STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF:

AMERICAS STYRENICS LLC

AI # 2384

PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT
LA. R.S. 30:2001, ET SEQ.

SETTLEMENT

The following Settlement is hereby agreed to between Americas Styrenics LLC ("Respondent") and the Department of Environmental Quality ("DEQ" or "the Department"), under authority granted by the Louisiana Environmental Quality Act, La. R.S. 30:2001, et seq. ("the Act").

I

Respondent is a limited liability corporation that owns and/or operates a styrene monomer manufacturing facility located in St. James, St. James Parish, Louisiana ("the Facility").

II

On April 19, 2011, the Department issued to Respondent a Consolidated Compliance Order & Notice of Potential Penalty, Enforcement No. AE-CN-11-00172 based upon the following findings of fact:

The Respondent owns and/or operates the St. James Styrene Facility, a styrene monomer manufacturing facility, located at or near 9901 Louisiana Highway 18, St. James, St. James Parish, Louisiana. The facility currently operates under Title V Permit No. 2560-00007-V9 issued on April 5, 2010.

According to the Respondent’s Notification of Change of Ownership/Operator or Name
Change Form, NOC-1, submitted via correspondence dated June 12, 2008, effective May 1, 2008, Chevron Phillips Chemical Company, LP (Chevron Phillips) and the Dow Chemical Company formed a joint business venture to form Americas Styrenics LLC. At that time, the St. James Styrene Facility became part of Americas Styrenics LLC.

On or about January 12, 2011, and January 14, 2011, file reviews of the Respondent's facility were performed to determine the degree of compliance with the Act and the Air Quality Regulations.

The following violations were noted during the course of the reviews:

A. According to the Respondent's 40 CFR Part 70 Permit Deviation Report dated November 17, 2010, the Respondent reported that "the St. James Plant did not complete the 10-year inspection for tank MF-304 [Toluene Storage Tank, EQT 029] as prescribed by the regulations [40 Code of Federal Regulations (CFR) 63.120(a)(2)(ii)]. The regulations required that the tank be emptied and degassed for the 10-year inspection. We did conduct the inspection of the tank components, in 2007, while the tank was in service." According to the Respondent, tank MF-304 was upgraded with an internal floating roof in 1997. Chevron Phillips conducted an inspection in 2007 without emptying and degassing tank MF-304. Since the Respondent became the operator of the St. James Facility in 2008, it has not conducted an inspection of MF-304 in accordance with 40 CFR 63.120(a)(2)(ii). The failure to empty and degas the storage vessel at least once every 10 years for inspection is a violation of 40 CFR 63.120(a)(2)(ii), which language has been adopted as a Louisiana regulation in LAC 33:III.5122, Specific Requirement No. 244 of Title V Permit No. 2560-00007-V8, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

B. The Department received an Unauthorized Discharge Notification Report from the Respondent dated May 30, 2008. According to the Respondent, the benzene, toluene, and Ethylbenzene emissions above the hourly maximum permit limits during this incident were as follows:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Maximum Emission Rates (lbs/hr)</th>
<th>Emissions (lbs)</th>
<th>Emissions Over Permit Limit (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>0.053</td>
<td>0.347</td>
<td>0.113</td>
</tr>
<tr>
<td>Toluene</td>
<td>0.113</td>
<td>0.556</td>
<td>0.409</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>0.112</td>
<td>0.553</td>
<td>0.010</td>
</tr>
</tbody>
</table>

According to this report, the maximum temperature established for the SM-1 Hotwell Absorption Tower (EQT 004) was exceeded on May 25, 2008. "The temperature excursion was the result of a
solenoid failure on the level control system of our process unit refrigeration equipment. The shutdown of this process refrigeration equipment triggered the increase in temperature of the SM-1 Hotwell Absorption Tower scrubbing liquid above the range established in the most recent performance test, 109° Fahrenheit. . . . There were no off-site impacts as a result of this excursion.” The duration of this event was 4.93 hours. Each permit limit exceedance is a violation of Title V Permit No. 2560-00007-V8, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The Respondent also reported these deviations in its Title V 2008 Annual Compliance Certification Report dated March 24, 2009, Title V Semiannual Monitoring Report dated September 29, 2008, and 40 CFR Part 70 Quarterly Permit Deviation Report dated September 29, 2008.

