

CBE



April 20, 2009

Ajaya Satyal  
District Air Program Administrator  
F.D.E.P. - South District Office  
P.O. Box 2549  
Ft. Myers, Florida 33902-2549

**RE: E-Stone USA Corporation  
Permit No. 0550049-004-AV  
Request for Additional Information Regarding Initial Title V Permit  
Application**

Dear Mr. Satyal:

The purpose of this letter is to respond to your request for additional information addressed to Mr. James Gorsuch dated April 1, 2009. Each response is numbered in accordance with your letter:

**Question 1**

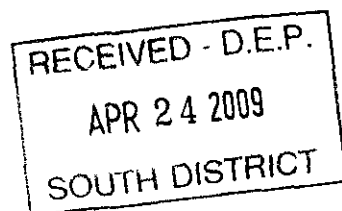
**Fuel Usage**

E-Stone does not use any propane in the manufacturing process. All of the emission units have been switched over to natural gas. The only propane used at the facility is for the forklifts and for one of the welders used for maintenance. A revised List of Insignificant Activities is included in Attachment A.

**Question 2**

**Emissions Units and Activities**

The driveways will eventually be paved and the aggregate piles are watered as needed to prevent unconfined particulate matter.



**Question 3**

**Compliance Plan**

Prior to start-up of polymerizing line 2, E-Stone will need to properly size an RTO and submit a construction application for its installation. Once they have obtained a construction permit, they will install it and perform the initial compliance demonstration and update the OM&M plan. Lastly E-Stone will submit an application to incorporate polymerizing line 2 into the existing Title V operating permit.

E-Stone does not have any milestone dates at this time due to the economy.

**Question 4**

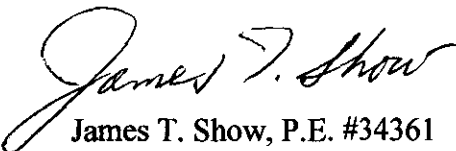
**Compliance Demonstration Test Report**

A response to the South District's Air Resource Management Compliance and Enforcement Section's letter dated March 27, 2009 was submitted to the Department on April 3, 2009. Enclosed in Attachment B is a copy of this letter.

If you have any further questions, please call me at (407) 298-2282 or e-mail me at [sara@grovescientific.com](mailto:sara@grovescientific.com).

Respectfully,

GROVE SCIENTIFIC & ENGINEERING COMPANY

  
James T. Show, P.E. #34361

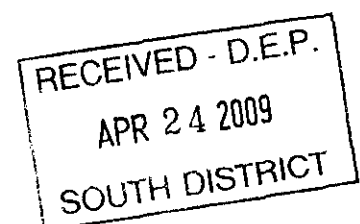
V.P., Engineering



Sara Greivell

Environmental Scientist

cc: Polly Mandrell – E-Stone USA Corporation  
Livio Magni – E-Stone USA Corporation  
Jim Gorsuch, CFO Trend-USA

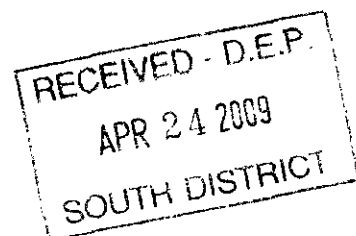


**ATTACHMENT A**  
**Revised List of Insignificant Activities**

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## **List of Insignificant Activities:**

- Fire extinguishers
- Cleaning and sweeping of streets & paved surfaces
- Emergency backup generators (4)
- Non-routine clean out of tanks and equipment for the purposes of worker entry or in preparation for maintenance or decommissioning
- Research and development, quality control
- Water treatment
- Bulk propane storage tank
- Bulk resin storage tank
- Portable totes of aggregate
- Polishing Line 1 – wet process and no ovens or dryers
- Slab cutting – wet saw
- Product packaging
- Aggregate storage bins (outdoors)
- Propane tanks for forklifts and welder



**ATTACHMENT B**  
**Copy of Response to Request for Additional**  
**Information on Compliance Test**

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April 3, 2009



Mr. Ajaya K. Satyal  
District Air Program Administrator  
Florida Department of Environmental Protection  
South District Office  
P.O. Box 2549  
Ft. Myers, Florida 33902-2549

**RE: Request for Additional Information on Compliance Test  
E-Stone USA Corporation  
File No. 0550049-004-AV**

Dear Mr. Satyal;

We are in receipt of the above request, discussed each of the following issues with Sherrill Culliver and have addressed them below. The incorrect run time was calculated in the stack test report causing the other calculation to be incorrect.

