Attachment 1-A

EU 001 - Hot Water Generators / Boilers with an individual heat input rating of at least 10 MMBtu/hr

Identification/Asset Number (Historical Numbers in Parentheses)	Location/Building	Manufacturer	Model	Serial No.	Capacity MMBtu/hr	Date Installed[1]	Date Removed	Primary Fuel	Back Up Fuel[2]
IM-B-0002-A	VAB Utility Annex Hot Water Generator (HWG) #1 / K6-947	The International Boiler Works (IBW) Company	TJW-C-20	L-260	20	1987	N/A	Natural Gas	Liquid Fuels
IM-B-0002-B	VAB Utility Annex Hot Water Generator (HWG) #2 / K6-947	The International Boiler Works (IBW) Company	TJW-C-20	14918	20	1985	N/A	Natural Gas	Liquid Fuels
IM-B-0002-C	VAB Utility Annex Hot Water Generator (HWG) #3 / K6-947	The International Boiler Works (IBW) Company	TJW-C-20	L-319	20	1991	N/A	Natural Gas	Liquid Fuels

Notes:

[1] The installation date may be an equipment installation date, facility construction date, air construction permit issue date, equipment manufactured date, or an estimated startup date provided by facility personnel.

[2] Boilers are limited to ULSD for backup fuel. Other units in EU (if added) will have added flexibility with fuels (Liquid Fuels include: No. 2 Fuel Oil, Diesel Fuel, Biodiesel, Jet Fuel, and Synthetically Derived Fuels).

The permit attachments will be updated with the submittal of the Semi Annual Report due February 28, 2015.

N/A = Not Applicable

Attachment 2-A
EU 091 - Surface Coating Operations

Identification/Asset Number (Historical Numbers in Parentheses)	Location/Building	Description	Manufacturer	Model	Type of Particulate Matter Control	Date Installed[2]	Date Removed
IM-P-001 A	Corrosion Control Facility / M6-1625	Corrosion Control Booth Number 1	Ralph, Hahn & Associates[1]	N/A	Filter	1992	N/A
IM-P-001 B	Corrosion Control Facility / M6-1625	Corrosion Control Booth Number 2	Ralph, Hahn & Associates[1]	N/A	Filter	1992	N/A
IM-P-002	**Base Support Building / M6-0486**	**Spray Booth**	**DeVilbiss**	**N/A**	**Water wall**	**1972**	**August 2014**
SK-P-001	Solid Rocket Booster - Assembly and Refurbishment Facility / L6-0247	Top Coat Application Cell	Currier	39-ED-29	Filter	1986	N/A
SK-P-004A	Solid Rocket Booster - Assembly and Refurbishment Facility / L6-0247	Thermal Protection System (TPS) Spray Cell No. 1 (North Room 132)	Currier	39-ED-29	Filter	1986	N/A
SK-P-004A	Solid Rocket Booster - Assembly and Refurbishment Facility / L6-0247	Thermal Protection System (TPS) Spray Cell No. 2 (South Room 145)	Currier	39-ED-29	Filter	1986	N/A
SK-P-004B	Solid Rocket Booster - Assembly and Refurbishment Facility / L6-0247	Thermal Protection System (TPS) Cure Cell No. 1 (North Room 141)	Currier	39-ED-29	Filter	1986	N/A
SK-P-004B	Solid Rocket Booster - Assembly and Refurbishment Facility / L6-0247	Thermal Protection System (TPS) Cure Cell No. 2 (South Room 146)	Currier	39-ED-29	Filter	1986	N/A
SK-P-006 A	Hangar AF Area Solid Rocket Booster (SRB) Paint Building / 66310	East Spray Cell Paint Booth	Binks Manufacturing Co.	FAC-0101-1	Filter	1985	N/A
SK-P-006 B	Hangar AF Area Solid Rocket Booster (SRB) Paint Building / 66310	West Spray Cell Paint Booth	Binks Manufacturing Co.	FAC-0101-2	Filter	1985	N/A
TM-H-002	Component Refurbishment and Chemical Analysis Facility / K6-1696	IPA Vent Hood	Wiltech - Field Fabricated	N/A	N/A	1998	N/A
TM-P-002	Hangar AF / 66250	Small Parts Paint Booth	USBI - Field Fabricated	N/A	Filter	1990	N/A
TM-P-003	Launch Equipment Shop Paint Shop / K6-1397	Paint Booth	Spray Booth Systems, Inc.	N/A	Filter	1984	N/A
TM-P-001	Hangar N / 01728	Paint Booth	Col-Met Spray Booths, Inc	EIE 1208	Filter	2008	December 2012
TM-P-004	Hangar N / 01728	Film Lube Booth	DeVilbiss	N/A	Filter	1994	December 2012

