

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

# Application Review

**Issue Date: December ##, 2022**

**Region:** Washington Regional Office  
**County:** Craven  
**NC Facility ID:** 2500159  
**Inspector's Name:** Robert Bright  
**Date of Last Inspection:** 05/25/2022  
**Compliance Code:** 3 / Compliance - inspection

<p style="text-align: center;"><b>Facility Data</b></p> <p><b>Applicant (Facility's Name):</b> Fleet Readiness Center East</p> <p><b>Facility Address:</b>  Fleet Readiness Center East  A Street - Marine Corps Air Station  Cherry Point, NC 28533</p> <p><b>SIC:</b> 9711 / National Security  <b>NAICS:</b> 92811 / National Security</p> <p><b>Facility Classification: Before:</b> Title V <b>After:</b> Title V  <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V</p>	<p style="text-align: center;"><b>Permit Applicability (this application only)</b></p> <p><b>SIP:</b> 15A NCAC 02D .0503, .0512, .0515, .0516, .0521, and .1109  <b>NSPS:</b> 40 CFR 60 Subparts Kb and IIII  <b>NESHAP:</b> 40 CFR 63, Subpart N, GG, ZZZZ, DDDDD, and PPPPP  <b>PSD:</b> NA  <b>PSD Avoidance:</b> NA  <b>NC Toxics:</b> 15A NCAC 02D .1100, and 15A NCAC 02Q .0711  <b>112(r):</b> NA  <b>Other:</b> NA</p>
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Contact Data			Application Data
<p style="text-align: center;"><b>Facility Contact</b></p> <p>Vincent Fusconi  Air Quality Program Manager  (252) 464-7264  PSC Box 8021  Cherry Point, NC 28533+0021</p>	<p style="text-align: center;"><b>Authorized Contact</b></p> <p>Captain Jim Belmont,  USN  Commanding Officer  (252) 464-7000  PSC Box 8021, Building 137  Cherry Point, NC 28533+0021</p>	<p style="text-align: center;"><b>Technical Contact</b></p> <p>Vincent Fusconi  Air Quality Program Manager  (252) 464-7264  PSC Box 8021  Cherry Point, NC 28533+0021</p>	<p><b>Application Number:</b> 2500159.22B  <b>Date Received:</b> 01/25/2022  <b>Application Type:</b> Renewal  <b>Application Schedule:</b> TV-Renewal</p> <p style="text-align: center;"><b>Existing Permit Data</b></p> <p><b>Existing Permit Number:</b> 05506/T45  <b>Existing Permit Issue Date:</b> 04/01/2022  <b>Existing Permit Expiration Date:</b> 10/31/2022</p>

**Total Actual emissions in TONS/YEAR:**

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2020	2.36	10.66	31.39	4.74	4.61	6.66	3.26 [Methylene chloride]
2019	2.90	24.33	59.11	7.57	5.08	10.57	4.23 [Methylene chloride]
2018	131.96	25.00	47.40	9.57	3.88	8.55	2.55 [Methylene chloride]
2017	2.81	12.25	42.08	7.87	3.16	8.92	4.51 [Methylene chloride]
2016	0.2400	2.00	96.26	1.93	3.01	10.58	3.82 [Polycyclic Organic Matter (Inc)]

<p><b>Review Engineer:</b> Richard Simpson</p> <p><b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____</p>	<p style="text-align: center;"><b>Comments / Recommendations:</b></p> <p><b>Issue:</b> 05506/T46  <b>Permit Issue Date:</b> December XX, 2022  <b>Permit Expiration Date:</b> November 30, 2027</p>
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**I. Introduction:**

Fleet Readiness Center East (FRC East) currently holds Title V Permit No. 05506T45 with an expiration date of October 31, 2022 for providing depot-level maintenance, engineering and logistics support for Marine Corps and Navy aircraft in Cherry Point, Craven County, North Carolina.

