# UNITED STATED ENVIRONMENTAL PROTECTION AGENCY BEFORE THE ADMINISTRATOR

IN THE MATTER OF	*	
PIN OAK TERMINALS, LLC	*	
	*	PETITION FOR OBJECTION
Clean Air Act Title V Permit	*	
No. 2580-00051-V0	*	
	*	Permit No. 2580-00051-V0
Louisiana Department of	*	
Environmental Quality	*	
- •	*	

# **PETITION FOR OBJECTION**

Pursuant to Clean Air Act, 42 U.S.C. §7661d(b)(2) and 40 C.F.R. §70.8(d), International-Matex Tank Terminals, LLC (IMTT or Petitioner) petitions the Administrator of the United States Environmental Protection Agency (EPA) to object to the initial Title V Permit No. 2580-00051-V0 which is proposed to be issued to Pin Oak Terminals, LLC (Pin Oak) for the expansion of the tank terminal located in St. James Parish, Louisiana. Pin Oak has not yet received Title V Permit No. 2580-00051-V0 or commenced construction of the expanded tank terminal.

#### I. Introduction

#### A. About IMTT

IMTT is a bulk liquids storage terminal company that handles and stores bulk liquid commodities throughout the United States. It owns and operates several such terminals along the Mississippi River in Louisiana, such as in St. Rose, Geismer, and Gretna. All of its facilities have air emission permits with several facilities regarded as major sources of air emissions.

IMTT is submitting this Petition for Objection to ensure that all similarly situated facilities undergo the same permit review process. Relevant statutes, regulations, and procedures must be followed so that permit applications are processed in similar ways, all relevant and required information is provided to the public, and all facilities are subjected to substantially the same review process. IMTT has an interest in assuring that the relevant statutes, regulations, and procedures are applied equally to similarly situated facilities.

Further, IMTT has a vested interest in assuring that there are no exceedances of relevant National Ambient Air Quality Standards in current non-attainment areas. To the extent a facility adds emissions that contribute to the total of pollutants in the ambient air, there is a risk that such standards will be exceeded. LDEQ assures, through its permits, that the standards are achieved to protect the public health and environment and foster economic growth. Future plans for economic expansion in the area by IMTT and others will be impacted (through prevention or

reduction) if relevant standards are exceeded or if emissions are such that other economic growth is curtailed or prevented.

#### **B. Pin Oak Terminals**

The Pin Oak Terminal Facility (or the Facility) is a liquids bulk storage terminal or facility in Mt. Airy, Louisiana. Its current permit, Permit No. 2580-00051-02, purports to allow the operation of 46 tanks with a capacity of about 5.9 million barrels. It is a synthetic minor source permit.

Pin Oak submitted an *Application for a Significant Modification to Minor Source Air Permit No.* 2580-00051-02 for an Initial Title V and PSD Permit (the Application). Exhibit A. Supplemental information was submitted on May 11, 2017 (Exhibit B, the May 11 Application) and June 15, 2017 (Exhibit C). Pin Oak plans to handle a variety of materials and products, which "may include, but are not limited to, vacuum gas oil, residual oil No. 6, asphalt, diesel (which could include cutter stock), methanol, benzene, "and other petro-chemical and chemical products." Application, p. 2 of 113. Pin Oak seeks to significantly enlarge and expand the Facility by adding 63 tanks, over 11,000,000 barrels of capacity (for a total of approximately 17 million barrels), and about 1,430 tons per year (TPY) of Volatile Organic Compound (VOC) emissions. See Table 1.

	<b>Current Permit</b>	Application
Date	Aug. 23, 2016	March 3, 2017
Tanks	46	Add 63 tanks
		Enlarge 5 tanks
		Total: 109 tanks
Barrels	5,949,897 bbls	Add over 11,000,000 bbls
		Total: over 17,000,000 bbls
TSCAP VOC TPY	72.75 TPY	Add 1,420.9 TPY
		Total: 1,493.65 TPY
Total VOC TPY	86.64 TPY	Add 1,429.99 TPY
		Total: 1,516.63 TPY

Table 1

On or about October 13, 2017, the Louisiana Department of Environmental Quality (LDEQ) proposed to issue two permits to Pin Oak. LDEQ proposed to issue Prevention of Significant Deterioration (PSD) Permit, No. PSD-LA-821 (the PSD Permit or Draft PSD Permit). Exhibit D. Additionally, LDEQ proposed to issue a Part 70 Operating Permit, No. 2580-00051-V0 (the Title V Permit or Draft Title V Permit.) Exhibit E.