C. The Department received an Unauthorized Discharge Notification Report from the Respondent dated September 24, 2008. According to the Respondent, the benzene, toluene, Ethylbenzene, styrene, and volatile organic compounds (VOC) emissions above the hourly maximum permit limits during this incident were as follows:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Emissions Over Permit Limit (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzene</td>
<td>38.64</td>
</tr>
<tr>
<td>Toluene</td>
<td>3.56</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>6.81</td>
</tr>
<tr>
<td>Styrene</td>
<td>3.74</td>
</tr>
<tr>
<td>VOC</td>
<td>35.71</td>
</tr>
</tbody>
</table>

According to this report, on September 17, 2008, “The emission exceedance was due to an intermittent [sic] loss of lean oil flow to the SM-2 Hotwell Absorption Tower during start-up of the SM-2 process unit. . . . There were no off-site impacts as a result of this exceedance.” Each permit limit exceedance is a violation of Title V Permit No. 2560-00007-V8, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The Respondent also reported these deviations in its Title V 2008 Annual Compliance Certification Report dated March 24, 2009, Title V Semiannual Monitoring Report dated March 24, 2009, 40 CFR Part 70 Quarterly Permit Deviation Report dated December 15, 2008, and HON Startup, Shutdown, and Malfunction Plan Report dated October 17, 2008. Based on the Department’s preliminary analysis, the emissions from this Unauthorized Discharge may have exceeded the ambient air quality standard for benzene.

D. According to the Respondent’s 40 CFR Part 70 Permit Deviation Report dated June 17, 2009, the Respondent reported that from February 12, 2009, to February 25, 2009, the daily calibration drift
(CD) test for the F-Boiler (EQT 035) did not meet the performance specifications as required by 40 CFR 60 Subpart Db. The failure to obtain emission data for a minimum of seventy-five (75) percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days is a violation of 40 CFR 60.48b(f), which language has been adopted as a Louisiana regulation in LAC 33:III.3003, Specific Requirement No. 313 of Title V Permit No. 2560-00007-V8, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2). The Respondent also reported these deviations in its Title V 2009 Annual Compliance Certification Report dated March 29, 2010, Title V Semiannual Monitoring Report dated September 28, 2009, and First Quarter 2009 NOx Analyzer Continuous Emissions Monitoring Report dated April 28, 2009.

E. According to the Respondent's Unauthorized Discharge Notification Report dated May 1, 2009, the Respondent reported that benzene was discovered to be leaking through a temperature gauge on heat exchanger TT-1101 in the Ethybenzene Unit at 0930 hours on April 27, 2009. A leak repair was attempted at 1800 hours on April 27, 2009, which was unsuccessful. On April 28, 2009, at 1430 hours the failed thermocouple and thermo-well were removed and replaced with a blind flange. The total amount of benzene emissions released was 1,581.6 pounds during this incident. This unauthorized discharge is a violation of LAC 33:III.905 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The Respondent also reported no offsite impacts were indicated by air monitoring during this event.

F. According to the Respondent's 40 CFR Part 70 Permit Deviation Report dated September 28, 2009, the Respondent reported that on June 5, 2009, the hydrocarbon monitoring results indicated that the secondary carbon canister on the North Dock Sump (GY-3344A) and SMI Process Sump (GY-2133) were not achieving ninety-five (95) percent control efficiency. The Respondent uses carbon canisters to control emissions on all wastewater and process sumps that are collectively grouped as 1-90-Wastewater Emissions (Sumps, EQT 020). Each failure to achieve ninety-five (95) percent control efficiency is a violation of 40 CFR 63.149(a), which language has been adopted as a Louisiana regulation in LAC 33:III.5122, Specific Requirement No. 144 of Title V Permit No. 2560-00007-V8, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2). The Respondent also reported these deviations in its Title V 2009 Annual Compliance Certification Report dated March 29, 2010, Title V Semiannual Monitoring Report dated September 28, 2009, and Hazardous Organic NESHAP Periodic Report dated November 12, 2009.
G. According to the Respondent’s Unauthorized Discharge Notification Report dated September 11, 2009, the Respondent reported that on September 4, 2009, “benzene was released through an atmospheric vent associated with the Ethylbenzene (EB) Reactor MR1101S regeneration system. The release was due to improper alignment of the regeneration valves. The regeneration gases should have been routed to the HS-1101 EB Unit Feed Heater (EQT-100; EPN 1-88) which is a control device for the regeneration gas. . . . Total amount of benzene released to the atmosphere was estimated at 745 pounds over a 119 hour period.” This unauthorized discharge is a violation of LAC 33:III.905 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). Based on the Department’s preliminary analysis, the emissions from this Unauthorized Discharge may have exceeded the ambient air quality standard for benzene.