**II. Description of Facility:**

The Fleet Readiness Center East (FRC East) is a tenant command aboard the Marine Corps Air Station (MCAS) at Cherry Point. MCAS Cherry Point is located in Craven County. This is the largest Marine Corps Air Base in the world. The FRC East sits on 150 acres of land and occupies over 100 building and structures, with approximately 1.5 million square feet under roof. The FRC East is charged with providing support for Marine Corps and Navy aircraft including the CH46 (dual rotors), CH53 (single rotor) helicopters, V-22 Osprey and various other aircraft including the F-35 in the military fleet and nine primary aircraft engines. Painting, bead blasting, anodizing and engine testing comprise the air quality related operations at this facility.

**III. Purpose of Application**

Permit application No. 2500129.22B was received on January 25, 2022 and deemed complete for a renewal of an existing Title V permit pursuant to 15A NCAC 02Q .0513. The renewal application was received at least nine months prior to the expiration date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied. This permit action will address the following sources and control devices associated with the application:

**VI. History/Background/Application Chronology**

**January 25, 2022** – Permit application 2500159.22B was received for a Title V renewal and a permit acknowledgement was sent to the facility.

**April 1, 2022** – Permit 05506T45 was issued.

**May 25, 2022** – The facility was inspected by WRO engineer Robert Bright and the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of the inspection.

**November XX-XX, 2022** – The facility, Washington Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the permit renewal. Comments were received and included in the permit.

**November XX, 2022**– TVEE changes were approved by Jenny Sheppard TVEE Coordinator.

**December XX, 2022** – Permit 05506T46 was issued.

**V. Permit Modifications/Changes and TVEE Discussion**

The following changes were made to Air Permit No. 05506T45.\*

Page No.	Section	Description of Changes
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers. Permit was updated with the latest Permit Shell 7.0.
-----	Permit	Changed: Permit number, replaces permit number, effective date, application number, effective date of permit.

48-56	Section 3	The General Conditions in Section 3 of the permit were updated to the latest version.
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\*This list is not intended to be a detailed record of every change made to the permit but a summary of those changes.

There were no changes required to the Title V Equipment Editor (TVEE) under this permit renewal because the recent issuance of the current permit contained all of the most recent versions of the regulations and permit shell revisions.

## VI. Statement of Compliance

### Five year compliance history

On August 14, 2015, Mr. Robert Bright of the WARO office conducted a full compliance evaluation of the facility. A review of records from December 2013 through July 2015 indicated that the required documentation for the July 2015 monthly inspections via the regulations/permit conditions for 15A NCAC 02D .0512, 15A NCAC 02D .0521, 15A NCAC 02D .0958, could not be provided. The facility was issued a Notice of Deficiency in an August 23, 2017 letter.

During the most recent inspection conducted on May 25, 2022, Robert Bright of the WARO indicated that the facility appeared to operate in compliance with all applicable regulations and permit conditions at the time of inspection.

## VII. Application Description

There were no changes to the emission sources, regulations, and potential emissions for this permit renewal.

## VIII. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

- A. 15A NCAC 02D .0503, "Particulates from Fuel Burning Indirect Heat Exchangers"
- B. 15A NCAC 02D .0512 "Particulates from Miscellaneous Wood Products Finishing Plants"
- C. 15A NCAC 02D .0515, "Particulates from Miscellaneous Industrial Processes"
- D. 15A NCAC 02D .0516, "Sulfur Dioxide Emissions from Combustion Sources"
- E. 15A NCAC 02D .0521, "Control of Visible Emissions"
- F. 15A NCAC 02D .0524, "New Source Performance Standards (40 CFR 60, Subpart Kb)"
- G. 15A NCAC 02D .1100, "Toxic Air Pollutant Emissions Limitation and Reporting Requirements"
- H. 15A NCAC 2D .1109 [112(J)] "Case-By-Case "Maximum Achievable Control Technologies"
- I. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart N)"
- J. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart GG)"
- K. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ)"
- L. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart DDDDD)"
- M. 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart PPPPP)"
- N. 15A NCAC 02Q .0711, "Facility Wide Toxic Air Pollutants Exemption Rate Emissions Limits"

The regulations associated with this permit renewal are evaluated below. For a discussion of MACT, CAM, and PSD requirements, see Section X. The permit will be updated to reflect the most current stipulations for all applicable regulations.

