

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: Scheduled Inspection

N172636193

FACILITY: Peter-Lacke USA		SRN / ID: N1726
LOCATION: 865 STEPHENSON HWY, TROY		DISTRICT: Southeast Michigan
CITY: TROY		COUNTY: OAKLAND
CONTACT: Jim Devereux , Technical Director		ACTIVITY DATE: 07/20/2016
STAFF: Kerry Kelly	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection and FCE		
RESOLVED COMPLAINTS:		

On July 20, 2016, I (Kerry Kelly) conducted a scheduled inspection of Peter-Lacke USA located at 865 Stephenson Highway, Troy, Michigan. This facility is identified by the State of Michigan with the State Registration Number (SRN) N1726 . The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules, and Permit to Install (PTI) No. 104-15

### DESCRIPTION OF FACILITY LOCATION AND PERMIT

Peter-Lacke operates a batch paint manufacturing facility in Oakland County a quarter mile west of Interstate 75 and six-tenths of a mile north of 14 Mile Road. The area surrounding Peter-Lacke is populated with industrial and residential properties. The nearest residential area is approximately one-tenth of a mile southwest of Peter-Lacke. There is a community park located about six-hundredths of a mile southwest of Peter-Lacke.

A permit (PTI 104-15) for pre-dispersion portable mixing tanks, milling in horizontal pearl mixers, let-down area mixing tanks, tinting, and filtration in cartridge-type or vibratory filtration equipment/processes (EUPAINTPROD) at Peter-Lacke was issued on June 19, 2015. The permit also includes a facility-wide hazardous air pollutant (HAP) limit, cumene limit, and naphthalene limit for all process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment (FGFACILITY). The facility is classified as a synthetic minor opt-out for HAPs as a result.

### INSPECTION

I (Kerry Kelly) arrived at Peter-Lacke at approximately 9:30 AM on July 20, 2016. I entered the office at Peter-Lacke, showed my DEQ photo credentials, explained the purpose of the inspection, and gave a copy of the pamphlet "Environmental Inspections: Rights and Responsibilities" to Mr. Jim Devereux, Technical Director.

#### Opening Meeting

In the opening meeting I asked Mr. Devereux basic questions about Peter-Lacke operations and about the general conditions, emission limits, and recordkeeping requirements set forth in PTI 104-15. According to Mr. Devereux, installation of the permitted emission unit (EUPAINTPROD) at

Peter-Lacke was completed in October 2015. Mr. Devereux stated that since start-up of operations there were no abnormal conditions, start-ups, shutdowns, or malfunctions that resulted in emissions of hazardous or toxic air pollutants. EUPAINTPROD has not been reconstructed, relocated, or modified since issuance of PTI 104-15 according to Mr. Devereux. Peter-Lacke typically operates Monday through Friday 7:30 AM to 4:00 PM with a staff of approximately 10 office and production workers. EUPAINTPROD special condition (SC) VII. 1. requires the permittee notify the AQD district supervisor within 30 days of completion of installation. Notification of start-up was not in Peter-Lacke's AQD file at the DEQ Southeast Michigan District office. I asked Mr. Devereux about the notification on August 30, 2016. Mr. Devereux sent me an email with the notification letter attached (attachment 5) on August 30, 2016. The notification letter was dated January 11, 2016 and address to Mr. Paul Owens. Mr. Owens works in the RRD in the Southeast Michigan District Office. Based on the statements provided by Mr. Devereux and the notification letter it appears the notification was submitted more than 30 days after installation and commencement of trial operations. A notice of violation will not be issued for the late notification.

