



TITLE V PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth herein.

Operating Permit Number: OP2010-042A

Facility ID Number: 189-0230

Expiration Date: May 20, 2015

Project Number: 2011-07-029

Installation Name and Address

The Boeing Company
Airport Road and McDonnell Boulevard
St. Louis, MO 63134
St. Louis County

Mailing Address

The Boeing Company
PO Box 516; M/C S111-2491
St. Louis, MO 63166

Parent Company's Name and Address

The Boeing Company
100 North Riverside
Chicago, Illinois 60606-1596

Installation Description:

The Boeing Company, designs, develops, manufactures, integrates and supports a variety of aerospace, defense, and security products and services. These include military and commercial aircraft, helicopters, missiles, space launch vehicles and other space systems, and sensing systems. Examples of permitted equipment include paint spray booths, halogenated solvent degreasers, and boilers. This project was a modification to OP2010-042. Information was edited in the emission units with and without limitations table due to rule changes (ZZZZ) and equipment added or removed from the site (generators). The responsible official has also changed.

MAY 07 2012

Effective Date

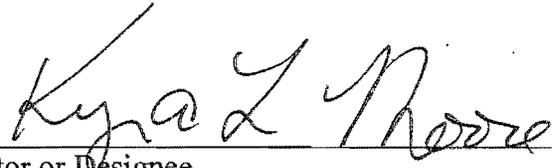

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

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Reported Air Pollutant Emissions, tons per year*								
Year	Volatile Organic Compounds (VOC)	Hazardous Air Pollutants (HAPs)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Lead (Pb)	Particulate Matter ≤ 10 Microns (PM-10)	Particulate Matter 2.5-10 Microns (PM-2.5)
2004	91.63	38.36	139.22	144.64	39.65	0.00	30.65	2.37
2005	65.76	52.10	64.81	80.74	28.83	0.00	20.32	1.66
2006	103.63	32.94	0.28	22.93	20.25	0.00	19.94	0.65
2007	67.78	27.41	3.41	24.38	20.94	0.00	16.80	0.85
2008	69.38	28.59	0.35	22.60	20.96	0.00	3.48	0.66

* As reported in EIQ

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) St. Louis County Air Pollution Control Program Construction Permit #1490 (Operating Permit #5486)
- 2) St. Louis County Air Pollution Control Program Construction Permit #1491 (Operating Permit #5487)
- 3) St. Louis County Air Pollution Control Program Construction Permit #3554
- 4) St. Louis County Air Pollution Control Program Construction Permit #5331
- 5) St. Louis County Air Pollution Control Program Construction Permit #5368
- 6) St. Louis County Air Pollution Control Program Construction Permit #5737
- 7) St. Louis County Air Pollution Control Program Construction Permit #5741
- 8) St. Louis County Air Pollution Control Program Construction Permit #6114
- 9) St. Louis County Air Pollution Control Program Construction Permit #6208
- 10) St. Louis County Air Pollution Control Program Construction Permit #6757
- 11) St. Louis County Air Pollution Control Program Construction Permit #6835
- 12) St. Louis County Air Pollution Control Program Construction Permit #6836

- 13) St. Louis County Air Pollution Control Program Construction Permit #6859
- 14) St. Louis County Air Pollution Control Program Construction Permit #6869
- 15) St. Louis County Air Pollution Control Program Construction Permit #6870
- 16) St. Louis County Air Pollution Control Program Construction Permit #6875
- 17) St. Louis County Air Pollution Control Program Construction Permit #6890
- 18) St. Louis County Air Pollution Control Program Construction Permit #6891
- 19) St. Louis County Air Pollution Control Program Construction Permit #6892
- 20) St. Louis County Air Pollution Control Program Construction Permit #6893
- 21) St. Louis County Air Pollution Control Program Construction Permit #6894
- 22) St. Louis County Air Pollution Control Program Construction Permit #6949
- 23) St. Louis County Air Pollution Control Program Construction Permit #6980
- 24) St. Louis County Air Pollution Control Program Construction Permit #7019

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emit air pollutants and which are identified as having emission unit-specific limitations. Information provided in the table is for informational purposes only. It shall not be construed to create any limits, conditions, or requirements.

STLCO OPERATING PERMIT #	GROUPED EIQ POINT #	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION					MANUFACTURER	MODEL	YEAR IN-STALLED	DESCRIPTION	
				BLDG	COLUMN			LEVEL					
					LET1	LET2	NUM 1						NUM 2
	GRP-SC-STL-01	SC-STL-01	AS-STL-01	PW						---	---	---	Plant-wide aerospace adhesive/sealant usage
	GRP-SC-STL-01	SC-STL-01	VS-245-01	245	R	T	5		1				Vented solvent storage area
	GRP-SC-STL-01	SC-STL-01	BF-STL-01	PW						---	---	---	Plant-wide aerospace Fugitive Painting
	GRP-SC-STL-01	SC-STL-02	BF-STL-02	PW						---	---	---	Other miscellaneous Plant-wide solvent building fugitives
	GRP-HC-STL-01	HC-STL-01	HC-STL-01	PW						---	---	---	Plant-wide aerospace handwipe solvent cleaning building fugitives
7264	GRP-CC-STL-01	CC-STL-01	CC-101-04	101									Cold cleaner #1
7365	GRP-CC-STL-01	CC-STL-01	CC-101-06	101									Cold cleaner #2
7266	GRP-CC-STL-01	CC-STL-01	CC-101-07	101									Cold cleaner #3
7267	GRP-CC-STL-01	CC-STL-01	CC-101-08	101									Cold cleaner #4
7268	GRP-CC-STL-01	CC-STL-01	CC-102-02	102									Cold cleaner #5
7269	GRP-CC-STL-01	CC-STL-01	CC-102-03	102									Cold cleaner #6
7270	GRP-CC-STL-01	CC-STL-01	CC-245-01	245									Cold cleaner #7
4374	GRP-CC-STL-01	CC-STL-01	CC-102-01	102	C1		11		1			1977	Cold cleaner for hydraulic equipment
	GRP-HC-STL-01	HC-STL-01	CC-STL-01B	PW						---	---	---	Plant-wide spray gun cleaning

STLCO OPERATING PERMIT #	GROUPED EIQ POINT #	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR INSTALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM 1	NUM 2					
	GRP-CS-STL-04	CS-STL-01	CS-066-01	66	A		2		1			1966	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-066-02	66	A		2		1			1966	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-066-03	66	A		10		1			1966	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-066-04	66	A		10		1			1966	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-111-03	111	O		5		1	Superior	4-5-751-S15-GP	1984	Natural gas boiler/fuel oil available in emergency (6.3 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-221-01	221	D	E	3	4	1	Power Master	4020944	1953	Natural gas boiler/fuel oil available in emergency (3.3475 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-221-02	221	D	E	3	4	1	Power Master	4020944	1953	Natural gas boiler/fuel oil available in emergency (3.3475 MMBtu/hr)
6839	GRP-CS-STL-02	CS-078-01	CS-078-01	78	B		16		1	Cleaver Brooks	CB-LE	2003	Natural gas boiler (24.494 MMBtu/hr)
6840	GRP-CS-STL-02	CS-078-01	CS-078-02	78	B		16		1	Cleaver Brooks	CB-LE	2003	Natural gas boiler (24.494 MMBtu/hr)
6895	GRP-CS-STL-02	CS-063-03	CS-063-03	63	E	Mech Room			1	Cleaver Brooks	CBI-700-500-125	2005	Natural gas boiler (20.4 MMBtu/hr)
3078	GRP-CS-STL-01	CS-101-01	CS-101-01	101	L		1		1	Combustion Engineering		1962	Natural gas/fuel oil boiler (45.0 MMBtu/hr)
3078	GRP-CS-STL-01	CS-101-01	CS-101-02	101	L		1		1	Combustion Engineering		1962	Natural gas/fuel oil boiler (45.0 MMBtu/hr)
6835	GRP-CS-STL-03	CS-101-07	CS-101-07	101	J		3		1	Cleaver Brooks	DLW 52	2003	Natural gas/fuel oil boiler (41.3MMBtu/hr)
6836	GRP-CS-STL-03	CS-101-07	CS-101-08	101	J		3		1	Cleaver Brooks	DLW 52	2003	Natural gas/fuel oil boiler (41.3 MMBtu/hr)
6980	GRP-CS-STL-02	CS-102-01	CS-102-05	102	F	G	17	19	1	Cleaver Brooks		2006	Natural gas/fuel oil boiler (84.724 MMBtu/hr)
3079	GRP-CS-STL-01	CS-102-02	CS-102-02	102	E	F	17	19	1	Cleaver Brooks	CB 800 HP	1988	Natural gas/fuel oil boiler (33.48 MMBtu/hr)
6949	GRP-CS-STL-01	CS-102-02	CS-102-04	102	E	F	17	19	1	Cleaver Brooks		2005	Natural gas/fuel oil boiler (32.660 MMBtu/hr)
6951	GRP-CS-STL-01	CS-STL-01	CS-103-01	103					Behind bldg.			2006	Natural gas (13.20 MMBtu/hr)
4709	GRP-CS-STL-01	CS-STL-01	CS-110-01	110					Basement	Cleaver Brooks	CB-250	1979	Natural gas boiler/fuel oil back-up (10.461 MMBtu/hr)
4709	GRP-CS-STL-01	CS-STL-01	CS-110-02	110					Basement	Cleaver Brooks	CB-250	1979	Natural gas boiler/fuel oil back-up (10.461 MMBtu/hr)
5287	GRP-CS-STL-01	CS-STL-01	CS-111-01	111	O		5		1	Superior	4-5-2506-LGP	1984	Natural gas boiler/fuel oil back-up (16.8 MMBtu/hr)
5287	GRP-CS-STL-01	CS-STL-01	CS-111-02	111	O		5		1	Superior	4-5-2506-LGP	1984	Natural gas boiler/fuel oil back-up (16.8 MMBtu/hr)
	GRP-CS-STL-04	CS-STL-01	CS-STL-01A	PW						---	---	---	Plant-wide combustion (indirect natural gas)

STLCO OPERATING PERMIT #	GROUPED EIQ POINT #	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR INSTALLED	DESCRIPTION
				BLDG	COLUMN			LEVEL					
					LET1	LET2	NUM 1		NUM 2				
	NONE	NONE	DP-STL-01	PW						---	---	---	Plant-wide mechanical depainting
Varies	NONE	NONE	EG-064-03	64					N				Non-Emergency Diesel engine (operates simulators)
	NONE	NONE	EG-066-04	66					S	Caterpillar	3421DIT-D	2003	Diesel emergency generator, 660 HP
	NONE	NONE	EG-066-05	66					S	Caterpillar	3412DIT-D	2003	Diesel emergency generator, 660 HP
	NONE	NONE	EG-066-06	66					S	Caterpillar	3412DIT-D	2003	Diesel emergency generator, 660 HP
	NONE	NONE	EG-066-07	66					S	Caterpillar	3412DIT-D	2003	Diesel emergency generator, 660 HP
	NONE	NONE	EG-078-01	78	A		6		1	Kohler	400REOZD	2003	Emergency generator, 635 BHP
7387	NONE	NONE	EG-245-01	245					Outside	Caterpillar	C27	2009	Diesel Emergency generator, 1214 HP
	NONE	NONE	EG-245-02	245					E	Kubota	V2203 DIEU2	2011	Refrigerant Trailer Emergency Diesel Generator
	NONE	NONE	EG-245-03	245					E	Kubota	V2203 DIEU2	2011	Refrigerant Trailer Emergency Diesel Generator
	NONE	NONE	EG-245-04	245					W	Kubota	V2203 DIEU2	2011	Refrigerant Trailer Emergency Diesel Generator
	NONE	NONE	EG-014-01	14					Outdrs	Onan	115DFC-4XR8/3854E	1968	Diesel emergency generator, 134 HP
	NONE	NONE	EG-032-01	32					E	International	GCD325	2001	Diesel emergency generator, 325 HP
	NONE	NONE	EG-032-02	32					E	International	GCD325	2001	Diesel emergency generator, 325 HP
	NONE	NONE	EG-033-01	33	B		10		1	Kohler	150ROZJ81		Diesel emergency generator, 150 HP
	NONE	NONE	EG-034-01	34	S		22		1	Caterpillar	D318		Diesel emergency generator, 104 HP
	NONE	NONE	EG-064-01	64	N		6		2				Natural gas emergency generator (250 HP @ 1800 RPM)
	NONE	NONE	EG-066-02	66					S	Clarke Detroit		Prior to 1990	Diesel emergency generator (for fire pump), 265 HP
	NONE	NONE	EG-066-09	66	D		2		1	Kohler	100RZG	2004	Natural gas emergency generator, 134 HP
	NONE	NONE	EG-067-01	67					W	Detroit Diesel			Diesel emergency generator, 205 HP
	NONE	NONE	EG-075-01	75	A		1		1	Cummins	6BT-5.9	1988	Diesel emergency generator, 135 HP
	NONE	NONE	EG-079-01	79					W	John Deere	4045TF250	2005	Diesel emergency generator, 134 HP
	NONE	NONE	EG-100-01	100	A		11		1				Diesel emergency generator, 335 HP
	NONE	NONE	EG-101-01	101	J		3		1				Diesel emergency generator, 302 HP

STLCO OPERATING PERMIT #	GROUPED EIQ POINT #	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN-STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM 1	NUM 2					
	NONE	NONE	EG-101-02	101					Roof	Kohler	30RZG	2004	Natural gas emergency generator, 75 HP
	NONE	NONE	EG-101A-01	101 A	F		1		1				Natural gas emergency generator, 67 HP
	NONE	NONE	EG-102-01	102	F	G	17	19	1				Diesel emergency generator, 134 HP
	NONE	NONE	EG-103-01	103	B		7		1				Diesel emergency generator, 308 HP
	NONE	NONE	EG-106-01	106	B		5		1				Diesel emergency generator, 150 HP
	NONE	NONE	EG-107-01	107	B		6		1				Diesel emergency generator, 134 HP
	NONE	NONE	EG-110-01	110					Basemnt				Natural gas emergency generator, 40 HP
	NONE	NONE	EG-111-01	111	I		3		1			1984	Diesel emergency generator, 680 HP
	NONE	NONE	EG-122-01	122					1				Diesel emergency generator, 285 HP
	NONE	NONE	EG-220-01	220	BB		18		1	Kohler	150ROZJ 81		Diesel emergency generator, 241 HP
7388	NONE	NONE	EG-921-01	921					E	Kohler	125REOZ JD	2006	Diesel emergency generator, 168 HP
6869	NA	GT-102-01	GT-102-01	102 B					1	Alstom	Tornado	2004	Natural gas turbine (wind tunnel)
	NONE	NONE	HW-STL-01	PW						---	---	---	Plant-wide handling of hazardous waste
5487	GRP-CL-STL-01	CL-063-01	MB-063-01	63	F		3		1			1986	Vented paint mixing room
6890	GRP-CL-STL-01	CL-078-01	MB-078-01	78	E		13		1			2004	Vented paint mixing room
	GRP-CL-STL-01	CL-101-04	MB-101-04	101	XX		2		1			2001	Vented paint mixing room
	GRP-HC-STL-01	HC-STL-01	MC-STL-01	PW									Plant-wide chemical depainting
5486	GRP-CL-STL-01	CL-063-01	SB-063-01	63	F		2		1			1986	Spray booth (paint & others)(aerospace production and R&D)
6894	GRP-CL-STL-01	CL-063-01	SB-063-02	63	H				2	NA	NA	2005	Spray booth (paint & others)(aerospace production and R&D)
5368	GRP-CL-STL-01	CL-STL-01	SB-066-01	66	H		7		1			1984	Spray booth (R&D and aerospace production) (painting and sanding)
6891	GRP-CL-STL-01	CL-078-01	SB-078-01	78	K		16		1	NA	NA	2004	Spray booth (aerospace production and R&D)
6892	GRP-CL-STL-01	CL-078-01	SB-078-02	78	K		12		1	NA	NA	2004	Spray booth (aerospace production and R&D)
6893	GRP-CL-STL-01	CL-078-01	SB-078-03	78	K		9		1	NA	NA	2004	Spray booth (aerospace production and R&D)
5737	GRP-CL-STL-01	CL-101-02	SB-101-02	101	G		1		1			1990	Spray booth (aerospace production) (painting and sanding)
	GRP-CL-STL-01	CL-101-01	SB-101-03	101	P		30		1				Lab hood for conformal coating of parts
5614	GRP-CL-STL-01	CL-STL-01	SB-101-29	101	Q		54		1			1988	Spray booth (sealants and adhesives)
3219	GRP-CL-STL-01	CL-101-02	SB-101-33	101	G		1		1	Binks		1961	Spray booth 13 (aerospace production) (painting and sanding)

STLCO OPERATING PERMIT #	GROUPED EIQ POINT #	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN-STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM 1	NUM 2					
	NONE	NONE	SB-101-34	101	B		18		1				Spray Booth (Arc Spray)
3554	GRP-CL-STL-01	CL-101-01	SB-101-39	101	A		25	29	1	DeVilbiss	SL-1360	1964	Spray booth (aerospace production) (painting and sanding)
3217	GRP-CL-STL-01	CL-101-02	SB-101-40	101	F		1		1	DeVilbiss		1961	Spray booth (aerospace production) (painting and sanding)
3218	GRP-CL-STL-01	CL-101-02	SB-101-40A	101	F		1		1	DeVilbiss		1961	Spray booth (aerospace production) (painting and sanding)
6208	GRP-CL-STL-01	CL-101-03	SB-101-45	101	P1		30	33	1			1996	Robotic Sprayer (R&D)
	GRP-CL-STL-01	CL-101-04	SB-101-46	101	TT		3		1			2001	Paint Booth (aerospace production)
7019	GRP-CL-STL-01	CL-101-01	SB-101-47	101	A		25	29	1			2007	Two bay spray booth (aerospace production) (painting and sanding)
5140	GRP-CL-STL-01	CL-STL-01	SB-102-02	102	H		13	15	3	Binks		1983	Bench spray booth (lab) (epoxy spray) (R&D)
4902	GRP-CL-STL-01	CL-STL-01	SB-102-03	102	C		16		1	DeVilbiss	XDF 6224	1984	Paint booth (aerospace)(mostly R&D) (some aerospace production)
	GRP-CL-STL-01	CL-102-01	SB-102-04	102	J		10		4				Spray Booth (R&D)
5741	GRP-CL-STL-01	CL-248-01	SB-248-01	248	Rm.	134 B			1			1990	Paint booth (R&D and aerospace production)
5443	GRP-CL-STL-01	CL-248-01	SB-248-02	248	Rm.	137 A			1			1986	Spray booth (robotic & hand applied) (R&D)
5690	GRP-CL-STL-01	CL-248-01	SB-248-03	248	Rm.	134 C			1	Binks		1987	Spray booth (R&D)
5442	GRP-CL-STL-01	CL-248-01	SB-248-04	248	Rm.	134 A			2			1986	Spray booth (robotic & hand applied) (R&D)
5331	GRP-CL-STL-01	CL-248-01	SB-248-05	248	Rm.	129 A			1			1984	Spray Booth (R&D)
5701	GRP-CL-STL-01	CL-STL-01	SB-245-02	245	C		29		1			1989	Paint booth (tooling, aerospace production, and maintenance)
	GRP-CL-STL-01	CL-STL-01	SB-245-03	245	D		1		1	Team Blowtherm		2002	Bench spray booth (aerospace production)
6859	GRP-CL-STL-01	CL-STL-01	SB-245-07	245	E		23		1			2003	Spray booth (aerospace coatings and non-aerospace production)
	GRP-CL-STL-01	CL-STL-01	SB-245-08	245	A		1	4	1			2002	Bench spray booth (R&D and non-aerospace production)
	GRP-CL-STL-01	CL-STL-01	SB-245-09	245	A		1	4	1			2002	Bench spray booth (R&D and non-aerospace production)
	GRP-SC-STL-01	SC-STL-01	SC-101-01	101	G		23		1				Hood for brush coating applications
	GRP-SC-STL-01	SC-STL-01	SC-101-02	101	G		23		1				Hood for brush coating applications

STLCO OPERATING PERMIT #	GROUPED EIQ POINT #	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN- STALL ED	DESCRIPTION
				BLD G	COLUMN				LEVEL				
					LET1	LE T2	NUM 1	NUM 2					
	GRP-SC-STL-01	SC-STL-01	SC-101-03	101	G		23		1				Hood for brush coating applications
11990,31273	ST-STL-01	NONE	ST-066-02	66					SE				Gasoline AST (550 gal)
12043,31201	ST-STL-01	NONE	ST-078-01	78							2004		Gasoline AST (1,000 gal)
11991,31274	ST-STL-01	NONE	ST-121-01	121					NW				Gasoline AST (550 gal)
6875	NA	TS-102-01	TS-102-01	102	A		17		1				Engine Test Stand
6870	GRP-VD-STL-02	VD-101-06	VD-101-06	101	E		11		1		2004		Vapor degreaser
7271	GRP-VD-STL-01	VD-101-07	VD-101-07	101	T		33				2006		Degreasing unit
7281	GRP-VD-STL-01	VD-101-08	VD-101-08	101						Parts Cleaning Technology	2009		Degreasing unit
6168	GRP-VD-STL-02	VD-102-03	VD-102-03	102	A		13	15	1		1995		Vapor degreaser

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance. Plant wide conditions may apply to these units. All of the information provided in the table is for informational purposes only. It shall not be construed to create any limits, conditions or requirements.