A public hearing was held on November 16, 2017. Public comments were submitted in opposition to the PSD Permit and the Title V Permit. Exhibits F-1, F-2, and F-3. As of the filing of this Petition for Objection, no final permit has been issued.

EPA's 45-day review period ended on or about November 27, 2017. 40 C.F.R. §70.8(c). This Petition for Objection is timely as it is filed "within 60 days after the expiration of the Administrator's 45-day review period." 40 C.F.R. §70.8(d).

### II. Basis Of Objection

The Clean Air Act mandates that the Administrator "shall issue an objection ... if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of [the Clean Air Act], including the requirements of the applicable implementation plan." 42 U.S.C. §7661d(b)(2). EPA shall "object to the issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements under [Part 70]." 40 CFR §70.8(c)(1).

The "petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period." 42 U.S.C. §7661d(b)(2). The objections contained herein were raised during the public comment period.

In the petition for objection process, EPA had historically examined "the propriety of prior construction permitting decisions in the title V permitting process." *In re: Big River Steel, LLC,* Order Responding to Petition Requesting Objection to the Issuance of a Title V Operating Permit, Petition No. VI-2013-10, October 31, 2017 (*Big River Steel*), at p. 13. Indeed, EPA's review was expansive, specifically including "the merits of PSD issues [which] can be ripe for consideration in a timely petition to object under Title V." *Big River Steel,* at p. 13, citing *In re: Shintech, Inc.,* Order on Petition, Permit Nos. 2466-VO, 2467-VO, 2468-VO (September 10, 1997). Thus, applicable requirements expressly include "the requirement to obtain a PSD permit *that in turn complies with the applicable PSD requirements under the Act,* EPA regulations, and the Louisiana SIP." *Id.,* emphasis in original.

EPA criticized this "expansive reading" which it stated only "leads to an incongruous result that is inefficient and can upset settled expectations—on the part of a state, an owner/operator, and the public at large—in circumstances where a source has obtained a legally enforceable preconstruction permit in accordance with the requirements of title I." *Big River Steel*, at p. 10.

Thus, EPA announced a new restrictive policy limiting its review of Title V permits. *Big River Steel*, at p. 20. Henceforth, "EPA should limit its review under the procedures that are unique to title V permits to whether the title V permit has accurately incorporated those terms and conditions and whether the title V permit includes adequate monitoring, recordkeeping, and reporting requirements to assure compliance with the terms and conditions of the preconstruction permit." *Id.* 

However, the limitation announced in *Big River Steel* is inapplicable in this case due to one important distinguishing characteristic. In *Big River Steel*, the PSD Permit had been issued, which allowed the petitioner therein to pursue its claims in state court. EPA stated that "the public had the opportunity to challenge the PSD conditions issued by ADEQ through the appropriate channels of state administrative and judicial review, and in fact the Petitioner took advantage of this opportunity." *Big River Steel*, at p. 18. Indeed, the PSD permit had "already

been the subject of an extensive administrative appeal and a judicial review in the state system." *Big River Steel*, at p. 20.

Here, the situation is entirely different. LDEQ has not issued the PSD Permit or Title V Permit. There is no legal right to seek administrative and/or judicial review of these proposed permits and so Petitioner cannot take advantage of any such reviews until the final permit decision is issued. There have been no administrative or judicial reviews at all, much less 'extensive' ones. Further, Pin Oak has no 'settled expectations' at this time because a PSD permit has not been issued and the draft permit has always been subject to change or revision based on public comments. As a result, EPA's limited review policy, as announced in *Big River Steel*, is not applicable and EPA should review whether the PSD Permit and the Title V Permit fully comply with all PSD and Title V requirements.

To the extent that EPA does seek to apply its more restrictive review process in this matter, viable grounds for an objection still exist and are asserted herein. LDEQ did not accurately incorporate the applicable requirements into the Title V Permit <u>and</u> did not include monitoring, recordkeeping, and reporting requirements in the Title V Permit which are adequate to assure compliance.

