

Product	Chemical Composition of Existing Products	Concentration of Interest (µg/L)	
	Chemical Compound	Point-of-Injection	MCL, RBC or MCP
Linear gel delivery system	guar gum derivative		
	diesel, which contains the following:		
	benzene	313.20	5.00
	toluene	522.00	1,000.00
	ethylbenzene	522.00	700.00
	xylene	522.00	10,000.00
	naphthalene	14,094.00	20.00
	1-methylnaphthalene	71,340.00	20 / 6,000
	2-methylnaphthalene	34,974.00	121.67
	dimethylnaphthalenes	270,570.00	na
	trimethylnaphthalenes	160,080.00	na
	fluorenes	31,320.00	2190.00
	phenanthrenes	7,830.00	300 / 50
aromatics	574,200.00	200 / 30,000	
Water Gelling Agent	guar gum		
	water	495,049.50	na
	fumaric acid	132,337.87	na
Linear Gel Polymer	fumaric acid	529,351.49	na
	adipic acid	366,257.43	na
Gelling Agents (BLM Lists)	benzene		5.00
	ethylbenzene		700.00
	methyl tert-butyl ether		2.64
	naphthalene		20.00
	polynuclear aromatic hydrocarbons (pahs)		na
	polycyclic organic matter (pom)		na
	sodium hydroxide		na
	toluene		1,000.00
	xylene		10,000.00
	Crosslinker	boric acid	170,998.00
ethylene glycol		285,788.42	73,000.00
monoethanolamine		na	na
Crosslinker	sodium tetraborate decahydrate		na
Crosslinker (BLM Lists)	ammonium chloride		na
	potassium hydroxide		na
	zirconium nitrate		na
	zirconium sulfate		na
Foaming Agent	isopropanol	234,945.16	na
	salt of alkyl amines	na	na
	diethanolamine	na	na
Foaming Agent	ethanol	236,081.75	na
	2-butoxyethanol	269,641.08	na
	ester salt	na	na
	polyglycol ether	na	na
	water	na	na
Foamers (BLM)	glycol ethers	na	na
Acid Treatment	hydrochloric acid	na	na
Acid Treatment	formic acid	na	73,000.00
Breaker Fluid	diammonium peroxodisulfate	na	na
Breaker Fluids (BLM Lists)	ammonium persulfate		na
	ammonium sulfate		na
	copper compounds		1,460.00
	ethylene glycol		na
	glycol ethers		na
Microbiocide	2-bromo-2-nitro-1,3-propanediol		na
Biocide	2,2-dibromo-3-nitrilopropionamide		na
	2-bromo-3-nitrilopropionamide		na
Bactericides	polycyclic organic matter (pom)		na
	polynuclear aromatic hydrocarbons (pahs)		na
Acid Corrosion Inhibitor	methanol	236,070,000.00	18,250.00
	propargyl alcohol	47,425,000.00	na
Acid Corrosion Inhibitor	pyridinium, 1-(phenylmethyl)-ethyl methyl deriv.	na	na
	thiourea	210,750,000.00	na
	propan-2-ol	39,275,000.00	na
	poly(oxy-1,2-ethanediyl)-nonylphenyl-hydroxy	na	na

☐ = Exceeds regulatory standard

MCL = Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water.

RBC = EPA's Risk Based Concentration Tables. (<http://www.epa.gov/reg3hwmd/risk/index.html>, developed by Region 3, serving: Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)

MCP = Massachusetts Contingency Plan - Risk-based ground water standards for drinking water protection chosen because Massachusetts has developed standards for many constituents in diesel fuel. Two numbers are given (the first is drinking water standard, the second is standard for groundwater discharging to surface water).