United States Environmental Protection Agency
Region 7
Enforcement and Compliance Assurance Division

Air Branch

Air Branch Inspection Report
Unannounced Full Compliance Evaluation
Silgan Containers Corporation
2115 Lower Lake Road
Saint Joseph, Missouri, 64504
FRS# 110010816279

Inspection Date(s):
December 12, 2024

SEAN BERGIN Digitally signed by SEAN BERGIN Date: 2025.01.29 12:38:00 -06'00'

Sean Bergin, Inspector, ECAD, Air Branch

Authorized for Release by:

LANCE AVEY Digitally signed by LANCE AVEY Date: 2025.01.29 11:42:01 -06'00'

Lance Avey, Acting Air Branch Manager, ECAD

11201 Renner Boulevard
Lenexa, Kansas 66219

CONTENTS

TABLES

APPENDICES

This Contents page shows all the sections contained in this report and provides a clear indication of the end of this report.

INSPECTION OVERVIEW

INSPECTION OBJECTIVE

The objective of the full compliance evaluation (FCE) inspection was to determine compliance of the facility with the Clean Air Act (CAA), specifically those requirements listed in the facility's construction permit (Permit Number 082022-007). An Emergency Planning and Community Right-to-Know Act (EPCRA), Section 313, Toxic Release Inventory (TRI) inspection was conducted concurrently. The findings of the TRI inspection can be found in this report.

This inspection was conducted by Sean Bergin, EPA Region 7, Enforcement and Compliance Assurance Division, Air Branch.

Table 1. Project Team Members.

Table 1. PROJECT TEAM MEMBERS		
Team Member	**Organization**	**Project Role**
Sean Bergin	EPA Region 7, ECAD, Air Branch	Lead inspector
Chris Kerr	Missouri Department of Natural Resources (MoDNR) Kansas City Regional Office	Inspector

FACILITY CONTACT INFORMATION

Table 2. Facility Contact Information

Table 2. FACILITY CONTACT INFORMATION		
Name, Title	**Phone No.**	**Email Address**
Michael Huff	816.396.2902	mhuff@silgancontainers.com
Adam Maynard	816.396.2902	amaynard@silgancontainers.com

FACILITY OVERVIEW

Silgan Containers (Silgan) is a metal food packaging company located in St. Joseph, Missouri. Silgan has approximately 100 employees and operates 24 hours per day, seven days per week.

Silgan is a major source of Volatile Organic Compounds (VOCs). The VOC and Hazardous Air Pollutants (HAP) emissions are controlled by a regenerative thermal oxidizer.

The last onsite compliance monitoring activity of the facility was a FCE inspection conducted by MoDNR on March 30, 2023. Silgan was determined to be in compliance with the CAA following the inspection.

According to EPA's Enforcement and Compliance History Online (ECHO) website, the most recent formal CAA enforcement at this facility was a Letter of Warning issued on November 14, 2024, for failing to conduct a required performance test in a timely manner.

Silgan is currently operating under a construction permit issued on August 3, 2022. Previously, Silgan had been operating with a Title V operating permit issued on May 25, 2016. On April 16, 2021, Silgan notified MoDNR that they were in the process of permanently shutting down and removing nine emission units which would reduce the potential to emit of Silgan to approximately 30 tons per year. Silgan planned to allow the existing Title V permit to expire without renewal. It appears that the MoDNR permitting group had not been able to approve the termination request, and the Title V permit expired without a renewal application. During the March 30, 2023, inspection, the inspector requested that Silgan resubmit the recession request with new installation-wide potential to emit calculations for an official determination to be made concerning Silgan's permit status. The information was received by MoDNR. Currently, Silgan is operating without an operating permit.

FACILITY OPERATIONS SUMMARY

The Silgan manufacturing facility has five major departments.

1. Draw and Ironed (D&I) two-piece can manufacturing,
2. Steel & aluminum draw/redraw (DRD) can manufacturing,
3. steel can end manufacturing,
4. sheet coating & lithography operations, and
5. coil shearing.

