

**OMB Control No. 2070-0054; EPA ICR No. 0586.11**

**Attachment H**

**List of Chemicals Covered by Final PAIR Rules, 2004-2010**

**Chemicals Listed in December 7, 2004 Section 8(a) PAIR - 69 FR 70552**

<u>CAS No.</u>	<u>Substance</u>
* * * * * Pyridinamines:	
462-08-8	3-Pyridinamine.
504-24-5	4-Pyridinamine.
504-29-0	2-Pyridinamine.
* * * * * Tungsten compounds:	
1314-35-8	Tungsten oxide (WO <sub>3</sub> ).
7440-33-7	Tungsten.
7783-03-1	Tungstate (WO <sub>4</sub> \2\^-), dihydrogen, (T- 4).
7783-82-6	Tungsten fluoride (WF <sub>6</sub> ), (OC-6-11).
7790-60-5	Tungstate (WO <sub>4</sub> \2\^-), dipotassium, (T-4).
7790-85-4	Cadmium tungsten oxide (CdWO <sub>4</sub> ).
10213-10-2	Tungstate (WO <sub>4</sub> \2\^-), disodium, dihydrate, (T-4).
11105-11-6	Tungsten oxide (WO <sub>3</sub> ), hydrate.
11120-01-7	Sodium tungsten oxide.
11120-25-5	Tungstate (W <sub>12</sub> (OH) <sub>2</sub> O <sub>40</sub> \10\^-), decaammonium.
12027-38-2	Tungstate(4-),[.mu.12- [orthosilicato(4-)- .kappa.O:.kappa.O:.kappa.O: .kappa.O':.kappa.O':.kappa.O': .kappa.O":.kappa.O" :.kappa.O" :.kappa.O":.kappa.O" :.kappa.O""]]tetracosa- .mu.- oxododecaoxododeca-, tetrahydrogen.
12028-48-7	Tungstate (W <sub>12</sub> (OH) <sub>2</sub> O <sub>38</sub> \6\^-), hexaammonium.
12036-22-5	Tungsten oxide (WO <sub>2</sub> ).
12067-99-1	Tungsten hydroxide oxide phosphate.
12138-09-9	Tungsten sulfide (WS <sub>2</sub> ).
12141-67-2	Tungstate (W <sub>12</sub> (OH) <sub>2</sub> O <sub>38</sub> \6\^-), hexasodium.
13283-01-7	Tungsten chloride (WCl <sub>6</sub> ), (OC-6-11)-.
13472-45-2	Tungstate (WO <sub>4</sub> \2\^-), disodium, (T- 4)-.
14040-11-0	Tungsten carbonyl (W(CO) <sub>6</sub> ), (OC-6- 11)-.
23321-70-2	Tungsten oxide (WO <sub>3</sub> ), dihydrate.