Notes:
[1] Engineering Design Firm
[2] The installation date may be an equipment installation date, facility construction date, air construction permit issue date, equipment manufactured date, or an estimated startup date provided by facility personnel.
N/A = Not Applicable

Attachment 3-A
EU 086 - Emergency Stationary Compression Ignition (CI) RICE

Identification/Asset Number (Historical Numbers in Parentheses)	Facility #	Description	Engine Description	Notes	Displacement (liters/cylinder)	Generator Manufacturer	Generator Model Number	Generator Serial Number	Engine Manufacturer	Engine Model Number	Engine Serial Number	Engine Manufacture Date	Start-up Date	Standby Brake Horsepower (bhp)*	Nominal Rated Kilowatt (kW)	Subject to New Source Performance Standard (NSPS)/40 CFR Part 60, Subpart IIII Subject (Y/N)	Rationale for NSPS Applicability Determination	Subject to the RICE NESHAP/40 CFR 63 Subpart ZZZZ (Y/N)	Date Removed
SIG01003	M7-0360	Space Station Processing Facility/Generator	Electric Power Generator		2.5	Kohler	2000R0ZD	391738	Detroit Diesel	92037K16	20E200360	10/7/1997	1999	2,935	2,000	N	Manufactured **BEFORE** 04-01-2006	N	N/A
SIG01004	M7-0360	Space Station Processing Facility/Generator	Electric Power Generator		2.5	Kohler	1200R0ZD	610139	Detroit Diesel	91237416	12E-11074	1/30/1999	5/10/1999	1,750	1,200	N	Manufactured **BEFORE** 04-01-2006	N	N/A
CLG01001	M7-1354	Payload Hazardous Servicing Facility/Generator	Electric Power Generator		2.7	Caterpillar	SR5	G1E02342	Caterpillar	C32	PRH00520	7/6/2010	11/22/2010	1,474	1,000	Y	Manufactured **AFTER** 04-01-2006	N	N/A
HCG02001	E3-1133	Mid-Course Radar Facility/Generator	Electric Power Generator	Engine Plate read 05-2000, Put 05-01-2000 in the Engine Manufacture Date	2.8	Generac	573RS1403 5	WA3575636-0700	Mitsubishi	S12A2-PTA	22241	5/1/2000	2006	1,140	800	N	Manufactured **BEFORE** 04-01-2006	N	N/A
3367659 (G1E00774)	60674	Hangar AE/Generator	Electric Power Generator	Identification/Asset Number has changed from G1E00774 to 3367659.	3.7	Caterpillar	SR5	G1E00774	Caterpillar	C32	PRH00494	6/28/2010	6/16/2011	1,474	1,000	Y	Manufactured **AFTER** 04-01-2006	N	N/A
HE906272 (FIREX-003A)	J7-1388	Industrial Water Pumping Station/Fire Engine #1	Fire Pump Engine	Description has changed from Pad 39 B Pump House to Industrial Water Pumping Station. Identification/Asset Number has changed from FIREX-003A to HE906272.	4.3	Not Applicable	Not Applicable	Not Applicable	Caterpillar	3508-DITA	95Y01040	9/24/1997	11/4/1997	1,065	795	N	Manufactured **BEFORE** 07-01-2006	N	N/A
HE906274 (FIREX-003B)	J7-1388	Industrial Water Pumping Station/Fire Engine #2	Fire Pump Engine	Description has changed from Pad 39 B Pump House to Industrial Water Pumping Station. Identification/Asset Number has changed from FIREX-003B to HE906274.	4.3	Not Applicable	Not Applicable	Not Applicable	Caterpillar	3508-DITA	95Y01036	9/19/1997	11/4/1997	1,065	795	N	Manufactured **BEFORE** 07-01-2006	N	N/A
HE906276 (FIREX-003C)	J7-1388	Industrial Water Pumping Station/Fire Engine #3	Fire Pump Engine	Description has changed from Pad 39 B Pump House to Industrial Water Pumping Station. Identification/Asset Number has changed from FIREX-003C to HE906276.	4.3	Not Applicable	Not Applicable	Not Applicable	Caterpillar	3508-DITA	95Y01039	9/23/1997	11/4/1997	1,065	795	N	Manufactured **BEFORE** 07-01-2006	N	N/A
HE906278 (FIREX-003D)	J7-1388	Industrial Water Pumping Station/Fire Engine #4	Fire Pump Engine	Description has changed from Pad 39 B Pump House to Industrial Water Pumping Station. Identification/Asset Number has changed from FIREX-003D to HE906278.	4.3	Not Applicable	Not Applicable	Not Applicable	Caterpillar	3508-DITA	95Y01038	9/23/1997	11/4/1997	1,065	795	N	Manufactured **BEFORE** 07-01-2006	N	N/A
HE906292 (FIREX-002)	K6-0895	Orbiter Processing Facility Pump House/Fire Engine #1	Fire Pump Engine	Identification/Asset Number has changed from FIREX-002 to HE906292.	4.3	Not Applicable	Not Applicable	Not Applicable	Caterpillar	3508	68Z01274	2/24/2005	9/30/2005	850	770	N	Manufactured **BEFORE** 07-01-2006	N	N/A

