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Part II

Department of Homeland Security

6 CFR Part 27

**Appendix to Chemical Facility Anti-
Terrorism Standards; Final Rule**

Appendix A to Part 27. -- DHS Chemicals of Interest ¹

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage		Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Acetaldehyde		75-07-0	1.00	10,000						X					
Acetone cyanohydrin, stabilized		75-86-5					ACG	APA							X
Acetyl bromide		506-96-7					ACG	APA							X
Acetyl chloride		75-36-5					ACG	APA							X
Acetyl iodide		507-02-8					ACG	APA							X
Acetylene	[Ethyne]	74-86-2	1.00	10,000						X					
Acrolein	[2-Propenal] or Acrylaldehyde	107-02-8	1.00	5,000					X						
Acrylonitrile	[2-Propenenitrile]	107-13-1	1.00	10,000						X					
Acrylyl chloride	[2-Propenoyl chloride]	814-68-6	1.00	10,000						X					
Allyl alcohol	[2-Propen-1-ol]	107-18-6	1.00	15,000					X						
Allylamine	[2-Propen-1-amine]	107-11-9	1.00	10,000						X					
Allyltrichlorosilane, stabilized		107-37-9					ACG	APA							X
Aluminum (powder)		7429-90-5			ACG	100								X	
Aluminum bromide, anhydrous		7727-15-3					ACG	APA							X
Aluminum chloride, anhydrous		7446-70-0					ACG	APA							X
Aluminum phosphide		20859-73-8					ACG	APA							X
Ammonia (anhydrous)		7664-41-7	1.00	10,000					X						
Ammonia (conc. 20% or greater)		7664-41-7	20.00	20,000					X						
Ammonium nitrate, [with more than 0.2 percent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance]		6484-52-2	ACG	5,000	ACG	400					X			X	

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Ammonium nitrate, solid [nitrogen concentration of 23% nitrogen or greater]		6484-52-2			33.00	2000									X	
Ammonium perchlorate		7790-98-9	ACG	5,000	ACG	400						X			X	
Ammonium picrate		131-74-8	ACG	5,000	ACG	400						X			X	
Amyltrichlorosilane		107-72-2					ACG	APA								X
Antimony pentafluoride		7783-70-2					ACG	APA								X
Arsenic trichloride	[Arsenous trichloride]	7784-34-1	1.00	15,000	30.00	2.2			X			X				
Arsine		7784-42-1	1.00	1,000	0.67	15			X				X			
Barium azide		18810-58-7	ACG	5,000	ACG	400						X			X	
1,4-Bis(2-chloroethylthio)-n-butane		142868-93-7			CUM 100g								X			
Bis(2-chloroethylthio)methane		63869-13-6			CUM 100g								X			
Bis(2-chloroethylthiomethyl)ether		63918-90-1			CUM 100g								X			
1,5-Bis(2-chloroethylthio)-n-pentane		142868-94-8			CUM 100g								X			
1,3-Bis(2-chloroethylthio)-n-propane		63905-10-2			CUM 100g								X			
Boron tribromide		10294-33-4			12.67	45	ACG	APA						X		X
Boron trichloride	[Borane, trichloro]	10294-34-5	1.00	5,000	84.70	45			X					X		
Boron trifluoride	[Borane, trifluoro]	7637-07-2	1.00	5,000	26.87	45			X					X		
Boron trifluoride compound with methyl ether (1:1)	[Boron, trifluoro [oxybis (methane)]-, T-4-]	353-42-4	1.00	15,000					X							
Bromine		7726-95-6	1.00	10,000					X							
Bromine chloride		13863-41-7			9.67	45								X		
Bromine pentafluoride		7789-30-2					ACG	APA								X
Bromine trifluoride		7787-71-5			6.00	45	ACG	APA						X		X
Bromotrifluorethylene	[Ethene, bromotrifluoro-]	598-73-2	1.00	10,000						X						

