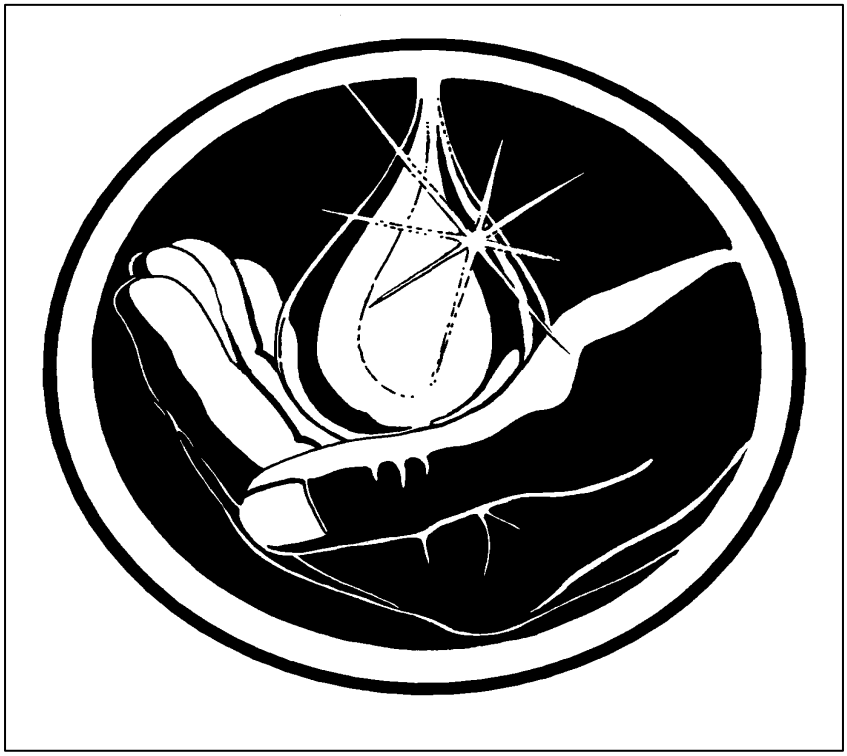
Circular DEQ-7
EXHIBIT 4

Montana Department of
ENVIRONMENTAL QUALITY

CIRCULAR DEQ-7

MONTANA NUMERIC WATER QUALITY STANDARDS



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INTRODUCTION

The Department of Environmental Quality (Department) Circular DEQ-7 (DEQ-7) contains numeric water quality standards for Montana's surface and ground waters. The standards were developed in compliance with Section 75-5-301, Montana Code Annotated (MCA) of the Montana Water Quality Act, Section 80-15-201, MCA (the Montana Agricultural Chemical Groundwater Protection Act), and Section 303(c) of the Federal Clean Water Act (CWA). Together, these provisions of state and federal law require the adoption of narrative and numeric standards that will protect the designated beneficial uses of state waters, such as growth and propagation of fishes and associated wildlife, waterfowl and furbearers, drinking water, culinary and food processing, recreation, and agriculture.

DEQ-7 contains a great deal of information about Montana's numeric standards in a compact form. In addition to providing the numeric water quality standards for each parameter DEQ-7 also contains the following:

- The primary synonyms of each parameter. This section also includes any identification numbers used by the U.S. Environmental Protection Agency (EPA), such as the Resource Conservation and Recovery Act (RCRA) waste number, if available, as the last entry in the synonyms section;
- the Chemical Abstracts Service Registry Number (CASRN) for each chemical, as well as the National Institute for Occupational Safety and Health (NIOSH) and the SAX reference numbers (taken from Dangerous Properties of Industrial Materials, by N. Irving Sax);
- the categorization of each parameter according to the type of pollutant;
- the bioconcentration factor, if known;
- trigger values used to determine "nonsignificant changes in water quality" under Montana's nondegradation policy (ARM 17.30.701-718); and
- required reporting values (RRV). See footnote 19 for a further explanation of RRV usage.

The numeric water quality standards in DEQ-7 have been established for parameters (i.e., "pollutants") in five categories: toxic, carcinogenic, radioactive, nutrients and harmful. An explanation of each of these categories is given below under "Explanation of Terms".

Parameters are listed in alphabetical order. In order to facilitate listing by alphabetical order, parameters that are normally written with the numbers first are listed with the numbers last. For example, 2,4-Dinitrophenol is listed as Dinitrophenol, 2,4-.

There are many explanatory notes following the table portion of DEQ-7. Footnotes referencing the explanatory notes are found in both the table headings and in individual line items. The notes following the table explain various aspects of the standards. For example, the standards for some metals, ammonia, and dissolved oxygen cover a range of values that are computed by using tables or formulas, using such parameters as pH, hardness, or temperature.

The Department will provide hard copies of this document upon request or the document may be retrieved from the Department website at, http://www.deq.mt.gov/wqinfo/Circulars/DEQ-7.PDF. Use of an electronic copy will enable the reader to search for synonyms or CASRN. Such searches will make this document easier to use.

STANDARDS DEVELOPMENT

Montana's numeric water quality standards were developed using guidance from the EPA which includes:

- National Recommended Water Quality Criteria (NRWQC)[1] for the protection of human health and aquatic life, developed under Section 304(a) of the CWA. These include criteria for priority pollutants (PP), non priority Pollutants (NPP), and organoleptic pollutants (OL); and
- Drinking Water Health Advisories (HA) and Maximum Contaminant Levels (MCLs) developed under the Safe Drinking Water Act.[2]

The 2011 versions of NRWQC and Drinking Water Standards and Health Advisories were used to develop the standards in this version of DEQ-7.

Aquatic life criteria take into consideration the magnitude (how much of a pollutant is allowable), duration of exposure to the pollutant (averaging period), and frequency (how often criteria can be exceeded). Acute criteria are based on a one hour exposure event and can only be exceeded once, on average, in a three year period. Chronic criteria are based on a 96 hour exposure and can only be exceeded, on average, once in a three year period. For more information, see EPA's ***Guidelines for Deriving Numerical National Water Quality Criteria for the Protection of Aquatic Organisms and Their Uses***.[3] The techniques used for determining Aquatic Life numeric standards are complex and take a great deal of time to develop. They require a detailed accumulation of scientific evidence from multiple studies, reviewed by experts in their field that may take years to complete. Aquatic Life Standards are added to DEQ-7 as they become available.

Nutrient standards for aquatic life are not included in DEQ-7, but will be addressed in future, separate documentation. Nutrients in the aquatic environment are essential substances (organic or inorganic) which are used by living organisms such as algae or bacteria for cellular metabolism or construction. Examples include nitrogen (typically as ammonia, nitrate, or nitrite) and phosphorus. If present in excessive amounts (which depends on the ecosystem involved), nutrients can produce excessive algal and plant growth, which can lead to undesirable deterioration of beneficial uses of State waters. The human health standards for nitrogenous compounds are still found in DEQ-7 and are listed as toxic compounds.

Human health criteria also have a magnitude, duration and frequency component. The standard assumption in calculating the magnitude of the pollutant for groundwater exposure is that a 70 kg person will consume two liters a day for 70 years. Water consumption is assumed to be the only route of exposure in that time frame. For surface water criteria, two routes of exposure are considered, water consumption and fish consumption. EPA and the Department use a fish consumption rate of 17.5 grams of fish per day.

Other publications used by the Department in the development of standards include: the *1986 Quality Criteria for Water*, EPA 440/5/86-001 (the "Gold Book") and numerous updates; *Toxics Criteria for those States not Complying with Clean Water Act* 303(c)(2)(B); *The National Toxics Rule* [NTR], which was published in the Code of Federal Regulations, 40 CFR 131.36 (1992); and *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California*, 62 F.R. 42159 [1997].

EXPLANATION OF TERMS

Toxics: A toxin is any chemical which has an immediate, deleterious effect on the metabolism of a living organism. The surface water quality standards for human health toxins are the more restrictive of either the MCL or the NRWQC. The ground water standards for human health toxins are the drinking water MCL or, if an MCL is not available, the NRWQC criteria. If neither an MCL nor an NRWQC criteria is available, an HA will be developed by the Department with the aid of the regional EPA toxicologist.

[1] See http://www.epa.gov/waterscience/criteria/wqctable/
[2] See http://water.epa.gov/drink/standards/hascience.cfm#dw-standards
[3] Available at: http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/

Carcinogens: The Montana Water Quality Act requires that human health standards for carcinogens be the more restrictive of either of the following: (1) the risk-based level of one in one hundred thousand [$1x10^{-5}$] for all carcinogens except arsenic, which is based upon one in one thousand [$1x10^{-3}$]; or, (2) the MCL. For surface water, the risk-based levels in EPA's NRWQC criteria or the MCL was used, or if not available HA information was used. In cases where a risk based level was not available, the most recent oral reference dose (RfD) or cancer potency factor (q1*) in the Integrated Risk Information System (IRIS) was used to compute the standard. In cases where no risk-based levels were available for known carcinogens, the standards in DEQ-7 are based on toxic effects. Ground water standards are based on EPA Drinking Water MCLs or HAs, NRWQC criteria, or IRIS information.

Pesticides: The Montana Agricultural Chemical Ground Water Protection Act requires that federal water quality criteria be adopted as ground water standards for pesticides if they are available. Pesticides are not a separate category in DEQ-7, but are included in either the toxic or carcinogenic categories. The criteria derivation would follow the process described above for those categories. If no MCLs or other federal criteria are available, standards must be developed using available data on health effects RfD and standard assumptions. The standard assumptions are that two liters of water are consumed per day and that adults weighing 70 kilograms are exposed for 70 years (life-long exposure) to a single source of water. When information was available, a relative source contribution (RSC) factor was also applied. The RSC is the percentage of a parameter's intake through drinking water versus other dietary sources. A RSC of 0.2 was used in most cases to develop ground water standards for pesticides. In some cases, no data was available to develop a water quality standard for a pesticide in surface water. In these cases, the ground water standard (developed for a pesticide according to the risk-based analysis provided above) was also adopted as a surface water standard. Other federal data sources were used when the EPA's most recent drinking water regulations and health advisories did not include data for a pesticide.

Bioconcentration: Bioconcentration factors (BCF) are not a separate category in DEQ-7, but are included with each pollutant for which there is a known bioconcentration effect. Bioconcentration is a biological amplification process which results in a higher concentration of a pollutant in a living organism than in the environment to which the organism is exposed. Pollutants such as mercury can be hundreds of times more concentrated in fish tissues than in the water the fish lives in. The calculation of a BCF is complex and is dependent on the age of the organism and the chemistry of its environment. A detailed discussion of bioconcentration can be found in EPA 823-B-94-004 *Guidance for Assessing Chemical Contaminant Data for use in Fish Advisories.*

The human health standards for carcinogens and other parameters that exhibit bioconcentration were developed using the assumption that there are two routes of human exposure: through consumption of water and fish. EPA's water quality criteria are derived using an average fish consumption rate of 17.5 grams/day and water consumption of two liters per day. The Department follows the EPA guidance for fish consumption rates.

Radioactive: All elements that emit alpha, beta, or gamma radiation are regulated in ground water by the EPA. As all forms of radiation are carcinogenic, the calculation of a numeric standard is derived either from MCLs set by the EPA or calculated from the Oral Cancer Slope Factor (OCSF) provided by the EPA Region VIII toxicologist, the use of a risk based level of one in one hundred thousand ($1x10^{-5}$) and the consumption of two liters of water daily for 70 years for an adult weighing 70 kilograms. Unlike pesticides, a relative source correction (RSC) is not applied to the calculation of numeric standards for radioactive substances as discussed in EPA 402-R-11-001, *EPA Radiogenic Cancer Risk Models and Projections.*

Harmful: Pollutants typically classified as harmful include substances or measures which are controlled by both numeric and narrative standards. Examples of numeric standards would be pH, color or bacterial concentration. The numeric standards vary depending on the water body classification for beneficial use. The

use of tables from the footnotes section of DEQ-7 is pivotal to the proper selection of the appropriate standard. Narrative standards are not covered in DEQ-7, but include such parameters as alkalinity, sulfates, chloride, hardness, sediment, and total dissolved solids.

Required Reporting Value: Each pollutant's required reporting value (RRV) is the Department's selection of a laboratory reporting limit that is sufficiently sensitive to meet the most stringent numeric water quality standard. The Department's RRV calculation is modified from EPA Guidance 821-B-04-005, "Revised Assessment of Detection and Quantitation Approaches," and uses method detection limits (MDLs) provided by laboratories. An MDL, as defined in 40 CFR 136 Appendix B, is "the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte." EPA's guidance is based on MDL studies conducted at individual labs and recommends multiplying the MDL by 3.18 to calculate the RRV. Since the Department calculates RRVs based on an inter-laboratory study, the guidance has been modified to use the 75^{th} percentile of the MDLs from the labs multiplied by 3.18.

Because DEQ-7 contains numeric standards for pollutants regulated under 40 CFR 136, EPA's Safe Drinking Water Act (SDWA), and EPA's Office of Pesticides, MDLs used to calculate RRVs in DEQ-7 include those from methods in 40 CFR 136 Appendix A, EPA's SDWA methods, and select methods approved by EPA for the analysis of pesticides. It is the responsibility of the sampling entity to ensure that appropriate methods and reporting limits are requested from the laboratory to meet analytical and reporting limit needs. For pollutants with low standards and RRVs, the Department realizes that the RRVs may be below the laboratory's lowest calibration standards. In these cases, laboratories are encouraged to report values down to the RRV when possible, and to qualify data reported below their lowest calibration standard.

RULES CONTAINING MONTANA'S WATER QUALITY STANDARDS

The Administrative Rules of Montana (ARM), 17.30.620 through 17.30.670, contain numeric surface water quality standards that vary with each stream classification. Examples of numeric standards that change under each stream classification include Escherichia coli bacteria, color, turbidity, pH, and temperature.

Both Montana's surface water and ground water rules contain narrative standards (ARM 17.30.620 through 17.30.670 and ARM 17.30.1001 through 17.30.1045). The narrative standards cover a number of parameters, such as alkalinity, chloride, hardness, sediment, sulfate, and total dissolved solids for which sufficient information does not yet exist to develop specific numeric standards. These narrative standards are directly translated to protect beneficial uses from adverse effects, supplementing the existing numeric standards.

CIRCULAR DEQ-7, MONTANA NUMERIC WATER QUALITY STANDARDS(9)

Except where indicated, values are listed as micrograms per liter (µg/L). No number indicates that a standard has not been adopted or information is currently unavailable. A '( )' indicates that a detailed note of explanation is provided.