1. 15A NCAC 02D .0503, Particulates from Fuel Burning Indirect Heat Exchangers: This rule applies to two JP5 fuel-fired heat exchangers (ID Nos. D0113 and D0114). The process heaters and hot water heaters. Emissions of particulate matter from the combustion of JP5 fuel or similar distillate that are discharged from these sources (ID Nos. D0113 and D0114) into the atmosphere shall not exceed 0.51 pounds per million Btu heat input. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of JP5 fuel or similar distillate in these sources (ID Nos. D0113 and D0114). Continued compliance is anticipated.
2. 15A NCAC 02D .0512, Particulates from Miscellaneous Wood Products Finishing: This rule applies to particulate matter emissions from the wood working operation and dust collection system (ID No. D0127) shall be controlled by one simple cyclone (ID No. CD-D0127). To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer, if any. As a minimum, the inspection and maintenance program shall include monthly external inspection of the ductwork, and cyclone, noting the structural integrity. The results of inspection and maintenance for the cyclone shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following: the date and time of each recorded action, the results of each inspection; and the results of maintenance performed on the cyclone. Continued compliance is anticipated.
3. 15A NCAC 02D .0515, Particulates from Miscellaneous Industrial Processes: This rule applies to particulate matter emissions from the HVOF thermal spray booths listed above shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \times P^{0.67} \quad \text{Where: } E = \text{allowable emission rate in pounds per hour} \\ P = \text{process weight in tons per hour}$$

Liquid and gaseous fuels and combustion air are not considered as part of the process weight. To ensure compliance, particulate matter emissions from HVOF thermal spray booths listed above shall be controlled by the associated cartridge filter, HEPA filter, scrubber and/or cyclone. To ensure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following: a monthly visual inspection of the system ductwork and material collection unit for leaks; and an annual (for each 12 month period following the initial inspection) internal inspection of the control device housing structural integrity. Continued compliance is anticipated.

4. 15A NCAC 02D .0516, Sulfur Dioxide Emission from Combustion Sources: This rule limits sulfur dioxide emissions to 2.3 pounds per million BTU heat input from the process heaters and hot water heaters. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of JP5 fuel or similar distillate in these sources (ID Nos. D0113 and D0114). Continued compliance is anticipated.
5. 15A NCAC 02D .0521, Control of Visible Emissions: This rule limits visible emissions to 20% opacity (except a six-minute averaging period can exceed 20% once per hour and four times per 24-hour period, provided visible emissions do not exceed 87% opacity). No monitoring/recordkeeping/reporting is required for the combustion of JP5 fuel or similar distillate in these sources (ID Nos. D0113 and D0114). Continued compliance is anticipated.

## IX. NSPS, NESHAPS/MACT, PSD, 112(r), CAM

### NSPS

The facility's horizontal fixed-roof jet fuel storage tank with a 25,000-gallon capacity (**ID No. IA0076**) is currently subject to 40 CFR 60, Subpart Kb "Standards of Performance for Volatile Organic Liquid Storage Vessels". This permit renewal does not affect this status. The source is an insignificant activity.

The facility is subject to 40 CFR Part 60 Subpart III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines". The units must comply with the fuel requirements of 40 CFR 1090.305 including a maximum sulfur content of 15 ppm. The sources shall be equipped with a non-resettable hour meter prior to startup and operate per the manufacturer's recommendations.

**NESHAPS/MACT** – The Permittee is currently subject to the Maximum Achievable Control Technology Standards 40 CFR 63 Subpart N, GG, ZZZZ, DDDDD, and PTTTT for its existing engines, turbines, and boiler. The permit currently includes references to the requirements in each of the paragraphs of this Subpart.

1. 40 CFR 63, National Emission Standards for Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (Subpart N). This Subpart is applicable to the following tanks:

Building 4035 Six hard chrome plating tanks (ID Nos. T0099, T0100, T0105, T0106, T0155, and T0218) with a four-stage composite mesh pad scrubber (ID No. CR-2R).

The existing tanks are located at a major source of HAPs and 40 CFR 63Subpart N applies. Permit Sections 2.1 E. notes the requirements. This permit renewal does not affect this status.

2. 40 CFR 63, National Emission Standards for Aerospace Manufacturing and Rework Facilities (Subpart GG). For the most recent 2022 modification, alternative record keeping was updated to include the following language in permit Sections 2.2 A.1.i. and 2.2 A.5.d.:

40 CFR 63.743(d)(i-iii) - Instead of complying with the individual coating limits in 40 CFR 63.745, a facility may choose to comply with the averaging provisions specified in paragraphs (i)(i) through (i)(iii) of this section.

- i. Each owner or operator of a new or existing source shall use any combination of primers, topcoats (including self-priming topcoats), specialty coatings, Type I chemical milling maskants, or Type II chemical milling maskants such that the monthly volume-weighted average organic HAP and VOC contents of the combination of primers, topcoats, specialty coatings, Type I chemical milling maskants, or Type II chemical milling maskants, as determined in accordance with the applicable procedures set forth in 40 CFR 63.750 and complies with the specified content limits in 40 CFR 63.745, unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program.
- ii. Averaging is allowed only for uncontrolled primers, topcoats (including self-priming topcoats), specialty coatings, Type I chemical milling maskants, or Type II chemical milling maskants.
- iii. Averaging is not allowed between specialty coating types defined in appendix A to this subpart, or between the different types of coatings specified in paragraphs (d)(iii)(A) through (G) of this section.
  - (A) Primers and topcoats (including self-priming topcoats).

- (B) Type I and Type II chemical milling maskants.
- (C) Primers and chemical milling maskants.
- (D) Topcoats and chemical milling maskants.
- (E) Primers and specialty coatings.
- (F) Topcoats and specialty coatings.
- (G) Chemical milling maskants and specialty coatings.

This Subpart is applicable to the following existing sources in their respective Buildings:

Building 84: Paint booth (ID No. D0069) with dry particulate filter system (ID No. CD-D0069) and associated spray gun cleaning operation

Building 129: Paint booth (ID No. D0061) with dry particulate filter system (ID No. CD-D0061) and paint booth (ID No. D0066) with dry particulate filter system (ID No. CD-D0066) and each booth having an associated spray gun cleaning operation

Building 133: Paint booth (ID No. A0019) with dry particulate filter system (ID No. CD-A0019) and paint booth (ID No. A0032) with dry particulate filter system (ID No. CD-A0032) and associated spray gun cleaning operation, both with shared electric drying oven, sermetal spray booth (ID No. A0178) with dry particulate filter system venting to activated carbon filter (ID No. CD-A0178), solvent cleaning spray booth (ID No. B0040), abrasive blasting operation (ID No. E0080) with cartridge filter venting to HEPA filter (ID No. CD-FE0080), portable laser depainting systems (ID Nos. ID0073 and ID0230) and the ultrasonic vapor degreaser (ID No. IA0134)

Building 137: Paint booth (ID No. C0005) with dry particulate filter system (ID No. CD-C0005), paint booth (ID No. C0056) with dry particulate filter system (ID No. CD-C0056), paint booth (ID No. C0062) with dry particulate filter system (ID No. CD-C0062), paint booth (ID No. D0008) with dry particulate filter system (ID No. CD-D0008), paint booth (ID No. D0009) with dry particulate filter system (ID No. CD-D0009), paint booth (ID No. D0036) with dry particulate filter system (ID No. CD-D0036), paint booth (ID No. D0131) with dry particulate filter system (ID No. CD-D0131), and each booth having an associated spray gun cleaning operation. Abrasive blasting operation (ID No. D0097) with cartridge filter (ID No. CD-D0097), paint stripping tank (ID No. A0145), and depainting/chemical stripping area (ID No. D0120).