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1,3-Butadiene		106-99-0	1.00	10,000						X					
Butane		106-97-8	1.00	10,000						X					
Butene		25167-67-3	1.00	10,000						X					
1-Butene		106-98-9	1.00	10,000						X					
2-Butene		107-01-7	1.00	10,000						X					
2-Butene-cis		590-18-1	1.00	10,000						X					
2-Butene-trans	[2-Butene, (E)]	624-64-6	1.00	10,000						X					
Butyltrichlorosilane		7521-80-4						ACG	APA						X
Calcium hydrosulfite	[Calcium dithionite]	15512-36-4						ACG	APA						X
Calcium phosphide		1305-99-3						ACG	APA						X
Carbon disulfide		75-15-0	1.00	20,000						X					
Carbon oxysulfide	[Carbon oxide sulfide (COS); carbonyl sulfide]	463-58-1	1.00	10,000							X				
Carbonyl fluoride		353-50-4			12.00	45								X	
Carbonyl sulfide		463-58-1			56.67	500								X	
Chlorine		7782-50-5	1.00	2,500	9.77	500				X				X	
Chlorine dioxide	[Chlorine oxide, (ClO2)]	10049-04-4	1.00	1,000				ACG	APA	X					X
Chlorine monoxide	[Chlorine oxide]	7791-21-1	1.00	10,000							X				
Chlorine pentafluoride		13637-63-3			4.07	15								X	
Chlorine trifluoride		7790-91-2			9.97	45								X	
Chloroacetyl chloride		79-04-9						ACG	APA						X
2-Chloroethylchloro- methylsulfide		2625-76-5			CUM 100g								X		
Chloroform	[Methane, trichloro-]	67-66-3	1.00	20,000						X					
Chloromethyl ether	[Methane, oxybis(chloro-)]	542-88-1	1.00	1,000						X					
Chloromethyl methyl ether	[Methane, chloromethoxy-]	107-30-2	1.00	5,000						X					
1-Chloropropylene	[1-Propene, 1-chloro-]	590-21-6	1.00	10,000							X				
2-Chloropropylene	[1-Propene, 2-chloro-]	557-98-2	1.00	10,000							X				

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Chlorosarin	[o-Isopropyl methylphosphonochloridate]	1445-76-7			CUM 100g							X			
Chlorosoman	[o-Pinacoly methylphosphonochloridate]	7040-57-5			CUM 100g							X			
Chlorosulfonic acid		7790-94-5					ACG	APA							X
Chromium oxychloride		14977-61-8					ACG	APA							X
Crotonaldehyde	[2-Butenal]	4170-30-3	1.00	10,000						X					
Crotonaldehyde, (E)-	[2-Butenal], (E)-	123-73-9	1.00	10,000						X					
Cyanogen	[Ethanedinitrile]	460-19-5	1.00	10,000	11.67	45				X			X		
Cyanogen chloride		506-77-4	1.00	10,000	2.67	15			X				X		
Cyclohexylamine	[Cyclohexanamine]	108-91-8	1.00	15,000					X						
Cyclohexyltrichlorosilane		98-12-4					ACG	APA							X
Cyclopropane		75-19-4	1.00	10,000						X					
DF	Methyl phosphonyl difluoride	676-99-3			CUM 100g							X			
Diazodinitrophenol		87-31-0	ACG	5,000	ACG	400					X			X	
Diborane		19287-45-7	1.00	2,500	2.67	15			X				X		
Dichlorosilane	[Silane, dichloro-]	4109-96-0	1.00	10,000	10.47	45				X			X		
N,N-(2-diethylamino)ethanethiol		100-38-9			30.00	2.2						X			
Diethyldichlorosilane		1719-53-5					ACG	APA							X
o,o-Diethyl S-[2-(diethylamino)ethyl] phosphorothiolate		78-53-5			30.00	2.2						X			
Diethyleneglycol dinitrate		693-21-0	ACG	5,000	ACG	400					X			X	
Diethyl methylphosphonite		15715-41-0			30.00	2.2						X			
N,N-Diethyl phosphoramidic dichloride		1498-54-0			30.00	2.2						X			
N,N-(2-diisopropylamino)ethanethiol	N,N-diisopropyl-(beta)-aminoethane thiol	5842-07-9			30.00	2.2						X			

