

## STATEMENT OF BASIS

Title V Air Operation Permit Revision  
Permit No. 0090051-042-AV

### APPLICANT

The applicant for this project is National Aeronautics and Space Administration. The applicant's responsible official and mailing address are: Mr. Burton R. Summerfield, Associate Director, Management, National Aeronautics and Space Administration, Kennedy Space Center (KSC), Mail Code: AA-C, Kennedy Space Center, FL 32899.

### FACILITY DESCRIPTION

This existing facility, National Aeronautics and Space Administration (NASA) operates the Kennedy Space Center (KSC) facility. The facility is categorized under Standard Industrial Classification Code No. 9661 and North American Industry Classification System Code No. 927110. The facility is in Brevard County at Kennedy Space Center, Florida. The UTM coordinates of the existing facility are Zone 17, 534.2 km East, and 3155.0 km North. NASA-KSC is a spacecraft and payload processing and launch facility which contains the following six categories of permitted air emission units:

- a) Surface Coating Operations, EU101 (listed in **Attachment 1-A**);
- b) Internal Combustion Engines, EU102, EU103, EU104, EU105, (listed in **Attachments 2-A, 3-A, 4-A, 5-A**) used for both emergency and non-emergency purposes;
- c) Chromate Conversion Operation, EU106 (listed in **Attachment 6-A**);
- d) Portable Aggregate Material Crushing Operations, which provides for a portable aggregate crushing plant to be used at the facility, EU107, (listed in **Attachment 7-A**). The portable crushing unit must have its own air permit (Rule 62-210.310(2), F.A.C.);
- e) Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ. EU108 (listed in **Attachment 8-A**); and,
- f) Gasoline Dispensing Operations, EU109 (listed in **Attachment 9-A**).

Also at the facility are miscellaneous insignificant emissions units and/or activities.

The existing facility is comprised of the following emissions units (EUs):

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
101	Surface Coating Operations
102	Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) subject to NESHAP 40 CFR 63 Subpart ZZZZ
103	Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII
104	Non-Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII
105	Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII
106	Chromate Conversion Operation subject to NESHAP 40 CFR 63 Subpart WWWWWW (6W)
107	Portable Material Crushing Operation subject to NSPS 40 CFR 60 Subpart OOO
108	Emergency Stationary Spark Ignition RICE subject to NSPS 40 CFR 60 Subpart JJJJ
109	Gas Dispensing Operations subject to NESHAP 40 CFR 63 Subpart CCCCCC

### PROJECT DESCRIPTION

The purpose of this permitting project is to revise the Title V air operation permit for the above referenced facility. The revision is for the addition and removal of emission sources that have occurred or are planned to occur at NASA KSC.

### PROCESSING SCHEDULE AND RELATED DOCUMENTS

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- Application for a Title V air operation permit revision received December 5, 2024.
- Draft Title V air operation permit revision issued January 29, 2025.
- Public Notice of Intent to Issue Air Permit published on Month day, 2024.
- Proof of publication (affidavit) of Public Notice of Intent to Issue Air Permit received on Month day, 2024.
- Proposed Title V air operation permit revision issued Month day, 2024.
- Final Title V air operation permit revision issued Month day, 2024.

### PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 9661 - Space and Research and Technology.

North American Industry Classification System (NAICS): 927110 - Space and Research and Technology.

Title I - HAP: The facility is not a major source of hazardous air pollutants (HAP).

NESHAP: This facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) a.k.a. "MACT" of 40 Code of Federal Regulations (CFR) 63. The following emissions units are subject to the NESHAP requirements.

Applicable Requirement	EU No(s).
40 CFR 63, Subpart A, NESHAP (a.k.a. MACT) General Provisions	102, 103, 104, 107, 108
40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	102, 103, 104, 105
40 CFR 63, Subpart CCCCCC ("6C") -National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	109
40 CFR 63, Subpart WWWWWW ("6W") - National Emission Standards for Plating and Polishing Operations	106

Title IV: The facility does not operate units subject to the acid rain provisions of the Clean Air Act.

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 operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

Applicable Requirement	EU No(s).
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	103, 104, 105, 107, 108
40 CFR Part 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants	107
40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	103, 104, 105
40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	108

CAM: Emission units at this facility are not subject to Compliance Assurance Monitoring (CAM) for one or more of the following reasons: they do not trigger the potential pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system

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(CEMS); they are not equipped with air pollution control device(s); they are equipped with device(s) which are considered to be inherent to the process/operation; or, they satisfy CAM by meeting the post-1990 federal monitoring requirements for the same or similar air pollutants.

SIP: This facility operates units subject to the state implementation plan (SIP) of Chapter 62-210.300, F.A.C.

Applicable Requirement	EU No(s).
Rule 62-210.300, F.A.C., Permits Required	All 'regulated' EUs

### PROJECT REVIEW

Changes were made in this Title V air operation permit revision. The major changes made in this project are overviewed here. Some changes were made in the format of this revised Title V air operation permit.

### Appendices

#### Appendix I, List of Insignificant Emissions Units and/or Activities

Added "parachute dryer" under activity 1. Miscellaneous insignificant activities identified in Attachment 1 are included under activities 1., 2., 3. and 5.

