

EPA evaluates degradates that are found at  $\geq 10\%$  of applied chemical and/or are of toxicological concern

Blue shading indicates chemicals that are not on DPR list

CAS #	Parent	Degradates $\geq 10\%$	Degradates of Toxicological Concern (confirmed or uncertain)	Reference	Notes
94-75-7 533-73-3	2,4-D acid	1,2,4-benzenetriol		USEPA. 2013. EFED Registration Review Problem Formulation for 2,4-D -REVISED	
120-83-2 615-67-8		2,4-dichlorophenol (2,4-DCP) chlorohydroquinone	2,4-DCP		EPA Health Advisory for 2,4-DCP, which is also a degradate of 2,4-DP and 2,4-DB
13160-33-8	Asoxystrobin			USEPA. 2009. Preliminary Problem Formulation for the Ecological Risk and Drinking Water Exposure Assessments for Asoxystrobin	
NA		Z isomer of azoxystrobin	Z isomer of azoxystrobin	USEPA. 2010. Revised EFED Registration Review Problem Formulation for Bifenthrin	
82657-04-3	Bifenthrin	None	None		
63-25-2 90-15-3	Carbaryl	1-naphthol	1-naphthol	USEPA. 2010. Registration Review--Preliminary Problem Formulation for Ecological Risk and Environmental Fate, Endangered Species, and Drinking Water Assessments for Carbaryl	
130-15-4		1,4-naphthoquinone			
500008-45-7 NA	Chlorantraniliprole	IN-LBA24	None	USEPA. 2008. Pesticide Fact Sheet for Chlorantraniliprole	
122453-73-0 NA NA NA NA NA	Chlorfenapyr	CL(AC) 312,094	CL(AC) 312,094 CL(AC) 303,267 CL(AC) 325,195 CL(AC)303,094 CL(AC) 303,195	USEPA. 2010. Registration Review--Problem Formulation Revised Based on Public Comments for Ecological Risk, Environmental Fate, and Endangered Species Assessments for Chlorfenapyr	Very little agricultural use.  Metabolite identifiers may not be correct; text of cited document does not match table heading.
1897-45-6 118-74-1 Multiple Multiple	Chlorothalonil	hexachlorobenzene (impurity) dioxins (impurity) furans (impurity)	hexachlorobenzene (impurity) dioxins (impurity) furans (impurity)	USEPA. 2012. Registration Review--Preliminary Problem Formulation for the Ecological Risk Assessment and Drinking Water Exposure Assessment of Chlorothalonil.	Water quality standards for dioxins/furans
28343-61-5 NA NA NA NA NA NA NA NA NA NA NA		SDS-3701 (4-hydroxy-2,5,6-trichloro-1,3-dicyanobenzene) SDS-46851 SDS-47523 R417888 R471811 R419492 SDS-67042 2,5,6-trichloro-1,3-dicyanobenzene-4-sulphonate trichloro-1,3-dicyanobenzene SDS-66382	SDS-3701 (4-hydroxy-2,5,6-trichloro-1,3-dicyanobenzene)		Has EPA OPP aquatic life benchmark