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Difluoroethane	[Ethane, 1,1-difluoro-]	75-37-6	1.00	10,000						X					
N,N-Diisopropyl phosphoramidic dichloride		23306-80-1			30.00	2.2						X			
1,1-Dimethylhydrazine	[Hydrazine, 1, 1-dimethyl-]	57-14-7	1.00	10,000						X					
Dimethylamine	[Methanamine, N-methyl-]	124-40-3	1.00	10,000						X					
N,N-(2-dimethylamino)ethanethiol		108-02-1			30.00	2.2						X			
Dimethyldichlorosilane	[Silane, dichlorodimethyl-]	75-78-5	1.00	10,000			ACG	APA		X					X
N,N-Dimethyl phosphoramidic dichloride	[Dimethylphosphoramido-dichloridate]	677-43-0			30.00	2.2						X			
2,2-Dimethylpropane	[Propane, 2,2-dimethyl-]	463-82-1	1.00	10,000						X					
Dingu	[Dinitroglycoluril]	55510-04-8	ACG	5,000	ACG	400						X		X	
Dinitrogen tetroxide		10544-72-6			3.80	15							X		
Dinitrophenol		25550-58-7	ACG	5,000	ACG	400						X		X	
Dinitroresorcinol		519-44-8	ACG	5,000	ACG	400						X		X	
Diphenyldichlorosilane		80-10-4					ACG	APA							X
Dipicryl sulfide		2217-06-3	ACG	5,000	ACG	400						X		X	
Dipicrylamine [or] Hexyl	[Hexanitrodiphenylamine]	131-73-7	ACG	5,000	ACG	400						X		X	
N,N-(2-dipropylamino)ethanethiol		5842-06-8			30.00	2.2						X			
N,N-Dipropyl phosphoramidic dichloride		40881-98-9			30.00	2.2						X			
Dodecyltrichlorosilane		4484-72-4					ACG	APA							X
Epichlorohydrin	[Oxirane, (chloromethyl)-]	106-89-8	1.00	20,000					X						
Ethane		74-84-0	1.00	10,000						X					
Ethyl acetylene	[1-Butyne]	107-00-6	1.00	10,000						X					
Ethyl chloride	[Ethane, chloro-]	75-00-3	1.00	10,000						X					
Ethyl ether	[Ethane, 1,1-oxybis-]	60-29-7	1.00	10,000						X					
Ethyl mercaptan	[Ethanethiol]	75-08-1	1.00	10,000						X					

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Ethyl nitrite	[Nitrous acid, ethyl ester]	109-95-5	1.00	10,000						X					
Ethyl phosphonyl difluoride		753-98-0			CUM 100g							X			
Ethylamine	[Ethanamine]	75-04-7	1.00	10,000						X					
Ethyldiethanolamine		139-87-7			80.00	220						X			
Ethylene	[Ethene]	74-85-1	1.00	10,000						X					
Ethylene oxide	[Oxirane]	75-21-8	1.00	10,000						X					
Ethylenediamine	[1,2-Ethanediamine]	107-15-3	1.00	20,000					X						
Ethyleneimine	[Aziridine]	151-56-4	1.00	10,000						X					
Ethylphosphonothioic dichloride		993-43-1			30.00	2.2						X			
Ethyltrichlorosilane		115-21-9					ACG	APA							X
Fluorine		7782-41-4	1.00	1,000	6.17	15			X				X		
Fluorosulfonic acid		7789-21-1					ACG	APA							X
Formaldehyde (solution)		50-00-0	1.00	15,000					X						
Furan		110-00-9	1.00	10,000						X					
Germane		7782-65-2			20.73	45							X		
Germanium tetrafluoride		7783-58-6			2.11	15							X		
Guanyl nitrosaminoguanilydene hydrazine			ACG	5,000	ACG	400					X			X	
Hexaethyl tetraphosphate and compressed gas mixtures		757-58-4			33.37	500							X		
Hexafluoroacetone		684-16-2			15.67	45							X		
Hexanitrostilbene		20062-22-0	ACG	5,000	ACG	400					X			X	
Hexolite	[Hexotol]	121-82-4	ACG	5,000	ACG	400					X			X	
Hexyltrichlorosilane		928-65-4					ACG	APA							X
HMX	[Cyclotetramethylene-tetranitramine]	2691-41-0	ACG	5,000	ACG	400					X			X	

