

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

FY2016 Insp-

P016534222

FACILITY: AFC Holcroft	SRN / ID: P0165
LOCATION: 89630 Pontiac Trail, WIXOM	DISTRICT: Southeast Michigan
CITY: WIXOM	COUNTY: OAKLAND
CONTACT: <i>JK</i>	ACTIVITY DATE: 03/30/2016
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance
SUBJECT: FY 2016 inspection of AFC-Holcroft ("AFCH")	SOURCE CLASS: MINOR
RESOLVED COMPLAINTS:	

P0165 - SAR - 2016 03 30

AFC-Holcroft (SRN P0165)
49630 Pontiac Trail
Wixom, Michigan 48393-2009

Rules: 285, 281, 287(c) (coating booth – site-specific special exemption by treating the entire plant as a booth)

Not Subject to: NESHAP/ MACT T, area source National Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T; NESHAP/ MACT T); Correction; 29484 Federal Register / Vol. 60, No. 107 / Monday, June 5, 1995 / Rules and Regulations; amended National Air Emission Standards for Hazardous Air Pollutants: Halogenated Solvent Cleaning (40 CFR, Part 63, Subpart T); Final Rule; Page 25138 Federal Register / Vol. 72, No. 85 / Thursday, May 3, 2007 / Rules and Regulations. About 2007, AFCH quit using halogenated solvents in Graymills Handy-Kleen parts cleaner; at any rate, the parts cleaner is serviced Safety-Kleen.

On March 30, 2016, I conducted a level 2 self-initiated inspection of AFC-Holcroft ("AFCH") located at 49630 Pontiac Trail, Wixom, Michigan 48393-2009. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 (PA 451); and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

During the FY 2016, inspection, Mr. Gordon J. Cargill (Phone: 248-668-4054; Cell: 248-705-2094; Fax: 248-624-3710; E-mail: gCargill@afc-holcroft.com), Manufacturing Manager, and Ms. Kathy Neumann (Phone: 248-668-4093; Fax: 248-668-5593; E-mail: kNeumann@afc-holcroft.com), Quality / Safety Manager, assisted me.

Mr. Jeff Thompson (Phone: 248-668-4092; Fax: 248-668-5592; E-mail: jThompson@afc-holcroft.com), Manufacturing Supervisor, and Mr. Michael J. Boutsikaris (Phone: 248-668-4051; Fax: 248-668-5561; E-mail: mBoutsikaris@afc-holcroft.com), Manufacturing Supervisor, did NOT participate. Ms. Cathy Morgan (Phone: 248-668-4093; Fax: 248-668-5593; E-mail: cMorgan@afc-holcroft.com), Quality / Safety Manager, retired about April 01, 2015.

AFCH makes heat-treating furnaces for both ferrous and non-ferrous metal heat-treating industry. The furnaces assembled may either use electricity or natural gas for attaining and maintaining heat-treating temperature. Most styles of furnaces are built: atmosphere and vacuum furnaces; batch integral quench furnaces; pusher furnaces; cast link belt and mesh belt conveyor furnaces; roller hearth and rotary hearth furnaces; walking beam furnaces; car bottom furnaces. Support equipment such as atmosphere generators, parts handling equipment and process controls and instrumentation are also built or supplied to the customer. AFCH is in furnace business for nearly 100 years.

Painting – Special site-specific case of Rule 287(c)

Structural components such as furnace walls are painted in an open factory space; i.e. there no paint spray booth with filters for overspray particulate control. Paints may be either solvent based or water based depending upon customer requests (usually, orange, yellow and blue). Almost entire factory floor is covered with these paints due to overspray. Entire factory floor may be treated as paint spray booth with a dry filter system on each of the four exhaust fans. The November 09, 2010, VN response letter states that the filters would be installed on all four building exhaust fans and VOC records will be kept. These filters (4) are now installed and operating.

I confirmed that four filters on four exhaust fans are installed. Painters are trained to operate the filters properly during painting. The filters can be closed or opened as desired by operating a rope or chain. Intake air fan is operated when the exhaust fans with filters are operated. Intake air is passed through a system of bags for uniform air distribution in the plant; two large fans are present.

Each painting area (furnace) is enclosed by fire-retardant curtains. Wixom Fire Dept. has approved these curtain materials. Furnaces can be 10-20 feet long or wide; usually a square or rectangle in shape based upon an engineering drawing section (top or front view).

The exhaust fan filters that serve the entire plant are changed upon completion of paint jobs according to Maintenance Dept. There are four (4) filters in all. I observed that the spent filters were covered with overspray paint indicating that the plant overspray control system is working properly.

While painting, outside ventilation is brought into the building using a giant bag for proper air distribution in the plant. Outside air drawn and ventilation exhaust is such that proper air balance is maintained: intake air flow rate should be slightly less than paint overspray particulate laden exhaust air flow rate.

Mr. Tom Spicer, Head of Maintenance, separated about October 2014. Mr. Cuck Felton, Head of Maintenance, replaced Mr. Spicer.

October 21, 2010, Violation Notice

Please refer to October 21, 2010, Violation Notice (VN) for failure to comply with Rule 336.1201 / 336.1287(c). On November 9, 2010, AQD received VN response letter stating that all elements of Rule 287(c) requirements would be complied with.

Based upon 12-month usage records review, less than 200 gallons of paint per year were used (Coatings: CY2011 = 125, CY2012 = 181, CY2013 = 174, CY2014 = 185 & CY2015 = 88 gallons per year; Clean-up solvents: CY2014 = 139 gallons per year). The filters are installed on all four exhaust fans, which treat particulate emissions from the entire building. I asked Ms. Neumann tabulate coatings and diluent & clean-up solvents properly using MS Excel.

Misc. particulate emissions equipment

Cutting and grinding equipment is present in the building. Steel sheets are cut using shear-cutting, natural gas based torch-cutting, plasma-cutting. Welding equipment is also present. One machine shop is present. None of the process equipment is equipped with any filter system. Upon installing filters (about 2011) on four building ventilation fans in order to comply with Rule 287, all particulate emissions can be controlled. The process equipment are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l). However, four filters are not always operated; but operated when painting.

Cutting machines (in machine shop)

In the machine shop, three (3) cutting machines are present. Each machine has its own capture device for particulate matter emissions. The captured particulate laden exhaust gases are transported via a manifold to one Industrial Air Cleaners pleated filter system installed inside the building. Cleaned

air is released into in-plant environment.

The pleated filters are inspected quarterly (1 / 3 months) and replaced annually (1 / year) . The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285(l).

Cold-cleaner

There is one Graymills Handy-Kleen (3 ft. * 4 ft.) parts cold-cleaner with spray a brush and a solvent tank. The cold-cleaners are subject rule 336.611 or 336.1707 depending on if it is new or existing. A cold-cleaner is exempt from Rule 336.1201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

Safety-Kleen supplies the solvents and services the cold-cleaners. Mineral spirits containing no halogenated solvents is used. Once a month, dirty solvent is picked up for disposal or recovery.

The Cold-cleaner is NOT Subject to: 40 CFR, Part 63, Subpart T, NESHAP/ MACT T, since solvents containing halogenated compounds are not used after 2007. AFC-Holcroft used to use, before 2007, Zep Parts Cleaner 036. Product code 036 contained halogenated solvents: 50% Trichloroethylene (CAS 70-01-6) and 50% Tetrachloroethylene (CAS 127-18-4). The solvent's high specific gravity of 1.53 (water = 1) is due to chlorine.

About 2013, I gave DEQ's decals for "cold-cleaner operating procedures" for posting and complying with work-practice rules. I asked the company to follow the common sense work practice described in the procedures. During FY2016 inspection, the work-practice procedures were posted; but soiled. Mechanically assisted lid was closed. Spent solvent is disposed of as RCRA Hazardous Waste.

During FY2013 inspection, the work-practice procedures were not posted. But now (FY 2016), the DEQ Decals are posted albeit soiled. On March 30, 2016, I gave additional work-practice decals for replacing soiled ones.