2921-88-2 5598-15-2	Chlorpyrifos		Chlorpyrifos oxon	USEPA. 2008. Registration Review--Preliminary Problem Formulation for Ecological Risk and Environmental Fate, Endangered Species and Drinking Water Assessments for Chlorpyrifos	
6515-38-4		3,5,6-trichloro-2-pyridinol (TCP)	3,5,6-trichloro-2-pyridinol (TCP)		
64902-72-3	Chlorsulfuron			USEPA. 2012. Registration Review--Preliminary Problem Formulation for Ecological Risk and Environmental Fate, Endangered Species, and Drinking Water Assessments for Chlorsulfuron	
NA		O-desmethylchlorsulfuron (ODMC)	ODMC		
NA		2-chlorophenylsulfonyleurea (CPSU)	CPSU		
1668-54-8		Triazine amine (TA)			
NA		Ring opened chlorsulfuron (ROC)	ROC		
6961-82-6		Chlorsulfonamide (CSM)			Could be more degradates of toxicological concern, pending more data expected in Registration Review process
210880-92-5 (previously 205510-53-8)	Clothianidin			USEPA. 2011. Registration Review: Problem Formulation for the Environmental Fate and Ecological Risk, Endangered Species, and Drinking Water Exposure Assessments of Clothianidin	Clothianidin is a breakdown product of thiamethoxam
NA		N-(2-chloro-5-thiazolyl-methyl)-N'-methylurea (TZNG)	TZNG		
NA		N-methyl-N'-nitroguanidine (MNG)	MNG		
NA		N-(2-chlorothiazol-5-ylmethyl)-N'-methylguanidine (TMG)	TMG		
471-29-4		methyl guanadine (MG)			
NA		N-(2-chloro-5-thiazolyl-methyl)-N'-methylurea (TZMU)			
NA		4-hydroxy-2-methylamino-2-imidazolin-5-one (HMIO)			
598-50-5		methyl urea (MU)			
75-12-7		formamide (FA)			
NA		7-methylamino-4H-imidazo[5,1-b][1,2,5]thiadiazin-4-one (MIT)			
736994-63-1	Cyantraniliprole			USEPA. 2013. AMENDMENT--EFED Environmental Risk Assessment of Proposed New Global Chemical Cyantraniliprole....	DPR has required analytical method for INJ9Z3
NA		INJ9Z38	INJ9Z38		
NA		IN-NXX69	IN-NXX69		
NA		IN-QKV54	IN-QKV54		
NA		IN-RNU71	IN-RNU71		
NA		IN-JSE76	IN-JSE76		
NA		IN-JCZ3	IN-JCZ3		
NA		IN-K5A78	IN-K5A78		
NA		IN-PLT97	IN-PLT97		
NA			INK5A77		
NA			IN-K5A79		

68359-37-5 (isomer mixture); 86560-92-1 (diastereoisomer I) 86560-93-2 (diastereoisomer II) 86560-94-3 (diastereoisomer III) 86560-95-4 (diastereoisomer IV) Beta-cyfluthrin is comprised mainly of diastereoisomers II and IV.	Cyfluthrin/beta-Cyfluthrin	3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylic acid (DCVA) 4-fluoro-3-phenoxybenzoic acid (FPB-acid) 4-fluoro-3-phenoxybenzaldehyde (FPB-ald)	DCVA FPB-acid FPB-ald	USEPA. 2010. EFED Registration Review Problem Formulation for Cyfluthrin and beta-Cyfluthrin	
55701-03-6					
77279-89-1					
68395-57-9					
52315-07-8 55701-03-6 39515-51-0 3739-38-6	Cypermethrin	DCVA 3-phenoxybenzaldehyde 3-phenoxybenzoic acid (3-PBA)	DCVA 3-PBA	USEPA. 2012. Registration Review: Preliminary Problem Formulation for Environmental Fate and Ecological Risk, Endangered Species, and Drinking Water Assessments for Cypermethrin and zeta-Cypermethrin	Has EPA OPP aquatic life benchmark
NA		cyperamide			
1861-32-1 118-74-1 Multiple Multiple 2136-79-0	Dacthal (DCPA)	hexachlorobenzene (impurity) dioxins (impurity) furans (impurity) tetrachloroterephthalic acid (TPA) monomethyl tetrachloroterephthalic acid (MTP)	hexachlorobenzene (impurity) dioxins (impurity) furans (impurity) TPA MTP	USEPA. 2011. Registration Review--Preliminary Problem Formulation for the Ecological Risk Assessment of Dimethyl 2,3,5,6-Tetrachloroterephthalate (DCPA)	Water quality standards for dioxins/furans
887-54-7					
62-73-7 79-43-6 79-02-7 NA 298-12-4	DDVP (dichlorvos; degradation product of naled and trichlorfon)	2,2-dichloroacetic acid 2,2-dichloroacetaldehyde desmethyl dichlorvos glyoxylic acid	2,2-dichloroacetic acid 2,2-dichloroacetaldehyde desmethyl dichlorvos glyoxylic acid	USEPA. 2009. Registration Review--Preliminary Problem Formulation for the Ecological Risk Assessment of Dichlorvos (DDVP)	
52918-63-5 NA 3739-38-6	Deltamethrin	alpha-R-deltamethrin 3-phenoxybenzoic acid (m-PBA) 3-phenoxybenzaldehyde (3-PBA)aldehyde) decamethrinic acid		USEPA. 2010. EFED Revised Registration Review Problem Formulation for Deltamethrin	
39515-51-0 72691-18-0 (cis); 74560-76-2 (trans)					
97886-45-8 NA NA	Dithiopyr	dithiopyr normal acid dithiopyr reverse acid	dithiopyr normal acid dithiopyr reverse acid	USEPA. 2013. Registration Review Problem Formulation for Dithiopyr	
1918-00-9 3401-80-7	Dicamba	3,6-dichlorosalicylic acid (DCSA)	DCSA	USEPA. 2008. Amendments to the Dicamba RED document	

