

MODIFIED

on January 11, 2021
by Olivia Harris

NAME CHANGED TO:

Pratt & Whitney,

Division of RTX Corporation

Christina

Engineer: Kielczewska Date: July 17, 2023

REGISTRATION CERTIFICATE
EPAC-10 REV. 7-73



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



STACK NO. 00531000919

EQUIPMENT CLASSIFICATION			REGISTRATION NO.
<input checked="checked" type="checkbox"/> FUEL BURNING	<input type="checkbox"/> INCINERATOR	<input type="checkbox"/> PROCESS MFG.	00530041
FIRM NAME			DATE ISSUED
PRATT AND WHITNEY		PWA MAIN PLANT	12/05/73
LOCATION OF EQUIPMENT (No. & Street, Town, Zip)			
400 MAIN ST			EAST HARTFORD CT 06108
COMMISSIONER OR HIS REPRESENTATIVE			

DEPARTMENT OF ENVIRONMENTAL PROTECTION

FUEL BURNING EQUIPMENT REGISTRATION

EP-4 NEW 5-

TO: Depart

Environmental Protection, Air Compliance Section, State Office Bldg., Hartford, Conn. 06115. Tel. 566-2690

1. APPLICATION NO

EP-R-005

NO. 200-220-621

3. FIRM		LEGAL NAME		BUSINESS ADDRESS (No. & Street, City, Zip Code)		PHONE	
United Aircraft Corporation				400 Main Street, East Hartford, Conn. 06108		565-4321	
4. DIVISION				400 Main Street, East Hartford, Conn. 06108		565-4321	
5. APPLICANT				400 Main Street, East Hartford, Conn. 06108		565-4321	
6. INSTALLATION							
7. EQUIPMENT BEING REGISTERED							
8. MAJOR ACTIVITY OF FIRM							
Boiler							
9. TYPE OF FUELS USED							
NAT. GAS							
OTHER							
10. BURNER EQUIPMENT							
11. TYPE OF COAL BURNER							
12. TYPE OF OIL BURNER							
13. COMBUSTION							
14. POLLUTANTS EMITTED							
16. STACK INFORMATION							
17. STACK LOCATION							
18. CERTIFICATION							

CONNECTICUT

8

NO.

AIR POLLUTION CONTROL EQUIPMENT USED (If "Yes," file form EP-7)

YES NO

WAREHOUSE OR LAB. RESIDENCE OR APTS. OTHER (Specify)

SEASONAL USE

MONTH

NAME

CITY OR TOWN

MAXIMUM FIRING RATE (BTU/hr.)

ANNUAL USAGE (Tons, Gals. or Cu. Ft.)

ASH CONTENT (%)

SULFUR CONTENT (%)

GRADES

Bluminous

Anthracite

Kerosene

2

4

5

6

0.03 %

0.80 %

95°F-100°F

ARE OIL HEATERS USED?

YES NO

HAND FIRED

UNDERFEED STOKER

TRAVELING GRATE

CHAIN GRATE

SPREADER STOKER

STOKER WITH GAS REINJECTION

CYCLONE FURNACE

PULVERIZED COAL

TANGENTIALLY FIRED

AIR ATOMIZER

STEAM ATOMIZER

SMOKE INDICATOR

TIME SWITCHED

RATE OF EMISSIONS (Tons/Yr.)

7.9 (Est.)

44.3 (Est.)

24.7 (Est.)

METHOD USED TO DETERMINE EMISSIONS

Emission Factors

Emission Factors

Emission Factors

DATE SOURCE STARTED UP

450°F

1968

EXHAUST GAS FLOW RATE (ACFM)

52,000

OPERATING HOURS

24

IS STACK EQUIPPED WITH RAIN HAT?

YES NO

STACK HEIGHT (feet)

142 ft.

STACK LINING

METAL

REFRACTORY

OTHER (Specify)

DIRECTION TO STACK: (Circle one)

N, NE, E, SE, S, SW, W, NW

DATE

9/29/72

Assistant Secretary

UNITED AIRCRAFT CORPORATION

E. L. DAVIS

SIGNED

310 ft.

Distance to stack from intersection:

1

I certify that I have examined the above information and that to the best of my knowledge it is true and complete. (Signature subjects signer to provisions of the General Statutes regarding false and misleading statements).