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Acenaphthene §§ § 3Acenaphthalene § Naphthyleneethylene § 1,8-Ethylenenaphthalene § 1,8-Ethylene Naphthalene § 1,2-Dihydroacenphthylene § Acenphthylene, 1,2-Dihydro-	83-32-9 AB 1255500 AAE750	Toxic			242	670 PP	670 PP		10
Acetochlor (30) §§ § Acenit § Azetochlor § C10925 § Erunit § Harness § MG 02 § MON 097 § Nevirex	34256-82-1	Toxic				140 HA	140 HA		0.4
Acifluorfen §§ Blazer § Tackle § Scepter § as sodium salt	62476-59-9	Carcinogen				10 HA	10 HA	N/A	0.5
Acrolein §§ Aqualine § Biocide § Crolean § Aqualin § Propenal § SHA 00701 § 2-propenal § Acraldehyde § Acrylaldehyde § Acrylic Aldehyde § Ethylene Aldehyde	107-02-8 AS 1050000 ADR000	Carcinogen	3 PP	3 PP	215	60 PP	60 PP	N/A	3
Acrylamide §§ 2-Propenamide § Propenamide§ Acrylic Amide § Ethylenecarboxamide § RCRA Waste Number U007	79-06-1 AS 3325000 ADS250	Carcinogen				0.08 HA	0.08 HA	N/A	0.008
Acrylonitrile §§ Fumigrain § Ventox § ENT 54 § TL 314 § Carbacryl § Cyanoethylene § Vinyl cyanide § Propenenitrile § 2-Propenenitrile § Acrylonitrile monomer § RCRA Waste Number U009	107-13-1 AT 5250000 ADX500	Carcinogen			30	0.51 PP	0.51 PP	N/A	3

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Alachlor (includes metabolites Alachlor ESA and Alachlor OA) (31) §§ Lasso § Lazo § Alator § Alanex § Alochlor § Pillarzo § Metachlor § Chimiclor § SHA 090501 § Methachlor § 2-Chloro-N-(2,6-Diethyl)Phenyl-N-Methoxymethylacetamide § 2-Chloro-2',6'-Diethyl-N-(Methoxymethyl) Acetanilide	15972-60-8 AE 1225000 CFX000	Toxic				2 MCL	2 MCL		0.3
Aldicarb (37) §§ Temik § Temic § Ambush § OMS 771 § Temik G 10 § Aldecarb § Carbamyl § SHA 098301 § Carbanolate § Sulfone Aldoxycarb § Union Carbide 21149 § § Propanal, 2-Methyl-2-(Methylthio)-, O-[(Methylamino)Carbonyl] Oxime RCRA Waste Number P070	116-06-3 UE 2275000 CBM500	Toxic				3 MCL	3 MCL	1	0.4
Aldicarb Sulfone (37) §§ Aldoxycarb § Standak § UC 21865 § Sulfocarb § SHA 110801 § Propionaldehyde, 2-Methyl-2-(Methylsulfonyl)-, O-(Methylcarbomoyl)Oxime § 2-Methyl-2-(Methylsulfonyl) Propanal O-[(Methylamino)Carbonyl] Oxime	1646-88-4 UE 2080000 AFK000	Toxic				2 MCL	2 MCL	2	0.5
Aldicarb Sulfoxide (37) §§	1646-87-3	Toxic				4 MCL	4 MCL	2	0.4

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Aldrin §§ § HHDN § Altox § Drinox § Aldrex § Aldrite § Seedrin § Octalene § SHA 045101 § Hexachlorohexahydro-endo-exo-Dimethanonaphthalene § 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8, 8a-Hexahydro-1,4,5,8-Dimethanonaphthalene § 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-Hexahydro-endo,exo- § 1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-Hexa-Hydro-1,4:5,8-Endo,Exo-Dimethanonaphthalene § RCRA Waste Number P004	309-00-2 IO 2100000 AFK250	Carcinogen	1.5 PP		4,670	$4.9x10^{-4}$ PP	0.02 HA	N/A	0.1
Alpha Emitters (11) §§ § Gross Alpha § Adjusted Gross Alpha	Multiple	Carcinogen / Radioactive				15 picoC /liter MCL	15 picoC /liter MCL	N/A	
alpha-Chlordane §§ -Chlordane § cis-Chlordan § cis-Chlordane § c (cis)-Chlordane § Chlordane, cis-Isomer	5103-71-9 PB 9705000 CDR675	Carcinogen			14,100	0.008 HA	1 HA	N/A	0.006

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
alpha-Hexachlorocyclohexane §§ § a-BHC § alpha-BHC § HCH-alpha § alpha-HCH § alpha-Lindane § a Hexachlorocyclohexane § alpha-Benzenehexachloride § alpha-Hexachlorocyclohexane § Benzene Hexachloride-alpha-isomer § alpha-1,2,3,4,5,6-Hexachlorocyclohexane § Cyclohexane, alpha-1,2,3,4,5,6-Hexachloro- § 1-alpha,2-alpha,3-beta,4-alpha,5-beta,6-beta-Hexachlorocyclohexane § Cyclohexane, alpha-1,2,3,4,5,6-Hexachloro-, (1-alpha, 2-alpha, 3-beta, 4-alpha, 5-beta, 6-beta)-	319-84-6 GV 3500000 BBQ000	Carcinogen			130	0.026 PP	0.026 PP	N/A	0.03
Aluminum, dissolved, pH 6.5 to 9.0 only (9) §§ Al	7429-90-5 BD 0330000 AGX000	Toxic	750 NPP	87 NPP				30	9
Ametryn §§ Ametrex	834-12-8	Toxic				60 HA	60 HA		6
Aminomethylphosphonic Acid (AMPA) § Glyphosate metabolite §§		Toxic				2,000 HA	2,000 HA		200
Aminopyralid § 4-amino-3,6-dichloropyridine-2carboxilic acid, § 4 amino-3,6 dichlro-2-pyridinecarboxilic acid § Milestone	150114-71-9	Toxic				4,000 HA	4,000 HA		0.2
Ammonia [total ammonia nitrogen (NH3-N plus NH4-N)] as ug/L N §§ § Ammonia Anhydrous § Anhydrous Ammonia § Spirit of Hartshorn	7664-41-7 BO 0875000 AMY500	Toxic	(7)(8) NPP	(7)(8) NPP				10	70

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Ammonium Sulfamate §§	7773-06-0	Toxic				2,000 HA	2,000 HA		200
Anthracene (PAH) §§ Paranaphthalene § Green Oil § Anthracin § Tetra Olive N2G	120-12-7 CA 9350000 APG500	Toxic			30	8,300 PP	2,100 HA	0.04	10
Antimony §§ Sb § Antimony Black § Antimony Regulus § C.I. 77050 § Stibium	7440-36-0 CC 4025000 AQB750	Toxic			1	5.6 PP	6 MCL	0.4	0.5
Arsenic (36) §§ As § Arsenicals § Arsenic-75 § Arsenic Black § Colloidal Arsenic § Grey Arsenic § Metallic Arsenic	7440-38-2 CG 0525000 ARA750	Carcinogen	340 PP	150 PP	44	10 MCL	10 MCL	N/A	1
Asbestos, fibers longer than 10 microns in length §§ § Amianthus § Amosite (Obs.) § Amphibole § Asbestos Fiber § Fibrous Grunerite § NCI CO8991 § Serpentine, includes Chrysotile, Actinolite, Aurosite, Anthophyllite, Crocidolite, and Tremolite	Multiple	Carcinogen				$7x10^6$ fibers /liter MCL	$7x10^6$ fibers /liter MCL	N/A	

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Atrazine (includes metabolites deethyl atrazine, deisopropyl atrazine, and deethyl deisopropyl atrazine) (32) §§ § Aatrex § Aktikon § Atrasine § Atred § Candex § Crisatrina § Crisazine§ Cyazin § Fenamin § Fenamine § Zeaphos § Fenatrol § Gesaprim § Hungazin § Inakor § Primatol § Malermais § Radazin § Radizine § Shell Atrazine herbicide § Strazine § Zeazine § SHA 080803 § 1-Chloro-3-Ethylamino-5-Isopropylamino-2,4,6-Triazine § s-Triazine, 2-Chloro-4-Ethylamino-6-Isopropylamino- § 2-Chloro-4-Ethylamino-6-Isopropylamino-s-Triazine	1912-24-9 XY 5600000 PMC325	Toxic				3 MCL	3 MCL	0.1	0.3
Azinophos and degredate azinphos methyl oxon metiltriazotion § Azimil § Bay 9027 § Bay 17147 § Carfene § Cotnion-methyl § Gusathion § Gusathion-M§ Guthion § Methyl-Guthion	961-22-8	Toxic				10 HA	10 HA		0.1
Azoxystrobin §§ § azoksystrobin § Azoxistrobin § Azoxistrobina § Azoxystrobin (BSI, ISO) § azoxystrobine § Azoxystrolin	131860-33-8	Toxic				1,000 HA	1,000 HA		0.03
Barium §§ Ba	7440-39-3 CA 8370000 BAH250	Toxic				1,000 NPP	1,000 NPP	2	3
Bentazon Methyl §§ § Basagran	25057-89-0	Toxic				200 HA	200 HA		3

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Benzene §§ § Phene § Benzol § Benzolene § Pyrobenzol § Carbon Oil § SHA 109301 § Coal Naphtha § Motor Benzol § Phenyl hydride § Cyclohexatriene C § Caswell Number 077 § EPA Pesticide Chemical Code 008801 § NCI C55276 § RCRA Waste Number U019	71-43-2 CY 1400000 BBL250	Carcinogen			5.2	5 MCL	5 MCL	N/A	0.6
Benzidine §§ § p,p'-Bianiline § 4,4'-Bianiline § 4,4'-Biphenyldiamine § p,p'-Diaminobiphenyl § 4,4'-Diaminodiphenyl § 4,4'-Biphenylenediamine § 4,4'-Diphenylenediamine § Biphenyl, 4,4'-Diamino- § 4,4'-Diamino-1,1'-Biphenyl § (1,1'-Biphenyl)-4,4'-Diamine § NCI C03361 § RCRA Waste Number U021	92-87-5 DC 9625000 BBX000	Carcinogen			87.5	$8.6x10^{-4}$ PP	$8.6x10^{-4}$ PP	N/A	5
Benzo(g,h,i)perylene (PAH) §§ § 1,12-Benzoperylene § 1,12-Benzperylene § Benzo(ghi)Perylene	191-24-2 DI 6200500 BCR000	Toxic			30			0.076	10
Benzo[a]Pyrene (PAH) §§ § BaP § 3,4-BP § Benz(a)Pyrene § Benzo-a-Pyrene § 3,4-Benzpyrene § 6,7-Benzopyrene § 3,4-Benzopyrene § 3,4-Benz(a)Pyrene § Benzo(d,e,f)Chrysene	50-32-8 DJ 3675000 BCS750	Carcinogen			30	0.038 PP	0.05 HA	N/A	0.06

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Benzo[b]Fluoranthene (PAH) §§ § B(b)F § Benzo(b)Fluoranthene § Benzo(e)Fluoranthene § 2,3-Benzfluoranthene § 3,4-Benzfluoranthene § 3,4-Benzofluoranthene § 2,3-Benzofluoranthene § 2,3-Benzofluoranthrene § Benz(e)Acephenanthrylene § 3,4-Benz(e)Acephenanthrylene	205-99-2 CU 1400000 BAW250	Carcinogen			30	0.038 PP	0.5 (29) HA	N/A	5
Benzo[k]fluoranthene (PAH) §§ § Benzo(k)Fluoranthene § 8,9-Benzofluoranthene § Dibenzo(b,jk)Fluorene § 2,3,1'8'-Binaphthylene § 11,12-Benzofluoranthene § 11,12-Benzo(k)Fluoranthene	207-08-9 DF 6350000 BCJ750	Carcinogen			30	0.038 PP	5 (29) HA	N/A	0.1
Benzo[a]anthracene (PAH) §§ § Tetraphene § Benzanthracene § Benzoanthracene § Naphthanthracene § 1,2-Benzanthrene § Benz(a)Anthracene § Benzo(a)Anthracene § 1,2-Benzanthracene § Benzo(b)Phenanthrene § 1,2-Benzoanthracene § Benzanthracene, 1,2- § 1,2-Benz(a)Anthracene § 2,3-Benzophenanthrene § RCRA Waste Number U018	56-55-3 CV 9275000 BBC250	Carcinogen			30	0.038 PP	0.5 (29) HA	N/A	0.1
Beryllium §§ Be § Beryllium-9 § Glucinum § RCRA Waste Number P015	7440-41-7 DS 1750000 BFO750	Carcinogen			19	4 MCL	4 MCL	N/A	0.8

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Beta Emitters (11) §§ § Gross Beta	Multiple	Carcinogen / Radioactive				0.4 mrem /yr MCL	0.4 mrem /yr MCL	N/A	
Beta-Chloronaphthalene §§ 2-Chloronaphthalene § ß-Chloronaphthalene § Naphthalene, 2-Chloro- § 2 Chlornaftalen § A13-01537 § CCRIS 5995 § HSDB 4014 § Halowax § EINECS 202-079-9 § RCRA waste number U047	91-58-7 QJ 2275000 CJA000	Toxic			202	1,000 PP	1,000 PP	0.94	10
beta-Hexachlorocyclohexane §§ § ß-BHC § beta-BHC § HCH-beta § beta-HCH § ß-Lindane § beta-Lindane § Hexachlorocyclohexane, beta- § trans-alpha-Benzenehexachloride § Cyclohexane, 1,2,3,4,5,6-Hexachloro-, beta- § 1-alpha,2-beta,3-alpha,4-beta,5-alpha,6-beta-Hexachlorocyclohexane § Cyclohexane, 1,2,3,4,5,6-Hexachloro-, (1-alpha, 2-beta, 3-alpha, 4-beta, 5-alpha, 6-beta)- § Benzenehexachloride, trans-alpha- § beta-1,2,3,4,5,6-Hexachlorocyclohexane	319-85-7 GV 4375000 BBR000	Carcinogen			130	0.091 PP	0.091 PP	N/A	0.02

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Bis(2-Chloroisopropyl) Ether §§ § DCIP § NCI C50044 § Dichlorodiisopropyl Ether § 2,2'-Oxybis(1-Chloropropane) § Bis (2-Chloroisopropyl) ether § Propane, 2,2'-Oxybis(2-Chloro- § Propane, 2,2'-Oxybis[1-Chloro- § 2',2'-Dichlorodiisopropyl Ether § Dichlorodiisopropyl Ether (DOT) § Bis(2-Chloro-1-Methylethyl) Ether § RCRA Waste Number U027 Reregistration decision CAS-RN	108-60-1 KN 1750000 BII250 39638-32-9	Toxic			2.47	1,400 PP	1,400 PP	0.8	10
Bis(2-Chloroethoxy)Methane §§ § Bis(ß-Chloroethyl)Formal	111-91-1 PA 3675000 BID750	Toxic			0.64			0.5	10
Bis(Chloroethyl)Ether §§ § BCEE § DCEE § Clorex § Chlorex § Chloroethyl Ether § Dichloroethyl Ether § Dichloroethyl Oxide § Bis(Chloroethyl) Ether § Di(2-Chloroethyl) Ether § Bis (Chloroethyl) Ether § Bis(2-Chloroethyl) Ether § Bis(ß-Chloroethyl) Ether § ß,ß'-Dichloroethyl Ether § 2,2'-Dichloroethyl Ether § Bis (2-Chloroethyl) Ether § 1,1'-Oxybis(2-Chloro)Ethane § Ethane, 1,1'-Oxybis[2-Chloro- § beta,beta'-Dichloroethyl Ether § 1-Chloro-2-(beta-Chloroethoxy)Ethane § RCRA Waste Number U025	111-44-4 KN 0875000 BIC750	Carcinogen			6.9	0.3 PP	0.3 PP	N/A	5

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Bis(Chloromethyl)ether §§ § BCME § bis-CME § Chloromethyl Ether § Oxybis(Chloromethane) § Bis (Chloromethyl) Ether § sym-Dichlorodimethyl Ether § 1,1'-Dichlorodimethyl Ether § Dimethyl-1,1'-Dichloroether § Chloro(Chloromethoxy) Methane § RCRA Waste Number P016	542-88-1 KN 1575000 BIK000	Carcinogen			63	0.001 NPP	0.001 NPP	N/A	$1x10^{-4}$
Bromacil §§ Hyvar §	314-40-9	Carcinogen				90 HA	90 HA	N/A	0.03
Bromate	7789-38-0	Carcinogen				10 MCL	10 MCL	N/A	1
Bromodichloromethane (HM) §§ Dichlorobromomethane § BDCM § NCI C55243 § Methane, bromodichloro- § Dichloromonobromomethane § Monobromodichloromethane	75-27-4 PA 5310000 BND500	Carcinogen			3.75	5.5 PP	10 HA	N/A	0.6
Bromoform (HM) §§ Tribromomethane § NCI C55130 § Methane, Tribromo- § Methenyl Tribromide § RCRA Waste Number U225	75-25-2 PB 5600000 BNL000	Carcinogen			3.75	43 PP	80 HA	N/A	5
Bromoxynil §§	1689-84-9	Carcinogen				3.4 HA	3.4 HA	N/A	0.3