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HN1 (nitrogen mustard-1)	[Bis(2-chloroethyl)ethylamine]	538-07-8			CUM 100g							X			
HN2 (nitrogen mustard-2)	[Bis(2-chloroethyl)methylamine]	51-75-2			CUM 100g							X			
HN3 (nitrogen mustard-3)	[Tris(2-chloroethyl)amine]	555-77-1			CUM 100g							X			
Hydrazine		302-01-2	1.00	10,000						X					
Hydrochloric acid (conc. 37% or greater)		7647-01-0	37.00	15,000					X						
Hydrocyanic acid		74-90-8	1.00	2,500					X						
Hydrofluoric acid (conc. 50% or greater)		7664-39-3	50.00	1,000					X						
Hydrogen		1333-74-0	1.00	10,000						X					
Hydrogen bromide (anhydrous)		10035-10-6			95.33	500							X		
Hydrogen chloride (anhydrous)		7647-01-0	1.00	5,000	ACG	500			X				X		
Hydrogen cyanide	[Hydrocyanic acid]	74-90-8			4.67	15							X		
Hydrogen fluoride (anhydrous)		7664-39-3	1.00	1,000	42.53	45			X				X		
Hydrogen iodide, anhydrous		10034-85-2			95.33	500							X		
Hydrogen peroxide (concentration of at least 35%)		7722-84-1			35.00	400								X	
Hydrogen selenide		7783-07-5	1.00	10,000	0.07	15				X			X		
Hydrogen sulfide		7783-06-4	1.00	10,000	23.73	45			X				X		
Iodine pentafluoride		7783-66-6					ACG	APA							X
Iron, pentacarbonyl-	[Iron carbonyl (Fe (CO)5), (TB5-11)-]	13463-40-6	1.00	10,000						X					
Isobutane	[Propane, 2-methyl]	75-28-5	1.00	10,000						X					
Isobutyronitrile	[Propanenitrile, 2-methyl-]	78-82-0	1.00	20,000					X						
Isopentane	[Butane, 2-methyl-]	78-78-4	1.00	10,000						X					
Isoprene	[1,3-Butadiene, 2-methyl-]	78-79-5	1.00	10,000						X					