H. According to the Respondent’s Unauthorized Discharge Notification Report dated November 17, 2009, the Respondent reported that on November 12, 2009, approximately one (1) gallon of a benzene/water mixture was released from a ¾-inch nozzle that had a screw type valve on a new piece of piping within the Ethylbenzene Unit. The Respondent also reported approximately 3.6 pounds of benzene was in the mixture. This unauthorized discharge is a violation of LAC 33:III.905 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2). The Respondent also reported there were no injuries or off-site impacts during this event.

I. According to the Respondent’s Unauthorized Discharge Notification Report dated January 14, 2010, the Respondent reported that on January 10, 2010, “benzene was leaking from a cracked flex hose on the thermal relief return line to the tank. The operator isolated the leak by blocking the upstream and downstream valves. The freezing point of benzene is approximately 42 °F and the ambient temperature at the time of the leak was 25 °F. All of the benzene released to the dike formed a solid sheet of frozen benzene that was layered on the top of a sheet of ice that already formed in the dike area. . . . The actual amount of benzene spilled is estimated at 112 gallons or 817 pounds. Evaporation estimates are negligible due to the low ambient temperatures during the spill and cleanup efforts.” This unauthorized discharge is a violation of LAC 33:III.905 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

J. According to the Respondent’s Unauthorized Discharge Notification Report dated July 12, 2010, the Respondent reported that on July 7, 2010, approximately one and one-half gallons of Ethylbenzene was discovered floating in a concrete lined storm ditch. The source of the spill was a sump that overflowed to a wash pad area in the SM1 Unit. This unauthorized discharge is a violation of LAC 33:III.905 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).
The following violations, while not cited in any enforcement action issued to the Respondent, are also included in this settlement.

A. According to the Respondent's Unauthorized Discharge Report dated April 11, 2011, severe weather on 4/4/11 caused a electrical power dip. During the power dip, the Flue Gas Recirculation fan on the E-boiler (EQT0040) tripped causing 261.3 pounds of NOx to be released above the permit limit. The E-boiler is permitted, in Title V Permit No. 2560-00007-V9, for 40.98 lb/hr of NOx. The duration of this event was 18 hours 42 minutes. All NOx was dissipated into the atmosphere. The Respondent reported that this unauthorized discharge was not preventable. The maximum permit limit exceedance of NOx is a violation of Title V Permit No. 2560-00007-V9, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

B. According to the Respondent's Unauthorized Discharge Report dated April 12, 2011, the pneumatic transmitter for the sump (MS-3382) failed, which controls the sump level indication, the high level alarm activation, and the automatic pump start. The failure of the transmitter did not send a signal to the Central Control Room when the sump reached a high level per designed. 25.7 pounds of Ethylbenzene and 47.6 pounds of benzene were released to the paved area immediately to MS-3382 after MS-3382 pressured up forcing approximately 5 to 10 gallons to overflow through the flame arrester connected to the sump. The duration of the event was 5 minutes. An estimated, 0.6 pounds of Ethylbenzene and 14.4 pounds of benzene evaporated.

C. According to a referral from the Air Permit Division, on April 3, 2010, compliance tests were conducted on the HS-1102 Catalyst Regenerator (EQT 042). According to the Respondent's Performance Test Submittal Report dated May 20, 2010, the results of this test showed that the heater remained in compliance with the permitted emission rate of 1.12 lbs/hr for CO. However, the results indicated that the lb/MMBtu value for CO was over the PSD limit of 0.086 lbs/MMBtu and the Title V permit limit of 0.093 lbs/MMBtu. This is a violation of PSD Permit No. PSD-LA-551(M-7), Title V Permit No. 2560-00007-V8, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

D. According to the Respondent's IH11 Semiannual Monitoring Report dated September 27, 2011, the E-boiler (EQT 0040) exceeded the NOx permitted maximum pound per hour emission limit of 40.68 lbs/hr on April 4, 2011. The E-boiler is equipped with a continuous emission monitoring system which indicated that the total duration of the exceedance was 18 hours 42 minutes. The total amount of NOx released above the permit limit was 261.5 pds during the entire duration of the event. According to the Respondent's Follow-Up Notification Report dated April 11, 2011, on April 4, 2011, the plant experienced an electrical power dip due to severe weather in the area. During the power dip, the Flue Gas Recirculation fan on the E-boiler was tripped causing the NOx lb/hr rate to increase above the permit limit. The maximum permit limit exceedance of NOx is