STLCO OPERATING PERMIT #	Grouped EIQ Point No.	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM1	NUM2					
	NONE	NONE	AC-245-02	245					Addition	Taricco		2010	Autoclave, 200 psi
	GRP-CS-STL-04	CS-STL-01	CS-STL-01B	PW						---	---	---	Plant-wide combustion (direct natural gas)
	GRP-CT-STL-01	CT-STL-01	CT-STL-01A	PW						---	---	---	Plant-wide forced draft cooling towers
	NONE	NONE	CU-STL-01A	PW						---	---	---	Plant-wide composite emissions
	NA	NONE	HT-245-01	245	R		23		1				Heat Treat Ovens
	GRP-PT-STL-01	PT-STL-01	IT-101-01P	101	R		36		1				Immersion\Process tank (1) in the passivate line
	GRP-PT-STL-01	PT-STL-01	IT-101-04P	101	R		36		1				Immersion\Process tank (4) in the passivate line
	GRP-PT-STL-01	PT-STL-01	IT-101-08P	101	R		36		1				Immersion\Process tank (8) in the passivate line
	NONE	NONE	IT-101-09P	101	R		36		1				Immersion\Process tank (9) in the passivate line
	NONE	NONE	IT-101-10P	101	R		36		1				Immersion\Process tank (10) in the passivate line
	NONE	NONE	IT-101-11N	101	R		33		1				Immersion\Process tank (11) in the nameplate line
	NONE	NONE	IT-101-14N	101	R		33		1			1994	Immersion\Process tank (14) in the nameplate line
	NONE	NONE	IT-101-15N	101	R		33		1			1994	Immersion\Process tank (15) in the nameplate line
6916	GRP-DT-STL-01	DT-STL-01	DT-101-18D	101	R		30		1			2004	Photo Resist Dip Operation Tank 18
6916	GRP-DT-STL-01	DT-STL-01	DT-101-19D	101	R		30		1			2004	Photo Resist Dip Operation Tank 19
	NONE	NONE	DT-101-20D	101	R		30		1				Photo Resist Dip Operation Tank 20
7305	GRP-ET-STL-01	ET-STL-01	ET-101-16E	101	S		30		1				Ferric Chloride Acid Etcher
	GRP-PT-STL-01	PT-STL-01	IT-101-01	101	A	B	30	36	1				Immersion\Process tank 1 in the aluminum line
5239	GRP-PT-STL-01	PT-STL-01	IT-101-05	101	A	B	30	36	1			1984	Immersion\Process tank 5 in the aluminum line

STLCO OPERATING PERMIT #	Grouped EIQ Point No.	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM1	NUM2					
	STL-01	01											
5240	GRP-PT- STL-01	PT-STL- 01	IT-101-06	101	A	B	30	36	1			1984	Immersion\Process tank 6 in the aluminum line
	GRP-PT- STL-01	PT-STL- 01	IT-101-07	101	A	B	30	36	1				Immersion\Process tank 7 in the aluminum line
5243	GRP-PT- STL-01	PT-STL- 01	IT-101-0A	101	A	B	30	36	1			1984	Immersion\Process tank A in the aluminum line
	GRP-PT- STL-01	PT-STL- 01	IT-101-A2	101	A	B	30	36	1				Immersion\Process tank A2 in the aluminum line
	GRP-PT- STL-01	PT-STL- 01	IT-101-0H	101	A	B	30	36	1				Immersion\Process tank H in the aluminum line
	NONE	NONE	IT-101-0J	101	A	B	30	36	1				Immersion\Process tank J in the aluminum line
	GRP-PT- STL-01	PT-STL- 01	IT-101-01M	101	T		53		1				Immersion\Process tank 1 in Mech. Lab
	GRP-PT- STL-01	PT-STL- 01	IT-101-03M	101	T		53		1				Immersion\Process tank 3 in Mech. Lab
	GRP-PT- STL-01	PT-STL- 01	IT-102-01	102	A		12	13	1				Immersion\Process tank 1 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-03	102	A		12	13	1				Immersion\Process tank 3 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-05	102	A		12	13	1				Immersion\Process tank 5 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-06	102	A		12	13	1				Immersion\Process tank 6 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-07	102	A		12	13	1				Immersion\Process tank 7 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-09	102	A		12	13	1				Immersion\Process tank 9 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-10	102	A		12	13	1				Immersion\Process tank 10 in 102
	GRP-PT- STL-01	PT-STL- 01	IT-102-01L	102	H	J	13	15	3				Immersion\Process tank 1 (R&D/QA/QC)
	GRP-PT- STL-01	PT-STL- 01	IT-102-02L	102	H	J	13	15	3				Immersion\Process tank 2 (R&D/QA/QC)
	GRP-PT- STL-01	PT-STL- 01	IT-102-03L	102	H	J	13	15	3				Immersion\Process tank 3 (R&D/QA/QC)
	GRP-PT- STL-01	PT-STL- 01	IT-102-04L	102	H	J	13	15	3				Immersion\Process tank 4 (R&D/QA/QC)
	GRP-PT- STL-01	PT-STL- 01	IT-102-05L	102	H	J	13	15	3				Immersion\Process tank 5 (R&D/QA/QC)
	GRP-PT- STL-01	PT-STL- 01	IT-102-06L	102	H	J	13	15	3				Immersion\Process tank 6 (R&D/QA/QC)

STLCO OPERATING PERMIT #	Grouped EQ Point No.	EQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM1	NUM2					
	GRP-PT-STL-01	PT-STL-01	IT-102-07L	102	H	J	13	15	3			Immersion\Process tank 7 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-08L	102	H	J	13	15	3			Immersion\Process tank 8 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-09L	102	H	J	13	15	3			Immersion\Process tank 9 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-10L	102	H	J	13	15	3			Immersion\Process tank 10 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-11L	102	H	J	13	15	3			Immersion\Process tank 11 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-12L	102	H	J	13	15	3			Immersion\Process tank 12 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-13L	102	H	J	13	15	3			Immersion\Process tank 13 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-14L	102	H	J	13	15	3			Immersion\Process tank 14 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-16L	102	H	J	13	15	3			Immersion\Process tank 16 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-17L	102	H	J	13	15	3			Immersion\Process tank 17 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-19L	102	H	J	13	15	3			Immersion\Process tank 19 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-20L	102	H	J	13	15	3			Immersion\Process tank 20 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-22L	102	H	J	13	15	3			Immersion\Process tank 22 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-25L	102	H	J	13	15	3			Immersion\Process tank 25 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-26L	102	H	J	13	15	3			Immersion\Process tank 26 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-27L	102	H	J	13	15	3			Immersion\Process tank 27 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-28L	102	H	J	13	15	3			Immersion\Process tank 28 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-29L	102	H	J	13	15	3			Immersion\Process tank 29 (R&D/QA/QC)	
	GRP-PT-STL-01	PT-STL-01	IT-102-30L	102	H	J	13	15	3			Immersion\Process tank 30 (R&D/QA/QC)	
	GRP-DT-STL-01	DT-245-01	DT-245-01	245	B		2		1			Dip Tank 1 (R&D)	
	GRP-DT-STL-01	DT-245-01	DT-245-02	245	B		2		1			Dip Tank 2 (R&D)	

STLCO OPERATING PERMIT #	Grouped EQ Point No.	EQ POINT NO.	EMISSION UNIT NO.	LOCATION					MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION
				BLDG	COLUMN			LEVEL				
					LET1	LET2	NUM1					
	GRP-DT-STL-01	DT-STL-01	DT-245-03	245	B		2		1			Dip Tank 3 (R&D)
	GRP-DT-STL-01	DT-STL-01	DT-245-04	245	B		2		1			Dip Tank 4 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-07	248	Rm.	132			1			Immersion\Process tank 7 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-09	248	Rm.	132			1			Immersion\Process tank 9 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-12	248	Rm.	132			1			Immersion\Process tank 12 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-13	248	Rm.	132			1			Immersion\Process tank 13 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-16	248	Rm.	132			1			Immersion\Process tank 16 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-25	248	Rm.	132			1			Immersion\Process tank 25 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-27	248	Rm.	132			1			Immersion\Process tank 27 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-28	248	Rm.	132			1			Immersion\Process tank 28 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-30	248	Rm.	132			1			Immersion\Process tank 30 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-31	248	Rm.	132			1			Immersion\Process tank 31 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-33	248	Rm.	132			1			Immersion\Process tank 33 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-34	248	Rm.	132			1			Immersion\Process tank 34 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-35	248	Rm.	132			1			Immersion\Process tank 35 (R&D)
	NONE	NONE	PT-248-0C	248	Rm.	132			1			Holding Tank C for process tanks (R&D)
	NONE	NONE	PT-248-0D	248	Rm.	132			1			Holding Tank D for process tanks (R&D)
	NONE	NONE	PT-248-0F	248	Rm.	132			1			Holding Tank F for process tanks (R&D)
	NONE	NONE	PT-248-0N	248	Rm.	132			1			Holding Tank N for process tanks (R&D)
	GRP-PT-STL-01	PT-STL-01	PT-248-0H	248	Rm.	132			1			Holding Tank H for cleaning process tanks (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-01C	248	Rm.	132			1			Immersion\Process tank 01 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-03C	248	Rm.	132			1			Immersion\Process tank 03 (R&D)
	GRP-PT-STL-01	PT-STL-01	IT-248-05C	248	Rm.	132			1			Immersion\Process tank 05 (R&D)

STLCO OPERATING PERMIT #	Grouped EIQ Point No.	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION					MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION	
				BLDG	COLUMN			LEVEL					
					LET1	LET2	NUM1						NUM2
	STL-01	01											
	GRP-PT-STL-01	PT-STL-01	IT-248-07C	248	Rm.	132			1			Immersion(Process tank 07 (R&D))	
	NONE	NONE	LH-STL-01	PW						---	---	---	Plant-wide lab hoods
	NONE	NONE	LS-102-01	102	F		5	8	1				HF/DF laser used for testing
	NONE	NONE	LS-245-01	245	B		3		1				Laser model builders
	NONE	NONE	LS-245-02	245	A		4		1				Laser paper cutter
	GRP-CL-STL-01	CL-101-03	MB-101-01	101	P	Q	30	33	1				Vented hood for paint mixing
	GRP-CL-STL-01	CL-101-03	MB-101-02	101	P2		30		1				Vented paint mixing hood
	GRP-CL-STL-01	CL-101-01	MB-101-05	101	B		25		1		2005		Paint mix area
	GRP-CL-STL-01	CL-STL-01	MB-245-01	245	C		29		1				Vented paint mixing room
	GRP-CL-STL-01	CL-248-01	MB-248-01	248	Rm 137B				1				Vented paint mixing hood – misc. activities
	GRP-CL-STL-01	CL-248-01	MB-248-02	248	Rm 137B				1				Vented paint mixing hood – misc. activities
	GRP-CL-STL-01	CL-248-01	MB-248-03	248	Rm 134B				1				Vented paint mixing hood – misc. activities
	GRP-SC-STL-01	SC-STL-01	MP-STL-01	PW						---	---	---	Plant-wide maintenance painting
	NONE	NONE	MS-079-01	79	NE				1				Fire Extinguisher Filling Station
	NONE	NONE	MS-STL-01	PW						---	---	---	Plant-wide hand held equipment (such as sanders, drills, riveters)
	NONE	NONE	MT-245-02	245	F		9		1				Tank containing concentrated cutting fluid
	NONE	NONE	MT-245-03	245	F		9		1				Cutting fluid mix tank
	NONE	NONE	OV-245-04	245	R	N	23	24	1				Electric austenizing furnace (Endothermic gas atmosphere)
	NONE	NONE	OV-245-05	245	R	N	23	24	1				Electric austenizing furnace (Endothermic gas atmosphere)
	NONE	NONE	OV-245-06	245	R		24		1				Endothermic gas generator
	Various	Various	OV-STL-01	PW						---	---	---	Plant-wide electric curing ovens
	Various	Various	OV-STL-02	PW						---	---	---	Plant-wide electric burn-off ovens
	NONE	NONE	PE-STL-01	PW						---	---	---	Plant-wide particulate emitting sources not specifically listed
	NONE	NONE	PE-067-01	67					SE	Houston Service Ind.	38404A		Central vacuum system (dust collector)

STLCO OPERATING PERMIT #	Grouped EIQ Point No.	EIQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM1	NUM2					
7491	NONE	NONE	PE-103-01	103					Outside	Farr	GS24	2010	Particulate control device for Erosion Sand Tester
	NONE	NONE	PE-220-01	220					Outside building	Donaldson Torit	30-15	2010	Particulate control device-exhaust is vented into a building
	NONE	NONE	PE-245-02	245	B		6		1			2002	Mill vented through a mist eliminator
	NONE	NONE	PE-245-04	245	T		6		1			2007	Particulate control device – exhaust is vented into building
6885	NONE	NONE	PE-245-01	245	D	G	18	21	1	Various	Various	2003	Wood and Metal Shop-Particulate creating devices vented through a baghouse
5490	NONE	NONE	PE-245-03	245	C	T	4	7	1	Various	Various		Plastic Tool Grinding-Particulate creating devices vented through a baghouse
	NONE	NONE	RF-STL-01	PW						---	---	---	Plant-wide gasoline refueling
	NONE	NONE	RF-STL-02	PW						---	---	---	Plant-wide aircraft refueling
	GRP-CL-STL-01	CL-060-01	SB-060-01	60	T		9		1				Spray booth (storage)
	GRP-CL-STL-01	CL-101-01	SB-101-01	101	N		30		1				Spray booth (lockfoam operations)
	GRP-CL-STL-01	CL-101-01	SB-101-07	101	N	P	30		1				Bench spray booth (4 sections) (lockfoam operations) (no painting)
	NONE	NONE	SB-107-01	107	B		2		1				Hood used for hydraulic testing
	GRP-CL-STL-01	CL-101-01	SB-101-04	101	Q		54		2				Spray booth/Lab Hood (Aerosol Cans)
	NONE	NONE	NONE	PW						---	---	---	Plant-wide salt corrosion chambers
	ST-STL-01	NONE	ST-STL-01	PW						---	---	---	Plant-wide gasoline storage tanks (less than 500 gallons)
	ST-STL-01	NONE	ST-76-01	76									Gasoline AST (500 gal)
	ST-STL-01	NONE	ST-102-01	102									Gasoline AST (500 gal)
	NONE	NONE	ST-STL-D	PW						---	---	---	Plant-wide Diesel/Fuel Oil/Jet Fuel Storage Tanks (≤10,000 gallons)
	NONE	NONE	RF-STL-01	PW						---	---	---	Plant-wide Diesel Refueling
	GRP-SC-STL-01	SC-STL-01	VS-221-01	221	B		8		1				Vented bench (soldering & solvents)
	NONE	NONE	WE-STL-01	PW						---	---	---	Plant-wide welding
	NONE	NONE	ST-076-03	76F								2004	Jet fuel 30,000 gal AST
	NONE	NONE	ST-076-04	76F								2004	Jet fuel 30,000 gal AST
	NONE	NONE	ST-076-05	76F								2004	Jet fuel 30,000 gal AST
	NONE	NONE	ST-102-21	102					E				Empty UST (20,000 gal)
	NONE	NONE	ST-120-01	120					S				Vertical Empty Tank(107,000 gal)

STLCO OPERATING PERMIT #	Grouped EQ Point No.	EQ POINT NO.	EMISSION UNIT NO.	LOCATION						MANUFACTURER	MODEL	YEAR IN STALLED	DESCRIPTION
				BLDG	COLUMN				LEVEL				
					LET1	LET2	NUM1	NUM2					
	NONE	NONE	ST-120-02	120					S			Vertical Empty Tank (50,000 gal)	
6114	GRP-CC- STL-01	CC-STL- 01	CC-221-01	221	B		8		1			1995	Cold cleaner for electronics only
	GRP-VD- STL-1	VD-STL- 01	VD-101-03	101	Q		53		2	Farr Manufacturing and Engineering Company	VI-2000-E	2003	Degreasing unit for electronics only
	GRP-VD- STL-01	VD-STL- 01	VD-102-02	102	E		9		1			1982	Vapor degreaser for electronics only

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

Federally Enforceable Requirements

Permit Condition PW001—Visible Emissions

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

Emission Limitations:

- 1) The permittee shall not discharge into the ambient air from any source, not exempted under this rule, any air contaminant of opacity greater than 20 percent.
- 2) If it is an existing source (existing prior to March 24, 1967), which emits less than 25 lbs/hr PM, then the permittee shall not discharge into the ambient air any air contaminant of an opacity greater than 40 percent.
- 3) A source with a 20 percent opacity limit may emit air contaminants with an opacity over 20 percent, but not greater than 40 percent for an aggregate length of time not to exceed six (6) minutes in any 60 minutes.
- 4) Where the presence of uncombined water is the only reason for failure of an emission to meet the requirements, the requirements shall not apply.

Monitoring:

- 1) Conduct visual emission observations of each area of the facility where emission units are present. Every emission unit shall be included in a designated area subject to approval by the permitting authority. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible emissions are observed, then no further observations are required. For emission units where visible emissions are observed with the exception of uncombined water, the source representative shall then conduct a Method 9 observation.
- 2) The following monitoring schedule shall be maintained for each area to be observed:
 - a) Observations must be made once per month. If an exceedance of the opacity limitation is noted, then-
 - b) Weekly observations per section 1) above shall be conducted for a minimum of eight (8) consecutive weeks. Should no exceedance of this regulation be observed during this period then-
 - c) Observations must be made once every two weeks for a period of eight (8) weeks. If an exceedance is noted, monitoring reverts to weekly. Should no exceedance of this regulation be observed during this period then monthly observations shall be resumed.

Recordkeeping:

- 1) Maintain records of all observation results noting whether any air emissions (except for water vapor) were visible from the emission units (Attachment A or similar record).
- 2) Maintain records of all Method 9 tests performed in accordance with this permit condition (Attachment B or similar record).
- 3) Maintain records of all equipment malfunctions and repairs when the malfunction results in an exceedance of the opacity limitation.

- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017; and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of an exceedance of the opacity limit.

Permit Condition PW002—Wood Furniture Manufacturing

10 CSR 10-6.075 and 40 CFR Part 63 Subpart JJ, *National Emission Standards for Wood Furniture Manufacturing Operations*

Emission Limitations:

This facility meets the definition of an incidental wood furniture manufacturer as defined in section §63.801 of this subpart as a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. Therefore, the facility shall be required use no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components and shall not be subject to any other provisions of this subpart.

Monitoring/Recordkeeping/Reporting:

Maintain purchase or usage records demonstrating that the source meets the definition of an incidental wood furniture manufacturer in §63.801 of this subpart.

Permit Condition PW003—Wood Furniture Manufacturing Alternate Operating Scenario A

10 CSR 10-6.075 and 40 CFR Part 63 Subpart JJ, *National Emission Standards for Wood Furniture Manufacturing Operations*

If the permittee uses more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components, the facility would no longer meet the definition of incidental wood furniture manufacturer and would be required to comply with all applicable requirements in 40 CFR Part 63 Subpart JJ.

Permit Condition PW004—Off-Site Waste and Recovery Operations

10 CSR 10-6.075 and 40 CFR Part 63 Subpart DD, *National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations*

Emission Limitations:

- 1) The owner or operator must prepare an initial determination of the total annual HAP quantity in the off-site material received at the plant site. This determination is based on the total quantity of the HAP listed in Table 1 of this subpart as determined at the point-of-delivery for each off-site material stream.
- 2) The owner or operator must prepare a new determination whenever the extent of changes to the quantity or composition of the off-site material received at the plant site could cause the total annual

HAP quantity in the off-site material received at the plant site to exceed the limit of one megagram per year.

- 3) If the facility receives more than one megagram per year, the facility will comply with the additional requirements in 40 CFR Part 63, Subpart DD.

Monitoring/Recordkeeping/Reporting:

The owner must maintain a record of the determination demonstrating the quantity or composition of the total annual HAP quantity in the off-site material received at the waste site. The total annual HAP refers only to HAP listed in Table 1 of the rule.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

EU0010—Paint Mixing Rooms

EMISSION UNIT NUMBER	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
MB-063-01	1491 (OP 5487)	Vented paint mixing room
MB-078-01	6890	Vented paint mixing room

NA = Not Applicable

Permit Condition EU0010-001 (Federally Enforceable)
 10 CSR 10-6.060, *Construction Permits Required*
 St. Louis County Air Pollution Control Program Construction Permits #1491 and 6890

Emission Limitations:

The emission of volatile organic compounds (VOC) and hazardous air pollutant (HAP) from coatings mixed and applied in the combination of mix rooms and paint booths of Building 63 (permit #s 5486, 5487, & 6894) and Building 78 (permit #s 6890, 6891, 6892, & 6893) are limited on a twelve (12) month rolling total as follows:

- 1) VOC: 32 tons per year
- 2) HAP: 32 tons per year

Monitoring/Recordkeeping:

- 1) Maintain monthly and twelve (12) month rolling period records of all VOC and HAP-containing coatings mixed and utilized in the covered units.
- 2) Records shall be completed within thirty (30) days after the end of each calendar month
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC or HAP limit. This notification is not required to be signed or certified by a responsible official.
- 2) Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017; and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the VOC or HAP limit specified in the emission limitations above.

EU0020—Miscellaneous Specialty Coating Emission Units

EMISSION UNIT NUMBER	FEDERAL		St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacture and Rework Facilities	10 CSR 10-5.330: Control of Emissions From Industrial Surface Coating Operations		
AS-STL-01	X	NA	NA	Plant-wide aerospace adhesive/sealant usage
SC-101-01	X	NA	NA	Hood for brush coating applications
SC-101-02	X	NA	NA	Hood for brush coating applications
SC-101-03	X	NA	NA	Hood for brush coating applications
VS-245-01	X	NA	NA	Vented solvent storage area
BF-STL-02	X	NA	NA	Other miscellaneous plant-wide solvent building fugitives

X = Applicable NA = Not Applicable

Permit Condition EU0020-001 (Federally Enforceable)

10 CSR 10-5.295, *Control of Emissions From Aerospace Manufacture and Rework Facilities*

Emission Limitations:

- 1) Specialty coatings shall be limited to a VOC content as expressed in Table I of this rule (See Appendix II).
- 2) Monthly averaging within specialty coating type may be used.
- 3) Permit condition EU0020-001 shall apply only to those activities involving the cleaning or coating of aerospace vehicles and components and shall not include activities excluded or exempted under (3)(I) of the rule.
- 4) The requirements for primers, topcoats, specialty coatings, and chemical milling maskants specified in Subsection (3)(A) of this rule do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 50 gal, and the combined annual total of all such primers and topcoats used at a facility does not exceed 200 gal.

Monitoring/Recordkeeping:

- 1) Maintain a list of coatings in use with category and VOC content as applied.
- 2) Record coating usage on a monthly basis.
- 3) For coating operations that achieve compliance through averaging, maintain records of monthly volume-weighted average VOC content for each regulated coating type.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program,

P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of an exceedance of the VOC content limit specified in the emission limitations above.