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Isopropyl chloride	[Propane, 2-chloro-]	75-29-6	1.00	10,000						X					
Isopropyl chloroformate	[Carbonochloridic acid, 1-methylethyl ester]	108-23-6	1.00	15,000					X						
Isopropylamine	[2-Propanamine]	75-31-0	1.00	10,000						X					
Isopropylphosphonothioic dichloride		1498-60-8			30.00	2.2						X			
Isopropylphosphonyl difluoride		677-42-9			CUM 100g							X			
Lead azide		13424-46-9	ACG	5,000	ACG	400					X			X	
Lead styphnate	[Lead trinitroresorcinate]	15245-44-0	ACG	5,000	ACG	400					X			X	
Lewisite 1	[2-Chlorovinyl]dichloroarsine	541-25-3			CUM 100g							X			
Lewisite 2	[Bis(2-chlorovinyl)chloroarsine]	40334-69-8			CUM 100g							X			
Lewisite 3	[Tris(2-chlorovinyl)arsine]	40334-70-1			CUM 100g							X			
Lithium amide		7782-89-0					ACG	APA							X
Lithium nitride		26134-62-3					ACG	APA							X
Magnesium (powder)		7439-95-4			ACG	100								X	
Magnesium diamide		7803-54-5					ACG	APA							X
Magnesium phosphide		12057-74-8					ACG	APA							X
MDEA	[Methyldiethanolamine]	105-59-9			80.00	220						X			
Mercury fulminate		628-86-4	ACG	5,000	ACG	400					X			X	
Methacrylonitrile	[2-Propenenitrile, 2-methyl-]	126-98-7	1.00	10,000					X						
Methane		74-82-8	1.00	10,000						X					
2-Methyl-1-butene		563-46-2	1.00	10,000						X					
3-Methyl-1-butene		563-45-1	1.00	10,000						X					
Methyl chloride	[Methane, chloro-]	74-87-3	1.00	10,000						X					
Methyl chloroformate	[Carbonochloridic acid, methyl ester]	79-22-1	1.00	10,000						X					
Methyl ether	[Methane, oxybis-]	115-10-6	1.00	10,000						X					
Methyl formate	[Formic acid Methyl ester]	107-31-3	1.00	10,000						X					

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Methyl hydrazine	[Hydrazine, methyl-]	60-34-4	1.00	15,000					X						
Methyl isocyanate	[Methane, isocyanato-]	624-83-9	1.00	10,000					X						
Methyl mercaptan	[Methanethiol]	74-93-1	1.00	10,000	45.00	500				X			X		
Methyl thiocyanate	[Thiocyanic acid, methyl ester]	556-64-9	1.00	20,000					X						
Methylamine	[Methanamine]	74-89-5	1.00	10,000						X					
Methylchlorosilane		993-00-0			20.00	45							X		
Methyldichlorosilane		75-54-7					ACG	APA							X
Methylphenyldichlorosilane		149-74-6					ACG	APA							X
Methylphosphonothioic dichloride		676-98-2			30.00	2.2						X			
2-Methylpropene	[1-Propene, 2-methyl-]	115-11-7	1.00	10,000						X					
Methyltrichlorosilane	[Silane, trichloromethyl-]	75-79-6	1.00	10,000			ACG	APA		X					X
Sulfur mustard (Mustard gas (H))	[Bis(2-chloroethyl)sulfide]	505-60-2			CUM 100g							X			
O-Mustard (T)	[Bis(2-chloroethylthioethyl)ether]	63918-89-8			CUM 100g							X			
Nickel Carbonyl		13463-39-3	1.00	10,000						X					
Nitric acid		7697-37-2	80.00	15,000	68.00	400			X					X	
Nitric oxide	[Nitrogen oxide (NO)]	10102-43-9	1.00	10,000	3.83	15			X				X		
Nitrobenzene		98-95-3			ACG	100								X	
5-Nitrobenzotriazol		2338-12-7	ACG	5,000	ACG	400					X			X	
Nitrocellulose		9004-70-0	ACG	5,000	ACG	400					X			X	
Nitrogen mustard hydrochloride	[Bis(2-chloroethyl)methylamine hydrochloride]	55-86-7			30.00	2.2						X			
Nitrogen trioxide		10544-73-7			3.83	15							X		
Nitroglycerine		55-63-0	ACG	5,000	ACG	400					X			X	
Nitromannite	[Mannitol hexanitrate, wetted]	15825-70-4	ACG	5,000	ACG	400					X			X	
Nitromethane		75-52-5			ACG	400								X	
Nitrostarch		9056-38-6	ACG	5,000	ACG	400					X			X	
Nitrosyl chloride		2696-92-6			1.17	15							X		

