



**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**APPLICANT**

National Aeronautics and Space Administration (NASA) – Kennedy Space Center (KSC)  
Mail Code: AA-B  
Kennedy Space Center, FL 32899  
John F. Kennedy Space Center  
Facility ID No. 0090051

**PROJECT**

Project No. 0090051-023-AV  
Application for Title V Air Operation Permit Renewal  
Project Name: Title V Air Operation Permit Renewal

**COUNTY**

Brevard County, Florida

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Waste and Air Resource Programs  
Central District Office  
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767  
DEP\_CD@dep.state.fl.us

April 3, 2013

Prepared by Stephen Amirault and Jeff Rustin, P.E.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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### GENERAL PROJECT INFORMATION

#### Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

#### Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

#### I. Project Description:

##### A. Applicant:

Kelvin Manning, Associate Director  
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##### B. Professional Engineer:

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C. Project Location:

NASA-KSC  
Kennedy Space Center, 32899

D. Project Summary:

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The renewed air permit will incorporate conditions applicable to emergency engines at the facility as specified in the January 30, 2013 Final Rule amendments to the NESHAP 40 CFR 63 Subpart ZZZZ. In addition, the renewal updates the List of Insignificant Emission Units and/or Activities.

E. Application Information:

Application Received: **December 7, 2012**  
Application complete: **December 7, 2012**

II. PSD Applicability for Project

As provided in the application total project emissions will not exceed the PSD significant emissions rates; therefore, the project is not subject to PSD preconstruction review.

III. Rule Applicability

Subject to:	Y/N	Comments
<b>Rule 62-212.400, F.A.C.</b> - Prevention of Significant Deterioration	N	Facility is not a PSD major source.
<b>Rule 62-296.320(4), F.A.C.</b> - General Particulate Emission Limiting Standards	Y	Facility could be a source of unconfined particulate matter emissions.
<b>Rules 62-296.320(1) and (2), F.A.C.</b> - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Facility is a source of VOC and particulate emissions.
<b>Rule 62-296.500, F.A.C.</b> - Reasonably Available Control Technology (VOC)	N	Brevard County is an attainment area for ozone.
<b>Rule 62-296.700, F.A.C.</b> - Reasonably Available Control Technology (PM)	N	There is no applicable source category regarding this project.
<b>Rule 62-204.800, F.A.C.</b> - Standards of Performance for New Stationary Sources (NSPS)	Y	40 CFR 60, Subparts A, IIII, JJJJ, and OOO.
<b>Rule 62-204.800, F.A.C.</b> National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS –40 CFR 63)	Y	40 CFR 63, Subparts A, JJJJJ, and ZZZZ

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Subject to:	Y/N	Comments
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	Y	Facility is a Title V Source.
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	Visible Emission Testing as required in the permit.

### IV. Summary of Emissions

Pollutant	EU No. and brief description	Actual Emissions (tpy)
PM	Facility	5.68
VOC	Facility	8.53
Total HAP	Facility	1.18
NOx	Facility	38.59
SO2	Facility	0.47
CO	Facility	13.43

Emissions for recent consecutive 12-month period (January-December 2012).

### V. Federal NSPS and/or NESHAP Provisions

NESHAP, Subpart A – General Provisions.

NESHAP, Subpart JJJJJ - Industrial, Commercial, and Institutional Boilers.

NESHAP, Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines (RICE)

NSPS, Subpart A – General Provisions.

NSPS, Subpart IIII - Stationary Compression Ignition (CI) Internal Combustion Engines.

NSPS, Subpart JJJJ, Stationary Spark Ignition (SI) Internal Combustion Engines

NSPS, Subpart OOO, Nonmetallic Mineral Processing Plants

### VI. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

### VI. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may

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be obtained by contacting the project engineer at the Florida Department of Environmental Protection Waste & Air Resource Programs, Central District Office, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767, 407-897-4100.