Insignificant Engines: These insignificant activities or "assets" ("assets" is a NASA-KSC term) are being removed:

1. HCG02001 (Mid-Course Radar (MCR) Site/Back-up Generator)
2. HE906278 (Pad B Pumphouse/FIREX Pump Engine #4)
3. IRG02163 (Indian River Bridge Generator)
4. HE906234 (Grove Pump #8, Flood Control Pump Engine)
5. HE906272 (Pad B Pumphouse/ FIREX Pump Engine #1)
6. HE906274 (Pad B Pumphouse J7-1388/FIREX Pump Engine #2)
7. HE906276 (Pad B Pumphouse/ FIREX Pump Engine #3)

Insignificant Engines: These insignificant activities or "assets" ("assets" is a NASA-KSC term) are being added:

#### 5. Surface Coating. Including:

- d) Room 1414A (Payload Support Building (M7-0505).

#### 2. Miscellaneous Internal Combustion Engines Units that are not subject to the NSPS/NESHAP

- e) HE902347 (CD&SC Gen #1 East)\*
- f) HE902351 (CD&SC Gen #2 Mid. Generator)\*

\* Engines are no longer used for peak shaving, non-emergency use. Moved to the list of Insignificant CI Engines and were formerly permitted in EU 102.

### Attachments

#### Table H, Permit History

Minor updates were made, e.g., added project subsequent to Permit No. 0090051-041-AC.

#### Attachments 1-A, 2-A, 3-A, 4-A, 5-A, 7-A, 8-A and 9-A

For easier identification, added receipt dates to each EU table to identify when the Department received the specific table. Previously submitted attachments from Project -040-AV are labelled as "Received on July 7, 2021." New attachments with this revision are labelled with "December 5, 2024."

#### Attachments 1-A, 2-A, 3-A, 5-A & 9-A removals

Within each emissions unit are emission activities or "assets" ("assets" is a NASA-KSC term). Under each listed emissions unit the following assets are being removed:

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EU 101- Permitted Surface Coating Operations (**Attachment 1-A**).

1. SK-P-115 (Booster Fabrication Facility)
2. SK-P-115A (Booster Fabrication Facility)
3. SK-P-4A/4B (Solid Rocket Booster Facility)
4. M-EF-7 (Booster Fabrication Facility)

EU 102- Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) subject to NESHAP 40 CFR 63 Subpart ZZZZ (**Attachment 2-A**).

1. HE902347 (CD&SC Gen #1 East) <sup>1</sup>
2. HE902351 (CD&SC Gen #2 Mid. Generator) \*

\* Engines are no longer used for peak shaving, non-emergency use. Moved to the list of Insignificant CI Engines.

EU 103- Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII (**Attachment 3-A**).

1. HE906236 (Grove Pump #9, Flood Control Pump Engine @ M5-1586A) \*\*
2. XZG01001 (CIF Generator)
3. M6-0410-1 (Visitors Center, Administrative Building)
4. M6-0336 – TBD (EML/Emergency Generator - Model 404D-22G)

\*\* Old Cummins engine was replaced with a new John Deere Tier 3 certified engine.

EU 105- Emergency Fire Pump CI RICE Subject to NSPS 40 CFR 60 Subpart IIII (**Attachment 5-A**).

1. HE906270 (RLV Hangar, Fire Engine #4) Replaced with Asset #HE906332

EU 109 Gas Dispensing Operations subject to NESHAP 40 CFR 63 Subpart CCCCCC (**Attachment 9-A**).

1. Gasoline fueling tank at M&O facility (M6-0486)

### Attachments 2-A, 3-A, 4-A & 9-A additions

Within each emissions unit are emission activities or “assets” (“assets” is a NASA-KSC term). Under each listed emissions unit the following assets are being added:

EU 102- Non-Emergency Stationary Compression Ignition (CI) Reciprocating Internal Combustion Engines (RICE) subject to NESHAP 40 CFR 63 Subpart ZZZZ (**Attachment 2-A**).

1. HE906272 (Pad B Pumphouse/ FIREX Pump Engine #1)
2. HE906274 (Pad B Pumphouse J7-1388/FIREX Pump Engine #2)
3. HE906276 (Pad B Pumphouse/ FIREX Pump Engine #3)

EU 103- Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII (**Attachment 3-A**).

1. J5-0341 – TBD (Weather Tower/Wind Profiler Engine @ J5-0341)
2. L7-0072 – Kubota Landfill Generator

EU 104- Non-Emergency Stationary CI RICE subject to NSPS 40 CFR 60 Subpart IIII (**Attachment 4-A**)

1. HE906260R1 (Grove Pump #9, Flood Control Pump Engine @ M5-1586A) <sup>2</sup>

EU 109 Gas Dispensing Operations subject to NESHAP 40 CFR 63 Subpart CCCCCC (**Attachment 9-A**)

1. K6-1345 Gasoline fueling tank [replaces same size gasoline tank at M&O facility (M6-0486)]

## CONCLUSION

This project revises Title V air operation permit No. 0090051-040-AV, which was effective on November 2, 2021. This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.