STATE OF LOUISIANA

DEPARTMENT OF ENVIRONMENTAL QUALITY

IN THE MATTER OF: * Settlement Tracking No.
FORMOSA PLASTICS CORPORATION, * SA-AE-17-0002
LOUISIANA * Enforcement Tracking No.
AI # 288 * AE-CN-11-01084

PROCEEDINGS UNDER THE LOUISIANA * Docket No. 2014-7901-EQ
ENVIRONMENTAL QUALITY ACT *

SETTLEMENT

The following Settlement is hereby agreed to between Formosa Plastics Corporation,
Louisiana ("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 corporation that owns and/or operates a vinyl chloride monomer and
polyvinyl chloride facility located in East Baton Rouge Parish, Louisiana ("the Facility").

II

On April 17, 2013, the Department issued to Respondent a Consolidated Compliance Order
& Notice of Potential Penalty, Enforcement No. AE-CN-11-01084, which was based upon the
following findings of fact:

"The Respondent owns and/or operates a vinyl chloride monomer (VCM) and polyvinyl
chloride (PVC) facility known as the FORMOSA PLASTICS CORPORATION, LOUISIANA'S
BATON ROUGE PLANT (the facility), located at the north end of Gulf States Utilities Road in
Baton Rouge, East Baton Rouge Parish, Louisiana. The Vinyl Chloride Monomer (VCM) Unit was authorized to operate under Title V Permit No. 0840-00002-V0 issued on August 11, 2006, and administratively amended on August 9, 2007. The VCM Unit is currently authorized to operate under Title V Permit No. 0840-00002-V1 issued on February 6, 2013. The facility was authorized to operate under PSD Permit No. PSD LA 560 (M 2) issued March 7, 1997, and PSD Permit No. PSD-LA-560 (M-3) issued on September 12, 2006. The facility was issued PSD Permit No. PSD-LA-560 (M-4) on July 10, 2008, and was later issued PSD-LA-560 (M-5) on July 1, 2010, under which the facility is currently authorized to operate. PSD-LA-546 (M-1) was issued for the facility on November 17, 1990, and the facility currently operates under PSD-LA-546 (M-2) issued on February 18, 2009. The PVC Unit was permitted under Title V Permit No. 1004-V0 issued on October 24, 2001. Title V Permit No. 1004-V1 was issued on February 18, 2009, to be effective on May 1, 2009. The PVC Unit is currently authorized to operate under Title V Permit No. 1004-V1 which was administratively amended on May 22, 2009. The Utilities Unit operated under Title V Permit No. 2915-V0 issued on September 12, 2006, and modified Title V Permit No. 2915-V1 issued on July 10, 2008. The Utilities Unit was authorized to operate under Title V Permit No. 2915-V2 issued on July 1, 2010. The Utilities Unit is currently authorized to operate under Title V Permit No. 2915-V3 issued on December 12, 2012.

On or about June 9, 2011, June 14, 2011, and June 27, 2011, an inspection of the Respondent’s facility was performed to determine the degree of compliance with the Act and the Air Quality Regulations. A Warning Letter dated August 18, 2011, was sent to the Respondent in regard to the inspection.

While the investigation by the Department is not yet complete, the following violations were noted during the course of the inspection:
A. The Respondent reported that it had discovered open-ended lines as follows:

<table>
<thead>
<tr>
<th>Date of Report</th>
<th>Title of Report</th>
<th>No. of open-ended lines</th>
<th>Unit</th>
<th>Title V Permit</th>
<th>Regulatory or Permit Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 30, 2010</td>
<td>2010 1st Title V Semi-Annual Report</td>
<td>2</td>
<td>VCM</td>
<td>0840-00002-V0</td>
<td>Specific Requirement 150; 40 CFR 63.167(a) which language has been adopted in LAC 33:III.5122</td>
</tr>
<tr>
<td>March 31, 2011</td>
<td>2010 2nd Title V Semi-Annual Report</td>
<td>2</td>
<td>VCM</td>
<td>0840-00002-V0</td>
<td>Specific Requirement 150; 40 CFR 63.167(a) which language has been adopted in LAC 33:III.5122</td>
</tr>
<tr>
<td>March 30, 2012</td>
<td>2011 2nd Title V Semi-Annual Report &amp; 2011 Title V Annual Compliance Certification</td>
<td>2</td>
<td>VCM</td>
<td>0840-00002-V0</td>
<td>Specific Requirement 150; 40 CFR 63.167(a) which language has been adopted in LAC 33:III.5122</td>
</tr>
<tr>
<td>March 30, 2012</td>
<td>2011 2nd Title V Semiannual Report</td>
<td>3</td>
<td>PVC</td>
<td>1004-V1</td>
<td>Specific Requirement 83; Paragraph H.1 of the Louisiana MACT Determination for Non-HON Equipment Leaks; LAC 33:III.5109.A</td>
</tr>
</tbody>
</table>

