
















## Pesticides Monitored in North Dakota as a Part of the Agricultural Groundwater Monitoring Program

Updated January 2021

### Key:


Pesticide Type	Use Restrictions	Controls	Abbreviations
 Fungicide	 Not Restricted in North Dakota	 Broadleaf Weeds	 Insects
 Herbicide	 Restricted Use	 Woody Plants	 Mites
 Insecticide	 Not Registered	 Grasses	 Fungi
 Degradate	 Banned in the United States	 Weeds (General)	




Maximum Contaminant Levels are set by United States Environmental Protection Agency for public drinking water systems. Health Advisory Levels are set by the United States Environmental Protection Agency for lifetime exposure to the chemical. Prevention Action Levels are concentrations that trigger action to prevent further contamination; the level is defined as 25% of the MCL/HAL in the North Dakota Pesticide State Management Plan.





Listed trade names are not a comprehensive list. Listing of any trade names does not imply endorsement of the product.




Listed pesticide uses are non-exhaustive and largely based on historical use in North Dakota. This information is not to be used in place of advice from a licensed pesticide vendor. Use restrictions are subject to change.






Data from the United States Environmental Protection Agency, United States Geological Survey, North Dakota Department of Agriculture, and the National Library of Medicine PubChem database.


<b>1-Naphthol</b>		Trade Names: See <b>Carbaryl</b>	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Metabolite of carbaryl			





<b>2,4,5-T</b>		Trade Names: Agent Orange	
Type: 	Use: 	HAL: 70 µg/L PAL: 17.5 µg/L	Controls: 
Applied to: Historically applied to select crops			
Notes: Banned because of high toxicity			





<b>2,4,5-TP</b>		Trade Names: Silvex, Fenoprop	
Type: 	Use: 	MCL: 50 µg/L PAL: 12.5 µg/L	Controls:  
Applied to: Historically applied to select crops and pastureland			
Notes: Banned because of high toxicity			





<b>2,4-D</b>		Trade Names: 2,4-D, Curtail	
Type: 	Use: 	MCL: 70 µg/L PAL: 17.5 µg/L	Controls: 
Applied to: Lawns, pasture, corn, soybeans, wheat, vegetables, other crops			
Notes:			


<b>3,5 Dichlorobenzoic Acid</b>		Trade Names:	
Type:  	Use: 	MCL/HAL: NE PAL: NE	Controls:  
Applied to: Crops			
Notes: Not registered in North Dakota; metabolite of propyzamide			


<b>3-Hydroxycarbofuran</b>		Trade Names: See <b>Carbofuran</b>	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Metabolite of carbofuran			




<b>Acifluorfen</b>		Trade Names: Blazer, Storm	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls:  
Applied to: Soybeans, vegetable and fruit crops			
Notes:			




<b>Alachlor</b>		Trade Names: Bronco, Bullet, Crop Star, Intro, Lasso, Lariat, Micro-Tech	
Type: 	Use: 	MCL: 2 µg/L PAL: 0.5 µg/L	Controls:  
Applied to: Historically used on corn, soybeans, wheat, fruit and vegetable crops			
Notes: No longer used in the United States			




<b>Aldicarb</b>		Trade Names: Temik	
Type: 	Use: 	MCL: 3 µg/L PAL: 0.75 µg/L	Controls:  
Applied to: Vegetable crops, other crops			
Notes: Not registered in North Dakota			


<b>Aldicarb-Sulfone</b>		Trade Names: See <b>Aldicarb</b>	
Type: 	Use:	MCL: 2 µg/L PAL: 0.5 µg/L	Controls:
Applied to:			
Notes: Metabolite of aldicarb			


<b>Aldicarb-Sulfoxide</b>		Trade Names: See <b>Aldicarb</b>	
Type: 	Use:	MCL: 4 µg/L PAL: 1 µg/L	Controls:
Applied to:			
Notes: Metabolite of aldicarb			


<b>Aldrin</b>		Trade Names:	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically applied to soil and seeds for select crops including corn			
Notes: Banned because of high toxicity; breaks down into dieldrin			




