FACILITY PERMIT REVIEW SHEET

DATE: 9/26/2011 **APPLICATION NUMBER:** 0310142-007-AO

FACILITY NAME: Shands Jacksonville Medical Center

FACILITY DESCRIPTION: Hospital, steam generating boiler

PERMIT PROCESSOR: C. Blane Johnson

MAJOR FOR CRITERIA POLLUTANTS AND/OR HAPs (Circle)

CO **PB** **NO_x** **PM** **SO_2** **VOC** **HAP**

SUBJECT TO: (Circle)

NSR(PSD) **PERMIT NUMBER:** _____

NSR(NAA) **PERMIT NUMBER:** _____

BACT **EU NUMBER:** 006

MACT **EU NUMBER:** 006

RACT **EU NUMBER:** 006

NSPS **EU NUMBER:** 006

PROJECT EMISSION SUMMARY

	POTENTIAL EMISSIONS	ALLOWABLE EMISSIONS	
	TPY	LBS/HR	TPY
PM	0.6		
PM10			
SO2	0.2		
NOX	7.7		
CO	6.5		
VOC	0.4		
TOC			
PB			
TOTAL HAP	0.1		
SINGLE HAP (highest)	0.1		

COMMENTS: _____

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310142-007-AO **EU NUMBER:** 006 (NG)

REFERENCES: AP-42, Section 1.4; 0310142-007-AO application

POLLUTANT: Nitrogen Oxides (NO_x)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/million ft^3) x emission factor (lb/million ft3) x (hr/yr) = PTE

18.0	1020	100	8760	=	15459	lb/yr
				=	7.7	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/million ft^3) x emission factor (lb/million ft3) x (hr/yr) = PTE

18.0	1020	84	8760	=	12985	lb/yr
				=	6.5	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/million ft^3) x emission factor (lb/million ft3) x (hr/yr) = PTE

18.0	1020	7.6	8760	=	1175	lb/yr
				=	0.6	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Emission factor is combined "Filterable PM" (=2) and "Condensable PM" (=1.3).

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/million ft^3) x emission factor (lb/million ft3) x (hr/yr) = PTE

18.0	1020	0.6	8760	=	92.8	lb/yr
				=	0.05	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS:

POLLUTANT: Hazardous Air Pollutants (HAPs)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/million ft^3) x emission factor (lb/million ft3) x (hr/yr) = PTE

18.0	1020	1.9	8760	=	292	lb/yr
				=	0.1	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS: Highest HAP, Hexane (1.8 lb/million ft^3) = 278 lb/yr.

POLLUTANT: Volatile Organic Compounds (VOCs)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/million ft^3) x emission factor (lb/million ft3) x (hr/yr) = PTE

18.0	1020	5.5	8760	=	850	lb/yr
				=	0.4	ton/yr

RULE APPLICABILITY: **FEDERAL** **STATE** **LOCAL**

COMMENTS:

PERMIT PROCESSOR: **DATE:**

Effective 2/27/97

EMISSIONS CALCULATIONS

APPLICATION NUMBER: 0310142-007-AO **EU NUMBER:** 006 (#2 F.O.)

REFERENCES: AP-42, Section 1.3; 0310142-007-AO application

POLLUTANT: Nitrogen Oxides (NO_x)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

18.0	140	20	400	=	1029	lb/yr
				=	0.5	ton/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Carbon Monoxide (CO)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

18.0	140	5	400	=	257	lb/yr
				=	0.1	ton/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS:

POLLUTANT: Particulate Matter (PM)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER
		20		

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

18.0	140	3.3	400	=	170	lb/yr
				=	0.1	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Emission factor is combined "Filterable PM" (=2) and "Condensable PM" (=1.3).

POLLUTANT: Sulfur Dioxide (SO_2)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x % sulfur content of fuel x (hr/yr) = PTE

18.0	140	142	0.05	400	=	365	lb/yr
					=	0.2	ton/yr

RULE APPLICABILITY:	FEDERAL	STATE	LOCAL
		62-296.406	2.1101

COMMENTS: Maximum fuel oil sulfur content limited to 0.05% by weight.

POLLUTANT: Hazardous Air Pollutants (HAPs)

ALLOWABLE EMISSIONS

LBS/HR	TPY	% OPACITY	CONCENTRATION	OTHER

POTENTIAL EMISSION CALCULATIONS

heat input (MMBtu/hr) / fuel heating value (MMBtu/1000 gal) x emission factor (lb/1000 gal) x (hr/yr) = PTE

18.0	140	7.88E-02	400	=	4.05	lb/yr
				=	0.0	ton/yr

RULE APPLICABILITY:

FEDERAL	STATE	LOCAL

COMMENTS: Highest HAP, Formaldehyde (6.10E-2 lb/1000 gal) = 3.14 lb/yr.

PERMIT PROCESSOR: _____ **DATE:** _____

Effective 2/27/97