## Chemicals Listed in August 16, 2006 Section 8(a) PAIR - 71 FR 47122

\* \* \* \* \* Voluntary HPV Challenge Program orphan (unsponsored) chemicals

<u>CAS No.</u>	<u>Substance</u>
62-56-6	Thiourea.
74-97-5	Methane, bromochloro-.
75-46-7	Methane, trifluoro-.
77-76-9	Propane, 2,2-dimethoxy-.
77-86-1	1,3-Propanediol, 2- amino-2- (hydroxymethyl)-.
81-07-2	1,2-Benzisothiazol- 3(2H)-one, 1,1-dioxide.
81-16-3	1-Naphthalenesulfonic acid, 2-amino-.
81-84-5	1H,3H-Naphtho[1,8- cd]pyran-1,3-dione.
83-41-0	Benzene, 1,2-dimethyl- 3-nitro-.
84-69-5	1,2- Benzenedicarboxylic acid, bis(2- methylpropyl) ester.
85-40-5	1H-Isoindole-1,3(2H)- dione, 3a,4,7,7a- tetrahydro-.
91-68-9	Phenol, 3- (diethylamino)-.
94-96-2	1,3-Hexanediol, 2- ethyl-.
96-22-0	3-Pentanone.
97-00-7	Benzene, 1-chloro-2,4- dinitro-.
98-09-9	Benzenesulfonyl chloride.
98-16-8	Benzenamine, 3- (trifluoromethyl)-.
98-56-6	Benzene, 1-chloro-4- (trifluoromethyl)-.
99-51-4	Benzene, 1,2-dimethyl- 4-nitro-.
100-64-1	Cyclohexanone, oxime.
101-34-8	9-Octadecenoic acid, 12-(acetyloxy)-, 1,2,3- propanetriyl ester, (9Z,9'Z,9''Z,12R,12'R, 12''R)-.
104-66-5	Benzene, 1,1'-[1,2- ethanediylbis(oxy)]bis-.
104-93-8	Benzene, 1-methoxy-4- methyl-.
107-39-1	1-Pentene, 2,4,4- trimethyl-.
107-40-4	2-Pentene, 2,4,4- trimethyl-.
107-45-9	2-Pentanamine, 2,4,4- trimethyl-.
110-18-9	1,2-Ethanediamine, N,N,N',N'-tetramethyl-.

110-33-8 Hexanedioic acid, dihexyl ester.

111-44-4 Ethane, 1,1'-oxybis[2-chloro-.

111-85-3 Octane, 1-chloro-.

111-91-1 Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-.

118-90-1 Benzoic acid, 2-methyl-.

119-33-5 Phenol, 4-methyl-2-nitro-.

121-69-7 Benzenamine, N,N-dimethyl-.

121-82-4 1,3,5-Triazine, hexahydro-1,3,5-trinitro-.

124-63-0 Methanesulfonyl chloride.

127-68-4 Benzenesulfonic acid, 3-nitro-, sodium salt.

131-57-7 Methanone, (2-hydroxy-4-methoxyphenyl)phenyl-.

137-20-2 Ethanesulfonic acid, 2-[methyl[(9Z)-1-oxo-9-octadecenyl]amino]-, sodium salt.

138-25-0 1,3-Benzenedicarboxylic acid, 5-sulfo-, 1,3-dimethyl ester.

139-40-2 1,3,5-Triazine-2,4-diamine, 6-chloro-N,N'-bis(1-methylethyl)-.

140-93-2 Carbonodithioic acid, O-(1-methylethyl) ester, sodium salt.

142-73-4 Glycine, N-(carboxymethyl)-.

150-50-5 Phosphorotriethic acid, tributyl ester.

330-54-1 Urea, N'-(3,4-dichlorophenyl)-N,N-dimethyl-.

460-00-4 Benzene, 1-bromo-4-fluoro-.

506-51-4 1-Tetracosanol.

506-52-5 1-Hexacosanol.

513-74-6 Carbamodithioic acid, monoammonium salt.

515-40-2 Benzene, (2-chloro-1,1-dimethylethyl)-.

529-33-9 1-Naphthalenol, 1,2,3,4-tetrahydro-.

529-34-0 1(2H)-Naphthalenone, 3,4-dihydro-.

542-92-7 1,3-Cyclopentadiene.

557-61-9 1-Octacosanol.

563-72-4 Ethanedioic acid, calcium salt (1:1).

579-66-8 Benzenamine, 2,6-diethyl-.

590-19-2 1,2-Butadiene.

592-45-0 1,4-Hexadiene.

598-72-1 Propanoic acid, 2-bromo-.

617-94-7 Benzenemethanol, .alpha.,.alpha.-dimethyl-.