EU0030—Aerospace Hand-wipe Solvent Cleaning Building Fugitives

EMISSION UNIT NUMBER	FEDERAL		St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 63, Subpart GG and 10 CSR 10-6.075: Aerospace Manufacturing and Rework Facilities NESHAP – Hand-wipe Solvent Cleaning Operations	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacture and Rework Facilities		
HC-STL-01	X	X	NA	Plant-wide aerospace handwipe cleaning building fugitives

X = Applicable NA = Not Applicable

Permit Condition EU0030-001 (Federally Enforceable)
 10 CSR 10-6.075 and 40 CFR Part 63, Subpart GG, *Aerospace Manufacturing and Rework Facilities-Hand-wipe Solvent Cleaning*
 10 CSR 10-5.295, *Control of Emissions from Aerospace Manufacture and Rework Facilities*

Emission Limitations:

- 1) Housekeeping Measures:
 Permittee shall institute and carry out a housekeeping program that requires the following:
 (§63.744(a))
 - a) Unless the permittee satisfies the requirements of 63.744(a)(4), or (d) below, place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in aerospace production in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs or equivalent used for very small cleaning operations are exempt from this requirement.
 - b) Unless the permittee satisfies the requirements of (d) below, store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.
 - c) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.
 - d) Demonstrate to the Administrator (or delegated state or local authority) that equivalent or better alternative measures are in place compared to the use of closed containers for the solvent-laden materials described in Paragraph (a) of this section, or the storage of solvents described in Paragraph (b) of this section.

- e) The utilization of flip-top bottles (regardless of the open or closed position of the flip-top) with an opening no larger than 0.012868 square inches of area (0.128 inch diameter) meets the equivalency requirements of 63.744(a)(4), or section (d) above, provided the permittee complies with the maintenance plan in Appendix I of this permit.
- 2) Permit condition EU0030-001 shall apply only to those activities involving the cleaning of aerospace vehicles and components and shall not include activities excluded or exempted under sections 63.741 or 63.744 of Subpart GG or other applicable sections.
- 3) Hand-wipe cleaning:
 - a) Each owner or operator of a new or existing affected hand-wipe cleaning operation covered by 40 CFR Part 63, Subpart GG, shall use cleaning solvents that meet one of the following requirements:
 1. Meet one (1) of the composition requirements in Section 63.744 (Table 1) of the Aerospace MACT.
 2. Have a composite vapor pressure of 45 mm Hg or less at 20°Celsius (C). (68°Fahrenheit (F))
 3. Demonstrate that the volume of hand-wipe cleaning solvents used in affected cleaning operations has been reduced by at least 60 percent from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State.
 - b) The following cleaning operations are exempt from the requirements of (3) Hand-wipe cleaning:
 1. Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;
 2. Cleaning during the manufacture, assembly, installation, maintenance or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine, etc.);
 3. Cleaning and surface activation prior to adhesive bonding;
 4. Cleaning of electronic parts and assemblies containing electronic parts;
 5. Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to air heat exchangers and hydraulic fluid systems;
 6. Cleaning of fuel cells, fuel tanks, and confined spaces;
 7. Surface cleaning of solar cells, coated optics, and thermal control surfaces;
 8. Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;
 9. Cleaning of metallic and non-metallic materials used in honeycomb cores during the manufacture or maintenance of these cores, and cleaning of the completed cores used in the manufacture of aerospace vehicles or components;
 10. Cleaning and cleaning solvent usage associated with research and development, quality control, and laboratory testing;
 11. Cleaning of aircraft transparencies, polycarbonate or glass substrates;
 12. Cleaning operations, using nonflammable liquids, conducted within five (5) feet of energized electrical systems. Energized electrical systems means AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections; and
 13. Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR 82.4.

Monitoring:

The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined as follows: (63.750(b)(1))

- 1) For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined by using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods. (63.750(b)(1))
- 2) The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260-91 (incorporated by reference as specified in 63.14 of subpart A of this part) and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using the manufacturer's data, standard engineering texts or other equivalent methods. The following equation shall be used to determine the composite vapor pressure: (63.750(b)(2))

$$PP_c = \frac{\sum_{i=1}^n \frac{(W_i)(VP_i) / MW_i}{\frac{W_w}{MW_w} + \sum_{e=1}^n \frac{W_e}{MW_e} + \sum_{i=1}^n \frac{W_i}{MW_i}}$$

Where:

W_i = Weight of the "i"th VOC compound, grams.

W_w = Weight of water, grams.

W_e = Weight of non-HAP, nonVOC compound, grams.

MW_i = Molecular weight of the "i"th VOC compound, g/g-mole.

MW_w = Molecular weight of water, g/g-mole.

MW_e = Molecular weight of exempt compound, g/g-mole.

PP_c = VOC composite partial pressure at 20°C, mm Hg.

VP_i = Vapor pressure of the "i"th VOC compound at 20°C, mm Hg. (§63.750(b))

Recordkeeping:

- 1) Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the information specified below:
 - a) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. (§63.752(b)(1))
 - b) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations: (§63.752(b)(2))
 1. The name of each cleaning solvent used; and (§63.752(b)(2)(i))
 2. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements. (§63.752(b)(2)(ii))
 3. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records. (§63.752(b)(2)(iii))
 - c) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2): (§63.752(b)(3))
 1. The name of each cleaning solvent used: (§63.752(b)(3)(i))
 2. The composite vapor pressure of each cleaning solvent used: (§63.752(b)(3)(ii))
 3. All vapor pressure test results, if appropriate, data and calculations used to determine the composite vapor pressure of each cleaning solvent; and (§63.752(b)(3)(iii))

4. The amount (in gallons) of each cleaning solvent used each month at each operation.
(§63.752(b)(3)(iv))
- 2) For each cleaning solvent used for exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b): (§63.752(b)(4))
 - a) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and (§63.752(b)(4)(i))
 - b) A list of the exempt processes to which the cleaning operation applies. (§63.752(b)(4)(ii))
- 3) For cleaning solvents subject to 10 CSR 10-5.295, maintain:
 - a) A list of materials with corresponding water contents for aqueous and semi-aqueous hand-wipe cleaning solvents;
 - b) A current list of cleaning solvents in use with their respective vapor pressure, or for blended solvents, VOC composite vapor pressure for all vapor pressure compliant hand-wipe cleaning solvents. This list shall include the monthly amount of each applicable solvent used; and
 - c) A current list of exempt hand-wipe cleaning processes for all cleaning solvents with a vapor pressure greater than forty-five (45) mmHg used in exempt hand-wipe cleaning operations. This list shall include the monthly amount of each applicable solvent used.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Each owner or operator of a hand wipe solvent operation subject to MACT Subpart GG shall submit the following information to St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102:
 - a) Semi-annual reports occurring every six (6) months that identify:
 1. Any instance where a non-compliant cleaning solvent is used for a nonexempt hand-wipe cleaning operation;
 2. A list of any new cleaning solvents used for hand-wipe cleaning in the previous six (6) months, and as appropriate, their composite vapor pressure or notification that they comply with the composition requirements;
 3. If the operations have been in compliance for the semi-annual period, a statement that the cleaning operations have been in compliance with the applicable standards.
 - a) Semi-annual reports are due by:
 1. October 1st for monitoring which covers the January through June time period, and
 2. April 1st for monitoring which covers the July through December time period.

EU0040—Cold Cleaners

EMISSION UNIT NUMBER	FEDERAL 10 CSR 10-5.300: Control of Emissions from Solvent Metal Cleaning	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
CC-101-04	X	7264	Cold cleaner #1, 24.7"x20.5"x6.5"
CC-101-06	X	7365	Cold cleaner #2, 32"x22"x10"
CC-101-07	X	7266	Cold cleaner #3, 39"x19.5"x21.5"
CC-101-08	X	7267	Cold cleaner #4, 96"x20.5"x19"
CC-102-02	X	7268	Cold cleaner #5, 32"x22"x10"
CC-102-03	X	7269	Cold cleaner #6, 20"x35.5"x8"
CC-245-01	X	7270	Cold cleaner #7, 30"x28"x10"
CC-102-01	X	0777 (OP 4374)	Cold cleaner for hydraulic equipment
CC-221-01	NA	6114	Cold cleaner for electronics only

X = Applicable NA = Not Applicable

Permit Condition EU0040-001 (Federally Enforceable)
 10 CSR 10–5.300, *Control of Emissions from Solvent Metal Cleaning*

Emission Limitation:

- 1) Equipment specifications (section (3)(A)1 Cold Cleaners):
 - a) The cold cleaning solvent vapor pressure shall not exceed 1.0 millimeters of Mercury (mmHg) at twenty degrees Celsius (20°C) (sixty-eight degrees Fahrenheit (68°F)).
 - b) Each cold cleaner will have a cover, which will prevent the escape of solvent vapors while in the closed position, or enclosed reservoir, which will limit the escape of solvent vapors whenever parts are not being processed in the cleaner.
 - c) Exemptions under 10 CSR 10-5.300 of the regulation may apply, including the following:
 1. Cold cleaners with liquid surface areas of one (1) square foot or less or maximum capacities of one (1) gallon or less;
 2. Solvent cleaning operations that meet the emission control requirements of 10 CSR 10-5.295, 10 CSR 10-5.330, 10 CSR 10-5.340 or 10 CSR 10-5.442;
 3. Solvent metal cleaning operations regulated under 40 CFR 63 subpart T;
 4. The cleaning of electronic components, medical devices or optical devices;
 5. Hand cleaning/wiping operations; and
 6. Flush cleaning operations;
 - d) Alternate methods for reducing cold cleaning emissions may be used if the permittee shows the emission control is at least equivalent to the control in (a) above and is approved by the Director.
 - e) When one (1) or more of the following conditions exist the design of the cover shall be such that it can easily be operated with one (1) hand and without disturbing the solvent vapors in the tank. (For covers larger than ten (10) square feet, this shall be accomplished by either mechanical assistance or by a power system).
 1. The solvent volatility is greater than 0.3 psi at one hundred degrees Fahrenheit (100°F)

2. The solvent is agitated.
 3. The solvent is heated.
 - f) A drainage facility allowing parts to drain while the cover is closed is required.
 - g) If an internal drainage facility as in (f) cannot fit into the cleaning system and the solvent volatility is less than 0.6 psi at one hundred degrees Fahrenheit (100°F), then the cold cleaner shall have an external drainage facility which provides for the solvent to drain back into the solvent bath.
 - h) Solvent sprays shall be a solid fluid stream and at a pressure which does not cause splashing above or beyond the freeboard.
 - i) A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment or in a location readily visible during operation of the equipment.
 - j) Any cold cleaner which uses a solvent that has a solvent volatility greater than 0.6 psi at one hundred degrees Fahrenheit (100°F) or heated above one hundred twenty degrees Fahrenheit (120°F) must have one (1) of the following control devices:
 1. A freeboard ratio of at least 0.75
 2. Water cover (solvent must be insoluble in and heavier than water)
 3. Another control system that has a mass balance demonstrated emission reduction efficiency of at least sixty-five percent (65%) and is approved by the Director prior to use.
- 2) Operating procedures (section (3)(B)1 Cold Cleaners):
- a) Covers shall be closed whenever parts are not being handled in the cleaners, or solvent must drain into an enclosed reservoir.
 - b) Cleaned parts shall be drained in the free board area for fifteen (15) seconds, or until dripping stops, whichever is longer.
 - c) Whenever a cold cleaner fails to perform within the operating parameters established by this rule, the unit shall be shut down and secured until trained service personnel are able to restore operation within the established parameters.
 - d) Solvent leaks shall be repaired immediately, or the degreaser shall be shut down and the leaks secured until they can be more permanently repaired.
 - e) Waste material removed from a cold cleaner shall be disposed of by one of the methods listed in the rule or equivalent (after the Director's approval) and in accordance with 10 CSR 25, as applicable.
 - f) Waste solvent shall be stored in closed containers only.
- 3) Operator and Supervisor Training (section (3)(C)):
- a) Persons who operate a cold cleaner shall be trained in the operational and equipment requirements specified in this rule.
 - b) The supervisor of any person who operates a cold cleaner shall receive equal or greater operational training than the operator.
 - c) Persons who operate a cold cleaner shall receive a procedural review at least once each twelve (12) months.

Monitoring/ Recordkeeping:

- 1) Monthly records of the following shall be maintained:
 - a) Types and amounts of solvent containing waste material from cleaning or degreasing operations:
 1. Transferred to a contract reclamation service or disposal facility
 2. Distilled on the premises
 - b) Maintenance and repair logs for the cold cleaner and any associated control equipment.

- 2) For cold cleaners subject to 10 CSR 10-5.300 the following records for each purchase of cold cleaning solvent shall be maintained:
 - a) The name and address of the solvent supplier;
 - b) The date of purchase;
 - c) The type of solvent; and
 - d) The vapor pressure of the solvent in mmHg at 20°C (68°F)
- 3) Keep a record of the cold cleaner training and procedural review for each employee.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the vapor pressure requirements in 1) a) of the emission limitation above.

Permit Condition EU0040-002 (Federally Enforceable)
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10 CSR 10-6.060, <i>Construction Permits Required</i> St. Louis County Air Pollution Control Program Construction Permit #6114

Emission Limitations:

- 1) This operation is limited to 550 gallons of solvent on a twelve (12) month rolling total.
- 2) The average solvent weight is limited to ten (10) pounds per gallon.

Monitoring/Recordkeeping:

Maintain monthly records showing the volume and weight of each material added to the unit and the twelve (12) month rolling total.

Reporting:

Should the records show that the limitations established above have been exceeded, Boeing shall notify the St. Louis County Air Pollution Control Program by the next working day. This notification is not required to be certified by a responsible official.

EU0050—Spray Gun Cleaning Operations

EMISSION UNIT NUMBER	FEDERAL			St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacture and Rework Facilities	40 CFR Part 63, Subpart GG and 10 CSR 10-6.075: Aerospace Manufacturing and Rework Facilities NESHAP – Spray Gun Cleaning Operations and	10 CSR 10-5.300: Control of Emissions from Solvent Metal Cleaning		
CC-STL-01B	X	X	NA	NA	Plant-wide spray gun cleaning

X = Applicable NA = Not Applicable

Permit Condition EU0050-001 (Federally Enforceable)
 10 CSR 10-6.075 and 40 CFR Part 63, Subpart GG, *Aerospace Manufacturing and Rework Facilities NESHAP – Spray Gun Cleaning*
 10 CSR 10-5.295, *Control of Emissions from Aerospace Manufacture and Rework Facilities*

Emission Limitations:

- 1) Each owner or operator of a new or existing spray gun cleaning operation shall use one or more of the techniques, or their equivalent, specified in this section. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below de minimis levels specified in 63.741 (f) are exempt from these requirements.
 - a) Enclosed Systems. Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing the cleaning solvent through the gun. If leaks are found during the monthly inspection required in 63.751 (a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued.
 - b) Nonatomized cleaning. Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.
 - c) Disassembled spray gun cleaning. Disassemble the spray gun and clean the components in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components.
 - d) Atomizing cleaning. Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions.
- 2) Permittee shall institute and carry out a housekeeping program that requires the following:
 - a) Unless the permittee satisfies the requirements of (d) of this section, place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in aerospace production in

- closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain, as practicable, the vapors of the cleaning solvent. Cotton-tipped swabs or equivalent used for very small cleaning operations are exempt from this requirement. (§63.744(a)(1))
- b) Unless the permittee satisfies the requirements of (d) below, store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (§63.744(a)(2))
 - c) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. (§63.744(a)(3))
 - d) Demonstrate to the Administrator (or delegated State or local authority) that equivalent or better alternative measures are in place compared to the use of closed containers for the solvent-laden materials described in Paragraph (a) of this section, or the storage of solvents described in Paragraph (b) of this section. (§63.744(a)(4))
- 3) Permit conditions EU0050-001 shall apply only to those activities involving the cleaning of spray guns used for the application of coatings to production aerospace vehicles, components, and parts and shall not include activities excluded or exempted under Sections 63.741 or 63.743 of Subpart GG or other applicable sections.

Monitoring:

Each owner or operator using an enclosed spray gun cleaner shall visually inspect the seals and all other potential sources of leaks associated with each enclosed spray gun cleaner system at least once per month. Each inspection shall occur while the system is in operation.

Recordkeeping:

- 1) A record of all leaks from enclosed spray gun cleaners that includes for each leak found:
 - a) Source identification
 - b) Date leak was discovered
 - c) Date leak was repaired
- 2) Each owner or operator using an enclosed spray gun cleaner shall keep records of the visual inspections.
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Each owner or operator of a spray gun cleaning operation subject to MACT Subpart GG shall submit the following information to St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102:
 - a) Semi-annual reports occurring every six (6) months that identify:
 1. Any instance where a non-compliant spray gun cleaning method is used.
 2. Any instance where leaks from enclosed spray gun cleaners are not repaired within 15 days.
 3. If the operations have been in compliance for the semi-annual period, submit a statement that the cleaning operations have been in compliance with the applicable standards.
 - a) The permittee shall submit semi-annual reports by:
 1. October 1st for monitoring which covers the January through June time period, and

2. April 1st for monitoring which covers the July through December time period

EU0060—Coating Lines

EMISSION UNIT NUMBER	FEDERAL			St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 63, Subpart GG and 10 CSR 10-6-075: Aerospace Manufacturing and Rework Facilities NESHAP – Primers and Topcoats	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacturing and Rework Facilities	10 CSR 10-5.330: Control of Emissions From Industrial Surface Coating Operations		
SB-063-01	X	X	NA	1490 (OP 5486)	Spray booth (paint & others)(aerospace production and R&D)
SB-063-02	X	X	NA	6894	Spray booth (paint & others)(aerospace production and R&D)
SB-066-01	X	X	NA	5368	Spray booth (R&D and aerospace production) (painting and sanding)
SB-078-01	X	X	NA	6891	Spray booth (aerospace production and R&D)
SB-078-02	X	X	NA	6892	Spray booth (aerospace production and R&D)
SB-078-03	X	X	NA	6893	Spray booth (aerospace production and R&D)
SB-101-02	X	X	NA	5737	Spray booth (aerospace production) (painting and sanding)
SB-101-03	NA	NA	NA	NA	Lab hood for conformal coating of parts
SB-101-29	NA	X	NA	1624 (OP 5614)	Spray booth (sealants and adhesives)
SB-101-33	X	X	NA	NA	Spray booth (aerospace production) (painting and sanding)
SB-101-34	NA	NA	NA	NA	Spray booth (Arc Spray)
SB-101-39	X	X	NA	3554	Spray booth (aerospace production) (painting and sanding)
SB-101-40	X	X	NA	NA	Spray booth (aerospace production) (painting and sanding)
SB-101-40A	X	X	NA	NA	Spray booth (aerospace production) (painting and sanding)
SB-101-45	NA	NA	NA	6208	Robotic Sprayer (R&D)
SB-101-46	X	X	NA	6757	Paint booth (aerospace production)
SB-060-01	NA	NA	NA	NA	Spray booth (cans of primer) (R&D)
SB-101-47	X	X	NA	7019	Two bay spray booth (aerospace production)
SB-102-02	NA	NA	NA	5140	Bench spray booth (lab) (epoxy spray) (R&D)
SB-102-03	X	X	NA	1042 (OP 4902)	Paint booth (aerospace) (mostly R&D) (some aerospace production)
SB-102-04	NA	NA	NA		Spray Booth (R&D)
SB-248-01	X	X	NA	5741	Paint booth (R&D and aerospace production)
SB-248-02	NA	NA	NA	1475 (OP 5443)	Spray booth (R&D)

EMISSION UNIT NUMBER	FEDERAL			St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 63, Subpart GG and 10 CSR 10-6-075: Aerospace Manufacturing and Rework Facilities NESHAP – Primers and Topcoats	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacture and Rework Facilities	10 CSR 10-5.330: Control of Emissions From Industrial Surface Coating Operations		
SB-248-03	NA	NA	NA	1621 (OP 5690)	Spray booth (R&D)
SB-248-04	NA	NA	NA	1474 (OP 5442)	Spray booth (R&D)
SB-248-05	NA	NA	NA	5331	Spray booth (R&D)
SB-245-02	X	X	NA	1709 (OP 5701)	Paint booth (tooling, aerospace production, and maintenance)
SB-245-03	X	X	NA	NA	Spray booth (aerospace production)
SB-245-05	NA	NA	NA		Small paint booth (aerosol cans and grinding)
SB-245-07	NA	NA	NA	6859	Spray booth (R&D)
SB-245-08	NA	NA	NA	NA	Spray booth (R&D and non-aerospace production)
SB-245-09	NA	NA	NA	NA	Spray booth (R&D and non-aerospace production)

X = Applicable NA = Not Applicable

Permit Condition EU0060-001 (Federally Enforceable)

10 CSR 10-6.075 and 40 CFR Part 63, Subpart GG, *Aerospace Manufacturing and Rework Facilities NESHAP – Primers and Topcoats*

Emission Limitations:

- 1) Primers:
 - a) Shall be limited to a VOC content of 350 grams per liter or 2.9 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.
 - b) Shall be limited to an organic HAP content of 350 grams per liter or 2.9 pounds per gallon (organic HAP content is measured less water and exempt solvent) as applied.
 - c) The VOC content may be used as a surrogate for the organic HAP content.
- 2) Topcoats:
 - a) Shall be limited to a VOC content of 420 grams per liter or 3.5 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.
 - b) Shall be limited to an organic HAP content of 420 grams per liter or 3.5 pounds per gallon (organic HAP content is measured less water and exempt solvent) as applied.
 - c) The VOC content may be used as a surrogate for the organic HAP content.
- 3) Averaging (as described in 63.745(e) (2) & 750 (d)) can be used to meet the Primer and Topcoat limits.
- 4) Work Practice Standards:
 - a) Primers and topcoats shall be handled in a manner to minimize spills.
 - b) Primers and topcoats shall be applied in a manner consistent with the requirements of this rule.

- 5) Inorganic HAP Control. The airflow shall be exhausted through a dry particulate filter system that meets the limits in 40 CFR 63.745(g) by Method 319 when primers or topcoats containing inorganic HAPs are being sprayed. (§63.752(d))
- 6) Permit conditions EU0060-001 shall apply only to those activities involving the coating of production aerospace vehicles, components, and parts and shall not include activities excluded or exempted under Sections 63.741 or 63.745 of Subpart GG or other applicable sections.
- 7) The requirements for primers and topcoats in 40 CFR 63.745 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 50 gal and the combined annual total of all such primers and topcoats used at a facility does not exceed 200 gal.
- 8) The requirements for primers and topcoats do not apply to the application of:
 - a) Specialty coatings, including those coatings listed as specialty coatings in Appendix A to Subpart GG,
 - b) Coatings used on space vehicles designed to travel beyond the limit of the earth's atmosphere, except for depainting operations, or
 - c) Coatings associated with the rework of antique aerospace vehicles or components.
- 9) The requirements for inorganic hazardous air pollutant control and application techniques do not apply to those operations during which a specialty coating is being applied or a non-aerospace vehicle, component, or part is being coated.
- 10) Dry particulate filter systems operated in accordance with the manufacturer's instructions are not required to have a start-up, shutdown, and malfunction plan. (§63.743(b))

Monitoring:

For dry filters, install differential pressure gauge across filter bank. Continuously monitor the pressure drop when inorganic HAP containing primers and topcoats are spray applied and take corrective action if pressure drop falls outside the manufacturer's limits.

Recordkeeping:

- 1) Primers and Topcoats
 - a) Record the name and VOC content as applied of each primer and topcoat used in production areas.
 - b) For low HAP content primers and topcoats recordkeeping complying with 63.752 (c)(3) may be used.
 - c) If averaging is used to meet the primer and topcoat limits recordkeeping shall comply with 63.752 (c)(4).
- 2) Inorganic HAP Control
 - a) Record the pressure drop (either electronically or manually) once each operating shift that inorganic HAP containing primer or topcoat is spray applied. (§63.752(d))
 - b) The pressure drop records are deemed to be complete if 95 percent of the potential readings are recorded for all the booths subject to this rule in any six (6) month period.
 - c) For this provision, a shift is defined as an 8-hour period.
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Each owner or operator of coating operation subject to MACT Subpart GG shall submit the following information to St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102:
 - a) Semi-annual reports occurring every six (6) months that identify:
 1. Any times when a primer or topcoat application containing inorganic HAP was not immediately shut down when the pressure drop across a dry particulate filter was outside limit(s) as specified by the filter or booth manufacturer.
 2. Any times where primers or topcoats exceeded the appropriate VOC or organic HAP limit.
 3. If the operations have been in compliance for the semi-annual period, submit a statement that the operations have been in compliance with the applicable standards.
 - b) Annual reports that identify the number of times the pressure drop was outside the limit(s) as specified by the filter or booth manufacturer.
 - c) The permittee shall submit semi-annual reports by:
 1. October 1st for monitoring which covers the January through June time period, and
 2. April 1st for monitoring which covers the July through December time period

Permit Condition EU0060-002 (Federally Enforceable)
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10 CSR 10-6.060, <i>Construction Permits Required</i>

Requirements of Construction Permit Number: #5331 Special Project Lab Spray Paint Booth

Emission Limitations:

Unit is limited to 0.62 tons VOC emitted from topcoats, primers and specialty coatings per year on a twelve (12) month rolling total.

Monitoring/Recordkeeping:

Monthly and twelve (12) month rolling period records of all aerospace topcoats, primers and specialty coatings utilized in the paint booths shall be maintained. These records shall include:

- 1) The amounts utilized.
- 2) The VOC content of each material.
- 3) Monthly calculations, which demonstrate compliance with the emission limits established above.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #5368 Spray Paint Booth Building 66

Emission Limitations:

Unit is limited to two tons VOC emitted from topcoats, primers and specialty coatings per year on a twelve (12) month rolling total.

Monitoring/Recordkeeping:

Monthly and twelve (12) month rolling period records of all aerospace topcoats, primers and specialty coatings utilized in the paint booths shall be maintained. These records shall include:

- 1) The amounts utilized.

- 2) The VOC and HAP(s) content of each material.
- 3) Monthly calculations, which demonstrate compliance with the emission limits established above.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #5737 Parts Paint Spray Booth

Emission Limitations:

Unit is limited to 12.5 tons VOC emitted from topcoats, primers and specialty coatings per year on a twelve (12) month rolling total.

Monitoring/Recordkeeping:

Monthly and twelve (12) month rolling period records of all aerospace topcoats, primers and specialty coatings utilized in the paint booths shall be maintained. These records shall include:

- 1) The amounts utilized.
- 2) The VOC content of each material.
- 3) Monthly calculations, which demonstrate compliance with the emission limits established above.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #6208 (Robotic Paint Spray Booth)

Emission Limitations:

Topcoats, primers and specialty coatings usage is limited to 39,990 pounds of VOC emitted per year on a twelve (12) month rolling average.

Monitoring/Recordkeeping:

- 1) Monthly records of topcoats, primers and specialty coatings usage and VOC content, as well as the twelve (12) month rolling average shall be maintained on site.
- 2) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #3554 (Spray Booth), #6757 (Parts Paint Spray Booth), and #7019 (Two Bay Spray Booth)

Emission Limitations:

The combined emissions of VOC and HAP from all materials utilized in spray booths #3554, #6757, and #7019 are limited on a twelve (12) month rolling total as follows:

- 1) VOC Thirty-nine and nine tenths (39.9) tons per year
- 2) HAP Twenty (20) tons per year

Monitoring/Recordkeeping:

- 1) Boeing shall maintain records of all VOC and HAP containing coatings utilized in this booth each month on forms provided by, or approved by, the Program Manager.
- 2) These forms shall be completed within thirty (30) days of the end of each calendar month, maintained on site for the latest sixty (60) month period and made available to the Program Manager, or his designated agent at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC or HAP limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #5741 (Large R & D Parts Paint Spray Booth Building 248)

Emission Limitations:

The emission of VOC and HAP from all materials utilized in this booth are limited on a twelve (12) month rolling total, as follows:

- 1) VOC: Limited to sixteen (16) tons per year
- 2) HAP: Limited to sixteen (16) tons per year
- 3) Individual HAP: Limited to less than ten (10) tons per year

Monitoring/Recordkeeping:

- 1) Boeing shall maintain records of all VOC and HAP containing coatings utilized in this booth each month on forms provided by, or approved by, the Program Manager.
- 2) These forms shall be completed within thirty (30) days of the end of each calendar month, maintained on site for the latest sixty (60) month period and made available to the Program Manager, or his designated agent at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC or HAP limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #6859 (Spray Booth)

Emission Limitations:

The emission of VOC and HAP from coatings applied in the spray booth are limited, on a twelve (12) month rolling total, as follows:

- 1) VOC two (2) tons per year

2) HAP two (2) tons per year

Recordkeeping/Monitoring:

- 1) Boeing shall maintain records of all VOC and HAP containing coatings utilized in this booth each month on forms provided by, or approved by, the Program Manager.
- 2) These forms shall be completed within thirty (30) days of the end of each calendar month, maintained on site for the latest sixty (60) month period and made available to the Program Manager, or his designated agent at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC or HAP limit. This notification is not required to be signed or certified by a responsible official.

Requirements of Construction Permit Number: #1490, #6891, #6892, #6893, and #6894 (63 and 78 Paint Spray Booths)

Emission Limitations:

The emission of VOC and HAP from coatings mixed and applied in the combination of mix rooms and paint booths of Building 63 (permit #s 5486, 5487, & 6894) and Building 78 (permit #s 6890, 6891, 6892, & 6893) are limited on a twelve (12) month rolling total as follows:

- 1) VOC: 32 tons per year
- 2) HAP: 32 tons per year

Monitoring/Recordkeeping:

- 1) Boeing shall maintain records of all VOC and HAP containing coatings utilized in this booth each month on forms provided by, or approved by, the Program Manager.
- 2) These forms shall be completed within thirty (30) days of the end of each calendar month, maintained on site for the latest sixty (60) month period and made available to the Program Manager, or his designated agent at any reasonable time.

Reporting:

Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the VOC or HAP limit. This notification is not required to be signed or certified by a responsible official.

Permit Condition EU0060-003 (Federally Enforceable)
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10 CSR 10-5.295, <i>Control of Emissions From Aerospace Manufacture and Rework Facilities</i>

Emission Limitations:

- 1) Specialty coatings shall be limited to VOC contents in Table I of this rule. (See Appendix II)
- 2) Monthly averaging within specialty coating type may be used.
- 3) Exemptions listed under (3)(I) of the rule apply.
- 4) Primers shall be limited to a VOC content of 350 grams per liter or 2.9 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.
- 5) Topcoats shall be limited to a VOC content of 420 grams per liter or 3.5 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.

- 6) Permit condition EU0060-003 is only applicable to the actual manufacture and rework of production aerospace vehicles and components.
- 7) The requirements for primers, topcoats, specialty coatings, and chemical milling maskants as specified in this regulation do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 50 gal and the combined annual total of all such primers, topcoats, specialty coatings, and chemical milling maskants used at a facility does not exceed 200 gal.

Monitoring/Recordkeeping:

- 1) Maintain a list of coatings in use with category and VOC content as applied.
- 2) Record coating usage on a monthly basis.
- 3) For coating operations that achieve compliance through coating averaging, maintain records of monthly volume-weighted average VOC content for each regulated coating type.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the emission limitations.

EU0070—Coating Lines Alternate Operating Scenario A
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EMISSION UNIT NUMBER	40 CFR Part 63, Subpart GG and 10 CSR 10-6.075: Aerospace Manufacturing and Rework Facilities NESHPAP – Primers and Topcoats	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacture and Rework Facilities	10 CSR 10-5.330: Control of Emissions From Industrial Surface Coating Operations	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
SB-060-01	X	X	NA	NA	Spray booth (cans of primer) (R&D)
SB-101-29	X	X	NA	1624 (OP 5614)	Spray booth (sealants and adhesives)
SB-101-03	X	X	NA	NA	Lab hood for conformal coating of parts
SB-101-34	X	X	NA	NA	Spray booth (arc spray)
SB-101-45	X	X	NA	6208	Robotic sprayer (R&D)
SB-248-02	X	X	NA	1475 (OP 5443)	Spray booth (R&D)
SB-248-03	X	X	NA	1621 (OP 5690)	Spray booth (R&D)
SB-248-04	X	X	NA	1474 (OP 5442)	Spray booth (R&D)
SB-248-05	X	X	NA	5331	Spray booth (R&D)
SB-245-07	X	X	NA	6859	Spray Booth (Aerospace production, R&D and non-aerospace production)
SB-245-08	X	X	NA	NA	Spray booth (R&D and non-aerospace production)
SB-245-09	X	X	NA	NA	Spray booth (R&D and non-aerospace production)

X = Applicable NA = Not Applicable

DESCRIPTION OF ALTERNATE SCENARIO

This alternate scenario allows these booths to be used for spray coating application of production parts with aerospace primers, topcoats and specialty coatings. These booths are currently used for an activity that is exempt from 10 CSR 10-5.295 and 40 CFR Part 63, Subpart GG requirements, such as research and development, maintenance, or arc spray. The coating of aerospace production parts in any of these booths with aerospace primers, topcoats, and specialty coatings will subject these booths to the applicable requirements listed above.

Applicable requirements are the same as listed above under EU0060—Coating Lines.

EU0080—Fugitive Painting

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EMISSION UNIT NUMBER	40 CFR Part 63, Subpart GG and 10 CSR 10-6.075: Aerospace Manufacturing and Rework Facilities NESHAP – Primers and Topcoats	10 CSR 10-5.295: Control of Emissions From Aerospace Manufacturing and Rework Facilities	10 CSR 10-5.330: Control of Emissions from Industrial Surface Coating Operations	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
BF-STL-01	X	X	NA	NA	Plant-wide Aerospace Fugitive Painting

X = Applicable

NA = Not Applicable

Permit Condition EU0080-001 (Federally Enforceable)
10 CSR 10-6.075 and 40 CFR Part 63, Subpart GG, <i>Aerospace Manufacturing and Rework facilities NESHAP – Primers and Topcoats</i>

Emission Limitations:

- 1) Primers:
 - a) Shall be limited to a VOC content of 350 grams per liter or 2.9 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.
 - b) Shall be limited to an organic HAP content of 350 grams per liter or 2.9 pounds per gallon (organic HAP content is measured less water and exempt solvent) as applied.
 - c) The VOC content may be used as a surrogate for the organic HAP content.
- 2) Topcoats:
 - a) Shall be limited to a VOC content of 420 grams per liter or 3.5 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.
 - b) Shall be limited to an organic HAP content of 420 grams per liter or 3.5 pounds per gallon (organic HAP content is measured less water and exempt solvent) as applied.
 - c) The VOC content may be used as a surrogate for the organic HAP content.
- 3) Averaging (as described in 63.745(e)(2) & 750 (d)) can be used to meet the Primer and Topcoat limits.
- 4) Work Practice Standards:
 - a) Primers and topcoats shall be handled in a manner to minimize spills.
 - b) Primers and topcoats shall be applied in a manner consistent with the requirements of this rule.
- 5) Areas where it is not technically feasible to paint parts in a booth, as identified in the Title V permit, are not required to meet particulate control requirements of 63.745 (g)(1) through (g)(3). In addition to the exceptions listed in 63.745 (g)(4)(i) through (g)(4)(viii), the following operations are not feasible within a paint booth:
 - a) The part is too large to be painted in a booth.
 - b) The coatings are not spray applied.
 - c) The part would need to be removed from a fixture/tool to be painted in a booth.
 - d) Rework on parts that have been assembled such that a tool is no longer available to place the assembled parts in a booth.
 - e) Permitting authority approval obtained.

- 6) Permit conditions EU0080-001 shall apply only to those activities involving the coating of production aerospace vehicles, components, and parts and shall not include activities excluded or exempted under Sections 63.741 or 63.745 of Subpart GG or other applicable sections.
- 7) The requirements for primers and topcoats in 40 CFR 63.745 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 50 gal and the combined annual total of all such primers and topcoats used at a facility does not exceed 200 gal.
- 8) The requirements for primers and topcoats do not apply to the application of:
 - a) Specialty coatings, including those coatings listed as specialty coatings in Appendix A to Subpart GG,
 - b) Coatings used on space vehicles designed to travel beyond the limit of the earth's atmosphere, or
 - c) Coatings associated with the rework of antique aerospace vehicles or components.
- 9) The requirements for inorganic hazardous air pollutant control and application techniques do not apply to those operations during which a specialty coating is being applied or a non-aerospace vehicle, component, or part is being coated.

Monitoring/Recordkeeping:

- 1) Record the name and VOC content as applied of each primer and topcoat used in production areas.
- 2) For low HAP content primers and topcoats recordkeeping complying with 63.752 (c)(3) may be used.
- 3) If averaging is used to meet the primer and topcoat limits recordkeeping shall comply with 63.752 (c)(4).
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Each owner or operator of coating operation subject to MACT Subpart GG shall submit semi-annual reports that identify the following information to St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102:
 - a) Report any times where primers or topcoats exceeded the appropriate VOC or organic HAP limit.
 - b) If the operations have been in compliance for the semi-annual period, submit a statement that the operations have been in compliance with the applicable standards.
 - c) The permittee shall submit semi-annual reports by:
 1. October 1st for monitoring which covers the January through June time period, and
 2. April 1st for monitoring which covers the July through December time period.

Permit Condition EU0080-002 (Federally Enforceable)

10 CSR 10-5.295, *Control of Emissions From Aerospace Manufacturing and Rework Facilities*

Emission Limitations:

- 1) Specialty coatings shall be limited to a VOC content in Table I of this rule. (See Appendix II)
- 2) Monthly averaging within specialty coating type may be used.
- 3) Exemptions listed under (3)(I) of the rule apply.
- 4) Primers shall be limited to a VOC content of 350 grams per liter or 2.9 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.

- 5) Topcoats shall be limited to a VOC content of 420 grams per liter or 3.5 pounds per gallon (VOC content is measured less water and exempt solvent) as applied.
- 6) Permit condition EU0080-002 is only applicable to the actual manufacture and rework of production aerospace vehicles and components.
- 7) The requirements for primers, topcoats, specialty coatings, and chemical milling maskants as specified in this regulation do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at a facility does not exceed 50 gal and the combined annual total of all such primers, topcoats, specialty coatings, and chemical milling maskants used at a facility does not exceed 200 gal.

Monitoring/Recordkeeping:

- 1) Maintain a list of coatings in use with category and VOC content as applied.
- 2) Record coating usage on a monthly basis.
- 3) For coating operations that achieve compliance through coating averaging, maintain records of monthly volume-weighted average VOC content for each regulated coating type.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the emission limitations above.

EU0090—Combustion Sources

FEDERAL

EMISSION UNIT NUMBER	40 CFR Part 60 Subpart D _c and 10 CSR 10-6.070, 10 MMBtu-100MMBtu: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	40 CFR Part 60 Subpart D _c and 10 CSR 10-6.070, 30 MMBtu-100MMBtu: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds	10 CSR 10-5.570, Control of Sulfur Emissions from Stationary Boilers	10 CSR 10-5.510 Control of Emissions of Nitrogen Oxide	10 CSR 10-5.030, Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
CS-066-01	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
CS-066-02	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
CS-066-03	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
CS-066-04	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in an emergency (6.3 MMBtu/hr)
CS-111-03	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in emergency (6.3 MMBtu/hr)
CS-221-01	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in emergency (3.3475 MMBtu/hr)
CS-221-02	NA	NA	NA	NA	NA	X	NA	Natural gas boiler/fuel oil available in emergency (3.3475 MMBtu/hr)
CS-063-03	X	NA	NA	NA	NA	X	6895	Natural gas boiler (20.4 MMBtu/hr)
CS-078-01	X	NA	NA	NA	NA	X	6839	Natural gas boiler (24.494 MMBtu/hr)
CS-078-02	X	NA	NA	NA	NA	X	6840	Natural gas boiler (24.494 MMBtu/hr)
CS-101-01	NA	NA	X	NA	NA	X	NA (OP 3078)	Natural gas/ fuel oil boiler (45.0 MMBtu/hr)
CS-101-02	NA	NA	X	NA	NA	X	NA (OP 3078)	Natural gas/ fuel oil boiler (45.0 MMBtu/hr)
CS-101-07	X	X	X	NA	NA	X	6835	Natural gas/ fuel oil boiler (41.3 MMBtu/hr)
CS-101-08	X	X	X	NA	NA	X	6836	Natural gas/ fuel oil boiler (41.3 MMBtu/hr)
CS-102-05	X	X	X	NA	X	X	6980	Natural gas/ fuel oil boiler (84.724 MMBtu/hr)
CS-102-02	NA	NA	X	NA	NA	X	NA (OP 3079)	Natural gas/ fuel oil boiler (33.48 MMBtu/hr)

EMISSION UNIT NUMBER	FEDERAL						St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 60 Subpart Dc and 10 CSR 10-6.070, 10 MMBtu-100MMBtu: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	40 CFR Part 60 Subpart Dc and 10 CSR 10-6.070, 30 MMBtu-100MMBtu: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	10 CSR 10-6-260 Restriction of Emission of Sulfur Compounds	10 CSR 10-5-570, Control of Sulfur Emissions from Stationary Boilers	10 CSR 10-5-510 Control of Emissions of Nitrogen Oxide	10 CSR 10-5-030, Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating		
CS-102-04	X	X	X	NA	NA	X	6949	Natural gas/ fuel oil boiler (32.660 MMBtu/hr)
CS-103-01	X	NA	NA	NA	NA	X	6951	Natural gas wind tunnel process heater (13.20 MMBtu/hr)
CS-110-01	NA	NA	X	NA	NA	X	0865 (OP 4709)	Natural gas boiler/ fuel oil back-up (10.461 MMBtu/hr)
CS-110-02	NA	NA	X	NA	NA	X	0865 (OP 4709)	Natural gas boiler/ fuel oil back-up (10.461 MMBtu/hr)
CS-111-01	NA	NA	X	NA	NA	X	1332 (OP 5287)	Natural gas boiler/ fuel oil back-up (16.8 MMBtu/hr)
CS-111-02	NA	NA	X	NA	NA	X	1332 (OP 5287)	Natural gas boiler/ fuel oil back-up (16.8 MMBtu/hr)
CS-STL-01A	NA	NA	NA	NA	NA	X	NA	Plant-wide combustion (indirect natural gas)

X = Applicable NA = Not Applicable

Permit Condition EU0090-001 (Federally Enforceable)
10 CSR 10-6.070 and 40 CFR Part 60 Subpart Dc, 10 MMBtu-100 MMBtu heat input, <i>Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</i>

Emission Limitation:

Gases that contain sulfur dioxide (SO₂) shall not be discharged into the atmosphere in excess of 215 ng/J (0.05 lb/million Btu) heat input; or as an alternative, no oil that contains greater than 0.5 weight percent sulfur shall be combusted when firing #2 fuel oil. (§60.42c(d))

Monitoring/Recordkeeping:

- 1) The emission limits or the oil sulfur limits may be determined based on a certification from the fuel supplier. Fuel supplier certification shall include the following information:
 - a) The name of the oil supplier;
 - b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in §60.41c; and
 - c) The sulfur content of the oil.
- 2) Record and maintain records of the amounts of each fuel combusted for affected units during each calendar month. (§60.48c(g)(2))
 - a) The NG consumption data may include NG consumption from other sources (i.e. hot water heaters).
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Submit semi-annual reports postmarked by the 30th day following the end of the reporting period to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. These reports shall include information as applicable as described in 40 CFR 60.48c (e)(1) through (11) and 40 CFR 60.48c (f)(1)(i) through (iii). This report does not have to be signed or certified by the responsible official.

Permit Condition EU0090-002 (Federally Enforceable)
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10 CSR 10-6.070 and 40 CFR Part 60 Subpart Dc, 30 MMBtu-100 MMBtu heat input, <i>Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units</i>
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Emission Limitation:

Opacity from the combustion of fuel oil for units with a heat input capacity of 30 MMBtu/hr or greater shall be limited to 20 percent opacity (6-minute average), except for one six-minute period per hour of not more than 27 percent opacity.

Monitoring:

- 1) Conduct visual emission observations of each area of the facility where emission units are present. Every emission unit shall be included in a designated area subject to approval by the permitting authority. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible emissions are observed, then no further observations are required. For emission units where visible emissions are observed with the exception of uncombined water, the source representative shall then conduct a Method 9 observation.
- 2) The following monitoring schedule shall be maintained for each area to be observed:
 - a) Observations must be made once per month. If an exceedance of the opacity limitation is noted, then-
 - b) Weekly observations per Section 1) above shall be conducted for a minimum of eight (8) consecutive weeks. Should no exceedance of this regulation be observed during this period then-
 - c) Observations must be made once every two weeks for a period of eight (8) weeks. If an exceedance is noted, monitoring reverts to weekly. Should no exceedance of this regulation be observed during this period then monthly observations shall be resumed.