Appendix A to Part 27. -- DHS Chemicals of Interest ¹

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage		Security Issue							
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination	
Nitrotriazolone		932-64-9	ACG	5,000	ACG	400						X			X	
Nonyltrichlorosilane		5283-67-0						ACG	APA							X
Octadecyltrichlorosilane		112-04-9						ACG	APA							X
Octolite		57607-37-1	ACG	5,000	ACG	400						X			X	
Octonal		78413-87-3	ACG	5,000	ACG	400						X			X	
Octyltrichlorosilane		5283-66-9						ACG	APA							X
Oleum (Fuming Sulfuric acid)	[Sulfuric acid, mixture with sulfur trioxide]	8014-95-7	1.00	10,000						X						
Oxygen difluoride		7783-41-7			0.09	15								X		
1,3-Pentadiene		504-60-9	1.00	10,000							X					
Pentane		109-66-0	1.00	10,000							X					
1- Pentene		109-67-1	1.00	10,000							X					
2-Pentene, (E)-		646-04-8	1.00	10,000							X					
2-Pentene, (Z)-		627-20-3	1.00	10,000							X					
Pentolite		8066-33-9	ACG	5,000	ACG	400						X			X	
Peracetic acid	[Ethaneperoxic acid]	79-21-0	1.00	10,000							X					
Perchloromethylmercaptan	[Methanesulfenyl chloride, trichloro-]	594-42-3	1.00	10,000						X						
Perchloryl fluoride		7616-94-6			25.67	45								X		
PETN	[Pentaerythritol tetranitrate]	78-11-5	ACG	5,000	ACG	400						X			X	
Phenyltrichlorosilane		98-13-5						ACG	APA							X
Phosgene	[Carbonic dichloride] or [carbonyl dichloride]	75-44-5	1.00	500	0.17	15				X				X		
Phosphine		7803-51-2	1.00	10,000	0.67	15					X			X		
Phosphorus		7723-14-0			ACG	400									X	
Phosphorus oxychloride	[Phosphoryl chloride]	10025-87-3	1.00	5,000	80.00	220	ACG	APA	X			X				X
Phosphorus pentabromide		7789-69-7					ACG	APA								X
Phosphorus pentachloride		10026-13-8					ACG	APA								X
Phosphorus pentasulfide		1314-80-3					ACG	APA								X

Appendix A to Part 27. -- DHS Chemicals of Interest ¹

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage		Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Phosphorus trichloride		7719-12-2	1.00	15,000	3.48	45	ACG	APA	X				X		X
Picrite	[Nitroguanidine]	556-88-7	ACG	5,000	ACG	400					X			X	
Piperidine		110-89-4	1.00	10,000						X					
Potassium chlorate		3811-04-9			ACG	400								X	
Potassium cyanide		151-50-8					ACG	APA							X
Potassium nitrate		7757-79-1			ACG	400								X	
Potassium perchlorate		7778-74-7			ACG	400								X	
Potassium permanganate		7722-64-7			ACG	400								X	
Potassium phosphide		20770-41-6					ACG	APA							X
Propadiene	[1,2-Propadiene]	463-49-0	1.00	10,000						X					
Propane		74-98-6	1.00	60,000						X					
Propionitrile	[Propanenitrile]	107-12-0	1.00	10,000					X						
Propyl chloroformate	[Carbonchloridic acid, propylester]	109-61-5	1.00	10,000						X					
Propylene	[1-Propene]	115-07-1	1.00	10,000						X					
Propylene oxide	[Oxirane, methyl-]	75-56-9	1.00	10,000						X					
Propyleneimine	[Aziridine, 2-methyl-]	75-55-8	1.00	10,000					X						
Propylphosphonothioic dichloride		2524-01-8			30.00	2.2						X			
Propylphosphonyl difluoride		690-14-2			CUM 100g							X			
Propyltrichlorosilane		141-57-1					ACG	APA							X
Propyne	[1-Propyne]	74-99-7	1.00	10,000						X					
QL	[o-Ethyl-o-2-diisopropylaminoethyl methylphosphonite]	57856-11-8			CUM 100g							X			
RDX	[Cyclotrimethylenetrinitramine]	121-82-4	ACG	5,000	ACG	400					X			X	
RDX and HMX mixtures		121-82-4	ACG	5,000	ACG	400					X			X	
Sarin	[o-Isopropyl methylphosphonofluoridate]	107-44-8			CUM 100g							X			
Selenium hexafluoride		7783-79-1			1.67	15							X		