Building 245: Paint booth (ID No. D0106) with dry particulate filter system (16 filter banks; ID No. CD-D0106), paint booth (ID No. D0129) with dry particulate filter system (8 three stage filter banks; ID No. CD-D0129) with each booth having an associated spray gun cleaning operation, and paint booth (ID No. D0226) with a 3-stage paint overspray filtration system (ID No. CD-D0226A) and carbon adsorption capture system (ID No. CD-D0226B).

Building 423: Laser depainting system (ID No. D0221) with associated dry particulate cartridge filter system (CD-D0221, 80 square feet of surface area) with add-on HEPA filter system (66 square feet of surface area).

Building 1798: Paint booth (ID No. D0052) with dry particulate filter system (6 filter banks; ID No. CD-D0052) and associated spray gun cleaning operation. Abrasive blasting operation (ID No. D0053) with cartridge filter venting to HEPA filters (ID No. CD-D0053).

Building 3766: Abrasive blasting operation (ID No. D0184) venting thru multiple filter banks (ID No. CD-D0184).

Building 3767: Paint booth (ID No. D0056) with dry particulate filter system (ID No. CD-D0056) and associated spray gun cleaning operation

Building 4032: Paint booth (ID No. A0179) with dry particulate filter system (ID No. CD-A0179) and associated spray gun cleaning operation

Building 4034: Abrasive blasting operation (ID No. D0182) with three two-stage filter systems (ID Nos. CD-D0182A/B, CD-D0182C/D, and CD-D0182E/F), media recovery unit 1 of 2 (ID No. D0183) with two-stage filter system (ID No. CD-D0183A/B), and media recovery unit 2 of 2 (ID No. D0205) with two-stage filter system (ID No. CD-D0205A/B)

Building 4224: Paint booth (ID No. B0101) with dry particulate filter system (ID No. CD-B0101) and associated spray gun cleaning operation

Building 4225: Paint booth (ID No. E0160) with dry particulate filter system (ID No. CD-E0160) and associated spray gun cleaning operation

The existing sources are located at a major source of HAPs and 40 CFR 63 Subpart GG applies. Permit Sections 2.1 A., 2.1 B., 2.1 C. and Section 2.2 A. notes the requirements. This permit renewal does not affect the status of the above sources.

3. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (Subpart ZZZZ). This Subpart is applicable to the following insignificant activity engines:

Building 83	IC0105
Building 137	IC0099, IC0100
Building 488	IC0141
Building 1006	IC0102
Building 4032	IC0104
Building 4224	IC0103
Building 4225	IE0188 and IE073
Building 137	IC0107

The engines are located at a major source of HAPs and 40 CFR 63Subpart ZZZZZ applies. The engines are in Section 2.3 of the permit. This permit renewal does not affect the status of the above sources.

4. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers (Subpart DDDDD). The following insignificant activity sources shall be subject to the requirements of MACT Subpart DDDDD:

Building 137	IC0017
Building 4032	IH0005

The exchange heaters in Building 137 (ID Nos. ID0113 and ID0114) are considered significant sources. They are required to meet the following regulations:

- a. For these sources (ID Nos. ES-D0113 and ES-D0114) (*i.e., units designed to burn light liquid fuel between 5 and 10 million Btu/hr with no oxygen trim*), the Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC

02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63 Subpart DDDDD "National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters," including Subpart A "General Provisions."

- b. For the purpose of this permit condition, the definitions and nomenclature contained in 40 CFR 63.7575 shall apply.
- c. The Permittee shall comply with the requirements of 40 CFR 63 Subpart A General Provisions according to the applicability of Subpart A to such sources as identified in Table 10 to 40 CFR Part 63, Subpart DDDDD.

