

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 9, 2009

LaDonna Castañuela, Chief Clerk
Texas Commission on Environmental Quality
Office of the Chief Clerk, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

Re: Sartomer Inc.
TCEQ Docket No. 2009-1468-MIS-U; Use Determination No. 13801
Executive Director's Response to Sartomer Inc.'s Appeal of the Executive Director's
Negative Use Determination

Dear Ms. Castañuela:

Enclosed for filing, please find an original and 7 copies of the "*Executive Director's Response to Sartomer Inc.'s Appeal of the Executive Director's Negative Use Determination.*" I have also attached the following exhibits to assist the Commission in the resolution of this matter:

- Exhibit 1 Notice of Deficiency (NOD) and Response.
- Exhibit 2 Copy of 30 Tex. ADMIN. CODE § 115, Subchapter B, Division 2.
- Exhibit 3 TCEQ, Property Tax Exemptions for Pollution Control Property, Draft Guidelines Document for Preparation of Use Determination Applications, January 2008.

Please file stamp these documents and return one complete set to Jose L. Caso, Staff Attorney, Environmental Law Division, MC 173. If you have any questions, please do not hesitate to contact me at (512) 239-4309.

Sincerely,

A handwritten signature in black ink, appearing to read "Jose L. Caso", written over a horizontal line.

Jose L. Caso, Staff Attorney
Environmental Law Division

TCEQ DOCKET NO. 2009-1468-MIS-U
TCEQ ID NO. 09-13801

| | | |
|-------------------------------|---|-----------------------|
| APPEAL OF THE | § | BEFORE THE |
| EXECUTIVE DIRECTOR'S NEGATIVE | § | |
| USE DETERMINATION ISSUED TO | § | TEXAS COMMISSION ON |
| SARTOMER INC. | § | |
| APPLICATION NUMBER: 09-13801 | § | ENVIRONMENTAL QUALITY |

**EXECUTIVE DIRECTOR'S RESPONSE TO SARTOMER INC.'S APPEAL OF THE
EXECUTIVE DIRECTOR'S NEGATIVE USE DETERMINATION ISSUED FOR
SARTOMER RESIN MANUFACTURING PLANT**

The Executive Director of the Texas Commission on Environmental Quality (the "Commission" or "TCEQ") files this response to the appeal of the Executive Director's Use Determination issued to Sartomer Inc. for its cooling tower's re-packing at the Sartomer Resin Manufacturing Plant. The appeal was submitted by Ronald Little of Associated Tax Appraisers.

For the reasons described below, the Executive Director respectfully requests that the Commission deny the appeal and affirm the Executive Director's Tier I negative use determination for (1) re-packing of a cooling tower heat exchanger ("re-packing").

PROGRAM BACKGROUND

This appeal of the Executive Director's negative use determination is filed pursuant to H.B. 3121 (77th Tex. Legislature, 2001) establishing an appeal process for use determinations and the Commission rules implementing the legislation. See TEX. TAX CODE § 11.31 and 30 TEX. ADMIN. CODE § 17.25.

In 1993, the citizens of Texas voted to adopt a tax measure called Proposition 2. Proposition 2 was implemented when Article VIII, § 1-1 was added to the Texas Constitution on November 2, 1993. The amendment allowed the legislature to "exempt from ad valorem taxation all or part of real and personal property used, constructed, acquired, or installed wholly or partly to meet or exceed rules or regulations adopted by any environmental protection agency of the United States, this state, or a political subdivision of this state for the prevention, monitoring, control, or reduction of air, water, or land pollution."

The Texas Legislature codified the constitutional amendment in 1993 as TEX. TAX CODE § 11.31 (effective January 1, 1994). The statutory language in the codified version mirrored the language of Article VIII, § 1-1. In 2001, the legislature amended Section 11.31 when it passed H.B. 3121 (effective September 1, 2001). This bill added several new procedural requirements to § 11.31, including a provision requiring the establishment and implementation of a process to appeal use determinations. See TEX. TAX CODE § 11.31(e) and 30 TEX. ADMIN. CODE § 17.25. The amendment also required the Commission to adopt new rules establishing specific standards

for the Executive Director to follow in making use determinations for property that qualified for either full or partial pollution control use determinations. *See* TEX. TAX CODE § 11.31(g).

Appeals under Section 17.25 of the Commission rules may be filed by either the applicant seeking the determination, or by the chief appraiser of the tax appraisal district affected by the determination. TEX. TAX CODE § 11.31(e) and 30 TEX. ADMIN. CODE § 17.25(a)(2). Appellant is required to explain the basis for the appeal. *See* 30 TEX. ADMIN. CODE § 17.25(b)(5). Under Section 11.31(i) of the Tax Code, “the chief appraiser shall accept a final determination by the Executive Director as conclusive evidence that the facility, device, or method is used wholly or partly as pollution control property.”

PROCEDURAL BACKGROUND

On or about May 15, 2009, Sartomer Inc. (“Sartomer” or “Appellant”) filed a Tier I application with the Executive Director seeking a use determination under Section 11.31 of the Tax Code for the re-packing of a cooling tower heat exchanger used in a resin manufacturing plant in Harris County.

On or about June 5, 2009, technical staff issued an administrative notice of deficiency (“NOD”). Sartomer submitted an updated application in response to the NOD and on July 14, 2009, the application was declared administratively complete. On July 31, 2009, the Executive Director completed the technical review of the application.

On August 18, 2009, the Executive Director issued a negative Tier I use determination for the re-packing of the cooling tower heat exchanger listed in the application and mailed notice of the negative use determination to Sartomer. On September 4, 2009, Sartomer filed a timely appeal with the Office of the Chief Clerk appealing the negative use determination.

DESCRIPTION OF THE POLLUTION CONTROL PROPERTY

The equipment listed in the Tier I application is the re-packing of a cooling tower heat exchanger. A cooling tower operates by releasing the heat from the hot water that travels downward through the packing while fans draw air through the tower. The packing is a fibrous material placed inside of a cooling tower that separates the hot water into small droplets as it travels downward. This process reduces the water’s temperature as the drawn air causes a small portion of the water to evaporate. The cooled water is then collected in a basin at the bottom of the cooling tower.

The water that is collected in the basin travels into a condenser. Inside the condenser a heat exchanger cools the facility’s hot process fluids and heats the water from the cooling tower. The hot water exiting the condenser returns to the cooling tower so that it may undergo the same process again. In theory, the water utilized in a cooling tower never comes in contact with any process fluids. Therefore, the water that is utilized in a cooling tower would not contain any chemicals or volatile organic compounds (“VOC’s”) that could be released into the environment.

In practice, however, there can be leaks in the piping. The result is that process fluids containing VOC's may enter into the water stream. As a result, VOC's may be emitted by the cooling tower.

Re-packing is part of the cooling tower's maintenance that consists of replacing the packing inside of a cooling tower.

Sartomer described the equipment as follows:

“Cooling Tower (packing). Replaced old packing to improve cooling tower exchanger efficiency. The delivery of cooling more efficiently [sic] will increase efficiency [sic] of condensers and reduce VOC emissions.”

APPELLANT'S CLAIMS

Sartomer's basis for this appeal is that the re-packing meets or exceeds the adopted environmental regulations in 30 Tex. ADMIN. CODE § 115. In addition, Sartomer argues that the re-packing's “only function is to increase the efficiency of condensers and reduce VOC emissions.”

LEGAL ANALYSIS

1. **The Executive Director's negative use determination should be affirmed because the re-packing is not installed to “meet or exceed rules and regulations adopted by any environmental protection agency of the United States, Texas, or a political subdivision of Texas, for the prevention, monitoring, control or reduction of air, water, or land pollution.” See 30 Tex. ADMIN. CODE § 17.4(a).**

Sartomer is not entitled to a positive use determination because the re-packing was not installed to meet or exceed an adopted environmental rule or regulation. Sartomer cites 30 Tex. ADMIN. CODE § 115, Subchapter B, Division 2 as the rule it meets or exceeds. The rules in Chapter 115 pertain to the control of air pollution from VOC's. The rules in Subchapter B pertain to general VOC sources. Finally, the rules in Division 2 pertain to Vent Gas Control. Sartomer did not indicate which provisions in Division 2 are being met or exceeded by the re-packing.

The provisions cited in the application only apply to vent gas control. A cooling tower and its components, i.e., packing, do not meet the vent gas control definitions. The cited rules apply to vent gas or volatile organic compound emission control systems that perform tasks such as flaring, oxidizing, incinerating, or condensing. However, a cooling tower and its components do not perform these functions. Therefore, the rules provided by Sartomer do not apply to the re-packing of a cooling tower.

The VOC regulations do not apply if there are no leaks in the condenser and only water vapor is

discharged from cooling towers. The cited rules neither regulate nor create any legal standards for cooling towers or water vapor. Therefore, the equipment is not entitled to a positive use determination because the re-packing and the release of water vapor do not meet an applicable rule or regulation, as required by 30 Tex. ADMIN. CODE § 17.4(a).

However, if, as explained in the equipment description, there is a leak in the heat exchanger, the re-packing would still fail to meet the listed regulations. In this situation, re-packing the cooling tower would increase VOC emissions because the re-packing would increase the cooling tower's evaporation rate and this would increase the amount of VOC's discharged. The re-packing would not prevent VOC emissions in any way.

2. The Executive Director's negative use determination should be affirmed because the re-packing is not listed in Part A of the Equipment and Categories List ("ECL").

Sartomer filed a Tier I application. The application cites item number A-184 in Part A of the ECL as the qualifying basis for the Tier I application. *See* 30 TEX. ADMIN. CODE § 17.14(a). The pollution control properties in item A-184 in Part A of the ECL are "Vapor/Liquid Recovery Equipment for Fugitive Emissions." *Id.* The description of the A-184 pollution control properties is:

"Hoods or other enclosures including piping and pumps or fans used to capture fugitive emissions from process equipment. The captured vapors are condensed or extracted for reuse or sold as product." *Id.*

The equipment described in A-184 captures fugitive emissions and eliminates them by flaring or other procedures. In contrast, cooling towers and their components, i.e., packing, remove heat from the cooling water and transfer it into the ambient air. As described above, the cooling water used in a cooling tower is designed to never come in contact with process fluids. If this is the case, only water vapor, containing no contaminants, is discharged into the environment by the cooling tower. However, at times the piping in the heat exchanger will develop orifices which allow process fluids to enter the cooling water stream. The leaks would lead to VOC emissions because some process fluids would evaporate when they are processed by the cooling tower. The re-packing would not control or capture VOC emissions in either situation.

The re-packing of a cooling tower does not contribute to the capture of any fugitive emissions. Therefore, the appellant's contention that the re-packing fits the A-184 ECL category is incorrect.

3. The contention that the re-packing's only function is to increase the condenser's efficiency and reduce VOC emissions is unfounded.

Sartomer's contention that increasing its condenser's efficiency will result in an environmental benefit is unfounded. Technical staff found that Sartomer will obtain a production benefit as the condenser's efficiency increases. Sartomer failed to provide any evidence to support its contention that increasing the condenser's efficiency will result in an environmental benefit. In

addition, Sartomer does not provide any evidence explaining how the re-packing will lead to a reduction in VOC emissions. Based on the given information, technical staff found that the re-packing does not provide an environmental benefit and the equipment is therefore not entitled to a positive use determination.

As discussed in the property description section, a condenser is a piece of equipment that contains a heat exchanger that cools the facility's hot process fluids and heats the inflowing cold water from the cooling tower. A cooling tower is an integral part of production. By increasing its condenser's efficiency, Sartomer will be able to increase its manufacturing efficiency. Furthermore, Sartomer did not provide any technical information explaining how increasing the efficiency of its condenser will lead to pollution control. Based on the information provided by Sartomer, technical staff concluded that an increase in the efficiency of a cooling tower and a condenser is a production benefit that serves no pollution control purposes. As a consequence, Sartomer is not entitled to a positive use determination because of the condenser's increased efficiency.

In response to the NOD issued, Sartomer did not provide any technical information explaining how the re-packing will reduce VOC emissions. In the case where there are no leaks in the heat exchanger, increasing the efficiency of the cooling tower will not result in pollution control and will not reduce VOC emissions. The reason is that the cooling tower only discharges evaporated water that has never come in contact with process fluids that may have VOC's or other toxic contaminants. If, as explained in issues 1 and 2 above, there are leaks in the heat exchanger, the re-packing would actually increase VOC emissions.

Because Sartomer has failed to demonstrate that the re-packing provides an environmental benefit, technical staff concluded that the re-packing is not pollution control property and is not entitled to a positive use determination.

CONCLUSION

After careful consideration of the Appeal filed by Sartomer Inc. on Use Determination application number 09-13801, the Executive Director concludes that the original Tier I negative use determination issued to Sartomer Inc. was issued correctly. The Appellant failed to provide any legal basis upon which the Commission should reverse the Executive Director's use determination in this case. The Executive Director's use determination in this case is consistent with the terms and mandates set forth in the relevant laws and rules. The averred assertions of the Appellant do not alter the findings and the final negative use determination issued by the Executive Director in this case.

Accordingly, the Executive Director respectfully requests that the Commission deny the instant appeal filed by Sartomer, Inc. and affirm the Executive Director's Tier I negative use determination.

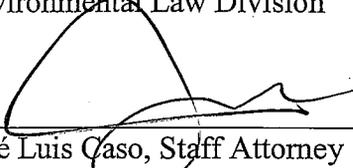
Respectfully submitted,

TEXAS COMMISSION ON ENVIRONMENTAL
QUALITY

Mark Vickery, Executive Director

Robert Martinez, Director
Environmental Law Division

Guy Henry, Senior Attorney
Environmental Law Division

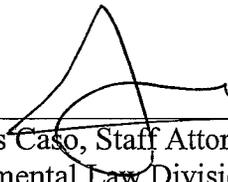


José Luis Caso, Staff Attorney
Environmental Law Division
Texas Bar No. 24065018
P.O. Box 13087, MC 173
Austin, Texas 78711-3087
Telephone No. (512) 239-4309
Facsimile No. (512) 239-0606

REPRESENTING THE EXECUTIVE
DIRECTOR OF THE TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY

CERTIFICATE OF SERVICE

I certify that on October 9, 2009, the original and 7 copies of the Executive Director's Response to Sartomer Inc.'s Appeal of the Executive Director's Use Determination Issued to Sartomer Resin Manufacturing Plant was filed with the Office of the Chief Clerk, Texas Commission on Environmental Quality and was served by first-class mail, agency mail, or facsimile to all persons on the attached mailing list.



José Luis Caso, Staff Attorney
Environmental Law Division
Texas Commission on Environmental Quality

MAILING LIST
SARTOMER RESIN MANUFACTURING PLANT
TCEQ Docket No2009-1468-MIS-U (UD-09-13801)

Associated Tax Appraisers
Ad Valorem Tax Consultants
4543 Post Oak Place, #232
Houston, Texas 77027
(281) 497-2200 Fax (713) 627-8454

Jim Robinson, Chief Appraiser
Harris County Appraisal District
P. O. Box 922004
Houston, Texas 77292
(713) 957-7800 Fax (713) 957-5210

Bridget Bohac
TCEQ Office of Public Assistance MC 108
P. O. Box 13087
Austin, Texas 78711-3087
(512) 239-4000 Fax (512) 239-4007

Ms. LaDonna Castañuela, Chief Clerk
TCEQ, Office of Chief Clerk MC 105
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-3300 Fax (512) 239-3311

Vic McWherter
TCEQ Office of Public Interest Counsel MC 103
P. O. Box 13087
Austin, Texas 78711-3087
(512) 239-6363 Fax (512) 239-6377

Kyle Lucas
TCEQ Alternative Dispute Resolution Program
MC 222
P. O. Box 13087
Austin, Texas 78711-3087
(512) 239-0687 Fax (512) 239-4015

Dr. Emmanuel Wada
Office of Chief Engineer MC 110
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-1917 Fax (512) 239-3165

Minor Hibbs
Office of Chief Engineer MC 110
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-6590 Fax (512) 239-3165

Robert Martinez
TCEQ Environmental Law Division MC 173
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-0600 Fax (512) 239-0606

José Luis Caso
TCEQ Office of Legal Services
Environmental Law Division MC 173
P.O. Box 13087
Austin, Texas 78711-3087
(512) 239-4309 Fax (512) 239-0606

Exhibit 1

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.C., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 05, 2009

ASSOCIATED TAX APPRAISERS
RONALD P LITTLE
4543 POST OAK PLACE #232
HOUSTON TX 77027-

This letter is to inform you that during the administrative review of Use Determination Application, 13801, the reviewer has determined that additional information is required. This application was filed for the following facility:

SARTOMER RESIN MFG PLANT
17335 WALLISVILLE RD
HOUSTON TX

The additional information required is:

Issue 1: For item 10 on page 4 of 5 in the application, an incorrect entry appears to have been made for the decision flow chart (DFC) box that the item reached. Please note that under the current DFC, box 7 is for Tier IV items, which is inconsistent with this application.

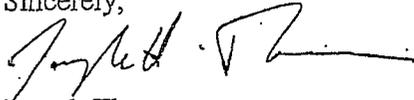
Issue 2: Only an original application was submitted, although 30 TAC 17.10(a)(1) requires both an original and a copy. Please submit both an original and a copy of the revised application.

Issue 3: This issue is technical rather than administrative in nature and does not need to be corrected for your application to be administratively complete. It is included here to facilitate further processing of your application. The description of property does not provide sufficient details on the control device, which is described as replacement packing for a cooling tower. Please provide a description of all sources of heat are routed to the cooling tower, where the tower is located, the type and purpose of condensers, any ancillary equipment included, and any other relevant information, as well as a process flow diagram showing components of the system (cooling tower, condensers, piping, etc.) and their relation to the rest of the facility.

Please provide the missing and/or incomplete information as soon as possible. As per 30 TAC 17.12(2)(A) the applicant must respond to a notice of deficiency (NOD) by providing the additional information required within 30 days of receipt of the NOD or the application will be

returned. Once the additional information has been received the administrative review of this application will resume. If you have any questions or require any assistance in developing the additional required information please contact the Tax Relief for Pollution Control Property Program at (512) 239-0012. Your response may be faxed to 512/239-5768, electronically mailed to txrelief@tceq.state.tx.us, or sent by U.S. Mail.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph Thomas", with a long horizontal flourish extending to the right.

Joseph Thomas

Tax Relief for Pollution Control Property Program

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
APPLICATION FOR USE DETERMINATION
FOR POLLUTION CONTROL PROPERTY**

The TCEQ has the responsibility to determine whether a property is a pollution control property. A person seeking a use determination must complete the attached application or a copy or similar reproduction. For assistance in completing this form refer to the TCEQ guidelines document, *Property Tax Exemptions for Pollution Control Property*, as well as 30 TAC §17, rules governing this program. For additional assistance please contact the Tax Relief for Pollution Control Property Program at (512) 239-3100. The application should be completed and mailed, along with a complete copy and the appropriate fee, to: TCEQ MC-214, Cashiers Office, PO Box 13088, Austin, Texas 78711-3088.

Information must be provided for each field unless otherwise noted.

1. GENERAL INFORMATION

A. What is the type of ownership of this facility?

- | | |
|---|--|
| <input checked="" type="checkbox"/> Corporation | <input type="checkbox"/> Sole Proprietor |
| <input type="checkbox"/> Partnership | <input type="checkbox"/> Utility |
| <input type="checkbox"/> Limited Partnership | <input type="checkbox"/> Other: |

B. Size of company: Number of Employees

- | | |
|--|---|
| <input type="checkbox"/> 1 to 99 | <input type="checkbox"/> 1,000 to 1,999 |
| <input checked="" type="checkbox"/> 100 to 499 | <input type="checkbox"/> 2,000 to 4,999 |
| <input type="checkbox"/> 500 to 999 | <input type="checkbox"/> 5,000 or more |

C. Business Description: (Provide a brief description of the type of business or activity at the facility)

Plastic Materials; SIC Code 2821

2. TYPE OF APPLICATION

- | | |
|--|---|
| <input checked="" type="checkbox"/> Tier I \$150 Fee | <input type="checkbox"/> Tier III \$2,500 Fee |
| <input type="checkbox"/> Tier II \$1,000 Fee | <input type="checkbox"/> Tier IV \$500 Fee |

NOTE: Enclose a check, money order to the TCEQ, or a copy of the ePay receipt along with the application to cover the required fee.

3. NAME OF APPLICANT

A. Company Name: Sartomer Inc c/o Associated Tax Appraisers
B. Mailing Address (Street or P.O. Box): P. O. Box 56561
C. City, State, and Zip: Houston, Texas 77256-6561

4. PHYSICAL LOCATION OF PROPERTY REQUESTING A TAX EXEMPTION

A. Name of Facility or Unit: Sartomer Resin Manufacturing Plant
B. Type of Mfg. Process or Service: Industrial Synthetic Resins Manufacturing
C. Street Address: 17335 Wallisville Road
D. City, State, and Zip: Houston, Texas
E. Tracking Number (Optional): _____
F. Company or Registration Number (Optional): _____

5. APPRAISAL DISTRICT WITH TAXING AUTHORITY OVER PROPERTY

A. Name of Appraisal District: Harris County Appraisal District
B. Appraisal District Account Number: 0410370000256

6. CONTACT NAME

| | |
|--|-----------------------------------|
| A. Company/Organization Name | Associated Tax Appraisers |
| B. Name of Individual to Contact: | Ronal P. Little |
| C. Mailing Address (Street or P.O. Box): | 4543 Post Oak Place Ste 232 |
| D. City, State, and Zip: | Houston, Texas 77027 |
| E. Telephone number and fax number: | (P) 281-497-2200 (F) 713-627-8454 |
| F. E-Mail address (if available): | rlittle@nationalrealty.com |

7. **RELEVANT RULE, REGULATION, OR STATUTORY PROVISION**

For each media, please list the specific environmental rule or regulation that is met or exceeded by the installation of this property.

| MEDIUM | Rule/Regulation/Law |
|--------|--|
| Air | 30 TAC Chapter 115 Subchapter B Division 2 |
| Water | |
| Waste | |

8. **DESCRIPTION OF PROPERTY (Complete for all applications)**

Describe the property and how it will be used at your facility. Do not simply repeat the description from the Equipment & Categories List. Include sketches of the equipment and flow diagrams of the processes where appropriate. Use additional sheets, if necessary. See attached List definition and Functions

Land: If a use determination is being requested for land, provide a legal description and an accurate drawing of the property in question.

9. **PARTIAL PERCENTAGE CALCULATION**

This section is to be completed for Tier III and IV applications. For information on how to conduct the partial percentage calculation, see the application instructions document. Attach calculation documents to completed application.

10. **PROPERTY CATEGORIES AND COSTS**

List each control device or system for which a use determination is being sought. Provide additional attachments for more than 3 properties.

| Property | Taxable on 1/01/94? | DFC Box | ECL # | Estimated Cost | Use % |
|-------------------------|---------------------|---------|-------|----------------|-------|
| Land | | | | | |
| Property | | | | | |
| Cooling Tower (packing) | 07/01/08 | 12 | A-184 | \$27,686 | 100% |
| Totals | | | | | |

11. EMISSION REDUCTION INCENTIVE GRANT

(For more information about these grants, see the Application Instruction document).

Will an application for an Emission Reduction Incentive Grant be filed for this property/project?

Yes No

12. APPLICATION DEFICIENCIES

After an initial review of the application, the TCEQ may determine that the information provided with the application is not sufficient to make a use determination. The TCEQ may send a notice of deficiency, requesting additional information that must be provided within 30 days of the written notice.

13. FORMAL REQUEST FOR SIGNATURE

By signing this application, you certify that this information is true to the best of your knowledge and belief.

Name: Ronald P. Little

Date: 5/15/08

Title: Senior Property Tax Consultant

Company: Associated Tax Appraisers

Under Texas Penal Code, Section 37.10, if you make a false statement on this application, you could receive a jail term of up to one year and a fine up to \$2,000, or a prison term of two to 10 years and a fine of up to \$5,000.

14. DELINQUENT FEE/PENALTY PROTOCOL

This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ are paid in accordance with the Delinquent Fee and Penalty Protocol. (Effective September 1, 2006)

SARTOMER Pollution Control Property

| Location | Date | Type | Description | Total | Description | Approx. Square Footage | Applicable Regulation | Equipment Category List |
|----------|----------|------|--------------------------------|-----------|---|------------------------|--|-------------------------|
| IN TX | 07/01/08 | M | Cooling Tower (packing) | \$27,686 | Replaced old packing to improve cooling tower exchanger efficiency. The delivery of cooling more efficiently will increase efficiency of condensers and reduce VOC emissions. | NA | 30 TAC Chapter 115 Subchapter B Division 2 | A-184 |
| | | | | | | | | |
| | | | 1735 Wallisville Rd plant WCV1 | \$429,032 | | | | |
| | | | | | | | | |

4/10
2008

Exhibit 2

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES

DIVISION 2: VENT GAS CONTROL

§§115.120 - 115.123, 115.125 - 115.127, 115.129

Effective December 7, 2006

§115.120. Vent Gas Definitions.

The following words and terms, when used in this division (relating to Vent Gas Control), shall have the following meanings, unless the context clearly indicates otherwise. Additional definitions for terms used in this division are found in §§3.2, 101.1, and 115.10 of this title (relating to Definitions).

(1) **Bakery oven** - An oven for baking bread or any other yeast-leavened products.

(2) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) batch distillation operation** - A SOCMI noncontinuous distillation operation in which a discrete quantity or batch of liquid feed is charged into a distillation unit and distilled at one time. After the initial charging of the liquid feed, no additional liquid is added during the distillation operation.

(3) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) batch process** - Any SOCMI noncontinuous reactor process which is not characterized by steady-state conditions, and in which reactants are not added and products are not removed simultaneously.

(4) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) distillation operation** - A SOCMI operation separating one or more feed stream(s) into two or more exit streams, each exit stream having component concentrations different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid and vapor-phase as they approach equilibrium within the distillation unit.

(5) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) distillation unit** - A SOCMI device or vessel in which distillation operations occur, including all associated internals (including, but not limited to, trays and packing), accessories (including, but not limited to, reboilers, condensers, vacuum pumps, and steam jets), and recovery devices (such as absorbers, carbon adsorbers, and condensers) which are capable of, and used for, recovering chemicals for use, reuse, or sale.

(6) **Synthetic Organic Chemical Manufacturing Industry (SOCMI) reactor process** - A SOCMI unit operation in which one or more chemicals, or reactants other than air, are combined or decomposed in such a way that their molecular structures are altered and one or more new organic compounds are formed.

Adopted December 13, 2002

Effective January 17, 2003

§115.121. Emission Specifications.

(a) For all persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, as defined in §115.10 of this title (relating to Definitions), the following emission specifications shall apply.

(1) No person may allow a vent gas stream containing volatile organic compounds (VOC) to be emitted from any process vent, unless the vent gas stream is controlled properly in accordance with §115.122(a)(1) of this title (relating to Control Requirements).

(2) No person may allow a vent gas stream to be emitted from the following processes unless the vent gas stream is controlled properly in accordance with §115.122(a)(2) of this title:

(A) any synthetic organic chemical manufacturing industry reactor process or distillation operation;

(B) any air oxidation synthetic organic chemical manufacturing process;

(C) any liquid phase polypropylene manufacturing process;

(D) any liquid phase slurry high-density polyethylene manufacturing process;

or

(E) any continuous polystyrene manufacturing process.

(3) In the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, VOC emissions from bakery ovens, as defined in §115.10 of this title, shall be controlled properly in accordance with §115.122(a)(3) of this title.

(4) Any vent gas stream in the Houston/Galveston area which includes a HRVOC, as defined in §115.10 of this title, is subject to the requirements of Subchapter H of this chapter (relating to Highly-Reactive Volatile Organic Compounds) in addition to the applicable requirements of this division (relating to Vent Gas Control).

(b) In Nueces and Victoria Counties, no person may allow a vent gas stream to be emitted from any process vent containing one or more of the following VOC or classes of VOC, unless the vent gas stream is controlled properly in accordance with §115.122(b) of this title:

(1) emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene;

(2) emissions of the following specific VOC: ethylene, butadiene, isobutylene, styrene, isoprene, propylene, methylstyrene; and

(3) emissions of specified classes of VOC, including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons

(C₈ and above).

(c) For persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following emission specifications shall apply.