E. According to the Respondent's 2H11 Semiannual Monitoring Report dated March 29, 2012, a stack test was performed on the D Boiler (EQT 0052). While the emissions demonstrated during the test were within the established permit limits, the results of the test were not submitted to the Department within 45 days after completion of the test as required by Appendix B. This is a violation of Title V Permit No. 2560-00007-V10, Specific Requirement No. 508, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

F. According to the Respondent's 1H12 Semiannual Monitoring Report dated September 25, 2012, the Respondent reported that on January 1, 2012, the daily calibration drift (CD) test on the F-Boiler (EQT 035) did not meet the performance specifications as required by 40 CFR 60 Subpart Db. The CD test results for both the automatic and a manual test for this day exceeded four times the allowable drift limits specified in 40 CFR 60 Appendix B. Because the CD test results were greater than four times the allowable limits, the CEMS analyzer was considered out of control and the emissions data cannot be used for reporting during a 180 minute period until the next successful CD test was performed on January 2, 2012. This is a violation of Title V Permit No. 2560-00007-V10, Specific Condition No. 342, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

III

Respondent denies it committed any violations or that it is liable for any fines, forfeitures and/or penalties.

IV

Nonetheless, Respondent, without making any admission of liability under state or federal statute or regulation, agrees to pay, and the Department agrees to accept, a payment in the amount of FORTY-THREE THOUSAND TWO HUNDRED TWELVE AND 50/100 DOLLARS ($43,212.50) of which One Thousand Seventy-Six and 86/100 Dollars ($1,076.86) represents the Department's enforcement costs, in settlement of the claims set forth in this agreement. The total amount of money expended by Respondent on cash payments to the Department as described above, shall be considered a civil penalty for tax purposes, as required by La. R.S. 30:2050.7(E)(1).
V

Respondent further agrees that the Department may consider the permit record(s), the Consolidated Compliance Order & Notice of Potential Penalty and this Settlement for the purpose of determining compliance history in connection with any future enforcement or permitting action by the Department against Respondent, and in any such action Respondent shall be estopped from objecting to the above-referenced documents being considered as proving the violations alleged herein for the sole purpose of determining Respondent's compliance history.

VI

This agreement shall be considered a final order of the Secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Respondent hereby waives any right to administrative or judicial review of the terms of this agreement, except such review as may be required for interpretation of this agreement in any action by the Department to enforce this agreement.

VII

This settlement is being made in the interest of settling the state's claims and avoiding for both parties the expense and effort involved in litigation or an adjudicatory hearing. In agreeing to the compromise and settlement, the Department considered the factors for issuing civil penalties set forth in La. R. S. 30:2025(E) of the Act.

VIII

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in St. James Parish, Louisiana. The advertisement, in form, wording, and size approved by the Department, announced the availability of this settlement for public view and comment and the opportunity for a public hearing. Respondent has submitted an original proof-of-publication affidavit and an original public notice to the
Department and, as of the date this Settlement is executed on behalf of the Department, more than forty-five (45) days have elapsed since publication of the notice.

IX

Payment is to be made within ten (10) days from notice of the Secretary's signature. If payment is not received within that time, this Agreement is voidable at the option of the Department. Payments are to be made by check, payable to the Department of Environmental Quality, and mailed or delivered to the attention of Accountant Administrator, Financial Services Division, Department of Environmental Quality, Post Office Box 4303, Baton Rouge, Louisiana, 70821-4303. Each payment shall be accompanied by a completed Settlement Payment Form (Exhibit A).

X

In consideration of the above, any claims for penalties are hereby compromised and settled in accordance with the terms of this Settlement.

XI

Each undersigned representative of the parties certifies that he or she is fully authorized to execute this Settlement Agreement on behalf of his or her respective party, and to legally bind such party to its terms and conditions.
AMERICAS STYRENICS LLC

BY:  

(Signature)

STEPHEN L. KOONTZ
(Printed)

TITLE:  SITE LEADER

THUS DONE AND SIGNED in duplicate original before me this ___ day of

October, 2013, at Angadsomville, Louisiana

Debra L. Petter

(stamped or printed)

NOTARY PUBLIC (ID #021494)

LOUISIANA DEPARTMENT OF
ENVIRONMENTAL QUALITY
Peggy M. Hatch Secretary

BY:  

Cheryl Sonnier Nolan, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this ___ day of


Perry Theriot

(stamped or printed)

NOTARY PUBLIC (ID # 19181)

Approved:  

Cheryl Sonnier Nolan, Assistant Secretary