



JUL 12 2012

Gerardo C. Rios, Chief  
Permits Office  
Air Division  
U.S. EPA - Region IX  
75 Hawthorne St  
San Francisco, CA 94105

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**  
**District Facility # S-1075**  
**Project # S-1121499**

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Styrotek Inc., located at Road 176 & Ave 4, Delano, which has been issued a Title V permit. Styrotek Inc. is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project is to replace two continuous pre-expanders with one batch pre-expander at their expanded polystyrene molding operation.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # S-1075-6-25 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



David Warner  
Director of Permit Services

Enclosures  
cc: Dolores Gough, Permit Services

**Seyed Sadredin**  
Executive Director/Air Pollution Control Officer

---

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: 661-392-5500 FAX: 661-392-5585



# San Joaquin Valley

AIR POLLUTION CONTROL DISTRICT

JUL 12 2012

Gary Ayers  
Styrotek Inc.  
P.O. Box 1180  
Delano, CA 93216-1180

**Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)  
District Facility # S-1075  
Project # S-1121499**

Dear Mr. Ayers:

Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project is to replace two continuous pre-expanders with one batch pre-expander at their expanded polystyrene molding operation.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,



David Warner  
Director of Permit Services

Enclosures  
cc: Dolores Gough, Permit Services

---

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061  
[www.valleyair.org](http://www.valleyair.org)

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: (661) 392-5500 FAX: (661) 392-5585

# San Joaquin Valley Air Pollution Control District Authority to Construct Application Review

## Replace Continuous Pre-Expanders with Batch Pre-Expander

Facility Name: Styrotek, Inc.  
Mailing Address: P.O. Box 1180  
Delano, CA 93216-1180  
Contact Person: Gary Ayers  
Telephone: 661-725-4957  
Fax: 661-725-7064  
E-Mail: [gayers@styrotek.com](mailto:gayers@styrotek.com)

Date: July 2, 2012  
Engineer: Dolores Gough  
Lead Engineer: Steve Leonard

 7/6/12

Application #(s): S-1075-6-25

Project #: S-1121499

Deemed Complete: May 17, 2012

---

### I. Proposal

Styrotek, Inc. (hereafter referred to as Styrotek) operates an expanded polystyrene molding operation in Delano. Styrotek is proposing to replace the two continuous pre-expanders currently listed on the expanded polystyrene molding operation permit (S-1075-6-24, condition #3) with one new batch pre-expander. After replacing the two continuous pre-expanders, there will be a total of two batch pre-expanders and permit condition #3 will be modified as follows:

Pre-expander area shall include ~~two continuous pre-expanders~~, one **two** batch pre-expanders, and associated bead dryers, bin hoppers, blowers, screeners, screw conveyors, and twenty-eight 1,800 cubic foot capacity pre-expanded bead storage silos.

The replacement of the continuous pre-expanders is not expected to result in any emissions increase from the molding operation. There is also no increase in plant throughput or any criteria pollutant emissions proposed.

Styrotek received their Title V Permit on October 31, 2004. This modification can be classified as a Title V minor modification pursuant to Rule 2520, Section 3.20, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Styrotek must apply to administratively amend their Title V Operating Permit to include the requirements of the ATC(s) issued with this project.

Appendix A: Current Permit to Operate

### II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (9/21/06)
Rule 2520	Federally Mandated Operating Permits (6/21/01)

Rule 4101 Visible Emissions (2/17/05)  
Rule 4102 Nuisance (12/17/92)  
Rule 4201 Particulate Matter Concentration (12/17/92)  
Rule 4682 Polystyrene, Polyethylene, and Polypropylene Products Manufacturing (09/20/07)  
Rule 4801 Sulfur Compounds (12/17/92)  
CH&SC 41700 Health Risk Assessment  
CH&SC 42301.6 School Notice  
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

### **III. Project Location**

Styrotek is located approximately 4 miles east of Delano near the intersection of Road 176 and Avenue 4, in Kern County. This operation is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

### **IV. Process Description**

The process description provided by Styrotek is as follows:

#### Step 1: Pre-expansion

Raw material, consisting of expandable polystyrene beads with no more than 4.2% by weight pentane content, is supplied to the facility in lined supra-bags. The beads are stored at 70°F in the sealed bags to prevent pentane loss prior to use. Pentane is the blowing agent in this raw material that allows the beads to expand under steam pressure to fill a mold cavity and form a "Strofoam" product. The facility's current PTO allows a maximum pentane content of 4.2%.

