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

P086445963		
FACILITY: T-Rex Arms Shooting Range		SRN / ID: P0864
LOCATION: 44800 North I-94 Service Drive, BELLEVILLE		DISTRICT: Detroit
CITY: BELLEVILLE		COUNTY: WAYNE
CONTACT:		ACTIVITY DATE: 09/05/2018
STAFF: Gerald Krawiec	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Scheduled Inspection and Complaint Investigation		

AQD staff conducted a scheduled inspection for FY 2018 of T-Rex Arms Shooting Range, located at 44800 North I-94 Service Drive in the City of Belleville. The purpose of the inspection is to determine the facility's compliance with applicable state and federal air pollution rules and regulations. General Manager, Jonathan Lee accompanied AQD staff on the inspection.

## Background:

RESOLVED COMPLAINTS:

T-Rex ARMS, LLC opened for business in mid-2016. Previously, this building housed a vending machine company and had been vacant.

## Complaint History:

EPA forwarded a complaint (with photo's) to the DEQ in late September 2017 alleging T-Rex is operating with defective bullet traps and disconnected air filtration system. The complaint contained both the complainants name and email address. AQD staff sent an email to the complainant explaining that staff would like to get more information regarding the complaint. In addition, staff needed to gain a better understanding of what the 5 photographs depicted before conducting an inspection. A response to this request for information was never received.

# Facility Description:

The T-Rex facility is comprised of a retail store, shooting range, office space, training rooms and a large unused portion of the building. The retail store is stocked with firearms (hand guns, rifles, etc.) and various other related items such as ammunition, holsters, sights, targets, safety equipment, etc. The 50-yard shooting range is state of the art with great lighting, HVAC system with HEPA filters for ventilation, electronic operated targets, bullet traps with HEPA dust collection system, etc.

#### Pre-Inspection:

AQD staff met with General Manager, Jonathan Lee to explain the purpose of this inspection. It was explained that T-Rex was selected for an inspection and there is a complaint EPA forwarded to DEQ that needed to be resolved. He immediately knew about that complaint since MIOSHA and other governmental agencies have been to the facility in response to that same complaint. Mr. Lee commented that 3 people were fired from T-Rex in mid-2017. The owner suspects the complaint was alleged by 1 or more of those fired persons. Lee also stated that the fired people ironically had the authority to fix the problems that are depicted by these photos.

Mr. Lee described each photo in detail as follows:

Photo #1 – Depicts patches on the back side of the back wall of the range. The patches are covering bullet holes caused by ricocheted projectiles.

Photo #2 – Depicts bullet holes on the back wall of the range caused by ricocheted projectiles.

Photo #3 – Depicts a bullet hole on the back wall of the building caused by ricocheted projectiles.

Photo #4 - Depicts disconnected ductwork on 1 of the bullet traps. This is duct leads to the control system with HEPA filters. There are 8 bullet traps.

Photo #5 – Depicts disconnected ductwork for bullet traps 1 - 4. The ductwork merges into this manifold leading to the north control system with HEPA filters.

## Inspection:

General Manager, Jonathan Lee accompanied AQD staff as we walked through the entire building including the shooting range. Starting behind the range where 8 bullet traps are located, the conditions depicted in photos #4 and #5 were found repaired. Bullet traps numbers 1 – 4 exhausts to the north control system with HEPA filters located outdoors on the west side of the building. Bullet traps numbers 5 - 8 exhausts to the south control system with HEPA filters also located outdoors on the west side of the building. All metals (lead, copper, etc.) collected from the bullet traps is recycled. HEPA filters are changed every 3 – 4 weeks depending on the volume of business. While in this area Mr. Lee pointed out the backwall of the range and the backwall of the building that are depicted in photos #1, #2 and #3. We need to go onto the range to observe the correction made on the range to resolve this issue.

We then entered the 50-yard shooting range which has 8 shooting stalls, it is well lighted, and ventilated by a separate HVAC system with HEPA filters located outdoors on the west side of the building. At the backwall of the range, Mr. Lee pointed out the heavy steel baffling that was installed near the ceiling to prevent ricocheted projectiles from escaping the bullet traps. Mr. Lee stated this modification is effective at directing ricochets into the bullet traps as designed. This modification resolves the issues depicted in photos #1, #2 and #3. Bullet casings made of brass, steel or aluminum are collected at the shooting stall area for recycling. HEPA filters for this HVAC system are changed every 3 – 4 weeks depending on the volume of business.

# Post Inspection:

AQD staff explained to Mr. Lee that this facility must be operated and maintained in the conditions observed during this inspection in order to continue to be exempt from the AQD's PTI program.

Photos of the control equipment were taken and attached to this report.

# Regulatory Summary:

Rule 285(2)(cc) of the Michigan Air Pollution Control Rules exempts gun shooting ranges from the Permit to Install program if the gun shooting range is controlled by appropriately designed and operated high-efficiency particulate filters.

This Rule applies to this facility.

#### Compliance Determination:

Based upon this inspection of the T-Rex Arms Shooting Range, located at 44800 North I-94 Service Drive in the City of Belleville, it appears this facility is operating in compliance with the applicable air quality rules and regulations.