The Coiled steel is uncoiled and lubricated before being stamped into cups in a cupping press. The cups are ironed and drawn to the appropriate size. Excess metal is then trimmed, and the cans are washed. After washing, the cans have a washcoat enamel applied to the outside surfaces and are cured in a two-stage natural gas-fired drying washcoat oven. After drying, the cans are flanged, beaded to increase side strength, and tested for integrity. Spray enamel is applied to the inside of the cans by inside spray machines and the enameled cans are cured in a natural gas-fired inside bake oven. The finished can bodies have a printed code applied for identification using a Videojet printer and then packaged before being sent to the warehouse.

The steel and aluminum DRD can manufacturing process begins with pre-lubricated and pre-coated coil steel and aluminum. The steel is uncoiled before being stamped into cups in a stamping press. The cans are trimmed to remove excess metal, flanged to allow for the end to be applied, and tested for integrity. The finished can bodies have a printed code applied for identification using a Videojet printer and then packaged before being sent to the warehouse.

The steel can end manufacturing process begins with pre-coated cut sheets of steel. The sheets are stamped into shells in a shell press and then conveyed to a compound liner/applicator. The shells are lined with a compound to act as a seal, and the end is applied to the can body. The finished ends are packaged and sent to the warehouse.

The sheet coating and lithography operations begin with uncoated coil steel. The coil is cut into sheet pieces and then stacked on a conveyor system. Coating is applied to the metal sheet in one of three lines. Lines 1 and 2 consist of a roll coater, conventional ink offset lithographic press, and a curing oven. Line 3 consists of a roll coater and curing oven. The mobber roll coaters transfer the coating to the metal sheet as it passes between the mobber roller and a backing roller. Lithography presses apply ink to the coated sheets. The sheets are cured in a curing oven. Finished sheets are stacked, bundled, and sent to the warehouse.

The coil shearing process begins with uncoated coil steel. The coil is cut into sheets, packaged, and sent to the warehouse or to the sheet coating and lithography department for further processing.

Manufactured products are packaged and shipped offsite to customers.

The inside can spray machines, which coat the interior of each can produced, are permanent total enclosures which vent to the regenerative thermal oxidizer (RTO). The washcoat process is partially enclosed and vents to the RTO.

An aerial photograph of the facility can be found in **Appendix A**. A schematic diagram of the facility can be found in **Appendix B**.

FIELD ACTIVITIES SUMMARY

I arrived at the facility on December 12, 2024, at approximately 8:30 a.m. I had conducted the offsite surveillance just prior to arrival. I did not observe visible emissions during the offsite surveillance. Ms. Kerr and I made entry and signed in. Mr. Adam Maynard greeted us in the entryway at approximately 8:45 a.m., and I introduced myself and Ms. Kerr, presented my credentials, and provided my business card to Mr. Maynard. I conducted an opening conference during which I explained that the purpose of the visit was to conduct an inspection to determine compliance with the CAA and with TRI. I explained that after asking for some general business information, I would observe emission units and associated control equipment and review associated records demonstrating compliance with the issued permit. I explained to Mr. Maynard that the facility would have an opportunity to make a claim of business confidentiality at the end of the inspection.

After the records review, Ms. Kerr and I were given a facility tour by Mr. Maynard. I was asked to wear the following PPE: safety glasses and steel-toed boots. Mr. Maynard informed Ms. Kerr and me that the palletizing machine had broken down shortly after our arrival. With the palletizing machine down, the process units were shut down, and the RTO had been taken offline. During the facility tour, Mr. Maynard explained the processes involved, and we observed the emission units and control devices used.

No samples were taken during the inspection.

Following the tour, we met and discussed the permitted requirements of Silgan. We also discussed TRI reporting. I provided Mr. Maynard with a Receipt for Documents listing the documents that I wanted to collect from Silgan. Mr. Maynard and I signed the form (**Appendix C**), and the Confidential Notice form (**Appendix D**). A claim of business confidentiality was not made. I also provided Mr. Maynard with a Notice of Preliminary Findings (NOPF) **(Appendix E)**, describing potential areas of noncompliance as shown below.