Raw material is moved to the pre-expansion room, as needed, where the bags are opened and the beads are vacuum transported to the pre-expander bead system. Presurized steam is injected into the bottom of the pre-expander cylinder to provide sufficient heat to the beads so that they will soften and the expanding agent, pentane, injected into the beads during manufacture, expands the beads to 4-6 times the original diameter. The steam vent pipe from the pre-expander chamber extends into a shroud which is under negative pressure created by 1200-2000 scfm to collect steam, pentane, and air into the vapor collection line. The vapor collection system captures fugitive emissions at this point.

#### Step 2: Pre-puff Aging

After pre-expansion, beads are dried and pneumatically transported to enclosed metal storage silos to cool down and stabilize. Depending on the production requirements, the allowed stabilization period varies from four to twenty four hours. A small amount of pentane is released during aging. The silos are also vented to the vapor collection system through direct piping under negative pressure.

### Step 3: Molding Process

In the molding process, the pre-expanded beads are pneumatically transferred from the pre-puff storage silos to small receiving silos above the molding machines. The pre-puff beads with a pentane content of 4.2% or less are loaded into an enclosed steam chest and pressurized steam is injected into the mold to heat the beads so that they soften, expand, and fuse together to form solid shapes of expanded polystyrene. The molded shapes are then cooled with water to halt the expansion process and discharged to collection conveyors for packing, storage, and shipping.

The steam vent pipes from the molding machine and the cooling water extend into a shroud which is under negative pressure to draw steam, pentane and air into the vapor collection line. Each of these processing steps is under negative pressure generated by the vapor collection system; therefore, collection efficiency of >90% can be assumed at these collection points. All pentane vapors collected by the vapor control system are combusted in a Regenerative Thermal Oxidizer (RTO) supplemented by natural gas and propane.

## **V. Equipment Listing**

### Pre-Project Equipment Description:

ATC S-1075-6-24: EXPANDED POLYSTYRENE MOLDING OPERATION, INCLUDING PRE-EXPANDER AREA, PRODUCTION AREA, AND 3.0 MM BTU/HR NATURAL GAS/LPG FIRED REGENERATIVE THERMAL OXIDIZER (RTO) SERVING PENTANE VAPOR CONTROL SYSTEM

### Proposed Modification:

ATC S-1075-6-25: MODIFICATION OF EXPANDED POLYSTYRENE MOLDING OPERATION, INCLUDING PRE-EXPANDER AREA, PRODUCTION AREA, AND 3.0 MM BTU/HR NATURAL GAS/LPG FIRED REGENERATIVE THERMAL OXIDIZER (RTO) SERVING PENTANE VAPOR CONTROL SYSTEM: REPLACE TWO CONTINUOUS PRE-EXPANDERS WITH ONE VACUTRANS MODEL PREEX 9000 BATCH-TYPE PRE-EXPANDER AND ASSOCIATED EQUIPMENT FOR A TOTAL OF TWO BATCH PRE-EXPANDERS

### Post Project Equipment Description:

PTO S-1075-6-25: EXPANDED POLYSTYRENE MOLDING OPERATION, INCLUDING PRE-EXPANDER AREA, PRODUCTION AREA, AND 3.0 MM BTU/HR NATURAL GAS/LPG FIRED REGENERATIVE THERMAL OXIDIZER (RTO) SERVING PENTANE VAPOR CONTROL SYSTEM

## VI. Emission Control Technology Evaluation

The facility is equipped with a pentane vapor collection system. The collected vapors are combusted in the existing RTO with a VOC destruction efficiency of 99%. No change to the existing control equipment is proposed; therefore, an emissions control technology evaluation is not required for this project.

## VII. General Calculations

### A. Assumptions

- No change in emissions will result from the replacement of the continuous pre-expanders with batch pre-expanders
- Maximum pentane content of raw beads does not exceed 4.2% (current permit)
- 37% of the total pentane content is released during the softening and molding process (based on testing of EPS operation)
- RTO destruction efficiency for VOC is 99% (current permit)
- Overall VOC capture and control efficiency is 93% (current permit)
- Raw beads processed do not exceed 128,310 lb/day nor 32,029,500 lbs (current permit)
- There will be no change in emissions due to combustion of natural gas in the RTO (no change in fuel rate is proposed)

### B. Emission Factors

For the RTO, the emissions factors for NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, CO, and VOC are listed on the current permit and summarized in the following table:

RTO Emission Factors		
	lb/MMBtu	Source
NO <sub>x</sub>	0.142	Current Operating Permit
SO <sub>x</sub>	0.0164	Current Operating Permit
PM <sub>10</sub>	0.0076	Current Operating Permit
CO	0.0737	Current Operating Permit
VOC	0.0054	Current Operating Permit

### C. Calculations

#### 1. Pre-Project Potential to Emit (PE1)

Emissions for the polystyrene molding operation are from the combustion of natural gas/propane in the RTO and from the fugitive and uncontrolled emissions from the molding operation. The proposed modification will not result in an increase in emissions; therefore, PE1 = PE2.