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Butyl Benzyl Phthalate §§ § BBP § Sicol 160 § Unimoll BB § Palatinol BB § Santicizer 160 § Butylbenzylphthalate § Butylbenzyl Phthalate § Benzyl Butyl Phthalate § n-Benzyl Butyl Phthalate § Benzyl n-Butyl Phthalate § Phthalic Acid, Benzyl Butyl Ester § Butyl Phenylmethyl 1,2-Benzenedicarboxylate § 1,2-Benzenedicarboxylic Acid, Butyl Phenylmethyl Ester § NCI C54375	85-68-7 TH 9990000 BEC500	Carcinogen			414	1,500 PP	1,500 PP	N/A	10
Butylate §§ Sutan §	2008-41-5	Toxic				400 MCL	400 MCL		0.02
Cadmium §§ Cd § C.I. 77180 § Colloidal Cadmium	7440-43-9 EU 9800000 CAD000	Toxic	0.52 @25 mg/L hardness (12) PP	0.097 @25 mg/L hardness (12) PP	64	5 MCL	5 MCL	0.1	0.03
Carbaryl §§ Sevin §	63-25-2	Toxic				700 HA	700 HA	2	1
Carbofuran §§ § Yaltox § Euradan § Furadan § Curaterr § Furacarb § SHA 090601 § Niagra 10242 § 2,2-Dimethyl-7-Coumaranyl N-Methylcarbamate § 2,2-Dimethyl-2,3-Dihydro-7-Benzofuranyl N-Methylcarbamate § Carbamic Acid, Methyl-, 2,3-Dihydro-2,2-Dimethyl-7-Benzofuranyl Ester	1563-66-2 FB 9450000 FPE000	Toxic				40 MCL	40 MCL	1	1

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Carbon Tetrachloride §§ Freon 10 § R 10 § Univerm § Tetrasol § Fasciolin § Flukoids § Necatorina § Necatorine § Halon 104 § Tetraform § Carbon Tet § Benzinoform § Carbon Chloride § Perchloromethane § Tetrachloromethane § Methane Tetrachloroide § RCRA Waste Number U211	56-23-5 FG 4900000 CBY000	Carcinogen			18.75	2.3 PP	3 HA	N/A	0.6
Carboxin §§ Vitavax §	5234-68-4	Toxic				700 HA	700 HA	1	70
Chloramben §§ Vegiben §	133-90-4	Toxic				100 HA	100 HA		0.5
Chlordane §§ Termex § Belt § Niran § Dowchlor § Chlortox § Chlordan § Clordano § Chlor Kil § Toxichlor § Octa-Klor § Ortho-Klor § SHA 058201 § Gold Crest C-100 § Chlordane, Technical § Octachloro-4, 7-Methanohydroindane § Octachlorodihydrodicyclopentadiene § Octachloro-4,7-Methanotetrahydroindane-4,7-Methylene Indane § 4,7-Methanoindan, 1,2,4,5,6,7,8,8-Octachloro-3a,4,7,7a-tetrahydro- § 4,7-Methano-1H-Indene § RCRA Waste Number U036	57-74-9 PB 9800000 CDR750	Carcinogen	1.2 PP	0.0043 PP	14,100	0.008 PP	1 HA	N/A	0.1
Chlorimuron Ethyl §§ Classic §	90982-32-4	Toxic				700 HA	700 HA	0.1	0.1
Chlorine, total residual §§ Cl § Bertholite § Chlorine, molecular § Molecular Chlorine	7782-50-5 FO 2100000 CDV750	Toxic	19 NPP	11 NPP		4,000 MCL	4,000 MCL		100

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Chlorite	7758-19-2	Toxic				1,000 MCL	1,000 MCL		100
Chlorobenzene §§ Monochlorobenzene § MCB § Chlorobenzol § Chlorbenzene § Phenyl Chloride § Benzene Chloride § Benzene, Chloro- § Monochlorbenzene § NCI C54886 § RCRA Waste Number U037	108-90-7 CZ 0175000 BBM750	Toxic			10.3	100 MCL	100 MCL	0.5	0.8
Chlorodibromomethane §§ Monochlorodibromomethane § CDBM § NCI C55254 § Methane, Dibromochloro- § Dibromochloromethane (THM)	124-48-1 PA 6360000 CFK500	Carcinogen			3.75	4 PP	4 PP	N/A	0.6
Chloroethane §§ Ethyl Chloride § Aethylis § Aethylis Chloridum § Anodynon § Chelen § Chlorethyl § Chloridum § Chloryl § Chloryl Anesthetic § Ether Chloratus § Ether Hydrochloric § Ether Muriatic § Hydrochloric Ether § Kelene § Monochlorethane § Muriatic Ether § Narcotile § NCI C06224	75-00-3 KH 7525000 EHH000	Toxic						0.52	
Chloroform (THM) §§ Trichloromethane § TCM § Freon 20 § Trichloroform § R-20 Refrigerant § Methenyl Chloride § Formyl Trichloride § Methyl Trichloride § Methane Trichloride § Methane, Trichloro- § Methenyl Trichloride § NCI CO2686§ RCRA Waste Number U044	67-66-3 FS 9100000 CHJ500	Carcinogen			3.75	57 PP	70 HA	N/A	0.9

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Chlorophenol, 2- §§ Phenol, 2-Chloro § o-Chlorophenol § 2-Chlorophenol § Phenol, o-Chloro- § RCRA Waste Number U048	95-57-8 SK 2625000 CJK250	Toxic			134	81 PP	81 PP	0.3	10
Chlorophenyl Phenyl Ether, 4- §§ § 4- Chlorophenyl Phenyl Ether	7005-72-3	Toxic with BCF >300			1,200				10
Chlorsulfuron §§ Glean §§ Telar	64902-72-3	Toxic				1,750 HA	1,750 HA		0.02
Chlorothalonil §§ Bravo §	1897-45-6	Carcinogen				100 HA	100 HA	N/A	0.05
Chlorpyrifos §§ Dursban § Ethion § Brodan § Eradex § Lorsban § Pyrinex § NA 2783 § Piridane § DowCo 179 § SHA 059101 § Ethion, dry § Chlorothalonil § Chlorpyrifos-Ethyl § O,O-Diethyl O-3,5,6-Trichloro-2-Pyridyl Phosphorothioate § Phosphorothioic Acid, O,O-Diethyl O-(3,5,6-Trichloro-2-Pyridyl) Ester	2921-88-2 TF 6300000 DYE000	Toxic	0.083 NPP	0.041 NPP		20 HA	20 HA	0.25	0.1
Chromium, all forms §§ Cr § Chrome	7440-47-3 GB 4200000 CMI750	Toxic				100 MCL	100 MCL	1	10
Chromium, hexavalent §§ Chromium (VI) §	18540-29-9	Toxic	16 PP	11 PP	16				2
Chromium, trivalent §§ Chromium (III) §	16065-83-1	Toxic	579 @ 25mg/L hardness (12) PP	27.7 @ 25 mg/L hardness (12) PP	16			1	3

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Chrysene (PAH) §§ § Benz(a)Phenanthrene § Benzo(a)Phenanthrene § 1,2-Benzphenanthrene § 1,2-Benzophenanthrene § 1,2,5,6-Dibenzonaphthalene § RCRA Waste Number U050	218-01-9 GC0700000 CML810	Carcinogen			30	0.038 PP	50 (29) HA	N/A	0.1
cis-1,2-Dichloroethylene §§ § 1,2-Dichloroethylene § cis-Dichloroethylene § cis-1,2-Dichloroethene § 1,2,cis-Dichloroethylene § ethylene, 1,2-Dichloro-, (z)-	156-59-2 KV 9420000 DFI200	Toxic				70 MCL	70 MCL	0.002	0.9
cis-1,3-Dichloropropene §§ Telone II § 1,3-Dichloropropene § 1,3-Dichloropropylene § (Z)-1,3-Dichloropropene § cis-1,3-Dichloropropylene § 1-Propene, 1,3-Dichloro-, (Z)-	10061-01-5 UC 8325000 DGH200	Carcinogen			1.91	3.4 HA	4 HA	N/A	0.6
Clopyralid §§ Stinger §	1702-17-6	Toxic				1,000 HA	1,000 HA	1	0.3
Color §§	N/A	Harmful				(18)	(18)	N/A	5 UNITS
Copper §§ Cu § Allbri Natural Copper § ANAC 110 § Arwood Copper § Bronze Powder § CDA 101 § CDA 102 § CDA 110 § CDA 122 § C.I. 77400 § C.I. Pigment Metal 2 § Copper Bronze § 1721 Gold § Gold Bronze § Kafar Copper § M1 (Copper) § M2 (Copper) § OFHC Cu § Raney Copper	7440-50-8 GL 5325000 CNI000	Toxic	3.79@ 25mg/L hardness (12) PP	2.85@ 25 mg/L hardness (12) PP	36	1,300 PP	1,300 PP	0.5	2
Cyanazine §§ Bladex	21725-46-2	Toxic				1 HA	1 HA		0.02

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Cyanide, total §§ § Cyanide § Isocyanide § Cyanides, includes soluble salts and complexes § RCRA Waste Number P030	57-12-5 GS 7175000 COI500	Toxic	22 PP	5.2 PP	1	140 PP	200 MCL		3
Dacthal §§ DCPA §	1861-32-1	Toxic				70 HA	70 HA	0.025	1
Dalapon §§ Revenge § Dalpon § Unipon § Dowpon § Radapon § Basinex § Ded-Weed § Dalacide § Gramevin § Crisapon § Dalpon Sodium § 2,2-Dichloropropionic Acid § SHA 28902, for sodium salt § SHA 28901, for dalapon only Propionic Acid, 2,2-Dichloro- § Sodium 2,2-Dichloropropionate § a-Dichloropropionic Acid § a,a-Dichloropropionic Acid § alpha-alpha-Dichloropropionic Acid	75-99-0 UF 0690000 DGI400	Toxic				200 MCL	200 MCL	1.3	3
Dalapon, sodium salt §§ Dalpon § Unipon § Dowpon § Radapon § Revenge § Basinex § Ded-Weed § Dalacide § Gramevin § Crisapon § Dalpon Sodium § Sodium Dalapon § 2,2-Dichloropropionic Acid § SHA 28902, for sodium salt § SHA 28901, for dalapon only § Propionic Acid, 2,2-Dichloro- § Sodium 2,2-Dichloropropionate § alpha-alpha-Dichloropropionic Acid	127-20-8 UF 1225000 DGI600	Toxic				200 MCL	200 MCL	1.3	3

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Demeton §§ Systox § Bay 10756 § Bayer 8169 § Demox § Diethoxy Thiophosphoric Acid Ester of 2-Ethylmercaptoethanol § O,O-Diethyl 2-Ethylmercaptoethyl Thiophosphate § O,O-Diethyl O(and S)-2-(Ethyl-Thio)Ethyl Phosphorothioate Mixture § E 1059 § ENT 17,295 § Mercaptophos § Systemox § Systox § ULV § Demeton-O + Demeton-S	8065-48-3 TF 3150000 DAO600	Toxic		0.1 NPP		1.4 HA	1.4 HA	0.25	0.01
Di(2-Ethylhexyl)Phthalate (PAE) §§ Bis(2-Ethylhexyl)Phthalate § BEHP § DEHP § Octoil § Fleximel § Flexol DOP § Kodaflex DOP§ Ethylhexyl Phthalate § Diethylhexyl Phthalate § 2-Ethylhexyl Phthalate § Di(Ethylhexyl)phthalate § Di(2-Ethylhexyl)phthalate § Bis (2-Ethylhexyl) Phthalate § Bis(2-Ethylhexyl)-1,2-Benzene-Dicarboxylate § 1,2-Benzenedicarboxylic Acid, Bis(2-Ethylhexyl)Ester	117-81-7 TI 0350000 BJS000	Carcinogen			130	6 MCL	6 MCL	N/A	2

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Di(2-Ethylhexyl)Adipate §§ Hexanedioic Acid § DEHA § BEHA § Bisoflex DOA § Effemoll DOA § Ergoplast AdDO § Flexol A 26 § PX-238 § Reomol DOA § Vestinol OA § Wickenol 158 § Kodaflex DOA § Monoplex DOA § NCI C54386 § Octyl Adipate § Dioctyl Adipate § Di-2-Ethylhexyl Adipate § Di (2-Ethylhexyl) Adipate § Bis(2-Ethylhexyl) Adipate § Adipic Acid, Bis(2-Ethylhexyl) Ester § Hexanedioic Acid, Bis(2-Ethylhexyl) Ester	103-23-1 AU 9700000 AEO000	Carcinogen				300 HA	300 HA	N/A	6
Diazinon §§	333-41-5	Toxic	0.17 NPP	0.17 NPP		0.6 HA	0.6 HA	0.25	0.03
Dibenz[a,h]Anthracene (PAH) §§ § DBA § DB(a,h)A § Dibenz(a,h)Anthracene § Dibenzo(a,h)anthracene § 1,2:5,6-Benzanthracene § Dibenzo (a,h) Anthracene § 1,2,5,6-Dibenzanthracene § 1,2:5,6-Dibenz(a)Anthracene § RCRA Waste Number U063	53-70-3 HN 2625000 DCT400	Carcinogen			30	0.038 PP	0.05 (29) HA	N/A	0.1
Dibromoethane, 1,2- §§ Ethylene Dibromide § DBE § EDB § Nephis § Kopfume § Celmide § E-D-Bee § Soilfume§ Bromofume § Dowfume 40 § SHA 042002 § Pestmaster § Soilbrom-40§ Dibromoethane § Ethylene Bromide § Glycol Dibromide § 1,2-Dibromoethane § 1,2-Ethylene Dibromide § RCRA Waste Number U067	106-93-4 KH 9275000 EIY500	Carcinogen				0.004 HA	0.004 HA	N/A	0.01

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dibutyl Phthalate §§ § DPB § Celluflex DPB § Elaol § Hexaplas M/B § Palatinol C§ Polycizer DBP § PX 104 § Staflex DBP § Witcizer § SHA 028001 § Butylphthalate § N-Butylphthalate § Di-n-Butylphthalate § Di-n-Butylphthalate § Dibutyl-o-Phthalate § Di-n-Butyl Phthalate § RCRA Waste Number U069 § Phthalic Acid Dibutyl Ester § Dibutyl 1,2-Benzene Dicarboxylate § 1,2-Benzenedicarboxylic Acid Dibutyl Ester § 1,2-Benzenedicarboxylic Acid, Dibutyl Ester § Benzene-o-Dicarboxylic Acid Di-n-Butyl Ester	84-74-2 TI 0875000 DEH200	Toxic			89	2,000 PP	2,000 PP	0.25	10
Dicamba §§ Banvel §	1918-00-9	Toxic				200 HA	200 HA	0.28	0.7
Dichlorobenzene, 1,2- §§ DCB § ODB § ODCB § Dizene § Cloroben § Chloroben § Chloroden § Termitkil § Dilatin DB § Dowtherm E § Dilantin DB § o-Dichlorobenzene § Orthodichlorobenzene § ortho-Dichlorobenzene § Special Termite Fluid § Benzene, 1,2-Dichloro- § RCRA Waste Number U070	95-50-1 CZ 4500000 DEP600	Toxic			55.6	420 PP	600 MCL	0.02	10
Dichlorobenzene, 1,3- §§ Benzene, 1,3-Dichloro § M-Dichlorobenzene § m-Dichlorobenzene § meta-Dichlorobenzene § 1,3-Dichlorobenzene-	541-73-1 CZ 4499000 DEP699	Toxic			55.6	320 PP	600 HA	0.006	5

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dichlorobenzene, 1,4- §§ Benzene, 1,4-Dichloro- § 1,4- Dichlorobenzene § PDB § PDCB § NCI C54955 § Evola § Paradi § Paradow§ Persia-Perazol § Paracide § Parazene § Paramoth § Santochlor § Paranuggets § di-Chloricide § Para Chrystals § p- Dichlorobenzene § Caswell Number 632 § Paradichlorobenzene § para-Dichlorobenzene- § p- Chlorophenyl Chloride § EPA Pesticide Chemical Code 061501 § RCRA Waste Number U070 § RCRA Waste Number U071 § RCRA Waste Number U072	106-46-7 CZ 4550000 DEP800	Toxic			55.6	75 MCL	75 MCL		5
Dichlorobenzidine, 3,3'- §§ DCB § C.I. 23060 § Curithane C126 § Dichlorobenzidine § o,o'-Dichlorobenzidine § Dichlorobenzidine Base § Benzidine, 3,3'-Dichloro- § 3,3'-Dichloro-4,4'- Diaminodiphenyl § 3,3'- Dichloro-(1,1'-Biphenyl)- 4,4'-Diamine § 1,1'- Biphenyl-4,4'-Diamine, 3,3'-Dichloro- § RCRA Waste Number U073	91-94-1 DD 0524000 DEQ400	Carcinogen			312	0.21 PP	0.21 PP	N/A	5