MEMORANDUM

DATE: April 13, 2012

TO: Macky McCleary, Deputy Commissioner
Anne R. Gobin, Bureau Chief

FROM: Allison M. Tyropolis, APCE
Kiernan J. Wholean, Supervising APCE
Richard A. Pirolli, Assistant Director
Gary S. Rose, Director

SUBJECT: Modification of Registration Nos. 053-0039, 053-0041, and 053-0042 for three boilers at Pratt & Whitney in East Hartford, CT

DISCUSSION:

Pratt & Whitney was issued registrations (Registration Nos. 053-0039, 053-0041, and 053-0042) for three boilers on December 5, 1973, pursuant to the former Section 22a-174-2 of the Regulations of Connecticut State Agencies (RCSA).

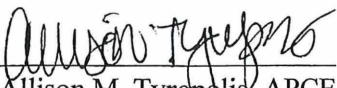
On April 5, 2012, the Department received a request from Pratt & Whitney to modify the three boiler registrations. Pratt & Whitney is currently allowed to burn No. 6 fuel oil and natural gas in these boilers. They are requesting for the capability to burn No. 6 fuel oil to be removed and for the boilers to be limited to the use of ultra low sulfur fuel oil (0.0015% sulfur) and natural gas. This modification request was the result of a meeting Pratt & Whitney had with the Department where Pratt & Whitney indicated that they no longer have the capability of firing No. 6 fuel oil.

Modifications of registrations issued pursuant to the former RCSA §22a-174-2 are done pursuant to the Rules of Practice and a process derived from discussions between the Engineering and Enforcement Sections and the Attorney General's Office.

The Department of Environmental Protection's Compliance History Policy (CHP) requires a compliance history review for every applicant. The resources used to determine compliance with the CHP were: the SIMS Enforcement database and input from the Air Enforcement and Field Operations Section. On April 10, 2012, The Air Enforcement and Field Operations Section indicated that there is no enforcement related reason to delay or deny the registration modifications.

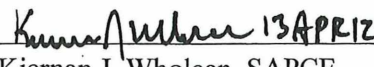
RECOMMENDATION:

Based on the information submitted by the applicant, this evaluation, inspection report and the compliance history review, it is recommended that Registration Nos. 053-0039, 053-0041, and 053-0042 be modified as requested.


Allison M. Tyropolis, APCE

4/13/12
Date

REVIEW:


Kiernan J. Wholean, SAPCE


Richard A. Pirolli, Asst. Director


Gary S. Rose, Director

MEMORANDUM

DATE: May 9, 2012

TO: Macky McCleary, Deputy Commissioner
Anne R. Gobin, Bureau Chief

FROM: Allison M. Tyropolis, APCE
Kiernan J. Wholean, Supervising APCE
Richard A. Pirolli, Assistant Director
Gary S. Rose, Director

SUBJECT: Modification of Registration Nos. 053-0039, 053-0041, and 053-0042 for three boilers at Pratt & Whitney in East Hartford, CT

DISCUSSION:

Pratt & Whitney was issued registrations (Registration Nos. 053-0039, 053-0041, and 053-0042) for three boilers on December 5, 1973, pursuant to the former Section 22a-174-2 of the Regulations of Connecticut State Agencies (RCSA).

On April 5, 2012, the Department received a request from Pratt & Whitney to modify the three boiler registrations. Pratt & Whitney is currently allowed to burn No. 6 fuel oil and natural gas in these boilers. They are requesting for the capability to burn No. 6 fuel oil to be removed and for the boilers to be limited to the use of ultra low sulfur fuel oil (0.0015% sulfur) and natural gas. This modification request was the result of a meeting Pratt & Whitney had with the Department where Pratt & Whitney indicated that the boilers no longer have the capability of firing No. 6 fuel oil.

✓ On May 7, 2012, the Department received a clarification to their registration modification request. This letter clarifies the intent of the word "upgrade" used in the original letter. The changes made to the boilers will not result in an increase of potential emissions of any air pollutant. Also, converting the boilers from No. 6 fuel oil to ultra low fuel oil does not increase actual emissions of any individual air pollutants by 15 tons or more per year. Potential emissions are limited by collateral conditions of NSR Permit No. 053-0009, which states that these boilers "shall burn an aggregate of no greater than 23,500,000 gallons per year of fuel oil." Low NOx burners and flue gas recirculation will be added to control air pollution when firing natural gas and ultra low sulfur fuel oil. Finally, the boiler changes do not result in "reconstruction" as defined by RCSA Section 22a-174-1(97). Therefore, the changes made to these boilers will not trigger NSR review.

Modifications of registrations issued pursuant to the former RCSA §22a-174-2 are done pursuant to the Rules of Practice and a process derived from discussions between the Engineering and Enforcement Sections and the Attorney General's Office.