EUPAINTPROD SC's I. 1. limits VOC emissions to 20.4 tons/year. Recordkeeping requirements to demonstrate compliance with these emission limits are set forth in SC's VI. 1. – 4. EUPAINTPROD SC's VI. 3. b, c, and d require records of VOC content and monthly and 12-month rolling VOC mass emission calculations for each coating product produced. Mr. Devereux provided records of VOC content lbs/gallon and lbs/lb for each raw material used and monthly and 12-month rolling VOC mass emission calculations (Attachment 1). Though Peter-Lacke is not calculating VOC's based on the products produced as stated in the permit, using the raw material throughput to calculate VOC's should result in the same amount of VOC emissions or perhaps more conservative emission estimates. The 12-month rolling VOC emission is based on the nine months of data collected since start-up began in October 2015. VOC emissions were calculated using 0.034 lb VOC/lb solvent emission factor. The highest 12-month VOC emissions reported was 0.72 tons/year. Based on VOC emission records, it appears Peter-Lacke is in compliance with the 20.4 tons/year emission limit specified in EUPAINTPROD SC I.1 and the recordkeeping requirements set forth in SC VI.3. and 4. I viewed Peter-Lacke's internet database of SDS's for all of its paint products during the opening meeting. Mr. Devereux sent me an electronic copy of the SDS's for the six most produced products at Peter-Lacke and for the solvent used. This appears to demonstrate compliance with EUPAINTPROD SC VI.2.

EUPAINTPROD SC I. 2. limits xylene emissions to 25.8 lbs/day. Recordkeeping requirements to demonstrate compliance with these emission limits are set forth in SC VI. 5. SC VI.5. mandates the permittee keep records of each xylene containing coating, the content of xylene in the

coatings produced, and monthly and 12-month rolling xylene emissions using an emission factor of 0.034 lb xylene/lb solvent. Mr. Devereux provided records of the xylene containing materials, the xylene content of the materials used, and monthly and 12-month rolling xylene emissions (Attachment 2) on July 21, 2016. According to Mr. Devereux these records were compiled by Peter-Lacke's consultant Sarah Coleman, ASTI Environmental. Mr. Devereux gave me permission to contact Ms. Coleman regarding calculations and records. Bruce Bawkon, P.E. ASTI Environmental, provided a spreadsheet with the records required in PTI 104-15 on August 15, 2016 including the pounds used of each xylene containing material. The xylene emissions in the records provided by Mr. Devereux differed from the xylene emissions in the records provided by Mr. Bawkon. The xylene emissions provided on August 15, 2016 were higher than the xylene emissions in the July 21, 2016 records. I called Ms. Coleman and asked her the reason for the discrepancy. Ms. Coleman stated that there was a miscommunication between Peter-Lacke and ASTI regarding the raw material data supplied to ASTI by Peter-Lacke. According to Ms. Coleman some of the raw material data was reported in pounds and some in gallons. Peter-Lacke and ASTI have, according to Ms. Coleman, addressed the issue and Sarah re-calculated the emissions with the accurate information. The highest reported daily xylene emissions from the report submitted by Bruce Bawkon were 16.9 lbs reported on June 19, 2016. These records appear to demonstrate compliance with 25.8 lb/day xylene emission limit set forth in EUPAINTPROD SC I.2. and recordkeeping requirements set forth in SC VI.5. On August 26, 2016 Mr. Devereux and I discussed the xylene emissions discrepancy and recordkeeping. During this conversation I asked Mr. Devereux to send me the emission calculations spreadsheet each month for August 2016 through January 2017 for my review.

Solvent-based industrial and automotive coating use is limited to 200,000 gal/year per EUPAINTPROD SC I.3. Monthly and 12-month rolling paint production records required in EUPAINTPROD SC VI. 3. (a) were provided by Mr. Devereux (Attachment 3). The highest reported monthly amount of paint produced for the period of January 2016 through June 2016 was 2171 gallons (June 2016) and the highest 12-month rolling reported was 866.44 gallons (June 2016). Based on the records provided the solvent-based and hydro-based industrial and automotive coating usage is below the 200,000 gal/year limit set forth in SC II.1.