1194-65-6 2008-58-4 NA	Dichlobenil	2,6-dichlorobenzamide (BAM) 4-chloro-2(3H)benzoxasolone (BZZ)	2,6-dichlorobenzamide (BAM); 4-chloro-2(3H)benzoxasolone (BZZ) BAM BZZ	USEPA. 2012. Revised EFED Registration Review Problem Formulation for Dichlobenil	EPA OPP HHBP** exists for BAM
330-54-1	Diuron			USEPA. 2003. Reregistration Eligibility Decision (RED) for Diuron	
150-68-5 NA NA 95-76-1		N'-(3-chlorophenyl)-N,N-dimethyl urea (MCPDMU) 3-(3,4-dichlorophenyl)-1-methylurea (DCPMU) 3,4-dichlorophenylurea (DCPU)	MCPDMU  3,4-dichloroaniline (3,4-DCA) impurity: tetrachlorazobenzene (TCAB)		
115-29-7 1031-07-8 2157-19-9	Endosulfan I/II	endosulfan sulfate endosulfan diol	endosulfan sulfate endosulfan diol	USEPA. 2002. Reregistration Eligibility Decision for Endosulfan	
66230-04-4 NA NA	Esfenvalerate	4-chloro-alpha-(1-methylethyl)-benzeneacetic acid (CPIA) decarboxy-fenvalerate		USEPA. 2010. Registration Review--Preliminary Problem Formulation for Ecological Risk, Environmental Fate, Endangered Species, and Drinking Water Assessment for Esfenvalerate	
51630-58-1	Fenvalerate	None	None	USEPA. 2010. Registration Review--Preliminary Problem Formulation for Ecological Risk, Environmental Fate, Endangered Species, and Drinking Water Assessment for Esfenvalerate	Could have some enrichment of SS isomer (esfenvalerate)
120068-37-3 205650-65-3 120067-83-6 120068-36-2 NA NA NA NA	Fipronil	desulfinylfipronil (MB 45897) fipronil sulfide (MB 45950) fipronil sulfone (MB 46136) MB 46513 RPA 104615 RPA 105048 fipronil amide (RPA 200766)	fipronil sulfide (MB 45950) fipronil sulfone (MB 46136) MB 46513	USEPA. 2011. Registration Review--Preliminary Problem Formulation for Ecological Risk and Environmental Fate, Endangered Species, and Drinking Water Assessments for Fipronil	
131341-86-1 NA 126120-85-2 NA	Fludioxonil	CGA-265378 CGA-192155 CGA-339833	CGA-265378 CGA-192155 CGA-339833	USEPA. 2011. Registration Review: Preliminary Problem Formulation for Environmental Fate, Ecological Risk, Endangered Species, and Drinking Water Exposure Assessments for Fludioxonil	
318290-98-1 NA NA	Fluensulfone	5-chloro-thiazole-2-sulfonic acid (thiazole sulfonic acid or TSA) deschlorothiazole sulfonic acid		USEPA. 2014. Assessment for the New Chemical Fluensulfone	Newly registered nematicide; methyl bromide replacement; highly toxic to aquatic invertebrates; moderately toxic to fish; very highly toxic to molluscs; water soluble; mobile