The Department of Environmental Protection's Compliance History Policy (CHP) requires a compliance history review for every applicant. The resources used to determine compliance with the CHP were: the SIMS Enforcement database and input from the Air Enforcement and Field Operations Section. On April 10, 2012, the Air Enforcement and Field Operations Section indicated that there is no enforcement related reason to delay or deny the registration modifications.

RECOMMENDATION:

Based on the information submitted by the applicant, this evaluation, and the compliance history review, it is recommended that Registration Nos. 053-0039, 053-0041, and 053-0042 be modified as requested.

Allison Tyropolis
Allison M. Tyropolis, APCE

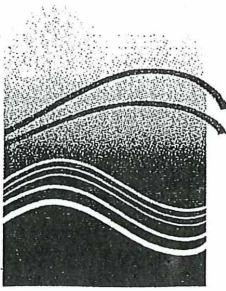
5/9/12
Date

REVIEW:

Kiernan J. Wholean 09 MAY 12
Kiernan J. Wholean, SAPCE

Richard A. Pirolli 5/10/12
Richard A. Pirolli, Assistant Director

Gary S. Rose 05-10-12
Gary S. Rose, Director



Connecticut Department of

ENERGY &
ENVIRONMENTAL
PROTECTION

Mr. Steven Eitelman
Pratt & Whitney
400 Main Street
East Hartford, CT 06108

RE: Modification of Registration Nos. 053-0039, 053-0041, and 053-0042 for three boilers at Pratt & Whitney in East Hartford, CT

Dear Mr. Eitelman:

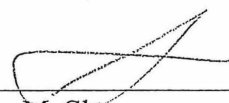
The Commissioner of the Department of Energy and Environmental Protection (DEEP) may modify any license at the request of the licensee in accordance with Section 22a-3a-5(d) of the Regulations of Connecticut State Agencies (RCSA), and any other applicable law. Any modification at the request of the licensee shall comply with the requirements of RCSA Section 22a-3a-5(a).

As requested and supported in your letter dated April 5, 2012, the DEEP Bureau of Air Management Registrations for the above mentioned equipment are hereby modified unless within 30 days of issuance of this notice a request for hearing is filed. Such request shall conform with the provisions of RCSA Subsection 22a-3a-6(i). These registrations have been modified to remove the option to burn No. 6 fuel oil and allow the facility to burn ultra low sulfur fuel oil in the boilers. The Department will update its emissions inventory to reflect this modification.

This letter in no way grants immunity from legal action resulting from the failure of this source to remain in compliance with existing air pollution regulations, nor does it provide an exemption from compliance with future Federal, State or local laws.

If you have any questions concerning this notice, please contact Ms. Allison Tyropolis of my staff at (860) 424-4152.

5/15/12
Date


Macky McCleary
Deputy Commissioner

MM:amt

cc: Ernest Bouffard, Air Technical Services
Robert Girard, Air Enforcement
L. Renée Welsh, Pratt & Whitney

Certified Mail

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney
A Division of United Technologies

April 5, 2012

Mr. Ric Pirolli
Director, Engineering and Enforcement
Bureau of Air Management
Department of Energy and Environmental Protection
State of Connecticut
79 Elm Street
Hartford, CT 06106-5127

RECEIVED

APR 05 2012

DEPT. OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT
AIR ENFORCEMENT

Re: Pratt & Whitney, 400 Main Street East Hartford, Connecticut
Boiler Registrations 00530042, 00530041, and 00530039

Dear Mr. Pirolli:

As requested by the DEEP during our March 22, 2012 meeting and subsequent phone conversations to discuss Pratt & Whitney, East Hartford's future boiler upgrades, the purpose of this letter is to revise the facility's boiler registrations 00530042, 00530041, and 00530039. P&W's current Fuel Burning Equipment Registration forms indicate the boilers can consume No. 6 fuel oil (0.8% sulfur). P&W is upgrading these boilers to consume ultra low sulfur No. 2 (0.0015% sulfur) fuel oil and will no longer consume No. 6 fuel oil.

If you have any questions, please contact Steven Eitelman at (860) 565-7929. Thank you.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offence under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.