FGFACILITY special conditions (SC) I. 1 - 4 limit individual and aggregate HAP emissions to 9 tons/year and 22.5 tons/year respectively, cumene emissions to 471.3 lbs/year, and naphthalene emissions to 377.1 lbs/year. Recordkeeping requirements to demonstrate compliance with these emission limits are set forth in SC's VI. 1. – 3. Mr. Bawkon provided monthly and 12-month rolling emission records for each individual HAP, aggregate HAP's, cumene, and naphthalene (Attachment 1). These records include the

pounds and gallons used of each HAP, cumene, and naphthalene containing material. The highest reported 12-month rolling individual HAP emissions was 0.109 tons/month of xylene reported for August 2016. The highest reported 12-month rolling aggregate HAP emissions was 0.615 tons/month reported for August 2016. The records provided appear to demonstrate compliance with the emission limits set forth in FGFACILITY SC I. 1. and 2. and the recordkeeping requirements in FGFACILITY VI.2. Mr. Bawkon provided monthly and 12-month rolling records of cumene and naphthalene emissions including the pounds and gallons of cumene and naphthalene materials used. The highest 12-month rolling cumene emissions reported was 0.000181 tons/month reported July 2016. Records indicate that there have been no naphthalene emissions from Peter-Lacke between December 2015 and July 2016. The records provided by Mr. Bawkon indicate Peter-Lacke is in compliance with the cumene and naphthalene emission limits set forth in FGFACILITY SC I. 3. and 4. and the recordkeeping requirements in SC 3.

### **Walk-Through**

Following the opening meeting Mr. Devereux escorted me on a facility walk-through. Mr. Devereux explained that the facility is divided into five areas (lab, application, quality control (QC), warehouse, and manufacturing). During the facility walk-through I inspected the permitted and unpermitted equipment at Peter-Lacke. The unpermitted equipment consists of two spray paint booths with associated ovens, two cold cleaners, and a fume hood.

### **Laboratory**

We began the walk-through in the lab area. In the lab I inspected an exhaust hood where paints are mixed. It appears the paint mixing process is exempt per R336.1283 (1)(a)(vi) which exempts from permitting pilot processes or process equipment utilizing T-BACT used for the production of a product for field testing.

### **Application**

After leaving the laboratory Mr. Devereux escorted me to the application area. Equipment in the application area at the time of the inspection included two paint booths with associated ovens, an ultraviolet trial line which cures paint in seconds using photo initiators and UV, and one cold cleaner. Both paint booths had properly installed and operating fabric filters. Though not permitted these paint booths and ovens were included in the permit application. According to the permit engineer's notes after speaking with the district inspector at the time it was decided that the booths and oven would be exempt per R 336.1287 (c) and the natural gas fired oven per R336.1282. R336.1287 (c) exempts from permitting a surface coating line if the coating use rate is not more than 200 gallons as applied, minus water, per month, any exhaust system that serves only coating spray equipment is

supplied with a properly installed and operating particulate control system, and 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. A coating line means an operation which is a single series in a coating process and which is comprised of 1 or more coating applicators and any associated flash-off areas, drying areas, and ovens wherein 1 or more surface coatings are applied and subsequently dried or cured. The paint booths, ovens, and ultraviolet trial line at Peter-Lacke appear to meet the definition of a coating line. Paint usage records required per R336.1287 (c) had not been kept prior to July 22, 2016. After speaking with Mr. Devereux and the consultant for Peter-Lacke, Sarah Coleman, ASTI Environmental, Ms. Coleman informed me that Peter-Lacke would be using the R 336.187(c) and R33.61282 exemptions and would begin keeping paint usage records (Attachment 4). Ms. Coleman also stated she would use 100 percent emission rate when calculating HAP and VOC emissions from the paint booths. Mr. Devereux began having employees keep written record of paint booth throughput on July 22, 2016 and submitted to me records of the paint booth throughput for July 22, 2016 through July 27, 2016 (Attachment 5). The total paint usage for this period (6 days) for both booths was approximately 7.25 gallons. Based on this information and five day work weeks, it appears the paint usage for both booths combined would be approximately 25.3 gallons per month which is below the 200 gallon per booth per month limit specified in R 336.1287(c). It appears the paint booths, associated ovens, and the ultraviolet trial line are exempt from permitting per R336.1287 (c).

I inspected the cold cleaner in the application area. This cold cleaner has an air/vapor interface less than 10 square feet (approximately 3 square feet). butylacetate is the solvent used in this cold cleaner. During the inspection the lids to the cold cleaner was closed, there was a device available for draining parts, the waste solvent was stored in closed containers, and written procedures were posted in an accessible, conspicuous location near the cold cleaner. Mr. Matthews provided the SDS for the butylacetate used in the cold cleaners. This unit appears to be exempt from R 336.1201 per R 336.1281(h) and appears to be in compliance with R 336.1707.