<b>Atrazine</b>		Trade Names: Aatrex, Bicep II, Breakfree NXT, Cinch ATZ, Confidence XTRA, Harness XTRA, Tremor ATZ, Triangle	
Type: 	Use: 	MCL: 3 µg/L PAL: 0.75 µg/L	Controls: 
Applied to: Applied pre-or-post emergence to corn, wheat, vegetable and fruit crops, canola, pasture, other crops			
Notes:			




<b>Bentazon</b>		Trade Names: Basagran, Rezult B, Storm	
Type: 	Use: 	HAL: 200 µg/L PAL: 50 µg/L	Controls: 
Applied to: Soybeans, vegetables			
Notes:			




<b>BHC (Alpha)</b>		Trade Names: Alpha-HCH (See <b>Lindane</b> )	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Biproduct of lindane production and often contained in commercial lindane			




<b>BHC (Beta)</b>		Trade Names: Beta-HCH (See <b>Lindane</b> )	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Biproduct of lindane production and often contained in commercial lindane			




<b>BHC (Delta)</b>		Trade Names: Delta-HCH (See <b>Lindane</b> )	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Biproduct of lindane production and often contained in commercial lindane			




<b>Bromoxynil</b>		Trade Names: Buctril, Brox, Bison, Bromac, Huskie, Maestro, Moxy, Starane	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Corn, wheat, other crops			
Notes:			





<b>Carbaryl</b>		Trade Names: Sevin	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Corn, wheat, soybeans, vegetable and fruit crops, alfalfa, pasture, lawn and garden			
Notes:			





<b>Carbofuran</b>		Trade Names: Furadan, Curaterr	
Type: 	Use: 	MCL: 40 µg/L PAL: 10 µg/L	Controls: 
Applied to: Historically applied to corn, wheat, vegetable crops, other crops			
Notes: Not registered in North Dakota and heavily restricted throughout the United States			


<b>Chlordane (alpha)</b>		Trade Names: Octachlor and Velsicol	
Type: 	Use: 	MCL: 2 µg/L PAL: 0.5 µg/L	Controls: 
Applied to: Historically applied to food crops, lawns, gardens			
Notes: Banned because of high toxicity			




<b>Chlordane (gamma)</b>		Trade Names: Octachlor and Velsicol	
Type: 	Use: 	MCL: 2 µg/L PAL: 0.5 µg/L	Controls: 
Applied to: Historically applied to food crops, lawns, gardens			
Notes: Banned because of high toxicity			




<b>Chlorothalonil</b>		Trade Names: Bravo, Echo, Daconil	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Corn, wheat, soybeans, vegetable and fruit crops, lawn and turf			
Notes:			




<b>Chlorpyrifos</b>		Trade Names: Cobalt, Dursban, Govern, Lorsban, Pilot, Warhawk	
Type: 	Use: 	HAL: 2 µg/L PAL: 0.5 µg/L	Controls:  
Applied to: Corn, soybeans, wheat, vegetable and fruit crops, alfalfa, other crops			
Notes:			




<b>DDD</b>		Trade Names:	
Type:  	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically applied to select crops			
Notes: Banned because of high toxicity; metabolite of DDT			




<b>DDE</b>		Trade Names: See DDT	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Degradation product of DDT			




<b>DDT</b>		Trade Names: Anofex, Cezarex, Chlorophenothane, Dicophane, Dinocide, Gesarol, Guesapon, Guesarol, Gyron, Ixodex, Neocid, Neocidol, Zerdane	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically heavily used in agriculture			
Notes: Banned because of high toxicity			




<b>Diazinon</b>		Trade Names: Diazinon	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Corn, vegetable and fruit crops, nuts. Also used on cattle ear tags for insect control.			
Notes:			




<b>Dicamba</b>		Trade Names: Banvel, Clarity, Diablo, Oracle, Rifle, Sterling Blue, Vanquish, Vision	
Type: 	Use: 	MCL: 4000 µg/L PAL: 1000 µg/L	Controls: 
Applied to: Turf, pasture, corn, soybeans, wheat, other crops			
Notes:			




<b>Dichlorprop</b>		Trade Names:	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Cereal crops, pasture			
Notes: Not registered in North Dakota			