The Respondent noted that each open-ended line was corrected immediately upon discovery. Each failure to equip each open-ended line with a cap, blind flange, plug, or a second valve is a violation of the applicable permit and associated requirements listed above, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(2).

B. The Respondent reported in the first quarter 2011 Vinyl Chloride Report dated March 15, 2011, submitted in accordance with 40 CFR 61 Subpart F and in the 2011 Title V First Semi-Annual Report under cover letter dated September 30, 2011, that the 3-hour average concentration of vinyl chloride monomer (VCM) was in excess of 10 parts per million (ppm) for Incinerator 231A (EQT 83) or Incinerator 231B (EQT 84) as follows:
<table>
<thead>
<tr>
<th>Equipment</th>
<th>Equipment ID No.</th>
<th>Date of Incident</th>
<th>Time</th>
<th>Vinyl chloride 3-hour average (ppm)</th>
<th>Cause/Corrective Action Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>January 15, 2011</td>
<td>1:00 p.m.</td>
<td>14.8</td>
<td>Venting equipment for maintenance activities during turnaround. Upon discovery, the vent load was reduced and the vents were transferred to the alternate incinerator.</td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>January 15, 2011</td>
<td>2:00 p.m.</td>
<td>15.4</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>January 15, 2011</td>
<td>3:00 p.m.</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>January 27, 2011</td>
<td>10:00 a.m.</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>January 27, 2011</td>
<td>11:00 a.m.</td>
<td>42.5</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>January 27, 2011</td>
<td>12:00 p.m.</td>
<td>46.1</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>January 27, 2011</td>
<td>1:00 p.m.</td>
<td>37.3</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 1, 2011</td>
<td>11:00 p.m.</td>
<td>47.5</td>
<td>High levels in the incinerator knock out pot. Reduced the level in the knock out pot and transferred the vents to the alternate incinerator.</td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 1, 2011</td>
<td>12:00 p.m.</td>
<td>72.9</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 2, 2011</td>
<td>12:00 a.m.</td>
<td>72.5</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 2, 2011</td>
<td>1:00 a.m.</td>
<td>25.3</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>February 5, 2011</td>
<td>2:00 a.m.</td>
<td>13.6</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>February 5, 2011</td>
<td>3:00 a.m.</td>
<td>13.9</td>
<td></td>
</tr>
<tr>
<td>Incinerator A</td>
<td>83</td>
<td>February 5, 2011</td>
<td>4:00 a.m.</td>
<td>14.1</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 5, 2011</td>
<td>2:00 a.m.</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 5, 2011</td>
<td>3:00 a.m.</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Incinerator B</td>
<td>84</td>
<td>February 5, 2011</td>
<td>4:00 a.m.</td>
<td>11.8</td>
<td></td>
</tr>
</tbody>
</table>

Additionally, the Respondent reported in the VCM Unit 2011 Title V Second Semi-Annual Report under cover letter dated March 30, 2012, that the VCM three (3) hour average was recorded above 10 ppm on December 17, 2011, due to a refrigeration unit malfunction resulting in increased load to the incinerator. Each exceedance of the 10 ppm 3-hour average is a violation of 40 CFR 61 Subpart F, in particular 40 CFR 61.65(d)(1) which language has been adopted as a Louisiana regulation in LAC 33:III.5116, Specific Requirement 254 of Title V Permit No. 0840-00002-V0, LAC 33:III.501.C.4, and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

C. The Respondent reported in the VCM Unit 2010 Title V First Semi-Annual Report under cover letter dated September 30, 2010, that while one pump was not operating, the repair provisions specified in 40 CFR 63.163(c) were not timely completed for one pump that was visually identified as having a leaking dual mechanical seal while in idle service. The Respondent failed to make a first attempt at repair no later than five (5) calendar days after the leak was detected and complete the repairs no later than 15 calendar days after the leak was detected in violation of 40 CFR 63.163(c)(1) and (c)(2) which
language has been adopted as a Louisiana regulation in LAC 33:III.5122, Specific Requirements 124 of Title V Permit No. 0840-00002-V0, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(2).