Recordkeeping:

- 1) Maintain records of all observation results noting whether any air emissions (except for water vapor) were visible from the emission units (Attachment A or similar record).
- 2) Maintain records of all Method 9 tests performed in accordance with this permit condition (Attachment B or similar record).
- 3) Maintain records of all equipment malfunctions and repairs when the malfunction results in an exceedance of the opacity limitation.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of an exceedance of the opacity limit.

Permit Condition EU0090-003 (Federally Enforceable)
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10 CSR 10-6.260, <i>Restriction of Emission of Sulfur Compounds</i>

Emission Limitations:

- 1) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those in 10 CSR 10-6.010, *Ambient Air Quality Standards*.
- 2) Fuel oil burned at this facility must have a sulfur content of no greater than two percent from October through March and no greater than four percent for the rest of the year.
- 3) Propane and natural gas combustion have no requirements placed on them in this section.

Monitoring/Recordkeeping:

Maintain a record of the sulfur content of the fuel oil as purchased. (ex. bill of lading, MSDS, or other)

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of an exceedance of the sulfur content limit.

Permit Condition EU0090-004 (Federally Enforceable)
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10 CSR 10-5.510, <i>Control of Emissions of Nitrogen Oxides</i>

Emission Limitations:

Operation Limitation: An owner or operator of a boiler with a maximum rated heat input capacity equal to or greater than fifty (50) MMBtu per hour but less than one hundred (100) MMBtu per hour shall complete an annual adjustment or tune up on the combustion process. This shall include:

- 1) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
- 2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NOx and, to the extent practicable, minimize carbon monoxide.

- 3) Inspection of the air to fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.

Monitoring/Recordkeeping:

A record of the required tune-ups will be maintained.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, any deviation from the operation limitation above as part of the facility's Semi-Annual Monitoring Report.

Permit Condition EU0090-005 (Federally Enforceable)

10 CSR 10-5.030, *Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

Emission Limitations:

- 1) *For existing units*—The maximum allowable particulate emission rate (ER) for an installation of existing indirect heating sources with a heat input rate equal to or greater than ten (10) million BTUs per hour and less than or equal to five thousand (5000) million BTUs per hour shall be determined by the following equation:

$$E=1.09 (Q)^{-0.259}$$

where: E=the maximum allowable particulate ER in pounds per million BTUs of heat input, rounded off to two (2) decimal places; and
Q=the installation heat input in millions of BTUs per hour.

- 2) *For new units*—The maximum allowable particulate ER for a new sources in an installation of indirect heating sources with a heat input rate equal to or greater than ten (10) million BTUs per hour and less than or equal to one thousand (1000) million BTUs per hour shall be determined by the following equation:

$$E=0.80 (Q)^{-0.301}$$

where: E=the maximum allowable particulate ER in pounds per million BTUs of heat input, rounded off to two (2) decimal places; and
Q=the installation heat input in millions of BTUs per hour.

- 3) The exemptions listed under (1)(F) and (G) of this rule may apply.

Monitoring/Recordkeeping:

Maintain documentation of a one-time calculation that demonstrates compliance with the standard.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program,

P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the applicable particulate emission limit.

Permit Condition EU0090-006 (Federally Enforceable)
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10 CSR 10-6.060, <i>Construction Permits Required</i>

Requirements of the Construction Permit Number: #6835 and #6836

Emission Limitations:

These boilers, in combination, are limited to the use of one million (1,000,000) gallons of #2 fuel oil on a twelve (12) month rolling total.

Monitoring Recordkeeping:

- 1) Maintain monthly and twelve (12) month rolling total records of the #2 oil usage on forms approved by the Program Manager. The forms shall be completed within ten (10) days of the end of each calendar month.
- 2) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Should the records show that a violation of the emission limitations established above has occurred; Boeing shall notify the St. Louis County Air Pollution Control Program by no later than the next working day. This notification is not required to be signed or certified by a responsible official.

Requirements of the Construction Permit Number: #6949 and #6980

Emission Limitations:

For each boiler individually, #2 fuel oil usage is limited to one million (1,000,000) gallons per year on a twelve (12) month rolling total.

Monitoring Recordkeeping:

- 1) Maintain monthly and twelve (12) month rolling total records of the #2 oil usage on forms approved by the Program Manager. The forms shall be completed within thirty (30) days of the end of each calendar month.
- 2) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Should the records show that a violation of the emission limitations established above has occurred; Boeing shall notify the St. Louis County Air Pollution Control Program by no later than the next working day. This notification is not required to be signed or certified by a responsible official.

EMISSION UNIT NUMBER	FEDERAL	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 63, Subpart GG and 10 CSR 10-6.075: Aerospace Manufacturing and Rework Facilities NESHAP		
MC-STL-01	NA	NA	Plant-wide chemical depainting
DP-STL-01	NA	NA	Plant-wide mechanical depainting

X = Applicable NA = Not Applicable

EU0110—Depainting Operations-Alternate Operating Scenario A

EMISSION UNIT NUMBER	FEDERAL	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 63, Subpart GG and 10 CSR 10-6.075: Aerospace Manufacturing and Rework Facilities NESHAP		
MC-STL-01	X	NA	Plant-wide chemical depainting
DP-STL-01	X	NA	Plant-wide mechanical depainting

X = Applicable NA = Not Applicable

Permit Condition EU0110-001 (Federally Enforceable)
 10 CSR 10-6.075 and 40 CFR Part 63, Subpart GG, *Aerospace Manufacturing and Rework facilities NESHAP*

Emission Limitations:

- 1) The provisions of EU0100-001 shall apply only to the depainting of the outer surface of completed aircraft and shall not include activities excluded or exempted under Sections 63.741 or 63.746 of Subpart GG or other applicable sections. For each calendar year, this permit condition shall apply only if the facility depaints seven or more completed aircraft. This permit condition does not apply to the depainting of parts or units normally removed from the aerospace vehicle for depainting; to the depainting of aerospace vehicles or components that are intended for public display, no longer operational, and not easily capable of being moved; to the depainting of radomes; or to the depainting of parts, subassemblies, and assemblies normally removed from the primary aircraft structure before depainting.

- 2) Non-chemical based depainting equipment shall be operated and maintained according to the manufacturer's specifications or locally prepared operating procedures. During periods of malfunctions, substitute materials may be used during the repair period provided the substitute materials used are those available that minimize organic HAP emissions. Substitute materials can be used for no more than fifteen (15) days annually, unless such materials are organic HAP-free.
- 3) On an average annual basis, no more than 26 gallons (or 190 pounds) of organic HAP containing chemical strippers per commercial aircraft depainted; or more than 50 gallons (or 365 pounds) of organic HAP containing chemical strippers per military aircraft depainted for spot stripping and decal removal shall be used.
- 4) Depainting operations that generate airborne inorganic HAP emissions from dry media blasting shall comply with 63.746 (b)(4)(i) through (v).
- 5) Mechanical and hand sanding operations are exempt from the requirements of 63.746 (b)(4).

Monitoring/Recordkeeping:

- 1) *Chemical Depainting.* For chemical strippers used in the depainting operation maintain the name of each chemical stripper.
- 2) *Mechanical Depainting.* If dry media blasting equipment is used to comply with the organic HAP emission limit specified in 63.746(b)(1), record:
 - a) The names and types of non-chemical based equipment; and
 - b) For periods of malfunction,
 1. The non-chemical method or technique that malfunctioned;
 2. The date that the malfunction occurred;
 3. A description of the malfunction;
 4. The methods used to depaint aerospace vehicles during the malfunction period;
 5. The dates that these methods were begun and discontinued; and
 6. The date that the malfunction was corrected.
- 3) *Spot Stripping and Decal Removal.* For spot stripping and decal removal, record the volume of organic HAP containing chemical stripper or weight of organic HAP used, the annual average volume of organic HAP-containing stripper or weight of organic HAP used per aircraft, the annual number of aircraft stripped, and all data and calculations used.
- 4) *Inorganic HAP Emissions.*
 - a) Record the actual pressure drop (either electronically or manually) across the particulate filters once each shift in which the depainting process is in operation. (63.752(e)(7))
 - b) For this provision, a shift is an eight-hour period.

Reporting:

- 1) Submit semi-annual reports occurring every six months that identify:
 - a) Any 24-hour period where organic HAP were emitted from the depainting of aerospace vehicles, other than from the exempt operations listed in §63.746 (a), (b)(3), and (b)(5).
 - b) Any new chemical strippers used at the facility during the reporting period;
 - c) The organic HAP content of these new chemical strippers;
 - d) For each chemical stripper that undergoes reformulation, its organic HAP content;
 - e) Any new non-chemical depainting technique in use at the facility since the notification of compliance status or any subsequent semi-annual report was filed;
 - f) For periods of malfunctions:
 - 1) The non-chemical method or technique that malfunctioned;
 - 2) The date that the malfunction occurred;

- 3) A description of the malfunction;
 - 4) The methods used to repaint aerospace vehicles during the malfunction period;
 - 5) The dates that these methods were begun and discontinued; and
 - 6) The date that the malfunction was corrected;
 - g) All periods where a non-chemical repainting operation subject to 63.746 (b)(2) and (b)(4) for the control of inorganic HAP emissions was not immediately shut down when the pressure drop was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operational procedures;
 - h) A list of new and discontinued aircraft models repainted at the facility over the last 6 months and a list of the parts normally removed or repainting for each new aircraft model being repainted; and
 - i) If the repainting operation has been in compliance for the semi-annual period, a statement signed by a responsible company official that the operation was in compliance with the applicable standards.
- 2) Submit an annual report that identifies:
- a) The average volume per aircraft of organic HAP-containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in 63.746 (b)(3); and
 - b) The number of times the pressure drop limit(s) for each filter system were outside the limits specified by the filter or booth manufacturer or in locally prepared operating procedures.

EU0120—Generators

EMISSION UNIT NUMBER	10 CSR 10-6-260 Restriction of Emissions of Sulfur Compounds	FEDERAL					St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
		1) 40 CFR Part 63, Subpart ZZZZ Greater than 500 HP Emergency Units	40 CFR Part 63, Subpart ZZZZ ≤ 500 HP New Unit	40 CFR Part 63, Subpart ZZZZ ≤ 500 HP Existing Units	40 CFR Part 60, Subpart III	40 CFR Part 60, Subpart JJJJ		
EG-014-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 134 HP
EG-032-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 325 HP
EG-032-02	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 325 HP
EG-033-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 150 HP
EG-034-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 104 HP
EG-064-01	NA	NA	NA	X	NA	NA	NA	Natural Gas Emergency Generator (250 HP @ 1880 RPM)
EG-064-03	X	NA	X	NA	X	NA	Varies	Non-Emergency Diesel Engine (for simulators)
EG-066-02	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator (for fire pump), 265 HP

EMISSION UNIT NUMBER	10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds	FEDERAL					St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
		1) 40 CFR Part 63, Subpart ZZZZ Greater than 500 HP Emergency Units	40 CFR Part 63, Subpart ZZZZ ≤ 500 HP New Unit	40 CFR Part 63, Subpart ZZZZ ≤ 500 HP Existing Units	40 CFR Part 60, Subpart IIII	40 CFR Part 60, Subpart IIII		
EG-066-04	X	X	NA	NA	NA	NA	NA	Diesel Emergency Generator, 660 HP
EG-066-05	X	X	NA	NA	NA	NA	NA	Diesel Emergency Generator, 660 HP
EG-066-06	X	X	NA	NA	NA	NA	NA	Diesel Emergency Generator, 660 HP
EG-066-07	X	X	NA	NA	NA	NA	NA	Diesel Emergency Generator, 660 HP
EG-066-09	NA	NA	NA	X	NA	NA	NA	Natural Gas Emergency Generator, 134 HP
EG-067-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 205 HP
EG-075-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 135 HP
EG-078-01	X	X	NA	NA	NA	NA	NA	Diesel Emergency Generator, 635 BHP
EG-079-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 134 HP
EG-100-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 335 HP
EG-101-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 302 HP
EG-101-02	NA	NA	NA	X	NA	NA	NA	Natural Gas Emergency Generator, 75 HP
EG-101A-01	NA	NA	NA	X	NA	NA	NA	Natural Gas Emergency Generator, 67 HP
EG-102-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 134 HP
EG-103-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 308 HP
EG-106-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 150 HP
EG-107-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 134, HP
EG-110-01	NA	NA	NA	X	NA	NA	NA	Natural Gas Emergency Generator, 40 HP
EG-111-01	X	NA	NA	NA	NA	NA	NA	Diesel Emergency Generator, 680 HP
EG-122-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 285 HP
EG-220-01	X	NA	NA	X	NA	NA	NA	Diesel Emergency Generator, 241 HP

EMISSION UNIT NUMBER	10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds	FEDERAL					St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
		1) 40 CFR Part 63, Subpart ZZZZ Greater than 500 HP Emergency Units	40 CFR Part 63, Subpart ZZZZ ≤ 500 HP New Unit	40 CFR Part 63, Subpart ZZZZ ≤ 500 HP Existing Units	40 CFR Part 60, Subpart IIII	40 CFR Part 60, Subpart IIIJ		
EG-245-01	NA	X	NA	NA	X	NA	7387	Diesel Emergency Generator, 1214 HP
EG-245-02	X	NA	NA	X	NA	NA	NA	Diesel Emergency Refrigeration Generator, 39 HP
EG-245-03	X	NA	NA	X	NA	NA	NA	Diesel Emergency Refrigeration Generator, 39 HP
EG-245-04	X	NA	NA	X	NA	NA	NA	Diesel Emergency Refrigeration Generator, 39 HP
EG-921-01	NA	NA	X	NA	X	NA	7388	Diesel Emergency Generator, 168 HP

X = Applicable NA = Not Applicable

Permit Condition EU0120-001 (Federally Enforceable)

10 CSR 10-6.075 and 40 CFR Part 63, Subpart ZZZZ (> 500 HP Emergency), *Stationary Reciprocating Internal Combustion Engines NESHAP*

Recordkeeping/Reporting

A record of the initial notification for each unit subject to this rule must be readily accessible in hard copy or electronic form on-site for at least two years after the date of each report or record. Records may be kept off-site for the remaining three years.

Permit Condition EU0120-002 (Federally Enforceable)

10 CSR 10-6.075 and 40 CFR Part 63, Subpart ZZZZ (≤ 500 HP New Units), *Stationary Reciprocating Internal Combustion Engines NESHAP*

Units are subject to NESHAP Subpart ZZZZ requirements, but all NESHAP requirements are met through compliance with 40 CFR Part 60, Subpart IIII and JJJJ. (40 CFR 63.6590 (c))

Permit Condition EU0120-003 (Federally Enforceable)

10 CSR 10-6.075 and 40 CFR Part 63, Subpart ZZZZ (≤ 500 HP Existing Units), *Stationary Reciprocating Internal Combustion Engines NESHAP*

The facility must comply with the following requirements no later than May 3, 2013, for applicable Compression Ignition units and no later than October 19, 2013, for applicable Spark Ignition units.

Operational Limitation:

- 1) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time follow the monitoring requirements below. [40 CFR Part 63.6625(h)]

- 2) Operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or operator-developed maintenance plan, which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR Part 63.6625(e)]
- 3) Install a non-resettable hour meter if one is not already installed. [40 CFR Part 63.6625(f)]
- 4) Maintenance checks and readiness testing of such units is limited to 100 hours per year [40 CFR Part 63.6640(f)(1)(ii)]
- 5) The facility may operate its emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours have usage limitations per 40 CFR Part 63.6640 (f)(1)(iii) and include 15 emergency demand response hours annually, which are also subject to usage limitations. [40 CFR Part 63.6640(f)(1)(iii)]

Monitoring:

- 1) Change oil and filter every 500 hours of operation or annually, whichever comes first;
- 2) (Alternatively, utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.) [40 CFR Part 63, Subpart ZZZZ Table 2c]
- 3) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first for applicable Compression Ignition units. [40 CFR Part 63, Subpart ZZZZ, Table 2c]
- 4) Inspect spark plugs every 1,000 hours or annually, whichever comes first for applicable Spark Ignition units. [40 CFR Part 63, Subpart ZZZZ, Table 2c]
- 5) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR Part 63, Subpart ZZZZ, Table 2c]

Recordkeeping:

- 1) The facility must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that it operated and maintained the stationary RICE according to its own maintenance plan [40 CFR Part 63.6655(e)]
- 2) Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR Part 63.6655(f)]

Reporting:

- 1) For each deviation from an emission or operating limitation or monitoring requirements that occurs for a stationary RICE, the Semi-Annual Monitoring Reports must also contain the following information: [40 CFR Part 63.6650(d)]
 - a) The total operating time of the stationary RICE at which the deviation occurred during the reporting period. [40 CFR Part 63.6650(d)(1)]
 - b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. [40 CFR Part 63.6650(d)(2)]

10 CSR 10-6.070 and 40 CFR Part 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

Emission Limitation:

- 1) For pre-2007 model year non-emergency stationary CI internal combustion engines, purchase engines certified to the emission standards of 60.4204(a) for the same model year and maximum engine power. (40 CFR 60.4211(b))
- 2) For 2007 model year and later emergency stationary CI internal combustion engines, purchase engines certified to the emission standards in 60.4205(b) for the same model year and maximum engine power. (40 CFR 60.4211(c))
- 2) Starting October 1, 2007, use diesel fuel that meets requirements of 40 CFR 80.510(a). Starting October 1, 2010, use diesel fuel that meets the requirements of 40 CFR 80.510(b). (40 CFR 60.4207)
- 3) Maintenance checks and readiness testing of emergency stationary ICE is limited to 100 hours per year. (40 CFR 60.4211(e))

Monitoring:

- 1) Install a non-resettable hour meter prior to startup of the engine. (60.4209(a))
- 2) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. Owners and operators may only change those setting that are permitted by the manufacturer. (40 CFR 60.4211(a))

Recordkeeping:

For emergency generators, maintain records of hours used for maintenance checks and readiness testing. A non-resettable meter may be used as an alternative, so long as the hours from the meter are recorded once per year.

Reporting:

None per 40 CFR 60.4214(a).

Permit Condition EU0120-005 (Federally Enforceable)

10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

Emission Limitations:

- 1) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those in 10 CSR 10-6.010, *Ambient Air Quality Standards*.
- 2) New sources shall be limited to 500 ppmv of sulfur dioxide or 35 mg/cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) The emission unit shall be limited to burning fuel oil with a sulfur content of no more than 0.5 percent weight sulfur to demonstrate compliance with #2 above (See Statement of Basis).
- 4) Propane and natural gas fueled engines, and engines subject to an applicable sulfur limit under 10 CSR 10-6.070, have no requirements placed on them in this section.

Monitoring/Recordkeeping:

Maintain a record of the sulfur content of liquid fuel purchased for these IC engines. (ex. bill of lading, MSDS, or other)

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of an exceedance of the sulfur content limit.

EU0130—Handling Of Hazardous Waste

EMISSION UNIT NUMBER	FEDERAL	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	NESHAP – Hazardous Waste Handling Manufacturing and Rework Facilities Aerospace 40 CFR Part 63, Subpart GG and 10 CSR 10-6.075:		
HW-STL-01	X	NA	Plant-wide handling of hazardous waste

X = Applicable NA = Not Applicable

Permit Condition EU0130-001 (Federally Enforceable)
 10 CSR 10-6.075 and 40 CFR Part 63, Subpart GG, *Aerospace Manufacturing and Rework Facilities NESHAP – Hazardous Waste Handling*

Emission Limitations/ Monitoring/Recordkeeping:

All waste that contains HAP and is subject to this rule, but is not subject to RCRA standards, shall be handled and transferred to or from containers, vats, vessels, and piping systems in such a manner that minimizes spills.

EU0180—Gasoline Storage Tanks

EMISSION UNIT NUMBER	FEDERAL	St. Louis County Operating Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	10 CSR 10-5.220: Control of Petroleum Liquid Storage, Loading and Transfer (Tanks greater than 500 gals and less than or equal to 1,000 gas)		
ST-066-02	X	11990, 31273	Gasoline storage tank (~550 gal)
ST-078-01	X	12043, 31201	Gasoline storage tank (1,000 gal)
ST-121-01	X	11991,31274	Gasoline tank (550 gal)
ST-076-01	NA	NA	Gasoline tank (500 gal)
ST-102-01	NA	NA	Gasoline tank (500 gal)
ST-STL-01	NA	NA	Plant-wide gasoline storage tanks (less than 500 gallons)

X = Applicable NA = Not Applicable

Permit Condition EU0180-001 (Federally Enforceable)

10 CSR 10-5.220, *Control of Petroleum Liquid Storage, Loading and Transfer (Tanks Greater Than 500 Gallons and Less Than or Equal to 1,000 Gallons)*

Emission Limitations:

Requirements for gasoline storage tanks with a capacity greater than 500 gallons:

- 1) Must be equipped with a submerged fill pipe unrestricted to within six (6) inches of the bottom of the tank;
- 2) All storage caps and fittings shall be vapor tight when gasoline transfer is not taking place; and
- 3) Each tank shall be vented via conduit that is:
 - a) At least two (2) inches inside diameter;
 - b) A minimum of twelve (12) foot above grade; and
 - c) Equipped with a pressure/vacuum vent cap that is CARB certified and MoPETP approved at three inches water column pressure/eight inches water column vacuum (3" wcp/8" wcv).

Monitoring:

If a deficiency is found, the facility shall be allowed 30 days to bring the unit into compliance with the emission limitations above.

Recordkeeping/Reporting:

- 1) Maintain records documenting the vessel owners and number of delivery vessels unloaded by each owner.
- 2) Delivery records shall be kept at the facility. Retention of delivery records onsite will be limited to the four (4) most recent receipts of each grade of product.
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

EU0200—Halogenated Vapor Degreasers

EMISSION UNIT NUMBER	FEDERAL		St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	40 CFR Part 63, Subpart T and 10 CSR 10-6-075: Halogenated Solvent Cleaning NESHAP	10 CSR 10-5.300: Control of Emissions from Solvent Metal Cleaning		
VD-101-06	X	NA	6870	Vapor degreaser (trichloroethylene)
VD-102-03	X	NA	6168	Vapor degreaser (trichloroethylene)

X = Applicable NA = Not Applicable

Permit Condition EU0200-001 (Federally Enforceable)

10 CSR 10-6.075 and 40 CFR Part 63, Subpart T, *National Emission Standards for Halogenated*

Solvent Cleaning

Emission Limitations:

- 1) Emissions shall not exceed 150 kg per m² of solvent/air interface per month, averaged over three (3) consecutive months using the three (3) month rolling average compliance method.
- 2) This rule is not applicable to the listed units when they contain a solvent that is not subject to 40 CFR Part 63, Subpart T.