Appendix A to Part 27. -- DHS Chemicals of Interest ¹

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage		Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release – Toxic	Release – Flammables	Release – Explosives	Theft – CW/CWP	Theft – WME	Theft – EXP/IEDP	Sabotage/Contamination
Sesquimustard	[1,2-Bis(2-chloroethylthio)ethane]	3563-36-8			CUM 100g							X			
Silane		7803-62-5	1.00	10,000						X					
Silicon tetrachloride		10026-04-7					ACG	APA							X
Silicon tetrafluoride		7783-61-1			15.00	45							X		
Sodium azide		26628-22-8			ACG	400								X	
Sodium chlorate		7775-09-9			ACG	400								X	
Sodium cyanide		143-33-9					ACG	APA							X
Sodium hydrosulfite	[Sodium dithionite]	7775-14-6					ACG	APA							X
Sodium nitrate		7631-99-4			ACG	400								X	
Sodium phosphide		12058-85-4					ACG	APA							X
Soman	[o-Pinacolyl methylphosphonofluoridate]	96-64-0			CUM 100g							X			
Stibine		7803-52-3			0.67	15							X		
Strontium phosphide		12504-16-4					ACG	APA							X
Sulfur dioxide (anhydrous)		7446-09-5	1.00	5,000	84.00	500			X				X		
Sulfur tetrafluoride	[Sulfur fluoride (SF4), (T-4)-]	7783-60-0	1.00	2,500	1.33	15			X				X		
Sulfur trioxide		7446-11-9	1.00	10,000					X						
Sulfuryl chloride		7791-25-5					ACG	APA							X
Tabun	[o-Ethyl-N,N-dimethylphosphoramido-cyanidate]	77-81-6			CUM 100g							X			
Tellurium hexafluoride		7783-80-4			0.83	15							X		
Tetrafluoroethylene	[Ethene, tetrafluoro-]	116-14-3	1.00	10,000						X					
Tetramethyllead	[Plumbane, tetramethyl-]	75-74-1	1.00	10,000					X						
Tetramethylsilane	[Silane, tetramethyl-]	75-76-3	1.00	10,000						X					
Tetranitroaniline		53014-37-2	ACG	5,000	ACG	400					X			X	
Tetranitromethane	[Methane, tetranitro-]	509-14-8	1.00	10,000					X						
Tetrazene	[Guanyl nitrosaminoguanyl/tetrazene]	109-27-3	ACG	5,000	ACG	400					X			X	