Sincerely,

L. Renée Welsh
Authorized Representative
Director, EH&S and Facilities – MC&O

cc. Allison Tyropolis

Pratt & Whitney
400 Main Street
East Hartford, CT 06108



Pratt & Whitney
A Division of United Technologies

May 7, 2012

RECEIVED

MAY 07 2012

Mr. Ric Pirolli
Director, Engineering and Enforcement
Bureau of Air Management
Department of Energy and Environmental Protection
State of Connecticut
79 Elm Street
Hartford, CT 06106-5127

**DEPT. OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR MANAGEMENT
ENGINEERING AND ENFORCEMENT**

Re: Pratt & Whitney, 400 Main Street East Hartford, Connecticut
Boiler Registrations 00530042, 00530041, and 00530039

Dear Mr. Pirolli:

As requested by the CTDEEP during a March 22, 2012 meeting with Steven Eitelman and Christopher Santucci of Pratt & Whitney and subsequent phone conversations discussing Pratt & Whitney, East Hartford's (P&W) future boiler changes, the purpose of this letter is to revise the facility's boiler registrations 00530042, 00530041, and 00530039. Although the boilers have always had the capability of burning fuel oil, the current Fuel Burning Equipment Registration forms specifically state the boilers consume No. 6 fuel oil (0.8% sulfur) and P&W is requesting that this be changed to ultra low sulfur No. 2 (0.0015% sulfur) fuel oil. Other information about the change is as follows:

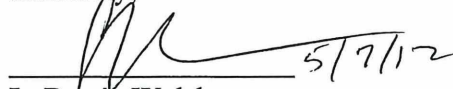
- Boiler changes will not result in an increase of potential emissions of any individual air pollutant.
- Air pollution control equipment (i.e. low NOx burners and flue gas recirculation) will be added to control air pollution while firing natural gas or fuel oil.
- The boiler changes do not result in "reconstruction" as defined in RCSA Section 22a-174-1.
- The result of the conversion to ultra low sulfur No. 2 fuel oil: "such conversion does not increase actual emissions of any individual air pollutant by fifteen (15) tons or more per year."

- Potential emissions are limited by NSR Permit #053-0009 condition that states the boilers “shall burn an aggregate of no greater than 23,500,000 gallons per year of fuel oil.”

The boiler changes will be performed as allowed in RCSA Sections 22a-174-3a(a)(2)(A)(i) and (iv). If you have any questions, please contact Steven Eitelman at (860) 565-7929. Thank you.

I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offence under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.

Sincerely,

A handwritten signature in black ink, appearing to read 'L. Renée Welsh', followed by the date '5/7/12' written in a similar cursive style.

L. Renée Welsh

Authorized Representative

Director, EH&S and Facilities – MC&O

cc. Allison Tyropolis



May 27, 2004

Gary Rose
Director, Engineering & Technical Services
Bureau of Air Management
Connecticut Department of Environmental Protection (CT DEP)
79 Elm Street
Hartford, CT 06106

Re: Pratt & Whitney, Andrew Willgoos Turbine Laboratory; Shutdown Notification

Dear Mr. Rose:

Pratt & Whitney, Pent Road, East Hartford, Connecticut will no longer operate the following sources:

Permit/Registration Number	Description
R 053-0163	Boiler B&W #1 ✓
P 053-0056	Burner Rig Test X208/X209/203 ✓
R 053-0150	Drive Engine #1 ✓
R 053-0151	Drive Engine #2 ✓
R 053-0152	Drive Engine #3 ✓
R 053-0158	Tank D (JP-8) ✓ D Duplicate
M-339	Test Cell No X-208 ✓
M-340	Test Cell No X-209 ✓
M-338	Test Cell No X-217 ✓
M-341	Test Cell No X-218 ✓
M-342	Test Cell No X-234 ✓
M-343	Test Cell No X-235 ✓
R 053-0133	X208 inlet air heater ✓
R 053-0257	X209 inlet air heater
R 053-0147	X234 inlet air heater ✓
R 053-0148	X235 inlet air heater ✓

These sources will be shutdown as of June 2004 and are not projected to operate at this facility in the future.

Please consider this notification a request to remove these sources from the Title V permit for this facility (053-0097-TV). If you have any questions or comments, please contact Tanja Ashlin at (860) 565-7929. Thank you.