Recordkeeping:

- 1) Maintain a log of dates and amounts of solvent additions and deletions for each solvent cleaning machine.
- 2) Maintain records of the solvent composition of wastes removed from cleaning machines as determined using the procedure described in §63.465(c)(2); and (§63.467(c)(2)).
- 3) Maintain calculation sheets showing how monthly emissions and the rolling three-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Monitoring

- 1) On the first operating day of every month, ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.
 - a) An operating day is a day in which parts are processed in the solvent cleaning unit.

Reporting:

- 1) Annual Solvent Emission Report as required by 40 CFR 63.468(g)– due by February 1st for the prior year.
- 2) Exceedance Report – due by the 30th day following the end of each calendar half or quarter as required by 40 CFR 63.468(h).

Permit Condition EU0200-002 (Federally Enforceable)

10 CSR 10-6.060, *Construction Permits Required*

St. Louis County Air Pollution Control Program Construction Permit # 6870

Reporting:

Notify the St. Louis County Air Pollution Control Program, no later than the next working day after the discovery of any exceedance of the emission limitation established under EU0200-001. This notification is not required to be signed or certified by a responsible official.

EU0210—Non-Halogenated Degreasers

	FEDERAL	FEDERAL		
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EMISSION UNIT NUMBER	40 CFR Part 63, Subpart T and 10 CSR 10-6.075: Halogenated Solvent Cleaning NESHAP	10 CSR 10-5.300: Control of Emissions from Solvent Metal Cleaning (hoist)	St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
VD-101-07	NA	X	7271	Degreasing unit (HFE-72DE), Chiller coils, Cover <10 Sq. Ft.
VD-101-08	NA	X	7281	Degreasing unit (n-propyl bromide), 17 Sq. Ft., Chiller coils, Slide cover

X = Applicable NA = Not Applicable

Permit Condition EU0210-001 (Federally Enforceable)
10 CSR 10-5.300, <i>Control of Emissions from Solvent Metal Cleaning</i>

Emission Limitations:

- 1) Each open-top vapor degreaser shall have a cover that will prevent the escape of solvent vapors from the degreaser while in the closed position and shall be designed to open and close easily such that minimal disturbing of the solvent vapors in the tank occurs. For covers larger than ten (10) square feet, easy cover use shall be accomplished by either mechanical assistance, such as spring loading or counter weighing or by power systems.
- 2) Each open-top vapor degreaser shall be equipped with a vapor level control device that shuts off the heating source when the vapor level rises above the cooling or condensing coil, or an equivalent safety device approved by the Director and EPA.
- 3) Each open-top vapor degreaser with an air/vapor interface over 10¾ square feet shall be equipped with at least one (1) of the following control devices:
 - a) A freeboard ratio of at least 0.75;
 - b) A refrigerated chiller;
 - c) An enclosed design;
 - d) A carbon adsorption system with ventilation of at least 50 cubic feet per minute per square foot of air vapor area when the cover is open and exhausting less than 25 ppm of solvent by volume average over one complete adsorption cycle as measured using the reference method specified at 10 CSR 10-6.030(14)(A); or
 - e) A control system with a mass balance demonstrated overall VOC emissions reduction efficiency greater than or equal to 65 percent and prior approval by the Director and EPA.
- 4) A permanent conspicuous label summarizing the operating procedures shall be affixed to the equipment or in a location readily visible during the operation of the equipment.
- 5) The cover shall be kept closed at all times except when processing workloads through the open-top vapor degreaser, performing maintenance or collecting solvent samples.
- 6) Solvent carry-out shall be minimized in the following ways:
 - a) Parts shall be racked, if practical, to allow full drainage;
 - b) Parts shall be moved in and out of the open-top vapor degreaser at less than 11 feet per minute;
 - c) Workload shall remain in the vapor zone at least 30 seconds or until condensation ceases, whichever is longer;
 - d) Pools of solvent shall be removed from cleaned parts before removing parts from the open-top vapor degreaser freeboard area; and

- e) Cleaned parts shall be allowed to dry within the open-top vapor degreaser freeboard area for at least 15 seconds or until visually dry, whichever is longer.
- 7) Porous or absorbent materials such as cloth, leather, wood or rope shall not be degreased.
- 8) If workloads occupy more than half of the open-top vapor degreaser's open-top area, rate of entry and removal shall not exceed 5 feet per minute.
- 9) Spray shall never extend above vapor level.
- 10) Whenever an open-top vapor degreaser fails to perform within the rule operating requirements, the unit shall be shut down until operation is restored to meet the rule operating requirements.
- 11) Solvent leaks shall be repaired immediately or the open-top vapor degreaser shall be shut down until the leaks are repaired.
- 12) Ventilation exhaust from the open-top vapor degreaser shall not exceed 65 cubic feet per minute per square foot of the open-top vapor degreaser open area unless proof is submitted that it is necessary to meet OSHA requirements. Fans shall not be used near the open-top vapor degreaser opening.
- 13) Water shall not be visually detectable in solvent exiting the water separator, except for automatic water separators that by configuration do not allow visual inspection.
- 14) Any waste material removed from an open-top vapor degreaser shall be disposed of by one of the following methods or an equivalent method approved by the Director and EPA:
 - a) Reduction of the waste material to less than 20 percent VOC solvent by distillation and proper disposal of the still bottom waste; or
 - b) Stored in closed containers for transfer to—
 - i) A contract reclamation service; or
 - ii) A disposal facility approved by the Director and EPA.
- 15) Waste solvent shall be stored in closed containers only.
- 16) Operator and Supervisor Training (Section (3)(C)):
 - a) Persons who operate a vapor degreaser shall be trained in the operational and equipment requirements specified in this rule.
 - b) The supervisor of any person who operates a vapor degreaser shall receive equal or greater operational training than the operator.
 - c) Persons who operate a vapor degreaser shall receive a procedural review at least once each twelve (12) months.

Monitoring/Recordkeeping:

- 1) Monthly records of the following shall be maintained:
 - a) Types and amounts of solvent containing waste material from cleaning or degreasing operations:
 1. Transferred to a contract reclamation service or disposal facility
 2. Distilled on the premises
 - b) Maintenance and repair logs for the vapor degreaser and any associated control equipment.
- 2) Keep a record of the solvent metal cleaning training and procedural review for each employee.
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the emission limitations above.

EU0230—Jet Engine Test Stand

EMISSION UNIT NUMBER	FEDERAL			St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	10 CSR 10-6.075 and 40 CFR Part 63 Subpart PPPP: Engine Test Cells/Standards	10 CSR 10-6.075 and 40 CFR Part 63 Subpart YYYY: Engine Test Cells/Standards	10 CSR 10-6.070 and 40 CFR Part 60 Subpart GG: Standards for Performance for Stationary Gas Turbines		
TS-102-01	X	NA	NA	6875	Jet Engine Test Stand, 17.36 MMBtu, jet fuel, 80,000 SCFM

X = Applicable NA = Not Applicable

Permit Condition EU0230-001 (Federally Enforceable)
 10 CSR 10-6.060, *Construction Permits Required*
 St. Louis County Air Pollution Control Program Construction Permit # 6875

Emission Limitations:

Jet fuel usage is limited to seventy thousand (70,000) gallons per year on a twelve (12) month rolling total.

Monitoring/Recordkeeping:

- 1) Maintain monthly and twelve (12) month rolling total records of the jet fuel combusted on forms approved by the St. Louis County Air Pollution Control Program.
- 2) Records shall be posted within thirty (30) days of the end of each calendar month.
- 3) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the emission limitations above.
- 2) Notify the St. Louis County Air Pollution Control Program no later than the next working day after the discovery of any exceedance of the emission limitation above. This notification is not required to be signed or certified by a responsible official.

Permit Condition EU0230-002 (Federally Enforceable)
 10 CSR 10-6.075 and 40 CFR Part 63 Subpart PPPPP, *Engine Test Cells/Standards*

This subpart applies to this installation due to the Jet Engine Research Operation (#6875), but there are no applicable requirements for this operation due to the exemption for existing affected sources found in Section 63.9290(b).

EU0240—Stationary Gas Turbine

EMISSION UNIT NUMBER	FEDERAL		St. Louis County Construction Permit #	DESCRIPTION (for information only, this does not create any permit requirements)
	10 CSR 10-6.070 and 40 CFR Part 60 Subpart GG: Stationary Gas Turbines NSPS	10 CSR 10-6.075 and 40 CFR Part 63 Subpart YYYY: Stationary Combustion Turbine NESHAP		
GT-102-01	X	X	6869	Gas turbine (natural gas for wind tunnel)

X = Applicable NA = Not Applicable

Permit Condition EU0240-001 (Federally Enforceable)
 10 CSR 10-6.070 and 40 CFR Part 60 Subpart GG, *Standards of Performance for Stationary Gas Turbines*

Emission Limitations:

- 1) Shall not exceed the NOx limit of 0.015 percent by volume or 150 ppmvd at 15 percent oxygen on a dry basis. (Based on equation under 60.332 (a)(2). See Statement of Basis)
- 2) Shall comply with one or the other following conditions:
 - a) Shall not discharge into the atmosphere from stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume or 150 ppmvd at 15 percent oxygen on a dry basis.
 - b) Shall not burn in any stationary gas turbine of any fuel, which contained total sulfur in excess of 0.8 percent by weight (8000 ppmw).

Monitoring:

Take, at twelve (12) month intervals, a sample of sulfur content measurements using the applicable methods specified in 40 CFR 60.335 or an alternate method approved by the agency (such as ASTM D4913 and ASTM 4810, which are currently approved). {§(60.334(h)(4) and (i)(3)}.

- 1) If any of the samples taken at 12-month intervals has a total sulfur content between 0.4 and 0.8 weight percent (4000 and 8000 ppmw), follow the procedures in Paragraph (i)(3)(i)(C) of 40 CFR 60.334 Section.
- 2) If any measurement exceeds 0.8 weight percent (8000 ppmw), follow the procedures in Paragraph (i)(3)(i)(D) of 40 CFR 60.334 Section.

Recordkeeping:

- 1) Maintain records of the sulfur samples required under Monitoring.
- 2) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the emission limitations above.

Permit Condition EU0240-002 (Federally Enforceable)
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40 CFR Part 63 Subpart YYYY, <i>National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines</i>
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Emission Limitations/Recordkeeping/Monitoring/Reporting

A record of the initial notification for each unit subject to this rule must be readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each report or record. Records may be kept off-site for the remaining 3 years.

Permit Condition EU0240-003 (Federally Enforceable)
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10 CSR 10-6.060, <i>Construction Permits Required</i> St. Louis County Air Pollution Control Program Construction Permit #6869

Emission Limitations:

- 1) Limited to the burning of pipeline natural gas containing no more than three thousand (3,000) grains of sulfur per million cubic feet (Laclede Gas guarantee).
- 2) Emissions of nitrous oxides (NO_x) are limited to twelve (12) tons per year on a twelve (12) month rolling total.
- 3) Emissions of sulfur dioxide (SO₂) are limited to two (2) tons per year on a twelve (12) month rolling total.
- 4) Within sixty (60) days of achieving the maximum design rate of the combustion turbine, the permittee shall perform stack testing at fifty (50), seventy-five (75) and one hundred (100) percent of capacity. The testing results will be utilized to determine the actual emissions of NO_x and SO₂ per million cubic feet of natural gas burned and to demonstrate NSPS compliance. In lieu of SO₂ stack testing, Boeing may be able to utilize an EPA approved natural gas sampling method to determine the turbine's SO₂ emissions.

Monitoring/Recordkeeping:

- 1) Maintain monthly natural gas usage and sulfur content records for the combustion turbine in millions of cubic feet burned.
- 2) Records shall be utilized in determining the monthly and twelve (12) month rolling total emissions of NO_x and SO₂ utilizing the emission factors developed in the stack testing or sampling results.
- 3) The monthly and twelve (12) month rolling totals shall be recorded on the form provided by the Program Manager and the form shall be complete within thirty (30) days of the end of each calendar month.
- 4) Retain records for the previous sixty (60) month period and make them available to the St. Louis County Air Pollution Control Program, or its designated agent, at any reasonable time.

Reporting:

- 1) Report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control

Program, P.O. Box 176, Jefferson City, MO 65102, no later than thirty (30) days after the discovery of any exceedance of the emission limitations above.

- 2) Notify the St. Louis County Air Pollution Control Program no later than the next working day after the records show that an exceedance of either the NO_x or SO₂ emission limitations above has occurred. This notification is not required to be signed or certified by a responsible official.

VII. Core Permit Requirements

This section lists excerpts from applicable regulations. The installation is responsible for complying with the cited portions of the regulations as found in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) to the extent they are consistent with the provisions in this permit. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.045 Open Burning Restrictions-State/Local Only Enforceable

The applicable portions of this regulation are: (1), (2), (3)(A)1., (3)(A)2., (3)(A)3.D., (3)(A) 4., (3)(A)5.D., (3)(A)6., (3)(A)7., (3)(A)8., (3)(A)9., (3)(B)1., (3)(B)2., (3)(D), (3)(E), (4), (5)

Emission Limitations:

No person may conduct, cause, permit, or allow the disposal of tires, petroleum-based products, trade waste, construction or demolition waste, salvage operation waste, or asbestos containing materials by open burning, except as permitted by 10 CSR 10-6.045, which provides for open burning permits in certain cases, and conditionally exempts fires set for the purposes of training fire fighters and industrial employees in fire fighting methods.

Recordkeeping Requirements:

None

Monitoring Requirements:

None

Reporting Requirements:

None

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions- Federally Enforceable

The entire regulation is applicable.

Emission Limitations:

None

Recordkeeping Requirements:

- 1) Information regarding the type and amount of emission and time of SSM episodes that resulted in excess emissions shall be recorded and kept on file. This data shall be included in emission reported on any required Emissions Inventory Questionnaire.
- 2) Information submitted in accordance with this rule shall be kept on file at the installations for a period of five years and made available to the St. Louis County Air Pollution Control Program, or its designated agent, upon request.

Monitoring Requirements:

None

Reporting Requirements:

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the Paragraph 1 information list to the Director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excess release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the Director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the Paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the Director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the Director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.
- 6) Any reports required by this rule are not required to be signed or certified by the Responsible Official.

10 CSR 10-6.060 Construction Permits Required- Federally Enforceable

The entire regulation is applicable.

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority. Exemptions under 10 CSR 10-6.061 apply.

10 CSR 10-6.065 Operating Permits- Federally Enforceable

The applicable portions of this regulation are: (1), (2), (3), (6), and (7). See the General Permit Requirements Section for more detail.

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [§6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [§(6)(C)1.C(II)] The permittee shall immediately make such permit available to any St. Louis County Air Pollution Control Program or Missouri Department of Natural Resources' personnel upon request. [§(6)(C)3.B]

10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos- Federally Enforceable

The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos. The applicable requirements of Subpart M are 40 CFR 61.140, 61.141, 61.143, 61.145, 61.146, 61.148, 61.150, 61.152, 61.153, 61.157, and Appendix A to Subpart M of Part 61.

10 CSR 10-6.100 Alternate Emission Limits- State/ Local Only Enforceable

This entire regulation is applicable.

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits become effective.

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information- Federally Enforceable

The entire rule is applicable. Reporting frequency is as described for an installation required to obtain a Part 70 Operating Permit.

Emission Limitations:

None

Recordkeeping Requirements:

The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.

Monitoring Requirements:

None

Reporting Requirements:

- 1) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 2) The fees shall be due on the date specified by 10 CSR 10-6.110(3)(D) each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the Director.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential- Federally Enforceable

The applicable portions of this regulation are: (1), (2), (3)(D), (3)(E), and (4).

Emission Limitations:

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each.

Recordkeeping Requirements:

None

Monitoring Requirements:

None

Reporting Requirements:

The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention- Federally Enforceable

The entire rule is applicable.

Emission Limitations:

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

Recordkeeping Requirements:

None

Monitoring Requirements:

None

Reporting Requirements:

None

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin- Federally Enforceable

The entire regulation is applicable.

Emission Limitations:

- 1) The permittee shall not cause or allow any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.
- 2) The permittee shall not cause nor allow any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
- Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - Paving or frequent cleaning of roads, driveways and parking lots;
 - Application of dust-free surfaces;
 - Application of water; and
 - Planting and maintenance of vegetative ground cover.

Recordkeeping Requirements:

Should it be determined that noncompliance has occurred, the Director may require recordkeeping to assure compliance with reasonable control measures.

Monitoring Requirements:

Should it be determined that noncompliance has occurred, the Director may require monitoring to assure compliance with reasonable control measures.

Reporting Requirements:

Should it be determined that noncompliance has occurred, the Director may require reporting to assure compliance with reasonable control measures.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants- Federally Enforceable

The entire rule is applicable.

Emission Limitations:

None

Recordkeeping Requirements:

None

Monitoring Requirements:

- The Director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The Director may specify testing methods to be used in accordance with good professional practice. The Director may observe the testing. Qualified personnel shall perform all tests.
- The Director may conduct tests of emissions of air contaminants from any source. Upon request of the Director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

Reporting Requirements:

The Director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business

Exemption Requirements- State/Local Only Enforceable

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

10 CSR 10-6.280 Compliance Monitoring Usage- Federally Enforceable

The entire regulation is applicable.

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits," and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the Director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits," and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
 - ii) 10 CSR 10-6.040, "Reference Methods";
 - iii) 10 CSR 10-6.070, "New Source Performance Standards";
 - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
 - a) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited- Federally Enforceable

The entire regulation is applicable.

Emission Limitations:

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires

used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

Recordkeeping Requirements:

None

Monitoring Requirements:

None

Reporting Requirements:

None

10 CSR 10-6.165 Restriction of Emission of Odors-State/Local Only Enforceable

Sections (3)(A), (3)(B) and (4) regarding animal feeding operations are inapplicable..

Emission Limitations:

No person may cause, permit, or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than fifteen minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

Recordkeeping Requirements:

None

Monitoring Requirements:

None

Reporting Requirements:

None

10 CSR 10-5.450 Coating of VOC Emissions from Traffic Coatings- Federally Enforceable

The applicable portions of this regulation are: (1), (2), and (3).

Emission Limitations:

No person shall supply, sell, offer for sale, apply, or solicit the application of any traffic coating, which at the time of sale or manufacture contains more than 1.26 pounds VOC per gallon, excluding water, exempt compounds, and any colorant added to tint bases, or manufacture, blend, or repackage such a coating for use within the St. Louis metropolitan area without the approval of the staff Director. All VOC-containing traffic coating materials shall be stored in closed containers when not in use. In use includes, but is not limited to, being accessed, filled, emptied, or repaired.

Recordkeeping Requirements:

None

Monitoring Requirements:

None

Reporting Requirements:

None

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone- Federally Enforceable

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
 - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
 - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
 - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
 - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee imports, or exports a class I or class II substance, the permittee is subject to the import and export requirements specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls. The permittee currently does not manufacture or transform Class I or Class II substances, so the inapplicable portions of Part 82, Subpart A are described in the Statement of Basis.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is not prohibited in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

VIII. Saint Louis County Air Pollution Control Code Requirements

Locally Enforceable

The St. Louis County Air Pollution Control Code Requirements described here are not Title V applicable requirements under 10 CSR 10-6.020(2)(A)23 that are subject to Semi-annual Monitoring Reports, Annual Compliance Certification, or Supplemental Reports described below in IX. General Permit Requirements. This section lists excerpts from applicable ordinances. The installation is responsible for complying with the full ordinances as found in the Saint Louis County Air Pollution Control Code.

Section 612.040, Air Quality Standards and Air Pollution Control Regulations

Saint Louis County Air Pollution Control Program may enforce Missouri Code of State Regulations as adopted and promulgated by the Air Conservation Commission of the State of Missouri consisting of Title 10, Division 10, Chapter 5 and 6.

Section 612.100, Emergency Abatement of Violation

By written approval of the County Executive, any facility indirectly or directly discharging any air contaminant in violation of the St. Louis County Air Pollution Control Code where it is the opinion of the Director that the discharge creates an emergency which requires immediate action to protect the public health, shall order the person in writing to discontinue immediately.

Section 612.110, Permits Required

The permittee shall obtain St. Louis County Air Pollution Control Program operating permits for its installation. The permittee shall not commence construction, modification, or major modification of any installation subject to this rule without obtaining a permit from St. Louis County Air Pollution Control Program.

Section 612.120, Permits to be Visibly Affixed or Placed

The permittee shall visibly affix St. Louis County Air Pollution Control Program Permit on or near permitted equipment.

Section 612.200, Testing Prior to Granting of Operating Permit

Before an authority to construct or permit to operate is granted, the Director may require the applicant to conduct tests to determine the kind or amount of the air contaminant emitted from the equipment. Such tests shall be conducted, reviewed and certified by a licensed engineer under Chapter 327 RSMo. 1959. The permittee shall notify the St. Louis County Air Pollution Control Program of the time and place of testing for the purpose of witnessing the test.

Section 612.220, Suspension or Revocation of Permits

The Director may suspend or revoke a permit to operate or authority to construct for willful or continued violation of the Saint Louis County Air Pollution Control Code.

Section 612.250 Fees, When Payable, Exceptions

Fees for authority to construct and operating permits in the amounts provided in Section 612.260 shall be paid to the Director except as provided in Subsections 3 and 4 of this rule.

Section 612.260, Schedules

The permittee shall pay St. Louis County Air Pollution Control Program Construction and Operating Permit fees when applicable and annual Emission Inspection fees in accordance with this rule.

Section 612.280, Testing by Order of the Board

- 1) *Emission Limitations:* If any article, machine, equipment or other contrivance is in violation of the Saint Louis County Air Pollution Code, the Director may file with the Board for its approval an order directing the permittee of such equipment to conduct such tests as are necessary in the opinion of the Director and approved by the Board to determine whether the equipment is in violation of this Code.
- 2) *Monitoring/Recordkeeping Requirements:* The entire test results shall be reviewed and certified by an engineer licensed under Chapter 327, RSMo 1959. The engineer shall be selected by the permittee and approved by the Board.
- 3) *Reporting Requirements:* The permittee shall give at least (7) days notice prior to the commencement of the test. The permittee shall report to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017 (or current address).