The PE1 was taken from the last project finalized for this unit and summarized below:

<b>Pre-Project Potential to Emit (PE1)</b>		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO <sub>x</sub>	10.2	3,732
SO <sub>x</sub>	1.2	431
PM <sub>10</sub>	0.5	200
CO	5.3	1,937
VOC	0.4 +139.6 (fugitives)	142

## 2. Post Project Potential to Emit (PE2)

As indicated above PE1 = PE2.

<b>Post-Project Potential to Emit (PE2)</b>		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO <sub>x</sub>	10.2	3,732
SO <sub>x</sub>	1.2	431
PM <sub>10</sub>	0.5	200
CO	5.3	1,937
VOC	0.4 +139.6 (fugitives)	142

## 3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

<b>Pre Project Stationary Source Potential to Emit [SSPE1] (lb/year)</b>					
Permit Unit/ERC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
ATC S-1075-3-12 **	2,665	475	730	21,170	438
S-1075-5-3	463	31	33	100	38
S-1075-6-22 <sup>1</sup>	3,758	431	200	1,937	34,982
S-1075-7-5	2,004	714	1,904	18,465	1,378
S-1076-8-3	507	68	216	4,345	1,086
<b>Pre Project SSPE (SSPE1<sub>i</sub>)</b>	<b>9,371</b>	<b>1,719</b>	<b>3,083</b>	<b>46,017</b>	<b>37,922</b>

\*\* Implemented ATC

## 4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source

and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Since there is no change in emissions on this project SSPE1 = SSPE2.

<b>Post- Project Stationary Source Potential to Emit [SSPE2] (lb/year)</b>					
Permit Unit/ERC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
ATC S-1075-3-12 **	2,665	475	730	21,170	438
S-1075-5-3	463	31	33	100	38
S-1075-6-22 <sup>1</sup>	3,758	431	200	1,937	34,982
S-1075-7-5	2,004	714	1,904	18,465	1,378
S-1076-8-3	507	68	216	4,345	1,086
<b>Post- Project SSPE (SSPE2)</b>	<b>9,371</b>	<b>1,719</b>	<b>3,083</b>	<b>46,017</b>	<b>37,922</b>

\*\* Implemented ATC

## 5. Major Source Determination

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post-project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site."

<b>Major Source Determination (lb/year)</b>					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
SSPE1	9,371	1,719	3,083	46,017	37,922
SSPE2	9,371	1,719	3,083	46,017	37,922
Major Source Threshold	20,000	140,000	140,000	200,000	20,000
Major Source?	No	No	No	No	Yes

As seen in the table above, the facility is an existing Major Source for VOC and will remain a Major Source for VOC as a result of this project.

## 6. Baseline Emissions (BE)

The BE calculation (in lbs/year) is performed pollutant-by-pollutant for each unit within the project, to calculate the QNEC and if applicable, to determine the amount of offsets required.

Pursuant to Section 3.7 of District Rule 2201, BE = Pre-project Potential to Emit for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or

- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to Section 3.22 of District Rule 2201.

As shown above, the facility is a major source for VOC emissions. Pursuant to Rule 2201, Section 3.12, a Clean Emissions Unit is defined as an emissions unit that is "equipped with an emissions control technology with a minimum control efficiency of at least 95% or is equipped with emission control technology that meets the requirements for achieved-in-practice BACT as accepted by the APCO during the five years immediately prior to the submission of the complete application.

This emissions unit is equipped with a capture and thermal oxidizer, which meets the requirements for achieved-in-practice BACT for VOC. Therefore, VOC Baseline Emissions (BE) are equal to the Pre-Project Potential to Emit (PE1).

## 7. SB288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Since this facility is a major source for VOC, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table.

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO <sub>x</sub>	3,372	50,000	No
SO <sub>x</sub>	431	80,000	No
PM <sub>10</sub>	200	30,000	No
VOC	34,932	50,000	No

As shown above, none of the SB288 Major modification thresholds are exceeded.