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dichlorodifluoromethane (HM) §§ Freon 12 § F 12 § R 12 § FC 12 § Halon § CFC-12 § Arcton 6 § Electro-CF 12 § Eskimon 12 § Frigen 12 § Gentron 12 § Isceon 122 § Kaiser Chemicals 12 § Ledon 12 § Ucon 12 § Propellant 12 § Refrigerant 12 § Fluorcarbon-12 § Difluorodichloromethane § Methane, dichlorodifluoro- § RCRA Waste Number U075	75-71-8 PA 8200000 DFA600	Toxic			3.75	1,000 HA	1,000 HA	0.05	0.8
Dichloroethane, 1,2- §§ Ethylene Chloride § EDC § Brocide § 1,2-DCE § NCI C00511 § Dutch Oil § Dutch Liquid § Dichloremulsion § Di-Chlor-Mulsion § 1,2-Bichlorethane § 1,2-Dichlorethane § Ethane Dichloride § 1,2-Bichloroethane § Ethylene Dichloride § 1,2-Dichloroethane § Ethane, 1,2-Dichloro- § 1,2-Ethylene Dichloride § alpha,beta-Dichloroethane § RCRA Waste Number U077	107-06-2 KI 0525000 DFF900	Carcinogen			1.2	3.8 PP	4 HA	N/A	0.5
Dichloroethylene, 1,1- §§ Vinylidene Chloride § VDC § 1,1-DCE § Sconatex § NCI C54262 § 1,1-Dichloroethene § Vinylidene Chloride § 1,1-Dichloroethylene § Vinylidene Dichloride § Ethene, 1,1-Dichloro- § Vinylidene Chloride II § Dichloroethylene, 1,1- § Ethylene, 1,1-Dichloro- § RCRA Waste Number U078	75-35-4 KV 9275000 DFI000	Carcinogen			5.6	7 MCL	7 MCL	N/A	0.7

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dichlorophenol, 2,4- §§ Phenol, 2,4-Dichloro § DCP § 2,4-DCP § NCI C55345 § 2,4-Dichlorophenol § RCRA Waste Number U081	120-83-2 SK 8575000 DFX800	Toxic			40.7	77 PP	77 PP	10	10
Dichlorophenoxyacetic Acid, 2,4- §§ Dichlorophenoxyacetic Acid § 2,4-D § Salvo § Phenox § Farmco § Amidox § Miracle § Agrotect § Weedtrol § Herbidal § Ded-Weed § Lawn-Keep § Fernimine § Crop Rider § Dichlorophenoxyacetic Acid, 2,4- § Acetic Acid, (2,4-Dichlorophenoxy)- § 2,4-Dichlorophenoxyacetic Acid, salts and esters	94-75-7 AG 6825000 DFY600	Toxic				70 MCL	70 MCL	0.02	1
Dichloropropane, 1,2- §§ Propylene Chloride § 1,2-Dichloropropane § NCI C55141 § Propylene Dichloride § Caswell Number 324 § Propane, 1,2-Dichloro- § a,ß-Propylene Dichloride § alpha,beta-Dichloropropane § EPA Pesticide Chemical Code 029002 § RCRA Waste Number U083	78-87-5 TX 9625000 DGF600	Toxic			4.11	5.0 PP	5 MCL		0.7

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dichloropropene, 1,3- §§ Telone II § Telone § NCI C03985 § Vidden D § Dichloropropene § a-Chloroallyl Chloride § g-Chloroallyl Chloride § 1,3-Dichloropropene § 1,3-Dichloropropylene § 1,3-Dichloro-2-Propene § Propene, 1,3-Dichloro- § Telone II Soil Fumigant § 3-Chloropropenyl Chloride § alpha,gamma-Dichloropropylene	542-75-6 UC 8310000 CEF750	Carcinogen			1.91	3.4 PP	4 HA	N/A	0.3
Dichlorprop §§ § Canapur DP § Basagran DP § Cornox RX § Hedonil DP § Kildip § Mayclene § Polyclene § Weedone DP § Polytox	120-36-5	Toxic				300 HA	300 HA		1
Dieldrin §§ § Alvit § Quintox § Octalox § Illoxol § Dieldrex § NCI C00124 § Dieldrite § Hexachloroepoxyoctahydro-endo,exo-Dimethanonaphthalene § 3,4,5,6,9,9-Hexachloro-1a,2,2a,3,6,6a,7,7a-Octahydro-2,7:3,6-Dimethanonaphth(2,3-b)Oxirene § 2,7:3,6-Dimethanonaphth(2,3-b)Oxirene, 3,4,5,6,9,9-Hexachloro-1a,2,2a,3,6,6a,7,7a-Octahydro- § SHA 045001 § 1,4:5,8-Dimethanonaphthalene § RCRA Waste Number P037	60-57-1 IO 1750000 DHB400	Carcinogen	0.24 PP	0.056 PP	4,670	$5.2x10^{-4}$ PP	0.02 HA	N/A	0.02

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Diethyl Phthalate §§ § Anozol § Neantine § Solvanol § NCI C60048 § Placidole E § Ethyl Phthalate § Diethylphthalate § Diethyl-o-Phthalate § 1,2-Benzenedicarboxylic Acid, Diethyl Ester § RCRA Waste Number U088	84-66-2 TI 1050000 DJX000	Toxic			73	$1.7x10^4$ PP	$1.7x10^4$ PP	0.25	10
Difenoconazole §§ § 1-[2-[2-chloro-4-(4-chlorophenoxy)phenyl1]-4-methyl-1,3-dioxolan-2ymethyl]-1H-1,2,4-triazole § CGA169374 § Dividend § Dragon § Plover § Score § Score EC250	119446-68-3	Carcinogen				70 HA	70 HA	N/A	0.06
Dimethenamid and degredate demethenamid OA § 2-Chloro-N-(2,4-dimethyl-3-thienyl)-N-(2-methoxy-1-methylethyl)acetamide § San 682H § Frontier herbicide § EPA pesticide Code 129051	87674-68-8	Carcinogen				400 HA	400 HA	N/A	0.03
Dimethoate §§	60-51-5	Toxic				7 HA	7 HA		6
Dimethrin §§	70-38-2	Toxic				2,000 HA	2,000 HA		200

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dimethyl Phthalate §§ § DMP § NTM § ENT 262 § Mipax § Avolin § Fermine § Solvanom § Solvarone § Palatinol M § Methyl Phthalate § Dimethylphthalate § Phthalic Acid, Dimethyl Ester § Dimethyl Benzene-o-Dicarboxylate § Dimethyl 1,2-Benzenedicarboxylate § 1,2-Benzenedicarboxylic Acid, Dimethyl Ester	131-11-3 TI 1575000 DTR200	Toxic			36	$2.7x10^5$ PP	$2.7x10^5$ PP	0.04	10
Dimethylphenol, 2,4- §§ Phenol, 2,4-Dimethyl- § m-Xylenol § 2,4-Xylenol § 4,6-Dimethylphenol § Caswell Number 907A § 2,4-Dimethyl Phenol § 1-Hydroxy-2,4-Dimethylbenzene § 4-Hydroxy-1,3-Dimethylbenzene § EPA Pesticide Chemical Code 086804 § RCRA Waste Number U101	105-67-9 ZE 5600000 XKJ500	Toxic			93.8	380 PP	380 PP	10	10
Dinitro-o-Cresol, 4,6- §§ Dinitrocresol § Detal § Sinox § DNOC § Arborol § Capsine § Dinitrol § Trifocide § Antinonin § Winterwash § Dinitro-o-Cresol § 2,4-Dinitro-o-Cresol § 4,6-Dinitro-o-Cresol § o-Cresol, 4,6-dinitro- § 2-Methyl-4,6-Dinitrophenol § 4,6-Dinitro-2-Methylphenol § 2,4-Dinitro-6-Methylphenol § 3,5-Dinitro-2-Hydroxytoluene § Phenol, 2-Methyl-4,6-Dinitro- § Caswell Number 390 § RCRA Waste Number P047	534-52-1 GO 9625000 DUT400	Toxic			5.5	13 PP	13 PP		10

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dinitrophenol, 2,4- §§ Phenol, 2,4-Dinitro § Nitro § Kleenup § Aldifen § 2,4-Dinitrophenol § 2,4- DNP § Chemox PE § Maroxol-50 § Solfo Black B § alpha-Dinitrophenol § Dinitrophenol, 2,4- § Tertrosulphur Black PB § 1- Hydroxy-2,4- Dinitrobenzene § RCRA Waste Number P048	51-28-5 SL 2800000 DUZ000	Toxic			1.5	69 PP	69 PP	13	60
Dinitrotoluene, 2,4- §§ Toluene, 2,4-Dinitro § 2,4-DNT § NCI C01865 § 2,4-Dinitrotoluol - § Benzene, 1-Methyl-2,4- Dinitro- § RCRA Waste Number U105	121-14-2 XT 1575000 DVH000	Carcinogen			3.8	1.1 PP	1.1 PP	N/A	0.2
Dinitrotoluene, 2,6- §§ Toluene-dinitro § 2,4-DNT § Methyl-1,3- Dinitrobenzene § RCRA Waste Number U106	606-20-2 XT 1925000 DVH400	Carcinogen				0.5 HA	0.5 HA	N/A	0.2
Dinoseb §§ § DNBP § DBNF § Aretit § Basanite § Caldon § Sparic § Kiloseb § Spurge § Premerge § Dinitro § Hel- Fire § SHA 037505 § Dow General § Sinox General § Dow General Weed Killer § Vertac General Weed Killer § 2-sec-Butyl-4,6- Dinitrophenol § Dinitro- Ortho-Sec-Butyl Phenol § 2-(1-Methylpropyl)-4,6- Dinitrophenol § 4,6- Dinitro-2-(1-Methyl-n- Propyl)Phenol§ Phenol, 2- (1-Methylpropyl)-4,6- Dinitro- § RCRA Waste Number P020	88-85-7 SJ 9800000 BRE500	Toxic				7 MCL	7 MCL	0.19	1

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Dioxin Chlorinated Dibenzo-p-dioxins and Chlorinated Dibenzofurans Calculation of an equivalent concentration of 2,3,7,8-TCDD is to be based on congeners of CDDs/CDFs and the toxicity equivalency factors (TEF) in van den Berg, M: et al. (2006) The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 93(2):223-241.	1746-01-6	Carcinogen			5,000	$5x10^{-9}$ (10) PP	$2x10^{-6}$ (10) HA	N/A	footnote (10)
Diphenamid §§	957-51-7	Carcinogen				200 HA	200 HA	N/A	20
Diphenylhydrazine, 1,2- §§ Hydrazine, 1,2-Diphenyl- § Hydrazobenzene § NCI C01854 § N,N'-Bianiline § Benzene, Hydrazodi- § (sym)-Diphenylhydrazine § 1,2-Diphenylhydrazine § RCRA Waste Number U109	122-66-7 MW 2625000 HHG000	Carcinogen			24.9	0.36 PP	0.36 PP	N/A	0.04
Diquat §§ § Actor § Feglox § Deiquat § Reglone § Aquacide § Dextrone § Paraquat § Preeglove § SHA 032201 § Weedtrine-D § Diquat Dibromide § Ethylene Dipyridylium Dibromide § 1,1-Ethylene 2,2-Dipyridylium Dibromide § 5,6-Dihydro-Dipyrido(1,2a,1c)Pyraziniu m Dibromide § 9,10-Dihydro-8a,10a-Diazoniaphenanthrene(1,1'-Ethylene-2,'-Bipyridylium)Dibromide	2764-72-9 DWX800 JM 5690000	Toxic				20 MCL	20 MCL	0.44	2

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Disulfoton §§ § Disyston	298-04-4	Toxic				0.3 HA	0.3 HA	0.07	0.09
Diuron §§ § Karmex	330-54-1	Toxic				10 HA	10 HA	1	0.5
Endosulfan (39) §§ § NCI C00566 § Malixv § Ensure § Beosit § Endocel § Thiodan § Cyclodan § Crisulfan § Benzoepin § Thiosulfan § SHA 079401 § Chlorthiepin § Endosulfan (mixed isomers) § Hexachlorohexahydromethano 2,4,3-Benzodioxathiepin-3-Oxide § 1,4,5,6,7,7-Hexachloro-5-Norbornene-2,3-Dimethanol Cyclic Sulfite § 5-Norbornene-2, 3-Dimethanol, 1,4,5,6,7,7-Hexachloro Cyclic Sulfite § RCRA Waste Number P050	115-29-7 RB 9275000 BCJ250	Toxic	0.11 PP	0.056 PP	270	62 PP	62 PP	0.014	see Cis and trans isomers
Endosulfan, I (39) (the cis isomer of Endosulfan) §§ § Thiodan I § Endosulfan-I § Alpha-Endosulfan § alpha-Endosulfan	959-98-8	Toxic	0.11 PP	0.056 PP	270	62 PP	62 PP		0.02
Endosulfan, II (39)(the trans isomer of endosulfan) §§ § Thiodan II § Endosulfan-II § Beta-Endosulfan § beta-Endosulfan	33213-65-9	Toxic	0.11 PP	0.056 PP	270	62 PP	62 PP	0.004	0.02
Endosulfan Sulfate §§ § 6,9-Methano-2,3,4-Benzodioxathiepin, 6,7	1031-07-8	Toxic			270	62 PP	62 PP	0.05	0.05

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Endothall §§ § Hydout § Hydrothal-47 § Aquathol § SHA 038901 § Accelerate § Tri-Endothal § Endothal Hydout § 3,6-Endooxohexahydrophthalic Acid § Phthalic Acid, Hexahydro-3,6-endo-Oxy- § 7-Oxabicyclo(2,2,1)Heptane-2,3-Dicarboxylic Acid § 1,2-Cyclohexanedicarboxylic Acid, 3,6-endo-Epoxy- § RCRA Waste Number P088	145-73-3 RN 7875000 EAR000	Toxic				100 MCL	100 MCL	1	2
Endrin §§ § NCI C00157 § Endrex § Mendrin § Nendrin § Hexadrin § SHA 041601 § Compound 269 § 1,2,3,4,10,10-Hexachloro-6,7-Epoxy-1,4,4(a)5,6,7,8,8a-Octahydro-endo § 3,4,5,6,9,9-Hexachloro-1a,2,2a,3,6,6a,7,7a-Octahydro-2, 7:3,6-Dimethanonaphth[2,3-b]oxirene § 1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-Hexachloro-6,7-Epoxy-1,4,4a,5,6,7,8,8a-Octahydro-Endo,Endo- § RCRA Waste Number P051	72-20-8 IO 1575000 EAT500	Toxic with BCF >300	0.086 PP	0.036 PP	3,970	0.059 PP	2 MCL		0.006
Endrin Aldehyde §§	7421-93-4	Toxic with BCF >300			3,970	0.29 PP	0.29 PP		0.03