<b>Diclofop-methyl</b>		Trade Names:	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Turf, wheat, barley			
Notes: Not registered in North Dakota, restricted use in the United States			




<b>Dieldrin</b>		Trade Names:	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically applied to fruits, soils, seeds			
Notes: Banned because of high toxicity; related to aldrin			


<b>Dinoseb</b>		Trade Names:	
Type: 	Use: 	MCL: 7 µg/L PAL: 1.75 µg/L	Controls: 
Applied to: Historically applied to soybeans and vegetable crops			
Notes: Banned because of high toxicity			


<b>Endosulfan I</b>		Trade Names: Benzoepin, Endocel, Parrysulfan, Phaser, Thiodan, Thionex	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically applied to vegetable and fruit crops			
Notes: Banned because of high toxicity			




<b>Endosulfan II</b>		Trade Names: Benzoepin, Endocel, Parrysulfan, Phaser, Thiodan, Thionex	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically applied to vegetable and fruit crops			
Notes: Banned because of high toxicity			




<b>Endosulfan Sulfate</b>		Trade Names: See <b>Endosulfan I</b>	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Metabolite of Endosulfan			




<b>Endrin</b>		Trade Names: Endrin	
Type: 	Use: 	MCL: 2 µg/L PAL: 0.5 µg/L	Controls: 
Applied to: Historically applied to fruit, cereal, or grain crops			
Notes: Banned because of high toxicity			


<b>Endrin Aldehyde</b>		Trade Names: See <b>Endrin</b>	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Degradation product of endrin			




<b>Endrin Ketone</b>		Trade Names: See <b>Endrin</b>	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Degradation product of endrin			




<b>Ethalfuralin</b>		Trade Names: Sonalan	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Applied pre-emergence to soybeans, vegetable and fruit crops, sunflowers, other crops			
Notes:			




<b>Fenvalerate</b>		Trade Names: Asana XL, Fenvalostar, Zyrate	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Corn, soybeans, wheat, vegetable and fruit crops, other crops			
Notes:			





<b>Heptachlor</b>		Trade Names: Heptagran, Baskalor, Drinox, Soleptax, Termide, Velsicol	
Type: 	Use: 	MCL: 0.4 µg/L PAL: 0.1 µg/L	Controls: 
Applied to: Historically applied to corn as seed or soil treatment			
Notes: Banned for agricultural use because of high toxicity			





<b>Heptachlor Epoxide</b>		Trade Names: See <b>Heptachlor</b>	
Type: 	Use:	MCL: 0.2 µg/L PAL: 0.05 µg/L	Controls:
Applied to:			
Notes: Metabolite of heptachlor			




<b>Lindane</b>		Trade Names: Gamallin	
Type: 	Use: 	MCL: 0.2 µg/L PAL: 0.05 µg/L	Controls: 
Applied to: Historically applied to seeds and food crops			
Notes: Banned because of high toxicity			





<b>Malathion</b>		Trade Names: Fyfanon, Malathion	
Type: 	Use: 	HAL: 500 µg/L PAL: 125 µg/L	Controls: 
Applied to: Corn, wheat, soybeans, vegetable and fruit crops, alfalfa, pasture, city mosquito control sprays			
Notes:			





<b>MCPA</b>		Trade Names: MCPA, Chiptox, Rhonox, Spurge Power	
Type: 	Use: 	HAL: 30 µg/L PAL: 7.5 µg/L	Controls: 
Applied to: Wheat, pasture			
Notes:			





<b>Methiocarb</b>		Trade Names: Mesurol	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls:  
Applied to: Fruit and vegetable crops			
Notes:			





<b>Methomyl</b>		Trade Names: Lannate, Nudrin	
Type: 	Use: 	HAL: 200 µg/L PAL: 50 µg/L	Controls:  
Applied to: Corn, soybeans, vegetable and fruit crops, alfalfa, other crops, yards			
Notes:			




<b>Methoxychlor</b>		Trade Names:	
Type: 	Use: 	MCL: 40 µg/L PAL: 10 µg/L	Controls: 
Applied to: Crops, livestock			
Notes: Banned because of high toxicity			