## 8. Federal Major Modification

District Rule 2201, Section 3.17 states that Federal Major Modifications are the same as "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

The proposed modification does not result in an increase in design capacity or potential to emit and does not impact the ability of the emissions unit to operate at a higher utilization rate. Therefore, the proposed modification will not result in a federal major modification.

## 9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Since there is no increase in emissions, the QNEC for all pollutants is zero. No detailed calculation is required.

## VIII. Compliance

### Rule 2201 New and Modified Stationary Source Review Rule

#### A. Best Available Control Technology (BACT)

##### 1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following\*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in an SB288 Major Modification or a Federal Major Modification, as defined by the rule, or modified emissions unit, in a stationary source project, which results in a Major Modification.

\*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

##### a. New emissions units – PE > 2 lb/day

As discussed in Section I above, there are no new emissions units associated with this project; therefore, BACT for new units with PE > 2 lb/day purposes is not triggered.

##### b. Relocation of emissions units – PE > 2 lb/day

As discussed in Section I above, there are no emissions units being relocated from one stationary source to another; therefore, BACT is not triggered.

##### c. Modification of emissions units – AIPE > 2 lb/day

$$\text{AIPE} = \text{PE}_2 - \text{HAPE}$$

Where,

AIPE = Adjusted Increase in Permitted Emissions, (lb/day)

PE<sub>2</sub> = Post-Project Potential to Emit, (lb/day)

HAPE = Historically Adjusted Potential to Emit, (lb/day)

$$\text{HAPE} = \text{PE1} \times (\text{EF2}/\text{EF1})$$

Where,

PE1 = The emissions unit's Potential to Emit prior to modification or relocation, (lb/day)

EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1

EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

Since PE1 = PE2 and EF1 = EF2, the AIPE for all pollutants is not greater than 2.0 lb/day.

#### d. SB288/Federal Major Modification

As discussed in Section VII.C.7 and 8 above, this project does not constitute a SB288/Federal Major Modification; therefore, BACT is not triggered.

### B. Offsets

#### 1. Offset Applicability

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the Post Project Stationary Source Potential to Emit (SSPE2) equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

Offset Determination (lb/year)					
	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>	CO	VOC
Post Project SSPE (SSPE2)	9,371	1,719	3,083	46,017	37,922
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	No	No	No	No	Yes

#### 2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for VOC only; however, since there is no increase in emissions associated with this project, offset calculations are not required.

## C. Public Notification

### 1. Applicability

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications,
- b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- c. Any project which results in the offset thresholds being surpassed, and/or
- d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant.

#### a. New Major Sources, Federal Major Modifications, and SB288 Major Modifications,

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

#### c. PE > 100 lb/day

Applications which include a new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project; therefore, public noticing is not required for this project for Potential to Emit Purposes.

#### d. Offset Threshold

The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Threshold				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold	Public Notice Required?
NO <sub>x</sub>	9,371	9,371	20,000 lb/year	No
SO <sub>x</sub>	1,719	1,719	54,750 lb/year	No
PM <sub>10</sub>	3,083	3,083	29,200 lb/year	No
CO	46,017	46,017	200,000 lb/year	No
VOC	37,922	37,922	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore, public noticing is not required for offset purposes.

#### e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any

affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e.  $SSIPE = SSPE2 - SSPE1$ . The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

<b>Stationary Source Increase in Permitted Emissions [SSIPE] – Public Notice</b>					
Pollutant	SSPE2 (lb/year)	SSPE1 (lb/year)	SSIPE (lb/year)	SSIPE Public Notice Threshold	Public Notice Required?
NO <sub>x</sub>	9,371	9,371	0	20,000 lb/year	No
SO <sub>x</sub>	1,719	1,719	0	20,000 lb/year	No
PM <sub>10</sub>	3,083	3,083	0	20,000 lb/year	No
CO	46,017	46,017	0	20,000 lb/year	No
VOC	37,922	37,922	0	20,000 lb/year	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

## 2. Public Notice Action

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

## D. Daily Emission Limits (DELs)

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

All the existing maximum daily limits will be retained on the new ATC to ensure compliance with this rule.

## E. Compliance Assurance

### 1. Source Testing

No additional or modified source testing conditions are required as a result of this project.

### 2. Monitoring

No additional or modified monitoring conditions are required as a result of this project.

### **3. Recordkeeping**

No additional or modified recordkeeping conditions are required as a result of this project.

### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

### **Rule 2520 Federally Mandated Operating Permits**

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application.

### **Rule 4101 Visible Emissions**

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity).

The RTO is fired on pentane containing vapors, natural gas, and propane only. The proposed modifications are not expected to cause a violation of the visible emissions standard specified in the Rule; therefore, continued compliance with this rule is expected.

### **Rule 4102 Nuisance**

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

### **California Health & Safety Code 41700 (Health Risk Assessment)**

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

As discussed above, there are no increases in emissions associated with this project, therefore a health risk assessment is not necessary and no further risk analysis is required.

### **Rule 4201 Particulate Matter Concentration**

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot. Since there is no increase in PM10 emissions, continued compliance with this rule is expected.

### **Rule 4682 Polystyrene, Polyethylene, and Polypropylene Products Manufacturing**

The purpose of this rule is to limit emissions of VOC and trichlorofluoromethane (CFC-11) and dichlorofluoromethane (CFC-12) from manufacturing and processing of products composed of polystyrene, polyethylene, or polypropylene and from the storage of VOC blowing agents.

The provisions of this rule shall apply to any manufacturing, processing, and storage of products composed of polystyrene, polyethylene, or polypropylene.

All existing conditions applicable to this rule will be retained on the new ATC to ensure compliance with the requirements of this rule.

### **Rule 4801 Sulfur Compounds**

A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO<sub>2</sub>, on a dry basis averaged over 15 consecutive minutes. There is no change to the type of gas being combusted by the ROT; therefore, continued compliance with this rule is expected.

### **California Health & Safety Code 42301.6 (School Notice)**

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

### **California Environmental Quality Act (CEQA)**

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

### Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

### District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

### IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful COC noticing period, issue Authority to Construct S-1075-6-25 subject to the permit conditions on the attached draft Authority to Construct in Appendix F.

### X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-1075-6-25	3020-10-F	3.0 MMBtu/hr	\$607.00

### Appendices

- A: Current Operating Permit
- B: Draft Authority to Construct
- C: Emissions Profile
- D: Title V Compliance Certification

# **Appendix A**

---

## **Current Operating Permit**

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** S-1075-6-24

**EXPIRATION DATE:** 06/30/2016

**SECTION:** NE32 **TOWNSHIP:** 24S **RANGE:** 26E

**EQUIPMENT DESCRIPTION:**

EXPANDED POLYSTYRENE MOLDING OPERATION, INCLUDING PRE-EXPANDER AREA, PRODUCTION AREA, AND 3.0 MM BTU/HR NATURAL GAS/LPG FIRED REGENERATIVE THERMAL OXIDIZER (RTO) SERVING PENTANE VAPOR CONTROL SYSTEM

## PERMIT UNIT REQUIREMENTS

---

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Tulare County 407] Federally Enforceable Through Title V Permit
3. Pre-expander area shall include two continuous pre-expanders, one batch pre-expander, and associated bead dryers, bin hoppers, blowers, screeners, screw conveyors, and twenty-eight 1,800 cubic foot capacity pre-expanded bead storage silos. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Production area shall include thirty-nine presses, belt conveyors, vacuum pumps, vacuum blowers and exhaust blowers. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Pentane control system shall include vapor collection piping network serving vacuum systems, molding machines and water drain vents and one regenerative thermal oxidizer (RTO). [District NSR Rule] Federally Enforceable Through Title V Permit
6. RTO shall incinerate VOC's recovered from the pre-expander(s), bead storage silo(s), or molding machine(s) at any time these units are in operation. [District NSR Rule] Federally Enforceable Through Title V Permit
7. RTO shall be equipped with an operational temperature gauge to indicate the temperature of the combustion chamber. A continuously recording device shall be utilized to indicate the combustion chamber temperature during operation. [District NSR Rule] Federally Enforceable Through Title V Permit
8. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
9. Sampling ports adequate for extraction of grab samples, measurement of gas flow rate, and use of an FID, PID, or other District-approved VOC detection device shall be provided for both the influent and the effluent gas streams. [District Rule 1081] Federally Enforceable Through Title V Permit
10. Pentane content of raw bead supply shall not exceed 4.2% by weight on an annual average basis. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
11. Raw beads processed shall not exceed 128,310 pounds/day nor 32,027,500 pounds/year. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Only natural gas and propane shall be used as auxiliary fuel for the combustion of VOC. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

