

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

P060366677

FACILITY: Williams International CO., LLC.		SRN / ID: P0603
LOCATION: 2000 CENTERPOINT PARKWAY, PONTIAC		DISTRICT: Warren
CITY: PONTIAC		COUNTY: OAKLAND
CONTACT:		ACTIVITY DATE: 11/03/2022
STAFF: Iranna Konanahalli	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled FY 2023 Inspection of Williams International ("Williams") located at 2000 Centerpointe Pkwy., Pontiac, MI 48341-3146.		
RESOLVED COMPLAINTS:		

Williams International (P0603)
2000 Centerpointe Pkwy.
Pontiac, MI 48341-3146

Contacts:

1. **Dave Holden** (Phone: 248-624-5200-Ext. 6503; E-mail: dHolden@Williams-Int.com), Sr. Safety and Security Specialist
2. **Steve Trombat** (Phone: 248-624-5200-Ext. 2206; E-mail: sTrombat@Williams-Int.com), Engineering Launch Manager
3. **Tom Littlefield** (Phone: 248-624-5200-Ext. 2550; E-mail: tLittlefield@Williams-Int.com), Director of Facilities Engineering
4. **Jim Hertel** (Phone: 248-624-5200-Ext. 2481; E-mail: jHertel@Williams-Int.com), Safety and Security Specialist.

Active Permits

1. **PTI No. 25-22** (App-2021-0324) dated March 14, 2022, for nickel (Ni) plating line controlled by a packed bed wet scrubber using pH-controlled water using NaOH (sodium hydroxide). The packed bed scrubber (MAPCO, Model #100-8-3-SC) controls of acid and nickel emissions. Nickel (Ni) emissions are based on the 0.63 grains/A-hr emission factor.
2. **PTI No. 34-22** (App-2021-0253) dated March 31, 2022, for a nitric acid-etch line with rust prevent tank. The acidic emissions are controlled by a 1,000 CFM water scrubber. However, the rust prevent tank (Rustlick™ 606, Moisture-absorbing rust

preventative, Flash point: 174.2 °F (79.0 °C) Pensky-Martens Closed Cup) emits into the in-plant environment.

Pending permit: APPP-2022-0242 for fabricated metal treatment operation.

On **November 3, 2022**, I conducted a level-2 **Scheduled FY 2023 Inspection** of Williams International (“Williams”) located at 2000 Centerpointe Pkwy., Pontiac, MI 48341-3146. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994, PA 451; Michigan Department of Environment, Great Lakes and Energy, Air Quality Division (EGLE-AQD) administrative rules; and the permits (PTI No. 25-22 & PTI No. 34-22).

During the inspection, **Dave Holden**, Sr. Safety and Security Specialist, **Steve Trombat**, Engineering Launch Manager, **Tom Littlefield**, Director of Facilities Engineering, and **Jim Hertel**, Safety and Security Specialist, assisted me.

Founded in 1955, by Dr. Sam B. Williams upon separating from Chrysler Corporation, as Williams Research Corporation (the company name changed to Williams International in 1981), Williams International (“Williams”) provides jet-powered propulsion. The privately-owned company, Williams, manufactures general aviation gas turbine engines. Williams' line of powerful, efficient gas turbine and turbofan engines are designed for trainer aircraft and private business jets, traditionally flown by piston engines. Williams' engines also supply industrial and military small scale craft, such as drones used for naval gunnery practice. Its engines, also, propel high profile projects like Tomahawk cruise missiles and subsonic target drones. Guarding its market share, the engine builder also offers maintenance and aftermarket parts services. Williams has a product line covering from 1,000 to 3,600 pounds of thrust.

Williams operates R&D (research and development) and R&O (repair and overhaul) out of the headquarters in Pontiac, Michigan.

PTI No. 25-22, Emission Unit (EU)

PTI No. 25-22, EU-02

A nickel electroplating line consisting of two cleaning, one pickling, one hydrochloric acid etch, one Woods nickel strike, one nickel sulfamate, one nickel strip, and multiple rinse tanks. Several tanks in the line are controlled by a packed bed wet scrubber system with pH control.

Control: Push-pull ventilation system for the emissions capture from nickel (Ni) electroplating line and packed bed wet scrubber (MAPCO, Model #100-8-3-SC) with pH control using NaOH.

In all, thirty-three (33) tanks with push-pull ventilation system are present.

This is a larger (compared to the other scrubber, about twice the size of the other) packed bed scrubber is equipped with a Rotameter for flow rate, scrubber liquor pH display, Magneheilig instrument for pressure differential (ΔP).

The nickel (Ni) electroplating line is currently (FY 23) not operating and hence compliance evaluation will be conducted during the next inspection. The line is under testing and installation phase.

PTI No. 34-22, Emission Units (EUs)

PTI No. 34-22, Flexible Group (FG)

PTI No. 34-22, FG1 (EU1, EU1RUSTPREVNTDIP)

A nitric acid etching line with a rust prevention dip tank. The nitric acid etching line is controlled by a wet scrubber. RUST Dip is outside the line.

Control: Packed bed scrubber (about half the size of the other). Fully enclosed line.

The NITAL line is currently (FY 23) not operating and hence compliance evaluation will be conducted during the next inspection. The line is under testing and installation phase.

Miscellaneous PM processes

BAY9: R&D machining. The stand-alone machines equipped with cartridge filter (mist collectors)

BAY1: Mills (12) and lathes (8).

BAY2: Oil EDM (electro discharge machine). Mills (6). Automatic polishing cells. Deburring.

BAY3: Mills and lathes .

So on: BAY 4 Thru 8.

Each machine is equipped with cartridge filter (mist collector) for particulate or mist control. Most machines use aqueous coolant. Each exhaust discharge is to in-plant environment.

The machines are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rule 336.1285 (2)(l).

CONCLUSION

Williams is deemed to be in compliance with its permits and Clean Air Act, currently (FY23), as the lines not operational yet.

NAME J. S. Marshall

DATE March 16, 2023 SUPERVISOR Joyce