NA		5-chloro-2-methyl sulfonyl thiazole (methyl sulfone or MS)	MS		
NA		3,4,4-trifluoro-but-3-ene-1-sulfonic acid (butene sulfonic acid or BSA)			
NA		2-(3,4,4-trifluoro-3-butenyl sulfonyl) thiazole (deschloro-fluensulfone)			
NA		butene sulfinic acid			
239110-15-7	Fluopicolide			USEPA. 2013. Registration Review: Problem Formulation for the Environmental Fate, Ecological	EPA OPP HHBP exists for BAM
2008-58-4		2,6-dichlorobenzamide (BAM)	BAM		
1071-83-6	Glyphosate		AMPA; inert: POEA/other surfactants	USEPA. 2009. Registration Review--Preliminary Problem Formulation for the Ecological Risk and	
74341-63-2		aminomethylphosphonic acid (AMPA)	AMPA	Drinking Water Exposure Assessments for Glyphosate and its Salts	
6179-26-2		inert: polyethoxylated tallow amines (POEA surfactant)	POEA		
NA		other surfactants	other surfactants		
51235-04-2	Hexazinone			USEPA. 2010. EFED Registration Review Problem Formulation for Hexazinone.	Several degradates are persistent and mobile
NA		Metabolite B			
NA		Metabolite A-1	Metabolite A-1		
NA		Metabolite D			
NA		Metabolite 2			
NA		Metabolite G3170	Metabolite G3170		
NA			Metabolite A		
138261-41-3	Imidacloprid			USEPA. 2008. EFED Problem Formulation for the Registration Review of Imidacloprid	
NA		imidacloprid guanidine	imidacloprid guanidine		
NA		imidacloprid olefin	imidacloprid olefin		
NA		imidacloprid urea	imidacloprid urea		
173584-44-6	Indoxacarb			USEPA. 2013. Registration Review Problem Formulation for Indoxacarb	Has EPA OPP aquatic life benchmark
NA		IN-JT333	IN-JT333		Has EPA OPP aquatic life benchmark
NA		IN-MP819	IN-MP819		Has EPA OPP aquatic life benchmark
NA		IN-KG433	IN-KG433		Has EPA OPP aquatic life benchmark
NA		IN-KT413	IN-KT413		Has EPA OPP aquatic life benchmark
NA		IN-MF014			
NA		IN-MH304			
NA		MW 297			
NA		IN-KB687			
NA		IN-CO639			
NA		IN-MAS573			
NA		IN-JU873			
NA		IN-ML438			
NA		IN-MK643			
NA		IN-MK638			
NA		IN-ML437-OH	IN-ML437-OH		
NA		IN-MS775			