CAA: Failure to apply for a renewal operating permit and Failure to conduct a performance test.

The Silgan response to the NOPF can be found in **Appendix F**.

I conducted a closing conference with Mr. Maynard and discussed the inspection findings and what to expect following the inspection. I departed the facility at approximately 1:00 p.m.

On January 6 and 8, 2025, Mr. Huff emailed me the documents requested at the time of the inspection except the safety data sheets (SDS) and the NOPF response. On January 15, 2025, I received the SDS.

INVESTIGATION OBSERVATIONS AND POTENTIAL FINDINGS

Ambient weather, site conditions, and field activities were documented in the field records. All photographs are attached as **Appendix G**. Documents collected for the inspection can be found in the inspection folder. I made the following observations during the inspection. I discussed all observations with facility representatives during the closeout meeting unless otherwise noted in the observation description.

These observations are not final compliance determinations. The EPA Region 7 Air Branch case review team will make the final compliance determinations based on its review of this report and other technical, regulatory, and facility information.

Permit Conditions:

Silgan's HAP emissions are limited to 10 tons for individual HAP and 25 tons for combined HAPs in any consecutive 12-month period. Silgan's VOC emissions are limited to 250 tons consecutive 12-month period.

At the time of the inspection, I requested the HAP and VOC emission calculations from December 2019 to present. The calculations can be found in the inspection folder. Based on Silgan's calculations, HAP emissions have remained below 10 tons for individual HAP and 25 tons for combined HAPs during the 5-year period. The highest total HAP emissions in one month was 2.81 tons in 2021. Silgan's VOC emissions have remained below the 250 tons per year limit during the 5-year period. The highest monthly VOC emissions were 18 tons which occurred four times in 2020.

Emissions from ES-2010 Washcoat and ES- 2024 Inside Spray Machines are controlled by CD-2A Smith RTO. The RTO shall be in use at all times when ES-2010 Washcoat and ES-2024 Inside Spray Machines are in operation. Mr. Maynard told me that washcoat and inside spray can emissions are continuously directed to the RTO.

CD-2A Smith RTO shall be operated and maintained in accordance with the manufacturer's specifications to ensure a minimum VOC destruction efficiency of 95.0 percent by weight. The VOC destruction efficiency shall be verified through performance testing. CD-2A Smith RTO shall maintain a minimum operating temperature equal to or greater than the average operating temperature recorded during the most recent performance test. The operating temperature shall be continuously monitored and recorded.

Silgan is required to performance test the RTO every five years. A performance test was conducted on May 1, 2019, demonstrating compliance with an average destruction efficiency of 96.1%. Silgan had planned to retest on April 16, 2024, but a fire occurred in a curing oven, and the test had to be postponed. Silgan requested an extension which was granted provided the test was conducted no later than October 31, 2024. Silgan received a Letter of Warning (LOW) from MoDNR on November 14, 2024, for failure to conduct the performance test and was required to provide a written response by November 29, 2024, and conduct the performance test by December 31, 2024. Silgan provided the response on time and conducted the performance test on December 4-5, 2024, demonstrating a destruction efficiency of 96.9%. The results of the most recent test were not finalized at the time of the inspection, and a new minimum operating temperature had not been established. At that time, Silgan was using the minimum operating temperature established during the 2019 performance test. Silgan has completed the terms of the LOW, and failure to conduct a performance test in a timely manner is no longer an issue.

Silgan monitors the operating temperature continuously on charts which are scanned and maintained. Mr. Maynard told me that if the operating temperature drops below the minimum operating temperature, all process units venting to the RTO are shut down until the RTO minimum operating temperature is re-established.

An operating and maintenance log for the RTO, and all permitted equipment, is maintained by Silgan. Manufacturer's operations manuals are maintained onsite.

