



Air Branch

Air Branch Inspection Report
Unannounced Partial Compliance Evaluation
US Paint Corp
831 S 21st Street
St. Louis, Missouri 63103
FRS# 110012609016

Inspection Date(s):
September 13-14, 2023

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INSPECTION OVERVIEW

INSPECTION OBJECTIVE

The objective of the partial compliance evaluation (PCE) inspection was to determine compliance of the facility with the Clean Air Act (CAA), specifically those requirements located in the code of federal regulations at 40 CFR Part 63 Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing. The inspection was part of the U.S. Environmental Protection Agency's (EPA) Creating Cleaner Air for Communities National Enforcement Compliance Initiative.

Table 1 lists the inspection team members.

Table 1. PROJECT TEAM MEMBERS		
Team Member	Organization	Project Role
Lead Inspector Luke Rodriguez	EPA, Region 7, ECAD, Air Branch	Project manager (PM)
Miranda Cason, Program Analyst	Missouri Department of Natural Resources (MoDNR)	Sampling with Photo Ionization Detector under direction of Luke Rodriguez

FACILITY CONTACT INFORMATION

Table 2 lists the primary facility contacts.

Table 2. FACILITY CONTACT INFORMATION		
Name, Title	Phone No.	Email Address
Laura Schubert, Environmental Manager	618-559-3194	lschubert@uspaint.com
Justin Kuehnel, Health, and Safety Manager	618-741-9525	jkuehnel@uspaint.com

FACILITY OVERVIEW

US Paint Corporation owns and operates a paint manufacturing facility in St. Louis Missouri manufacturing high performance paints and primers for specialized industrial and Original Equipment Manufacturer (OEM) markets. The facility performs paints and allied products manufacturing and is an area source of hazardous air pollutant (HAP) emissions.

The facility is an existing synthetic minor source of volatile organic compounds (VOCs) and HAPs and was issued an Intermediate State Permit to Operate by MoDNR on October 5, 2022. The permit identifies the following regulations and standards subject to review during this inspection (**Table 3**):

Table 3. APPLICABLE REGULATIONS AND STANDARDS	
Code of Federal Regulation	Standard Name
40 CFR Part 63	Subpart A, General Provisions Subpart CCCCCC, National Emission Standards for Hazardous Air Pollutants for Area Sources: Paints and Allied Products Manufacturing

FACILITY OPERATIONS SUMMARY

Raw materials such as resins, solvents and pigments are mixed and processed according to product specific requirements. Finished products are packaged in containers ranging in size from one pint to 250 gallons, stored in warehouses on site and then distributed to customers via trucks. The facility employs roughly 100 people and is in operation with two shifts, one from 7 a.m. to 3 p.m. and another from 3 p.m. to 11 p.m. on Monday through Saturday. The facility currently operates two shifts but intends to start a third shift in January.

FIELD ACTIVITIES SUMMARY

I arrived at the facility on September 13, 2023, and completed a drive by surveillance inspection. I did not observe visible emissions or detect any odors during the drive by surveillance. I made entry at the front office at 8:20 AM and introduced myself and Ms. Cason, presented my credentials, and provided my business card to Mr. Kuehnel. Ms. Cason and I were given a facility safety briefing by Mr. Kuehnel. 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 specifically, to determine compliance with the conditions listed in Table 3. Mr. Kuehnel notified me that Ms. Schubert was the Environmental Manager for the facility and would not be available until the following morning. I was given a facility tour by Mr. Kuehnel. I took photos and used the FLIR camera and Ms. Cason carried the photo-ionization detector (PID) during our walkthrough. After the facility tour, Ms. Cason and I left for the day. Ms. Cason was unavailable the following day. Site sampling activities are described in the **Measurement and/or Sampling Activities** section below.

I arrived at the facility on September 14, 2023, and I made entry at the front office and introduced myself to Ms. Schubert. I presented my credentials, and I explained that after asking for some general business information, I would review associated records demonstrating compliance with the requirements of 40 CFR 63 Subpart CCCCCC. I explained to Ms. Schubert that the facility could make a claim of business confidentiality and provided her with a

Confidential Business Information form (**Appendix A**). Ms. Schubert did not make a claim of confidentiality.

I reviewed the required records necessary to determine compliance with the regulations and permit conditions noted in Table 3 only. I obtained copies of the records as indicated on the Receipt for Documents (**Appendix B**).

I conducted a closing conference with Ms. Schubert. I provided the facility with copies of the Confidential Business Information form and the Receipt for Documents and a small business information sheet.

Observations and potential findings from the facility tour, and records review, and sampling/measurement activities are noted in the **Investigation Observation and Potential Findings** section below.

Measurement and/or Sampling Activities

The inspection team conducted photo-ionization sampling using a Photo-Ionization Detector (PID) and recorded video using a FLIR Camera during the onsite inspection under my direction. I did a bump test calibration of the PID with 100 ppm isobutylene immediately preceding the facility walkthrough. Ms. Cason carried the PID during the facility walkthrough. We first walked upwind of the facility then immediately downwind and then inside the production area. I carried the FLIR Camera and recorded videos of several vents on the exterior of the building.

All environmental measurement activities were performed in accordance with the EPA Region 7 quality system. I followed manufacturer and EPA processes for instrument calibration; Instrument calibration was documented in the instrument’s logbook.

Table 4 summarizes field measurement activities.

Table 4. FIELD MEASUREMENT ACTIVITIES			
Location Identifier	Date(s) and Time	Method and/or Procedure¹, and Equipment	Measurer Name
Luke Rodriguez	9/13/23	Region 7 procedure: <i>FLIR ThermoCAM™ GasFindIR, GF320, and Similar Infrared Cameras,</i> Equipment: FLIR, <i>ThermoCAM™</i> , and S/N: 44401969	Luke Rodriguez
Luke Rodriguez	9/13/23 8:30 AM to 9:40 AM	Region 7 procedure: <i>Safety and Sample Screening Instruments,</i> Instrument guide(s): <i>MultiRAE+ Multi-Gas Monitoring Equipment</i> Equipment: Honeywell, ppbRAE 3000+, SN:594-916195.	Miranda Cason

Table 4. FIELD MEASUREMENT ACTIVITIES			
Location Identifier	Date(s) and Time	Method and/or Procedure ¹ , and Equipment	Measurer Name
¹ The current version of each procedure, at the time of the investigation, was followed.			

INVESTIGATION OBSERVATIONS AND POTENTIAL FINDINGS

Ambient weather, site conditions and activities were documented in field records. All photographs are attached as **Appendix C**. 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.

US Paint Corporation maintains an Intermediate Title 5 Operating Permit issued by MoDNR. The Intermediate Title 5 Operating Permit limits the facility to emitting less than 100 tons of VOCs and 25 tons of combined (HAP) emissions from the entire installation in any consecutive 12-month period. The facility's record of the rolling 12-month VOC and HAP emissions from the beginning of 2021 to August 2023, are included as **Appendix D**. The highest total VOC emissions reported during the time frame occurred in the 12-month period ending July 2021 and was 55 tons. The highest total HAP emissions reported during the time frame occurred in the 12-month period ending December 2022 and was 4.5 tons. I reviewed the emissions calculations for the facility and the calculations appeared to be consistent with the methodology required by Permit Condition PW002, in the October 5, 2022 Intermediate State Operating Permit.

§ 63.11601(a)(1) – (5) – standards for new and existing facilities.

§ 63.11601(a)(1) requires that the facility operate a capture system when dry pigments which contain compounds of cadmium, chromium, lead, or nickel are added to a process vessel or to the grinding and milling process. According to Ms. Schubert, US Paint Corp uses dry pigments and solids that contain chromium. These are applied in Building E-North. Dust collection hoods are situated over the vessels where dry pigments are added and are routed to either Dust Collector 1 (E/DC1) or Dust Collector 3(N/DC1). The remainder of the pigments and solids that are added to process vessels are added in a paste, slurry, or liquid form.

§ 63.11601(a)(2) requires that the particulate emissions identified in § 63.11601(a)(1) are routed to a particulate control device. The Dust collection hoods are situated over the vessels where dry pigments are added and are routed to either Dust Collector 1 (E/DC1) or Dust Collector 3(N/DC1).

§ 63.11601(a)(3) requires that emissions from the addition of dry pigments which contain compounds of cadmium, chromium, lead or nickel to a process vessel or to the grinding and milling process are captured and routed to a control device or that they be in paste, slurry, or liquid form. According to Ms. Schubert, the only addition of dry pigments occurs in Building E-North, and those emissions are controlled by Dust Collector 1 or Dust Collector 3. All other additions of pigments which contain chromium are already in paste or liquid form. The addition of the paste or liquid occurs on the outside perimeter of Building-D.

§ 63.11601(a)(4) requires that particulate emissions must be routed to a control device meeting the requirements of § 63.11601(a)(5) or that they be fully enclosed or that they be in solution during the grinding and milling.

§ 63.11601(a)(5) requires that the opacity of visible emissions from the dust particulate control device not exceed 10 percent but this does not apply to control devices which do not vent to atmosphere. According to Ms. Schubert, Dust Collector 1 and Dust Collector 3 contain fabric filters which are occasionally reverse pulsed, and the dust is collected in a bin below. The air is returned to the building and not vented to atmosphere therefore the 10% opacity limit does not apply.

§ 63.11601(b)(1) – (5) - standards for new and existing facilities.

The requirements in § 63.11601(b)(1) – (5) apply to process and storage vessels that store or process materials contain benzene or methylene chloride. According to Ms. Schubert, the facility does not store or process materials which contain benzene or methylene chloride.

§ 63.11602 - performance test and compliance requirements.

§ 63.11602(a)(1) specifies the requirements for the initial inspection and monitoring activities.

§ 63.11602(a)(2) specifies the ongoing compliance inspection and testing requirements.

Inspections must be conducted according to § 63.11602(a)(2)(i) for wet particulate control systems and according to § 63.11602(a)(2)(ii) for dry particulate control systems. Tests must be

completed as specified in § 63.11602(a)(2)(iii) and recordkeeping must be completed as specified in § 63.11602(b) for all inspections and tests. § 63.11602(a)(2)(i) does not apply because there are no wet particulate control systems in use at US Paint Corporation.

§ 63.11602(b) requires that the information in § 63.11602(b)(1) through (6) be recorded for each inspection and testing activity:

§ 63.11602(b)(1) The date, place, and time;

(2) Person conducting the activity;

(3) Technique or method used;

(4) Operating conditions during the activity;

(5) Results; and

(6) Description of correction actions taken.

§ 63.11602(a)(2)(ii)(A) requires a weekly visible inspection of any flexible ductwork. The information specified in § 63.11602(b) must be included.

§ 63.11602(a)(2)(ii)(B) requires inspections of rigid, stationary ductwork for leaks, and the interior of the dry particulate control unit for structural integrity and to determine the condition of the fabric filter (if applicable) every 12 months. The information specified in § 63.11602(b) must be included.

I requested records sufficient to demonstrate compliance with the requirements for conducting inspections in § 63.11602(a)(2)(ii)(A), § 63.11602(a)(2)(ii)(B) and § 63.11602(b). Ms. Schubert produced a document which outlines the preventative maintenance activities for the Dust Collectors. This document is included as Appendix E. The PMs include a weekly inspection which requires that the employee “Check flexible duct hoses for tears, leaks, rips, etc.” and a 364-day inspection which requires the employee to “Calibrate air flow meters on all dust collectors, check rigid stationary ductwork, interior of control unit, fabric filters.” Appendix E also includes the preventative maintenance work orders and the date for the completion for Dust Collectors 1, 2, 3 and 4. The record provided does not have the place and time of the activity, the technique or method used, the operating conditions during the activity, or the results of the inspection. Corrective actions would be required in the event of the inspection finding an issue

with the ductwork, but that information is not included in the record so there is no way to tell whether a corrective action should have been completed.

§ 63.11602(a)(2)(iii) requires a 5-minute visual determination of emissions from the particulate control device every 3 months using Method 22 for each particulate control device. As noted above, § 63.11602(a)(2) requires that these test results must be recorded as specified in § 63.11602(b). According to § 63.11602(a)(2)(iii), the observations must be performed during the addition of dry pigments and solids containing compounds of chromium to a process vessel or to the grinding and milling equipment. Mrs. Schubert told me that the only dry pigments and solids containing chromium added to a process vessel are added in Building E-North. As discussed above, these dust collectors are not vented to atmosphere. The regulation is not explicit whether the requirement to conduct a visual determination of emissions applies to a unit which is not vented to atmosphere and not subject to the opacity limit in § 63.11601(a)(5).

I requested records to demonstrate compliance with the requirements in § 63.11602(a)(2)(iii) and 63.11602(b). Section 63.11602(b) specifies the recordkeeping requirements for the opacity observations. Ms. Schubert provided me with a record of the Method 22 observations which she conducted from January 2021 to September 2023. This record is included as **Appendix F**. Ms. Schubert reported that she conducts the tests monthly to comply with Permit Condition 011 and utilizes a form to record the test information. Ms. Schubert is using “Attachment F” from the previous 2017 Operating Permit to record the test information.¹ Although “Attachment F” is titled “PW003 40 CFR Part 63 Subpart CCCCCC”, it does not have space for the information required by 40 CFR 60 Appendix A-7 to Part 60, 63.11602(b)(1), or Method 22. For example, while the form notes a start time, there is no stop time as required by 40 CFR 60 Appendix A-7 to Part 60, 11.5 Recording Observations. Additionally, the form does not have the place identified as required by 63.11602(b)(1). Further, Method 22 requires recording:

“the following information on the field data sheet (Figure 22-1): Company name, industry, process unit, observer's name, observer's affiliation, and date. Record also the estimated wind speed, wind direction, and sky condition. Sketch the process unit being observed and note the observer location relative to the source and the sun. Indicate the potential and

¹ It should be noted that Permit Condition 011 identifies Attachment K as the appropriate recordkeeping document in the recordkeeping section. Attachment K contains space to input all the required Method 22 information.

actual emission points on the sketch.” 40 CFR 60 Appendix A-7 to Part 60, 11.2.1 Outdoor location.

The form contains a column for operating condition, but the operating condition of the equipment is not listed. In this column the sky condition is recorded.

Ms. Schubert reported that she was certified to conduct Method 9 tests.

§ 63.11603 Notification, reporting, and recordkeeping requirements.

§ 63.11603(b) requires the preparation of an annual compliance certification report but the report does not need to be submitted unless a deviation has occurred. According to Ms. Schubert, the facility has not reported and deviations and has never submitted the annual compliance certification report. The report which was prepared for the 2022 calendar year is attached as **Appendix G**.

§ 63.11603(c) specifies the recordkeeping requirements. These recordkeeping requirements are addressed above and not repeated here.

40 CFR 63 Subpart T- National Emission Standards for Halogenated Solvent Cleaning

According to Ms. Schubert, the facility does not use any methylene chloride at the facility and is therefore not subject to this subpart.

40 CFR 63 Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

40 CFR 63 Subpart HHHHHH applies to any facility which is engaged in any of the activities in paragraphs (a) through (c) in § 63.11169. These include (c) Spray application of coatings containing compounds of chromium (Cr). US Paint Corporation engages in spray application of coatings containing chromium in their spray booths. However, § 63.11169(d) lists the activities which are exempt from this regulation including (5) surface coating that meets the definition of “quality control activities.” Quality control activities are defined as surface coating activities that meet all of the following criteria:

- (1) The activities associated with a surface coating or paint stripping operation are intended to detect and correct defects in the final product by selecting a limited number of samples from the operation and comparing the samples against specific performance criteria.

(2) The activities do not include the production of an intermediate or final product for sale or exchange for commercial profit; for example, parts that are surface coated or stripped are not sold and do not leave the facility.

(3) The activities are not a normal part of the surface coating or paint stripping operation; for example, they do not include color matching activities performed during a motor vehicle collision repair.

(4) The activities do not involve surface coating or stripping of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity; that is, the activities are not facility maintenance.

Ms. Schubert told me that the spray booths in operation at US Paint Corporation meet all of the criteria specified in the definition of quality control activities and are exempt from the requirements located at 40 CFR 63 Subpart HHHHHH.

Potential Finding 1: Recordkeeping required for inspections does not have required information.
Observation Summary: Inspections are required for ductwork vented to particulate control devices. The records of the inspections are lacking required information.
Citation: § 63.11602(a)(2)(ii)(A), § 63.11602(a)(2)(ii)(B) and § 63.11602(b)
Evidence: Preventative maintenance records for inspections included as Attachment E.
Description of Observation: The record provided does not have the place and time of the activity. The technique or method used, the operating conditions during the activity, or the results of the inspection.

Potential Finding 2: Recordkeeping required for Method 22 Tests do not have required information.
Observation Summary: Method 22 Observations are required quarterly. The records provided are lacking required information.
Citation: Permit Condition 011, Appendix A-7 to Part 60.
Evidence: Opacity Observations included as Appendix F.
Description of Observation: The record provided does not have the place and time of the activity, the place of the observation, the stop time for the test and other information required by Method 22.

End of report.