**Item 1**

The correct length of production time for the calculations should have been 352 minutes as pointed out by Mr. Culliver's review of the test report. This has been corrected in the report and a revised "Section 5.0" is attached. All of the calculation affected by the run-time have been revised.

**Item 2**

The polyester resin usage is correct in the original report as I discussed with Mr. Culliver. The counter did not start at 21.667 lbs. This is the amount of resin it took to make the first slab. The second page of the raw data sheets in Appendix E of the report, shows it took 1674.901 pounds of polyester resin to make 78 slabs. This was the overall production rate in the 352 minutes.

**page 2 of 2**

**E-Stone**

**Item 3**

Tinuvin is a catalyst that comes in powder form. There are no HAP in Tinuvin. Styrene (4.68 pounds) is used to dissolve the Tinuvin into a solution so that it can be added to the overall resin recipe. To correctly account for this styrene, it is added to the resin amount in section 5.3 of the report. The final emission rate is expressed as pounds of organic HAP per ton of neat resin. Neat resin is the polyester with the HAP (in this case styrene).

Should you have any additional questions regarding this letter, please call or email [bruno@grovescientific.com](mailto:bruno@grovescientific.com).

Sincerely,

**GROVE SCIENTIFIC & ENGINEERING COMPANY**



**Bruno A. Ferraro, CEP, QEP**

**President**

cc: Polly Mandrell

## SECTION 5.0

### PRODUCTION DATA AND MASS ORGANIC HAP EMISSION RESULTS

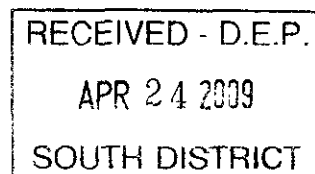
#### 5.1 Production Monitoring System

The robotic manufacturing process at E-Stone is computer controlled and monitored. The operator can select any time sequence and obtain real-time raw material consumption rate and production rate. The computer generated report and the AOC Resins MSDS are included in Attachment E.

The report includes the time between 09:12:25 hours to 15:04:52 hours for a total of 352 minutes during which 78 slabs were produced. This equates to 13.3 slabs/hr of production. A total of 1674.901 lbs of AOC polyester resin was used in 352 minutes or 280.89 lbs/hr. The resin is a 50/50 mixture of two AOC resins; A520-PKC-00 which is 35% styrene and A520-PKE-00 which is 35% styrene. A small amount of styrene (4.68 pounds) is added to the batch as a diluent for the micro-additive Tinuvin. A summary of the raw material usage is presented below in Table 5-1.

**Table 5-1: Summary of Raw Material Usage**

Raw Material	Total Pounds used in 78 Slabs	Usage Rate (lbs/hr)
Limestone Rock (backing)	5850.000	997.159
Decorative Aggregate	9069.984	1546.020
Catalyst (Norox 90 cc)	16.741	2.854
Styrene	4.68	0.798
Polyester Resin	1674.901	285.495





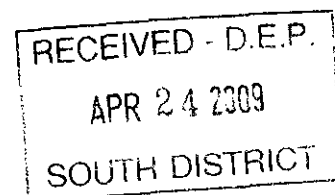
## 5.2 Emission Summary

The stack test report is included in its entirety in Attachment F. Three locations were tested for styrene using EPA Method 25A applying a measured response factor to styrene, the only organic HAP. The three locations tested were the inlet and outlet of the RTO and the dust collector outlet (DC3). The mass emissions are based on the combined emission rate of the RTO outlet and the DC3 outlet. The inlet of the RTO was measured to determine overall RTO destruction efficiency for in-house purposes only. The results of the destruction efficiency are summarized below in Table 5-2.