Appendix A to Part 27. -- DHS Chemicals of Interest ¹

Chemicals of Interest (COI)	Synonym	Chemical Abstract Service (CAS) #	Release		Theft		Sabotage		Security Issue						
			Minimum Concentration (%)	Screening Threshold Quantities (in pounds)	Minimum Concentration (%)	Screening Threshold Quantities (in pounds unless otherwise noted)	Minimum Concentration (%)	Screening Threshold Quantities	Release -- Toxic	Release -- Flammables	Release -- Explosives	Theft -- CW/CWP	Theft -- WME	Theft -- EXP/IEDP	Sabotage/Contamination
1H-Tetrazole		288-94-8	ACG	5,000	ACG	400					X			X	
Thiodiglycol	[Bis(2-hydroxyethyl)sulfide]	111-48-8			30.00	2.2						X			
Thionyl chloride		7719-09-7					ACG	APA							X
Titanium tetrachloride	[Titanium chloride (TiCl ₄) (T-4)-]	7550-45-0	1.00	2,500	13.33	45	ACG	APA	X				X		X
TNT	[Trinitrotoluene]	118-96-7	ACG	5,000	ACG	400					X			X	
Torpex	[Hexotonal]	67713-16-0	ACG	5,000	ACG	400					X			X	
Trichlorosilane	[Silane, trichloro-]	10025-78-2	1.00	10,000			ACG	APA		X					X
Triethanolamine		102-71-6			80.00	220						X			
Triethanolamine hydrochloride		637-39-8			80.00	220						X			
Triethyl phosphite		122-52-1			80.00	220						X			
Trifluoroacetyl chloride		354-32-5			6.93	45								X	
Trifluorochloroethylene	[Ethene, chlorotrifluoro]	79-38-9	1.00	10,000	66.67	500				X			X		
Trimethylamine	[Methanamine, N,N-dimethyl-]	75-50-3	1.00	10,000						X					
Trimethylchlorosilane	[Silane, chlorotrimethyl-]	75-77-4	1.00	10,000			ACG	APA		X					X
Trimethyl phosphite		121-45-9			80.00	220						X			
Trinitroaniline		26952-42-1	ACG	5,000	ACG	400					X			X	
Trinitroanisole		606-35-9	ACG	5,000	ACG	400					X			X	
Trinitrobenzene		99-35-4	ACG	5,000	ACG	400					X			X	
Trinitrobenzenesulfonic acid		2508-19-2	ACG	5,000	ACG	400					X			X	
Trinitrobenzoic acid		129-66-8	ACG	5,000	ACG	400					X			X	
Trinitrochlorobenzene		88-88-0	ACG	5,000	ACG	400					X			X	
Trinitrofluorenone		129-79-3	ACG	5,000	ACG	400					X			X	
Trinitro-meta-cresol		602-99-3	ACG	5,000	ACG	400					X			X	
Trinitronaphthalene		55810-17-8	ACG	5,000	ACG	400					X			X	
Trinitrophenetole		4732-14-3	ACG	5,000	ACG	400					X			X	
Trinitrophenol		88-89-1	ACG	5,000	ACG	400					X			X	
Trinitroresorcinol		82-71-3	ACG	5,000	ACG	400					X			X	
Tritonal		54413-15-9	ACG	5,000	ACG	400					X			X	
Tungsten hexafluoride		7783-82-6			7.10	45							X		

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Vinyl acetate monomer	[Acetic acid ethenyl ester]	108-05-4	1.00	10,000						X					
Vinyl acetylene	[1-Buten-3-yne]	689-97-4	1.00	10,000						X					
Vinyl chloride	[Ethene, chloro-]	75-01-4	1.00	10,000						X					
Vinyl ethyl ether	[Ethene, ethoxy-]	109-92-2	1.00	10,000						X					
Vinyl fluoride	[Ethene, fluoro-]	75-02-5	1.00	10,000						X					
Vinyl methyl ether	[Ethene, methoxy-]	107-25-5	1.00	10,000						X					
Vinylidene chloride	[Ethene, 1,1-dichloro-]	75-35-4	1.00	10,000						X					
Vinylidene fluoride	[Ethene, 1,1-difluoro-]	75-38-7	1.00	10,000						X					
Vinyltrichlorosilane		75-94-5					ACG	APA							X
VX	[o-Ethyl-S-2-diisopropylaminoethyl methyl phosphonothiolate]	50782-69-9			CUM 100g							X			
Zinc hydrosulfite	[Zinc dithionite]	7779-86-4					ACG	APA							X

¹ The acronyms used in this appendix have the following meaning: ACG = A Commercial Grade; APA = A Placarded Amount; CW/CWP = Chemical Weapons/Chemical Weapons Precursors; WME = Weapons of Mass Effect; EXP/IEDP = Explosives/Improvised Explosive Device Precursors