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Epichlorohydrin §§ § ECH § Epoxy Propane § - Epichlorohydrin § Chloromethyloxirane § RCRA Waste Number U041 § y-Chloropropyleneoxide § 2-Chloropropylene Oxide § Glycerol Epichlorhydrin § 2,3-Epoxypropyl Chloride § 1-Chlor-2,3-Epoxypropane§ 3-Chlor-1,2-Epoxypropane	106-89-8 TX 4900000 CGN750	Carcinogen				30 HA	30 HA	N/A	3
Escherichia coli (Bacteria)	N/A	Harmful				(13)	Less than 1 (6)	N/A	1 per 100ml
Ethion §§ Phosphorodithioic acid, S,S'-methylene O,O,O',O'-tetraethyl ester § Diethion § Embathion § Ethanox § Ethiol 100 § Ethodan § Ethopaz § ethyl methylene phosphorodithioate § FMC-1240 § Fosfatox E § Fosfono P § HSDB 399 § Hylemox § KWIT § NIA 1240 § Niagara 1240 § Nialate § Phosphotox E § RP 8167 § Rhodocide § Rodocid § Vegfru fomisate	563-12-2	Toxic				4 HA	4 HA		0.3
Ethofumesate §§ 2-Ethoxy-2,3-dihydro-3,3-dimethyl-5-benzofuranyl methanesulfonate § BRN 5759730 § CR 14658 § Caswell #427BB § HSDB 7451 § Nortron § Progress § Tramat	26225-79-6	Toxic				9,000 HA	9,000 HA		0.08
Ethylbenzene §§ § EB § NCI C56393 § Ethylbenzol § Phenylethane § Ethyl Benzene § Benzene, Ethyl	100-41-4 DA 0700000 EGP500	Toxic			37.5	530 PP	700 MCL	0.002	1

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Fenamiphos §§ § Nemacur	22224-92-6	Toxic				2 HA	2 HA		0.2
Fenbuconazole §§ 1H-1,2,4-Triazole-1-propanenitrile,alp-ha-(2-(4-chlorophenyl)ethyl)-alpha-phenyl- § 4-(4-chlorophenyl)-2-(1H-1,2,4-triazol-1-ylmethyl)butyronitrile	114369-43-6	Carcinogen				100 HA	100 HA	N/A	0.02
Fipronil §§ §HSDB 7051 §MB 46030 §RM1601 §Regent §UNII-QGH063955F	120068-37-3	Carcinogen				1 HA	1 HA	N/A	0.004
Flucarbazone §§ Flucarbazone § 1H-1,2,4-Triazole-1carboxamide, 4,5-dihydro-3-methoxy-4-methyl-5-oxo-N((2-(trifluoromethoxy) phenyl)sulfonyl-	145026-88-6	Toxic				3,000 HA	3,000 HA		300
Flucarbazone sulfonamide §§ §	37526-59-3	Toxic				3,000 HA	3,000 HA		300
Fluometuron §§ § Flo-Met	2164-17-2	Carcinogen				90 HA	90 HA	N/A	0.5
Fluoranthene §§ § Idryl § Benzo(jk)Fluorene § Benzo(j,k)Fluorene § 1,2-Benzacenaphthene § 1,2-(1,8-Naphthylene)Benzene § Benzene, 1,2-(1,8-Naphthalenediyl)- § RCRA Waste Number U120	206-44-0 LL 4025000 FDF000	Toxic BCF >300			1,150	130 PP	130 PP		10
Fluorene (PAH) §§ § 9H-Fluorene § Diphenylenemethane § o-Biphenylenemethane § 2,2'-Methylenebiphenyl	86-73-7	Toxic			30	1,100 PP	1,100 PP	0.25	5

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Fluoride §§ Flourine § Fluoride § Fluoride(1-) § Perfluoride § Fluoride Ion § Fluorine, Ion § Soluable§ Fluoride § Hydrofluoric Acid, on(1-) § RCRA Waste Number P056	16984-48-8 ~~NIOSH:~~ LM 6290000 FEX875	Toxic				4,000 MCL	4,000 MCL	5	200
Fluroxypyr	69377-81-7	Toxic				7,000 HA	7,000 HA		0.1
Fonofos §§ § Dyfonate	944-22-9	Toxic				10 HA	10 HA		1
Gamma Emitters (11) §§	Multiple	Carcinogen / Radioactive				0.4 mrem /yr MCL	0.4 mrem /yr MCL	N/A	
gamma-Chlordane §§ § Chlordane, beta-Isomer	5566-34-7	Carcinogen			14,100	0.008 HA	1 HA	N/A	0.006
gamma-hexachlorocyclohexane §§ Lindane § BHC § -BHC § Gamene § Lintox § Lentox § Hexcide § Aparsin § Agrocide § Afcide § BHC-gamma § gamma-BHC § HCH-gamma § gamma-HCH § Hexachlorocyclohexane § gamma-Hexachlorobenzene § gamma-Benzenehexachloride § gamma-Benzene Hexachloride § Hexachlorocyclohexane-gamma § Hexachlorocyclohexane (gamma)	58-89-9 GV 4900000 BBQ500	Toxic	0.95 PP		130	0.2 MCL	0.2 MCL		0.02
Gases, dissolved, total-pressure (20) §§	Multiple	Toxic	110% of saturation						

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Glyphosate §§ § Jury § Honcho § Rattler § Weedoff § Roundup § Glifonox § n-(Phosphonomethyl)-Glycine § Glycine, n-(Phosphonomrthyl)- § Glyphosate plus inert ingrediants § MON 0573	1071-83-6 MC 1075000 PHA500	Toxic				700 MCL	700 MCL	6	6
Glyphosate Isopropylamine Salt §§ § SHA 103601	38641-94-0	Toxic				700 HA	700 HA	6	70
Guthion §§ § DBD § NCI C00066 § Carfene § Gothnion § Azinphos § Crysthyon § Gusathion § Bay 17147 § Methylazinphos § Methyl Guthion § Methyl-Guthion § Azinphos-Methyl § Azinphos Methyl § Caswell Number 374 § o,o-Dimethylphosphorodithioate S-Ester § Benzotriazinedithiophosphoric Acid Dimethoxy Ester § Phosphorodithioic Acid, O,O-Dimethyl Ester, S-Ester with 3-(Mercaptomethyl)-1,2,3-Benzotriazin-4(3H)-One § EPA Pesticide Chemical Code 058001	86-50-0 TE 1925000 ASH500	Toxic		0.01 NPP					0.1
Haloacetic acids (38) § Dichloroacetic acid (79-43-6) § Trichloroacetic acid (76-03-9) § Chloroacetic acid (79-11-8) § Bromoacetic acid(79-08-3) §Dibromoacetic acid (631-64-1)	various	Carcinogen				60 MCL	60 MCL	N/A	1

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Heptachlor §§ § NCI C00180 § Drinox § Heptamul § Agroceris § Heptagran § SHA 04481 § Rhodiachlor § Velsicol-104 § 3,4,5,6,7,8,8a-heptachlorodicyclopentadiene § Dicyclopentadiene, 3,4,5,6,7,8,8a-Heptachloro- § 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-Tetrahydro-4,7-Methanol-1H-Indene § 4,7-Methano-1H-Indene, 1,4,5,6,7,8,8-Heptachloro-3a,4,7,7a-Tetrahydro- § 1(3a),4,5,6,7,8,8-Heptachloro-3a(1),4,7,7a-Tetrahydro-4,7-Methanoindene § RCRA Waste Number P059	76-44-8 PC 0700000 HAR000	Carcinogen	0.26 PP	0.0038 PP	11,200	$7.9x10^{-4}$ PP	0.08 HA	N/A	0.02
Heptachlor Epoxide §§ § HCE § Velsicol 53-CS-17 § Epoxyheptachlor § 1,4,5,6,7,8,8-Heptachloro-2,3-Epoxy-2,3,3a,4,7,7a-Hexahydro-4,7-Methanoindene § 2,5-Methano-2H-Indeno[1,2b]Oxirene, 2,3,4,5,6,7,7-Heptachloro-1a,1b,5,5a,6,6a-Hexahydro- (alpha, beta, and gamma isomers)	1024-57-3 PB 9450000 EBW500	Carcinogen	0.26 PP	0.0038 PP	11,200	$3.9x10^{-4}$ PP	0.04 HA	N/A	0.01
Hexachlorobenzene §§ § HCB § Amatin § Smut-Go § Sanocide § Anticarie § Bunt-Cure § Bunt-No-More § Perchlorobenzene § Phenyl Perchloryl § No Bunt Liquid § Julin's Carbon Chloride § Co-op Hexa § Hexa C.B. § Benzene, Hexachloro-	118-74-1 DA 2975000 HCC500	Carcinogen			8,690	0.0028 PP	0.2 HA	N/A	0.03

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Hexachlorobutadiene §§ § 1,3-Hexachlorobutadiene § 1,3-Butadiene, Hexachloro- § 1,1,2,3,4,4-Hexachloro-1,3-Butadiene § 1,3-Butadiene, 1,1,2,3,4,4-Hexachloro- § HCBD § Dolan-Pur § Perchlorobutadiene § RCRA Waste Number U128	87-68-3 EJ 0700000 PCF000	Carcinogen			2.78	4.4 PP	5 HA	N/A	0.5
Hexachlorocyclohexane §§	608-73-1	Carcinogen				0.123 NPP	0.123 NPP	N/A	0.01
Hexachlorocyclopentadiene §§ § HEX § HCP § PCL § C-56 § HCCPD § NCI C55607 § Hexachloropentadiene § Perchlorocyclopentadiene § 1,3-Cyclopentadiene, 1,2,3,4,5,5-Hexachloro- § RCRA Waste Number U130	77-47-4 GY 1225000 HCE500	Toxic			4.34	40 PP	50 MCL	1	5
Hexachloroethane §§ § Avlotane § Distokal § Distopan § Distopin § Egitol § Falkitol § Fasciolin § NCI C04604 § Phenohep § Mottenhexe § Perchloroethane § Hexachloroethylene § Ethane, Hexachloro- § Carbon Hexachloride § Ethane Hexachloride § Ethylene Hexachloride § 1,1,1,2,2,2-Hexachloroethane § RCRA Waste Number U131	67-72-1 KI 4025000 HCI000	Carcinogen			86.9	14 PP	30 HA	N/A	1
Hexazinone §§	51235-04-2	Toxic				400 HA	400 HA	1	0.02

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Hydrogen Sulfide §§ § Stink Damp § Sulfur Hydride § Hydrogen Sulphide § Dihydrogen Sulfide § Dihydrogen Monosulfide § Hydrogen Sulfuric Acid § Hydrosulfuric Acid § Sulfurated Hydrogen § RCRA Waste Number U135	7783-06-4 MX 1225000 HIC500	Toxic		2 NPP					20
Hydroxyatrazine §§ § Hydroxydechloroatrazine	2163-68-0	Toxic				70 HA	70 HA		7
Imazalil (Parent name Enilconazole) §§ 1-(2-(2,4-dichlorophenyl)-2-(2-propenyloxy)ethyl)-1H-imidazole § Enilconazole § BRN 054683 § Caswell #497AB § Chloramizol § Deccozil § Secozil S 75 § Fungaflor § HSDB 6672 § R 23979 § EPA Pesticide Code 111901	35554-44-0	Carcinogen				6 HA	6 HA	N/A	0.6
Imazamethabenz-methyl ester (includes the metabolite imazamethabenz methyl acid) (33) §§ Assert §	81405-85-8	Toxic				400 HA	400 HA		40
Imazamox §§ § Ammonium salt of imazamox	114311-32-9	Toxic				$2x10^4$ HA	$2x10^4$ HA		0.04
Imazapic §§ Imazapic § AC263222, Cadre, Imazameth, Imazamethapyr, Imazmethapyr	104098-48-8	Toxic				4,000 HA	4,000 HA		0.01
Imazapyr §§ Arsenal §	81334-34-1	Toxic				$2.1x10^4$ HA	$2.1x10^4$ HA		0.01

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Imazethapyr §§ 3-pyridinecarboxilic acid, 2-(4,5-dihydro-4-methyl-4-(1-methylethyl)-5oxo-1H-imidazol-2-yl)-5-ethyl- § AC 263,499 § CL263499 § HSDB 6678 § Pivot § Pursuit § EPA Pesticide Code# 128922	81335-77-5	Toxic				$2x10^4$ HA	$2x10^4$ HA		0.03
Imidacloprid §§	105827-78-9 138261-41-3	Toxic				400 HA	400 HA		0.07
Indeno(l,2,3-cd)pyrene (PAH) §§ § o-Phenylenepyrene § 2,3-Phenylenepyrene § 2,3-o-Phenylenepyrene § Indeno (l,2,3-cd) Pyrene § 1,10-(o-Phenylene)Pyrene § 1,10-(1,2-Phenylene)Pyrene § RCRA Waste Number U137	193-39-5 NK 9300000 IBZ000	Carcinogen			30	0.038 PP	0.5 (29) HA	N/A	0.08
Iron §§ Fe § Ancor EN 80/150+A622 § Armco Iron	7439-89-6 NO 4565500 IGK800	Harmful (aquatic life)		1,000 NPP				N/A	20
Isophorone §§ § Isoforon § NCI C55618 § Isoacetophorone § alpha-Isophorone § 1,1,3-Trimethyl-3-Cyclohexene-5-One § 3,5,5-Trimethyl-2-Cyclohexene-1-One § 3,5,5-Trimethyl-2-Cyclohexone	78-59-1 GW 7700000 IHO000	Carcinogen			4.38	350 PP	400 HA	N/A	10
Lead §§ Pb § C.I. 77575 § C.I. Pigment Metal 4 § Glover § Lead Flake § Lead 22 § Omaha § Omaha & Grant § SI § SO	7439-92-1 OF 7525000 LCF000	Toxic	13.98 @ 25 mg/L hardness (12) PP	0.545 @ 25 mg/L hardness (12) PP	49	15 MCL	15 MCL	0.1	0.3

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
m-Xylene §§ § m-Xylol § 1,3-Xylene § meta-Xylene § m-Dimethylbenzene § m-Methyltolulene § 1.3-Dimethylbenzene § 1,3 Dimethyl Benzene	108-38-3 ZE 2275000 XHA000	Toxic			1.17	$1x10^4$ MCL	$1x10^4$ MCL	0.5	2
Malathion §§ § Formal § Sumitox § Emmatos § Celthion § Forthion § Malacide § Kop-Thion § Calmathion § Carbethoxy § NCI C00215 § Carbethoxy Malathion § SHA 057701 § Phosphothion § S-1,2-Bis(Ethoxycarbonyl)Ethyl-O,O-Dimethyl Thiophosphate § O, O-Dimethyl-S-(1,2-Dicarbethoxyethyl) Dithiophosphate § O,O-Dimethyl S-1,2-Di(Ethoxycarbamyl)Ethyl Phosphorodithioate § Succinic Acid, mercapto-, diethyl ester, S-Ester with O,O-Dimethyl Phosphorodithioate	121-75-5 WM 8400000 CBP000	Toxic		0.1 NPP		100 HA	100 HA		0.09
MCPA §§ 4-chloro-2 methylphenoxy acetic acid	94-74-6	Toxic				~~4~~ HA	~~4~~ HA		0.008

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
MCPP §§ 2-(4-chloro-2-methylphenoxy)propionic acid § Mecoprop § 2M 4KhP § 2M-4CP § Anicon B § Anicon P § CMPP § Caswell #559 § Celatox CMPP § iso-Cornox § Isocarnox § Kilprop § Liranox § Mechlorprop § Mecomec § Mecopar § Mecopeop § Mecoper § Mecopex § Mecoprop § Mecoturf § Mecprop § Mepro § Methoxone § Morogal § Okultin § Proponex-pluse § RD 4593 § Rankotex § Runcatex § SYS 67 Mecmin § U 46 KV fluid § Vi-Par § Vi-Pex § EPA pesticide Code #031501	7085-19-0 93-65-2	Toxic				300 HA	300 HA		0.007
Mercury §§ Hg § Colloidal Mercury § Mercury, Metallic § NCI C60399 § Quick Silver § RCRA Waste Number U151	7439-97-6 OV 4550000 MCW250	Toxic with BCF >300	1.7 PP	0.91 PP	5,500	0.05 PP	2 MCL		0.005
Metalaxyl § Ridomil §	57837-19-1	Toxic				600 HA	600 HA	3.5	0.04
Methamidophos §§ Monitor §	10265-92-6	Toxic				2 HA	2 HA		0.2
Methomyl §§ Lannate §	16752-77-5	Toxic				200 HA	200 HA	1	1