82558-50-7	Isoxaben	hydroxyisoxaben	hydroxyisoxaben	USEPA. 2014. Transmittal of the Preliminary Environmental Fate and Ecological Risk Assessment in Support of the Registration Review of Isoxaben	Unk = Unknown (but included in Total Toxic Residue analysis)
NA		dimethoxybenzamide	dimethoxybenzamide		
NA		methoxyphenylpyrimidinol	methoxyphenylpyrimidinol		
NA		amino ethyl methyl hexenoylisoxaben	amino ethyl methyl hexenoylisoxaben		
NA		Unk 3	Unk 3		
NA		Unk 3i	Unk 3i		
NA		Unk 5	Unk 5		
NA		Unk 5b	Unk 5b		
68085-85-8 (mixed isomers); 91465-08-6 (lambda); 76703-62-3 (gamma)	Lambda-cyhalothrin (and Gamma)	compound 1a			
NA		compound 1b			
39515-51-0		3-phenoxybenzaldehyde (Compound IV)			
3739-38-6		3-phenoxybenzoic acid (Compound V)			
42590-03-4		3-phenoxybenzenemethanol (compound VI)			
NA		compound XV	compound XV		
330-55-2	Linuron	3,4-dichloroaniline (3,4-DCA)	3,4-DCA	USEPA. 2008. Human Health Risk Assessment to Support a Section 18 Emergency Exemption for Use on Lentils in Washington and Idaho.	
121-75-5	Malathion	malathion monocarboxylic acid		USEPA. 2009. Registration Review--Preliminary Problem Formulation for Ecologicla Risk, Environmental Fate, and Endangered Species Assessments for Malathion	
35884-76-5		malathion dicarboxylic acid			
1190-28-9			malaoxon		
1634-78-2					
94-74-6	MCPA	4-chloro-o-cresol (4-CC)	4-CC	USEPA. 2014. EFED Registration Review Problem Formulation for MCPA	Water quality standards for dioxins/furans
1570-64-5		impurity: dioxins	impurity: dioxins		
Multiple		impurity: furans	impurity: furans		
94-81-5	MCPB	MCPA; 4-chloro-o-cresol (4-CC);	4-CC; dioxins/furans	USEPA. 2014. EFED Registration Review Problem Formulation for MCPA	Water quality standards for dioxins/furans
94-74-6		impurities: dioxins/furans	MCPA		
1570-64-5		MCPA	4-chloro-o-cresol (4-CC)		
Multiple		impurity: dioxins	impurity: dioxins		
Multiple		impurity: furans	impurity: furans		
16484-77-8 (acid); 66423-9-4 (dimethylamine salt); 66423-01-0 (potassium salt)	MCPP-p			USEPA. 2014. Problem Formulation for the Environmental Fate and Ecological Risk, endangered Species, and Drinking Water Assessments in Support of the Registration Review	
1570-64-5			2-methyl-4-chlorophenol		
8018-01-7	Mancozeb			USEPA. 2005. Reregistration Eligibility Decision for	

96-45-7		ethylene thiourea	ethylene thiourea	Mancozeb. AND USEPA. 2005. Environmental Fate	Has EPA OPP HHBP and aquatic life benchmark
12427-38-2	Maneb			USEPA. 2005. Reregistration Eligibility Decision for	No longer registered; tolerances revoked
96-45-7		ethylene thiourea	ethylene thiourea	Mancozeb. AND USEPA. 2005. Environmental Fate	effective July 2011.
137-42-8 (Na); 137-41-7 (K)	Metam sodium/Metam potassium			and Ecological Risk Assessment for	EPA OPP HHBP exists for ethylene thiourea
556-61-6		methylisothiocyanate (MITC)	MITC	USEPA. 2007. Risks of Metam Sodium Use to	Highly volatile; highly water soluble; Henry's
7783-06-04			hydrogen sulfide	Federally Listed Threatened California Red Legged	constant indicates rapid volatilization from
9006-42-2	Metiram			Frog ( <i>Rana aurora draytonii</i> )	surface water
96-45-7		ethylene thiourea	ethylene thiourea	USEPA. 2005. Reregistration Eligibility Decision	CA DPH AAL*** and EPA OPP aquatic life
300-76-5	Naled			(RED) for Metiram. AND USEPA. 2005.	benchmark
62-73-7		DDVP	DDVP	USEPA. 2008. Registration Review--Preliminary	EPA OPP HHBP exists for DDVP
79-43-6		2,2-dichloroacetic acid	2,2-dichloroacetic acid	Problem Formulation for the Ecological Risk	
79-02-7		2,2,-dichloroacetaldehyde	2,2,-dichloroacetaldehyde	Assessment of Naled AND USEPA. 2009.	
NA		desmethyl dichlorvos	desmethyl dichlorvos	Registration Review--Preliminary Problem	
298-12-4		glyoxylic acid	glyoxylic acid	Formulation for the Ecological Risk Assessment of	
19044-88-3	Oryzalin	2-ethyl-7-nitro-1-propyl-5-		Dichlorvos (DDVP)	
NA		sulfonylaminobenzimidazole 3-oxide		USEPA. 2010. Registration Review: Problem	
19666-30-9	Oxadiazon	Unclear	None	Formulation for Environmental Fate, Ecological	
42874-03-3	Oxyfluorfen			Risk, Endangered Species, and Drinking Water	
NA		2-chloro-1-(3-ethoxy-4-hydroxyphenol)-		Exposure Assessments for Oryzalin	
82-68-8	PCNB			USEPA. 2003. Reregistration Eligibility Decision for	
527-20-8		pentachloroaniline (PCA)	PCA	Oxadiazon	
1825-19-0		pentachlorothioanisole (PCTA)	PCTA	USEPA. 2002. Reregistration Eligibility Decision	
608-93-5		pentachlorobenzene		(RED) for Oxyfluorfen	
NA			pentachlorothioanisole sulfoxide		
87-86-5			(PCTASO)	USEPA. 2006. Reregistration Eligibility Decision for	
118-74-1			pentachlorophenol	Pentachloronitrobenzene.	
40487-42-1	Pendimethalin		impurity: hexachlorobenzene		
NA			(4-[1-ethylpropyl)amino]-2-methyl-3,5-	USEPA. 2012. Registration Review: Preliminary	
71022-43-0			dinitrophenyl) methanol	Problem Formulation for Environmental Fate and	
4836-66-2			3,5-dinitrobenzyl alcohol	Ecological Risk, Endangered Species, and Drinking	
NA			2,4-dinitrobenzyl alcohol	Water Assessments for Pendimethalin	
52645-53-1	Permethrin		4-[1-ethyl-propyl)amino]-2-methyl-		
			3,5-dinitro benzyl alcohol	USEPA. 2011. EFED Registration Review Preliminary	

