Title V Air Operation Permit Revision
Permit No. 0090051-028-AV

APPLICANT

The applicant for this project is the National Aeronautics and Space Administration (NASA), Kennedy Space Center (KSC). The applicant's responsible official and mailing address is: Mr. Kelvin Manning, Associate Director for Business Operations, NASA-KSC, Mail Code: AA-B, Kennedy Space Center, Florida 32899.

FACILITY DESCRIPTION

The applicant operates the John F. Kennedy Space Center facility, which is located at NASA-KSC, Kennedy Space Center, Florida 32899.

This existing facility is a spacecraft launch facility that contains the following air emission units:

a. Hot Water Generators/Boilers with individual heat input rates of at least 10 MMBtu/hr
b. Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE)
c. Emergency Stationary Spark Ignition (SI) RICE
d. Launch Complex 39 (LC-39) Non-Emergency CI RICE
e. Hypergol Servicing Operations and Activities
f. Surface Coating Operations
g. Portable Aggregate Material Crushing Operations
h. Non-Emergency Existing Stationary CI RICE with Controls
i. Non-Emergency Stationary CI RICE that are subject to New Source Performance Standards (NSPS) (These engines are currently under construction.)

Also included in this permit are miscellaneous insignificant emissions units and/or activities.

PROJECT DESCRIPTION

The primary purpose of this permitting project is to revise the existing Title V air operation permit No. 0090051-023-AV, to incorporate conditions of construction Permit 0090051-025-AC. Permit 0090051-025-AC was issued to the KSC facility to construct and install oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) in the exhaust of nine stationary Reciprocating Internal Combustion Engines in order to comply with amended requirements contained in 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants. This project also incorporates regulatory updates and changes to covered emission units.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Title V Air Operation Renewal Permit No. 0090051-023-AV, issued 05/24/2013
Construction Permit 0090051-025-AC, issued 01/03/2014
Application for the Title V Air Operation Permit Revision received **August 28, 2014**.
Request for Additional Information (RAI) issued **October 14, 2014**
RAI response dated **December 1, 2014**
Draft-Proposed Permit issued **December 24, 2014**
Additional Comments from Applicant to Draft-Proposed Permit received **January 7, 2015**

PRIMARY REGULATORY REQUIREMENTS

Title III: The facility is not identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

- 40 CFR 60, Subpart A, NSPS General Provisions
- 40 CFR 60, Subpart IIII, Stationary Compression Ignition (CI) Internal Combustion Engines
- 40 CFR 60, Subpart JJJJ, Stationary Spark Ignition (SI) Internal Combustion Engines

NESHAP: The facility does operate units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

- 40 CFR 63, Subpart A, NESHAP General Provisions
- 40 CFR 63, Subpart JJJJJJ, Industrial, Commercial, and Institutional Boilers
- 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) does not apply to any of the units at the facility.

PROJECT REVIEW

Changes that were made as part of this revision include the following:

(1) Updated Facility-wide Conditions to reflect new Title V permit template

(2) Reformatted Permit Sections to include individual Emission Units (EU) Sections with applicable requirements for emergency and non-emergency engines.

(3) Incorporated conditions from Construction Permit 0090051-025-AC for EU 088 - Launch Complex 39 (LC-39) Non-Emergency CI RICE and EU 093 - Non-Emergency Existing Stationary CI RICE with Controls.

RECENT PERMIT HISTORY

Title V Permit Renewal 0090051-023-AV was issued 05/24/2013

Construction Permit 0090051-024-AC was issued 11/12/2013 for installation of two portable hypergolic fuel and oxidizer scrubbers into EU 089. Expiration date for this permit was extended to 06/30/2016 under Permit Amendment Project 0090051-027-AC, issued 02/24/2014.

Construction Permit 0090051-025-AC was issued 01/03/2014 to authorize installation of air pollution controls on nine engines located at the facility that participate in the Florida Power & Light (FP&L) demand response program (incorporated in this Permit Revision project)

Construction Permit 0090051-026-AC was issued 04/11/2014 to allow for installation of two new Reciprocating Internal Combustion Engines (RICE) to be located at the Consolidated Data Center. The expiration date for this permit is March 31, 2016

Construction Permit 0090051-029-AC was issued 09/26/2014 for Permit Determination for two deployed temporary diesel boilers and installation of up to five proposed new natural gas boilers.

CONCLUSION

This project revises Title V air operation permit No. 0090051-0023-AV, which was issued on 5/24/2013, to incorporate conditions authorized in Construction Permit 0090051-025-AC. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-210 and 62-213, F.A.C.