

FORM INV-2 EMISSION POINT DESCRIPTION

1. Company/Facility Name		ACME HOSPITAL		2. Form INV-2 Page		1	of	1
3. Release Point Identifier		EP-001						
4. Is this release point used as an emergency bypass stack?				No <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>			
If YES, for which release point(s)? List release point identifiers:								
5. Release Point Type								
Downward-facing Vent	<input type="checkbox"/>				Indoor Vented	<input type="checkbox"/>		
Fugitive (specify)	<input type="checkbox"/>				Vertical	<input checked="" type="checkbox"/>		
Goose Neck	<input type="checkbox"/>				Vertical with Rain Cap	<input type="checkbox"/>		
Horizontal	<input type="checkbox"/>							
6. Release Point Description		BOILER STACK						
7. Operating Status		Operating <input checked="" type="checkbox"/>	Permanently Shutdown <input type="checkbox"/>		Temporarily Shutdown <input type="checkbox"/>			
8. Operating Status Date (Please enter the date the shutdown occurred. The status date should be blank if the status above was entered as operating.)								
9. Stack Height Above Ground		20	feet					
10. Stack Shape and Dimensions: (interior dimensions at exit point)								
Circular Diameter:		<input checked="" type="checkbox"/>	1.5	feet				
Rectangular Dimensions:		<input type="checkbox"/>		feet	x		feet	
Composition Of Exhaust Stream								
Exhaust Stream Characteristics		Release Point Composition of Exhaust Stream			Units of Measure			
11. Temperature		300			Degree Fahrenheit			
12. Flow Rate		3,600			<input checked="" type="checkbox"/> ACFM <input type="checkbox"/> SCFM			
13. Bypass Stacks								
Bypass Stack – Release Point Identifier								
Bypass Stack Description								
Bypass Stack – Release Point Identifier								
Bypass Stack Description								
14. List of Emission Unit Identifiers Venting Through This Release Point Identifier								
Emission Unit Identifier	Emission Unit Identifier	Emission Unit Identifier	Emission Unit Identifier					
EU-001								

FORM INV-4 PROCESS DESCRIPTION - ACTUAL EMISSIONS

1. Company/Facility Name		ACME HOSPITAL			2. Form INV-4 Page		1	of	1
3. Release Point Identifier		EP-001							
4. Release Point Description		NATURAL GAS BOIL							
5. Emission Year		2017							
6. Emission Unit Identifier		EU-001							
7. SCC Number		10200602							
8. Description of Process		NATURAL GAS COMB							
Annual Throughput									
9. Annual Throughput		24.5							
10. <u>Throughput Unit of Measure</u>		MMCF							
11. Throughput Type (Input, Output, or Existing)		I							
12. <u>Throughput Material</u>		NATURAL GAS							
Actual Operating Rate/Schedule									
13. Average Hours/Day		8							
14. Average Days/Week		5							
15. Average Weeks/Year		52							
16. Actual Hours For Year		2,080							
Seasonal Operations									
17. January, February & December (%)		25							
18. March, April & May (%)		25							
19. June, July & August (%)		25							
20. September, October & November (%)		25							
Associated Control Devices									
21. Control Device Identifier									
22. Control Device Description									
23. Control Device Identifier									
24. Control Device Description									
ACTUAL EMISSIONS									
25. Air Pollutant	26. Emission Factor	27. Emission Factor Units of Measure	28. Source of Emission Factor	29. Ash or Sulfur %	30. Combined Control Efficiency	31. Transfer Efficiency	32. Actual Estimated Emissions (Tons)		
PM-2.5	7.6	LBS/MMCF	WEBFIRE				0.09		
PM-10	7.6	LBS/MMCF	WEBFIRE				0.09		
SO ₂	0.6	LBS/MMCF	WEBFIRE				0.01		
NOX	100	LBS/MMCF	WEBFIRE				1.23		
VOC	5.5	LBS/MMCF	WEBFIRE				0.07		
CO	84	LBS/MMCF	WEBFIRE				1.03		
Lead									
Ammonia	3.2	LBS/MMCF	WEBFIRE				0.04		

ACTUAL EMISSIONS – Individual HAPs and additional regulated air pollutants – list each individual pollutant name in Column 25

Hexane	1.8	LBS/MMCF	WEBFIRE				0.02

*Calculation Methods: CEMS – Engineering Judgment – Manufacturer’s Specification – Material Balance – Other (Specify) – State or Local Speciation Profile – Site Specific – Stack Test – Trade Group – US EPA - Vendor

FORM INV-5 CALCULATIONS

1. Company/Facility Name	ACME HOSPITAL	2. Form INV-5 Page	1	of	1
3. Release Point Identifier	EP-001				
4. Emission Unit Identifier	EU-001				
5. SCC Number:	10200602				
Calculations are provided in support of information reported on Form INV – 4 for the SCC Number listed above.					
6. Emissions Calculations					
PROCESS: NATURAL GAS COMBUSTION					
FUEL: NATURAL GAS					
ACTUAL THROUGHPUT: 24.5 MMCF					
POLLUTANT		EMISSION FACTORS FROM AP-42 (SCC NUMBER 10200602)			
PM-2.5		7.6 LBS PER MMCF BURNED			
PM-10		7.6 LBS PER MMCF BURNED			
SO2		0.6 LBS PER MMCF BURNED			
NOX		100 LBS PER MMCF BURNED			
VOC		5.5 LBS PER MMCF BURNED			
CO		84 LBS PER MMCF BURNED			
NH3		3.2 LBS PER MMCF BURNED			
HEXANE		1.8 LBS PER MMCF BURNED			
CALCULATIONS					
ACTUAL PM-2.5 TONS					
$(24.5 \text{ MMCF}) * (7.6 \text{ LBS/MMCF}) * (1 \text{ TON}/2,000 \text{ LBS}) = 0.09 \text{ TONS}$					
ACTUAL PM10 TONS = 0.09					
ACTUAL SO2 TONS = 0.01					
ACTUAL NOX TONS = 1.23					
ACTUAL VOC TONS = 0.07					
ACTUAL CO TONS = 1.03					
ACTUAL NH3 TONS = 0.04					
ACTUAL HEXANE TONS = 0.02					