FINAL REPORT

PACKAGING CORPORATION OF AMERICA

FILER CITY, MICHIGAN

2022 NON-CONDENSABLE GAS CLOSED VENT SYSTEM SOURCE TESTING REPORT

RWDI #2201968

July 29, 2022

SUBMITTED TO

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1 INTRODUCTION

1.1 Overview

RWDI USA LLC (RWDI) has been retained by Packaging Corporation of America (PCA) to complete testing on the non-condensable closed vent system (CVS) identified as FGMACT_SUBPART_S at their facility located at 2246 Udell Street in Filer City, Michigan. The test program was conducted to identify any leaks that may be present along the CVS that comes off the digester and evaporative system to where it exits the building and is transferred and introduced into the flame zone of an on-site boiler.

1.2 Test Date

RWDI conducted the testing program on June 7th, 2022.

1.3 Test Program Organization

Details with respect to the key individuals involved with the stack sampling survey are provided below:

Company Name:	**Packaging Corporation of America**
Company Address:	2246 Udell St, Filer City, Michigan
Environmental Contacts:	Josh Kosmowski / Zeb Jones
Cellular No:	231-510-6390
E-mails:	Joshkosmowski@packagingcorp.com / Zebjones@packagingcorp.com
Sampling Company:	**RWDI USA LLC**
Project Manager:	Brad Bergeron
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2 SOURCE DESCRIPTION

2.1 Plant Overview

The low volume, high concentration (LVHC) Collection System at PCA's Filer City Mill includes various equipment (hoods, vents, ductwork, gas movers) that collect the LVHC gases from the digester and evaporator systems and conveys the gases to Boiler 1 or Boiler 2 for destruction. In addition, the mill collects gases from the pulp washers using LVHC Collection System and conveys these gases to Boiler 1 or Boiler 2 for destruction.

2.2 Overview

Table 2.2.1: Summary of Sampling Program

CVS
All locations less than 500 ppm

3 TEST PROGRAM

3.1 Description of Testing Methodologies

3.1.1 USEPA Method 21

A portable flame ionization detector (FID) was used to measure VOC emissions from numerous locations within FGMACT_SUBPART_S. The instrument was calibrated prior to use with certified zero air and a certified methane mixture for the upscale calibration. The probe of the FID was placed at the surface of the testing locations to detect potential leaks. The FID sampled each location for a minimum of two (2) times the response time. A leak is defined as a constant reading of 500 ppm above background.

3.2 Applicable Regulations

The following information is provided to show the applicable regulations and standards pertaining to the CVS located at PCA in Filer City, Michigan

63.450 Standards for enclosures and closed-vent system:

a) Each enclosure and closed-vent specified in 63.443(c), 63.444(b), and 63.445(b) for capturing and transporting vent streams that contain HAP shall meet the requirements specified in paragraphs (b) and (d) of this section.
b) Each enclosure shall maintain negative pressure at each enclosure or hood opening as demonstrated by the procedures specified in 63.457(e). Each enclosure or hood opening closed during the initial performance test specified in 63.457(a) shall be maintained in the same closed and sealed position as during the performance test at all times except when necessary to use the opening for sampling, inspection, maintenance, or repairs.
c) Each component of the closed-vent system used to comply with 63.443(c), 63.444(b), and 63.445(b) that is operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks as indicated by an instrument reading of less than 500 parts per million by volume above background, as measured by the procedures specified in 65.457(d).
d) Each bypass line in the closed-vent system that could divert vent streams containing HAP to the atmosphere without meeting the emission limitations in 63.443, 63.444, or 63.445 shall comply with either of the following requirements:
    1) On each bypass line, the owner or operator shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that is capable of taking periodic readings as frequently as specified in 63.454(e). The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line.
    2) For bypass line valves that are not computer controlled, the owner or operator shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal.

4 SUMMARY OF RESULTS

Testing was conducted on June 7th, 2022. All sampling locations were under the 500 ppm limit.