13. Minimum volatile organic compound control efficiency across RTO shall be 99% by weight. [District NSR Rule and District Rule 4682] Federally Enforceable Through Title V Permit
14. Minimum VOC (pentane) capture and control efficiency, calculated as VOC vapor capture efficiency multiplied times RTO control efficiency divided by 100, shall be 93% by weight. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
15. The total VOC emissions from the EPS molding operation including fugitive and RTO combustion emissions shall not exceed 140.0 pounds in any one day nor 34,982 lb/year. [District NSR Rule] Federally Enforceable Through Title V Permit
16. The minimum operating temperature for the combustion chamber of the RTO shall be maintained at or above 1400 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
17. Combustion emission rates from RTO shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>): 117.0 ppmv @ 3% O<sub>2</sub> or 0.142 lb/MMBTU, CO: 100 ppmv @ 3% O<sub>2</sub> or 0.0737 lb/MMBTU, SO<sub>x</sub> (as SO<sub>2</sub>) 0.0164 lb/MMBTU, PM<sub>10</sub>: 0.0076 lb/MMBTU, nor VOC: 0.0054 lb/MMBTU. [District NSR Rule] Federally Enforceable Through Title V Permit
18. RTO inlet ductwork and exhaust stack shall be equipped with adequate provisions facilitating the collection of samples from both the influent and the effluent gas stream sampling ports consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. [District Rule 1081] Federally Enforceable Through Title V Permit
19. Permittee shall monitor and record pressure upstream of the condenser (water knockout box) on a weekly basis to document that the system is under vacuum. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
20. Vapor control system capture efficiency shall be demonstrated within 60 days of startup and annually thereafter by using the following calculation procedure:  $e \times f / (a \times b - c \times d)$  where a = pentane content of raw beads (lb/ton), b = raw bead input rate (tons/hr), c = pentane content of product (lb/ton), and d = product output rate (tons/hr), e = pentane vapor concentration at RTO inlet (lb/scf), f = flow rate into RTO (scf/hr). [District Rules 1070 and 4682] Federally Enforceable Through Title V Permit
21. For demonstration of vapor control system capture efficiency through source testing, at least three test runs covering at least one production cycle and at least 3 hours and no more than 24 hours in duration shall be conducted to determine capture efficiency. Protocols for data analysis must either meet the data quality objective (DQO) or lower confidence limit (LCL) approaches as described in EPA "Guidelines for Determining Capture Efficiency." January 9, 1995 and 40 CFR 51 Appendix M, Methods 204-204F, as applicable. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
22. Source testing to measure the VOC emissions from the RTO and RTO control efficiency shall be conducted annually. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
24. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
25. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
26. During the operation of the RTO, the permittee shall monitor and record combustion chamber temperatures at least once every 15 minutes. The temperature readings shall be at or above 1,400 F during which the pentane vapors are being combusted in the RTO. Upon detecting any excursion below the 1,400 F temperature reading, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 4682 and 40 CFR part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

27. The RTO's burner and its associated components and the vapor collection system shall be inspected thoroughly on an annual basis. The records of inspection shall at least contain date and time of inspection, identification of the person performing an inspection, parts replacement and repairs, and all maintenance actions taken. The records shall be kept and maintained for compliance inspection upon request. [40 CFR part 64] Federally Enforceable Through Title V Permit
28. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
29. Vapor control system shall be visually and audibly inspected for leaks weekly. [District NSR Rule] Federally Enforceable Through Title V Permit
30. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
31. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR part 64] Federally Enforceable Through Title V Permit
32. Permittee shall maintain daily records of RTO temperature, raw bead pentane content and pounds of raw beads processed and make such records readily available for District inspection for a period of five years. [District Rule 1070 and District Rule 4682] Federally Enforceable Through Title V Permit
33. Permittee shall maintain records of vapor control system capture efficiency and RTO control efficiency and make such records readily available for District inspection for a period of five years. [District Rules 1070 and 4682] Federally Enforceable Through Title V Permit
34. Permittee shall maintain a record of all periods of non-operation of the RTO, including the dates, duration and reason(s) for the unit not being operated. [District NSR Rule] Federally Enforceable Through Title V Permit
35. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
36. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: Tulare County Rule 407, SJVUAPCD Rules 1081, 4201, and 4682. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# Appendix B