(1) No person may allow a vent gas stream to be emitted from any process vent containing one or more of the following VOC or classes of VOC, unless the vent gas stream is controlled properly in accordance with §115.122(c)(1) of this title:

(A) emissions of ethylene associated with the formation, handling, and storage of solidified low-density polyethylene;

(B) emissions of the following specific VOC: ethylene, butadiene, isobutylene, styrene, isoprene, propylene, and methylstyrene; and

(C) emissions of specified classes of VOC, including aldehydes, alcohols, aromatics, ethers, olefins, peroxides, amines, acids, esters, ketones, sulfides, and branched chain hydrocarbons (C₈ and above).

(2) No person may allow a vent gas stream to be emitted from any catalyst regeneration of a petroleum or chemical process system, basic oxygen furnace, or fluid coking unit into the atmosphere, unless the vent gas stream is properly controlled in accordance with §115.122(c)(2) of this title.

(3) No person may allow a vent gas stream to be emitted from any iron cupola into the atmosphere, unless the vent gas stream is properly controlled in accordance with §115.122(c)(3) of this title.

(4) Vent gas streams from blast furnaces shall be controlled properly in accordance with §115.122(c)(4) of this title.

Adopted December 13, 2002

Effective January 17, 2003

§115.122. Control Requirements.

(a) For all persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, the following control requirements shall apply.

(1) Any vent gas streams affected by §115.121(a)(1) of this title (relating to Emission Specifications) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC) concentration of no more than 20 parts per million by volume (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(B) in a smokeless flare; or

(C) by any other vapor control system, as defined in §115.10 of this title (relating to Definitions).

(2) Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(A) in a smokeless flare; or

(B) by any other vapor control system, as defined in §115.10 of this title.

(3) For the Dallas/Fort Worth, El Paso, and Houston/Galveston areas, VOC emissions from each bakery with a bakery oven vent gas stream(s) affected by §115.121(a)(3) of this title shall be reduced as follows.

(A) Each bakery in the Houston/Galveston area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) is at least 80%.

(B) Each bakery in the Dallas/Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year, shall ensure that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) is at least 80%.

(C) Each bakery in the Dallas/Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year, but less than 50 tons per calendar year, shall reduce total VOC emissions by at least 30% from the bakery's 1990 emissions inventory in accordance with the schedule specified in §115.129(d) of this title (relating to Counties and Compliance Schedules).

(D) Each bakery in the El Paso area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year shall reduce total VOC emissions by at least 30% from the bakery's 1990 emissions inventory in accordance with the schedule specified in §115.129(e) of this title.

(E) Emission reductions in the 30% to 90% range are not creditable under Chapter 101, Subchapter H, Division 1 of this title (relating to Emission Credit Banking and Trading) for the following bakeries:

(i) each bakery in the Houston/Galveston area with a total weight of

VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 25 tons per calendar year;

(ii) each bakery in the Dallas/Fort Worth area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year;

(iii) each bakery in the El Paso area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or greater than 50 tons per calendar year.

(4) Any vent gas stream that becomes subject to the provisions of paragraphs (1), (2), or (3) of this subsection by exceeding provisions of §115.127(a) of this title (relating to Exemptions) shall remain subject to the provisions of this subsection, even if throughput or emissions later fall below the exemption limits unless and until emissions are reduced to no more than the controlled emissions level existing before implementation of the project by which throughput or emission rate was reduced to less than the applicable exemption limits in §115.127(a) of this title; and:

(A) the project by which throughput or emission rate was reduced is authorized by any permit or permit amendment or standard permit or permit by rule required by Chapter 116 or Chapter 106 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification; and Permits by Rule). If a permit by rule is available for the project, compliance with this subsection must be maintained for 30 days after the filing of documentation of compliance with that permit by rule; or

(B) if authorization by permit, permit amendment, standard permit, or permit by rule is not required for the project, the owner or operator has given the executive director 30 days' notice of the project in writing.

(b) For all persons in Nueces and Victoria Counties, any vent gas streams affected by §115.121(b) of this title must be controlled properly with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices):

(1) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(2) in a smokeless flare; or

(3) by any other vapor control system, as defined in §115.10 of this title.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following control requirements shall apply

(1) Any vent gas streams affected by §115.121(c)(1) of this title must be controlled properly:

(A) in a direct-flame incinerator at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius);

(B) in a smokeless flare; or

(C) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(2) Any vent gas streams affected by §115.121(c)(2) of this title must be controlled properly:

(A) in a direct-flame incinerator or boiler at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius); or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(3) Any vent gas streams affected by §115.121(c)(3) of this title must be controlled properly:

(A) at a temperature equal to or greater than 1,300 degrees Fahrenheit (704 degrees Celsius) in an afterburner having a retention time of at least one-fourth of a second, and having a steady flame that is not affected by the cupola charge and relights automatically if extinguished; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

(4) Any vent gas streams affected by §115.121(c)(4) of this title must be controlled properly:

(A) in a smokeless flare or in a combustion device used in a heating process associated with the operation of a blast furnace; or

(B) by any other vapor control system, as defined in §115.10 of this title, with a control efficiency of at least 90% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).

§115.123. Alternate Control Requirements.

(a) The alternate control requirements for vent gas streams in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas are as follows.

(1) Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division (relating to Vent Gas Control) may be approved by the executive director in accordance with §115.910 of this title (relating to Availability of Alternate Means of Control) if emission reductions are demonstrated to be substantially equivalent.

(2) The owner or operator of a synthetic organic chemical manufacturing industry (SOCMI) reactor process or distillation operation in which vent gas stream emissions are controlled by a control device with a control efficiency of at least 90% which was installed before December 3, 1993 may request an alternate reasonably available control technology (ARACT) determination. The executive director may approve the ARACT if it is determined to be economically unreasonable to replace the control device with a new control device meeting the requirements of §115.122(a)(2) of this title (relating to Control Requirements). Each ARACT approved by the executive director shall include a requirement that the control device be operated at its maximum efficiency. Each ARACT shall only be valid until the control device undergoes a replacement, a modification as defined in 40 Code of Federal Regulations (CFR) §60.14 (October 17, 2000), or a reconstruction as defined in 40 CFR §60.15 (December 16, 1975), at which time the replacement, modified, or reconstructed control device shall meet the requirements of §115.122(a)(2) of this title. Any request for an ARACT determination shall be submitted to the executive director in writing no later than May 31, 1994. The executive director may direct the holder of an ARACT to reapply for an ARACT if it is more than ten years since the date of installation of the control device and there is good cause to believe that it is now economically reasonable to meet the requirements of §115.122(a)(2) of this title. Within three months of an executive director request, the holder of an ARACT shall reapply for an ARACT. If the reapplication for an ARACT is denied, the holder of the ARACT shall meet the requirements of §115.122(a)(2) of this title as soon as practicable, but no later than two years from the date of the executive director's written notification of denial.

(b) For all persons in Nueces and Victoria Counties, alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title if emission reductions are demonstrated to be substantially equivalent.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 of this title if emission reductions are demonstrated to be substantially equivalent.

Adopted December 13, 2002

Effective January 17, 2003

§115.125. Testing Requirements.

Compliance with the emission specifications, vapor control system efficiency, and certain control requirements and exemption criteria of §§115.121 - 115.123 and 115.127 of this title (relating to Emission Specifications; Control Requirements; Alternate Control Requirements; and Exemptions) shall be determined by applying one or more of the following test methods and procedures, as appropriate, when specifically required within this division (relating to Vent Gas Control), when required by the executive director under §101.8 of this title (relating to Sampling), or when the owner or operator elects to conduct testing of one or more vent gas streams.

(1) Flow rate. Test Methods 1-4 (40 Code of Federal Regulations (CFR) 60, Appendix A) are used for determining flow rates, as necessary.

(2) Concentration of volatile organic compounds (VOC).

(A) Test Method 18 (40 CFR 60, Appendix A) is used for determining gaseous organic compound emissions by gas chromatography.

(B) Test Method 25 (40 CFR 60, Appendix A) is used for determining total gaseous nonmethane organic emissions as carbon.

(C) Test Methods 25A or 25B (40 CFR 60, Appendix A) are used for determining total gaseous organic concentrations using flame ionization or nondispersive infrared analysis.

(3) Performance requirements for flares and vapor combustors.

(A) For flares, Test Method 22 (40 CFR 60, Appendix A) is used for visual determination of fugitive emissions from material sources and smoke emissions.

(B) For flares, additional test method requirements are described in 40 CFR 60.18(f), unless EPA or the executive director has granted a waiver from such testing requirements.

(C) Flares in the Beaumont/Port Arthur, Dallas/Fort Worth, and Houston/Galveston areas shall comply with the performance test requirements of 40 CFR 60.18(b), unless EPA or the executive director has granted a waiver from such testing requirements.

(D) For vapor combustors, the owner or operator may consider the unit to be a flare. Each vapor combustor in Victoria County and the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas which the owner or operator elected to consider as a flare shall meet the performance test requirements of 40 CFR 60.18(b) in lieu of any testing under paragraphs (1) and (2) of this section.

(E) Compliance with the requirements of 40 CFR 60.18(b) will be considered to demonstrate compliance with the emission specifications and control efficiency requirements of §115.121 and §115.122 of this title.

(4) Minor modifications. Minor modifications to these test methods may be used, if approved by the executive director.

(5) Alternate test methods. Test methods other than those specified in paragraphs (1) - (3) of this section may be used if validated by 40 CFR 63, Appendix A, Test Method 301 (effective December 29, 1992). For the purposes of this paragraph, substitute "executive director" each place that Test Method 301 references "administrator."

Adopted December 6, 2000

Effective January 18, 2001

§115.126. Monitoring and Recordkeeping Requirements.

The owner or operator of any facility which emits volatile organic compounds (VOC) through a stationary vent in Aransas, Bexar, Calhoun, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties or in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas shall maintain the following information at the facility for at least five years, except that the five-year record retention requirement does not apply to records generated before December 31, 2000. The owner or operator shall make the information available upon request to representatives of the executive director, EPA, or any local air pollution control agency having jurisdiction in the area.

(1) Vapor control systems. For vapor control systems used to control emissions in Victoria County and in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas from vents subject to the provisions of §115.121 of this title (relating to Emission Specifications), records of appropriate parameters to demonstrate compliance, including:

(A) continuous monitoring and recording of:

- (i) the exhaust gas temperature immediately downstream of a direct-flame incinerator;
- (ii) the inlet and outlet gas temperatures of a catalytic incinerator or chiller;
- (iii) the exhaust gas VOC concentration of any carbon adsorption system, as defined in §101.1 of this title (relating to Definitions); and
- (iv) the exhaust gas temperature immediately downstream of a vapor combustor. Alternatively, the owner or operator of a vapor combustor may consider the unit to be a flare and meet the requirements specified in 40 Code of Federal Regulations (CFR) §60.18(b) and

Chapter 111 of this title (relating to Control of Air Pollution from Visible Emissions and Particulate Matter) for flares;

(B) in the Beaumont/Port Arthur, Dallas/Fort Worth, and Houston/Galveston areas, the requirements specified in 40 CFR §60.18(b) and Chapter 111 of this title for flares; and

(C) for vapor control systems other than those specified in subparagraphs (A) and (B) of this paragraph, records of appropriate operating parameters.

(2) Test results. A record of the results of any testing conducted in accordance with §115.125 of this title (relating to Testing Requirements).

(3) Records for exempted vents. Records for each vent exempted from control requirements in accordance with §115.127 of this title (relating to Exemptions) shall be sufficient to demonstrate compliance with the applicable exemption limit, including the following, as appropriate:

(A) the pounds of ethylene emitted per 1,000 pounds of low-density polyethylene produced;

(B) the combined weight of VOC of each vent gas stream on a daily basis;

(C) the concentration of VOC in each vent gas stream on a daily basis;

(D) the maximum design flow rate or VOC concentration of each vent gas stream exempt under §115.127(a)(4)(C) of this title; and

(E) the total design capacity of process units exempt under §115.127(a)(4)(B) of this title.

(4) Alternative records for exempted vents. As an alternative to the requirements of paragraph (3)(B) and (C) of this section, records for each vent exempted from control requirements in accordance with §115.127 of this title and having a VOC emission rate or concentration less than the applicable exemption limits at maximum actual operating conditions shall be sufficient to demonstrate continuous compliance with the applicable exemption limit. These records shall include complete information from either test results or appropriate calculations which clearly documents that the emission characteristics at maximum actual operating conditions are less than the applicable exemption limit. This documentation shall include the operating parameter levels that occurred during any testing, and the maximum levels feasible (either VOC concentration or mass emission rate) for the process.

(5) Bakeries. For bakeries subject to §115.122(a)(3)(A) - (B) of this title (relating to Control Requirements), the following additional requirements apply.

(A) The owner or operator of each bakery in the Houston/Galveston area with a total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, equal to or

greater than 25 tons per calendar year, shall submit a control plan no later than March 31, 2001, to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction. The plan shall demonstrate that the overall emission reduction from the uncontrolled VOC emission rate of the oven(s) will be at least 80% by December 31, 2001. At a minimum, the control plan shall include the emission point number (EPN) and the facility identification number (FIN) of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the 2000 VOC emission rates (consistent with the bakery's 2000 emissions inventory). The projected 2002 VOC emission rates shall be calculated in a manner consistent with the 2000 emissions inventory.

(B) All representations in control plans become enforceable conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the bakery submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction within 30 days of the change. All control plans shall include documentation that the overall emission reduction from the uncontrolled VOC emission rate of the bakery's oven(s) continues to be at least the specified percentage reduction. The emission rates shall be calculated in a manner consistent with the most recent emissions inventory.

(6) Bakeries (contingency measures). For bakeries subject to §115.122(a)(3)(C) and (D) of this title, the following additional requirements apply.

(A) No later than six months after the commission publishes notification in the *Texas Register* as specified in §115.129(d) or (e) of this title (relating to Counties and Compliance Schedules), the owner or operator of each bakery shall submit an initial control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory will be at least 30%. At a minimum, the control plan shall include the EPN and the FIN of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the 1990 VOC emission rates (consistent with the bakery's 1990 emissions inventory). The projected VOC emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(B) In order to document continued compliance with §115.122(a)(3) of this title, the owner or operator of each bakery shall submit an annual report no later than March 31 of each year to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction which demonstrates that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory during the preceding calendar year is at least 30%. At a minimum, the report shall include the EPN and FIN of each bakery oven and any associated control device, a plot plan showing the location, EPN, and FIN of each bakery oven and any associated control device, and the VOC emission rates. The emission rates for the preceding calendar year shall be calculated in a manner consistent with the 1990 emissions inventory.