**Table 5-2: Summary of RTO Destruction Efficiency**

Run No.	RTO Inlet (lbs/hr as styrene)	RTO Outlet (lbs/hr as styrene)	Destruction Efficiency (%)
1	7.48	0.06	99.17
2	7.74	0.06	99.21
3	7.22	0.09	98.76
<b>Average</b>	<b>7.48</b>	<b>0.07</b>	<b>99.04</b>

The results of the mass styrene (HAP) emissions are presented below in Table 5-3.



**Table 5-3: Summary of Mass Styrene (HAP) Emissions**

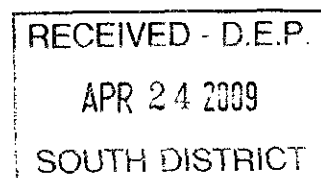
<b>Run No.</b>	<b>RTO Outlet (lbs/hr as styrene)</b>	<b>DC3 Outlet (lbs/hr as styrene)</b>	<b>Total Organic HAP Mass Emission Rate (lbs/hr as styrene)</b>
<b>1</b>	0.06	5.39	5.45
<b>2</b>	0.06	6.60	6.66
<b>3</b>	0.09	6.12	6.21
<b>Average</b>	<b>0.07</b>	<b>6.03</b>	<b>6.10</b>

### **5.3 Compliance with HAP Emission Limit**

In accordance with Specific Condition B.12 of the referenced construction permit, this open molding - non-CR/HS polymerization process is required to meet the organic HAP emission limit referenced in 40 Part 63 Subpart WWW Table 3, item 2, of 88 pounds of organic HAP per ton of resin. As presented in Table 5-1, the hourly resin usage during the test was 285.495 lbs plus 0.798 lbs of additional styrene (used to mix Tinuvin into solution) equals 286.29 lbs/hr or 0.1431 tons/hr. Styrene is the only organic HAP in this product.

The emission limit is calculated as follows:

$(6.10 \text{ lbs organic HAP}) / (0.1430 \text{ tons of resin}) = 42.66 \text{ lbs organic HAP/ton of neat resin.}$



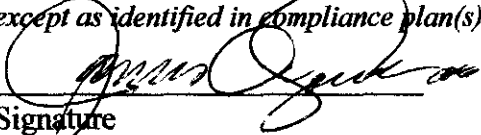
**ATTACHMENT C**  
**Responsible Official Certification and**  
**P.E. Certification Pages**

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**APPLICATION INFORMATION**

**Application Responsible Official Certification**

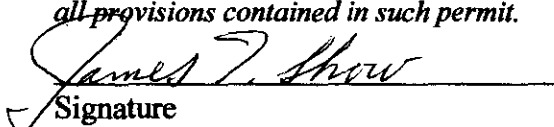
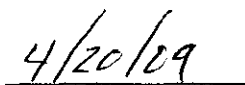
**Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."**

1. Application Responsible Official Name: <b>James Gorsuch</b>
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source, CAIR source, or Hg Budget source.
3. Application Responsible Official Mailing Address... Organization/Firm: <b>E-Stone Corporation</b> Street Address: <b>8041 Haywood Taylor Blvd</b> City: <b>Sebring</b> State: <b>Florida</b> Zip Code: <b>33870</b>
4. Application Responsible Official Telephone Numbers... Telephone: <b>(863) 655 - 1273</b> ext. Fax: <b>(863) 655 - 1309</b>
5. Application Responsible Official E-mail Address: <b>Pollyma@trendgroup-usa.com</b>
6. Application Responsible Official Certification: <i>I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.</i>  Signature _____ Date <u>4/22/09</u>

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**APPLICATION INFORMATION**

**Professional Engineer Certification**

1. Professional Engineer Name: <b>James T. Show</b> Registration Number: <b>34361</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Grove Scientific &amp; Engineering Company</b> Street Address: <b>6140 Edgewater Drive, Suite F</b> City: <b>Orlando</b> State: <b>Florida</b> Zip Code: <b>32810</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(407) 298 - 2282</b> ext. Fax: <b>(407) 290 - 9038</b>
4. Professional Engineer E-mail Address: <b>j_sshow@bellsouth.net</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>   Signature   Date  (seal)

\* Attach any exception to certification statement.