Compliance Date [40 CFR 63.7495(a)]

- d. The Permittee shall comply with the applicable requirements upon startup of these sources.
- e. As specified in 40 CFR 63.9(b)(4) and (5), the Permittee shall submit an Initial Notification to the DAQ not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]  
The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if this notification requirement is not met.
- f. The following work practice standards apply:
  - i. The Permittee shall conduct a tune-up every two years while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up as specified below.
    - (A) As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The Permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled shutdown.
    - (B) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
    - (C) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the Permittee may delay the inspection until the next scheduled unit shutdown).
    - (D) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject.
    - (E) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.  
[40 CFR 63.7500(a), 63.7540(a)(10) and (a)(11)]
  - ii. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. The initial tune-up shall be conducted no later than 25 months after the initial startup of the source. [40 CFR 63.7515(d)]
  - iii. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13), 63.7515(g)]



- iv. At all times, the Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these work practice requirements are not met.

g. The Permittee shall:

- i. keep a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or compliance report that has been submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a)(1)]
- ii. maintain on-site and submit, if requested by the DAQ, a report containing the information in paragraphs (A) through (C) below:
  - (A) the concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the heat exchanger;
  - (B) a description of any corrective actions taken as a part of the tune-up; and
  - (C) the type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 CFR 63.7540(a)(10)(vi)]

- iii. keep the associated records for Section 2.1 J.4.f. of the permit.

iv. keep:

- (A) records in a form suitable and readily available for expeditious review;
- (B) each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and
- (C) each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The Permittee can keep the records offsite for the remaining 3 years.

[40 CFR 63.7560, 63.10(b)(1)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these recordkeeping requirements are not met.

h. The following reporting requirements apply:

- i. The Permittee shall submit compliance reports to the DAQ on a two-year basis. The first report shall cover the period beginning on start-up and ending on the earliest December 31<sup>st</sup> less than two years from the compliance date. Subsequent two-year reports shall cover the periods from January 1 to December 31. The Permittee shall submit the compliance reports postmarked on or before January 30. [40 CFR 63.7550(a), (b)]
- ii. The compliance report must also be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI). CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) The Permittee shall use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, the Permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web

site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the Permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The Permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]

- iii. The compliance report must contain the following information:
- (A) company name and address.
  - (B) process unit information, emissions limitations, and operating parameter limitations.
  - (C) date of report and beginning and ending dates of the reporting period.
  - (D) include the date of the most recent tune-up for each unit required according to Section 2.1 J.4.f. of the permit. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
  - (E) statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- [40 CFR 63.7550(a) and (c), Table 9 to 40 CFR Part 63, Subpart DDDDD]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if these reporting requirements are not met

5. 40 CFR 63, National Emission Standards for Hazardous Air Pollutants for Engine Test Cells/Standards (Subpart PPPPP). This Subpart is applicable to the following sources in their respective Buildings:

Building 133 Four distillate/distillate equivalent fuel-fired turbine engines-APU test cells (ID Nos. A0001, A0002, A0003, and A0004)

Building 137 Six distillate fuel/distillate equivalent fuel-fired turbine engines-APU test cells (ID Nos. D0147, D0148, D0149, D0150, D0151, D0152)

Building 3402 Distillate/distillate equivalent fuel-fired turbine engine APU test cell (ID No. A0077)

Building 4188 Distillate fuel/distillate equivalent fuel-fired turbine engine APU test cell (ID No. A0058)

The facility is a major source of HAP and operates engine test cells/stands, therefore the facility is subject to 40 CFR 63, Subpart PPPPP. Each of the engine or test cells is used exclusively for testing combustion turbine engines. Per §63.9290(d)(1), the emission sources do not have to meet the requirements of this subpart and of subpart A of this part. This is noted in Section 2.1 G. of the permit.

**PSD** – The facility is a PSD major facility for VOCs. This permit renewal does not affect this status.

**112(r)** – The facility is not subject to Section 112(r) of the Clean Air Act requirements because it does not store any of the regulated substances in quantities above the thresholds in the Rule. This permit renewal does not affect this status.

**CAM** – 40 CFR 64 requires that a compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source

threshold and use a control device to meet an applicable standard. CAM is not applicable for this facility.