The Petitioners specifically allege as the basis for this Petition for Objection that:

- LDEQ did not comply with the requirements of the PSD program (Section III);
- LDEQ did not include all 'applicable requirements,' as that term is defined and interpreted by EPA, into the Title V Permit (Section IV); and
- The Title V Permit contains provisions that are not enforceable (Section V).

### **III. LDEQ Did Not Comply With PSD Requirements**

As noted above, compliance with PSD requirements should be considered in a petition for objection. *Big River Steel*, at p. 13, citing *In re: Shintech, Inc.* Here, LDEQ did not follow the PSD requirements regarding the Best Available Control Technology (BACT) and modeling.

### A. The BACT Determination Is Deficient

The Louisiana State Implementation Plan, which is the 'applicable implementation plan,' contains explicit provisions requiring the application of BACT. LAC 33:III.509 is included within the approved implementation plan. See 40 C.F.R. §52.970(c).

A new major stationary source or major modification "shall apply best available control technology for each regulated NSR pollutant." LAC 33:III.509.J.2 and J.3. BACT itself involves "the maximum degree of reduction for each pollutant … that the administrative authority, on a case-by-case basis, determines is achievable for such source." LAC 33:III.509.B.

# 1. LDEQ's Review Of BACT Is Inadequate

# a. LDEQ Merely Copied The Application

LDEQ's Preliminary Determination Summary, pp. 10 - 20, and the Statement of Basis, Section IX.1, pp. 12 - 14, are virtual carbon copies of Chapter 5 of Pin Oak's Application. LDEQ failed to conduct its own determinations as it merely copied Pin Oak's BACT discussion from the Application. Indeed, LDEQ made no determinations at all as it merely 'cut-and-pasted' Pin Oak's BACT discussion.

LDEQ failed to conduct a rigorous, comprehensive, and independent review of technologies to determine BACT as required by law. BACT is a limitation which "the <u>permitting authority</u> on a case-by-case basis ... <u>determines</u> is achievable." 42 U.S.C. §7479(3), emphasis supplied. As EPA has stressed, "it is important to note that ... the ultimate BACT decision is made by the permit issuing agency." *New Source Review Workshop Manual - Prevention of Significant Deterioration and Nonattainment Area Permitting*, October, 1990 (NSR Manual), p. B-53. As the 'permit issuing agency,' LDEQ must review the documentation and rationale presented and ensure Pin Oak "has addressed all the most effective control options that could be applied." *Id.* 

Thus, LDEQ, not Pin Oak, must make the determination. Here, LDEQ abdicated its role by simply copying Pin Oak's BACT discussion.

### b. LDEQ Did Not Conduct A Thorough Search Of Controls

There is no information regarding available controls beyond the excerpts from the RBLC Database. Application, Appendix B. Other information, such as manufacturer's data, engineering estimates, and the experience of other sources, must be consulted and reviewed. NSR Manual, p. B-24. Additionally, the NSR Manual recommends that other sources be consulted, including guidelines of other districts, control technology vendors, new source review permits and associated inspection and performance test reports, environmental consultants, trade literature, and EPA's New Source Review bulletin board. *Id.*, p. B-11. As a result, to the extent that LDEQ conducted any BACT determination, it is completely inadequate.

Pin Oak does claim that fact sheets and other guidance documents, as well as vendor data, was reviewed and LDEQ alludes to "other information." Preliminary Determination Summary, p. 11, and Application, p. 40. But, there is no proof that any such information was in fact reviewed because it is not included in the Application, supplemental information, or the administrative record during the public comment period.

# 2. Hot Oil Heaters

Pin Oak propsoed low NOx burner technology, along with good combustion practices and pipeline quality natural gas, as BACT for the three Hot Oil Heaters, based on its review of the control options in the RBLC Database: low NOx burners (LNB), ultra-low NOX burners (ULNB), selective catalytic reduction (SCR) with LNBs, flue gas recirculation (FGR), good

combustion practices, good design, and proper operation. Application, p. 42 of 113, and Table 5-1.

Pin Oak states that "LNBs, LNBs with FGR, and ULNBs have been recently identified as BACT" and are "the most common NOx control technologies currently used." Application, p. 43 of 113. Pin Oak notes that reductions range between 68 and 84 per cent for "combustion controls (including LNB and FGR)." Application, Table 5-2.

