



Part B, Section 1, SCAQMD BACT Determination

Source Type: **Major/LAER**
 Application No.: **562449**
 Equipment Category: **Boiler**
 Equipment Subcategory: **39.9 MMBtu/hr with SCR**
 Date: **March 22, 2016**

1. EQUIPMENT INFORMATION

A. MANUFACTURER: Simoneau		B. MODEL: FX2-35	
C. DESCRIPTION: 39.9 MMBtu watertube boiler with low NOx burner and SCR			
D. FUNCTION: Boilers provides steam for laundry facilities, hospital heating and sterilization procedures.			
E. SIZE/DIMENSIONS/CAPACITY: Boiler No. 2			
COMBUSTION SOURCES			
F. MAXIMUM HEAT INPUT: 39.9 MMBtu/hr			
G. BURNER INFORMATION			
TYPE		INDIVIDUAL HEAT INPUT	
WEBSTER		39.9 MMBtu/hr	
NUMBER		1	
H. PRIMARY FUEL: NATURAL GAS		FUEL OIL	
J. OPERATING SCHEDULE: Hours 24 Days 7 Weeks 52			
K. EQUIPMENT COST:			
L. EQUIPMENT INFORMATION COMMENTS: EQUIPMENT IS NEW CONSTRUCTION. THREE IDENTICAL BOILERS AND SCR WITH IDENTICAL LIMITS. ADD'L PERMIT NO. BOILER 1 G36227, BOILER 3 G36229, SCR 1 G36231, SCR 3 G36234			

2. COMPANY INFORMATION

A. COMPANY: US GOVT, VET. AFFAIRS MED CTR (LONG BEACH)		B. FAC ID: 13990	
C. ADDRESS: 5901 E. 7 th ST. CITY: Long Beach STATE: CA ZIP: 90822		D. NAICS CODE: 622110	
E. CONTACT PERSON: Jason Thompson		F. TITLE: Env Protection Spec.	
G. PHONE NO.: 562-826-8000 x3083		H. EMAIL:	

3. PERMIT INFORMATION

A. AGENCY: SCAQMD	B. APPLICATION TYPE: NEW CONSTRUCTION
C. SCAQMD ENGINEER: Roy Olivares	
D. PERMIT INFORMATION: PC ISSUANCE DATE: P/O NO.: G36227 PO ISSUANCE DATE: 6/18/2015	
E. START-UP DATE: 8/7/2015	
F. OPERATIONAL TIME: > 1 year	

4. EMISSION INFORMATION

A. BACT EMISSION LIMITS AND AVERAGING TIMES:						
	VOC	NOx	SOx	CO	PM OR PM₁₀	INORGANIC
BACT Limit		5 ppmvd		100 ppmvd		5 ppmvd NH3 slip
Averaging Time		15 min		15 MIN		60 MIN
Correction		@ 3% O ₂		@ 3% O ₂		@ 3% O ₂
B. OTHER BACT REQUIREMENTS: When firing on Standby fuel: 40 ppmvd NOx @3%O ₂ , 15 min avg; 400 ppmvd CO @3%O ₂ .						
C. BASIS OF THE BACT/LAER DETERMINATION: Achieved in Practice/New Technology						
D. EMISSION INFORMATION COMMENTS:						

5. CONTROL TECHNOLOGY

A. MANUFACTURER: Pasasia		B. MODEL: Custom	
C. DESCRIPTION: Selective Catalytic Reduction, low temp de-NOx, Haldor Topsoe, model dnx-1029. Ammonia injection, three 150 lb cylinders, feed forward			
D. SIZE/DIMENSIONS/CAPACITY: 4'-9" W x 4'-9" L x 9'-0" H			
E. CONTROL EQUIPMENT PERMIT INFORMATION: APPLICATION NO. 562452 PC ISSUANCE DATE: PO NO.: G36233 PO ISSUANCE DATE: 6/18/2015			
F. REQUIRED CONTROL EFFICIENCIES: Emission requirements are mass based and listed in Section 4 emission Information			
CONTAMINANT	OVERALL CONTROL EFFICIENCY	CONTROL DEVICE EFFICIENCY	COLLECTION EFFICIENCY
VOC	___%	___%	___%
NOx	___%	___%	___%
SOx	___%	___%	___%
CO	___%	___%	___%
PM	___%	___%	___%
PM ₁₀	___%	___%	___%
INORGANIC	___%	___%	___%
G. CONTROL TECHNOLOGY COMMENTS Pressure drop not to exceed 2.5" H2O. SCR be temperature 400-650oF. Ammonia injection shall not exceed 0.55 lb/hr. Ammonia injection to start when cat bed outlet temp reaches 400oF. Start-ups not to exceed 120 min for cold start and 30 min for warm start.			

6. DEMONSTRATION OF COMPLIANCE

A. COMPLIANCE DEMONSTRATED BY: Source Test PR16435
B. DATE(S) OF SOURCE TEST: October 12, 2016
C. COLLECTION EFFICIENCY METHOD:
D. COLLECTION EFFICIENCY PARAMETERS:
E. SOURCE TEST/PERFORMANCE DATA: low mid and high fire each tested for NOx, CO and NH3. Reference source test report for details of each load tested. All loads met emission limits for each contaminant,
F. TEST OPERATING PARAMETERS AND CONDITIONS: Low fire 322 Mcfd, mid fire 437 Mcfd, 814 Mcfd
G. TEST METHODS (SPECIFY AGENCY): SCAQMD Method 207.1, SCAQMD 100.1
H. MONITORING AND TESTING REQUIREMENTS: NH3 slip test every 3 months for first year.

I. DEMONSTRATION OF COMPLIANCE COMMENTS:

7. ADDITIONAL SCAQMD REFERENCE DATA

A. BCAT: 011204	B. CCAT: 81	C. APPLICATION TYPE CODE: 10	
D. RECLAIM FAC? YES <input type="checkbox"/> NO <input type="checkbox"/>	E. TITLE V FAC: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	F. SOURCE TEST ID(S): PR16435	
G. SCAQMD SOURCE SPECIFIC RULES: 1146			
H. HEALTH RISK FOR PERMIT UNIT			
H1. MICR:	H2. MICR DATE:	H3. CANCER BURDEN:	H4. CB DATE:
H5: HIA:	H6. HIA DATE:	H7. HIC:	H8. HIC DATE: