BAT EFFLUENT LIMITATIONS—Continued

Waste source	Pollutant parameter	BAT effluent limitation
	Base fluid retained on cuttings.	For NAFs that meet the stock limitations (C_{16}–C_{18} internal olefin) in this table, the maximum weighted mass ratio averaged over all NAF well sections shall be 6.9 g-NAF base fluid/100 g-wet drill cuttings.[10] For NAFs that meet the C_{12}–C_{14} ester or C_8 ester stock limitations in footnote 11 of this table, the maximum weighted mass ratio averaged over all NAF well sections shall be 9.4 g-NAF base fluid/100 g-wet drill cuttings.
Well treatment, completion, and workover 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.[4]
Produced sand		No discharge.
Domestic Waste	Foam	No discharge.

[1] All Alaskan facilities are subject to the drilling fluids and drill cuttings discharge limitations for facilities located beyond 3 miles offshore.

[2] As determined by the suspended particulate phase (SPP) toxicity test. See § 435.11(gg).

[3] As determined by the static sheen test. See § 435.11(hh).

[4] As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

[5] PAH mass ratio = Mass (g) of PAH (as phenanthrene)/Mass (g) of stock base fluid as determined by EPA Method 1654, Revision A, [specified at § 435.11(u)] entitled ''PAH Content of Oil by HPLC/UV,'' December 1992, which is published as an appendix to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(uu).

[6] Base fluid sediment toxicity ratio = 10-day LC_{50} of C_{16}-C_{18} internal olefin/10-day LC_{50} of stock base fluid as determined by EPA Method 1644: ''Method for Conducting a Sediment Toxicity Test with *Leptocheirus plumulosus* and Non-Aqueous Drilling Fluids or Synthetic-Based Drilling Muds'' after preparing the sediment according to the procedure specified in EPA Method 1646, which are published as appendices to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(ee) and (uu).

[7] Biodegradation rate ratio = Cumulative headspace gas production (ml) of C_{16}-C_{18} internal olefin/Cumulative headspace gas production (ml) of stock base fluid, both at 275 days as determined by EPA Method 1647, which is published as an appendix to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(e) and (uu).

[8] Drilling fluid sediment toxicity ratio = 4-day LC_{50} of C_{16}-C_{18} internal olefin drilling fluid/4-day LC_{50} of drilling fluid removed from drill cuttings at the solids control equipment as determined by EPA Method 1644: ''Method for Conducting a Sediment Toxicity Test with *Leptocheirus plumulosus* and Non-Aqueous Drilling Fluids or Synthetic-Based Drilling Muds'' after sediment preparation procedures specified in EPA Method 1646, which are published as appendices to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(ee) and (uu).

[9] As determined before drilling fluids are shipped offshore by the GC/MS compliance assurance method (EPA Method 1655), and as determined prior to discharge by the RPE method (EPA Method 1670) applied to drilling fluid removed from drill cuttings. If the operator wishes to confirm the results of the RPE method (EPA Method 1670), the operator may use the GC/MS compliance assurance method (EPA Method 1655). Results from the GC/MS compliance assurance method (EPA Method 1655) shall supersede the results of the RPE method (EPA Method 1670). EPA Method 1655 and 1670 are published as appendices to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(uu).

[10] Maximum permissible retention of non-aqueous drilling fluid (NAF) base fluid on wet drill cuttings averaged over drilling intervals using NAFs as determined by EPA Method 1674, which is published as an appendix to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(uu). This limitation is applicable for NAF base fluids that meet the base fluid sediment toxicity ratio (Footnote 6), biodegradation rate ratio (Footnote 7), PAH, mercury, and cadmium stock limitations (C_{16}-C_{18} internal olefin) defined above in this table.

[11] Maximum permissible retention of non-aqueous drilling fluid (NAF) base fluid on wet drill cuttings average over drilling intervals using NAFs as determined by EPA Method 1674, which is published as an appendix to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(uu). This limitation is applicable for NAF base fluids that meet the ester base fluid sediment toxicity ratio and ester biodegradation rate ratio stock limitations defined as:

(a) ester base fluid sediment toxicity ratio = 10-day LC_{50} of C_{12}-C_{14} ester or C_8 ester/10-day LC_{50} of stock base fluid as determined by EPA Method 1644: ''Method for Conducting a Sediment Toxicity Test with *Leptocheirus plumulosus* and Non-Aqueous Drilling Fluids or Synthetic-Based Drilling Muds'' after sediment preparation procedures specified in EPA Method 1646, which are published as appendices to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(ee) and (uu);

(b) ester biodegradation rate ratio = Cumulative headspace gas production (ml) of C_{12}-C_{14} ester or C_8 ester/Cumulative headspace gas production (ml) of stock base fluid, both at 275 days as determined by EPA Method 1647, which is published as an appendix to subpart A of this part and in ''Analytic Methods for the Oil and Gas Extraction Point Source Category,'' EPA–821–R–11–004. See § 435.11(e) and (uu); and

(c) PAH mass ratio (Footnote 5), mercury, and cadmium stock limitations (C_{16}-C_{18} internal olefin) defined above in this table.

[58 FR 12504, Apr. 13, 1979, as amended at 66 FR 6898, Jan. 22, 2001; 69 FR 18803, Apr. 9, 2004; 77 FR 29836, May 18, 2012]

§ 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.	.....	No discharge.[1]
(B) For facilities located beyond 3 miles from shore:.		
Water-based drilling fluids and associated drill cuttings.	Free Oil	No discharge.[2]
Non-aqueous drilling fluids.	.....	No discharge.
Drill cuttings associated with non-aqueous drilling fluids.	Free Oil	No discharge.[2]
Well treatment, completion and workover fluids.	Free oil	No discharge.[2]
Deck drainage	Free oil	No discharge.[3]
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.

[1] All Alaskan facilities are subject to the drilling fluids and drill cuttings discharge limitations for facilities located more than 3 miles offshore.

[2] As determined by the static sheen test. See § 435.11(hh).

[3] As determined by the presence of a film or sheen upon or a discoloration of the surface of the receiving water (visual sheen).

[58 FR 12504, Apr. 13, 1979, as amended at 66 FR 6899, Jan. 22, 2001; 77 FR 29836, May 18, 2012]

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.	.....	No discharge.[1]
(B) For facilities located beyond 3 miles from shore:		
Water-based drilling fluids and associated drill cuttings.	SPP Toxicity	Minimum 96-hour LC_{50} of the SPP Toxicity Test[2] shall be 3% by volume.
	Free oil	No discharge.[3]
	Diesel oil	No discharge.
	Mercury	1mg/kg dry weight maximum in the stock barite.
	Cadmium	3 mg/kg dry weight maximum in the stock barite.
Non-aqueous drilling fluids.	.....	No charge.
Drill cuttings associated with non-aqueous drilling fluids:		
Stock Limitations (C_{16}–C_{18} internal olefin.	Mercury	1mg/kg dry weight maximum in the stock barite.
	Cadmium	3 mg/kg dry weight maximum in the stock barite.
	Polynuclear Aromatic Hydrocarbons (PAH).	PAH mass ratio[5] shall not exceed 1×10^{-5}.
	Sediment toxicity.	Base fluid sediment toxicity ratio[6] shall not exceed 1.0.
	Biodegradation rate.	Biodegradation rate ratio[7] shall not exceed 1.0.
Discharge Limitations.	Diesel oil	No discharge.
	SPP Toxicity	Minimum 96-hour LC_{50} of the SPP Toxicity Test[2] shall be 3% by volume.
	Sediment toxicity.	Drilling fluid sediment toxicity ratio[8] shall not exceed 1.0.
	Formation Oil	No discharge.[9]

§ 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):