D. The Respondent reported in the VCM Unit 2011 Title V First Semi-Annual Report under cover letter dated September 30, 2011, that it failed to perform the proper sampling methodology for one (1) quarterly sampling event for the heat exchange system in the VCM Unit. The Respondent reported in the VCM Unit 2011 Title V Second Semi-Annual Report under cover letter dated March 30, 2012, that the EDC cooling tower was inadvertently not properly sampled in the second half of 2011 to include the cooling tower outlet in accordance with 40 CFR 63.104(b). Each failure to properly sample the cooling water is a violation of 40 CFR 63.104(b) which language has been adopted as a Louisiana regulation in LAC 33:III.5122, Specific Requirement 324 of Title V Permit No. 0840-00002-V0, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

E. The Respondent reported in the VCM Unit 2011 Title V Second Semi-Annual Report under cover letter dated March 30, 2012, that an equipment opening occurred with the VCM concentration greater than 2 percent by volume as required in 40 CFR 61.65(b)(6)(i) due to lab error. According to the Respondent’s report, the equipment was opened for a maintenance activity based on the initial lab reported data results. The Respondent’s internal review determined that the initial result was actually above the allowable value for the equipment opening. According to the Respondent, the resulting minor emissions were part of permitted emissions for the maintenance activity. The Respondent opened equipment before reducing the amount of vinyl chloride contained therein to an amount which occupies a volume of no more than 2.0 percent of the equipment’s containment volume or 0.0950 cubic meters, whichever is larger at standard temperature and pressure in violation of 40 CFR 61.65(b)(6)(i) which language has been adopted as a Louisiana regulation in LAC 33:III.5116 and La. R.S. 30:2057(A)(1) and 30:2057(A)(2).

F. The Respondent reported in the VCM Unit 2011 Title V First Semi-Annual Report under cover letter dated September 30, 2011, that two (2) new pumps were inadvertently not included in the inspection log templates and were not recorded routinely. According to the Respondent, upon discovery, the new pumps were added to the weekly visual inspection log templates. Each failure to document the weekly visual inspections is a violation of 40 CFR 63.181(c) which language has been adopted as a Louisiana regulation in LAC 33:III.5122, Specific Requirement 199 of Title V Permit No. 0840-00002-V0, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(2).

G. The Respondent reported in the 2011 Title V Second Semi-Annual Report under cover letter dated March 30, 2012, that while one pump was not operating, the repair provisions specified in 40 CFR 63.163(c) were not timely completed for one (1) pump that was visually identified as having a leaking dual mechanical seal while in idle service. The failure to make a first attempt at repair no later than five (5) calendar days after a leak is detected, and complete repairs no later than 15 calendar days after the leak is detected is a
violation of 40 CFR 63.163(c)(1) and (c)(2) which language has been adopted as a Louisiana regulation in LAC 33:III.5122, Specific Requirement 124 of Title V Permit No. 0840-00002-V0, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(2).

H. The Respondent reported in the PVC Unit 2008 Title V Third Quarterly Report under cover letter dated December 31, 2008, that on August 23, 2008 and August 24, 2008, the primary RVCM test instrument failed and a backup instrument was used to perform the analysis. The backup instrument holding temperature duration was preset for 15 minutes instead of 1 hour as specified in EPA Test Method 107. The Respondent noted that all RVCM samples were in compliance and well below the standard on these days. The failure to follow the procedures in test Method 107 in 40 CFR Part 61, Appendix B as prescribed in 40 CFR 61.67(g)(3) is a violation of 40 CFR 61.70(c)(2)(iii) which language has been adopted as a Louisiana regulation in LAC 33:III.5116, Part 70 Specific Condition 9 of Title V Permit No. 1004-V0, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(2).

I. The Respondent reported in the PVC Unit 2009 Title V First Semi-Annual Report under cover letter dated September 30, 2009, that on March 12, 2009, RVCM sampling was conducted as required. However, the caps on the bottles, though secure, were not wrapped with adhesive tape as described in Section 8.1.1 of the test method. The failure to follow the procedures in test Method 107 of 40 CFR Part 61, Appendix B, Method 107 as prescribed in 40 CFR 61.67(g)(3) is a violation of 40 CFR 61.70(c)(2)(iii) which language has been adopted as a Louisiana regulation in LAC 33:III.5116, Part 70 Specific Condition 9 of Title V Permit No. 1004-V0, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(2).