Emissions from ES-2024 Inside Spray Machines are controlled by fabric filters. Mr. Maynard showed me the filter media at the time of the inspection. The permit requires that each filter be equipped with a pressure drop gauge. I observed the gauges at the time of the inspection. The filters are monitored twice per day as required. I reviewed the pressure drop observations at the time of the inspection. A manufacturer's operations log is maintained onsite.

Silgan is required to operate ES-2024 Inside Spray Machines so that 100 percent of emissions from ES-2024 Inside Spray Machines are captured and routed to CD-2A Smith RTO.

Silgan is required to verify within 30 days of startup that 100 percent capture efficiency has been achieved according to the procedures of EPA Test Method 204 Criteria for and Verification of a Permanent or Temporary Total Enclosure, set forth in 40 CFR Part 51, Appendix M. The total enclosure was tested May 1, 2014, and passed.

Silgan is required to operate ES-2010 Washcoat within a partial enclosure such that a minimum of 46.3 percent of emissions from ES-2010 Washcoat are captured and routed to CD-2A Smith RTO. ES-2010 was tested on May 1, 2024, and passed.

Silgan is required to keep all coatings, inks, solvents, and cleaning solutions in sealed containers whenever the materials are not in use. The permittee shall provide and maintain suitable, easily read, permanent markings on all coatings, inks, solvents, and cleaning solution containers used with this equipment. I did not observe any open containers at the time of the inspection.

Silgan is required to maintain all records required by this permit for not less than five years and shall make them available immediately to any MoDNR's personnel upon request. These records shall include the SDS for all materials used.

Records are maintained. Silgan provided five years of emissions records, including SDS, during the inspection.

The permittee shall conduct performance testing using US EPA Test Method 25A at least once every five years to confirm the destruction efficiency of CD-2A Smith RTO and set the minimum

operating temperature. Most recently, the RTO has been performance tested in 2019 and 2024. A fire at the facility delayed the 2024 performance test.

Toxic Release Inventory:

A determination of the accuracy of the Silgan TRI calculations had not been made by report transmittal.

Potential Finding 1: Silgan is operating without an operating permit.
Observation Summary: A renewal application was not submitted.
Citation: *10 CSR 10-6.065(II) Operating Permits.*
Evidence: A renewal application was not submitted.
Description of Observation: A termination letter to terminate the Title V permit was submitted, but an application to renew the operating permit was not submitted.

End of report.

E

NOTICE OF PRELIMINARY FINDINGS

FACILITY NAME: Silgan Container Corp AFS NO.: 29-021-00064

FACILITY ADDRESS: 2115 Lower Silver Lake Road

St. Joseph, MO 64504

INSPECTOR: Sean Bergin DATE: 12/12/2024

An inspection of the above facility has just been completed. The purpose of the inspection was to determine compliance with the requirements of the Clean Air Act and regulations promulgated pursuant thereto. The following potential violations were identified:

CITATION	DESCRIPTION
CP 082022-007 Special Condition 4.C	Failure to conduct a performance test
10 CSR 10-6.065	Failure to reapply for an operating permit

This Notice is provided to call your attention to those areas of potential noncompliance at the earliest possible time. This Notice does not constitute a Notice of Violation, Order, or Civil Action pursuant to Section 113 of the Clean Air Act, and may not be a complete listing of all violations which may be identified as a result of this inspection.

You may submit, in writing, within 10 days of receipt of this Notice, a description of all corrective actions taken and/or a schedule for completion of necessary corrective actions to be taken to:

Sean Bergin Phone: 913.551.7499
U.S. Environmental Protection Agency
901 N. 5th St.
Kansas City, Kansas 66101

Corrective actions you have taken may be considered in any subsequent U.S. EPA enforcement follow-up, to the extent allowed by Agency regulations, guidance, and policies.

The undersigned hereby acknowledges receipt of a copy of this Notice.

PRINTED NAME: Adam Maynard

TITLE: Superintendent

SIGNATURE: DATE: 12-12-24