The BACT analysis is deficient for the following reasons:

- Pin Oak does not evaluate LNBs with FGR or ULNBs to determine if these control technologies offer more protection.
- There is no discussion of which of the controls (LNBs, LNBs with FGR, or ULNBs) achieve the 64 to 84 per cent reduction.
- There is no ranking of LNBs with FGR or ULNBs to determine which offers the 'best available' controls and reductions.

### 3. Storage Vessels

Pin Oak devotes only a few paragraphs to the BACT determination for the 109 planned storage vessels which will emit over 1,400 TPY of VOCs. Application, pp. 44-46 of 113. Pin Oak reviewed the RBLC Database and found that BACT includes "no control, submerged fill, fixed roof tanks, floating roof tanks, or add-on control devices such as scrubbers and thermal oxidizers." Application, p. 45 of 113.

Control options for tanks storing high vapor pressure products include internal floating roofs (IFRs) with NSPS-complaint seals and fittings, external floating roofs (EFRs) with NSPS-compliant seals and fittings, or routing vapors to a collection system for combustion control. Application, p. 45 of 113. Pin Oak acknowledges that "all three control options are typically considered to have roughly equal control effectiveness." Application, p. 45 of 113. But, Pin Oak failed to review, evaluate, or even discuss the use of combustion controls to determine if BACT should include the use of combustion controls in connection with IFRs or EFRs. This silence renders the BACT analysis inadequate.

### B. The NAAQS Determination For Ozone Is Deficient

Pin Oak and LDEQ failed to properly assure that the National Ambient Air Quality Standards (NAAQS) for ozone will not be exceeded. No modeling was performed as required by the regulations.

"All estimates of ambient concentrations required under this Subsection shall be based on applicable air quality models, databases, and other requirements specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models)." LAC 33:509.L.1. Section 5.0 of Appendix W sets forth the requirements for modeling for ozone. EPA recommends that "models that estimate ozone concentrations are needed to assess impacts from specific sources or source complexes to satisfy requirements for NSR and other regulatory programs." 40 C.F.R. Part 51, App. W,

Section 5.3. For increases of VOC above 100 TPY, "an ambient air impact analysis including the gathering of ambient air quality data" must be performed. LAC 33:509.I.5.a.

LDEQ itself has stated: "Dispersion modeling is <u>required</u> when applying for a Prevention of Significant Deterioration (PSD) or for the Louisiana Comprehensive Toxic Air Pollutant Emission Control Program [LAC 33:III.Chapter 51]. If applying for a PSD permit, this modeling must be submitted with the PSD permit application. If it is not, then the application will not be considered technically complete." Exhibit G, p. 133 of 195, emphasis in original.

Despite these explicit provisions, no modeling at all was performed for ozone. LDEQ allowed the use of a "qualitative analysis" to estimate ozone formation in spite of regulations to the contrary. Application, Appendix C, Section 3.2. Pin Oak's Air Quality Modeling Protocol, dated December, 2016, states that Pin Oak will "perform an analysis as described in Appendix Q of the TCEQ's Air Modeling Guidelines APDG 6232 (June, 2014)." Application, Appendix C, Section 3.2. The Application contains a discussion of the method found in Appendix Q. Application, pp. 78 – 79 of 113.

However, the use of this method is improper. In April, 2015, prior to the submittal of the Application, TCEQ updated its Air Modeling Guidelines, APDG 6232. See Exhibit F-1, Exhibit E, attached thereto). Appendix Q, the appendix relied on by Pin Oak, was removed from Air Modeling Guidelines, APDG 6232, as it was "under further review." *Id.* As a result, Pin Oak utilized a method that had been removed and was under review when it submitted its Application.

Further, Pin Oak utilized Marathon's modeling work for a project at the Marathon Garyville Refinery and adopted it as its own to show that Pin Oak's NOx and VOC increases would not cause an exceedance of the ozone NAAQS. Application, Appendix C, Section 3.2, and Application, pp. 78 - 79 of 113. There is no exemption in the regulation allowing a proposed facility to adopt another facility's model to use as its own and then simply "compare their proposed emission rates with the Pin Oak proposed emission rates." *Id.* There is no protocol or procedure cited by Pin Oak to guide this qualitative analysis. Also, these projects are at least two miles apart and have appreciably different levels of NOx and VOC emissions.