Sincerely,

Mark Kopera
Manager, Facilities & Engineering

BUREAU OF AIR MANAGEMENT

MAY 28 2004

OFFICE OF THE DIRECTOR
PLANNING & STANDARDS

cc: Mr. Ron Freeto, DEP Air Permitting, 5th Floor
Mr. Bill Simpson, DEP Inventory Group, 5th Floor
Ms. Wendy Jacobs, DEP Emissions Trading, 5th Floor
Ms. Liz McAuliffe, DEP, 5th Floor
Mr. Keith Hill, DEP Compliance Assurance & Monitoring, 5th Floor

53-10

copy → Bill Simpson

TYPE OF INSPECTION	PERMIT COMPLIANCE	LOG NUMBER: 04-0649
SOURCE NAME	PRATT & WHITNEY WILLGOOS	
ADDRESS	Pent Rd, East Hartford CT 06108	
CONTACT NAME	Tanja Ashlin	
TELEPHONE NUMBER	(860) 565-7929	
DATE OF INSPECTION	5/12/2004	
REPORT FILE NAME	pratt and whitney 5 04.doc	

INSPECTION REPORT:

According to my escort, Tanja Ashlin, in the past 60-80% of Pratt and Whitney's altitude testing took place at Andrew Willgoos Turbine Laboratory. However the amount of altitude testing at this facility is decreasing, hence a number of air sources have been shut down.

A record of my findings is as stated:

The diesel powered "Blue Water Natural Gas Compressor" associated with permit numbers 053-09-0006 and 053-09-0061 has been removed from Andrew Willgoos Turbine Laboratory. The natural gas fuel line and electrical transferring line have been disconnected and capped.

The GG8 Stationary Gas Turbines at X-234 stand (Permit # 053-09-0045) have been shut down. The data system, fuel meter, computerized control system (TLC) and engine control system has been removed. The "non-permitted" test stand is currently in "cold shut down".

The GG8 Stationary Gas Turbines at X-237 stand (Permit # 053-09-0059) have been removed. The fuel line, electrical lines and air ducts associated have been disconnected and capped.

The GG8 Stationary Gas Turbines at X-218 Stand (Permit 053-09-0062) was never installed. The control panel and natural gas line for testing GG8 engine was never connected.

The B & W Fast Response Naval Boiler # 5 (Registration # 053-0167) has been shut down. The fuel meters have been disconnected and capped.

The B & W Fast Response Naval Boiler # 6 (Registration # 053-0168) has been shut down. The fuel meters have been removed from the boiler. The igniter, electricity and air controls have been tagged and locked out.

RECOMMENDATION: Based on this inspection the following Registered and Permitted equipment should be removed from Pratt & Whitney, Andrew Willgoos' emission inventory and Title V permit (Permit # 053-0097-TV).

P # 053-09-0060	Diesel powered Blue Water natural gas compressor ✓	D	Duplicate
P # 053-09-0061	Diesel powered Blue Water natural gas compressor ✓	D	Duplicate
P # 053-09-0062	Testing of GG8 Stationary Gas Turbines at X-218 Stand ✓	D	Duplicate
P # 053-09-0059	Testing of GG8 Stationary Gas Turbines at X-237 Stand ✓	D	Duplicate
P # 053-09-0045	Testing of GG8 Stationary Gas Turbines at X-234 Stand ✓	D	Duplicate
R # 053-0167	B&W Fast Response Naval Boiler # 5 ✓		
R # 053-0168	B&W Fast Response Naval Boiler # 6 ✓		

Debbie Tedford:

Debbie Tedford

, Date:

5-20-04



March 15, 2004

Gary Rose
Director, Engineering & Technical Services
Bureau of Air Management
Connecticut Department of Environmental Protection (CT DEP)
79 Elm Street
Hartford, CT 06106

Re: Pratt & Whitney, Andrew Willgoos Turbine Laboratory; Shutdown Notification

Dear Mr. Rose:


Pratt & Whitney, 400 Main Street, East Hartford, Connecticut will no longer operate the following sources:

Registration Number	Shutdown Date	Description
053-0167	2/24/04	B&W Fast Response Naval Boiler #5
053-0168	3/22/04	B&W Fast Response Naval Boiler #6

These sources will be shutdown as of the date indicated above and are not projected to operate at this facility in the future.

Please consider this notification a request to remove these sources from the Title V permit for this facility (053-0097-TV). If you have any questions or comments, please contact Tanja Ashlin at (860) 565-7929. Thank you.

Sincerely,


Kip Wyman
Chief Manufacturing Engineer
Director, Facilities & Services

03/12/04

BUREAU OF AIR MANAGEMENT

MAR 15 2004

OFFICE OF THE DIRECTOR
PLANNING & STANDARDS

cc: Mr. Ron Freeto, DEP Air Permitting, 5th Floor
Mr. Bill Simpson, DEP Inventory Group, 5th Floor
Ms. Wendy Jacobs, DEP Emissions Trading, 5th Floor
Ms. Liz McAuliffe, DEP, 5th Floor
Mr. Keith Hill, DEP Compliance Assurance & Monitoring, 5th Floor