Identification/Asset Number (Historical Numbers in Parentheses)	Facility #	Description	Engine Description	Notes	Displacement (liters/cylinder)	Generator Manufacturer	Generator Model Number	Generator Serial Number	Engine Manufacturer	Engine Model Number	Engine Serial Number	Engine Manufacture Date	Start-up Date	Standby Brake Horsepower (bhp)*	Nominal Rated Kilowatt (kW)	Subject to New Source Performance Standard (NSPS)/40 CFR Part 60, Subpart IIII Subject (Y/N)	Rationale for NSPS Applicability Determination	Subject to the RICE NESHAP/40 CFR 63 Subpart ZZZZ (Y/N)	Date Removed
HE906280 (FIREX-001A)	**M7-1362**	**FireX Pump Station/Fire Engine #1**	**Fire Pump Engine**	**Description has changed from Hypergol Maintenance Facility Pump House to FireX Pump Station. Identification/Asset Number has changed from FIREX-001A to HE906280.**	**5.1**	**Not Applicable**	**Not Applicable**	**Not Applicable**	**Fairbanks Morse**	**38F5-1/4**	**968638**	**<1950**	**1983**	**825**	**600**	**N**	**Manufactured BEFORE 07-01-2006**	**N**	**9/14/2014**
HE906282 (FIREX-001B)	**M7-1362**	**FireX Pump Station/Fire Engine #2**	**Fire Pump Engine**	**Description has changed from Hypergol Maintenance Facility Pump House to FireX Pump Station. Identification/Asset Number has changed from FIREX-001B to HE906282.**	**5.1**	**Not Applicable**	**Not Applicable**	**Not Applicable**	**Fairbanks Morse**	**38F5-1/4**	**968631**	**<1950**	**1983**	**825**	**600**	**N**	**Manufactured BEFORE 07-01-2006**	**N**	**9/14/2014**
HE906284 (FIREX-001)	**M7-1362**	**FireX Pump Station/Fire Engine #3**	**Fire Pump Engine**	**Description has changed from Hypergol Maintenance Facility Pump House to FireX Pump Station. Identification/Asset Number has changed from FIREX-001 to HE906284.**	**4.3**	**Not Applicable**	**Not Applicable**	**Not Applicable**	**Caterpillar**	**3512**	**65Z01177**	**1/24/2005**	**9/30/2005**	**1,020**	**760**	**N**	**Manufactured BEFORE 07-01-2006**	**N**	**9/14/2014**
TBD	M6-0547	Consolidated Data Center	Electric Power Generator	Under Construction Permit # 0090051-026-AC	3.14	Cummins	DQGAE	TBD	Cummins	QSK50-G5-NR2	TBD	TBD	TBD	1,850	1,250	Y	Manufactured **AFTER** 04-01-2006	N	N/A