(C) All representations in control plans and annual reports become enforceable

conditions. It shall be unlawful for any person to vary from such representations if the variation will cause a change in the identity of the specific emission sources being controlled or the method of control of emissions unless the owner or operator of the bakery submits a revised control plan to the executive director, the appropriate regional office, and any local air pollution control program with jurisdiction within 30 days of the change. All control plans and reports shall include documentation that the overall reduction of VOC emissions from the bakery's 1990 emissions inventory continues to be at least 30%. The emission rates shall be calculated in a manner consistent with the 1990 emissions inventory.

(7) Additional flare requirements. The owner or operator of a facility that uses a flare to meet the requirements of §115.122(a)(2) of this title shall install, calibrate, maintain, and operate according to the manufacturer's specifications, a heat-sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light to indicate continuous presence of a flame.

Adopted December 13, 2002

Effective January 17, 2003

§115.127. Exemptions.

(a) For all persons in the Beaumont/Port Arthur, Dallas/Fort Worth, El Paso, and Houston/Galveston areas, the following exemptions apply.

(1) A vent gas stream from a low-density polyethylene plant is exempt from the requirements of §115.121(a)(1) of this title (relating to Emission Specifications) if no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1,000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product.

(2) The following vent gas streams are exempt from the requirements of §115.121(a)(1) of this title:

(A) a vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period;

(B) a vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv);

(C) a vent gas stream which is subject to §115.121(a)(2) or (3) of this title; and

(D) a vent gas stream which qualifies for exemption under paragraphs (3), (4)(B), (4)(C), (4)(D), (4)(E), or (5) of this subsection.

(3) The following vent gas streams are exempt from the requirements of §115.121(a)(2)(B) - (E) of this title:

(A) a vent gas stream having a combined weight of VOC equal to or less than 100 pounds (45.4 kilograms) in any continuous 24-hour period;

(B) a vent gas stream from any air oxidation synthetic organic chemical manufacturing process with a concentration of VOC less than 612 ppmv; and

(C) a vent gas stream from any liquid phase polypropylene manufacturing process, any liquid phase slurry high-density polyethylene manufacturing process, and any continuous polystyrene manufacturing process with a concentration of VOC less than 408 ppmv.

(4) For synthetic organic chemical manufacturing industry (SOCMI) reactor processes and distillation operations, the following exemptions apply.

(A) Any reactor process or distillation operation that is designed and operated in a batch mode is exempt from the requirements of §115.121(a)(2)(A) of this title. For the purposes of this subparagraph, batch mode means any noncontinuous reactor process or distillation operation which is not characterized by steady-state conditions, and in which the addition of reactants does not occur simultaneously with the removal of products.

(B) Any reactor process or distillation operation operating in a process unit with a total design capacity of less than 1,100 tons per year, for all chemicals produced within that unit, is exempt from the requirements of §115.121(a)(2)(A) of this title.

(C) Any reactor process or distillation operation vent gas stream with a flow rate less than 0.011 standard cubic meters per minute or a VOC concentration less than 500 ppmv is exempt from the requirements of §115.121(a)(2)(A) of this title.

(D) Any distillation operation vent gas stream which meets the requirements of 40 Code of Federal Regulations (CFR) §60.660(c)(4) or §60.662(c) (concerning Subpart NNN--Standards of Performance for VOC Emissions From SOCMI Distillation Operations, December 14, 2000) is exempt from the requirements of §115.121(a)(2)(A) of this title.

(E) Any reactor process vent gas stream which meets the requirements of 40 CFR §60.700(c)(2) or §60.702(c) (concerning Subpart RRR--Standards of Performance for VOC Emissions From SOCMI Reactor Processes, December 14, 2000) is exempt from the requirements of §115.121(a)(2)(A) of this title.

(5) Bakeries are exempt from the requirements of §115.121(a)(3) and §115.122(a)(3) of this title (relating to Emission Specifications and Control Requirements) if the total weight of VOC emitted from all bakery ovens on the property, when uncontrolled, is less than 25 tons per calendar year.

(6) A vent gas stream is exempt from this division (relating to Vent Gas Control) if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of Volatile Organic Compounds) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(7) A combustion unit exhaust stream is exempt from this division provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

(8) As an alternative to complying with the requirements of this division (or, in the case of bakeries, as an alternative to complying with the requirements of §115.121(a)(1) and §115.122(a)(1) of this title) for a source that is addressed by a Chapter 115 contingency rule (i.e., one in which Chapter 115 requirements are triggered for that source by the commission publishing notification in the *Texas Register* that implementation of the contingency rule is necessary), the owner or operator of that source may instead choose to comply with the requirements of the contingency rule as though the contingency rule already had been implemented for that source. The owner or operator of each source choosing this option shall submit written notification to the executive director and any local air pollution control program with jurisdiction. When the executive director and the local program (if any) receive such notification, the source will then be considered subject to the contingency rule as though the contingency rule already had been implemented for that source.

(b) For all persons in Nueces and Victoria Counties, the following exemptions apply.

(1) A vent gas stream from a low-density polyethylene plant is exempt from the requirements of §115.121(b)(1) of this title if no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1,000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of the solidified product.

(2) The following vent gas streams are exempt from the requirements of §115.121(b) of this title:

(A) a vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(b)(2) and (3) of this title equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period; and

(B) a vent gas stream with a concentration of the VOC or classes of compounds specified in §115.121(b)(2) and (3) of this title less than 30,000 ppmv.

(3) A vent gas stream is exempt from this division if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of Volatile Organic Compounds) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(4) A combustion unit exhaust stream is exempt from this division provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, the following exemptions apply.

(1) The following vent gas streams are exempt from the requirements of §115.121(c)(1) of this title:

(A) a vent gas stream from a low-density polyethylene plant provided that no more than 1.1 pounds of ethylene per 1,000 pounds (1.1 kg/1,000 kg) of product are emitted from all the vent gas streams associated with the formation, handling, and storage of solidified product;

(B) a vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B) - (C) of this title equal to or less than 100 pounds (45.4 kg) in any continuous 24-hour period; and

(C) a vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv.

(2) A vent gas stream specified in §115.121(c)(2) of this title which emits less than or equal to five tons (4,536 kg) of total uncontrolled VOC in any one calendar year is exempt from the requirements of §115.121(c)(2) of this title.

(3) A vent gas stream is exempt from this division if all of the VOCs in the vent gas stream originate from a source(s) for which another division within Chapter 115 (for example, Storage of Volatile Organic Compounds) has established a control requirement(s), emission specification(s), or exemption(s) which applies to that VOC source category in that county.

(4) A combustion unit exhaust stream is exempt from this division provided that the unit is not being used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source.

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Effective January 17, 2003

§115.129. Counties and Compliance Schedules.

(a) The owner or operator of each vent gas stream in Aransas, Bexar, Brazoria, Calhoun, Chambers, Collin, Dallas, Denton, El Paso, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Matagorda, Montgomery, Nueces, Orange, San Patricio, Tarrant, Travis, Victoria, and Waller Counties shall continue to comply with this division (relating to Vent Gas Control) as required by §115.930 of this title (relating to Compliance Dates).

(b) The owner or operator of each bakery in Collin, Dallas, Denton, and Tarrant Counties subject to §115.122(a)(3)(C) of this title (relating to Control Requirements) shall comply with §§115.121(a)(3), 115.122(a)(3)(C), and 115.126(6) of this title (relating to Emission Specifications; Control Requirements; and Monitoring and Recordkeeping Requirements) as soon as practicable, but no later than one year, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the national ambient

air quality standard (NAAQS) for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in Federal Clean Air Act (FCAA), §172(c)(9).

(c) The owner or operator of each bakery in El Paso County subject to §115.122(a)(3)(D) of this title shall comply with §§115.121(a)(3), 115.122(a)(3)(D), and 115.126(6) of this title as soon as practicable, but no later than one year, after the commission publishes notification in the *Texas Register* of its determination that this contingency rule is necessary as a result of failure to attain the NAAQS for ozone by the attainment deadline or failure to demonstrate reasonable further progress as set forth in FCAA, §172(c)(9).

(d) The owner or operator of each vent gas stream in Ellis, Johnson, Kaufman, Parker, and Rockwall Counties shall comply with this division as soon as practicable, but no later than March 1, 2009.

Adopted November 15, 2006

Effective December 7, 2006

SUBCHAPTER B: GENERAL VOLATILE ORGANIC COMPOUND SOURCES

DIVISION 3: WATER SEPARATION

§§115.131 - 115.133, 115.135 - 115.137, 115.139

Effective December 7, 2006

§115.131. Emission Specifications.

(a) For all persons in the Beaumont/Port Arthur, Dallas/ Fort Worth, El Paso, and Houston/ Galveston areas as defined in §115.10 of this title (relating to Definitions), any volatile organic compound (VOC) water separator equipped with a vapor recovery system in order to comply with §115.132(a) of this title (relating to Control Requirements) shall reduce emissions such that the true partial pressure of the VOC in vent gases to the atmosphere will not exceed a level of 0.5 psia (3.4 kPa).

(b) For all persons in Gregg, Nueces, and Victoria Counties, any VOC water separator equipped with a vapor recovery system in order to comply with §115.132(b) of this title shall reduce emissions such that the partial pressure of the VOC in vent gases to the atmosphere will not exceed a level of 1.5 psia (10.3 kPa).

(c) For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any VOC water separator equipped with a vapor recovery system in order to comply with §115.132(c) of this title shall reduce emissions such that the true partial pressure of the VOC in vent gases to the atmosphere will not exceed a level of 1.5 psia (10.3 kPa).

Adopted October 25, 1995

Effective November 20, 1995

§115.132. Control Requirements.

Exhibit 3



Tax Relief for Pollution Control Property

Application Instructions and Equipment and Categories List – Effective January 2008

DRAFT

INSTRUCTIONS FOR COMPLETING APPLICATION FORM

The following instructions are intended to provide assistance in completing the TCEQ *Application for Use Determination for Pollution Control Property*.

GENERAL INFORMATION

If you have questions or require additional clarification or assistance please contact the Tax Relief Program at (512) 239-3100, or by email at txrelief@tceq.state.tx.us

The TCEQ may request additional information by mailing a deficiency letter. This additional information must be provided within 30 days of receipt of the written request or the application will be returned to the applicant.

Applications not accompanied with the proper fee payment or a copy of the ePay receipt will be mailed a deficiency letter. Review of the application will not begin until the proper fee is received.

OBTAINING COPIES OF THE APPLICATION FORM AND OTHER DOCUMENTS

A copy of the official application form in Microsoft Word format is available on the TCEQ Web page. The Equipment and Categories list (ECL) is included in both the Application Instructions and the guidance document (RG-102). The documents can be downloaded from the link titled "Application Forms and Guidance Documents". The URL is:
<http://www.tceq.state.tx.us/assistance/Prop2/prop2.html#apps>

Filing Information

Send the completed applications and copies to:

U.S. Mail
TCEQ - Cashiers Office MC-214
Tax Relief Program
PO Box 13088
Austin Texas 78711-3088

Physical Address
TCEQ – Cashiers Office MC-214
Building A
12100 Park 35 Circle
Austin, TX 78753

Other Information

All other written correspondence should be sent to: TCEQ - MC-110, Attention: Tax Relief for Pollution Control Property Program, P.O. Box 13087, Austin, Texas, 78711-3087 or faxed to (512) 239-5678. The telephone number for direct contact is (512) 239-3100.

APPLICATION INSTRUCTIONS

1. General Information

This section is used to provide general information about your company. The TCEQ does not use this information as part of the use determination review process. This information will be used by the TCEQ to compile a statistical analysis of use determinations processed by the agency.

Select the type of ownership of the facility by placing an "X" in the appropriate space. If "Other" is selected, use the space provided to explain.

Complete the "Size of Company" section by selecting the appropriate spaces for the number of employees for the entire company, not just the facility covered by the application.

DRAFT Tax Relief for Pollution Control Property Application
TCEQ-00611-instructions (January 2008)

Complete the "Business Description" section by providing a brief description of the nature of the business or activity that occurs at this facility.

2. Type of Application

Place an X on the proper line to identify the type of application being filed. If a project includes the installation of both property listed on Part A of the ECL property and property which is not listed, the property may be listed on one application. A Tier IV application must be filed for all equipment that is contained in one of the categories list on Part B of the ECL.

The types of applications for pollution control property are:

Tier I: This is for property that is on Part A of the ECL and as long as no variance from the listed percentage is requested.. The fee is \$150. The application can only include items that are on Part A of the ECL or are necessary for the installation or operation of that property.

Tier II: This is for property that is used 100% as pollution control property but is not on Part A of the ECL. The fee is \$1,000.

Tier III: This is for property that is partially used as pollution control property but is not listed on Part A of the ECL. The fee is \$2,500.

Tier IV: This is for property that is contained in one of the categories listed on Part B of the ECL. The fee is \$500.

3. Name of Applicant

Provide the name, mailing address, and telephone number of the owner of the facility for which this application is being filed.

4. Physical Location of Property Requesting a Tax Exemption

Provide the name of the facility, the type of facility, and the physical address of the facility. The facility address should be the address used by the local appraisal district to identify this facility. Provide the name of the county in which the facility is located.

5. Name of Appraisal District with Taxing Authority over Property

Provide the name of the appraisal district(s) in which the property is located. This information is required and will be used by the TCEQ to notify the appropriate appraisal district(s) that an application for use determination has been filed. Provide the Appraisal District Account Number for the facility or property. If the property is located in more than one appraisal district, list all of the appraisal districts and the associated account numbers.

6. Contact Name

Provide the company name, contact name, mailing address, telephone number, e-mail address, and fax number of the person whom the TCEQ is to contact in case of questions relating to this use determination application. **All correspondence relating to this application will be directed to this person.**

7. Relevant Rule, Regulation, or Statutory Provision

For each of the pollution control properties listed on this application, select the type of medium or media (air, water, waste) for which this property or device is required. Use the second column to cite the specific environmental rule, regulation, and/or law that is being met or exceeded by the installation of this property. The citation should be specific and should include the section and/or subsection of the rule, regulation, and/or law.