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Methoxychlor §§ § DMDT § Metox § Moxie § Methoxcide § NCI C00497 § Methoxy-DDT § Dimethoxy-DDT § 1,1,1-Trichloro-2,2-Bis(p-Methoxyphenyl)Ethane § Benzene, 1,1'-(2,2,2-Trichloroethylidene)Bis[4-Methoxy- § 1,1'-(2,2,2-Trichloroethylidene)Bis[4-Methoxybenzene] § Ethane, 1,1,1-Trichloro-2,2-Bis(p-Methoxyphenyl)- § RCRA Waste Number U247	72-43-5 KJ 3675000 DOB400	Toxic		0.03 NPP		40 MCL	40 MCL		0.02
Metsulfuron Methyl §§ Ally §	74223-64-6	Toxic				2,000 HA	2,000 HA	0.1	0.08
Methyl Bromide §§Bromomethane (HM) § EDCO § Celfume § Dowfume § Methogas § SHA 053201 § Brom-O-Sol § Brom-O-Gas § Terr-O-Gas § Halon 1001 § Terr-O-Cide § Bromo-O-Gas § Bromo Methane § Methylbromide § Methane, Bromo- § Monobromomethane § RCRA Waste Number U029	74-83-9 PA 4900000 BNM500	Toxic			3.75	47 PP	10 HA	0.11	1
Methyl Chloride §§ Chloromethane § Arctic § Monochloromethane § RCRA Waste Number U045	74-87-3 PA 6300000 CHX500	Toxic			3.75	30 HA	30 HA	0.08	1
Methylene chloride §§ Dichloromethane (HM) § R 30 § DCM § Freon 30 § Aerothene MM § NCI C50102 § Solmethine § Methane Dichloride § Methane, Dichloro- § 1,1-Dichloromethane § Methylene Bichloride § Methylene Dichloride	75-09-2 PA 8050000 MDR000	Carcinogen			0.9	5 MCL	5 MCL	N/A	2

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Metolachlor (includes the metabolites metolachlor ESA and metolachlor OA (34) §§ Dual §	51218-45-2	Carcinogen				700 HA	700 HA	N/A	0.2
Metribuzin §§ Sencor §	21087-64-9	Toxic				200 HA	200 HA	10	0.1
Mirex §§ § NCI C06428 § Dechlorane § Bichlorendo § Ferriamicide § Perchloropentacyclodecane § Dodecachloropentacyclodecane § Hexachlorocyclopentadiene Dimer § Cyclopentadiene, Hexachloro-, Dimer § Perchloropentacyclo(5.2.1.0[sup 2,6].0[sup 3,9].0[sup 5,8])Decane § Dodecachlorooctahydro-1,3,4-Metheno-2H-Cyclobuta (c,d)Pentalene § 1,3,4-Metheno-1H-Cyclobuta[cd]Pentalene, 1,1a,2,2,3,3a,4,5,5,5a,5b,6,-Dodecachlorooctahydro-	2385-85-5 PC 8225000 MQW500	Carcinogen		0.001 NPP		1 NPP	1 NPP	N/A	0.01
MTBE §§ Methyl Tertiary-Butyl Ether	1634-04-4	Harmful				30 (21)	30 (21)	N/A	1
Myclobutanil §§ § EPA PCC 128857 § Nova § Rally § Systhane § Systhane 12E § Systhane 6 Flo	88671-89-0	Toxic				200 HA	200 HA		0.03

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
N-Nitrosodimethylamine §§ Dimethylnitrosamine A707 § DMN § NDMA § DMNA § Nitrosodimethylamine § Dimethylnitrosoamine § N-Nitrosodimethylamine § N,N-Dimethylnitrosamine § Methylamine, N-Nitrosodi- § Dimethylamine, N-Nitroso- § N-Methyl-N-Nitrosomethanamine § Methamine, N-Methyl-N-Nitroso- § Methanamine, N-Methyl-N-Nitroso- § RCRA Waste Number P082	62-75-9 IQ 0525000 DSY400	Carcinogen			0.026	0.0069 PP	0.0069 PP	N/A	5
N-Nitrosodiphenylamine §§ § NDPA § NDPhA § Vultrol § Curetard A § NCI C02880 § Redax § TJP § Retarder J § Vulcalent A § Vulcatard § Vultrol § Nitrosodiphenylamine § Diphenylnitrosamine § N,N-Diphenylnitrosamine § N-Nitroso-N-Phenylaniline § Diphenylamine, N-Nitroso- § Benzenamine, N-Nitroso-N-Phenyl-	86-30-6 JJ 9800000 DWI000	Carcinogen			136	33 PP	33 PP	N/A	10
n-Dioctyl Phthalate §§ § DNOP § PX-138 § Vinicizer 85 § Dinopol NOP § n-Octyl Phthalate § Octyl Phthalate § Dioctyl Phthalate § Di-n-Octyl Phthalate § Di-sec-Octyl Phthalate § 1,2-Benzenedicarboxylic Acid, Dioctyl Ester § RCRA Waste Number U107	117-84-0 TI 1925000 DVL600	Carcinogen						N/A	10

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
N-Nitrosodi-N-Propylamine §§ § DPN § DPNA § NDPA § Dipropylnitrosamine § N-Nitrosodipropylamine § Di-n-Propylnitrosamine § Dipropylamine, N-Nitroso- § N-Nitrosodi-n-propylamine § N-Nitroso-di-n-propylamine § 1-Propanamine, N-Nitroso-n-Propyl- § RCRA Waste Number U111	621-64-7 JL 9700000 DWU600	Carcinogen			1.13	0.05 PP	0.05 PP	N/A	5
N-Nitrosopyrrolidine §§ § NPYR § NO-pyr § N-N-pyr § 1-Nitrosopyrrolidene § Pyrrolidine, 1-Nitroso- § Tetrahydro-N-Nitrosopyrrole § Pyrrole, Tetrahydro-N-Nitroso- § RCRA Waste Number U180	930-55-2 UY 1575000 NLP500	Carcinogen			0.055	0.16 NPP	0.16 NPP	N/A	0.02
Naphthalene §§ Moth Balls § Mighty 150 § NCI C52904 § Naphthene § White Tar§ Naphthalin § Tar Camphor § Caswell Number 587 § EPA Pesticide Chemical Code 055801 § RCRA Waste Number U165	91-20-3 QJ 0525000 NAJ500	Carcinogen			10.5	100 HA	100 HA	N/A	10
Nickel §§ Ni § C.I. 77775 § Ni 270 § Nickel 270 § Ni 0901-S § Ni 4303T § NP 2 § Raney Alloy § Raney Nickel	7440-02-0 QR 5950000 NCW500	Toxic	145@ 25mg/L hardness (12) PP	16.1 @ 25 mg/L hardness (12) PP	47	100 HA	100 HA	0.5	2
Nicosulfuron §§ Accent §	111991-09-4	Toxic				9,000 HA	9,000 HA	0.01	0.03

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Nitrate (as Nitrogen[N]) §§ NO3	14797-55-8	Toxic	(8)	(8)		$1x10^4$ NPP	$1x10^4$ NPP	surface water 5000, ground water, see ARM 17.30.715	20
Nitrate plus nitrite (as Nitrogen[N]) §§ NO3 + NO2	See nitrate and nitrite	Toxic	(8)	(8)		$1x10^4$ MCL	$1x10^4$ MCL	surface water 5000, ground water, see ARM 17.30.715	20
Nitrite (as Nitrogen[N]) §§ NO2	14797-65-0	Toxic	(8)	(8)		1,000 MCL	1,000 MCL	4	10
Nitrobenzene §§ § NCI C60082 § Mirbane Oil § Nitrobenzol § Oil of Mirbane § Benzene, Nitro- § Essence of Myrbane § RCRA Waste Number U169	98-95-3 DA 6475000 NEX000	Carcinogen			2.89	17 PP	17 PP	N/A	10
Nitrogen, total inorganic (as Nitrogen[N]) §§ the sum of ammonia, nitrite, and nitrate	See ammonia, nitrate and nitrite	Nutrient	(8)	(8)				10	10
Nitrophenol, 4- §§p-Nitropheno (DOT)l § 4-Hydroxynitrobenzene § NCI C55992) § RCRA Waste Number U170	100-02-7 SM 2275000 NIF000	Toxic			3.31	60 HA	60 HA	2.4	60
o-Nitrophenol §§ § 2-Nitrophenol oxynitrobenzene	88-75-5 SM 2100000 NIE500	Toxic			2.33			0.45	10
Nitrosamines §§ -Nitrosamide § -NSC223080	35576-91-1	Carcinogen				0.008 NPP	0.008 NPP	N/A	$8x10^{-4}$

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Nitrosodibutylamine, N §§ Dibutylnitrosamine § -1-Butanamine § BRN 1760378 § CCRIS 217 § EINECS 213-101-1 § HSDB 5107 § N-butyl-N-nitroso-1-butamine § NDBA § NSC 6830 § RCRA waste number U172	924-16-3	Carcinogen				0.063 NPP	0.063 NPP	N/A	3
Nitrosodiethylamine, N §§ Diethylnitrosamine § -BRN 1744991 § CCRIS 239 § DEN § EINECS 200-226-1 § Ethanamine, N-ethyl-N-nitroso § HSDB 4001 § NDEA § NSC 132 § RCRA waste number U174	55-18-5	Carcinogen				0.008 NPP	0.008 NPP	N/A	$8x10^{-4}$
Nonylphenol §§ § 2,6-Dimethyl-4-heptylphenol § Hydroxyl No. 253	25154-52-3	Toxic	28 NPP	6.6 NPP					0.7
o-Xylene §§ § o-Xylol § 1,2-Xylene § ortho-Xylene § o-Methyltoluene § o-Dimethylbenzene § 1,2-Dimethylbenzene § 1,2-Dimethyl Benzene	95-47-6 ZE 2450000 XHJ000	Toxic			1.17	$1x10^{4}$ MCL	$1x10^{4}$ MCL	0.5	1

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Oxamyl §§ § D-1410 § DPX 1410 § Insecticide-Nematicide 1410 § Vydate § Thioxamyl § Methyl 2-(Dimethylamino)-N- § Vydate L, Insecticide/Nematicide § ({[Methylamino]Carbonyl} Oxy)-2-Oxoethanimidothioate § 2-Dimethylamino-1-(Methylthio)Glyoxal O-Methylcarbamoylmonozime § Methyl N',N'-Dimethyl-N-({Methylcarbamoyl}Oxy)-1-Thiooxamimidate § N',N'-Dimethyl-N-[(Methylcarbamoyl)oxy]-1-Methylthiooxamimidic Acid	23135-22-0 RP 2300000 DSP600	Toxic				200 MCL	200 MCL	1	1
Oxydemeton Methyl §§ Metasystox R §	301-12-2	Toxic				0.7 HA	0.7 HA	1.4	0.07
Oxygen, dissolved (20) §§ O2 § Oxygen, Compressed § Oxygen, Refrigerated Liquid	7782-44-7 RS 2060000 OQW000	Toxic	(15)	(15)					0.3 mg/L

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
p,p'-Dichlorodiphenyldichloroethylene §§ DDE § DDE § p,p'-DDE § 4,4'-DDE § NCI C00555 § Dichlorodiphenyldichloroethylene § Dichlorodiphenyldichloroethylene, p,p'- § 2,2'-bis(4-Chlorophenyl)-1,1-Dichloroethylene § 1,1'-(Dichloroethenylidene)bis(4-Chlorobenzene) § 2,2'-bis(p-Chlorophenyl)-1,1-Dichloroethylene § Benzene, 1,1'-(DichloroethenylideneBis[4-Chloro-	72-55-9 KV 9450000 BIM750	Carcinogen			53,600	0.0022 PP	0.0022 PP	N/A	0.02
p,p'-Dichlorodiphenyldichloroethane §§ DDD § TDE § Dilene § NCI C00475 § Rothane § Rhothane § 4,4'-DDD § p,p'-DDD § p,p'-TDE § 4',4'-D-DDD § RCRA Waste Number U060 § Tetrachlorodiphenylethane § Dichlorodiphenyldichloroethane § Dichlorodiphenyl Dichloroethane § 2,2-bis(4-Chlorophenyl)-1,1-Dichloroethane § 1,1-Dichloro-2,2-bis(p-Chlorophenyl) Ethane § 1,1-bis(4-Chlorophenyl)-2,2-Dichloroethane § 2,2-bis(p-Chlorophenyl)-1,1-Dichloroethane § Benzene, 1,1'(2,2-Dichloroethylidene)Bis[4-Chloro-	72-54-8 KI 0700000 BIM500	Carcinogen			53,600	0.0031 PP	0.0031 PP	N/A	0.02

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
p,p'-Dichlorodiphenyltrichloroethane §§ DDT § DDT § 4,4'-DDT § Agritan § Anoflex § Arkotine § Azotox § Bosan Supra § Bovidermol § Chlorophenothan § Chlorophenothane § Chlorophenotoxum § Citox § Clofenotane § Dedelo § § Chlorophenothane § Diphenyltrichloroethane § Dichlorodiphenyltrichloroethane § 4,4'-Dichlorodiphenyltrichloroethane § 1,1,1-Trichloro-2,2,-bis(p-Chlorophenyl) Ethane § 1,1,1-Trichloro-2,2,-bis(p-Chlorophenyl)Ethane	50-29-3 KJ 3325000 DAD200	Carcinogen	0.5 PP	0.001 PP	53,600	0.0022 PP	0.0022 PP	N/A	0.02
p-Bromodiphenyl Ether §§ Benzene, 1-Bromo-4-Phenoxy- § p-Bromodiphenyl Ether § 4-Bromophenoxybenzene § 4-Bromodiphenyl Ether § 1-Bromo-4-Phenoxybenzene § p-Bromophenylphenyl Ether § 4-Bromophenyl Phenyl Ether	101-55-3	Toxic with BCF >300			1,640				10
p-Chloro-m-Cresol §§3-methyl-4-chlorophenol § PCMC § Parol § Aptal § Baktol § Baktolan § Ottafact § Raschit § Rasen-Anicon § Parmetol § Candasetpic § Chlorocresol § Preventol CMK § Parachlorometra Cresol § 4-Chloro-3-methylphenol § 2-Chloro-Hydroxytoluene § Phenol, 4-Chloro-3-methyl- § Chlorophenol, 4-, methyl, 3- § RCRA Waste Number U039	59-50-7 GO 7100000 CFE250	Harmful				3,000 OL	3,000 OL	N/A	10

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
p-Xylene §§ § p-Xylol § Chromar § Scintillar § 1,4-Xylene § para-Xylene § p-Methyltoluene § p-Dimethylbenzene § 1,4-Dimethylbenzene § 1,4-Dimethyl Benzene	106-42-3 ZE 2625000 XHS000	Toxic			1.17	$1x10^4$ MCL	$1x10^4$ MCL	0.5	2
Paraquat Dichloride §§	1910-42-5	Toxic				30 HA	30 HA	0.8	3
Parathion §§ § DNTP § Niran § Phoskil § Paradust § Stathion § Strathion § Pestox Plus § Nitrostigmine § Parathion Ethyl § Parathion-ethyl § Ethyl Parathion § Diethylparathion § Diethyl para-Nitrophenol Thiophosphate § Diethyl-p-Nitrophenyl Monothiophosphate § O,O-Diethyl O-4-Nitrophenyl Thiophosphate § Phosphorothioic Acid, O,O-Diethyl O-(4-Nitrophenyl) Ester § Caswell Number 637 § EPA Pesticide Chemical Code 057501 § RCRA Waste Number P089	56-38-2 TF 4920000,dry-liquid PAC250,dry	Carcinogen	0.065 NPP	0.013 NPP				N/A	0.2
Pentachlorobenzene §§ Benzene, Pentachloro- § QCB- § RCRA Waste Number U183	608-93-5 DA 6640000 PAV500	Toxic with BCF >300			2,125	1.4 NPP	1.4 NPP		5