*Note Standby bhp @ 1800 RPM for generator engines, @ 1200 RPM for pump engines (number includes parasitic accessories)

The permit attachments will be updated with the submittal of the Semi Annual Report due February 28, 2015.

N/A = Not Applicable

Red entries denote newly removed emission units.

Attachment 4-A
EU 087 - Emergency Stationary Spark Ignition (SI) RICE

As of July 2014, there are no stationary spark ignition engines at NASA-KSC that exceed the emission threshold for listing in this table, or in the electric utility demand response program.

Identification/Asset Number (Historical Numbers in Parentheses)	Facility #	Description	Engine Description	Notes	Displacement (liters/cylinder)	Generator Manufacturer	Generator Model Number	Generator Serial Number	Engine Manufacturer	Engine Model Number	Engine Serial Number	Engine Manufacture Date	Start-up Date	Standby Brake Horsepower (bhp)*	Nominal Rated Kilowatt (kW)	Subject to New Source Performance Standard (NSPS)/40 CFR Part 60, Subpart IIII Subject (Y/N)	Rationale for NSPS Applicability Determination	Subject to the RICE NESHAP/40 CFR 63 Subpart ZZZZ (Y/N)

*Note Standby bhp @ 1800 RPM for generator engines

Attachment 5-A

EU 088 - LC-39 Non-Emergency Stationary Compression Ignition (CI) RICE

Identification/Asset Number (Historical Numbers in Parentheses)	Facility #	Description	Engine Description	Notes	Displacement (liters/cylinder)	Generator Manufacturer	Generator Model Number	Generator Serial Number	Engine Manufacturer	Engine Model Number	Engine Serial Number	Engine Manufacture Date	Start-up Date	Standby Brake Horse Power (bhp)*	Nominal Rated Kilowatt (kW)	Subject to New Source Performance Standard (NSPS)/40 CFR Part 60, Subpart IIII Subject (Y/N)	Rationale for NSPS Applicability Determination	Subject to the RICE NESHAP/40 CFR 63 Subpart ZZZZ (Y/N)	Date Removed
EVG01001 (IM-G-001-1)	K6-1091	Launch Complex 39 Emergency Power Station/Generator #1	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Identification/Asset Number has changed from IM-G-001-1 to EVG01001.	4.3	Caterpillar	SR-4HV	8LS00880	Caterpillar	3516	7RN00683	10/16/1998	4/6/1999	2,934	2,000	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
EVG01002 (IM-G-001-2)	K6-1091	Launch Complex 39 Emergency Power Station/Generator #2	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Identification/Asset Number has changed from IM-G-001-2 to EVG01002.	4.3	Caterpillar	SR-4HV	8LS00881	Caterpillar	3516	7RN00686	10/20/1998	4/6/1999	2,934	2,000	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
EVG01003 (IM-G-001-3)	K6-1091	Launch Complex 39 Emergency Power Station/Generator #3	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Identification/Asset Number has changed from IM-G-001-3 to EVG01003.	4.3	Caterpillar	SR-4HV	8LS00882	Caterpillar	3516	7RN00687	10/21/1998	4/5/1999	2,934	2,000	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
EVG01004 (IM-G-001-4)	K6-1091	Launch Complex 39 Emergency Power Station/Generator #4	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Identification/Asset Number has changed from IM-G-001-4 to EVG01004.	4.3	Caterpillar	SR-4HV	8LS00883	Caterpillar	3516	7RN00688	10/22/1998	4/5/1999	2,934	2,000	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
EVG01005 (IM-G-001-5)	K6-1091	Launch Complex 39 Emergency Power Station/Generator #5	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Identification/Asset Number has changed from IM-G-001-5 to EVG01005.	4.3	Caterpillar	SR-4HV	8LS00884	Caterpillar	3516	7RN00689	10/23/1998	4/2/1999	2,934	2,000	N	Manufactured **BEFORE** 04-01-2006	Y	N/A