J. The Respondent reported in the 40 CFR 61 Subpart F NESHAP Report for the third quarter 2010 dated September 15, 2010, that on June 1, 2010, at 4:00 p.m. three (3) Residual Vinyl Chloride Monomer (RVCM) samples were not obtained. The daily average was calculated based upon all available sample data for that day. Additional training on existing RVCM sampling procedures and employee discipline was given to appropriate personnel. The failure to obtain a representative sample of polyvinyl chloride resin at 8-hour intervals is a violation of 40 CFR 61.70(c)(2)(ii) which language has been adopted as a Louisiana regulation in LAC 33:III.5116, Specific Requirement 149 of Title V Permit No. 1004-V1, LAC 33:III.501.C.4 and La. R.S. 30:2057(A)(2).

K. The Respondent submitted an Unauthorized Discharge Notification Report dated May 26, 2010, reporting a release of 546 pounds of VCM that occurred on May 19, 2010. The Respondent reported that the release occurred when a pressure relief valve on a piece of process equipment opened. The Respondent believes the cause to be a hydrostatic condition of pressure above the pressure relief valve set point. Preliminary investigation indicated that a water valve may have inadvertently been left open by an operator. The water valve that was left open ultimately led to the resulting release. This is a violation of LAC 33:III.905 and La. R.S. 30:2057(A)(2).
The Respondent reported a deviation in the PVC Unit Title V Semi-Annual Report under cover letter dated March 31, 2011, in regard to not being able to follow EPA Method 21 for several valves in the PVC Unit on November 4, 2010. According to the Respondent, the monitoring instrument probe was not able to be kept perpendicular to the interface of the monitoring surface due to the physical location of the valves near other equipment. The Respondent believes that the physical constraints are not believed to have had any impact on the monitoring results. The Department requires additional information on this particular matter to assess the Respondent’s compliance with its air permit and the Air Quality Regulations.

The Respondent reported unauthorized discharges to the Department in letters dated October 16, 2009; June 28, 2010; August 2, 2010; December 22, 2010; and February 8, 2011. The Department has reviewed the information submitted by the Respondent in regard to each of these discharges. However, based upon the Department’s review of this information, the Department has determined that additional information pertaining to these unauthorized discharges is necessary to assess the Respondent’s compliance with its air permits and the Air Quality Regulations.”

III

In response to the Consolidated Compliance Order & Notice of Potential Penalty, Respondent made a timely request for a hearing.

IV

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

V

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
TEN THOUSAND AND NO/100 DOLLARS ($10,000.00), of which Two Thousand Five Hundred Seventy-Three and 23/100 Dollars ($2,573.23) 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).

VI

Respondent further agrees that the Department may consider the inspection report(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.

VII

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.

VIII

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.
IX

As required by law, the Department has submitted this Settlement Agreement to the Louisiana Attorney General for approval or rejection. The Attorney General’s concurrence is appended to this Settlement Agreement.

X

The Respondent has caused a public notice advertisement to be placed in the official journal of the parish governing authority in East Baton Rouge Parish, Louisiana. The advertisement, in form and wording 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.

XI

Payment is to be made within thirty (30) 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).

XII

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

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.
FORMOSA PLASTICS CORPORATION, LOUISIANA

BY: [Signature]

(Paid Heurtault)

(TITLE: AVP Plant Manager)

THUS DONE AND SIGNED in duplicate original before me this 13th day of
November, 2017, at Baton Rouge, LA.

[Notary Public]

GERALD D SNEAD #129816
PARISH OF EAST BATON ROUGE
MY COMMISSION IF FOR LIFE

[stamped or printed]

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Chuck Carr Brown, Ph.D., Secretary

BY: [Signature]

Lourdes Iturralde, Assistant Secretary
Office of Environmental Compliance

THUS DONE AND SIGNED in duplicate original before me this 28th day of
February, 2018, at Baton Rouge, Louisiana.

[Notary Public]

[stamped or printed]

Approved: [Signature]

Lourdes Iturralde, Assistant Secretary

SA-AE-17-0002