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. 0090051-022-AV
Application for Title V Air Operation Permit Revision
Project Name: Title V Air Operation Permit Revision

COUNTY

Brevard County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Central District Office
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767

June 13, 2012 and July 17, 2012

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

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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 for Business Operations
NASA-KSC
Mail Code: AA-B
Kennedy Space Center, FL 32899

B. Professional Engineer:

Mr. Mitchell J. Hait, Ph.D., P.E.
404 Sebastian Square
St, Augustine, FL 32095

C. Project Location:

NASA-KSC
Kennedy Space Center, 32899

D. Project Summary:

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The air permit will incorporate conditions of construction permit 0090051-019-AC as part of as part of Emission Unit 086 "Compression Ignition Stationary Internal Combustion Engines". Other changes include reformatting to reflect new Title V permit template, removing 2 scrubbers, clarification of RICE applicability regarding 40 CFR 63 Subpart ZZZZ, updated List of Insignificant Emission Units and/or Activities, and provides for the operation of a portable material crushing operation (EU 092).

E. Application Information:

Application Received: **December 6, 2012**
Additional Information Request: **February 3, 2012**
Additional Information Response received: **April 24, 2012**
Application complete: **April 24, 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**
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	Facility is not a PSD major source.
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Facility could be a source of unconfined particulate matter emissions.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Facility is a source of VOC and particulate emissions.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Brevard County is an attainment area for ozone.
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	There is no applicable source category regarding this project.
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	Y	40 CFR 60, Subparts A, IIII, JJJJ, and OOO.

Subject to:	Y/N	Comments
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS –40 CFR 63)	N	40 CFR 63, Subparts A and JJJJJJ
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	2.68
VOC	Facility	6.28
Total HAP	Facility	0.66
NOx	Facility	38.69
SO2	Facility	0.52
CO	Facility	10.77

Emissions for recent 12 consecutive month period (January-December 2011).

V. Federal NSPS and/or NESHAP Provisions

NESHAP, Subpart A – General Provisions.
NESHAP, Subpart JJJJJJ - Industrial, Commercial, and Institutional Boilers.
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 be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Central District Office, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767, 407-893-3334.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit for the aforementioned air pollution sources in accordance with the draft permit and its conditions as stipulated (see attached).