---

Draft Authority to Construct

San Joaquin Valley  
Air Pollution Control District

**AUTHORITY TO CONSTRUCT**

**ISSUANCE DATE: DRAFT**

**PERMIT NO:** S-1075-6-25

**LEGAL OWNER OR OPERATOR:** STYROTEK INC  
**MAILING ADDRESS:** PO BOX 1180  
DELANO, CA 93216-1180

**LOCATION:** 545 ROAD 176  
(ROAD 176 & AVENUE 4)  
DELANO, CA 93215

**SECTION:** NE32 **TOWNSHIP:** 24S **RANGE:** 26E

**EQUIPMENT DESCRIPTION:**

MODIFICATION OF EXPANDED POLYSTYRENE MOLDING OPERATION, INCLUDING PRE-EXPANDER AREA, PRODUCTION AREA, AND 3.0 MM BTU/HR NATURAL GAS/LPG FIRED REGENERATIVE THERMAL OXIDIZER (RTO) SERVING PENTANE VAPOR CONTROL SYSTEM: REPLACE TWO CONTINUOUS PRE-EXPANDERS WITH ONE VACUTRANS MODEL PREEX 9000 BATCH-TYPE PRE-EXPANDER AND ASSOCIATED EQUIPMENT FOR A TOTAL OF TWO BATCH PRE-EXPANDERS

**CONDITIONS**

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801 and Tulare County 407] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

**YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT.** This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

**DAVID WARNER, Director of Permit Services**

S-1075-6-25 : Jul 5 2012 10:28AM -- GOUGHD : Joint Inspection Required with GOUGHD

5. Pre-expander area shall include two batch pre-expanders, and associated bead dryers, bin hoppers, blowers, screeners, screw conveyors, and twenty-eight 1,800 cubic foot capacity pre-expanded bead storage silos. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Production area shall include thirty-nine presses, belt conveyors, vacuum pumps, vacuum blowers and exhaust blowers. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Pentane control system shall include vapor collection piping network serving vacuum systems, molding machines and water drain vents and one regenerative thermal oxidizer (RTO). [District NSR Rule] Federally Enforceable Through Title V Permit
8. RTO shall incinerate VOC's recovered from the pre-expander(s), bead storage silo(s), or molding machine(s) at any time these units are in operation. [District NSR Rule] Federally Enforceable Through Title V Permit
9. RTO shall be equipped with an operational temperature gauge to indicate the temperature of the combustion chamber. A continuously recording device shall be utilized to indicate the combustion chamber temperature during operation. [District NSR Rule] Federally Enforceable Through Title V Permit
10. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
11. Sampling ports adequate for extraction of grab samples, measurement of gas flow rate, and use of an FID, PID, or other District-approved VOC detection device shall be provided for both the influent and the effluent gas streams. [District Rule 1081] Federally Enforceable Through Title V Permit
12. Pentane content of raw bead supply shall not exceed 4.2% by weight on an annual average basis. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
13. Raw beads processed shall not exceed 128,310 pounds/day nor 32,027,500 pounds/year. [District NSR Rule] Federally Enforceable Through Title V Permit
14. Only natural gas and propane shall be used as auxiliary fuel for the combustion of VOC. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Minimum volatile organic compound control efficiency across RTO shall be 99% by weight. [District NSR Rule and District Rule 4682] Federally Enforceable Through Title V Permit
16. Minimum VOC (pentane) capture and control efficiency, calculated as VOC vapor capture efficiency multiplied times RTO control efficiency divided by 100, shall be 93% by weight. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
17. The total VOC emissions from the EPS molding operation including fugitive and RTO combustion emissions shall not exceed 140.0 pounds in any one day nor 34,982 lb/year. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The minimum operating temperature for the combustion chamber of the RTO shall be maintained at or above 1400 degrees F. [District NSR Rule] Federally Enforceable Through Title V Permit
19. Combustion emission rates from RTO shall not exceed any of the following: NO<sub>x</sub> (as NO<sub>2</sub>): 117.0 ppmv @ 3% O<sub>2</sub> or 0.142 lb/MMBTU, CO: 100 ppmv @ 3% O<sub>2</sub> or 0.0737 lb/MMBTU, SO<sub>x</sub> (as SO<sub>2</sub>) 0.0164 lb/MMBTU, PM<sub>10</sub>: 0.0076 lb/MMBTU, nor VOC: 0.0054 lb/MMBTU. [District NSR Rule] Federally Enforceable Through Title V Permit
20. RTO inlet ductwork and exhaust stack shall be equipped with adequate provisions facilitating the collection of samples from both the influent and the effluent gas stream sampling ports consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. [District Rule 1081] Federally Enforceable Through Title V Permit
21. Permittee shall monitor and record pressure upstream of the condenser (water knockout box) on a weekly basis to document that the system is under vacuum. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit

DRAFT

CONDITIONS CONTINUE ON NEXT PAGE

22. Vapor control system capture efficiency shall be demonstrated within 60 days of startup and annually thereafter by using the following calculation procedure:  $e \times f / (a \times b - c \times d)$  where a = pentane content of raw beads (lb/ton), b = raw bead input rate (tons/hr), c = pentane content of product (lb/ton), and d = product output rate (tons/hr), e = pentane vapor concentration at RTO inlet (lb/scf), f = flow rate into RTO (scf/hr). [District Rules 1070 and 4682] Federally Enforceable Through Title V Permit
23. For demonstration of vapor control system capture efficiency through source testing, at least three test runs covering at least one production cycle and at least 3 hours and no more than 24 hours in duration shall be conducted to determine capture efficiency. Protocols for data analysis must either meet the data quality objective (DQO) or lower confidence limit (LCL) approaches as described in EPA "Guidelines for Determining Capture Efficiency." January 9, 1995 and 40 CFR 51 Appendix M, Methods 204-204F, as applicable. [District NSR Rule and 4682] Federally Enforceable Through Title V Permit
24. Source testing to measure the VOC emissions from the RTO and RTO control efficiency shall be conducted annually. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Source testing shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
28. During the operation of the RTO, the permittee shall monitor and record combustion chamber temperatures at least once every 15 minutes. The temperature readings shall be at or above 1,400 F during which the pentane vapors are being combusted in the RTO. Upon detecting any excursion below the 1,400 F temperature reading, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent recurrence of the excursion as expeditiously as practicable. [District Rule 4682 and 40 CFR part 64] Federally Enforceable Through Title V Permit
29. The RTO's burner and its associated components and the vapor collection system shall be inspected thoroughly on an annual basis. The records of inspection shall at least contain date and time of inspection, identification of the person performing an inspection, parts replacement and repairs, and all maintenance actions taken. The records shall be kept and maintained for compliance inspection upon request. [40 CFR part 64] Federally Enforceable Through Title V Permit
30. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR part 64] Federally Enforceable Through Title V Permit
31. Vapor control system shall be visually and audibly inspected for leaks weekly. [District NSR Rule] Federally Enforceable Through Title V Permit
32. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR part 64] Federally Enforceable Through Title V Permit
33. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR part 64] Federally Enforceable Through Title V Permit
34. Permittee shall maintain daily records of RTO temperature, raw bead pentane content and pounds of raw beads processed and make such records readily available for District inspection for a period of five years. [District Rule 1070 and District Rule 4682] Federally Enforceable Through Title V Permit
35. Permittee shall maintain records of vapor control system capture efficiency and RTO control efficiency and make such records readily available for District inspection for a period of five years. [District Rules 1070 and 4682] Federally Enforceable Through Title V Permit
36. Permittee shall maintain a record of all periods of non-operation of the RTO, including the dates, duration and reason(s) for the unit not being operated. [District NSR Rule] Federally Enforceable Through Title V Permit

DRAFT  
CONDITIONS CONTINUE ON NEXT PAGE

37. All records shall be retained for a minimum of five years, and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
38. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following requirements: Tulare County Rule 407, SJVUAPCD Rules 1081, 4201, and 4682. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

# Appendix C

---

## Emissions Profile

Permit #: S-1075-6-25	<b>Last Updated</b>
Facility: STYROTEK INC	06/28/2012 GOUGHD

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	3732.0	431.0	200.0	1937.0	34982.0
Daily Emis. Limit (lb/Day)	10.2	1.2	0.5	5.3	140.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

# Appendix D

---

## Title V Compliance Certification

**San Joaquin Valley  
Unified Air Pollution Control District**

**TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM**

**I. TYPE OF PERMIT ACTION (Check appropriate box)**

- SIGNIFICANT PERMIT MODIFICATION       ADMINISTRATIVE  
 MINOR PERMIT MODIFICATION               AMENDMENT

COMPANY NAME: <b>Styrotek, Inc.</b>	FACILITY ID: <b>S - 713</b> <span style="float: right; margin-right: 20px;">1075</span>
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name:	
3. Agent to the Owner:	

**II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):**

- Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:

Gary Ayers  
Signature of Responsible Official

5/7/12  
Date

Gary Ayers  
Name of Responsible Official (please print)

Operations Manager  
Title of Responsible Official (please print)

Replace continuous pre-expanders with a batch pre-expander.