### **Quality Control**

I did not observe any equipment or processes in the quality control area during my inspection that appeared to be subject to the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules.

## **Warehouse**

In the warehouse I observed multiple shelves with closed containers and totes stored on them. The materials in the totes appeared to be properly stored.

## **Manufacturing Area and PTI 104-15**

The paint manufacturing process consists of gathering raw materials, mixing them in pre-dispersion tanks, milling the pre-dispersed product, balancing the formulation by adding additional resins, additives, and solvents or water, quality checks, and filtering and packaging. These processes are identified in PTI 104-15 as EUPAINTPROD. The paint manufacturing process at Peter-Lacke begins with the staging and pre-dispersing the raw materials. Pre-dispersing involves mixing resin, pigment, and wetting agents, and either solvent or water. Solvent based paint pre-dispersion takes place in a separate room connected to the main manufacturing area. Water based paint pre-dispersion takes place in the main manufacturing area. In the solvent-based paint pre-dispersion room I inspected two electric paint mixing units and a dust collector. Emissions from the pre-dispersion process in this room are released into the general in-plant environment. The mixing units and dust collector in the solvent pre-dispersion area were not operating at the time of my inspection. I observed and inspected two pre-dispersion (for water-based paints)/let-down mixers, several covered tanks, two mills, a 1,000 gallon mixing tank, a cold cleaner, and tank cleaning equipment in the main manufacturing area. The water-based pre-dispersion/let down mixers are used to pre-disperse water-bourne paints and to balance formulations. I observed one of these mixers operating at the time of the inspection. There was not a cover on the paint vessel while it was being mixed. Special conditions (SC) III. 2. of PTI 104-15 requires that all VOC and/or HAP containing materials from the EUPAINTPROD containers and mixers be covered at all times except when operator access is necessary. Mr. Devereux said the contents of the vessel in the this mixer were water-based paint and had just been accessed by the operator. Though the material was water-based Mr. Devereux asked another employee to cover the vessel in the small mixer. The mills, used to further grind the pigment, are electrically powered. The 1,000 gallon mixer is designed for final mixing. According to Mr. Devereux the 1,000 gallon mixing tank has never been used. SC III. 2. requires the permittee handle all VOC and / or HAP containing materials in a manner to minimize the generation of fugitive emissions. Mr. Devereux explained that the manufacturing area is under negative pressure, air is ducted in from other areas and ducted out to the ambient air indirectly. The negative pressure, along with covering tanks, appears to demonstrate Peter-Lacke's compliance with EUPAINTPROD SC III.2. EUPAINTPROD SC VIII.1. of PTI 104-15 mandates the exhaust gases from EUPAINTPROD shall not be

directly discharged to the ambient air at any time. I did not observe any of the equipment I inspected being directly discharged into the ambient air. Peter-Lacke appears to be in compliance with SC VIII.1. I inspected the cold cleaner in the manufacturing area. This cold cleaner has an air/vapor interface less than 10 square feet (approximately 3 square feet). Butylacetate is the solvent used in this cold cleaner. During the inspection the lid to the cold cleaner was closed, there was a device was available for draining parts, the waste solvent was stored in closed containers, and written procedures were posted in an accessible, conspicuous location near the cold cleaner. Mr. Matthews provided the SDS for the butylacetate used in the cold cleaners. This unit appears to be exempt from R 336.1201 per R 336.1281(h) and appears to be in compliance with R 336.1707. Special conditions (SC) III 1. requires that all waste materials from the EUPAINTPROD be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. All the containers I observed and inspected were closed. Mr. Devereux stated that Americhem was collecting the waste at Peter-Lacke but Peter-Lacke recently contracted with Superior Oil to collect the waste. Peter-Lacke appears to be in compliance with SC III.1.

### CONCLUSION

Based on the information collected during the July 20, 2016 inspection it appears Peter-Lacke is operating in compliance with conditions of PTI 104-15 and the State and Federal air quality laws and regulations evaluated.

NAME

K. Kelley

DATE

8/30/16

SUPERVISOR

SK