628-13-7	Pyridine, hydrochloride.
628-96-6	1,2-Ethanediol, dinitrate.
645-62-5	2-Hexenal, 2-ethyl-.
693-07-2	Ethane, 1-chloro-2- (ethylthio)-.
693-95-8	Thiazole, 4-methyl-.
756-80-9	Phosphorodithioic acid, O,O-dimethyl ester.
870-72-4	Methanesulfonic acid, hydroxy-, monosodium salt.
928-72-3	Glycine, N- (carboxymethyl)-, disodium salt.
939-97-9	Benzaldehyde, 4-(1,1- dimethylethyl)-.
1000-82-4	Urea, (hydroxymethyl)-.
1002-69-3	Decane, 1-chloro-.
1111-78-0	Carbamic acid, monoammonium salt.
1115-20-4	Propanoic acid, 3- hydroxy-2,2-dimethyl-, 3-hydroxy-2,2-dimethylpropyl ester.
1401-55-4	Tannins.
1445-45-0	Ethane, 1,1,1- trimethoxy-.
1459-93-4	1,3-Benzenedicarboxylic acid, dimethyl ester.
1498-51-7	Phosphorodichloridic acid, ethyl ester.
1558-33-4	Silane, dichloro(chloromethyl) methyl-.
1738-25-6	Propanenitrile, 3- (dimethylamino)-.
1912-24-9	1,3,5-Triazine-2,4- diamine, 6-chloro-N- ethyl-N'-(1- methylethyl)-.
2152-64-9	Benzenamine, N-phenyl- 4-[[4- (phenylamino)phenyl][4- (phenylimino)-2,5- cyclohexadien-1- ylidene]methyl]-, monohydrochloride.
2210-79-9	Oxirane, [(2- methylphenoxy)methyl]-.
2372-45-4	1-Butanol, sodium salt.
2409-55-4	Phenol, 2-(1,1- dimethylethyl)-4- methyl-.
2425-54-9	Tetradecane, 1-chloro-.
2494-89-5	Ethanol, 2-[(4- aminophenyl)sulfonyl]-, hydrogen sulfate (ester).
2524-03-0	Phosphorochloridothioic acid, O,O-dimethyl ester.
2611-00-9	3-Cyclohexene-1- carboxylic acid, 3- cyclohexen-1-ylmethyl ester.
2691-41-0	1,3,5,7-Tetrazocine, octahydro-1,3,5,7- tetranitro-.
2814-20-2	4(1H)-Pyrimidinone, 6- methyl-2-(1- methylethyl)-.
2905-62-6	Benzoyl chloride, 3,5- dichloro-.
2915-53-9	2-Butenedioic acid (2Z)-, dioctyl ester.

3039-83-6	Ethenesulfonic acid, sodium salt.
3088-31-1	Ethanol, 2-[2- (dodecyloxy)ethoxy]-, hydrogen sulfate, sodium salt.
3132-99-8	Benzaldehyde, 3-bromo-.
3338-24-7	Phosphorodithioic acid, O,O-diethyl ester, sodium salt.
3386-33-2	Octadecane, 1-chloro-.
3710-84-7	Ethanamine, N-ethyl-N- hydroxy-.
3779-63-3	1,3,5-Triazine- 2,4,6(1H,3H,5H)- trione, 1,3,5-tris(6-isocyanatohexyl)-.
3965-55-7	1,3- Benzenedicarboxylic acid, 5-sulfo-, 1,3- dimethyl ester, sodium salt.
4035-89-6	Imidodicarbonic diamide, N,N',2-tris(6- isocyanatohexyl)-.
4170-30-3	2-Butenal.
4316-73-8	Glycine, N-methyl-, monosodium salt.
4860-03-1	Hexadecane, 1-chloro-.
5026-74-4	Oxiranemethanamine, N- [4- (oxiranylmethoxy)pheny l]-N- (oxiranylmethyl)-.
5216-25-1	Benzene, 1-chloro-4- (trichloromethyl)-.
5460-09-3	2,7- Naphthalenedisulfonic acid, 4-amino-5- hydroxy-, monosodium salt.
5915-41-3	1,3,5-Triazine-2,4- diamine, 6-chloro-N- (1,1-dimethylethyl)-N'-ethyl-.
6473-13-8	2-Naphthalenesulfonic acid, 6-[(2,4- diaminophenyl)azo]-3- [[4-[[4-[[7-[(2,4- diaminophenyl)azo]-1- hydroxy-3-sulfo-2-naphthalenyl]azo]pheny l]amino]-3- sulfophenyl]azo]-4-hydroxy-, trisodium salt.
6863-58-7	Butane, 2,2'-oxybis-.
6865-35-6	Octadecanoic acid, barium salt.
7320-37-8	Oxirane, tetradecyl-.
7795-95-1	1-Octanesulfonyl chloride.
8001-58-9	Creosote.
10265-69-7	Glycine, N-phenyl-, monosodium salt.
13749-94-5	Ethanimidothioic acid, N-hydroxy-, methyl ester.
13826-35-2	Benzenemethanol, 3- phenoxy-.
14666-94-5	9-Octadecenoic acid (9Z)-, cobalt salt.
17103-31-0	Urea, sulfate (2:1).
17321-47-0	Phosphoramidothioic acid, O,O-dimethyl ester.