*Note Standby bhp @ 1800 RPM for generator engines

The permit attachments will be updated with the submittal of the Semi Annual Report due February 28, 2015.

N/A = Not Applicable

Attachment 6-A
EU 089 - Hypergol Servicing Operations and Activities

Identification/Asset Number (Historical Numbers in Parentheses)	Location/Building	Description	Manufacturer	Model Number	Installation Date[1]	Date Removed
CM-07	Payload Hazardous Servicing Facility (PHSF) / M7-1354	Fuel Vapor Scrubber	Taylor Forged Engineering Systems	S70-1094-F1	1986	N/A
CM-08	Payload Hazardous Servicing Facility (PHSF) / M7-1354	Oxidizer Vapor Scrubber	Taylor Forged Engineering Systems	S70-1094-E1	1986	N/A
IM-53	Fuel Storage Area #1 (FSA-1) / 73019	Hypergol Fueling Operations, including mobile scrubbers	KSC Constructed	N/A	1983	N/A
TM-55	Orbiter Processing Facility (OPF) 1 & 2 / K6-0894	Oxidizer Purging System	KSC Constructed	S70-1095-09	1977	February 2014
TM-56	Orbiter Processing Facility (OPF) 1 & 2 / K6-0894	Fuel Purging System	KSC Constructed	S70-1094-09	1977	February 2014
TM-88	Hypergol Maintenance Facility (HMF) South / M7-1212	East/West Cell Fuel ASP	KSC Constructed	S70-1094-02	1964	December 2012
TM-89	Hypergol Maintenance Facility (HMF) South / M7-1212	East/West Cell Oxidizer ASP	KSC Constructed	S70-1095-02	1964	December 2012
TM-94	**Hypergol Maintenance Facility (HMF) North / M7-0961**	**East/West Cell Fuel ASP**	**KSC Constructed**	**S70-1095-02**	**1964**	**May 2014**
TM-95	**Hypergol Maintenance Facility (HMF) North / M7-0961**	**East/West Cell Oxidizer ASP**	**KSC Constructed**	**S70-1094-02**	**1964**	**May 2014**
TM-96	**Hypergol Maintenance Facility (HMF) North / M7-0961**	**Fuel Fume Hood**	**Kewaunee**	**SH-1505-MS-FL**	**1964**	**May 2014**
TM-97	**Hypergol Maintenance Facility (HMF) North / M7-0961**	**Oxidizer Fume Hood**	**Kewaunee**	**SH-1505-MS-OX**	**1964**	**May 2014**

Notes:
[1] The installation date may be an equipment installation date, facility construction date, air construction permit issue date, equipment manufactured date, or an estimated startup date provided by facility personnel.
Red entries denote newly removed emission units.
The permit attachments will be updated with the submittal of the Semi Annual Report due February 28, 2015.
N/A = Not Applicable

