M4502

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

M450245961		
FACILITY: THE COLLISION SHOP		SRN / ID: M4502
LOCATION: 12500 TELEGRAPH, TAYLOR		DISTRICT: Detroit
CITY: TAYLOR		COUNTY: WAYNE
CONTACT: Yolanda Tonero , Body Shop Manager		ACTIVITY DATE: 09/27/2018
STAFF: Gerald Krawiec	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection and Complaint Investigation		
RESOLVED COMPLAINTS:		

AQD staff conducted a scheduled inspection for the FY 2018 of The Collision Shop, located in the City of Taylor. The purpose of the inspection is to determine the facility's compliance with state and federal air pollution regulations. Shop Manager, Yolanda Tonero accompanied AQD staff on the inspection.

Background:

Since 1989 there has been an automobile collision/body shop at this location. On October 20, 1989, Permit to Install (PTI) C-8496 was issued by the Wayne County Air Pollution Control Division for a DeVilbiss paint spray booth. Since that time there have been several different owners and a few business name changes. Most of those years the facility has been known as "The Collision Shop" and is best known by that name.

In the spring of 2002 the original paint spray booth was removed and replaced with a new unit. Since the DeVilbiss paint spray booth is removed PTI C-8496 can be voided. As a result of updates in the Air Pollution Rules and Regulations the replacement unit is not required to receive a PTI. The Applicable Rule 287(2)(c) of the Michigan Air Pollution Control Rules exempts surface coating operations (paint spray booths) from the Permit to Install program if certain conditions are met which applies to this unit. The new booth is manufactured by VOC Containment Systems; model 900SWDD Side Down Draft Spray Booth, this unit is currently in operation today.

Complaint History:

This is intended to be a summary of this facility's long history of citizen complaints of odorous emissions. These complaints began in the 1990's and continue through 2018. The persons living in the residence adjacent to this collision shop are the main source of these complaints. As an example; between 9/3/1999 and 6/25/01 Wayne County (WC) received 15 complaints (14 from the same household). During this time period these complaints were investigated and none resulted in a finding of verified nuisance odors and no violations had been issued by WC staff.

In September 2002, this complainant alleged nuisance level odors from this facility to the MDEQ/AQD Detroit field office. At the same time the complainant hired an attorney to represent him against the City of Taylor alleging The Collision Shop is violating multiple zoning and other code violations of the City of Taylor's ordinances and the City is doing nothing about it. In early 2003 while working in Lansing, the complainant met with Jerry Avery, Director of Field Operations for the AQD, expressing his concerns about The Collision Shops status regarding compliance with AQD rules and regulations. Mr. Avery followed up with the district as appropriate and months later while touring air pollutions sources in WC made a point of conducting odor surveillance with the writer at this site. Although no contact was made at the facility or with the complainant, Mr. Avery acquired a much better understanding of the conditions surrounding the complainant's allegations. No odors were detected at that time.

On 3/20/2003 this writer responded to a complaint and did observe nuisance level odorous emission on the complainant's property and issued a LOV of Rule 901 on 3/26/2003. In response to this LOV action was taken that will be discussed later in this report.

Early in 2005 the complainant's attorney filed a civil lawsuit in the Wayne County Circuit Court against K & J Collision, Inc. aka; The Collision Shop. This case alleged various nuisance issues against the Defendant

including odors that prevented the Plaintiffs comfortable use of his property. On April 1, 2005, the writer received a subpoena to testify in a trail on April 11, 2005 in courtroom of Judge Kathleen McDonald. On Monday April 11, 2005, the writer appeared in court, gave testimony and was cross-examined in this civil case. Months later the writer discovered the Plaintiff did not prevail in this civil suit.

On 3/27/2006 this writer responded to a complaint and observed a nuisance level odor on the complainant's property and issued a LOV of Rules 901 and 910 on 3/31/2006. Since 2008 there have been continuing sporadic odor complaints received by the same complainant however, none have been verified by AQD staff. In addition to continuing to respond to complaints, whenever in this area on other AQD business or personal time the writer conducts an odor observation downwind from this facility without detection of odors.

Process Description:

The Collison Shop aka; Taylor Collision Center operates an automobile/truck body repair shop with a paint spray booth and body workshop. The facility repairs or replaces damaged body parts and/or prepares automobile body parts for painting using a high transfer efficiency paint spray gun. Painted parts are kept in the paint spray booth for curing. Painting is not a continuous operation and most of the time small parts and not whole vehicles are found in the booth. The booth is a down draft design with 2 banks of filters 1 on each side at floor level. Each bank of filters is exhausted through a separate stack 38 feet above ground level. Filters are regularly changed by a contracting company that replaces and disposes the waste off-site.