### **IV.** Applicable Requirements

### A. Introduction

The Clean Air Act requires that each Title V permit "shall include enforceable emission limitations and standards ... and such other conditions as are necessary to assure compliance with <u>applicable requirements</u> of this chapter, including the requirements of the applicable implementation plan." 42 U.S.C. §7661c(a), emphasis supplied.

Applicable requirements include "any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act" and "any term or condition of

any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act." 40 C.F.R. §70.2.

EPA has recently stated that 'applicable requirements' "include the terms and conditions of preconstruction permits" and that "the terms and conditions of that PSD permit [must be] included in a source's title V permit. *Big River Steel*, pp. 9 and 10. Thus, the terms and conditions of the PSD Permit are 'applicable requirements' which must be incorporated into the Title V Permit.

Under the more restrictive review announced in Big River Steel, EPA limits its review "to whether the title V permit has accurately incorporated those terms and conditions," i.e., the terms and conditions of the PSD Permit. *Big River Steel*, p. 20. Petitioner specifically alleges herein, as detailed below, that LDEQ did not incorporate the terms and conditions of the PSD Permit into the Title V Permit.

# B. LDEQ Did Not Incorporate PSD Permit Terms Into The Title V Permit

LDEQ "shall incorporate into each permit sufficient terms and conditions to ensure compliance with all state and federally applicable air quality requirements and standards at the source and such other terms and conditions as determined by the permitting authority to be reasonable and necessary." LAC 33:III.501.C.6. Further, LDEQ mandates that all Title V permits "shall include the elements required by 40 C.F.R. 70.6." LAC 33:I.507.B.2. These provisions are part of the 'applicable implementation plan.' 40 C.F.R. §52.970(c).

Pursuant to such authority, LDEQ included Specific Condition No. 2 in the PSD Permit. It states that the "permittee is authorized to operate in conformity with the specifications submitted to [LDEQ] as analyzed in LDEQ's [Preliminary Determination Summary] and subject to the following limitations and other specified conditions. Specifications submitted are contained in the application and Emission Inventory Questionnaire dated March 3, 2017, along with supplemental information dated May 11, 2017 and June 15, 2017."

The "specifications submitted" to LDEQ are contained in the Application and supplemental information. These "specifications" were specifically incorporated into the PSD Permit. As such, they must also be incorporated into the Title V Permit pursuant to the Clean Air Act and the regulations promulgated thereunder, as recently interpreted by EPA in *Big River Steel*.

There are multiple provisions (i.e., "specifications") in the Application that are not included in the Title V Permit. Additionally, the Preliminary Determination Summary contains provisions that are not included in the Title V Permit. The provisions of the Application and in the Preliminary Determination Summary which are not included in the Title V Permit are detailed below.

# 1. Destruction & Removal Efficiency

The Application states that the destruction and removal efficiency (DRE) of the Vapor Control Units is 99%. Application, pp. 487, 490 493, and 496 of 613. The Application also states that

emissions from marine, railcar, and tank truck loading will be controlled by "vapor control units with 99% destruction efficiency for loading operations of light products." Application, Table 5-1. The supplemental information submitted on May 11 clearly states that Pin Oak agreed to "control via vapor units with 99% destruction efficacy as BACT for VOC from loading operations of light products (vapor pressure  $\geq 1.5$  psia)." May 11 Application.

Despite these statements, the Title V Permit allows a lower DRE of 98% or even 90%. Title V Permit, Specific Requirements (SR) 38, 41, 42, 46, 47, 49, 64, 66, 71, 73, 87, 108, 124, 127, 134, and 143. See Table 2.

Additionally, LDEQ decided that BACT was control of VOC "via vapor control units with a 98% destruction efficiency." Title V Permit, SR 87, 134, and 183; PSD Permit, Briefing Sheet, p. 4 and Preliminary Determination Summary, p. 17. However, the Title V Permit does not achieve this DRE for all inputs to the vapor control units.

For VOC, the 98% reduction by weight for VOC is limited to "marine vessel loading operations." Title V Permit, SR 42. Otherwise, VOC DRE and/or reduction by weight must only be equal to or over 90%. Title V Permit, SR 46 and 47. VOC DRE must only be equal to or over 90% for railcar and tank truck loading. Title V Permit, SR 127 and 163. Thus, 98% DRE must only be achieved under the Title V Permit for emissions from marine loading and not emissions from tank truck or railcar loading.

