

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

N270939798

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| FACILITY: Fire Defense Research, LLC | | SRN / ID: N2709 |
| LOCATION: , ROYAL OAK | | DISTRICT: Southeast Michigan |
| CITY: ROYAL OAK | | COUNTY: OAKLAND |
| CONTACT: Robert Kelly , Owner | | ACTIVITY DATE: 04/21/2017 |
| STAFF: Samuel Liveson | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR |
| SUBJECT: Scheduled inspection of a minor source. | | |
| RESOLVED COMPLAINTS: | | |

On April 21, 2017, I conducted a scheduled, level 2 inspection of Fire Defense Research, LLC (Fire Defense), located at 4535 Delemere Boulevard in Royal Oak, Michigan. The purpose of this inspection was to determine the facility's compliance with the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); the Air Pollution Control Rules; and the conditions of Permit to Install (PTI) No. 1132-90.

I arrived on site around 10:00 AM. I met with Mr. Robert Kelly, Owner. Mr. Kelly provided a walkthrough of the facility. I provided Mr. Kelly with my contact information and explained the purpose of our unannounced inspections.

I originally visited the location the previous day (April 20th) but was asked to come back when the owner was available.

Background

This address previously housed Continental Coachworks, Ltd (Coachworks). Coachworks received PTI No. 1132-90 for a paint booth on February 13, 1991. According to Air Quality (MDEQ-AQD) records, the facility has not been inspected since receiving PTI No. 1132-90. Mr. Kelly believes Fire Defense purchased the building about 5 years ago.

Facility Information

Fire Defense is in fire extinguisher sales and service. The main office is located down the street at 4350 Delemere Boulevard, under separate business Fire Defense Equipment Company, Inc.

Facility Walkthrough

Based on my walkthrough and from talking with Mr. Kelly, the paint booth permitted under PTI No. 1132-90 is no longer on site. I requested that Ms. Sue Thelen of the MDEQ-AQD void the permit. According to Mr. Kelly and from my walkthrough, there are no cold cleaners or fuel-fired boilers on site.

Nonroad Engine

A gasoline engine on site has skids and appears to meet the definition of a nonroad engine per 40 CFR Part 1068 Subpart A. According to Mr. Kelly, the unit is 5-10 horsepower and moves around to different jobs when needed for temporary power on tools, etc. Because the engine is mobile, it does not appear to be subject to 40 CFR Part 63, Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, per the definition of a Stationary Reciprocating Internal Combustion Engine in §63.6675.

Per 40 CFR Part 63 Subpart ZZZZ, §63.6675:

“Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.”

The definition of nonroad engine per §1068.30 is below.

“Nonroad engine means:

(1) Except as discussed in paragraph (2) of this definition, a nonroad engine is an internal combustion engine that meets any of the following criteria:

(i) It is (or will be) used in or on a piece of equipment that is self-propelled or serves a dual purpose by both propelling itself and performing another function (such as garden tractors, off-highway mobile cranes and bulldozers).

(ii) It is (or will be) used in or on a piece of equipment that is intended to be propelled while performing its function (such as lawnmowers and string trimmers).

(iii) By itself or in or on a piece of equipment, it is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform.

(2) An internal combustion engine is not a nonroad engine if it meets any of the following criteria:

(i) The engine is used to propel a motor vehicle, an aircraft, or equipment used solely for competition.

(ii) The engine is regulated under 40 CFR part 60, (or otherwise regulated by a federal New Source Performance Standard promulgated under section 111 of the Clean Air Act (42 U.S.C. 7411)). Note that this criterion does not apply for engines meeting any of the criteria of paragraph (1) of this definition that are voluntarily certified under 40 CFR part 60.

(iii) The engine otherwise included in paragraph (1)(iii) of this definition remains or will remain at a location for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. For any engine (or engines) that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced, include the time period of both engines in calculating the consecutive time period. An engine located at a seasonal source is an engine that remains at a seasonal source during the full annual operating period of the seasonal source. A seasonal source is a stationary source that remains in a single location on a permanent basis (i.e., at least two years) and that operates at that single location approximately three months (or more) each year. See §1068.31 for provisions that apply if the engine is removed from the location.”

Miscellaneous Equipment

An electric exhaust hood at the site does not appear to have air quality concerns.

A pipe threading machine, saw, and drill do not appear to exhaust outside. This equipment appears to be exempt from obtaining a Permit to Install per R 285(2)(l)(vi)(B).

Several tanks of HFC 227 are on site. HFC 227 does not appear to be a VOC per R 122(f) (lvii). Tanks appear to be exempt from obtaining a Permit to Install per R 284(2)(j).

Small amounts of ceramic coating occurs by hand as a hobby, which appears to be exempt from obtaining a Permit to Install per R 287(2)(c). Coating occurs by brush and exhausts indoors. A related kiln for firing ceramic ware appears to be exempt from obtaining a Permit to Install per R 282(2)(a)(iii).

Compliance

Based on the AQD inspection and records review, it appears that Fire Defense is in compliance with the federal Clean Air Act, NREPA, and the Air Pollution Control Rules. I marked the facility as subject to "Only Exempt Equipment" in the Michigan Air Compliance and Enforcement System. On July 5, I requested that Ms. Sue Thelen void PTI No. 1132-90 because the permitted paint booth is no longer on site.

NAME



DATE

7/5/17

SUPERVISOR

SK