



**Kansas Department of Health and Environment  
Division of Environment  
Bureau of Air and Radiation**

**FLUID CATALYTIC CRACKING UNIT**

- 1) Source ID Number: \_\_\_\_\_
- 2) Company/Source Name: \_\_\_\_\_
- 3) Emission Unit Identification: \_\_\_\_\_
- 4) Normal Operating Schedule: \_\_\_\_\_ hrs/yr
- 5) Fresh feed rate \_\_\_\_\_ bbl/hr
- 6) Size of barrels \_\_\_\_\_ gal/bbl
- 7) Feed material, composition:

COMPONENT	MOLE % or WEIGHT% (circle one)

- 8) If applicable, feed recycle rate \_\_\_\_\_ bbl/hr
- 9) Regeneration air rate \_\_\_\_\_ scfm
- 10) Average reaction temperature \_\_\_\_\_ °F
- 11) Type of catalyst \_\_\_\_\_
- 12) Catalyst recirculation rate \_\_\_\_\_ lb/hr

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**(cont.)**

- 13) Catalyst regenerator coke burn-off rate \_\_\_\_\_lb/hr
- 14) Number of internal cyclones \_\_\_\_\_
- 15) Carbon Monoxide Boiler Primary Fuel Type (be sure to include appropriate units - Btu per (ft<sup>3</sup>, gal, or lb) for the heating value and (ft<sup>3</sup>, gal, or lb) per hr for consumption):  
Natural Gas \_\_\_\_\_ Oil \_\_\_\_\_ Other (specify) \_\_\_\_\_  
Heat Value: \_\_\_\_\_  
%Sulfur: \_\_\_\_\_ %Ash: \_\_\_\_\_  
Maximum Design Heat Rate: \_\_\_\_\_Btu/hr  
Operating rate: \_\_\_\_\_ Btu/hr  
Maximum Consumption Rate: \_\_\_\_\_ /hr  
Average Consumption Rate: \_\_\_\_\_ /hr
- 16) Secondary Fuel Type (be sure to include appropriate units - Btu per (ft<sup>3</sup>, gal, or lb)) for the heating value and (ft<sup>3</sup>, gal, or lb) per hr for consumption):  
Natural Gas \_\_\_\_\_ Oil \_\_\_\_\_ Other (specify) \_\_\_\_\_  
Heat Value: \_\_\_\_\_ %Sulfur: \_\_\_\_\_ %Ash: \_\_\_\_\_  
Maximum Burning Rate: \_\_\_\_\_Btu/hr Operating rate: \_\_\_\_\_ Btu/hr  
Maximum Consumption: \_\_\_\_\_ /hr Average Consumption: \_\_\_\_\_ /hr
- 17) Method used to dispose of collected fines: \_\_\_\_\_
- 18) Emissions discharged to the atmosphere \_\_\_\_\_ ft above grade through stack or duct \_\_\_\_\_ ft in diameter at \_\_\_\_\_ °F temperature, with \_\_\_\_\_ ft<sup>3</sup>/min and \_\_\_\_\_ ft/sec velocity.
- 19) For emission control equipment (i.e. cyclones, scrubbers, electrostatic precipitators, etc.), use the appropriate CONTROL EQUIPMENT form and duplicate as needed. Be sure to indicate the emission unit that the control equipment is affecting.
- 20) Did construction, modification, or reconstruction commence after June 11, 1973? Yes \_\_\_\_\_; No \_\_\_\_\_  
Did construction, modification, or reconstruction commence on or before January 17, 1984?  
Yes \_\_\_\_\_; No \_\_\_\_\_  
Is this a fluid catalytic cracking unit in which a contact material reacts with petroleum derivatives to improve feedstock quality and in which the contact material is regenerated by burning off coke and/or other deposits?  
Yes \_\_\_\_\_; No \_\_\_\_\_  
If yes, this plant may be subject to NSPS, 40 CFR Part 60, Subpart J.