After 2007, Zep 0366 (Dkyna 143) is purchased (before 2007, halogenated compounds were used).

100% VOC solvent. Flash Point (FP) = 143.6 °F TCC. Auto Ignition = xx °F. Boiling Point (BP) = 369 °F @ 760 mm Hg. Vapor Pressure (VP) = 1 mm Hg at 68 °F. Specific Gravity (SG, Water = 1.0) = 0.79. Density (ρ) @ 68 °F = 6.58 lbs. / gallon (0.790 kg /L). Flammability range = 1 %v (LEL) – 7%v (UEL).

Conclusion:

Please refer to October 21, 2010, Violation Notice. Exhaust filters are installed on four ventilation fans. This is a special case of Rule 287(c), where entire manufacturing plant is treated as a paint spray booth with exhaust filters.

FYI: Oct 21, 2010, VN

October 21, 2010

Mr. Gary Dawson
AFC Holcroft
89630 Pontiac Trail
Wixom, Michigan 48393-2009

SRN: P0165, Oakland (63) County

Dear Mr. Dawson:

VIOLATION NOTICE

On October 8, 2010, the Department of Natural Resources and Environment (DNRE), Air Quality Division (AQD), conducted an inspection of AFC Holcroft located at 49630 Pontiac Trail, Wixom, Michigan. The purpose of this inspection was to determine AFC Holcroft's compliance with the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); and the administrative rules.

During the inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Painting Process	Rule 336.1201 (Permit-to-Install)	AFC-Holcroft installed the Painting Process without obtaining a Permit-to-Install prior to commencing the painting operation. The painting occurs in an open factory space without a control device for paint overspray particulate matter. ^θ
<p>^θ Alternatively, AFC-Holcroft may install a coating line that meets all of the Rule 336.1287(c) conditions:</p> <p>The coating use rate is not more than 200 gallons, as applied, minus water, per month.</p> <p>Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.</p> <p>Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.</p> <p>Installing dry filter systems on all six building ventilation fans may be acceptable if all exhaust gas flow through these fans and NOT via bay doors.</p>		

AFC-Holcroft paints structural components for the ferrous and non-ferrous heat treating process equipment known as furnaces. The components are painted in an open factory space; i.e. there is no paint spray booth with filters. Both solvent based and water based paints are used. Almost entire factory floor is covered with these paints. About 10 gallons of paint per month is used although records are not kept. The furnaces are painted in place and are enclosed within a fire-retardant curtain system.

During this inspection, it was noted that AFC-Holcroft had installed and/or commenced operation of an unpermitted painting process/equipment at this facility. The AQD staff advised AFC-Holcroft on October 5, 2010, that this is a violation of Act 451, Rule 201.

A program for compliance may include a completed PTI application for the painting operation process equipment. An application form is available by request, or at the following website:

http://www.deq.state.mi.us/aps/nsr_information.shtml#AUP

Be advised that Rule 201 requires that a permit be obtained prior to installation, construction, operation, reconstruction, relocation, or alteration of any process or process equipment which may be a source of an air contaminant.

Please initiate actions necessary to correct the cited and submit a written response to this Violation Notice by November 11, 2010 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the occurred; an explanation of the causes and duration of the ; whether the ongoing; a summary of the actions that have been taken

and are proposed to be taken to correct the and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

If AFC Holcroft believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the cited above and for the cooperation that was extended to me during my inspection of AFC Holcroft . If you have any questions regarding the or the actions necessary to bring this facility into compliance, please contact me at the number listed below or the DNRE, SEMI (Warren), 27700 Donald Court, Warren, Michigan 48092-2793.

Sincerely,

Iranna Konanahalli

Air Quality Division
586-753-3741

ISK / VLL

- cc: Mr. Gerald Avery, DNRE
- Mr. Thomas Hess, DNRE
- Ms. Teresa Seidel, DNRE
- Mr. Christopher Ethridge, DNRE
- Mr. Richard Tazreak, DNRE

NAME 

DATE 04/14/2016

SUPERVISOR CJE