

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

N330138826

FACILITY: Teijin Advanced Composites America Inc.		SRN / ID: N3301
LOCATION: 1200 HARMON, AUBURN HILLS		DISTRICT: Southeast Michigan
CITY: AUBURN HILLS		COUNTY: OAKLAND
CONTACT: John Hodgson , Industrial Health and Safety		ACTIVITY DATE: 02/28/2017
STAFF: Tyler Salamasick	COMPLIANCE STATUS: Compliance	SOURCE CLASS: Minor
SUBJECT: Compliance determination PTI 1226-91.		
RESOLVED COMPLAINTS:		

Background

Teijin Advanced Composites America Inc. (Teijin) is a research and development facility located at 1200 Harmon Road, Auburn Hills, MI 48326. The facility was researching carbon fiber thermoplastic composites for various composite molding applications. Teijin is located in a primarily commercial area with the nearest residential structure approximately 0.5 miles south of the facility. D&S Plastics, Inc. (D&S) was formerly located at this address. D&S had an active permit (PTI No. 1226-91) for plastic automotive parts coating which consisted of two paint mix rooms, a power wash unit, two dry filter paint spray booths, flash off tunnels, and a natural gas fired oven. The facility was inspected on 2/28/17 by Tyler Salamasick, Environmental Quality Analyst of the Michigan Department of Environmental Quality, Air Quality Division. The intent of the 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 of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules and PTI No. 1226-91.

Inspection

Site arrival was at approximately 11:30 a.m. on 2/28/17. Upon meeting I presented my State of Michigan identification card, informed the facility representative of the intent of my inspection and was permitted onto the site. Industrial Health and Safety Manager, John Hodgson and Shop Supervisor, Roger Reott met with me to discuss the facility and its operations. John is a consultant from Industrial Health and Safety Solutions LLC for Teijin and works at Teijin three days a week. He told me that this facility was purchased in 2012 by the Japanese Company Teijin. After the purchase Teijin converted the facility into a research and development lab. The facility no longer has any of the associated equipment from the permit except the natural gas fired oven. Roger informed me that they no longer use the oven. Roger told me that they had used the oven to dry the nylon sheets, but they have since ceased that process. The oven was locked out at the time of my inspection, and they informed me that they did not intend on using the oven again. This equipment appears to be exempt from permitting under R 336.1201(1) pursuant to R 336.1286(2)(a) which in part states:

(2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following: (a) Plastic extrusion, rotocasting, and pultrusion equipment and associated plastic resin handling, storage, and drying equipment.

After showing me the drying oven, John and Roger showed me the composite sheets. This facility does not produce the composite sheets; they purchase them from a supplier. The engineers use these sheets to test various molding methods/shapes. Once a design is made the engineers develop and test making the shape in the molds. This facility has two large presses each with an associated electric oven. The ovens are used to heat the composite prior to putting the sheets in the press. The ovens do not get hot enough to burn the composite. This heating process softens the material enough to make it malleable. Once softened the composite is placed in the press/mold. Roger informed me that the facility does not use any mold release agents. After the press/mold opens the composite has cooled enough to become rigid again. Once rigid the piece can be removed and the process is complete. This process

appears to be exempt from R 336.1201(1) pursuant to R 336.1283(2)(v) which in part states:

(2) The requirement of R 336.1201(1) to obtain a permit to install does not apply to any of the following:

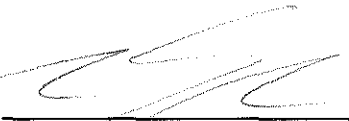
(v) The development of process or process equipment design and operating parameters.

Teijin also has a small material lab in the back section of their building. This area had one small electric oven used to test the material composition. This process did not appear to be a significant source of air contaminants.

Conclusion

It appears that Teijin is not conducting painting at this facility. The drying oven permitted by PTI No. 1226-91 was still installed but not operated. The other equipment permitted by PTI No. 1226-91 has been removed. PTI No. 1226-91 will be voided. All of the processes that I observed appeared to be exempt from R 336.1201(1). Teijin Advanced Composites America Inc. appears to be in compliance with the Federal Clean Air Act Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act of 1994, PA 451, as amended, Michigan's Air Pollution Control Rules.

NAME



DATE

3/7/17

SUPERVISOR