Section 612.290, Right of Entry; Inspections; Samples

The permittee shall allow the Director or his agents to enter at all times with reasonable notice, inspect any equipment, control apparatus, fuel, matter or things which affect or may affect the emission of air contaminants, inspect any records relating to the use of any equipment or control apparatus which affect or may affect the emission of air contaminants, and sample any equipment, control apparatus, fuel, matter or things which affect or may affect the emission of air contaminants.

Section 612.310, Upset Conditions, Breakdown or Scheduled Maintenance

- 1) Emissions exceeding any of the limits established by the St. Louis County Air Pollution Control Code as a direct result of unavoidable upset conditions in the nature of the process or unavoidable and unforeseeable breakdown of any air pollution equipment or related operating equipment or as a direct result of shutdown of such equipment for necessary scheduled maintenance, shall not be deemed in violation of this Code provided the following are met:
 - a) Such occurrence in the case of unavoidable upset in or breakdown of equipment shall have been reported to the Director within twenty-four (24) hours after the occurrence.
 - b) In the case of shutdown for necessary scheduled maintenance, the intent to shut down shall be reported to the Director at least twenty-four (24) hours prior to the shut down and the exception provided by this Section shall only apply in those cases where maximum reasonable effort, including off-shift labor where required, has been made to accomplish such maintenance during periods of non-operation of any related source operation and that it would be unreasonable or impossible to shut down the source operation during the maintenance period.
 - c) The person, firm or corporation responsible for such emission shall submit to the Director a full report of such occurrence including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences including but not limited to action to correct the conditions causing such emission to exceed said limits, to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded and to reduce the length of time for which said limits are exceeded.

Section 612.340, Air Pollution Nuisances Prohibited

- 1) It is unlawful for the permittee to cause the escape of such quantities of soot, cinders, noxious acids, fumes and gases or other particulate matter from whatever source in such place or matter as to be detrimental to any person or the public or to endanger the health, comfort and safety of any person or the public, injury or damage to property or business.
- 2) No person shall cause or permit the engine of a motor vehicle, other than an emergency vehicle, to idle for longer than three (3) consecutive minutes while parking, standing or stopped as defined in the St. Louis County Traffic Code, unless the engine is being used to operate a loading, unloading or processing device.

Section 612.380, Interfering with or Obstructing Division Personnel

No person shall hinder, resist, interfere with or obstruct the Director or any Division employee in carrying out any duty for the Director or the Board.

Section 612.530, St. Louis County Air Pollution Control Program Asbestos Abatement Rules and Regulations—Registration, Notification and Performance Requirements

The permittee shall conduct all asbestos abatement projects within the procedures and requirements established in 612.530.

IX. General Permit Requirements

This section lists excerpts from applicable regulations. The installation is responsible for complying with the cited portions of the regulations as found in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) to the extent they are consistent with the provisions in this permit. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

The installation shall comply with each of the following requirements, except that St. Louis County Air Pollution Control Code Requirements described in VIII of this permit are not Title V applicable requirements under 10 CSR 10-6.020(2)(A)23 that are subject to Semi-annual Monitoring Reports, Annual Compliance Certification, or Supplemental Reports described below.

Federally Enforceable

10 CSR 10-6.065, §(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065, §(6)(C)1.C General Recordkeeping and Reporting Requirements

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any St. Louis County Air Pollution Control Program or Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) Semi-annual Monitoring Reports
 - i) The permittee shall submit a semi-annual report by:
 - (1) October 1st for monitoring which covers the January through June time period, and
 - (2) April 1st for monitoring which covers the July through December time period.
 - ii) Each semi-annual monitoring report must identify any deviations from permit requirements since the previous report that have been monitored by the monitoring systems required under the permit, and any deviation from the monitoring, recordkeeping and reporting requirements of the permit.
 - iii) These reports shall be submitted to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.
 - b) Supplemental Reports
 - i) Submit supplemental reports as indicated below. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - (1) Notice of any deviation resulting from an emergency (or upset) condition as defined in Paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee

wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- (2) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
 - (3) Any other deviations identified in the permit as requiring more frequent reporting than the annual report shall be reported on the schedule specified in this permit.
- c) Every report submitted shall contain a certification by a responsible official of truth, accuracy and completeness (unless otherwise specified in this permit), except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
 - d) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065, §(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130;
or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065, §(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification, or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit

or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.

10 CSR 10-6.065, §(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official unless otherwise specified in this permit.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the permitting agency to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the permitting authority under this subsection):
 - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
 - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017, and the Missouri Department of Natural Resources Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, and EPA Region 7 Missouri Air Compliance Coordinator, 901 N. 5th Street, Kansas City, KS 66101, annually by April 1st, unless the applicable requirement specifies more frequent submission. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
 - a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - c) Whether compliance was continuous or intermittent;
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
 - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065, §(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 1) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.020(2)(R)11 Responsible Official

David A Thole and Michael J. Dwyer have each been established as responsible officials for this facility. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the St. Louis County Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065, §(6)(E)2. Application Shield

If the permittee submits a timely and complete application for permit renewal, the installation's failure to have an issued permit shall not be a violation of the requirement to have the permit until the permitting authority takes final action on the application. This application protection shall cease to apply if the applicant files an application that the permitting authority determines is not complete, or if, subsequent to a completeness determination, the applicant fails to submit, by the deadline specified in writing by the permitting authority, any additional information identified as being reasonably required to process the application. Permitting authority completeness determination and notification are detailed in 10 CSR 10-6.065(6)(B)1.B.

10 CSR 10-6.065, §(6)(E)3. Permit Renewal and Expiration

The installation's right to operate shall terminate upon the expiration of the permit, unless a complete permit renewal application is submitted at least six (6) months before the date of expiration, or unless the permitting authority takes final action approving an application for a permit renewal by the expiration date. If a timely and complete application for a permit renewal is submitted, but the permitting authority fails to take final action to issue or deny the renewal permit before the end of the term of the previous

permit, the previous permit shall not expire until the renewal permit is issued or denied. Any permit shield granted under the previous permit shall continue in effect during this period of time.

10 CSR 10-6.065, §(6)(E)6.A Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The St. Louis County Air Pollution Control Program, the Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) The St. Louis County Air Pollution Control Program, the Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065, §(6)(E)1.C Statement of Basis

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

10 CSR 10-6.065, §(6)(C)6. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date of permit issuance, provided that—

- 1) The applicable requirements are included and specifically identified in the permit; or
- 2) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation and the permit expressly includes that determination or a concise summary of it. The Statement of Basis constitutes the referenced determination of applicability.

The permit shield does not affect the following:

- 1) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders;
- 2) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance;
- 3) The applicable requirements of the acid rain program;
- 4) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information; or
- 5) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions of 10 CSR 10-6.065.

10 CSR 10-6.065, §(6)(C)8. Operational Flexibility

Operational flexibility (installation changes not requiring permit revisions). This installation is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications and the changes do not cause

emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The installation shall notify the St. Louis County Air Pollution Control Program, the Missouri Department of Natural Resources or EPA, Enforcement Section, at least seven (7) days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally-enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, the permittee shall provide advance written notice to the St. Louis County Air Pollution Control Program and Missouri Department of Natural Resources Air Pollution Control Program's Enforcement Section, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the permitting authority shall place a copy with the permit in the public file. Written notice shall be provided to the administrator and the permitting authority at least seven (7) days before the change is to be made. If less than seven (7) days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the administrator and the permitting authority as soon as possible after learning of the need to make the change.
 - b) The permit shield shall not apply to these changes.

10 CSR 10-6.065, §(6)(C)9 Off-Permit Changes

Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:

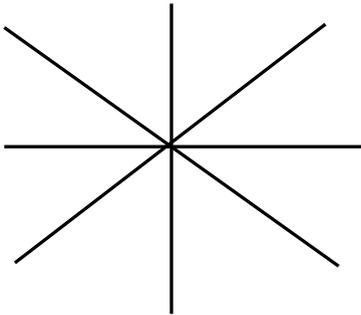
- 1) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification.
- 2) The permittee must provide written notice of the change to the St. Louis County Air Pollution Control Program, 74 Clarkson Wilson Ctr., Chesterfield, MO 63017 (or current address), as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101 (or current address), no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
- 3) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

Attachment B: Visible Emission Method 9 Observation Form

This compliance worksheet may be used to meet the recordkeeping requirements for Permit Condition PW001.

Source Name _____
 Address _____
 Observation Point _____
 Stack Identification _____
 Stack: Distance from _____ Height _____
 Temp _____ %RH _____
 Sky Condition _____
 Color of Emission _____

Quadrant: Draw symbols below in appropriate place to mark wind direction and speed, observer's location and sun location.



(Stack is at center)

Observer _____
 Observer's
 Signature _____
 Date _____ Certification Date _____
 Observation Began _____ Ended _____

COMMENTS:

	0	15	30	45		0	15	30	45
0					41				
1					42				
2					43				
3					44				
4					45				
5					46				
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V. Appendices

APPENDIX I: Closed Container Equivalency Determination Maintenance Plan

Maintenance Program and Recordkeeping for Flip-Top Bottles when not In Use, which is equivalent (per 40 CFR 63 Subpart GG, §63.744(a)(4)) to the storage of aerospace cleaning solvent in flip-top bottles with their flip-tops in the down position (a closed container) per 40 CFR 63 Subpart GG, §63.744(a)(2).

This maintenance program shall consist of:

A training session once each year for all employees that perform hand-wipe solvent cleaning, per 40 CFR 63 Subpart GG and 10 CSR 10-5.295, “Control of Emissions From Aerospace Manufacture and Rework Facilities”. This training shall instruct employees that flip-top bottles should be down when not in use and shall be documented including a list of trained employees which is kept for five years.

A monitoring program shall be initiated and maintained. Boeing personnel will conduct a walk-through of areas at each facility where regulated hand-wipe cleaning operations are routinely conducted and record the number of observed open and not in-use (“not closed”) flip-top bottles per facility. Boeing personnel will then calculate the percentage of bottles that were open and not in-use (“not closed”) for each facility. With this a monitoring improvement program shall be initiated with successive audits conducted for each facility according to the following schedule based on the results of the previous period’s set of audits:

- If the percent of bottles found not closed is greater than 2.0 percent in the facility, then an audit must be performed within the next quarter.
- If the percent of bottles found not closed is between 1.0 percent and 2.0 percent in the facility, then an audit must be performed within the next six months.
- If the percent of bottles found not closed is between 0.5 percent and 1.0 percent in the facility, then an audit must be performed within the next year.
- If the percent of bottles found not closed is less than 0.5 percent in the facility, then an audit must be performed within the next two years.

The time period for performing each audit begins at the end of the quarter in which the previous audit was performed.

Two consecutive audits resulting in greater than 2.0 percent of flip-top bottles found not closed, will result in non-compliance with this maintenance program, and thus, non-compliance with 40 CFR §63.744(a)(2) and (a)(4).

The bottles subject to this maintenance program shall have flip-top caps, and have an opening no larger than 0.012868 square inches of area (which is equivalent to 0.128 inch diameter).

APPENDIX II: Specialty Coating VOC Limitations

Table I: Specialty Coating VOC Limitations	Pounds per gallon	Grams per liter
Ablative Coating	5.0	600
Adhesion Promoter	7.4	890
Adhesive Bonding Primers:		
Cured at 250°F or below	7.1	850
Cured above 250°F	8.6	1030
Adhesives:		
Commercial Interior Adhesive	6.3	760
Cyanoacrylate Adhesive	8.5	1020
Fuel Tank Adhesive	5.2	620
Nonstructural Adhesive	3.0	360
Rocket Motor Bonding Adhesive	7.4	890
Rubber-Based Adhesive	7.1	850
Structural Autoclavable Adhesive	0.5	60
Structural Nonautoclavable Adhesive	7.1	850
Antichafe Coating	5.5	660
Bearing Coating	5.2	620
Caulking and Smoothing Compounds	7.1	850
Chemical Agent-Resistant Coating	4.6	550
Clear Coating	6.0	720
Commercial Exterior Aerodynamic Structure Primer	5.4	650
Compatible Substrate Primer	6.5	780
Corrosion Prevention Compound	5.9	710
Cryogenic Flexible Primer	5.4	645
Cryoprotective Coating	5.0	600
Dry Lubricative Material	7.3	880
Electric or Radiation-Effect Coating	6.7	800
Electrostatic Discharge and Electromagnetic Interference (EMI) Coating	6.7	800
Elevated Temperature Skydrol Resistant Commercial Primer	6.2	740
Epoxy Polyamide Topcoat	5.5	660
Fire-Resistant (interior) Coating	6.7	800
Flexible Primer	5.3	640
Flight-Test Coatings:		
Missile or Single Use Aircraft	3.5	420
All Others	7.0	840
Fuel-Tank Coating	6.0	720
High-Temperature Coating	7.1	850
Insulation Covering	6.2	740
Intermediate Release Coating	6.3	750
Lacquer	6.9	830
Maskant:		
Bonding Maskant	10.3	1230
Critical Use and Line Sealer Maskant	8.5	1020
Seal Coat Maskant	10.3	1230
Metallized Epoxy Coating	6.2	740
Mold Release	6.5	780
Optical Anti-Reflective Coating	6.3	750
Part Marking Coating	7.1	850
Pretreatment Coating	6.5	780
Rain Erosion-Resistant Coating	7.1	850
Rocket Motor Nozzle Coating	5.5	660
Scale Inhibitor	7.3	880
Screen Print Ink	7.0	840
Sealants:		
Extrudable/Rollable/Brushable Sealant	2.3	280
Sprayable Sealant	5.0	600
Silicone Insulation Material	7.1	850
Solid Film Lubricant	7.3	880
Specialized Function Coating	7.4	890
Temporary Protective Coating	2.7	320
Thermal Control Coating	6.7	800
Wet Fastener Installation Coating	5.6	675
Wing Coating	7.1	850

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Minor Modification, received June 8, 2011
- 2) Part 70 Operating Permit Administrative Amendment, received November 4, 2009;
- 3) Part 70 Operating Permit Renewal Application, received November 2, 2007;
- 4) 2003-2007 Emissions Inventory Questionnaires;
- 5) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
- 6) Letter from Steven Feeler of Missouri Department of Natural Resources Re: Closed Container Equivalency Determination Pursuant to 40 CFR §63.744(a)(4), dated December 2, 2008;
- 7) Letter from Steven Feeler of Missouri Department of Natural Resources Re: 10 CSR 10-5.330 Applicability of Surface Coating of Aerospace Vehicles and/or Components, dated August 21, 2009;
- 8) St. Louis County Air Pollution Control Program Operating Permit #3217;
- 9) St. Louis County Air Pollution Control Operating Permit #3218;
- 10) St. Louis County Air Pollution Control Operating Permit #3219;
- 11) St. Louis County Air Pollution Control Construction Permit #0865 (St. Louis County Air Pollution Control Operating Permit #4709);
- 12) St. Louis County Air Pollution Control Construction Permit #0777 (St. Louis County Air Pollution Control Operating Permit #4374);
- 13) St. Louis County Air Pollution Control Construction Permit #1042 (St. Louis County Air Pollution Control Operating Permit #4902);
- 14) St. Louis County Air Pollution Control Construction Permit #1207 (St. Louis County Air Pollution Control Operating Permit #5140);
- 15) St. Louis County Air Pollution Control Construction Permit #1303 (St. Louis County Air Pollution Control Operating Permit #5239);
- 16) St. Louis County Air Pollution Control Construction Permit #1303 (St. Louis County Air Pollution Control Operating Permit #5240);
- 17) St. Louis County Air Pollution Control Construction Permit #1304 (St. Louis County Air Pollution Control Operating Permit #5243);
- 18) St. Louis County Air Pollution Control Construction Permit #1332 (St. Louis County Air Pollution Control Operating Permit #5287);
- 19) St. Louis County Air Pollution Control Construction Permit #1474 (St. Louis County Air Pollution Control Operating Permit #5442);
- 20) St. Louis County Air Pollution Control Construction Permit #1475 (St. Louis County Air Pollution Control Operating Permit #5443);
- 21) St. Louis County Air Pollution Control Construction Permit #1522 (St. Louis County Air Pollution Control Program Operating Permit #5490);
- 22) St. Louis County Air Pollution Control Construction Permit #1621 (St. Louis County Air Pollution Control Operating Permit #5690);
- 23) St. Louis County Air Pollution Control Construction Permit #1624 (St. Louis County Air Pollution Control Operating Permit #5614);

- 24) St. Louis County Air Pollution Control Construction Permit #1709 (St. Louis County Air Pollution Control Operating Permit #5701);
- 25) St. Louis County Air Pollution Control Operating Permit #3078
- 26) St. Louis County Air Pollution Control Operating Permit #3079;
- 27) St. Louis County Air Pollution Control Construction/Operating Permit #6168;
- 28) St. Louis County Air Pollution Control Construction/Operating Permit #6839;
- 29) St. Louis County Air Pollution Control Construction/Operating Permit #6840;
- 30) St. Louis County Air Pollution Control Construction/Operating Permit #6885;
- 31) St. Louis County Air Pollution Control Construction/Operating Permit #6895;
- 32) St. Louis County Air Pollution Control Construction/Operating Permit #6916;
- 33) St. Louis County Air Pollution Control Construction/Operating Permit #6951;
- 34) St. Louis County Air Pollution Control Construction/Operating Permit #7264;
- 35) St. Louis County Air Pollution Control Construction/Operating Permit #7265;
- 36) St. Louis County Air Pollution Control Construction/Operating Permit #7266;
- 37) St. Louis County Air Pollution Control Construction/Operating Permit #7267;
- 38) St. Louis County Air Pollution Control Construction/Operating Permit #7268;
- 39) St. Louis County Air Pollution Control Construction/Operating Permit #7269;
- 40) St. Louis County Air Pollution Control Construction/Operating Permit #7270.

Definitions

This facility is subject to the definitions listed in, *10 CSR 10-6.020 Definitions and Common Reference Tables, Saint Louis County Ordinance 612.030, Definitions*, and any other term defined in an applicable local, state or federal regulation. The following select terms are frequently used in the permit:

Saint Louis County Ordinance 612.030

- (1) “Board” means the Appeal Board as established by Section 612.090
- (2) “Director” means the Director of the St. Louis County Department of Health
- (3) “Division” means the Air Pollution Control Branch of the Division of Environmental Protection of the St. Louis County Department of Health

10 CSR 10-6.020 Definitions and Common Reference Tables

- (2)(A) Administrator—The regional administrator for Region VII, U.S. Environmental Protection Agency (EPA).
- (2)(D) Director or department Director—Director of the Department of Natural Resources.

In addition, for purposes of this permit the following terms are defined:

- (1) Working day—Any day when business is conducted, excluding company-recognized holidays and weekends.
- (2) Program Manager—The Program Manager of the St. Louis County Air Pollution Control.

Applicable Requirements Included in the Operating Permit but Not in the Application

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

- 1) 10 CSR 10-5.130, *Certain Coals to Be Washed*. The facility does not import, sell, offer for sale, expose for sale, exchange, deliver or transport coal for use and consumption.
- 2) 10 CSR 10-5.240, *Additional Air Quality Control Measures May be Required When Sources are Clustered in a Small Land Area*. The facility is not located in a small land area as defined by the rule.
- 3) 10 CSR 10-5.330, *Control of Emissions from Industrial Surface Coating Operations*. This regulation is not applicable per a letter from Steven Feeler of the Missouri Department of Resources since the facility is subject to 10 CSR 10-5.295, *Control of Emission from Aerospace Manufacture and Rework Facilities*.
- 4) 10 CSR 10-5.370, *Control of Emissions from the Application of Deadeners and Adhesives*, the facility is not an automotive manufacturer as required to be subject to the rule.
- 5) 10 CSR 10-5.455, *Control of Emission from Solvent Cleanup Operation*. The facility emits less than 500 lbs per day of VOCs from any non-exempt solvent cleanup operations. In addition, cleaning operations subject to the Aerospace NESHAP are exempt according to section (C)7.
- 6) 10 CSR 10-5.500, *Control of Emissions from Volatile Organic Liquid Storage*, all storage vessels that meet the requirements of this rule are either subject to or exempt from the requirements of 40 CFR Parts 60, 61, or 63 and are therefore exempt from this rule according to section (1)(B)7.
- 7) 10 CSR 10-5.520, *Control of Volatile Organic Compound Emissions From Existing Major Sources*, does not apply to this facility because the facility is subject to one or more rules under Title 10, Chapter 5 of the Code of State Regulations (CSR) for volatile organic compound (VOC) emissions from a product process, or a raw material, intermediate or product tank.
- 8) 10 CSR 10-5.540, *Control of Emissions From Batch Process Operations*, does not apply because the facility does not operate any batch operations that have the potential to emit 100 tons/year of VOCs, nor do they have any operations within the SIC codes listed in the rule.
- 9) 10 CSR 10-5.570 *Control of Sulfur Emissions From Stationary Boilers*, does not apply to this facility because emission units are not subject to this rule per *10 CSR 10-5.570 (1) (C)6* since the boilers operate exclusively on natural gas and #2 fuel oil with less than 0.5 percent sulfur.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

St. Louis County Air Pollution Control Construction/Operating Permit #5331, 5368, and 5737 were modified to reflect previously approved permit conditions and actual monitoring and recordkeeping procedures at Boeing. The annual hourly limits were replaced with equivalent 12-month rolling total limits.

NSPS Applicability

- 1) Subpart Dc, “Small Industrial – Commercial – Institutional Steam Generating Units.” Several boilers at this facility are subject to this regulation as indicated in the permit under EU-0090-001 and EU-0090-002.
- 2) Subpart K and Ka, “Storage Vessels for Petroleum Liquids after June 11, 1973” and “Storage Vessels for Petroleum Liquids.” There are no “petroleum liquid” storage tanks with capacity greater than 40,000 gallons (Fuel oils # 2 through 6 and diesel fuel # 2-D and 4-D are exempt from the definition of “Petroleum Liquids”).

- 3) Subpart Kb, “Storage Vessels for Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.” There are not storage vessels subject to this regulation. The following table shows potentially affected units and the reason for non-applicability.