17976-43-1 2,4,6,8,3,5,7- Benzotetraoxatriplumba cycloundecin-3,5,7- triylidene, 1,9- dihydro-1,9-dioxo-.

19438-61-0 1,3- Isobenzofurandione, 5- methyl-.

19525-59-8 Glycine, N-phenyl-, monopotassium salt.

20068-02-4 2-Butenenitrile, 2- methyl-, (2Z)-.

20227-53-6 Phosphorous acid, 2- (1,1-dimethylethyl)-4- [1-[3-(1,1-dimethylethyl)-4- hydroxyphenyl]-1- methylethyl]phenyl bis(4-nonylphenyl) ester.

20469-71-0 Hydrazinecarbodithioic acid, compd. with hydrazine (1:1).

21351-39-3 Urea, sulfate (1:1).

22527-63-5 Propanoic acid, 2- methyl-, 3- (benzoyloxy)-2,2,4- trimethylpentyl ester.

24615-84-7 2-Propenoic acid, 2- carboxyethyl ester.

24794-58-9 Formic acid, compd. with 2,2',2"- nitrilotris[ethanol] (1:1).

25154-38-5 Piperazineethanol.

25168-05-2 Benzene, chloromethyl-,

25168-06-3 Phenol, (1- methylethyl)-.

25321-41-9 Benzenesulfonic acid, dimethyl-.

25383-99-7 Octadecanoic acid, 2- (1-carboxyethoxy)-1- methyl-2-oxoethyl ester, sodium salt.

25646-71-3 Methanesulfonamide, N- [2-[(4-amino-3- methylphenyl)ethylamino]ethyl]-, sulfate (2:3).

26377-29-7 Phosphorodithioic acid, O,O-dimethyl ester, sodium salt.

26401-27-4 Phosphorous acid, isooctyl diphenyl ester.

26680-54-6 2,5-Furandione, dihydro-3-(octenyl)-.

27193-28-8 Phenol, (1,1,3,3- tetramethylbutyl)-.

28106-30-1 Benzene, ethenylethyl-.

28188-24-1 Octadecanoic acid, 2- (hydroxymethyl)-2-[[1-(1-oxooctadecyl)oxy]methyl]-1,3-propanediyl ester.

28777-98-2 2,5-Furandione, dihydro-3- (octadecenyl)-.

28908-00-1 Benzothiazole, 2- [(chloromethyl)thio]-.

30574-97-1 2-Butenenitrile, 2- methyl-, (2E)-.

32072-96-1 2,5-Furandione, 3- (hexadecenyl)dihydro-.

33509-43-2 1,2,4-Triazin-5(2H)- one, 4-amino-6-(1,1- dimethylethyl)-3,4-dihydro-3-thioxo-.

34689-46-8 Phenol, methyl-, sodium salt.