In order to receive a positive use determination, the application must list a rule, regulation, or statutory provision that has been adopted by the Environmental Protection Agency of the United States, the state of Texas, or a political subdivision. Regulations adopted by health and safety agencies, such as Occupational Safety and Health Administration requirements, do not meet this criterion.

If the applicant is uncertain of a specific rule to list in this section, there are many sources available on the internet as references. Most, if not all, of the applicable environmental rules should be located in the Texas Administrative Code 30 or in the Code of Federal Regulations, Title 40. The following sites may be helpful:

Title 40 CFR Chapter Index: <http://www.epa.gov/epahome/cfr40.htm>
Code of Federal Regulations: <http://www.gpoaccess.gov/cfr/index.html>
TCEQ Rules (Chapter 30): <http://www.sos.state.tx.us/tac/index.shtml>

8. Description of Property

Do not simply repeat the description from the ECL. Describe the property and how it will be used at your facility. Equipment should be listed at the control device or process change level. If you install a control device, such as a scrubber, you need only to list the scrubber. You do not need to list each individual piece of the scrubber. If necessary, please attach sketches and/or flow diagrams to assist agency staff with the review process.

Land: provide a legal description and an accurate plot plan of the land in question.

Example of a Property Description:

The project installed internal floating roofs in storage tanks T-01 and T-02. Each roof consists of an internal steel pontoon with a mechanical shoe seal. The installation will reduce evaporation and VOC emissions.

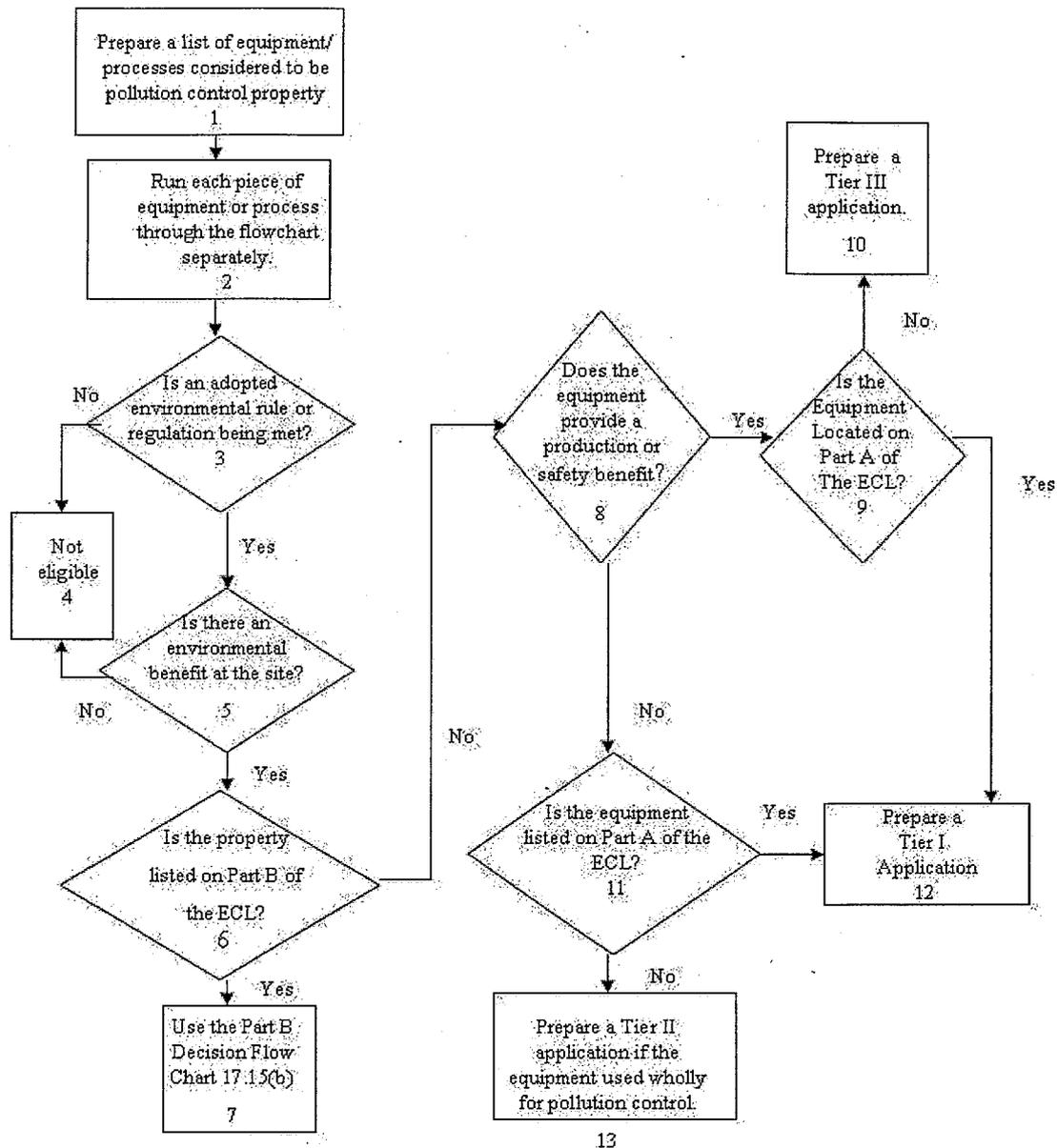
9. Decision Flow Charts

The Decision Flow Charts (DFC) are used to determine the correct application tier for pollution control property. Each piece of equipment or process change must be processed through the Decision Flow Chart (Figure 17.15(a)). If it is determined that the property is contained in one of the categories listed on Part B of the ECL the Part B DFC (Figure 17.15(b)) is used. Each item of property listed on the application must result in a yes answer to boxes 3 and 5 on the DFC or boxes 2 and 3 on the Part B DFC. Use the table in section 10 to document which box was the final destination of each piece of equipment.

Figure: 30 TAC §17.15(a)

Decision Flow Chart

Applicants must use this flowchart for each piece of equipment or process. In order for a piece of equipment or process to be eligible for a positive use determination the item must generate 'yes' answers to the questions asked in boxes 3 and 5. ECL means the Equipment and Categories List adopted under Texas Tax Code, §11.31(g).



Boxes 2 through 5 are used to determine if the property is pollution control property. Boxes 6 through 13 are used to determine the percentage of the use determination.

Where:

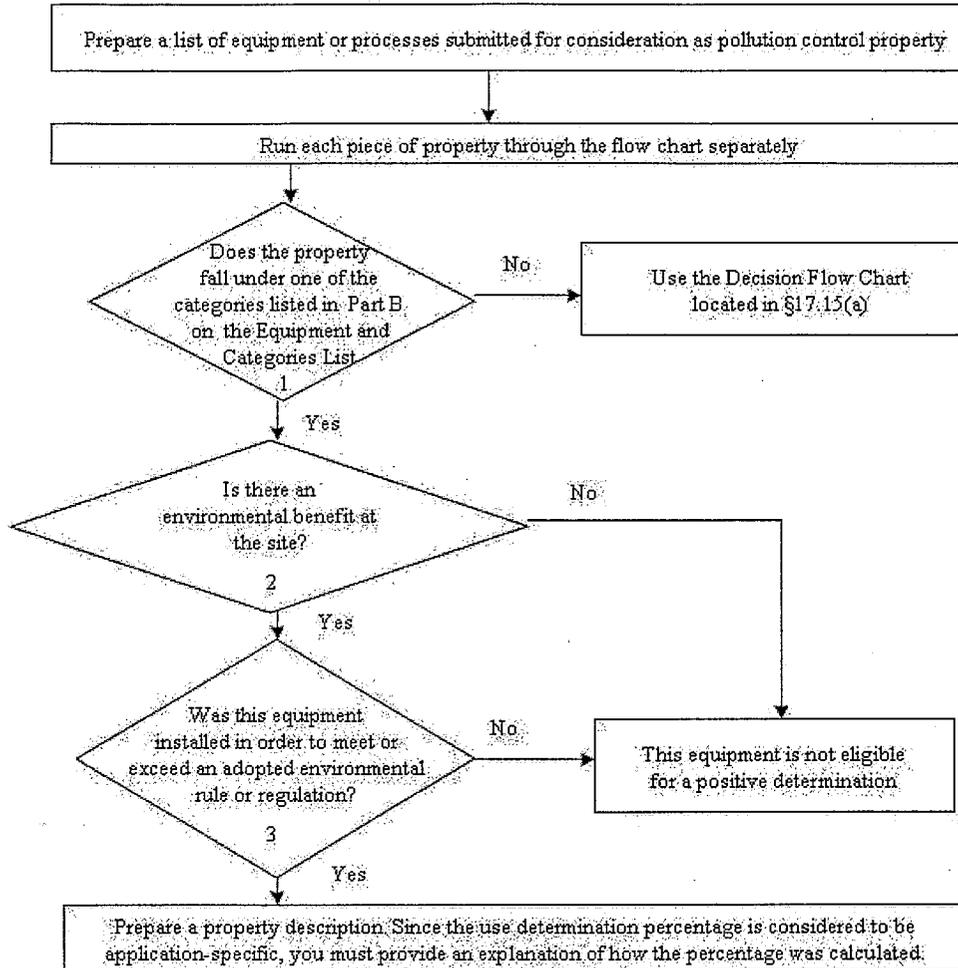
- Prepare a list of all property that is considered to be pollution control property.
- Process each item on the list through the flow chart separately.
- Determine the specific state, local, or federal environmental regulation, rule or law that is being met or exceeded by the use of this property.
- Determine the environmental benefit that this property provides at the site where it is installed.
- Determine if the property is listed on Part B of the ECL
- Determine if the equipment is only partly used for pollution control. If it is used only partly, and is not listed on Part A of the Equipment and Categories List (ECL), then a Tier III application must be filed and the partial determination calculation detailed in §17.17 Partial Determinations must be used.
- If the equipment is listed in Part A on the ECL, determine the reference number for that item. Include all equipment for the project in a single list that is included with the application
- If the equipment is not in Part A on the list prepare a Tier II application.

(b) For applications containing only property located in Part B of the figure in §17.14(a) of this title (relating to Equipment and Categories List), the Part B Decision Flow Chart shall be used for each item or process to determine whether the particular item will qualify as pollution control property. The executive director shall apply the standards in the Part B Decision Flow Chart when acting on an application containing only property that is listed in Part B of the Equipment and Categories List.

Figure: 30 TAC §17.15(b)

PART B DECISION FLOW CHART

For Applications Containing Only Equipment listed in Part B on the
Equipment And Categories List



Where:

1. Determine if the property is listed in Part B on the Equipment and Categories List. If not, then use the Decision Flow Chart located in §17.15(a).
2. Is there an environmental benefit at the site? If the answer is no then the property is not eligible for a positive use determination.
3. Determine if the equipment was installed in order to meet or exceed an adopted environmental rule or regulation. If the answer is no then the property is not eligible for a positive use determination.

10. Partial Percentage Calculation

The Cost Analysis Procedure (CAP) is used to calculate the partial determination for Tier III applications. The TCEQ encourages applicants to use the CAP for calculating use determination percentages for Tier IV applications. If a method other than the CAP is used to determine the use determination percentage for a Tier IV application, the applicant must supply an explanation and justification of the method. An example using the CAP is provided in the technical guidance document.

The variables used in the CAP equations in this section are defined as follows:

Capital Cost New - the estimated total capital cost of the equipment or process.

Capital Cost Old - the cost of comparable equipment or process without the pollution control. The standards used for calculating Capital Cost Old are as follows:

- If comparable equipment without the pollution control feature is on the market in the United States, then an average market price of the most recent generation of technology must be used.
- If the conditions in variable 3.1 of §17.17(b) do not apply and the company is replacing an existing unit, then the company shall convert the original cost of the unit to today's dollars by using a published industry specific standard. If the production capacity of the new equipment or process is lower than the production capacity of the old equipment or process, CCO is divided by the Production Capacity Factor (PCF) in order to reduce CCO to reflect the same capacity as CCN.
- If the conditions in variables 3.1 and 3.2 of §17.17(b) do not apply, and the company can obtain an estimate of the cost to manufacture the alternative equipment without the pollution control feature, then an average estimated cost to manufacture the unit must be used. The comparable unit must be the most recent generation of technology.

Production Capacity Factor - A calculated value used to adjust the value of a partial use determination to reflect the capacity of the original property or process. It is calculated by dividing the capacity of the existing equipment or process by the capacity of the new equipment or process. The Production Capacity Factor is only used when there is an increase in production capacity.

Byproduct (BP) - For property that generates a marketable byproduct, the net present value of the byproduct is used to reduce the partial determination. The value of the byproduct is calculated by subtracting the transportation and storage of the byproduct from the market value of the byproduct. This value is then used to calculate the net present value (NPV) of the byproduct over the lifetime of the equipment.

Byproduct Value - is equal to the retail value of the recovered byproduct for a one year period. Typically, the most recent three-year average price of the material as sold on the open market should be used in the calculation. If the price varies from state-to-state, the applicant shall calculate an average, and explain how the figures were determined.

Storage and Transport - These costs are the costs to store and transport the byproduct. These costs will reduce the market value of the byproduct. The applicant shall provide verification of how these costs were determined and itemized.

N - This is the estimated useful life in years of the equipment that is being evaluated for a use determination.

Interest rate - This is the current Prime Lending Rate that is in effect at the time the application is submitted. The Prime Lending Rate is defined by the Wall Street Journal as the base rate on corporate

loans posted by at least 75% of the nation's 30 largest banks. The Prime Lending Rate is posted daily in the Wall Street Journal and on most financial or investment web sites.