<b>Metolachlor</b>		Trade Names: Acuron, Bicep II, Brawl, Cinch ATZ, Dual II Magnum, Matador, Prefix, Sequence	
Type: 	Use: 	HAL: 700 µg/L PAL: 175 µg/L	Controls:  
Applied to: Applied pre-emergence to: corn, soybeans, vegetable and fruit crops, other crops			
Notes:			








<b>Metribuzin</b>		Trade Names: Axiom, Authority, Boundary, Matador, Rancor, Sencor, Tricor	
Type: 	Use: 	HAL: 70 µg/L PAL: 17.5 µg/L	Controls:  
Applied to: Applied pre-or-post emergence to: corn, wheat, soybeans, fruit and vegetable crops, alfalfa, other crops			
Notes:			





<b>Oxamyl</b>		Trade Names: Return, Vydate, Vy-King	
Type: 	Use: 	MCL: 200 µg/L PAL: 50 µg/L	Controls:  
Applied to: Vegetable and fruit crops, other crops			
Notes:			




<b>Parathion Ethyl</b>		Trade Names: Parathion	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls:  
Applied to: Vegetable and fruit crops, cotton, wheat, nuts			
Notes: Heavily restricted in the United States; not registered in North Dakota			




<b>Parathion Methyl</b>		Trade Names:	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Historically used on cotton, wheat			
Notes: No longer used in the United States			




<b>Pendimethalin</b>		Trade Names: Acumen, Freehand, Prowl, Pendimax, Pendulum, Stealth	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls:  
Applied to: Applied pre-or-post emergence to: corn, wheat, soybeans, fruit and vegetable crops, other crops			
Notes:			




<b>Pentachlorophenol (PCP)</b>		Trade Names:	
Type:   	Use: 	MCL: 1 µg/L PAL: 0.25 µg/L	Controls:   
Applied to: Commonly used as a wood preservative. Used as a herbicide, fungicide, and insecticide.			
Notes: Highly restricted use			


<b>Picloram</b>		Trade Names: Tordon	
Type: 	Use: 	MCL: 500 µg/L PAL: 125 µg/L	Controls:  
Applied to: Road ditches and other rights-of-way, pasture			
Notes:			




<b>Propiconazole</b>		Trade Names: Banner, Goliath XP, Propimax, Radar, Stratego, Tilt	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Corn, wheat, soybeans, vegetable and fruit crops, other crops, turf			
Notes:			




<b>Propoxur (Baygon)</b>		Trade Names: Baygon	
Type: 	Use: 	HAL: 3 µg/L PAL: 0.75 µg/L	Controls: 
Applied to: Primarily for indoor and yard use; some vegetable and fruit crops			
Notes:			

<b>Simazine</b>		Trade Names: Princep, Simazine	
Type: 	Use: 	MCL: 4 µg/L PAL: 1 µg/L	Controls: 
Applied to: Applied pre-or-post-emergence to: corn, vegetable and fruit crops, alfalfa, pasture, turfgrass, other crops			
Notes:			

<b>Toxaphene</b>		Trade Names:	
Type: 	Use: 	MCL: 3 µg/L PAL: 0.75 µg/L	Controls: 
Applied to: Historically applied to primarily cotton, also to corn, small grains, vegetables, soybeans, livestock			
Notes: Banned because of high toxicity			

<b>Trans-Nonachlor</b>		Trade Names: See <b>Chlordane (alpha) or (gamma)</b>	
Type: 	Use:	MCL/HAL: NE PAL: NE	Controls:
Applied to:			
Notes: Component of chlordane			

<b>Triallate</b>		Trade Names: Avadex, Buckle, Far-Go	
Type: 	Use: 	MCL/HAL: NE PAL: NE	Controls: 
Applied to: Barley, lentils, peas, triticale, wheat, and canary grass			
Notes:			

<b>Trifluralin</b>		Trade Names: Buckle, Treflan, Trust	
Type: 	Use: 	HAL: 10 µg/L PAL: 2.5 µg/L	Controls: 
Applied to: Applied pre-emergence to: corn, wheat, soybeans, vegetable and fruit crops, alfalfa, pasture, other crops			
Notes:			