Unit	Application	Permit	Description
VRU	99% - p487, p490	SR 38	Benzene - >98% reduction by weight
	99% - p493		
	99% - p496		
		SR 41	HAP - >98% reduction by weight (marine)
		SR 42	VOC - >98% reduction by weight (marine)
		SR 46	VOC - > 90% DRE
		SR 47	VOC - >90% reduction by weight
Marine	99% - p487, p490	SR 49	Benzene - >98% reduction by weight
		SR 64	HAP - >98% reduction by weight
		SR 66	VOC - >98% reduction by weight
		SR 71	VOC with TVP <1.5 psia exempt
		SR 73	TVP >1.5, VOC - >90% reduction by weight
		SR 87	BACT = VOC 98% DRE
Railcar	99% - p493	SR 108	Benzene - >98% reduction by weight
		SR 124	VOC with TVP <1.5 psia exempt
		SR 127	VOC - > 90% DRE
		SR 134	BACT = VOC 98% DRE

Table 2

Tank	99% - p496	SR 143	Benzene - >98% reduction by weight
Truck			
		SR 160	VOC with TVP <1.5 psia exempt
		SR 163	VOC - > 90% DRE
		SR 183	BACT = VOC 98% DRE

#### 2. True Vapor Pressure

a. There is no provision in the Title V Permit preventing or prohibiting the storage of materials with a true vapor pressure greater than 11.1 psai. See Title V Permit, Specific Requirements 1 - 31 - 37. However, the PSD Permit, at p. 16, states: "No products with vapor pressure greater than 11.1 psia are proposed to be stored." See also, Application, at p. 46 of 113.

b. There is no provision in the Title V Permit preventing or prohibiting the storage of materials with a true vapor pressure greater than 0.75 in fixed roof tanks. See Title V Permit, Specific Requirements 32 - 37. However, the PSD Permit, at p. 16, states: "For storage vessels string products with vapor pressure < 0.75 psia, Pin Oak proposes the use of vertical fixed roof tanks." Further, the Application of March 3, 2017 states: 'fixed roof tanks will store only products with vapor pressure below 0.75 psai." Application, p. 8 of 113 and p. 46 of 113.

c. There is no prohibition in the Title V Permit limiting the storage of materials with a true vapor pressure greater than 0.75 but less than 11.1 psia to internal floating roof tanks. See Title V Permit, Specific Requirements 1 - 32. However, the PSD Permit, at p. 16, states: "Pin Oak proposes the use of internal floating roof tanks ... for all storage tanks string product with vapor pressure  $\geq 0.75$  but less than 11.1 psai." See also, Application, at p. 46 of 113.

### 3. Submerged Fill Pipe For Fixed Roof Tanks

There is no requirement in the Title V Permit requiring the use of a submerged fill pipe for fixed roof tanks. See Title V Permit, Specific Requirements 32 - 37. However, the PSD Permit, at p. 16, states: "For storage vessels storing products with vapor pressure < 0.75 psia, Pin Oak proposes "submerged fill." See also, Application, at p. 46 of 113.

### 4. Tank Color

Pin Oak calculated emissions from 26 vertical fixed roof tanks (Tanks 110-1 through 110-26) using Tanks 4.09d. As part of those calculations, Pin Oak assumed that the shell color was white. Application, p. 383 of 613. However, Pin Oak is actually constructing these tanks with aluminum jacketing. By using aluminum instead of a white shell, emissions from the tanks will be higher than calculated (based on the difference in inputs into the calculation equations).



Source: http://pinoakterminals.com/2017/11/13/drone-video-november-2017/

# C. LDEQ Did Not Comply With The Applicable Implementation Plan

### V. Enforceability

#### A. Introduction

The Clean Air Act specifically requires that every permit "shall include <u>enforceable</u> emission limitations and standards, ... and such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan." 42 U.S.C. §7661c(a), emphasis supplied. LDEQ mandates that all Title V permits "shall include the elements required by 40 C.F.R. 70.6." LAC 33:I.507.B.2.

As the U.S. EPA recently stated, a key concept regarding enforceability "is whether the limit is enforceable as a practical matter." <sup>1</sup> "Practicable enforceability" means that the provisions in a permit must specify:

(1) A technically-accurate limitation and the source subject to the limitation;

(2) the time period for the limitation (hourly, daily, monthly, and annual limits such as rolling annual limits); and

(3) the method to determine compliance including appropriate monitoring, recordkeeping, and reporting.