ST-076-03	Jet fuel 30,000 gal above ground storage tank	VP =0.72 kPa @ 110 °F (<15.0 kPa limit)
ST-076-04	Jet fuel 30,000 gal above ground storage tank	VP =0.72 kPa @ 110 °F (<15.0 kPa limit)
ST-076-05	Jet fuel 30,000 gal above ground storage tank	VP =0.72 kPa @ 110 °F (<15.0 kPa limit)
ST-102-21	Fuel oil #2 UST (20,000 gal)	VP =0.15 kPa @ 110 °F (<15.0 kPa limit)

- 4) Subpart GG, “Standards of Performance for Stationary Gas Turbines”. EU-240, the Natural Gas Turbine (OP #6869), is subject to this regulation. According to 60.332(c), because this turbine is a stationary gas turbine with a heat input at peak load equal to or greater than 10 MMBtu and less than or equal to 100 MMBtu, the permittee is required to comply with the limit established by the equation in section 60.332(a)(2). See Calculation section below.
- 5) Subpart IIII, “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines”. This subpart does not apply to most of the generators at this facility because they were installed prior to July 11, 2005. The subject units at the time of permit issuance are EG-245-01, EG-921-01 and EG-64-03. EG-245 meets the Emission Limitations requirements with a 2009 Model Year Certificate of Conformity and the Monitoring requirements with an installed non-resettable meter. There are no Reporting requirements since the emergency unit is less than 3000 HP and less than 10 liters/cylinder. EG-921-01 meets the Emission Limitation requirements with a 2007 Model Year Certificate of Conformity and the Monitoring requirements with an installed non-resettable meter. There are no Reporting requirements since the emergency unit is less than 3000 HP and less than 10 liters/cylinder. EG-64-03 meets the Emission Limitations requirements with a Model Year Certificate of Conformity (since this is a rented unit, the model year and operating permit number will change, but the corresponding year certificate will be maintained on site) and the Monitoring requirements with an installed non-resettable meter. There are no Reporting requirements since the unit is less than 3000 HP and less than 10 liters/cylinder. (40 CFR 60.4214(a) and (b))
- 6) Subpart JJJJ, “Standards of Performance for Stationary Spark Ignition Internal Combustion Engines”. This subpart does not apply to EG-064-01, EG-066-09, EG-101-02, EG-101A-01, and EG-110-01 because they are emergency generators that were manufactured prior to January 1, 2009. (40 CFR 60.4230(a)(4)(iv) and 40 CFR 60.4230(a)(4)(iii))

MACT Applicability

- 1) 40 CFR Part 63 Subpart N, *Chromium Emissions from Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks*, does not apply to Boeing since the chrome anodizing tank was sold to GKN.
- 2) 40 CFR Part 63 Subpart Q, *Industrial Cooling Towers* does not apply to this installation because the cooling towers do not use chromium or chromium based compounds for water treatment.
- 3) 40 CFR Part 63 Subpart T, *Halogenated Solvent Cleaning*, applies to each vapor degreaser that utilizes halogenated solvents as indicated in the permit. Per ADI Control Number: M970030,

Boeing may assume the concentration of halogenated HAP in the liquid removed from the machine is the same as the liquid added to the machine.

The methodology for calculating emissions is provided by formula in §63.465(c). However, it should be noted that Boeing does not remove solid waste described as “SSR(i)” in §63.465(c)(1) from the vapor degreasers subject to Subpart T. The liquid solvent described as LSR(i) in §63.465(c)(1) could be contaminated with solids, grease, water, and other materials. In order to address this problem, EPA Region VII has issued a letter determination regarding how to make this calculation, dated March 12, 1997 and published in the ADI, Control Number M970030. According to this guidance, “when calculating the amount of halogenated HAP liquid solvent removed from a solvent cleaning machine, EPA suggests using the same halogenated HAP concentration of the liquid removed as that of the liquid added to the machine.”

- 4) 40 CFR 63 Subpart GG, *Aerospace Manufacturing and Rework Facilities*, applies to the installation as indicated in the permit. The requirements of this subpart do not apply to primers, topcoats, chemical milling maskants, strippers, and cleaning solvents containing HAP and VOC at concentrations less than 0.1 percent for carcinogens or 1.0 percent for noncarcinogens, as determined from manufacturer's representations. Primers and topcoats that contain organic HAP and VOC less than these thresholds are exempt from the application requirements of 40 CFR 63.745(f). Primers and topcoats that contain inorganic HAP less than these thresholds are exempt from the filtration requirements of 40 CFR 63.745(g). See applicability thresholds at 40 CFR 63.741(f).

§63.750, Test methods and procedures, provides methods for determining the vapor pressure of hand-wipe cleaning solvents. To further clarify these requirements, the vapor pressure of a blended hand-wipe solvent provided by the manufacturer that involves no mixing on site may be determined using the MSDS or other manufacturer's data, in lieu of a calculation, provided all components have been considered.

- 5) 40 CFR 63 Subpart DD, *Hazardous Air Pollutants from Off-Site Waste and Recovery Operations*, applies to this installation since Building 14 receives off site wastewater from GKN.
- 6) 40 CFR 63 Subpart JJ, *Wood Furniture Manufacturing Operations*, applies to Boeing as indicated in the permit. Boeing is classified as an “incidental wood furniture finisher”. According to 63.800(a), “The owner or operator of a source that meets the definition for an incidental furniture manufacturer shall maintain purchase or usage records demonstrating the source meets the definition in 63.801 of this subpart, but the source shall not be subject to any other provisions of this subpart.”
- 7) 40 CFR Part 63, Subpart CCC, *Steel Pickling Hydrochloric Acid Process* does not apply to this installation, because it does not pickle carbon steel components using hydrochloric acid solution at six percent or greater concentration by weight and at a temperature of 100 degrees F or greater. Steel pickling does not include removal of light rust or scale from finished steel products or activation of the metal surface prior to plating or coating. (40 CFR 63.1155 and 63.1156)
- 8) 40 CFR Part 63, Subpart EEEE, *Organic Liquids Distribution* does not apply to this installation. Organic liquids handled at this installation are within the rule exemptions for gasoline, fuel oil,

diesel, and aviation fuel, fuels consumed or dispensed on-site directly to users, solvents subject to other NESHAPs, and low vapor pressure materials. (40 CFR 63.2238 and 63.2406)

- 9) 40 CFR Part 63, Subpart MMMM, *Miscellaneous Metal Parts (Surface Coating)* does not apply to coating operations subject to the Aerospace NESHAP per 63.3881(c)(10). All other coating operations at this facility are exempt according to other sections of the rule.
- 10) 40 CFR Part 63, Subpart PPPP, *Surface Coating of Plastic Parts* does not apply to this installation. Plastic substrates that are surface coated fall within rule exemptions for aerospace components that are within the applicability criteria for the Aerospace NESHAP, specialty coatings used on aerospace components, research and development, building and facility maintenance, and other exemptions described at 40 CFR 63.4481.
- 11) 40 CFR Part 63, Subpart WWWW, *Reinforced Plastic Composites Production* does not apply to this facility because they do not process styrene-containing materials.
- 12) 40 CFR Part 63 Subpart YYYY, *Stationary Combustion Turbines*, applies to this installation due to the Natural Gas Turbine (#6869), however the only requirement for a lean pre-mix gas fired turbine such as this is to submit an initial notification, which was received on May 6, 2004.
- 13) 40 CFR Part 63 Subpart ZZZZ, *Stationary Reciprocating Internal Combustion Engines (RICE)* applies to this installation due to several stationary RICE on site. New emergency RICE greater than 500 HP are subject to NESHAP initial notification requirements only [40 CFR 63.6590(b)(1)(i)]. Initial notifications for subject units were received on October 27, 2004 and August 13, 2009.

Unit EG-111-01 was an “existing emergency stationary RICE” >500 HP because construction commenced before December 19, 2002. 40 CFR 63.6590(a)(1). As such, it is not required to meet the requirements of Subpart ZZZZ, or of Subpart A General Provisions. No initial notification was required for this unit. (40 CFR 63.6590(b)(3))

EG-921-01 and EG-064-03 (<500 HP) are subject to Subpart ZZZZ requirements, but all comply with this Subpart through compliance with 40 CFR Part 60, Subpart IIII. (40 CFR 63.6590(c))

- 14) 40 CFR Part 63, Subpart BBBB, *Semiconductor Manufacturing*, does not apply to this installation because it does not manufacture p-type and n-type semiconductors and active solid-state devices from a wafer substrate. Any research and development activities on semiconductors are not integrated into a semiconductor manufacturing process unit. (40 CFR 63.7182(b))
- 15) 40 CFR Part 63, Subpart DDDDD, *Boilers/Process Heaters* did apply to the external combustion boilers that have a maximum rated capacity that exceeds the applicability threshold of the subpart (> 10 MMBtu/hr). However, this rule was vacated on July 30, 2007, and is therefore no longer applicable. If the MACT is repromulgated, Boeing will comply with the new requirements.

- 16) 40 CFR Part 63 Subpart GGGGG, *Site Remediation*, does not apply to the installation. Site remediation work at Tract I and V is being performed under RCRA Corrective Action, which is exempt under 63.7881(b)(3).
- 17) 40 CFR Part 63 Subpart PTTTT, *Engine Test Cells/Stands*, applies to this installation due to the Jet Engine Research Operation (#6875), but there are no applicable requirements for this operation due to the exemption for existing affected sources found in section 63.9290(b).
- 18) 40 CFR Part 63 Subpart QQQQQ, *Friction Products Manufacturing*, does not apply to this installation. While purchased friction products such as brake components are used in aircraft assembly, friction materials are not manufactured at this site using a solvent-based process. (40 CFR 63.9485(a))

NESHAP Applicability

40 CFR Part 61, Subpart M, *National Emission Standard for Asbestos*, applies to the installation because of the renovation and demolition sections of the subpart, which makes the subpart applicable to all sources. It is included as a core permit requirement. Based on current activities at this facility, the following requirements of Subpart M do not apply: 40 CFR 61.142, 61.144, 61.147, 61.149, 61.151, 61.154, 61.155, and 61.156.

Other Regulatory Determinations

- 1) 10 CSR 10-5.300, *Control of Emission from Solvent Metal Cleaning*.
 - The rule does not apply to parts washers and solvent guns cleaners that are subject to 10 CSR 10-5.295 due to the exemption under 10 CSR 10-5.300(1)(D)1.B.
 - This rule does not apply to the halogenated degreasers due to the exemption under 10 CSR 10-5.300(1)(D)1.C.
 - This rule does not apply to non-halogenated degreasers VD-101-03 and VD-102-02, and cold cleaner CC-221-01 (OP #6114), which are used strictly to clean electronic components, due to the exemption under 10 CSR 10-5.300(1)(D)1.D.
 - The requirements of 10 CSR 10-5.300 (3)(B)2.B(II) does not apply if the parts are moved by hand in and out of the open-top vapor degreaser.
- 2) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
This regulation does not apply to boilers regulated by NSPS Subpart Dc that have greater than 30 MMBtu heat input per the exemption for emission sources regulated by 10 CSR 10-6.070 and the provisions of 40 CFR Part 60 (10 CSR 10-6.220(1)(H)). Since these boilers are subject to an opacity limit under 10 CSR 10-6.070 and 40 CFR Part 60, they are exempt from this regulation.
- 3) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*
Unpermitted natural gas boilers CS-066-01 through 04, CS-111-03, CS-221-01 and CS-221-02 are each <10 MMBtu and do not have fuel oil readily available as a backup fuel. The boilers could run on fuel oil in an emergency by bringing in a truck, but lines for fuel oil are not normally connected. If fuel oil were used, they would be subject to the sulfur limit established in this rule.
- 4) 10 CSR 10-6.400, *Restriction of Emission of Particulate Matter From Industrial Processes*
Construction permit #6885, Wood and Metal Shop Operation and #1522 (OP #5490) Plastic Tool Grinding are exempt from this regulation in accordance with 10 CSR 10-6.400(1)(B)(8)

and 10 CSR 10-6.061(3)(A)2.DD(IV), which exempts carving, cutting, routing, turning, drilling, machining, sawing, sanding, planing, buffing, or polishing solid materials, other than materials containing any asbestos, beryllium or lead greater than one percent, where the equipment is ventilated externally to an operating cyclonic inertial separator (cyclone), baghouse, or dry media filter. Both units above meet one of the exempt processes and are vented to a baghouse.

Other emission units that are exempt from this regulation, in accordance with 10 CSR 10-6.400(1)(B), are coating operations designed and maintained to control at least 95 percent of particulate overspray, particulate emission units subject to a federally enforceable requirement to control at least 90 percent of particulate emissions, emission sources that are exempt from Missouri construction permitting under 10 CSR 10-6.061, and emission units that have an uncontrolled potential to emit (at maximum hourly design rate) less than 0.5 pounds per hour or the calculated allowable emission limit in the rule.

5) 40 CFR Part 82, Subpart A, *Protection of Stratospheric Ozone, Production and Consumption Controls*

Based on representations by the applicant, the following 40 CFR Part 82, Protection of Stratospheric Ozone, Production and Consumption Controls Subpart A subsections do not currently apply to this installation: 40 CFR 82.5 through 82.13(f) and 40 CFR 82.17 through 82.24(b).

If at any time, the installation becomes subject to the above regulations they are responsible for contacting the St. Louis County Air Pollution Control, the Missouri Department of Natural Resources Air Pollution Control Program, and EPA Region VII to review and update the current permit.

6) After initial review by a regulatory agent without objection, forms shall be considered as approved by the Program Manager.

7) Construction Permits referenced in the permit, but with no applicable requirements listed, have been evaluated and determined to have no applicable requirements.

Calculations

1) 10 CSR 10-5.030, *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*

The total installation heat input at Boeing is approximately 463 MMBtu. Boeing is required to demonstrate compliance with 5.030(2)(B)2, but has chosen to demonstrate compliance with 5.030(2)(B)3, Emission Rate (ER) = 0.12 pounds/MMBtu, which is the strictest limit for an existing source (Installation > 1000 MMBtu/Hour).

For: *Natural Gas* $PM = 7.6 \frac{lb}{10^6 \text{ scf}}$ (From AP 42, Table 1.4-2)

$$7.6 \frac{lb}{10^6 \text{ scf}} * \frac{10^6 \text{ scf}}{1020 \text{ MMBtu}} = 0.0075 \text{ Lb/MMBtu} = ER$$

Fuel Oil $PM = 2.00 \frac{lb}{10^3 \text{ gal}}$ (From AP 42 Table 1.3-6 Industrial Boiler)

$$2 \frac{\text{lb}}{10^3 \text{ gal}} = 0.002 \frac{\text{lb}}{1 \text{ gal}} \quad * \frac{1 \text{ gal}}{140,000 \text{ BTU}} \quad * \frac{10^6 \text{ BTU}}{\text{MMBtu}}$$

(Heating Value for Distillate Oil-Liquid Fuels AP-42 App. A)

ER = 0.0143 Lb/MMBtu

Propane PM = 0.6 $\frac{\text{lb}}{10^3 \text{ gal}}$ (From AP 42 Table 1.5-1)

$$0.6 \frac{\text{lb}}{10^3 \text{ gal}} = 6E-04 \frac{\text{lb}}{1 \text{ gal}} \quad * \frac{1 \text{ gal}}{90,500 \text{ BTU}} \quad * \frac{10^6 \text{ BTU}}{\text{MMBtu}}$$

ER = 0.007 Lb/MMBtu (Thermal Equivalent for Propane AP-42 App. A)

2) 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

This regulation limits the sulfur dioxide emissions to 500 ppmv in certain generators (EU0120). Compliance with this rule is assumed in permit condition EU0120-004 by limiting the generators to burn only No. 2 fuel oil. No. 2 fuel oil sold within the State of Missouri is limited to a sulfur content of 0.5 percent by weight. The following mass balance on the sulfur in the fuel oil demonstrates compliance with this rule:

No. 2 Fuel Oil = 19,000 Btu/lb
 Maximum Sulfur Content = 0.005 lb S/lb Fuel Oil
 1 lb/MMBtu SO₂ = 538 ppm SO₂
 0.005 lb S/lb Fuel Oil / 0.019 MMBtu/lb = 0.263 lb S/MMBtu
 0.263 lb S/MMBtu x (64 lb SO₂/lbmol / 32 lb S/lbmol) = 0.526 lb SO₂/MMBtu
 0.526 lb/MMBtu x 538 ppm/(lb/MMBtu) = 283 ppmv

3) 40 CFR Part 60 Subpart GG, “Standards of Performance for Stationary Gas Turbines”, is applicable to the Natural Gas Turbine (#6869). The calculation below establishes the NO_x limitation:

Per 60.332 (a)(2):

$$\text{STD} = 0.0150 (14.4/Y) + F$$

STD = NO_x emission concentration percent by volume

Y = Manufacturer’s rated heat rate. Y value should not exceed 14.4 kJ-w/hr.

F = NO_x emission allowance for fuel-bound nitrogen as defined in Paragraph (a)(4) of this section.

Boeing has elected not to apply a NO_x emission allowance for fuel-bound nitrogen, F, therefore, F=0 (60.332(a)(4)).

The rated heat input of this unit is greater than 14.4 kJ-w/hr, therefore, 14.4 is used for Y.

STD=0.0150 (14.4/14.4) =0.0150 percent dry volume or 150 ppmvd @ 15 percent oxygen.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one (1) or more of the following reasons:

- 1) The specific pollutant regulated by that rule is not emitted by the installation;
- 2) The installation is not in the source category regulated by that rule;
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4) The installation does not contain the type of emission unit which is regulated by that rule;
- 5) The rule is only for administrative purposes.

The following four paragraphs apply only to changes that are not based on modifications to the facility.

- 1) Should a later determination conclude that the installation is subject to one (1) or more of the regulations specifically identified as not applicable in this Statement of Basis, the installation will be protected by the Permit Shield in such a case and cannot be deemed out of compliance with the Permit or with the regulation itself. The agency may re-open the permit for cause or the permittee may submit a permit modification application in accordance with the permit based on the circumstances.
- 2) Should a later determination conclude that the installation is subject to one (1) or more existing regulations omitted from the Statement of Basis; consistent with the operating permit modification or re-open for cause provisions, the installation shall determine and demonstrate, to the satisfaction of the St. Louis County Air Pollution Control and the Missouri Department of Natural Resources Air Pollution Control Program, the installation's compliance with that regulation(s). If the installation is not in compliance with an omitted regulation, the installation shall submit to the St. Louis County Air Pollution Control and the Missouri Department of Natural Resources Air Pollution Control Program a schedule, subject to approval, for achieving compliance with that regulation(s). The installation will be protected by the Permit Shield in such a case and cannot be deemed out of compliance with the Permit until the Permit has been officially modified, but can be deemed out of compliance with the regulation itself if compliance with the regulation is not achieved in accordance with the aforementioned approved schedule.
- 3) Should an applicable regulation listed in this permit be revised during the permit term, the permittee shall comply with the revised regulation by the effective date of the revision. The Permit Shield applies only to the version of the regulation in effect at the date of permit issuance including all requirements that were not modified in the revised version. The installation will be protected by the Permit Shield in such a case. The permittee is not required to report deviations from the revised portions of the regulation, and cannot be deemed out of compliance with the Permit until the Permit has been officially modified, but can be deemed out of compliance with the revised portions of the regulation itself once the revision is in effect.
- 4) Should a new applicable regulation become effective during the permit term, the permittee shall comply with the new regulation by the effective date of the regulation. The installation

cannot be deemed out of compliance with the Permit in such a case until the Permit has been officially modified, but can be deemed out of compliance with the regulation itself once the regulation is effective. Deviations are not required to be reported by the permit.

EPA Region 7 Comments on Draft Title V Permit Received April 14, 2010

- 1) Page 9 of the permit, the section entitled "Emission Units Without Limitations" provides a table that contains a list of equipment at this installation which does not have unit specific limitation at the time of permit issuance. In 10 CSR 10-6.030, section (5) and 10 CSR 10-6.220 section (6) of the State Implementation Plan (SIP) for the State of Missouri, contains opacity and particulate emission limitations that may be applicable to the named equipment, such as the boilers, listed in the table. Our recommendation is to determine if the emissions units listed in the table have opacity and/or particulate applicable emission limitations. If determined that the named units has an emission limitation, we recommend that these emission units be removed from this section of the permit and added to section III, "Emission Unit Specific Emission Limitations" section of the renewal operating permit. Also to specifically state individually those emission units in this section of the permit and their applicable regulations.
- 2) Page 17 and 18 of the permit~ the "Plant Wide Emissions Limitation, Permit Condition PW002 -Wood Furniture Manufacturing"; and Permit Condition PW003-Wood Furniture Manufacturing Alternative Operating Scenario A section of the permit, Boeing proposes to place 10 CSR 10-6.075 and 40 CFR Part 63 Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations with the applicable emission limitations and Monitoring/Recordkeeping/Reporting requirements in this section of the permit. Our recommendation is to determine if Subpart JJ applies to all of the emissions units at the facility. If not, identify individual emission units in which Subpart JJ is applicable and incorporate in section III. "Emission Unit Specific Emission Limitations" of the operating permit. Or, in the current proposed "Plant Wide Emission Limitations" section of the renewal permit, add and explicitly state the definition of "Incidental wood furniture manufacturer" which reads in the Subpart JJ standard; a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.

Response to EPA Comments on Draft Title V Operating Permit

- 1) The seven boilers that were previously listed under the "Emission Units Without Limitations" section were moved to the "Emission Units With Limitations" section. These boilers were added to the table under EU0090—Combustion Sources in the Emission Unit Specific Emission Limitations section. Regulation 10 CSR 10-5.030 was moved from the Plant Wide Emission Limitations section to the Emission Unit Specific Emission Limitations section under EU0090 and was added to table in that section as well. 10 CSR 10-6.220 remains under the Plant Wide Emission Limitations section since it would apply to a large number of emission units at the facility. However, a line stating "Plant wide conditions may apply to these units" was added to the description of this section so as not to exclude any of these emission units from applicability under 10 CSR 10-6.220.

- 2) If it becomes applicable, 40 CFR Part 63 Subpart JJ would not apply to any listed emission unit specifically. Therefore, this regulation remains under the Plant Wide Emission Limitations section to cover any area within the plant. A scenario where this MACT might apply would be if an employee built a toolbox or a shelf at any location within the plant, as needed, and painted it. An explicit definition for “Incidental wood furniture manufacturer” was added to this Plant Wide condition as was suggested by EPA.

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