35203-06-6	Benzenamine, 2-ethyl-6- methyl-N-methylene-.
35203-08-8	Benzenamine, 2,6- diethyl-N-methylene-.
37734-45-5	Carbonochloridothioic acid, S-(phenylmethyl) ester.
37764-25-3	Acetamide, 2,2- dichloro-N,N-di-2- propenyl-.
38185-06-7	Benzenesulfonic acid, 4-chloro-3,5-dinitro-, potassium salt.
38321-18-5	Ethanol, 2-(2- butoxyethoxy)-, sodium salt.
39515-51-0	Benzaldehyde, 3- phenoxy-.
40630-63-5	1-Octanesulfonyl fluoride.
40876-98-0	Butanedioic acid, oxo- , diethyl ester, ion(1- ), sodium.
51632-16-7	Benzene, 1- (bromomethyl)-3- phenoxy-.
52184-19-7	Phenol, 2,4-bis(1,1- dimethylpropyl)-6-[(2- nitrophenyl)azo]-.
52556-42-0	1-Propanesulfonic acid, 2-hydroxy-3-(2- propenyloxy)-, monosodium salt.
52663-57-7	Ethanol, 2-butoxy-, sodium salt.
56803-37-3	Phosphoric acid, (1,1- dimethylethyl)phenyl diphenyl ester.
57693-14-8	Chromate(3-), bis[3- (hydroxy-.kappa.O)-4- [[2-(hydroxy-.kappa.O)-1-naphthalenyl]azo- .kappa.N1]-7-nitro-1-naphthalenesulfonato(3- )]-, trisodium.
61788-44-1	Phenol, styrenated.
61788-76-9	Alkanes, chloro.
61789-32-0	Fatty acids, coco, 2- sulfoethyl esters, sodium salts.
61789-85-3	Sulfonic acids, petroleum.
63302-49-8	Phosphorochloridous acid, bis(4- nonylphenyl) ester.
64743-02-8	Alkenes, C>10.alpha-.
64743-03-9	Phenols (petroleum).
65996-79-4	Solvent naphtha (coal)
65996-80-7	Ammonia liquor (coal).
65996-81-8	Fuel gases, coke-oven.
65996-82-9	Tar oils, coal.
65996-83-0	Extracts, coal tar oil alk.
65996-86-3	Extract oils (coal), tar base.
65996-87-4	Extract residues (coal), tar oil alk.
65996-89-6	Tar, coal, high-temp.
65996-91-0	Distillates (coal tar), upper.
65996-92-1	Distillates (coal tar).



66071-94-1 Corn, steep liquor.

68081-86-7 Phenol, nonyl derivs.

68082-78-0 Lard, oil, Me esters.

68153-60-6 Fatty acids, tall-oil, reaction products with diethylenetriamine, acetates.

68187-41-7 Phosphorodithioic acid, O,O-di-C1-14- alkyl esters.

68187-57-5 Pitch, coal tar- petroleum.

68187-59-7 Coal, anthracite, calcined.

68188-18-1 Paraffin oils, chlorosulfonated, saponified.

68308-74-7 Amides, tall-oil fatty, N,N-di-Me.

68309-16-0 Fatty acids, tall-oil, 2-(2- hydroxyethoxy)ethyl esters.

68309-27-3 Fatty acids, tall-oil, sulfonated, sodium salts.

68334-01-0 Disulfides, alkylaryl dialkyl diaryl, petroleum refinery spent caustic oxidn. products.

68441-66-7 Decanoic acid, mixed esters with dipentaerythritol, octanoic acid and valeric acid.

68442-60-4 Acetaldehyde, reaction products with formaldehyde, by-products from.

68442-77-3 2-Butenediamide, (2E)- , N,N'-bis[2-(4,5- dihydro-2-nortall-oil alkyl-1H-imidazol-1- yl)ethyl] derivs.

68457-74-9 Phenol, isobutylenated methylstyrenated.

68476-80-2 Fats and Glyceridic oils, vegetable, deodorizer distillates.

68478-20-6 Residues (petroleum), steam-cracked petroleum distillates cyclopentadiene conc., C4-cyclopentadiene- free.