73 Fed. Reg. 1570, 1573 (Jan. 9, 2008).

The permit "must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with permit limitations. Permit limitations or conditions must be supported by monitoring, recordkeeping, and reporting requirements which are sufficient to enable both <u>regulators and citizens</u> alike to determine whether a limit has been exceeded, and if so, to take appropriate enforcement action." Yuhuang Order, p. 14, emphasis supplied.

<sup>&</sup>lt;sup>1</sup> *In the Matter of Yuhuang Chemical Inc.*, Order on Petition No. VI-2015-03, Aug. 31, 2016, (Yuhuang Order), p. 14; available at: <u>https://www.epa.gov/sites/production/files/2016-09/documents/yuhuang response2015\_0.pdf</u>.

The "permit ... must contain specific, clear, concise, and enforceable conditions." NSR Manual, p. H-1. It must be a "stand-alone' document." *Id*.

Under the more restrictive review announced in *Big River Steel*, EPA limits its review to "whether the title V permit includes adequate monitoring, recordkeeping, and reporting requirements to assure compliance with the terms and conditions of the preconstruction permit." *Big River Steel*, p. 20. Petitioners specifically allege herein, as detailed below, that the terms and conditions of the Title V Permit are inadequate to assure compliance.

### B. The Draft Title V Permit Does Not Assure Enforceability

### **1.** Vapor Control Units

The Vapor Control Units will allegedly control all emissions from the marine, railcar, and tank truck loading operations. Certain conditions are established for these units, including various DRE requirements. Title V Permit, SR 38 - 47. However, there is not a single monitoring, recordkeeping, reporting, testing, or maintenance requirement specified within the specific requirements. As a result, there is no method to assure compliance with the DRE requirements.

Each permit shall contain "all monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements" or "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit. LAC 33:III.507.B.2; 40 C.F.R. §70.6(a)(3). Further, all permits "shall contain ... compliance certification, testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." 40 C.F.R. §70.6(c)(1). No such provisions are included in the Title V Permit for the Vapor Control Units.

### 2. Reference To Other Documents

The Title V Permit is not a 'stand-alone' document. There are numerous references to subparts within the specific requirements, requiring both regulators and citizens alike to obtain, review, and independently determine which provisions in the subpart actually apply.

These references include, without limitation:

- SR 18: Storage vessels shall comply with applicable requirements of 40 CFR 61 Subpart Y when in benzene service.
- SR 22: Storage vessels will be subject to 40 CFR 63 Subpart R. See also, SR 35.
- SR 23: Comply with the "most stringent control requirements" 40 CFR 63 Subpart R, 40 CFR 60 Subpart Kb, or 40 CFR 60 Subpart XX. See also, SR 35.
- SR 31: BACT is the "most stringent of 40 CFR 60 Subpart Kb and 40 CFR 63 Subpart R."

Additionally, the specific requirements create ambiguity. Another regulator within LDEQ, such as an inspector, and certainly a citizen will not know which provisions the LDEQ permit writer intended to apply. These include, without limitation:

- SR18: While it is clear that LDEQ intends that certain provisions of 40 CFR 61 Subpart Y (the 'applicable requirements') apply when the storage vessel is in benzene service, it is unclear exactly which provisions LDEQ considers applicable.
- SR 23 and SR 35: It is unclear which of the provisions of 40 CFR 63 Subpart R, 40 CFR 60 Subpart Kb, or 40 CFR 60 Subpart XX LDEQ considers to be "most stringent control requirements."

To assure compliance and to make the Title V Permit an enforceable 'stand-alone' document, LDEQ must specify the exact provisions within each subpart that apply to the Facility.

### 3. Presence of a Leak

The Draft Title V Permit contains conflicting provisions, creating confusion for regulators and citizens as to which method must be used. LDEQ required that the presence of a leak be monitored "by technically sound method during loading of tank trucks, railcars, or marine vessels." Title V Permit, SR 56 and 113. However, it requires that the presence of a leak be "monitored by visual, audible, and/or olfactory during loading or unloading operations." Title V Permit, SR 129 and 175. Thus, two distinctly different compliance methods are included to determine the presence of a leak during loading of tank trucks and railcars.

