

**Attachment M**  
**Air Pollution Control Device Sheet**  
 (FLARE SYSTEM)

Control Device ID No. (must match Emission Units Table):

**Equipment Information**

1. Manufacturer:  Model No.	2. Method: <ul style="list-style-type: none"> <li><input type="checkbox"/> Elevated flare</li> <li><input type="checkbox"/> Ground flare</li> <li><input type="checkbox"/> Other</li> </ul> Describe
3. Provide diagram(s) of unit describing capture system with duct arrangement and size of duct, air volume, capacity, horsepower of movers. If applicable, state hood face velocity and hood collection efficiency.	
4. Method of system used: <input type="checkbox"/> Steam-assisted <input type="checkbox"/> Air-assisted <input type="checkbox"/> Pressure-assisted <input type="checkbox"/> Non-assisted	
5. Maximum capacity of flare:  <div style="text-align: right;">scf/min</div> <div style="text-align: right;">scf/hr</div>	6. Dimensions of stack:  <div style="text-align: right;">Diameter                      ft.</div> <div style="text-align: right;">Height                              ft.</div>
7. Estimated combustion efficiency: (Waste gas destruction efficiency)  Estimated:                              % Minimum guaranteed:                      %	8. Fuel used in burners: <input type="checkbox"/> Natural Gas <input type="checkbox"/> Fuel Oil, Number <input type="checkbox"/> Other, Specify:
9. Number of burners:  Rating:                                      BTU/hr	11. Describe method of controlling flame:
10. Will preheat be used? <input type="checkbox"/> Yes <input type="checkbox"/> No	
12. Flare height:                                      ft	14. Natural gas flow rate to flare pilot flame per pilot light:  <div style="text-align: right;">scf/min</div> <div style="text-align: right;">scf/hr</div>
13. Flare tip inside diameter:                                      ft	
15. Number of pilot lights:  Total    BTU/hr	16. Will automatic re-ignition be used? <input type="checkbox"/> Yes <input type="checkbox"/> No
17. If automatic re-ignition will be used, describe the method:	
18. Is pilot flame equipped with a monitor? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, what type? <input type="checkbox"/> Thermocouple <input type="checkbox"/> Infra-Red <input type="checkbox"/> Ultra Violet <input type="checkbox"/> Camera with monitoring control room <input type="checkbox"/> Other, Describe:	
19. Hours of unit operation per year:	

### Steam Injection

20. Will steam injection be used? <input type="checkbox"/> Yes <input type="checkbox"/> No	21. Steam pressure <span style="float: right;">PSIG</span> Minimum Expected: Design Maximum:
22. Total Steam flow rate: <span style="float: right;">LB/hr</span>	23. Temperature: <span style="float: right;">°F</span>
24. Velocity <span style="float: right;">ft/sec</span>	25. Number of jet streams
26. Diameter of steam jets: <span style="float: right;">in</span>	27. Design basis for steam injected: <span style="float: right;">LB steam/LB hydrocarbon</span>
28. How will steam flow be controlled if steam injection is used?	

### Characteristics of the Waste Gas Stream to be Burned

29. Name	Quantity Grains of H <sub>2</sub> S/100 ft <sup>3</sup>	Quantity (LB/hr, ft <sup>3</sup> /hr, etc)	Source of Material
30. Estimate total combustible to flare: (Maximum mass flow rate of waste gas)		LB/hr or ACF/hr scfm	
31. Estimated total flow rate to flare including materials to be burned, carrier gases, auxiliary fuel, etc.: LB/hr or ACF/hr			
32. Give composition of carrier gases:			
33. Temperature of emission stream: <span style="float: right;">°F</span>  Heating value of emission stream: <span style="float: right;">BTU/ft<sup>3</sup></span>  Mean molecular weight of emission stream: MW = <span style="float: right;">lb/lb-mole</span>	34. Identify and describe all auxiliary fuels to be burned.  <span style="float: right;">BTU/scf</span> <span style="float: right;">BTU/scf</span> <span style="float: right;">BTU/scf</span> <span style="float: right;">BTU/scf</span>		
35. Temperature of flare gas: <span style="float: right;">°F</span>	36. Flare gas flow rate: <span style="float: right;">scf/min</span>		
37. Flare gas heat content: <span style="float: right;">BTU/ft<sup>3</sup></span>	38. Flare gas exit velocity: <span style="float: right;">scf/min</span>		
39. Maximum rate during emergency for one major piece of equipment or process unit:			scf/min
40. Maximum rate during emergency for one major piece of equipment or process unit:			BTU/min
41. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification):			
42. Describe the collection material disposal system:			
43. Have you included <b>Flare Control Device</b> in the Emissions Points Data Summary Sheet?			

**44. Proposed Monitoring, Recordkeeping, Reporting, and Testing**

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING:

RECORDKEEPING:

REPORTING:

TESTING:

MONITORING: Please list and describe the process parameters and ranges that are proposed to be monitored in order to demonstrate compliance with the operation of this process equipment or air control device.

RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring.

REPORTING: Please describe any proposed emissions testing for this process equipment on air pollution control device.

TESTING: Please describe any proposed emissions testing for this process equipment on air pollution control device.

45. Manufacturer's Guaranteed Capture Efficiency for each air pollutant.

46. Manufacturer's Guaranteed Control Efficiency for each air pollutant.

47. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty.