

Subpart J - Standards of Performance for Petroleum Refineries

Source: [39 FR 9315, Mar. 8, 1974, as amended at 43 FR 10868, Mar. 15, 1978; 44 FR 13481, Mar. 12, 1979; 45 FR 79453, Dec. 1, 1980; 54 FR 34027, Aug. 17, 1989]

§ 60.101 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A.

(a) **Petroleum refinery** means any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking or reforming of unfinished petroleum derivatives.

(b) **Petroleum** means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.

(c) **Process gas** means any gas generated by a petroleum refinery process unit, except fuel gas and process upset gas as defined in this section.

(d) **Fuel gas** means any gas which is generated at a petroleum refinery and which is combusted. Fuel gas also includes natural gas when the natural gas is combined and combusted in any proportion with a gas generated at a refinery. Fuel gas does not include gases generated by catalytic cracking unit catalyst regenerators and fluid coking burners.

(e) **Process upset gas** means any gas generated by a petroleum refinery process unit as a result of start-up, shut-down, upset or malfunction.

(f) **Refinery process unit** means any segment of the petroleum refinery in which a specific processing operation is conducted.

(g) **Fuel gas combustion device** means any equipment, such as process heaters, boilers and flares used to combust fuel gas, except facilities in which gases are combusted to produce sulfur or sulfuric acid.

(h) **Coke burn-off** means the coke removed from the surface of the fluid catalytic cracking unit catalyst by combustion in the catalyst regenerator. The rate of coke burn-off is calculated by the formula specified in [§60.106](#).

(i) **Claus sulfur recovery plant** means a process unit which recovers sulfur from hydrogen sulfide by a vapor-phase catalytic reaction of sulfur dioxide and hydrogen sulfide.

(j) **Oxidation control system** means an emission control system which reduces emissions from sulfur recovery plants by converting these emissions to sulfur dioxide.

(k) **Reduction control system** means an emission control system which reduces emissions from

sulfur recovery plants by converting these emissions to hydrogen sulfide.

(l) **Reduced sulfur compounds** means hydrogen sulfide (H₂S), carbonyl sulfide (COS) and carbon disulfide (CS₂).

(m) **Fluid catalytic cracking unit** means a refinery process unit in which petroleum derivatives are continuously charged; hydrocarbon molecules in the presence of a catalyst suspended in a fluidized bed are fractured into smaller molecules, or react with a contact material suspended in a fluidized bed to improve feedstock quality for additional processing; and the catalyst or contact material is continuously regenerated by burning off coke and other deposits. The unit includes the riser, reactor, regenerator, air blowers, spent catalyst or contact material stripper, catalyst or contact material recovery equipment, and regenerator equipment for controlling air pollutant emissions and for heat recovery.

(n) **Fluid catalytic cracking unit catalyst regenerator** means one or more regenerators (multiple regenerators) which comprise that portion of the fluid catalytic cracking unit in which coke burn-off and catalyst or contact material regeneration occurs, and includes the regenerator combustion air blower(s).

(o) **Fresh feed** means any petroleum derivative feedstock stream charged directly into the riser or reactor of a fluid catalytic cracking unit except for petroleum derivatives recycled within the fluid catalytic cracking unit, fractionator, or gas recovery unit.

(p) **Contact material** means any substance formulated to remove metals, sulfur, nitrogen, or any other contaminant from petroleum derivatives.

(q) **Valid day** means a 24-hour period in which at least 18 valid hours of data are obtained. A "valid hour" is one in which at least 2 valid data points are obtained.