68513-62-2 Disulfides, C5-12-alkyl

68514-41-0 Ketones, C12-branched.

68515-89-9 Barium, carbonate nonylphenol complexes.

68527-22-0 Naphtha (petroleum), clay-treated light straight-run.

68584-25-8 Benzenesulfonic acid, C10-16-alkyl derivs., compds. with triethanolamine.

68602-81-3 Distillates, hydrocarbon resin prodn. higher boiling.

68603-84-9 Carboxylic acids, C5-9.

68608-59-3 Ethane, 1,2-dichloro-, manuf. of, by-products from, distn. lights.

68609-05-2 Cyclohexane, oxidized, non-acidic by- products, distn. lights.

68610-90-2 2-Butenedioic acid (2E)- , di-C8-18-alkyl esters.

68649-42-3 Phosphorodithioic acid, O,O-di-C1-14- alkyl esters, zinc salts.

68650-36-2 Aromatic hydrocarbons, C8, o-xylene-jjjjjjjjjjlean.

68782-97-8 Distillates (petroleum), hydrofined lubricating-oil.

68815-50-9 Octadecanoic acid, reaction products with 2-[(2-aminoethyl)amino]ethanol.

68909-77-3 Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine derivs. residues.

68915-05-9 Fatty acids, tall-oil, low-boiling, reaction products with ammonia-ethanolamine reaction by-products.

68915-39-9 Cyclohexane, oxidized, aq. ext., sodium salt.

68918-16-1 Tar, coal, dried and oxidized.

68919-17-5 Hydrocarbons, C12-20, catalytic alkylation by-products.

68937-29-1 1,6-Hexanediol, distn. residues.

68937-69-9 Carboxylic acids, C6- 18 and C5-15-di-.

68937-70-2 Carboxylic acids, C6- 18 and C8-15-di-.

68937-72-4 Carboxylic acids, di-, C4-11.

68953-80-0 Benzene, mixed with toluene, dealkylation product.

68955-37-3 Acid chlorides, tallow, hydrogenated.

68955-76-0 Aromatic hydrocarbons, C9-16, biphenyl deriv.- rich.

68987-41-7 Benzene, ethylenated.

68987-66-6 Ethene, hydrated, by-products from.

68988-22-7 1,4- Benzenedicarboxylic acid, dimethyl ester, manuf. of, by-products from.

68990-61-4 Tar, coal, high-temp., high-solids.

68990-65-8 Fats and Glyceridic oils, vegetable, reclaimed.

70084-98-9 Terpenes and Terpenoids, C10-30, distn. residues.

70693-50-4 Phenol, 2,4-bis(1- methyl-1-phenylethyl)- 6-[(2-nitrophenyl)azo]-.

70851-08-0 Amides, coco, N-[3- (dimethylamino)propyl] , alkylation products with sodium 3-chloro-2- hydroxypropanesulfonate.

71077-05-9 Ethanol, 2,2'-oxybis-, reaction products with ammonia, morpholine product tower residues.

72162-15-3 1-Decene, sulfurized.

72162-28-8 2-Propanone, reaction products with phenol.

72854-27-4 Tannins, reaction products with sodium bisulfite, sodium polysulfide and sodium sulfite.

73665-18-6 Extract residues (coal), tar oil alk., naphthalene distn. residues.

83864-02-2 Nickel, bis[(cyano- C)triphenylborato(1-)- N]bis(hexanedinitrile- N,N')-.

84501-86-0 Hexanedioic acid, esters with high- boiling C6-10-alkene hydroformylation products.

90640-80-5 Anthracene oil.

90640-86-1 Distillates (coal tar), heavy oils.

119345-02-7 Benzene, 1,1'-oxybis-, tetrapropylene derivs.

125997-20-8 Phosphoric acid, mixed 3-bromo-2,2- dimethylpropyl and 2-bromoethyl and 2- chloroethyl esters.