3739-38-6		m-phenoxybenzoic acid (m-PBA)		Problem Formulation for Permethrin	
13826-35-2		m-phenoxybenzyl alcohol (m-PB- alcohol)			
59042-49-8		cis-permethric acid (cis-DCVA)			
59042-50-1		trans-permethric acid (trans-DCVA)			
29091-21-2	Prodiamine			USEPA. 2010. Registration Review: Preliminary Problem Formulaiton fo the Ecological Risk	
NA		prodiamine benzimidazole	prodiamine benzimidazole		
709-98-8	Propanil			USEPA. 2006. Amendment to Reregistration Eligibility Decision (RED) for Propanil (March 2006)	
95-76-1		3,4-dichloroaniline (3,4-DCA)	3,4-DCA		
60207-90-1	Propiconazole			USEPA. 2006. Reregistration Eligibility Decision (RED) for Propiconazole	
288-88-0		1,2,4-triazole	1,2,4-triazole		
86362-20-1		triazole alanine	triazole alanine		
28711-29-7		triazole acetic acid	triazole acetic acid		
175013-18-0	Pyraclostrobin			USEPA. 2014. Registration Review: Preliminary Problem Formulation for Environmental Fate, Ecological Risk, Endangered Species, and Drinking Water Exposure Assessments for Pyraclostrobin	
NA		BF 500-3	BF 500-3		
NA		BF 500-4			
NA		BF 500-5			
NA		BF 500-6			
NA		BF 500-7			
NA		BF 500-11			
NA		BF 500-13			
NA		BF 500-14			
NA		500 M58			
NA		500M78			
122-34-9	Simazine			USEPA. 2013. Registration Review--Preliminary Problem Formulation for the Ecological Risk Assessment for Simazine	
1007-28-9		6-Desisopropylatrazine (DIA)	6-Desisopropylatrazine (DIA)		
2599-11-3		hydroxysimazine (HS)	hydroxysimazine (HS)		
3397-62-4			didealkylatrazine (DDA)		
Multiple			total chloro-triazines (TCT)		
122836-35-5	Sulfentrazone			USEPA. 2014. Preliminary Ecological Risk Assessment for the Registration Review of	
134391-01-08		sulfentrazone 3-carboxylic acid (SCA)	SCA		
74222-97-2	Sulfometuron-methyl			USEPA. 2012. Registration Review: Preliminary Problem Fromulaiton for Environmental Fate, Ecological Risk, Endangered Species, and Human Health Drinking Water Exposure Assessments for Sulfometuron Methyl	EECs below all ECOSAR estimates for toxicity. (HUMAN TOO?)
NA		sulfometuron pyrimidine amine	sulfometuron pyrimidine amine		
81-07-2		saccharin	saccharin		
NA		sulfometuron sulfonamide	sulfometuron sulfonamide		
108-79-2		pyrimidine-ol	pyrimidine-ol		
NA		sulfometuron methyl free acid			
NA		sulfometuron sulfonamide free acid	sulfometuron sulfonamide free acid		
NA		hydroxymehtyl-pyrimidine			
NA		sulfometuron methyl			
542-75-6	Telone			USEPA 2008. Risks of Telone Use to Federally Threatened California Red-legged Frog	
NA		3-chloroacrylic acid			Has EPA OPP aquatic life benchmark



