

**Environmental Protection Agency**

**§ 435.13**

by the oil and gas extraction industry in formulating drilling fluids. Poly(alpha olefins) are synthesized from the polymerization (dimerization, trimerization, tetramerization, and higher oligomerization) of purified straight-chain hydrocarbons such as C<sub>6</sub>-C<sub>14</sub> alpha olefins. Vegetable esters are synthesized from the acid-catalyzed esterification of vegetable fatty acids with various alcohols. The mention of these two branches of synthetic fluid base materials is to provide examples, and is not meant to exclude other synthetic materials that are either in current use or may be used in the future. A synthetic-based drilling fluid may include a combination of synthetic materials.

(y) The term *toxicity* as applied to BAT effluent limitations and NSPS for drilling fluids and drill cuttings shall refer to the bioassay test procedure presented in Appendix 2 of 40 CFR part 435, subpart A.

(z) The term *well completion fluids* shall refer to salt solutions, weighted brines, polymers, and various additives used to prevent damage to the well bore during operations which prepare the drilled well for hydrocarbon production.

(aa) The term *well treatment fluids* shall refer to any fluid used to restore or improve productivity by chemically or physically altering hydrocarbon-bearing strata after a well has been drilled.

(bb) The term *workover fluids* shall refer to salt solutions, weighted brines, polymers, or other specialty additives used in a producing well to allow for maintenance, repair or abandonment procedures.

(cc) The term *96-hour LC50* shall refer to the concentration (parts per million) or percent of the suspended particulate phase (SPP) from a sample that is lethal to 50 percent of the test organisms exposed to that concentration of the SPP after 96 hours of constant exposure.

[61 FR 66124, Dec. 16, 1996]

**§ 435.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT).**

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available:

**BPT EFFLUENT LIMITATIONS—OIL AND GREASE**  
[In milligrams per liter]

Pollutant parameter waste source	Maximum for any 1 day	Average of values for 30 consecutive days shall not exceed	Residual chlorine minimum for any 1 day
Produced water .....	72	48	NA
Deck drainage .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Drilling muds .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Drill cuttings .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Well treatment fluids .....	( <sup>1</sup> )	( <sup>1</sup> )	NA
Sanitary:			
M10 .....	NA	NA	≥ 1
M9IM <sup>3</sup> .....	NA	NA	NA
Domestic .....	NA	NA	NA

<sup>1</sup> No discharge of free oil.

<sup>2</sup> Minimum of 1 mg/l and maintained as close to this concentration as possible.

<sup>3</sup> There shall be no floating solids as a result of the discharge of these wastes.

**§ 435.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).**

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT):

BAT EFFLUENT LIMITATIONS

Waste source	Pollutant parameter	BAT effluent limitation
Produced water .....	Oil & grease	The maximum for any one day shall not exceed 42 mg/l; the average of daily values for 30 consecutive days shall not exceed 29 mg/l.
Drilling fluids and drill cuttings: (A) For facilities located within 3 miles from shore. (B) For facilities located beyond 3 miles from shore.	.....	No discharge. <sup>1</sup>
	Toxicity .....	Minimum 96-hour LC50 of the SPP shall be 3% by volume. <sup>2</sup>
	Free oil .....	No discharge. <sup>3</sup>
	Diesel oil .....	No discharge.
	Mercury .....	1 mg/kg dry weight maximum in the stock barite.
	Cadmium .....	3 mg/kg dry weight maximum in the stock barite.
Well treatment, completion, and work-over fluids.	Oil and grease.	The maximum for any one day shall not exceed 42 mg/l; the average of daily values for 30 consecutive days shall not exceed 29 mg/l.
Deck drainage .....	Free oil .....	No discharge. <sup>4</sup>
Produced sand .....	.....	No discharge.
Domestic Waste .....	Foam .....	No discharge.

<sup>1</sup> All Alaskan facilities are subject to the drilling fluids and drill cuttings discharge limitations for facilities located beyond 3 miles offshore.

<sup>2</sup> As determined by the toxicity test (appendix 2).

<sup>3</sup> As determined by the static sheen test (appendix 1).

<sup>4</sup> As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

**§ 435.14 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT).**

Except as provided in 40 CFR 125.30-32, any existing point source subject to this subpart must achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best conventional pollutant control technology (BCT):

BCT EFFLUENT LIMITATIONS

Waste source	Pollutant parameter	BCT effluent limitation
Produced water .....	Oil & grease	The maximum for any one day shall not exceed 72 mg/l; the average of values for 30 consecutive days shall not exceed 48 mg/l.
Drilling fluids and drill cuttings: (A) For facilities located within 3 miles from shore. (B) For facilities located beyond 3 miles from shore.	.....	No discharge. <sup>1</sup>
Well treatment, completion and work-over fluids.	Free oil .....	No discharge. <sup>2</sup>
Deck drainage .....	Free oil .....	No discharge. <sup>3</sup>
Produced sand .....	.....	No discharge.
Sanitary M10 .....	Residual chlorine.	Minimum of 1 mg/l and maintained as close to this concentration as possible.
Sanitary M91M .....	Floating solids.	No discharge.
Domestic Waste .....	Floating solids.	No discharge.
	All other domestic waste.	See 33 CFR part 151.

<sup>1</sup> All Alaskan facilities are subject to the drilling fluids and drill cuttings discharge limitations for facilities located more than 3 miles offshore.

<sup>2</sup> As determined by the static sheen test (appendix 1).

<sup>3</sup> As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

**§ 435.15 Standards of performance for new sources (NSPS).**

Any new source subject to this subpart must achieve the following new source performance standards (NSPS):

NEW SOURCE PERFORMANCE STANDARDS

Waste source	Pollutant parameter	NSPS
Produced water .....	Oil and grease.	The maximum for any one day shall not exceed 42 mg/l; the average of daily values for 30 consecutive days shall not exceed 29 mg/l.
Drilling fluids and drill cuttings: (A) For facilities located within 3 miles from shore. (B) For facilities located more than 3 miles from shore.	.....	No discharge. <sup>1</sup>
	Toxicity .....	Minimum 96-hour LC50 of the SPP shall be 3 percent by volume. <sup>2</sup>