In order to receive a partial determination you must use the cost analysis procedure as detailed in 30 TAC §17.17. The cost analysis procedure requires the use of the following equation:

$$\frac{[(\text{Production Capacity Factor} \times \text{Capital Cost New}) - \text{Capital Cost Old} - \text{Byproduct}]}{\text{Capital Cost New}} \times 100$$

On a separate piece of paper provide a response for each of the following sections:

1. Production Capacity Factor – Provide a description of the process and explain if there is an increase in capacity related to the installation of this property. If there is a capacity increase, use the following equation to calculate the Production Capacity Factor:

$$\text{Production Capacity Factor} = \frac{\text{Production Capacity of Old Property}}{\text{Production Capacity of New Property}}$$

2. Capital Cost New – Provide a description of how the estimated dollar value was calculated.
3. Capital Cost Old – Provide a description of how the estimated dollar value was calculated. Explain which of the three options was used to determine the capital cost old.
4. Byproduct: Does the installation of this property result in the creation of a byproduct. If the answer is yes, provide a description of the byproduct. Use the following equation to calculate the value of the byproduct. Explain how each variable of the equation was determined. Show the calculation.

$$BP = \sum_{t=1}^n \frac{[(\text{Byproduct Value}) - (\text{Storage \& Transport})]_t}{(1 + \text{Interest Rate})^t}$$

5. Calculation of partial percentage – show the equation and the calculated partial percentage.

11. Property Categories and Costs

The first column of this table is for categorizing the type of property. There are two category types, *Land* and *Property*. In the property section, list the property or equipment that was described in section 8 of this application.

The second column is used to certify that the property listed in the first column was not taxable on or before January 1, 1994. Enter "No" in this column to show that the property was not purchased, constructed, or installed on or before January 1, 1994. If the answer is "Yes", then the property is not eligible for a tax exemption.

The third column is used to record which box on the Decision Flow Chart was the final destination of the property.

The fourth column is used for property that is listed on the ECL. Place the appropriate ECL item numbers in this column.

The fifth column is used to record the estimated or actual purchase cost of the property listed in the first column.

The sixth column is used to list the partial use determination percentage. For property that is not used wholly for pollution control, enter the estimated pollution control percentage calculated above in section 10 or the percentage listed on the ECL.

12. Emission Reduction Incentive Grant

Senate Bill 5, 77th Legislative Session, established the Texas Emission Reduction Program (TERP). The TERP program is authorized to provide incentive grants for certain emission reduction activities. The amount of the grant is reduced by the amount of any additional financial incentives received for the property/project. A tax exemption granted under this program is considered to be a financial incentive.

Place an X in either the Yes or No box. More information about the TERP program may be obtained by calling 512/239-4900 or by e-mailing: terp@tceq.state.tx.us.

13. Application Deficiencies (provided for informational purposes only)

After an initial review of the application, the TCEQ may determine that the information provided with the application is not sufficient to make a use determination. The TCEQ may send a notice of deficiency, requesting additional information that must be provided within 30 days of the written notice.

14. Formal Request for Signature

To be considered complete, the application must be signed and dated. The application should be signed by either the applicant/owner or by their designated representative. By signing this application, you certify that the information provided is true to the best of your knowledge and belief.

15. Delinquent Fee/Penalty Protocol

This form will not be processed until all delinquent fees and/or penalties owed to the TCEQ or the Office of the Attorney General on behalf of the TCEQ, have been paid in accordance with the Delinquent Fee and Penalty Protocol. (Effective September 1, 2006)

Additional information about the Delinquent Fee Protocol including contact information can be found here: <http://www.tceq.state.tx.us/agency/delin/index.html>

Equipment and Categories List
Part A

Part A of the Equipment and Categories List is a list of property that the executive director has determined is used either wholly or partly for pollution control purposes. The items listed are described in generic terms without the use of brand names or trademarks and includes a defined use percentage. The use percentages on Part A of the ECL are established based on standard uses of the pieces of equipment involved. If the Executive Director determines that the equipment is not being used in a standard manner, the Executive Director may require that a Tier II partial determination analysis be conducted by the applicant in order to calculate the appropriate use determination percentage. The Executive Director may conduct a partial determination analysis, where it is appropriate; in order to more accurately reflect the environmental benefit at the site. The commission will review and update the list at least once every three years. Items may be added only if there is compelling evidence to support the conclusion that the item provides pollution control benefits and a justifiable pollution control percentage is calculable. Items may be removed from the list only if there is compelling evidence to support the conclusion that the item does not render pollution control benefits. Property used solely for product collection is not eligible for a positive use determination. Property used solely for worker safety or fire protection does not qualify as pollution control property. For items where the description limits the use determination percentage to the incremental cost difference, the cost of the property or device without the pollution control feature is compared to a similar device or property that does have the pollution control feature. Part A was formerly referred to as the Predetermined Equipment List. Part A is a list adopted under Texas Tax Code (TTC), §11.31(g).

Air Pollution Control Equipment

| No. | Media | Property | Description | % |
|----------------------------------|-------|--|--|-----|
| Particulate Control Devices | | | | |
| A-1 | Air | Baghouse Dust Collectors | Structures containing filters, blowers, ductwork— used to remove particulate matter from exhaust gas streams. | 100 |
| A-2 | Air | Demisters or Mist Eliminators Added | Mesh pads or cartridges — used to remove entrained liquid droplets from exhaust gas streams. | 100 |
| A-3 | Air | Electrostatic Precipitators | Wet or dry particulate collection by creating an electric field between positive or negative electrodes and collection surface. | 100 |
| A-4 | Air | Dry Cyclone Separators | Single or multiple inertial separators, with blowers, ductwork, etc. used to remove particulate matter from exhaust gas streams. | 100 |
| A-5 | Air | Scrubbers | Wet collection device using spray chambers, wet cyclones, packed beds, orifices, venturi, or high-pressure sprays to remove particulates and chemicals from exhaust gas streams. System may include pumps, ductwork, blowers, etc. needed for the equipment to function. | 100 |
| A-6 | Air | Water/Chemical Sprays and Enclosures for Particulate Suppression | Spray nozzles, conveyor and chute covers, windshields, piping, pumps, etc. — used to reduce fugitive particulate emissions. | 100 |
| A-7 | Air | Smokeless Igniters | Installed on electric generating units in order to control particulate emissions and opacity on start-up. | 100 |
| Combustion Based Control Devices | | | | |
| A-20 | Air | Thermal Oxidizers | Thermal destruction of air pollutants by direct flame combustion. | 100 |

| No. | Media | Property | Description | % |
|--|-------|---|--|-----|
| A-21 | Air | Catalytic Oxidizer | Thermal destruction of air pollutants that uses a catalyst to promote oxidation. | 100 |
| A-22 | Air | Flare/Vapor Combustor | Stack, burner, flare tip, blowers, etc. — used to destroy air contaminants in a vent gas stream. | 100 |
| Non-Volatile Organic Compounds Gaseous Control (VOC) Devices | | | | |
| A-40 | Air | Molecular Sieve | Microporous filter used to remove Hydrogen Sulfite (H ₂ S) or Nitrogen Oxides (NO _x) from a waste gas stream. | 100 |
| A-41 | Air | Strippers Used in Conjunction with Final Control Device | Stripper, with associated pumps, piping — used to remove contaminants from a waste gas stream or waste liquid stream. Stripper associated with product or by-product improvement does not qualify. | 100 |
| A-42 | Air | Chlorofluorocarbon (CFC) Replacement Projects | Projects to replace one CFC with an environmentally cleaner CFC or other refrigerant where there is no increase in the cooling capacity or the efficiency of the unit. Includes all necessary equipment needed to replace the CFC and achieve the same level of cooling capacity. | 100 |
| A-43 | Air | Refrigerant Recycling Equipment | Equipment used to recover and recycle CFC's and halocarbons. | 50 |
| A-44 | Air | Halogen Replacement Projects | All necessary equipment needed to replace the Halogen in a fire suppression system with an environmentally cleaner substance. | 100 |
| Monitoring and Sampling Equipment | | | | |
| A-60 | Air | Fugitive Emission Monitors | Organic vapor analyzers — used to discover leaking piping components. | 100 |
| A-61 | Air | Continuous & Noncontinuous Emission Monitors | Monitors, analyzers, buildings, air conditioning equipment, gas find Infrared (IR) Cameras, etc. constituting a monitoring system required to demonstrate compliance with emission limitations of regulated air contaminants. (Including flow and diluent gas monitors and dedicated buildings). | 100 |
| A-62 | Air | Monitoring Equipment on Final Control Devices | Temperature monitor or controller, flow-meter, pH meter, etc. for a pollution control device. Monitoring of production equipment or processes is not included. | 100 |
| A-63 | Air | On or Off-Site Ambient Air Monitoring Facilities | Towers, structures, analytical equipment, sample collectors, monitors, power supplies, etc. | 100 |
| A-64 | Air | Noncontinuous Emission Monitors, Portable | Portable monitors, analyzers, structures, trailers, air conditioning equipment, gas find IR Cameras, etc. used to demonstrate compliance with emission limitations. | 100 |
| A-65 | Air | Predictive Emission Monitors | Monitoring of process and operational parameters that are used to calculate or determine compliance with emission limitations. | 100 |
| A-66 | Air | Sampling Ports | Construction of stack or tower sampling ports used for emission sampling or for the monitoring of process or operational parameters that are used | 100 |

| No. | Media | Property | Description | % |
|----------------------------|-------|---|--|-----|
| | | | to calculate or determine compliance with emission limitations. | |
| A-67 | | Automotive Dynamometers | Automotive dynamometers used for in-house emissions testing of fleet vehicles in order to reduce emissions. | 100 |
| Control of Nitrogen Oxides | | | | |
| A-80 | Air | Selective Catalytic and Non-catalytic Reduction Systems | Catalyst bed, reducing agent injection and storage, monitors — used to reduce Nitrogen Oxide emissions from engines/boilers. Non-selective systems use a reducing agent without a catalyst. | 100 |
| A-81 | Air | Catalytic Converters for Stationary Sources | Used to reduce NO _x emissions from internal combustion engines. | 100 |
| A-82 | Air | Air/Fuel Ratio Controllers for Piston-Driven Internal Combustion Engines | Used to control the air/fuel mixtures and reduce NO _x formation for fuel injected, naturally aspirated, or turbocharged engines. | 100 |
| A-83 | Air | Flue Gas Recirculation | Ductwork, blowers, etc. — used to redirect part of the flue gas back to the combustion chamber for reduction of NO _x formation. May include flyash collection in coal fired units. | 100 |
| A-84 | Air | Water/Steam Injection | Piping, nozzles, pumps, etc. to inject water or steam into the burner flame of utility or industrial burners or the atomizer ports for gas turbines, used to reduce NO _x formation. | 100 |
| A-85 | Air | Overfire Air & Combination of asymmetric over fire air with the injection of anhydrous ammonia or other pollutant-reducing agents | The asymmetric over fire air layout injects preheated air through nozzles through a series of ducts, dampers, expansion joints, and valves also anhydrous ammonia or other pollutant-reducing agent injection is done at the same level. | 100 |
| A-86 | Air | Burners Out of Service | Staging of burner firing by not firing specific burners within a combustion unit for the purpose of eliminating hot spots to reduce NO _x emissions. | 100 |
| A-87 | Air | Lean-Burn Gas-Fired Compressor Engines | Advanced ignition & combustion system that introduces excess air into a reciprocating gas-fired compressor engine to make the engine run lean thereby lowering combustion temperatures, which reduces NO _x formation. | 20 |
| A-88 | Air | Low-NO _x Burners | Replacement of existing incinerator, furnace or boiler burners with low-NO _x burners for pollution control purposes. The incremental cost difference between the existing burners and the new burners is eligible for a positive use determination. | 100 |
| A-89 | Air | Over-Fire Air Systems | System which diverts combustion air from the burners to ports or nozzles located above the burners to reduce combustion zone temperatures thereby reduces thermal NO _x . | 100 |
| A-90 | Air | Low Emissions Conversion Kit for Internal Combustion Reciprocating Compressor Engines | Installation of conversion kits to reduce NO _x emissions from existing internal combustion engines used to drive natural gas compressors. These kits include igniter cells or assemblies that ignite a fuel rich mixture in a pre-combustion | 100 |

| No. | Media | Property | Description | % |
|------------------------------------|-------|---|---|-----|
| | | | chamber and forcing it into the power cylinder while still burning. Additional components consist of pilot gas system that delivers rich fuel to the igniter cell & power cylinders, power pistons, & power cylinder heads to replace the existing cylinders, pistons & heads. | |
| A-91 | Air | Water Lances | Installed in the fire box of boilers and industrial furnaces to eliminate hot spots; thereby reducing NO _x formation. | 100 |
| A-92 | Air | Electric Power Generation Burner Retrofit | Retrofit of existing burners on electric power generating units with components for reducing NO _x including directly related equipment. | 100 |
| A-93 | Air | High-Pressure Fuel Injection System | Retrofit technology for large bore natural gas fired internal combustion engines to reduce NO _x and Carbon Monoxide (CO) emissions. System includes injectors, fuel lines, and electronic controls. | 40 |
| A-94 | Air | Wet or Dry Sorbent Injection Systems | Use of a sorbent for flue gas desulfurization or NO _x control. | 100 |
| Volatile Organic Compounds Control | | | | |
| A-110 | Air | Activated Carbon Systems | Carbon beds or liquid-jacketed systems, blowers, piping, condensers — used to remove VOCs or odors from exhaust gas streams. | 100 |
| A-111 | Air | Storage Tank Secondary Seals and Internal Floating Roofs | Used to reduce VOC emissions caused by evaporation losses from above ground storage tanks. | 100 |
| A-112 | Air | Replacement of existing pumps, valves, or seals in piping service | The incremental cost difference between the cost of the original equipment and the replacement equipment is eligible only when the replacement of these parts is done for the sole purpose of eliminating fugitive emissions of volatile organic compounds. New systems do not qualify for this item. | 100 |
| A-113 | Air | Welding of pipe joints in VOC service (Existing Pipelines) | Welding of existing threaded or flanged pipe joints in order to eliminate fugitive emission leaks. | 100 |
| A-114 | Air | Welding of pipe joints in VOC Service (New construction) | The incremental cost difference between the cost of using threaded or flanged joints and welding of pipe joints in VOC service. | 100 |
| A-115 | Air | Carbon Absorber | Preventive abatement equipment absorbs VOCs, Freon and emission streams by using carbons atoms to combine with organic chemicals. | 100 |
| Mercury Control | | | | |
| A-133 | Air | Sorbent Injection Systems | Sorbents sprayed into the flue gas that chemically reacts to absorb mercury. The sorbents are then removed by a particulate removal device. Equipment may include pumps, tanks, blowers, nozzles ductwork, hoppers, particulate collection devices, etc. needed for the equipment to function. | 100 |
| A-134 | Air | Fixed Sorbent Systems | Equipment, such as stainless steel plate with a gold coating that is installed in the flue gas to | 100 |

| No. | Media | Property | Description | % |
|---------------------------------|-------|--|---|-----|
| | | | absorb mercury. | |
| A-135 | Air | Mercury Absorbing Filters | Filters which absorb mercury such as those using the affinity between mercury and metallic selenium. | 100 |
| A-136 | Air | Oxidation Systems | Equipment used to change elemental mercury to oxidized mercury. This can be catalysts (similar to Selective Catalytic Reduction (SCR) catalyst) or chemical additives which can be added to the flue gas or directly to the fuel. | 100 |
| A-138 | Air | Photochemical Oxidation | Use of an ultraviolet light from a mercury lamp to provide an excited state mercury species in flue gas, leading to oxidation of elemental mercury. | 100 |
| A-141 | Air | Chemical Injection Systems | Equipment used to inject chemicals into the combustion zone or flue gas that chemically bonds mercury to the additive which is then removed in a particulate removal device. | 100 |
| Control of Sulfur Oxides | | | | |
| A-168 | Air | Wet and Dry Scrubbers | Circulating fluid bed and moving bed technologies using a dry sorbent or various wet scrubber designs that inject a wet sorbent into the scrubber. | 100 |
| Miscellaneous Control Equipment | | | | |
| A-180 | Air | Hoods, Duct and Collection Systems connected to Final Control Devices | Piping, headers, pumps, hoods, ducts, etc. — used to collect air contaminants and route them to a control device. | 100 |
| A-181 | Air | Stack Modifications | Construction of stacks extensions. In order to meet a permit requirement. | 100 |
| A-182 | Air | New Stack Construction | The incremental cost difference between the stack height required for production purposes and the stack height required for pollution control purposes. | 100 |
| A-183 | Air | Stack Repairs | Repairs made to an existing stack in order for that stack to provide the same level of pollution control as was previously provided. | 100 |
| A-184 | Air | Vapor/Liquid Recovery Equipment for Fugitive Emissions | Hoods or other enclosures including piping and pumps or fans used to capture fugitive emissions from process equipment. The captured vapors are condensed or extracted for reuse or sold as product. | 100 |
| A-185 | Air | Vapor/Liquid Recovery Equipment (for venting to a control device) | Piping, blowers, vacuum pumps, compressors, etc. — used to capture a waste gas or liquid stream and vent to a control device. Including those used to eliminate emissions associated with loading tank trucks, rail cars, and barges. | 100 |
| A-186 | Air | Paint Spray Booth Attached to a Final Control Device (Replacement which provides increased pollution prevention control) | The incremental cost difference between the new paint booth and the replaced pain booth | 100 |
| A-187 | Air | Paint Spray Booth Attached to a | Pollution control equipment associated with the | 100 |

| No. | Media | Property | Description | % |
|--------------------------------|-------|---|---|-----|
| | | Final Control Device (New Construction) | paint booth — including the items such as the control device, water curtain, filters, or other devices to capture paint fumes. | |
| A-188 | Air | Powder Coating System - Installed to replace an existing paint booth. | The incremental cost difference between the Powder Coating System and the Paint Spray Booth which was replaced. | 100 |
| A-189 | Air | Powder Coating System - New Construction | Powder recovery system. | 100 |
| A-190 | Air | Blast Cleaning System - Connected to a Control Device | Particulate control device and blast material recycling system. | 100 |
| Dry Cleaning Related Equipment | | | | |
| A-200 | Air | Perchloroethylene (Perc) Closed-Loop Dry Cleaning Machines | Dry-to-dry closed loop technology sealed during the entire dry cleaning sequence to eliminate solvent emissions and minimize hazardous waste disposal. | 60 |
| A-201 | Air | Cartridge and Spin Disc Filtration Systems | A control device used to lessen emissions of VOC for naphtha cleaning systems. | 40 |
| A-202 | Air | Petroleum Dry-to-Dry Cleaning Machines | Closed loop system using naphtha instead of perchloroethylene. | 60 |
| A-203 | Air | Petroleum Re-claimers | A unit used to collect VOC emissions in the drying process. | 60 |
| A-204 | Air | Refrigerated Vapor Condenser. (Includes only the components that recover the vapors.) | A device that uses refrigerants to condense recovered vapors to liquids. Associated with dry cleaners, degreasers, or recovery of solvents from cleaning inside bulk containers or process vessels. | 90 |
| A-205 | Air | Secondary Containment | External structure or liner used to collect liquids released from dry cleaning equipment or chemical storage devices. | 100 |
| A-206 | Air | Direct Coupled Solvent Delivery Systems | Replacement of solvent delivery systems at existing dry cleaning facilities. | 100 |

Wastewater Pollution Control Equipment

| No. | Media | Property | Description | % |
|----------------------------------|-------------|---|---|-----|
| Solid Separation and De-watering | | | | |
| W-1 | Water | API Separator | Separates oil, water, and solids by settling and skimming. | 100 |
| W-2 | Waste water | CPI Separator | Mechanical oil, water, and solids separator. | 100 |
| W-3 | Waste water | Dissolved Air Flotation | Mechanical oil, water, and solids separator. | 100 |
| W-4 | Waste water | Skimmer | Hydrocarbon. | 100 |
| W-5 | Waste water | Decanter | Used to decant hydrocarbon from process wastewater. | 100 |
| W-6 | Waste water | Belt Press, Filter Press, Plate and Frame, etc. | Mechanical de-watering devices. | 100 |
| W-7 | Water | Centrifuge | Separation of liquid and solid waste by centrifugal force, typically a rotating drum. | 100 |

| No. | Media | Property | Description | % |
|--------------------|-------|-----------------------------------|--|-----|
| W-8 | Water | Settling Basin | Simple tank or basin for gravity separation of suspended solids. | 100 |
| W-9 | Water | Equalization | Tank, sump, or headbox used to settle solids and equilibrate process wastewater streams. | 100 |
| W-10 | Water | Clarifier | Circular settling basins usually containing surface skimmers and sludge removal rakes. | 100 |
| Disinfection | | | | |
| W-20 | Water | Chlorination | Wastewater disinfection treatment using chlorine. | 100 |
| W-21 | Water | De-chlorination | Equipment for removal of chlorine from water or waste water. | 100 |
| W-22 | Water | Electrolytic Disinfection | Disinfect water by the use of electrolytic cells. | 100 |
| W-23 | Water | Ozonization | Equipment that generates ozone for the disinfection of waste water. | 100 |
| W-24 | Water | Ultraviolet | Disinfection of wastewater by the use of ultraviolet light. | 100 |
| W-25 | Water | Mixed Oxidant Solution | Solution of chlorine, chlorine dioxide, and ozone to replace chlorine for disinfection. | 100 |
| Biological Systems | | | | |
| W-30 | Water | Activated Sludge | Biologically activating carbon matter in waste water by aeration, clarification, and return of the settled sludge to aeration. | 100 |
| W-31 | Water | Adsorption | Use of activated carbon to remove organic water contaminants. | 100 |
| W-32 | Water | Aeration | Passing air through wastewater to increase oxygen available for bacterial activities that remove contaminants. | 100 |
| W-33 | Water | Rotary Biological Contactor | Use of large rotating discs that contain a bio-film of microorganisms that promote biological purification of the wastewater. | 100 |
| W-35 | Water | Trickling Filter | Fixed bed of highly permeable media in which wastewater passes through and forms a slime layer to remove contaminants. | 100 |
| W-36 | Water | Wetlands and Lagoons (artificial) | Artificial marsh, swamp, or pond that uses vegetation and natural microorganisms as bio-filters to remove sediment and other pollutants. | 100 |
| W-37 | Water | Digester | Enclosed, heated tanks for treatment of sludge that is broken down by bacterial action. | 100 |
| Other Equipment | | | | |
| W-50 | Water | Irrigation | Equipment that is used to disburse treated wastewater through irrigation on the site. | 100 |
| W-51 | Water | Outfall Diffuser | Device used to diffuse effluent discharge from an outfall. | 100 |
| W-52 | Water | Activated Carbon Treatment | Use of carbon media such as coke or coal to remove organics and particulate from waste water. May be used in either fixed or fluidized beds. | 100 |
| W-53 | Water | Oxidation Ditches and Ponds | Process of pumping air bubbles into a pond to assist in oxidizing organic and mineral pollution. | 100 |
| W-54 | Water | Filters: Sand, Gravel, Microbial | Passing wastewater through a sand or gravel bed to remove solids and reduce bacteria. | 100 |
| W-55 | Water | Chemical Precipitation | Process used to remove heavy metals from wastewater. | 100 |

| No. | Media | Property | Description | % |
|------------------------------|-------|---|--|-----|
| W-56 | Water | Ultra-filtration | Use of semi-permeable membrane and hydrostatic pressure to filter solids and high molecular weight solutes. | 100 |
| W-57 | Water | Conveyances, Pumps, Sumps, Tanks, Basins | Used to segregate storm water from process water, control storm water runoff, or convey contaminated process water. | 100 |
| W-58 | Water | Water Recycling Systems | Installed systems, excluding cooling towers, that clean, recycle, or reuse wastewater or use grey water or storm water in order to reduce the amount of a facility's discharge or the amount of new water used as process or make-up water including Zero Discharge Systems. | 100 |
| W-59 | Water | Wastewater Treatment Facility/Plant | New wastewater treatment facilities constructed to process wastewater generated on-site. | 100 |
| W-60 | Water | High-Pressure Reverse Osmosis | The passing of a contaminated water stream over a permeable membrane at high pressure to collect contaminants. | 100 |
| W-61 | Water | Hydro-cyclone Vapor Extraction | An air-sparged hydro-cyclone for the removal of VOCs from a wastewater stream. | 100 |
| W-62 | Water | Recycled Water Cleaning System | Equipment used to collect and recycle the water used in a high-pressure water system for cleaning contaminants from equipment and pavement. | 100 |
| W-63 | Water | Chemical Oxidation | Use of hydrogen peroxide or other oxidants for wastewater treatment. | 100 |
| W-65 | Water | Stormwater Containment Systems | Structures or liners used for containment of runoff from rainfall. The land that is actually occupied by the containment structure is eligible for a positive use determination. | 100 |
| W-66 | Water | Wastewater Impoundments | Ponds used for the collection of water after use and before circulation. | 100 |
| W-67 | Water | Oil/Water Separator | Mechanical device used to separate oils from stormwater. | 100 |
| Control/Monitoring Equipment | | | | |
| W-70 | Water | pH Meter, Dissolved Oxygen. Meter, Chart Recorder, etc. | Used for wastewater operations control and monthly reporting requirements. | 100 |
| W-71 | Water | On-line Analyzer | Device that conducts chemical analysis on sample streams for wastewater operations control. | 100 |
| W-72 | Water | Neutralization | Control equipment used to adjust pH of wastewater treatment components. | 100 |
| W-73 | Water | Respirometer | Device used to measure oxygen uptake or Carbon Dioxide (CO ₂) release in wastewater treatment systems. | 100 |
| W-74 | Water | Diversion | Structures used for the capture and control of storm water and process wastewater or emergency diversion of process material. Land means only that land which is actually occupied by the division or storage structure. | 100 |
| W-76 | Water | Building | Used for housing wastewater control and monitoring equipment. | 100 |

| No. | Media | Property | Description | % |
|------|-------|--------------------|--|-----|
| W-77 | Water | De-foaming Systems | Systems consisting of nozzles, pilings, spray heads, and piping used to reduce surface foam. | 100 |

Solid Waste Management Pollution Control Equipment

| No. | Media | Property | Description | % |
|------------------------|------------------------|--|---|----------|
| Solid Waste Management | | | | |
| S-1 | Land/ Water | Stationary Mixing and Sizing Equipment | Immobile equipment used for solidification, stabilization, grinding, etc. of self generated waste material for the purpose of disposal or in-house recycling. | 100 % |
| S-2 | Land/ Water | Decontamination Equipment | Equipment used to remove waste contamination or residues from vehicles which leave the facility. | 100 |
| S-3 | Land/ Water | Solid Waste Incinerator (not used for energy recovery and export or material recovery) | Solid waste incinerators, feed systems, ash handling systems, controls, etc. | 100 |
| S-4 | Land/ Water/ Air | Monitoring and Control Equipment | Alarms, indicators, controllers, etc., for high liquid level, pH, temperature, flow, etc. in waste treatment system (Does not include fire alarms). | 100 |
| S-5 | Land/ Water | Solid Waste Treatment Vessels | Any vessel used for waste treatment. | 100 |
| S-6 | Land/ Water | Secondary Containment | External structure or liner used to contain and collect liquids released from a primary containment device and/or ancillary equipment. Main purpose is to prevent ground water or soil contamination. | 100 |
| S-7 | Land/ Water | Liners | A continuous layer or layers of natural and/or man-made materials that restrict downward or lateral escape of wastes or leachate in an impoundment, landfill, etc. | 100 |
| S-8 | Land/ Water | Leachate Collection and Removal Systems | A system capable of collecting leachate or liquids, including suspended solids, generated from percolation through or drainage from a waste. Systems for removal of leachate may include sumps, pumps, piping, etc. | 100 |
| S-9 | Land/ Water | Leak Detection Systems | A system capable of detecting the failure of a primary or secondary containment structure or the presence of a liquid or waste in a containment structure. | 100 |
| S-10 | Land/ Water | Final Cover Systems for Landfills (Non-Commercial) | A system of liners and materials to provide drainage, erosion prevention, infiltration minimization, gas venting, biotic barrier, etc. | 100 |
| S-11 | Land/ Water | Lysimeters | An unsaturated zone monitoring device used to monitor soil-pore liquid quality at a waste management unit. (e.g., below the treatment zone of a land treatment unit, etc.) | 100 |
| S-12 | Water | Groundwater Monitoring Well and Systems | A groundwater well or system of wells designed to monitor the quality of groundwater at a waste management unit. (e.g., detection monitoring systems, compliance monitoring systems) | 100 |
| S-14 | Air | Fugitive Emission Monitors | A monitoring device used to monitor or detect fugitive emissions from a waste management unit or ancillary equipment. | 100 |

| No. | Media | Property | Description | % |
|------|--------------------|---|---|-----|
| S-15 | Land/ Water | Slurry Walls/Barrier Walls | A pollution control method using a barrier to minimize lateral migration of pollutants in soils and ground water. | 100 |
| S-16 | Water | Groundwater Recovery or Remediation System | A groundwater remediation system used to remove or treat pollutants in contaminated groundwater or to contain pollutants. (e.g., pump-and-treat systems, etc.) | 100 |
| S-17 | Water | Injection Wells (Including Saltwater Disposal Wells) and Ancillary Equipment | Injection well, pumps, collection tanks and piping, pretreatment equipment, monitoring equipment, etc. | 100 |
| S-18 | Land/ Water | Noncommercial Landfills (used for disposal of self generated waste materials) and Ancillary Equipment | Excavation, clay and synthetic liners, leak detection systems, leachate collection and treatment equipment, monitor wells, waste hauling equipment, decontamination facilities, security systems, and equipment used to manage the disposal of waste in the landfill. | 100 |
| S-19 | Land/ Water | Resource Conservation Recovery Act Containment Buildings (used for storage or treatment of hazardous waste) | Pads, structures, solid waste treatment equipment used to meet the requirements of Subchapter O - Land Disposal Restrictions (30 TAC §335.431). | 100 |
| S-20 | Land/ Water | Surface Impoundments and Ancillary Equipment (Including Brine Disposal Ponds) | Excavation, ponds, clay and synthetic liners, leak detection systems, leachate collection and treatment equipment, monitor wells, pumps, etc. | 100 |
| S-21 | Land/ Water | Waste Storage Used to Collect and/or Store Waste Prior to Treatment or Disposal | Tanks, containers and ancillary equipment such as pumps, piping, secondary containment, vent controls, etc. (e.g., Resource Conservation Recovery Act Storage Tanks, 90-Day Storage Facilities, Feed Tanks to Treatment Facilities, etc.) | 100 |
| S-22 | Air | Fugitive Emission Containment Structures | Structures or equipment used to contain or reduce fugitive emissions or releases from waste management activities. (e.g., coverings for conveyors, chutes, enclosed areas for loading and unloading activities, etc.) | 100 |
| S-23 | Water | Double Hulled Barge | Double hulled to reduce chance of leakage into public waters. (Incremental cost difference between a single hulled barge and a double hulled barge.) | 30 |
| S-24 | Land | Composting Equipment | Used to compost material where the compost will be used on site. (Does not include commercial composting facilities.) | 100 |
| S-25 | Land | Compost Application Equipment | Equipment used to apply compost which has been generated on-site. | 100 |
| S-26 | Land | Vegetated Compost Sock | Put in place as part of a facility's permanent Best Management Plan (BMP). | 100 |
| S-27 | Air | Foundry Sand Reclamation Systems for Foundries | Components of a sand reclamation system that provide specific pollution control. Includes hooding over shaker screens vented to a dust collector, conveyor covers, and emission control devices at other points. | 100 |
| S-28 | Air/Water/ Land | Concrete Reclaiming Equipment | Processes mixed, un-poured concrete batches to reclaim the sand and gravel for reuse and recycles the | 100 |

| No. | Media | Property | Description | % |
|-----|-------|----------|--------------------------------|---|
| | | | water in a closed loop system. | |

Miscellaneous Pollution Control Equipment

| No. | Media | Property | Description | % |
|------|------------------------|--|--|-----|
| M-1 | Air/ Land/ Water | Spill Response/Cleanup Equipment Pre-positioned and Stored for Addressing Future Emergencies | Boats, barges, booms, skimmers, trawls, pumps, power units, packaging materials and containers, safety equipment, vacuum trailers, storage sheds, diversion basins, tankage, dispersants, etc. | 100 |
| M-2 | Air/ Land | Hazardous Air Pollutant Abatement Equipment—required removal material contaminated with asbestos, lead, or some other hazardous air pollutant. | High-Efficiency Particulate Arresting (HEPA) Vacuum Equipment, Negative Air Pressure Enclosures, Glove Bags, Personal Protection, Disposal. | 100 |
| M-3 | Air/ Land/ Water | Vacuum Trucks, Street Sweepers and Watering Trucks | Mobile Surface Cleaning Equipment — used exclusively to control particulate matter on plant roads. (Does not include sweepers or scrubbers used to control particulate matter within buildings.) | 100 |
| M-4 | Land | Compactors, Barrel Crushers, Balers, Shredders | Compactors and similar equipment used to change the physical format of waste material for recycling/reuse purposes or on-site disposal of facility-generated waste. | 100 |
| M-5 | Land/ Air/ Water | Distillation Recycling Systems | Used to remove hazardous content from waste solvents by heat, vaporization, and condensation. The recycled solvents must be reused at the facility generating the waste. | 100 |
| M-6 | Land/ Water | Boxes, Bins, Carts, Barrels, Storage Bunkers | Collection/storage containers for source-separation of materials to be recycled or reused. Does not include product storage containers or facilities. | 100 |
| M-8 | Air/ Land/ Water | Environmental Paving located at Industrial Facilities | Paving of outdoor vehicular traffic areas in order to meet or exceed an adopted environmental rule, regulation or law. Does not include paving of parking areas or driveways for convenience purposes. Value of the paving must be stated on a square foot basis with a plot plan provided which shows the paving in question. | 100 |
| M-9 | Air/ Land/ Water | Sampling Equipment | Equipment used to collect samples of exhaust gas, waste water, soil, or other solid waste to be analyzed for specific contaminants or pollutants. | 100 |
| M-10 | Water | Dry Stack Building for Poultry Litter | A pole-barn type structure used to temporarily store poultry litter in an environmentally safe manner. | 100 |
| M-11 | Land/ Water | Poultry Incinerator | Incinerators used to dispose of poultry carcasses. | 100 |
| M-12 | Land/ Water | Structures, Enclosures, Containment Areas, Pads | Required in order to meet 'no contact' stormwater regulations. | 100 |
| M-13 | Air | Methane Capture Equipment | Equipment used to capture methane generated by the decomposition of site generated waste material. | 100 |
| M-15 | Land | Drilling Mud Recycling System | Consisting of only the Shaker Tank System, Shale Shakers, Desilter, Desander, & Degasser. | 100 |
| M-16 | Land | Drilling Rig Spill Response Equipment | Includes only the Ram Type Blowout Preventers, Closing Unit and Choke Manifold System. | 100 |

| No. | Media | Property | Description | % |
|------|-------------|--|--|-----|
| M-17 | Air | Low NOx Combustion System | Components of power generating units designed to reduce NOx generation by operation of a drilling rig. | 100 |
| M-18 | Air | Odor Neutralization and Chemical Treatment Systems | Carbon absorption, zeolite absorption, and other odor neutralizing and chemical treatment systems to meet local ordinance, or to prevent/correct nuisance odors at off-site receptors. | 100 |
| M-19 | Air | Odor Dispersing and Removal Systems | Electrostatic precipitators, vertical dispersing fans, stack extensions, and other physical control equipment used to dilute, disperse, or capture nuisance odor vent streams. | 100 |
| M-20 | Air | Odor Detectors | Olfactometers, gas chromatographs, and other analytical instrumentation used specifically for detecting and measuring ambient odor, either empirically or chemical specific. | 100 |
| M-21 | Land | Cathodic Protection | Cathodic protection installed in order to prevent corrosion of metal tanks and piping. | 100 |
| M-22 | Water | Fish and Other Aquatic Organism Protection Equipment | Equipment installed to protect fish and other aquatic organisms from entrainment or impingement in an intake cooling water structure. Equipment includes: Aquatic Filter Barrier Systems, Fine-Mesh Traveling Intake Screens, Fish Return Buckets, Sprays, Flow-Altering Louvers, Fish Trough, Fish Behavioral Deterrents, and Wetland Creation. | 100 |
| M-23 | Water /Land | Double-Walled Piping | The difference between cost of single walled piping and the cost of double-walled piping, when the double-walled piping is installed in order to prevent unauthorized discharges. | 100 |
| M-24 | Water/ Land | Double-walled Tanks | The difference between cost of single walled tanks and the cost of double-walled tanks, when the double-walled tanks are installed in order to prevent unauthorized discharges. | 100 |

Equipment Located at Service Stations

| No. | Media | Property | Description | % |
|--|----------------|---|---|-----|
| Spill and Overfill Prevention Equipment | | | | |
| T-1 | Water | Tight Fill Fittings | Liquid tight connections between the delivery hose and fill pipe. | 100 |
| T-2 | Water | Spill Containers | Spill containment manholes equipped with either a bottom drain valve to return liquids to the tank, or a hand pump for liquid removal. | 100 |
| T-3 | Water | Automatic Shut-off Valves | Flapper valves installed in the fill pipe to automatically stop the flow of product. | 100 |
| T-4 | Water | Overfill Alarms | External signaling device attached to an automatic tank gauging system. | 100 |
| T-5 | Water | Vent Restriction Devices | Float vent valves or ball float valves to prevent backflow through vents. | 100 |
| Secondary Containment | | | | |
| T-11 | Water | Double-walled Tanks | The difference between cost of single walled tanks and the cost of double-walled tanks, when the double-walled tanks are installed in order to prevent unauthorized discharges or leaks. | 100 |
| T-12 | Water | Double-walled Piping | The difference between cost of single walled piping and the cost of double-walled piping, when the double-walled piping is installed in order to prevent unauthorized discharges or leaks. | 100 |
| T-13 | Water | Tank Top Sumps | Liquid tight containers to contain leaks or spills that involve tank top fittings and equipment. | 100 |
| T-14 | Water | Under Dispenser Sumps | Contains leaks and spills from dispensers and pumps. | 100 |
| T-15 | Water | Sensing Devices | Installed to monitor for product accumulation in secondary containment sumps. | 100 |
| T-16 | Land/ Water | Concrete Paving above Underground Tanks and Pipes | Required concrete paving located above underground pipes and tanks. The use determination value is limited to the difference between the cost per square foot of the concrete paving and the cost per square foot of the other paving installed at the Service Station. This item only applies to Service Stations. | 100 |
| Release Detection for Tanks and Piping | | | | |
| T-21 | Water | Automatic Tank Gauging | Includes tank gauging probe and control console. | 100 |
| T-22 | Water | Groundwater or Soil Vapor Monitoring | Observation wells located inside the tank excavation or monitoring wells located outside the tank excavation. | 100 |
| T-23 | Water | Monitoring of Secondary Containment | Liquid sensors or hydrostatic monitoring systems installed in the interstitial space for tanks or piping. | 100 |
| T-24 | Water | Automatic Line Leak Detectors | Devices installed at the pump that are designed to detect leaks in underground piping. Mechanical and electronic devices are acceptable. | 100 |
| T-25 | Water | Under Pump Check Valve | Valve installed to prevent back flow in the fuel dispensing line. This device is only used on suction pump piping systems. | 100 |
| T-26 | Water | Tightness Testing Equipment | Equipment purchased to comply with tank and/or piping tightness testing requirements. | 100 |

| Cathodic Protection | | | | |
|-----------------------------|-------|------------------------------------|--|-----|
| T-30 | Water | Isolation Fittings | Dielectric bushings and fittings to separate underground piping from above ground tanks and piping. | 100 |
| T-31 | Water | Sacrificial Anodes | Magnesium or zinc anodes packaged in low resistivity backfill to provide galvanic protection. | 100 |
| T-32 | Water | Dielectric Coatings | Factory installed coal-tar epoxies, enamels, fiberglass reinforced plastic, or urethanes on tanks and/or piping. Field installed coatings limited to exposed threads, fittings, and damaged surface areas. | 100 |
| Emissions Control Equipment | | | | |
| T-40 | Air | Stage I or Stage II Vapor Recovery | Includes pressure/vacuum vent relief valves, vapor return piping, stage 2 nozzles, coaxial hoses, vapor processing units, and vacuum-assist units. Used for motor vehicle fuel dispensing facilities. Does not include fuel delivery components of fuel dispensing unit. | 100 |

Part B

Part B of the ECL is a list of the pollution control property categories set forth in TTC, §26.045(f). These categories are described in generic terms without the use of brand names or trademarks. Property used solely for product collection or for production purposes is not eligible for a positive use determination. The pollution control percentage for this equipment is listed as a “V”, for variable, and must be calculated on an application specific basis. Applicants should first view Part A of the ECL to see if their equipment is already on that list. Part B is a list adopted under TTC, §26.045(f).

| No. | Property | % |
|------|---|---|
| B-1 | Coal Cleaning or Refining Facilities | V |
| B-2 | Atmospheric or Pressurized and Bubbling or Circulating Fluidized Bed Combustion Systems and Gasification Fluidized Bed Combustion Combined Cycle Systems | V |
| B-3 | Ultra-Supercritical Pulverized Coal Boilers | V |
| B-4 | Flue Gas Recirculation Components | V |
| B-5 | Syngas Purification Systems and Gas-Cleanup Units | V |
| B-6 | Enhanced Heat Recovery Systems | V |
| B-7 | Exhaust Heat Recovery Boilers | V |
| B-8 | Heat Recovery Steam Generators | V |
| B-9 | Super-heaters and Evaporators | V |
| B-10 | Enhanced Steam Turbine Systems | V |
| B-11 | Methanation | V |
| B-12 | Coal Combustion or Gasification By-product and Co-product Handling, Storage, and Treatment Facilities | V |
| B-13 | Biomass Cofiring Storage, Distribution, and Firing Systems | V |
| B-14 | Coal Cleaning or Drying Processes, such as coal drying/moisture reduction, air jigging, precombustion decarbonization, and coal flow balancing technology. | V |
| B-15 | Oxy-Fuel Combustion Technology, Amine or Chilled Ammonia Scrubbing, Catalyst based Fuel or Emission Conversion Systems, Enhanced Scrubbing Technology, Modified Combustion Technology, Cryogenic Technology | V |
| B-16 | If the United States Environmental Protection Agency adopts a final rule or regulation regulating carbon dioxide as a pollutant, property that is used, constructed, acquired, or installed wholly or partly to capture carbon dioxide from an anthropogenic source in this state that is geologically sequestered in this state. | V |
| B-17 | Fuel Cells generating electricity using hydrocarbon derived from coal, biomass, petroleum coke, or solid waste. | V |
| B-18 | Any other equipment designed to prevent, capture, abate, or monitor nitrogen oxides, volatile organic compounds, particulate matter, mercury, carbon monoxide, or any criteria pollutant. | V |