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Pentachlorophenol §§ Penta § PCP § Durotox § Weedone § Chem-Tol § Lauxtol A § NCI C54933 § NCI C55378 § NCI C56655 § Permite § Dowcide 7 § Permacide § Penta-Kil§ Permagard § Penchlorol § Chlorophen § Pentachlorphenol § Pentaclorofenolo § Thompson's Wood Fix § Phenol, Pentachloro- § 2,3,4,5,6-Pentachlorophenol § 1-Hydroxy- 2,3,4,5,6-Pentachlorobenzene	87-86-5 SM 6300000 PAX250	Carcinogen	5.3 @ pH of 6.5 (14) PP	4 @ pH of 6.5 (14) PP	11	1 MCL	1 MCL	N/A	0.1
pH §§	N/A	Harmful	(13)	(13)		(18)	(18)	N/A	
Phenanthrene (PAH) §§ § Phenantrin	85-01-8 SF 7175000 PCW250	Toxic			30			0.01	0.2
Phenol §§ § Baker's P and S Liquid and Ointment § NCI C50124 § Benzenol § Monophenol § Oxybenzene § Phenic Acid § Carbolic Acid § Phenylic Acid § Hydroxybenzene § Hydroxybenzene § Phenyl Alcohol § Phenyl Hydrate § Phenylic Alcohol § Phenyl Hydroxide § Benzene, Hydroxy- § Monohydroxybenzene § RCRA Waste Number U188	108-95-2 SJ 3325000 PDN750	Toxic			1.4	300 OL	300 OL	100	10
Phosphorus, inorganic (20) §§ § Ortho-phosphorus § phosphorus, Ortho- § reactive phosphorus	14265-44-2 7723-14-0	Nutrient	(8)	(8)				1	1

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Picloram §§ Tordon § ATCP § K-Pin § Borolin § Amdon Grazon § NCI C00237 § Tordon 10K § Tordon 22K § Tordon 101 Mixture § 3,5,6-Trichloro-4-Aminopicolinic Acid § 4-Amino-3,5,6-Trichloropicolinic Acid	1918-02-1 TJ 7525000 AMU250	Toxic				500 MCL	500 MCL	0.14	1
Pinoxaden (NOA 407855) (includes metabolites Pinoxaden NOA 407854 and pinoxaden NOA 447204) (35) §§	N/A	Toxic				2,000 HA	2,000 HA		200
Polychlorinated Biphenyls, (sum of all homolog, all isomer, all congener or all Aroclor analyses) §§ PCB's § Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260, 1268, 2565, 4465 § Chlophen § Chlorextol § Chlorinated Biphenyl § Chlorinated Diphenyl § Chlorinated Diphenylene § Chloro Biphenyl § Chloro-1,1-Biphenyl § Clophen § Dykanol § Fenclor § Inerteen § Kanechlor 300, 400, 500 § Montar § Noflamol § PCB (DOT) § Phenochlor § Polychlorobiphenyl § Pyralene § Pyranol § Santotherm § Sovol § Therminol FR-1	Multiple	Carcinogen		0.014 PP	31,200	$6.4x10^{-4}$ PP	0.5 MCL	N/A	0.08
Primisulfuron Methyl §§ Beacon § Exceed	86209-51-0	Toxic				2,000 HA	2,000 HA	0.1	200
Prometon §§ Pramitol §	1610-18-0	Toxic				100 HA	100 HA	0.3	0.002

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Pronamide §§ Kerb §	23950-58-5	Carcinogen				50 HA	50 HA	N/A	5
Propachlor §§ Ramrod §	1918-16-7	Toxic				90 HA	90 HA	0.5	0.2
Propane, 1,2-Dibromo-3-Chloro- §§ Dibromochloropropane § 1,2-Dibromo-3-Chloropopane § Fumagon § Fumazone § NCI C00500 § Nemabrom § Nemafume § Nemagon § Nemagone § Nemagone Soil Fumigant § Nemanax § Nemapaz § Nemaset § Nematocide § Nematox § OS 1897 § OXY DBCP § SD 1897 § Caswell Number 287 § 1-Chloro-2,3-Dibromopropane § DBCP § EPA Pesticide Chemical Code 011301 § RCRA Waste Number U066	96-12-8 TX 8750000 DDL800	Toxic				0.2 MCL	0.2 MCL		0.02
Propazine §§	139-40-2	Carcinogen				10 HA	10 HA	N/A	0.03
Propham §§	122-42-9	Toxic				100 HA	100 HA	0.13	0.5
Propioconazole §§ 1-((2-(2,4-dichlorophenyl)-4propyl-1,3-dioxolan-2-yl)methyl)-1H-1,2,4-triazole § Banner § CGA-64250 § Caswell#323EE § Desmel § HSDB 6731 § Orbit § Radar § Tilt § EPA Pesticide # 122101	60207-90-1	Carcinogen				700 HA	700 HA	N/A	70
Propoxur §§ Baygon §	114-26-1	Carcinogen				3 HA	3 HA	N/A	0.4
Prosulfuron §§ Benezenesulfonamide, N(((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)-2-(3,3,3-trifluoropropyl)-	94125-34-5	Toxic				100 HA	100 HA		0.02

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Pyrasulfotole §§ pyrasulfotole §	365400-11-9	Toxic				70 HA	70 HA		0.07
Pyrene (PAH) §§ § ß-Pyrine § beta-Pyrene § Benzo(def)Phenanthrene § Benzo[def]Phenanthrene	129-00-0 UR 2450000 PON250	Toxic			30	830 PP	830 PP	0.25	10
Pyroxsulam	422556-08-9	Toxic				7,000 HA	7,000 HA		0.09
Radium 226 §§	13982-63-6	Carcinogen / Radioactive				5 picoC/ liter Note: The sum of Radium 226 and 228. MCL	5 picoC/ liter Note: The sum of Radium 226 and 228. MCL	N/A	
Radium 228 §§	15262-20-1	Carcinogen / Radioactive				5 picoC/ liter Note: The sum of Radium 226 and 228. MCL	5 picoC/ liter Note: The sum of Radium 226 and 228. MCL	N/A	
Radon 222 §§	14859-67-7	Carcinogen / Radioactive				300 picoC/ liter MCL	300 picoC/ liter MCL	N/A	

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Selenium §§ Se § C.I. 77805 § Colloidal Selenium § Elemental Selenium § Selenium Alloy § Selenium Base § Selenium Dust § Selenium Elemental § Selinium Homopolymer§ Selenium Metal Powder, Non-Pyrophoric § Vandex	7782-49-2 VS 7700000 and VS 8310000, colloidal SBO500 and SBP000, colloidal	Toxic	20 PP	5 PP	4.8	50 MCL	50 MCL	0.6	1
Silver §§ Ag § Argentum § C.I. 77820 § Shell Silver § Silver Atom	7440-22-4 NIOSH: VW 3500000 SAX: SDI500	Toxic	0.374 @ 25 mg/L hardness (12) PP		0.5	100 HA	100 HA	0.2	0.2
Simazine §§ § CDT § Herbex § Framed § Bitemol § Radokor § A 2079 § Batazina § Cat (Herbicide) § CET § G 27692 § Geigy 27,692 § Gesaran § Gesatop 50 § Simazine 80W § Symazine § Taphazine § W 6658 § Zeapur § Princep § Aquazine § Herbazin § Tafazine § 2,4-bis(Ethylamino)-6-Chloro-s-Triazine § 1-Chloro, 3,5-Bisethylamino-2,4,6-Triazine § 2-Chloro-4,6-Bis(Ethylamino)-1,3,5-Triazine § 6-Chloro-N,N'-Diethyl-1,3,5-Triazine-2,4-Diyldiamine	122-34-9 XY 5250000 BJP000	Carcinogen				4 MCL	4 MCL	N/A	0.5
Strontium §§	7447-24-6	Toxic				4,000 HA	4,000 HA	100	20

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Styrene §§ § Styrol § Cinnamol § Cinnamene § Cinnamenol § NCI C02200 § Styrole § Strolene § Styron § Stropor § Vinylbenzol § Phenethylene § Phenylethene § Vinylbenzene § Ethenylbenzene § Phenylethylene § Benzene, Vinyl- § Stryene, Monomer	100-42-5 WL 3675000 SMQ000	Carcinogen				100 HA	100 HA	N/A	0.9
Sulfometuron Methyl §§ Oust §	74222-97-2	Toxic				2,000 HA	2,000 HA	0.01	0.02
Sulfosulfuron §§ imidazo(1,2-a)pyridine-3-sulfonamide,N-(((4,6-dimethoxy-2-pyrimidinyl)amino)cabonyl)-2-(ethylsulfonyl)- § Sulfosulfuron (ISO)	141776-32-1	Toxic				300 HA	300 HA		30
Tebuconazole §§ 1H-1,2,4-Triazole-1-ethanol,alpha-(2-(4-chlorophenyl)ethyl)-apha-(1,1-dimethylethyl)- § BAY-HWG 1608 § Elite § Ethyltrianol § Etiltrianol § Fenetrazole § Folicur § LYNX § Preventol A 8 § Raxil § Terbucanazole § Terbutrazole § HWG 1608 § HSDB 7448	107534-96-3	Carcinogen				200 HA	200 HA	N/A	0.04
Tebuthiuron §§ TebuconazoleSpike	34014-18-1	Toxic				500 HA	500 HA	2	0.002
Temperature §§	N/A	Harmful	(13)	(13)				N/A	
Terbacil §§ Sinbar §	5902-51-1	Toxic				90 HA	90 HA	2.2	0.02
Terbufos §§ Counter §	13071-79-9	Toxic				0.9 HA	0.9 HA	0.5	0.07

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Tetrachlorobenzene, 1,2,4,5- §§ Benzene, 1,2,4,5-Tetrachloro- § RCRA Waste Number U207 § 1,2,4,5-Tetrachlorobenzene	95-94-3 DB 9450000 TBN750	Toxic with BCF >300			1,125	0.97 NPP	0.97 NPP		5
Tetrachloroethane, 1,1,2,2- §§ Tetrachloroethane § TCE § Cellon § Westron § Bonoform § sym-Tetrachloroethane § Acetylene Tetrachloride § 1,1,2,2-Tetrachloroethane § Ethane, 1,1,2,2-Tetrachloro- § 1,1-Dichloro-2,2-Dichloroethane § RCRA Waste Number U209	79-34-5 NIOSH: KI 8575000 SAX: ACK500	Carcinogen			5	1.7 PP	2.0 HA	N/A	0.5
Tetrachloroethylene §§ Perchlorethylene § NCI C04580 § PCE § Perk § PERC § ENMA § Dow-Per § Perchlor § Perclene § Perklone § Didakene § Tetra Cap § Percosolve § Perchloroethylene § Tetrachloroethene § Carbon Bichloride § Carbon Dichloride § Ethylene Tetrachloride § Ethylene, Tetrachloro- § 1,1,2,2-Tetrachloroethylene § RCRA Waste Number U210	127-18-4 KX 3850000 TBQ250	Carcinogen			30.6	5 MCL	5 MCL	N/A	0.7
Thallium §§ Tl § Ramor	7440-28-0 XG 3425000 TEI000	Toxic			119	0.24 PP	2 MCL	0.3	0.2
Thifensulfuron Methyl §§ § Pinnacle	79277-27-3	Toxic				910 HA	910 HA	1	90

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Toluene §§ § Antisal 1a § NCI C07272 § Toluol § Tolu-Sol § Methacide § Methylbenzol § Methylbenzene § Phenylmethane § Phenyl-Methane § Methyl-Benzene § Benzene, Methyl § RCRA Waste Number U220	108-88-3 XS 5250000 TGK750	Toxic			10.7	1,000 MCL	1,000 MCL	0.01	1
Toxaphene §§ § Attac 4-2 § Alltox § Alltex § Attac 6 § Toxakil § Agricide § Chem-Phene § Clor Chem T-590 § Compound 3956 § Crestoxo § Estonox § Geniphene § Gy-Phene § Hercules 3956 § Melipax § Motox § PCC § Phenacide § Toxaphene mixture § Chlorinated-Camphene § Camphene, Octachloro- § RCRA Waste Number P123	8001-35-2 XW 5250000 THH750	Carcinogen	0.73 PP	0.0002 PP	13,100	0.0028 PP	0.3 HA	N/A	1
Tralkoxydim (28) §§ Achieve	87820-88-0	Carcinogen	3,750			20 HA	20 HA	N/A	2
trans-1,2-Dichloroethylene §§ § trans-Dichloroethylene § RCRA Waste Number U079 § trans-1,2-Dichloroethane § trans-1,2-Dichloroethene § Dichloroethylene, trans-§ trans-Acetylene Dichloride § 1,2-trans-Dichloroethylene § Ethene, 1,2-Dichloro-, (E)- § 1,2-Dichloroethylene, trans-	156-60-5 KV 9400000 DFI600	Toxic			1.58	100 MCL	100 MCL	0.05	0.6

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
trans-1,3-Dichloropropene §§ Telone II § 1,3-Dichloropropene § 1,3-Dichloropropylene § (E)-1,3-Dichloropropene § trans-1,3-Dichloropropylene § 1-Propene, 1,3-Dichloro-, (E)-	10061-02-6 UC 8320000 DGH000	Carcinogen			1.91	2 HA	2 HA	N/A	0.3
trans-Nonachlor (Chlordane component) §§ § Chlordane, trans-Isomer	39765-80-5	Carcinogen			14,100	0.008 PP	1 HA	N/A	0.1
Triallate §§ § Avadex BW § BRN 1875853 § Dipthal § Far-Go § Triamyl	2303-17-5	Carcinogen				5 HA	5 HA	N/A	5
Triasulfuron §§ Amber	82097-50-5	Toxic				70 HA	70 HA	1	0.03
Tribenuron Methyl §§ Express	101200-48-0	Carcinogen				60 HA	60 HA	N/A	6
Tributyltin (TBT) §§ §Tin-San § Tributylin chloride complex § EPA Pesticide Chemical #083108	56573-85-4	Toxic	0.46 NPP	0.072 NPP					0.007
Trichlorobenzene, 1,2,4- §§ Benzene, 1,2,4-Trichloro- § unsym-Trichlorobenzene § 1,2,4-Trichlorobenzene	120-82-1 DC 2100000 TIK250	Toxic			114	35 PP	70 MCL	0.02	10
Trichloroethane, 1,1,2- §§ Vinyl Trichloride § 1,1,2-Trichloroethane § ß-T § Ethane Trichloride § beta-Trichloroethane § NCI C04579 § Ethane, 1,1,2-Trichloro- § Caswell Number 875A [NLM] § EPA Pesticide Chemical Code 081203 [NLM]§ 1,2,2-Trichloroethane § RCRA Waste Number U227	79-00-5 KJ 3150000 TIN000	Carcinogen			4.5	3 HA	3 HA	N/A	0.7

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Trichloroethane, 1,1,1- §§ Methyl Chloroform § -T § Strobane § Inhibisol § 1,1,1-TCE § Tri-Ethane § Solvent 111 § Aerothene TT § Chloroethene § Chlorten § NCI C04626 § Methylchloroform § Chloroform, Methyl- § 1,1,1-Trichloroethene § alpha-Trichloroethane § Methyltrichloromethane § 1,1,1-Trichloroethane § Ethane, 1,1,1-Trichloro-§ RCRA WAste Number U226	71-55-6 KJ 2975000 TIM750	Toxic			5.6	200 MCL	200 MCL	0.5	0.7
Trichloroethylene §§ § TCE § Triad § Vitran § Algylen § Dow-Tri § Lanadin § Vestrol § Anamenth § Benzinol § Tri- Plus § Tri-Clene § Trichlorethene § Trichloroethene § Trichloroethane § Trichlorethylene § Ethene, Trichloro- § Ethylene Trichloride § Ethylene, Trichloro- § Acetylene Trichloride § 1,1,2- Trichloroethylene § 1,2,2- Trichloroethylene § 1- Chloro-2,2- Dichloroethylene § 1, 1- Dichloro-2-Chloroethylene	79-01-6 KX 4550000 TIO750	Carcinogen			10.6	5 MCL	5 MCL	N/A	0.5

