of the source's normal operating conditions. In these cases, the CAA allows for use of an alternative calculation method for sources whose annual emissions are "irregular, cyclical, or otherwise vary significantly from year to year."

The memo went on to reference the method adopted under NSR reform for the calculation of "baseline actual emissions", codified in 40 CFR §52.21(b)(48), which allows the use of a 24 month period out of ten years "in order to select a period of time that is more representative of the source's normal operation." The memo noted that this period "allows the source to consider a full business cycle in setting a baseline emissions rate that represents normal operation."

A review of EPA preambles, guidance and interpretive memos provides little guidance as to what constitutes "more representative of the source's normal operation" or what is meant by "irregular, cyclical or otherwise varying significantly from year to year." The preamble to the final adoption of NSR reform notes that the new rule was intended to address the concern that its predecessor limited the ability of an operator "to consider the operational fluctuations associated with normal business cycles when establishing baseline actual emissions." (See 67 FR 80191, December 31, 2002.) In that preamble, EPA noted that it commissioned Eastern Research Group to conduct a study of business cycles in nine industrial sectors, and concluded a ten year cycle reflected the range of cycles seen. EPA commented,

"The new procedure ensures that a source seeking to make changes at its facility at a time when utilization may not be at its highest can use a normal business cycle baseline by allowing the source to identify capacity actually used in order to determine an average annual emissions rate from which to calculate any projected actual emissions resulting from the change."

(Id., at 80199 – 80200.)

# PETROLOGISTICS

Aside from discussions associated with adoption of NSR Reform, PL Propylene was able to find one other guidance document elaborating on what was meant by “not representative of normal source operation.” In its 1990 NSR Workshop Manual, EPA noted in the netting context that the general requirement that the standard baseline of 24 months immediately preceding a physical or operational change could be replaced by another two year period where “the applicant adequately demonstrates that the prior two years is not representative of normal source operation.” (*New Source Review Workshop Manual: Prevention of Significant Deterioration and Nonattainment Permitting*, p. A-39. EPA, October 1990.) The manual goes on to explain, “Normal source operations may be affected by strikes, retooling, major industrial accidents and other catastrophic occurrences.”

## *Analysis*

These concepts of the normal business cycle, and what constitutes abnormal source operations seem to contemplate PL Propylene’s situation. The olefins business is known to be a cyclical business, with cycles driven by downstream market demand and pricing of raw materials, especially natural gas and other petroleum products. (See, *Fitch Comments on Private Letter Ruling on Olefins Manufacturing*, Bloomberg, October 18, 2012, available at [http://www.bloomberg.com/article/2012-10-18/a.Lf3Cr\\_bpTw.html](http://www.bloomberg.com/article/2012-10-18/a.Lf3Cr_bpTw.html) . In this article, Bloomberg reported that the Fitch Ratings agency in its comment concluded, “Olefins manufacturing is a cyclically exposed industry with revenue driven by business cycles and costs determined by feedstock production and consumption dynamics.”) It should be noted that what is now the PL Propylene facility was temporarily idled at a point where natural gas prices had increased to a peak of \$14 / mcf, with the average industrial price in 2005 being more than 50 percent higher than in 2003. (United States Natural Gas Industrial Price 1997-2011, Energy Information Administration. Available at <http://www.eia.gov/dnav/ng/hist/n3035us3a.htm>.)

The shutdown and retooling of the facility which followed this extreme spike appears to have been contemplated by the 2008 guidance, and associated interpretations of the use of the “2 in 10” baseline. The facility’s existing permit was amended to permit the use of new, more efficient technology that allowed the company to respond more effectively to market conditions. The resulting physical changes also allowed the facility to meet and exceed previous production levels, while reducing emissions of ozone precursors.

The temporary idling occasioned by the response to the market is also consistent with EPA’s guidance on “normal operations”. In its 1990 manual, EPA noted that a plant’s emissions may be dropped not just by brief outages or reduced throughput, but also by longer term outages such as “retooling”, repairs occasioned by “industrial accidents” and “strikes”. The temporary idling and retooling experienced by the PL Propylene facility is exactly consistent with this approach.

# PETROLOGISTICS

## *Alternative Language*

If the Commission finds that the language currently proposed for 30 TAC §101.106(b) would not permit PL Propylene to use the alternative baseline, the company respectfully requests that language be added to the rule to clarify that in cases where an existing facility was temporarily shut down during the attainment year, the alternative baseline could be used. Such a change would be consistent with other sections of the rule, where the commission has recognized that reductions have been obtained or credits have been retired to offset increases at a facility. In PL Propylene's case, the facility was not required to undergo nonattainment new source review as the facility's improved controls caused an actual reduction in emissions. This situation, where overall emissions of NOx and VOC have declined, is similar to the reasoning supporting proposed 30 TAC §101.110 for new units.

If the Commission elects to confirm the applicability of the alternative baseline for facilities in situations similar to PL Propylene, we respectfully offer the following language for the agency's consideration:

101.106(f) – A major stationary source that is not in operation during the baseline emissions period due to the construction of an authorized modification that resulted in a NOx or VOC emission reduction may request from the executive director approval to use the total baseline emissions methodology provided under paragraph (b) of this section for the historical period when the plant was operating.

Another alternative would be to modify proposed 30 TC §101.108 to allow facilities temporarily idled in the attainment year with an administratively complete permit amendment to use that section to calculate baseline emissions for the modified facility. Under this scenario, the baseline emissions would be the lower of emissions calculated under 101.106(b) or the permitted limits established under the amendment, provided those emissions of NOx and VOC were at least equal to those included in emissions inventories prior to the attainment date. This approach would comport with the rationale applied to the MSS issue: the emissions being authorized were in existence prior to the attainment year, and are now recognized in the amended permit. The distinction in PL Propylene's case would be that the resulting baseline of the permit allowable would likely be lower than the previously reported emissions.

PL Propylene wishes to reiterate its appreciation for TCEQ's efforts regarding this rule, and its willingness to consider all comments. Please feel free to contact me with any questions you may have.

Sincerely,



Vance Darr, P.E.  
Environmental Manager  
PL Propylene LLC

(Attachment)

## Historical Emissions Inventory

Company Name: PL Propylene LLC

Account No.: HG-0035-U

Regulated Entity No.: RN 102-576-063

<b>Year</b>	<b>NOx (tpy)</b>	<b>VOC (tpy)</b>
<b>1998</b>	374	125
<b>1999</b>	370	132
<b>2000</b>	417	149
<b>2001</b>	249	89
<b>2002</b>	194	67
<b>2003</b>	230	104
<b>2004</b>	299	115
<b>2005</b>	198	96
<b>2011</b>	173	90
<b>2012</b>	186	40