Attachment 7-A
EU 093 - Non-Emergency Existing Stationary Compression Ignition (CI) RICE with Installed Controls

Identification/Asset Number (Historical Numbers in Parentheses)	Facility #	Description	Engine Description	Notes	Displacement (liters/cylinder)	Generator Manufacturer	Generator Model Number	Generator Serial Number	Engine Manufacturer	Engine Model Number	Engine Serial Number	Engine Manufacture Date	Start-up Date	Standby Brake Horsepower (bhp)*	Nominal Rated Kilowatt (kW)	Subject to New Source Performance Standard (NSPS)/40 CFR Part 60, Subpart IIII Subject (Y/N)	Rationale for NSPS Applicability Determination	Subject to the RICE NESHAP/40 CFR 63 Subpart ZZZZ (Y/N)	Date Removed
PGE01001	K7-1203	Press Site Emergency Generator Building/Generator #1	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Historical Identification Number was a typing error, actual number is PGE01001 from PEG0100.	2.6	Caterpillar	LC6	G6B00322	Caterpillar	3456	7WG02514	10/20/2004	2005	764	500	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
PGE01002	K7-1203	Press Site Emergency Generator Building/Generator #2	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014. Historical Identification Number was a typing error, actual number is PGE01002 from PEG01002.	2.6	Caterpillar	LC6	G6B00465	Caterpillar	3456	7WG02524	10/22/2004	2005	764	500	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
HE902347	M6-0139	Communications Distribution and Switching Center Generator Building/Generator #1 East	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014	2.3	Cummins Onan	350DQBB	H970645638	Cummins Onan	N14-G2	11855364	7/1/1997	1997	535	350	N	Manufactured **BEFORE** 04-01-2006	Y	N/A
HE902351	M6-0139	Communications Distribution and Switching Center Generator Building/Generator #2 Middle	Electric Power Generator	Constructed and installed oxidation catalyst emission controls to limit or reduce the concentration of carbon monoxide (CO) March 2014	2.3	Cummins Onan	350DQBB	H970646347	Cummins Onan	N14-G2	11856022	8/1/1997	1997	535	350	N	Manufactured **BEFORE** 04-01-2006	Y	N/A

*Note Standby bhp @ 1800 RPM for generator engines
The permit attachments will be updated with the submittal of the Semi Annual Report due February 28, 2015.
N/A = Not Applicable

Attachment 8-A UNDER CONSTRUCTION

EU 094 - Non-Emergency NSPS Subject Stationary Compression Ignition (CI) RICE

Identification/Asset Number (Historical Numbers in Parentheses)	Facility #	Description	Engine Description	Notes	Displacement (liters/cylinder)	Generator Manufacturer	Generator Model Number	Generator Serial Number	Engine Manufacturer	Engine Model Number	Engine Serial Number	Engine Manufacture Date	Start-up Date	Standby Brake Horsepower (bhp)*	Nominal Rated Kilowatt (kW)	Subject to New Source Performance Standard (NSPS)/40 CFR Part 60, Subpart IIII Subject (Y/N)	Rationale for NSPS Applicability Determination	Subject to the RICE NESHAP/40 CFR 63 Subpart ZZZZ (Y/N)	Date Removed
TBD	M6-0547	Consolidated Data Center	Electric Power Generator	Under Construction Permit #0090051-026-AC	3.14	Cummins	DQGAE	TBD	Cummins	**QSK50-G8	TBD	TBD	TBD	1,850	1,250	Y	Manufactured **AFTER** 04-01-2006	N	N/A

*Note Standby bhp @ 1800 RPM for generator engines

**Note this engine model number Q5K50-G5-NR2 becomes QSK50-G8 when pollution control equipment is installed.

The permit attachments will be updated with the submittal of the Semi Annual Report due February 28, 2015.

N/A = Not Applicable