Dirt and dust created by pounding, grinding, sanding or other body repairs are contained within the building. The shop floor is swept as needed. There is also a paint mix/storage area.

Odor Abatement:

As a result of the LOV issued 3/26/2003 the company hired Dziurman/Associates Consulting Engineers to develop a compliance plan. That firm highlighted the fact that elevation of the complainant's property is 12 feet higher than the elevation of The Collision Shop's property. Currently the paint spray booth exhaust stacks are 20 feet above ground level (effectively 8 feet above the adjacent property elevation). The consultant feels that perhaps the emissions do not disperse effectively before approaching the complainant's property.

The first proposal was to install a Nomask Odor Scrubbing Solution System. In a conversation with the consultant and owner the writer expressed the opinion that odor masking systems have just not proven effective over time. It was further my opinion that it would be a waste of money in this situation. The conversation then went on to the possibility of raising the stack height to a much higher level. The building walls and roof construction will have to be evaluated to determine how much weight can be added in-order to determine a maximum stack height that could be installed without extensive reinforcement of building.

In summary, the facilities first step was to install carbon impregnated filters in each stack 5 feet above the roof line. This installation although helpful was not able to abate the odor situation. The second step was to increase the stack height. Therefore, each stack height was increased to 38 feet above ground level. At this height the emission point is now 26 feet above the adjacent complainant's property. The 38 feet height was calculated to be the maximum weight that could be added to the building without having to reinforce the building. The facility has taken reasonable actions to abate this odor problem.

On 3/31/2006 another LOV was issued citing Rule 901 and 910. The Collision Shop was painting with missing filters in the spray booth. The new owner was not aware of the complaint history at this facility and did not know about the charcoal filters located in the stacks on the roof. All filters have been replaced and the paint spray odors have not been detected by AQD staff since that time.

Inspection Narrative:

Prior to this inspection odor surveillance was conducted on 9/5, 9/11 and 9/25 without odor detection.

Shop Manager, Yolanda Tonero accompanied AQD staff as we walked through the shop to the paint spray booth. Inside the booth, at this time were 2 vehicle bumpers on racks drying, they had been spray painted about 1 hour ago. Paint application for these 2 pieces would have taken approximately 20 minutes. They will remain in the booth till dry which will take 2 – 3 hours. There is not any additional painting scheduled for today. The booth

is in good condition and all paint filters are in place and in good condition. Whole cars a seldom painted, mostly small parts such as bumpers and fenders or quarter panels are painted and application like these take normally 20 – 30 minutes at a time.

The charcoal filters can only be inspected by going onto the roof of the building. This requires a tall step ladder to gain access to the roof. A ladder is not available. Ms. Tonero, can make a ladder available at a later date and she can show proof that the company has purchased carbon filters, stating that they are buying new filters because they are replacing them. She also has records of paint, solvent and other dry filter purchases.

Dirt and dust created by pounding, grinding, sanding or other body repairs are contained within the building. The shop floor is swept on an as needed basics and is clean at this inspection. This reduces the chance of fugitive dust or dirt track-out escaping from the building.

The paint mix/storage area is kept in good order.

While at the rear of the building, we stepped outside of the building and I pointed out to Ms. Tonero how the overgrown trees are approaching the top of the stacks and obstructing the free vertical flow of the gases being exhausted. This obstruction of free flow could contribute to possible odor complaints. She stated that she had no idea this was happening and would discuss with owner trimming these trees. She also stated that in the event of a wind storm the branches could possibly cause some damage to their facility.

An opacity observation was not performed since the spray booth was not in operation.

Post Inspection:

Upon return to her office Ms. Tonero called the owner regarding the tree trimming and received the permission to contact their regular maintenance man to get this work done. At this time, I shared some photos of the stacks comparing some old and new. She did express some concern about trimming the trees because the trees are growing on the property next door, belonging to the complainant. She will also check with the company attorney before trimming.

Regarding paint, solvent and dry filter purchases, she will email this information and is confident those records will show they are purchase much less than 200 gallons of coating per month.

Records received 10/01/2018 indicating that between 1/01/2018 - 9/26/2018 a total of 210 gallons of combined paint toner and solvent was purchased (records attached).

Regulatory Summary:

The paint spray booth is exempt under Rule 287(2)(c)(i) & (ii). Records justifying the exempt status (records attached).

Operations that generate dirt and dust created by pounding, grinding, sanding or other body repairs are exempt under Rule 285(2)(l)(vi)(B) because those particulates are contained within the building. The shop floor is swept on an as needed basics preventing fugitive emissions.

Compliance Determination:

The inspection of The Collision Shop located at 12500 Telegraph Road, Taylor concluded the facility is operated in compliance with applicable air quality regulations.

The original WC PTI C-8496 can be voided as this equipment was removed in 2002.

NAME

DATE 3/4/19

SUPERVISOR