## **X. Facility Wide Air Toxics (State Enforceable Only)**

North Carolina General Statute (NCGS) 143-215.107(a) was approved on June 28, 2012 and this Act exempts from State Air Toxics those sources of emissions that are subject to certain Federal emissions requirements under 40 CFR Part 61 (NESHAP), Part 63 (MACT). This statute was placed into the North Carolina State Air Toxics regulations on May 1, 2014 under Regulation 15A NCAC 2Q .0702(a)(27).

Pursuant to 15A NCAC 02D .1100, 15A NCAC 2Q .0700, and in accordance with the approved application for an air toxic compliance demonstration, the emission limits contained in the current permit shall not be exceeded. To ensure compliance with these regulations the Permittee shall maintain records of production rates, throughput, material usage, and other process operational information as is necessary to determine compliance with the air toxic emission limits specified above for a minimum of five years from the date of recording.

The latest modeling report was approved by the Division of Air Quality per memo dated March 21, 2016. The modeling adequately demonstrates compliance, on a source-by-source basis, for all toxics modeled.

For the most recent 2022 modification (April 1, 2022), heat exchangers (ID Nos. D0113 and D0114) were added as significant sources and are applicable to 40 CFR Subpart DDDDD. Also added to this permit were insignificant activity sources (ID Nos. ID0159, IA0134, ID0073, ID0230, and IC0107) that are applicable to 40 CFR 63 Subpart GG, PPPPP, or ZZZZ. However, in accordance with 15A NCAC 02Q .0702(a)(27), emission sources subject to a standard under 40 CFR 63 are exempt from the toxic air pollutant rule.

Also included in the most recent modification were 3D printing systems (ID Nos. IE0222, IE0223, and IE0224) which were added as insignificant activity sources and were evaluated for NC's toxic air pollutant emissions. One toxic air pollutant, nickel metal, could be emitted from the systems. The Acceptable Ambient Level (AAL) for nickel metal is 6.0E-03 mg/m<sup>3</sup>. FRC East completed a facility-wide air dispersion modeling analysis in 2016 which demonstrated that the maximum nickel metal emission rate at that time (1.26 lb/day) resulted in a maximum modeled ambient air concentration of 6.4E-05 mg/m<sup>3</sup>, approximately 1.1% of the AAL. During calendar year 2020, FRC East emitted nickel metal at a rate of 0.4 lb/day, approximately 32% of the current modeled maximum. Nickel metal emissions from the 3D printer will not impact the current modeled rate or FRC East's ability to meet the nickel metal AAL.

The sources will continue to comply with all requirements for 15A NCAC 02D .1104 and 15A NCAC 2Q .0700. There are no other unacceptable risk sources with this permit renewal and the current status of the facility is not affected.

## **XI. Facility Emissions Review**

The actual emissions from the annual reporting inventories are listed in the first page of this review.

## **XII. Public Notice/EPA and Affected State(s) Review**

A thirty-day public notice period and a forty-five-day EPA review period is required for the renewal of the Title V permit. A notice of the DRAFT Title V Permit shall be made pursuant to

15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to the EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above.

EPA's 45 Day Review period

Brad Akers (U.S. EPA, Region IV) was provided a PROPOSED permit for review on December XX, 2022. EPA 45-day review period ended on February XX, 2023. No comments were offered or received.

Public Notice

The 30-day public notice of the PROPOSED permit was posted on the NCDAQ website on December XX, 2022. No comments were offered or received.

### **XIII. Other Regulatory Considerations**

- An application fee is not required for this renewal application.
- The appropriate number of application copies was received by the DAQ.
- A Professional Engineer's seal is not required for this application.
- A zoning consistency determination is not required for this renewal application.
- Craven County has not triggered increment tracking under PSD for any pollutants, so no tracking is required.
- The application was signed by Mr. Col. Thomas Atkinson, Commanding Officer, on January 10, 2022.

### **XIV. Recommendations**

The permit renewal application for Fleet Readiness Center East (FRCE) in Cherry Point, Craven County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 05506T46.