### 4. The Title V Draft Permit Understates Actual Emissions

Each Part 70 source must submit an application "pursuant to LAC 33:III.517." LAC 33:III.507.C.2. The application "shall contain ... calculations ... provided in sufficient detail to allow a determination of the appropriateness and accuracy of such calculations." LAC 33:III.517.D.9. Both of these provisions are part of the 'applicable implementation plan.' 42 C.F.R. §52.970(c).

### a. Destruction & Removal Efficiency

Pin Oak utilized a 99% DRE to estimate emissions. Application, pp. 487, 490 493, and 496 of 613. However, as LDEQ requires only a 90% or 98% DRE, actual emissions will be higher. See also, Section IV.B.1, incorporated herein by reference.

# b. Vapor Pressure In Calculations

Pin Oak states that it will receive materials with vapor pressures up to 11.1 psia. Application, at p. 46 of 113. However, it used vapor pressures between 0.0089 to 6.27 psia to calculate emissions. Application, at p. 380 of 113. To the extent it receives materials with a vapor pressure above 6.27 psia, emissions will be understated.

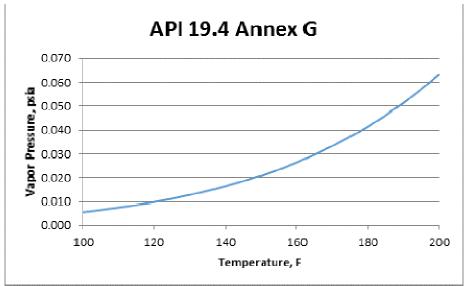
# c. Vapor Pressure In Standard Reference Texts

The vapor pressure of a material determines the volatilization of constituents from the material: the higher the vapor pressure, the higher the volatilization from that material. LDEQ, though,

does not require that actual testing be done to obtain a true vapor pressure in order to determine the actual emissions. Instead, the more generalized methods in LAC 33:III.2103.H.3 are specified, which allows the use of "standard reference texts" or "available data on the Reid vapor pressure." Title V Permit, SR 28; LAC 33:III.2103.H.3.

Pursuant to the Title V Permit, the true vapor pressure obtained from these very general reference sources are then used in generalized formulas in AP-42 to calculate the 'actual' VOC emissions from all storage vessels for compliance purposes. Title V Permit, SR 306. Thus, rather than using actual test data to calculate emissions, generalized data may be used to estimate vapor pressures which in turn is used with generalized equations to calculate emissions.

Vapor pressure information from "standard reference texts" varies widely. One example is the vapor pressure of No. 6 Fuel Oil, a product that Pin Oak plans to store at the Facility. The current industry standard is 0.013 psia at 130F, which is generated using the Antoine Coefficients from Section G.4.2 from API's Manual of Petroleum Measurement Standards, Chapter 19.4 and Annex G. See Figure, below. However, AP-42 allows a lower vapor pressure to be used, 0.001 psia. Calculating emissions using the lower vapor pressure will understate the actual amount of emissions.



Source: API's Manual of Petroleum Measurement Standards, Chapter 19.4 and Annex G

Thus, Pin Oak may pick the most advantageous true vapor pressure from a variety of potential sources and use that information to calculate VOC emissions. This creates a situation in which the actual VOC emissions will never be known as the underlying data on vapor pressure may be 'cherry-picked' from 'standard reference texts.'

### VI. Conclusion

For the foregoing reasons, EPA must object to the Title V Permit No. 2580-00051-V0 for Pin Oak Terminals, LLC.

#### **RESPECTFULLY SUBMITTED:**

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#### **List of Exhibits**

- A. Application for a Significant Modification to Minor Source Air Permit No. 2580-00051-02 for an Initial Title V and PSD Permit, March 2017
- B. Supplemental information May 11, 2017
- C. Supplemental information June 15, 2017
- D. PSD Permit (Draft)
- E. Title V Permit (Draft)
- F-1. Comments IMTT

Includes Exhibit E: TCEQ Air Modeling Guidelines, APDG 6232, April 2015 (excerpts)

- F-2. Comments Louisiana Environmental Action Network
- F-3. Comments Louisiana Bucket Brigade
- G. Louisiana Guidance for Air Permitting Actions, Rev. 5, January 2013 (pertinent excerpts)