NA		3-chloroallyl alcohol		Has EPA OPP aquatic life benchmark
34014-18-1	Tebuthiuron	N-[5-(1,14-dimehtylethyl)-1,3,4-thiadiazol-2-yl]-N-methylurea (Degradate 104)	Degradate 104	USEPA. 2014. Transmittal of the Draft Environmental Fate and Ecological Risk Assessment in Support of the Registration Review of Tebuthiuron
NA		Clothianidin; (N-[(2-chloro-5-thiazolyl)methyl]-N'-nitro urea (NOA-404617)		USEPA. 2011. Registration Review: Problem Formulation for the Environmental Fate, Ecological Risk, Endangered Species, and Drinking Water Exposure Assessments for Thiamethoxam
153719-23-4 210880-92-5 (previously 205510-53-8)	Thiamethoxam	clothianidin (N-[(2-chloro-5-thiazolyl)methyl]-N'-nitro urea (NOA-404617)	clothianidin	
NA				
23564-05-8 10605-21-7	Thiophanate-methyl	carbendazim	carbendazim	USEPA. 2014. Preliminary Problem Formulation for the Environmental Fate, Ecological Risk, EPA OPP HHBP exists for carbendazim
Multiple	Triazole derivatives*			
288-88-0		1,2,4-triazole	1,2,4-triazole	USEPA. 2006. 1,2,4-Triazole, Triazole Alanine, Triazole Acetic Acid: Human Health Aggregate Risk Assessment in Support of Reregistration and EPA OPP HHBP exists for 1,2,4-triazole
86362-20-1		triazole alanine	triazole alanine	EPA OPP HHBP exists for trazole alanine
28711-29-7		triazole acetic acid	triazole acetic acid	EPA OPP HHBP exists for trazole acetic acid
55335-06-3 (acetic acid); 57213-69-1 (triethylamine salt); 64700-56-7 (butoxyethyl ester)	Triclopyr (butoxyethyl ester and triethylamine salt)			USEPA. 1998. Reregistration Eligibility Decision (RED) for Triclopyr
6515-38-4		3,5,6-tricloro-2-pyridinol (TCP)	3,5,6-tricloro-2-pyridinol (TCP)	Has EPA OPP aquatic life benchmark
1582-09-8	Trifluralin	TR-4: a,a,a-trifluoro-5-nitro-N4,N4-dipropyl-toluene-3,4-diamine TR-6: 5-trifluoromethyl-3-nitro-1,2-benzenediamine TR-15: 2-ethyl-7-nitro-5-trifluoromethylbenzimeidizole		USEPA. 2012. Registration Review: Problem Formulation for the Environmental Fate, Ecological Risk, Endangered Species, and Drinking Water Exposure Assessments for Trifluralin

\*Triazole derivatives: bitertanol, bromuconazole, cyproconazole, difenoconazole, epoxiconazole, fenbuconazole, flusilazole, hexaconazole, ipconazole, metconazole, myclobutanil, paclobutrazole, propconazole, prothioconazole, tebuconazole,

\*\*EPA OPP HHBP = U.S. EPA Office of Pesticides Programs has developed a Human Health Benchmark for this pesticides degradate (see <http://iaspub.epa.gov/apex/pesticides/f?p=HHBP:home> )

\*\*\*CA DPH AAL = California Department of Public Health Archived Advisory Level (see drinking water reference value information)