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			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Trichlorofluoromethane (HM) §§ Freon 11 § F 11 § FC 11 § Arcton 9 § Eskimon 11 § Halocarbon 11 § Algofrene Type 1 § Fluorocarbon Number 11 § NCI C04637 § Isotron 11 § Fluorotrichloromethane § Isceon 131 § Monofluorotrichloromethane § Ucon Refrigerant 11 § Trichloromonofluoromethane § RCRA Waste Number U121	75-69-4 PB 6125000 TIP500	Toxic			3.75	$1x10^4$ HA	$1x10^4$ HA	0.07	0.8
Trichlorophenol, 2,4,5- §§ Dowcide B § 2,4,5-Trichlorophenol § Nurelle § Dowcide 2 § Collunosol § Preventol 1 § NCI C61187 § RCRA Waste Number U230	95-95-4 SN 1400000 TIV750	Toxic			110	1,800 NPP	1,800 NPP	10	60
Trichlorophenol, 2,4,6- §§ Phenachlor § Omal § Phenol, 2,4,6-trichloro- § NCI C02904 § 2,4,6-Trichlorophenol § Dowcide 2S § RCRA Waste Number U231	88-06-2 SN 1575000 TIW000	Carcinogen			150	14 PP	30 HA	N/A	10

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Trichlorophenoxy Proprionic Acid, 2 (2,4,5-) §§ Fenoprop § 2 (2,4,5-Trichlorophenoxy) Proprionic Acid § Kuran § Propon § Silvex § Aqua-Vex § Ded-Weed § Sta-Fast § 2,4,5-TP § Color-Set § Weed-B-Gon § Double Strength § 2,4,5-Trichlorophenoxypropionic Acid § (2,4,5-Trichlorophenoxy)Propionic Acid § 2-(2,4,5-Trichlorophenoxy)-Proprionic Acid § (+/-)-2-(2,4,5-Trichlorophenoxy)propanoic Acid § RCRA Waste Number U233	93-72-1 UF 8225000 TIX500	Toxic				10 NPP	50 MCL	0.075	0.2
Trichlorophenoxyacetic Acid §§ Brush-Rhap § 2,4,5-T (Brush-Rhap)	93-76-5	Toxic				70 HA	70 HA		0.2
Triclopyr §§ 3,4,5-Trichloro-2pyridinyloxyacetic acid § Confront § Dowco 233 § Garlon § Garlon 2 § Garlon 250 § Grazon 250 § Redeem § Release § Turflon § Caswell# 8821 § HSDB 7060 § EPA Pesticide Chemical #116001	55335-06-3	Toxic				400 HA	400 HA		0.5
Trifluralin §§ Treflan § Buckle	1582-09-8	Carcinogen				5 HA	5 HA	N/A	0.5
Trihalomethanes, total §§ § TTHMs	Multiple	Carcinogen				100 MCL	100 MCL	N/A	3
Triticonazole §§	131983-72-7	Toxic				1,000 HA	1,000 HA		0.1
Turbidity (20) §§	N/A	Harmful	(13)	(13)				N/A	1 NTU

Pollutant Element / Chemical Compound or Condition §§ - Primary Synonym § - Other Names	CASRN numbers, NIOSH number, SAX Number (25) (26) (27)	Category (1) (2)	Aquatic Life Standards		Bio-concentration Factor (BCF) (5)	Human Health Standards (17) (16)		Trigger Value (22)	Required Reporting Value (19)
			Acute (3)	Chronic (4)		Surface Water	Ground Water		
Uranium, natural §§ U § Uranium Metal, Pyrophoric	7440-61-1 YR 3490000 UNS000	Carcinogen / Radioactive				30 MCL	30 MCL	N/A	0.2
Vinyl 2-Chloroethyl Ether §§ Vinyl ß-Chloroethyl Ether- § 2-Chloroethyl Vinyl Ether § (2-Chloroethoxy)Ethene § RCRA Waste Number U042	110-75-8 KN 6300000 CHI250	Carcinogen			0.557			N/A	2
Vinyl Chloride §§ § VC § VCM § Chlorethene § Chloroethene § Chlorethylene § Chloroethylene § Ethylene, Chloro- § Monochloroethylene § Ethylene Monochloride § Vinyl Chloride Monomer § Vinyl C Monomer § Trovidur § RCRA Waste Number U043	75-01-4 KU 9625000 VNP000	Carcinogen			1.17	0.25 PP	0.2 HA	N/A	0.4
Xylenes §§ § Xylol § Violet 3 § Mixed Xylenes § Methyl Toluene § Dimethylbenzene § NCI C55232 § Total equals the sum of meta, ortho, and para. § RCRA Waste Number U239	1330-20-7 ZE 2100000 XGS000	Toxic			1.17	$1x10^4$ MCL	$1x10^4$ MCL	0.5	3
Zinc §§ Zn § Blue Powder § C.I. 77945 § C.I. Pigment Black 16 § C.I. Pigment Metal 6 § Emanay Zinc Dust § Granular Zinc § Jasad § Merrillite § Pasco § Zinc, Powder or Dust, non-Pyrophoric § Zinc, Powder or Dust, Pyrophoric	7440-66-6 ZG 8600000 ZBJ000	Toxic	37 @ 25 mg/L hardness (12) PP	37 @ 25 mg/L hardness (12) PP	47	2,000 HA	2,000 HA	5	8

FOOTNOTES

(1) Based on EPA's Integrated Risk Information System (IRIS) categories and includes parameters determined to be toxic (toxin) or carcinogenic (carcinogen). Harmful parameters are not defined by IRIS but are used in DEQ-7 and include biological agents (such as E. coli), those parameters which are detrimental to aesthetics (such as color), parameters that cause taste and/or odor effects (such as MTBE), or parameters that generate physical effects (such as iron).

(2) Chemicals classified by EPA as carcinogens for an oral route of exposure in the drinking water regulations and health advisories (EPA 822-B-96-002 and EPA 820-R-11-002) and those listed as carcinogens in the EPA priority pollutants list. In 2005, the EPA added a new scale to describe carcinogens and both the 1986 and 2005 scales are now in simultaneous use. The classifications considered carcinogenic in the 1986 scale are as follows: A (human carcinogen); B1 or B2 (probable human carcinogens); and C (possible human carcinogen). In the 2005 scale, the following categories are considered carcinogens: H (human carcinogen); L (likely carcinogen); L/N (likely to be carcinogenic above a specified dose) and S (suggestive evidence of carcinogenic potential).

(3) The one-hour average concentration of these parameters in surface waters may not exceed these values more than once in any three year period, on average, with the exception of silver, which, at present, is interpreted as a “not to exceed” value.

(4) The 96 hour average concentration of these parameters in surface waters may not exceed these values more than once in any three year period, on average.

(5) All bioconcentration factors (BCFs) were developed by the EPA as part of the Standards development as mandated by Section 304(a) of the federal Clean Water Act. National Recommended Water Quality Criteria: 2002 Human Health Criteria Calculation Matrix (EPA-822-R-02-012).

(6) The 24 hour geometric mean value must not exceed these values.

(7) Freshwater Aquatic Life Standards for total ammonia nitrogen (µg/L NH_3-N plus NH_4-N).

Because these formulas are non-linear in pH and temperature, the Standard is the average of separate evaluations of the formulas reflective of the fluctuations of pH and temperature within the averaging period; it is not appropriate to apply the formula to average pH and temperature.

1. The one-hour average concentration of total ammonia nitrogen (in µg/L) does not exceed the CMC (acute criterion) calculated using the following equations.

Where salmonid fish are present:

$$\text{CMC} = \frac{0.275}{1 + 10^{7.204 - \text{pH}}} + \frac{39.0}{1 + 10^{\text{pH} - 7.204}}$$

Or where salmonid fish are not present:

$$\text{CMC} = \frac{0.411}{1 + 10^{7.204 - \text{pH}}} + \frac{58.4}{1 + 10^{\text{pH} - 7.204}}$$

2. The thirty-day average concentration of total ammonia nitrogen (in µg/L) does not exceed the CCC (chronic criterion) calculated using the following equations.

When fish early life stages[1] are present:

$$CCC = \left(\frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) \times MIN\left(2.85, 1.45 \times 10^{0.028 \times (25 - T)}\right)$$

When fish early life stages[1] are absent:

$$CCC = \left(\frac{0.0577}{1 + 10^{7.688 - pH}} + \frac{2.487}{1 + 10^{pH - 7.688}} \right) \times 1.45 \times 10^{0.028 \times (25 - MAX(T,7))}$$

[1] Includes all embryonic and larval stages and all juvenile forms of fish to 30-days following hatching.

3. In addition, the highest four-day average within the 30-day period should not exceed 2.5 times the CCC.

Table 1. pH-Dependent Values of the CMC (Acute Criterion) Ammonia Standard.

CMC, total ammonia nitrogen (µg/L NH_3-N plus NH_4-N)		
pH	**Salmonids Present**	**Salmonids Absent**
6.5	32600	48800
6.6	31300	46800
6.7	29800	44600
6.8	28100	42000
6.9	26200	39100
7.0	24100	36100
7.1	22000	32800
7.2	19700	29500
7.3	17500	26200
7.4	15400	23000
7.5	13300	19900
7.6	11400	17000
7.7	9650	14400
7.8	8110	12100
7.9	6770	10100
8.0	5620	8400
8.1	4640	6950
8.2	3830	5720
8.3	3150	4710
8.4	2590	3880
8.5	2140	3200
8.6	1770	2650
8.7	1470	2200
8.8	1230	1840
8.9	1040	1560
9.0	885	1320

Table 2. Temperature and pH-Dependent Values of the CCC (Chronic Criterion) for *Fish Early Life Stages Present* and for *Fish Early Life Stages Absent*.

CCC for Fish Early Life Stages Present, total ammonia nitrogen (µg/L NH_3-N plus NH_4-N)										
pH	**Temperature, °C**									
	0	**14**	**16**	**18**	**20**	**22**	**24**	**26**	**28**	**30**
6.5	6670	6670	6060	5333	4680	4120	3620	3180	2800	2460
6.6	6570	6570	5970	5250	4610	4050	3560	3130	2750	2420
6.7	6440	6440	5860	5150	4520	3980	3500	3070	2700	2370
6.8	6290	6290	5720	5030	4420	3890	3420	3000	2640	2320
6.9	6120	6120	5560	4890	4300	3780	3320	2920	2570	2250
7.0	5910	5910	5370	4720	4150	3650	3210	2820	2480	2180
7.1	5670	5670	5150	4530	3980	3500	3080	2700	2380	2090
7.2	5390	5390	4900	4310	3780	3330	2920	2570	2260	1990
7.3	5080	5080	4610	4060	3570	3130	2760	2420	2130	1870
7.4	4730	4730	4300	3780	3320	2920	2570	2260	1980	1740
7.5	4360	4360	3970	3490	3060	2690	2370	2080	1830	1610
7.6	3980	3980	3610	3180	2790	2450	2160	1900	1670	1470
7.7	3580	3580	3250	2860	2510	2210	1940	1710	1500	1320
7.8	3180	3180	2890	2540	2230	1960	1730	1530	1330	1170
7.9	2800	2800	2540	2240	1960	1730	1520	1330	1170	1030
8.0	2430	2430	2210	1940	1710	1500	1320	1160	1020	897
8.1	2101	2101	1910	1680	1470	1290	1140	1000	879	773
8.2	1790	1790	1630	1430	1260	1110	973	855	752	661
8.3	1520	1520	1390	1220	1070	941	827	727	639	562
8.4	1290	1290	1170	1030	906	796	700	615	541	475
8.5	1090	1090	990	870	765	672	591	520	457	401
8.6	920	920	836	735	646	568	499	439	386	339
8.7	788	788	707	622	547	480	422	371	326	287
8.8	661	661	601	528	464	408	359	315	277	244
8.9	565	565	513	451	397	349	306	269	237	208
9.0	486	486	442	389	342	300	264	232	204	179

*At 15 C and above, the criterion for fish *ELS absent* is the same as the criterion for fish *ELS present*

(8) A plant nutrient, excessive amounts of which may cause violations of Administrative Rules of Montana (ARM) 17.30.637 (1)(e).

(9) Approved methods of sample preservation, collection, and analysis for determining compliance with the standards set forth in DEQ-7 are found in the surface water quality standards (ARM17.30.601, et seq.) and the ground water rules (ARM 17.30.1001, et seq.).

Standards for metals (except aluminum) in surface water are based upon the analysis of samples following a "total recoverable" digestion procedure (EPA Method 200.2, Supplement I, Rev. 2.8, May, 1994).

Standards for alpha emitters, beta emitters and gamma emitters in surface waters are based upon the analysis of unfiltered samples and appropriate EPA approved analysis methods.

Standards for metals in ground water are based upon the dissolved portion of the sample (after filtration through a 0.45 µm membrane filter, as specified in "Methods for Analysis of Water and Wastes" 1983, Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency, EPA-600/4-79-020, or equivalent). Standards for alpha emitters, beta emitters and gamma emitters in ground water are based upon the analysis of filtered samples and appropriate EPA approved analysis methods.

Standard for organic parameters in surface water and ground water are based on unfiltered samples.

(10) Calculation of an equivalent concentration of 2,3,7,8-TCDD is to be based on congeners of CDDs/CDFs and the toxicity equivalency factors (TEF) in van den Berg, M: et al. (2006) The 2005 World Health Organization Re-evaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-like Compounds. Toxicological Sciences 93(2):223-241. The analysis method to be used is EPA Method 1613, Revision B, Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS), EPA Method 8290, or other method approved by the department on case by case basis. The Required Reporting Value(s) (RRV) for Dioxin and congeners are to be the lowest detection level for the analysis method approved by the Department.

(11) Radionuclides consisting of alpha emitters, beta emitters and gamma emitters are classified as carcinogens. “Alpha emitters” means the total radioactivity due to alpha particle emission. “Beta emitters” means the total radioactivity due to beta particle emission. “Gamma emitters” means the total radioactivity due to gamma particle emission. The emitters covered under this Standard include but are not limited to: Cesium, radioactive Iodine, radioactive Strontium-89 and -90, radioactive Tritium Gamma photon emitters.

(12) Freshwater Aquatic Life Standards for these metals are expressed as a function of total hardness (mg/L, CaCO3). The values displayed in the chart correspond to a total hardness of 25 mg/L. The hardness relationships are:

	Acute = exp.{ma[ln(hardness)]+ba}			**Chronic = exp.{mc[ln(hardness)]+bc}**	
	ma	**ba**		**mc**	**Bc**
Cadmium	1.0166	-3.924		0.7409	-4.719
Copper	0.9422	-1.700		0.8545	-1.702
Chromium (III)	0.819	3.7256		0.819	0.6848
Lead	1.273	-1.46		1.273	-4.705
Nickel	0.846	2.255		0.846	0.0584
Silver	1.72	-6.52			
Zinc	0.8473	0.884		0.8473	0.884

Note: If the hardness is <25mg/L as CaCO3, the number 25 must be used in the calculation. If the hardness is greater than or equal to 400 mg/L as CaCO3, 400 mg/L must be used in the calculation.

(13) This standard is based upon Water-Use Classifications. See Administrative Rules of Montana (ARM), title 17, Chapter 30 - Water Quality, Sub-Chapter 6 - Surface Water Quality Standards.

(14) Freshwater Aquatic Life Standard for pentachlorophenol is dependent on pH. Values displayed in the chart correspond to a pH of 6.5 and are calculated as follows:

Acute = exp[1.005(pH) - 4.869] Chronic = exp[1.005(pH) - 5.134]

(15) Freshwater Aquatic Life Standards for dissolved oxygen in milligrams per liter are as follows:

	Standards for Waters Classified A-1, B-1, B-2, C-1, and C-2		**Standards for Waters Classified B-3, C-3, and I**	
	Early Life Stages[1,2]	**Other Life Stages**	**Early Life Stages[2]**	**Other Life Stages**
30 Day Mean	N/A[3]	6.5	N/A[3]	5.5
7 Day Mean	9.5 (6.5)	N/A[3]	6.0	N/A[3]
7 Day Mean Minimum	N/A[3]	5.0	N/A[3]	4.0
1 Day Minimum[4]	8.0 (5.0)	4.0	5.0	3.0

[1] These are water column concentrations recommended to achieve the required inter-gravel dissolved oxygen concentrations shown in parentheses. For species that have early life stages exposed directly to the water column, the figures in parentheses apply.
[2] Includes all embryonic and larval stages and all juvenile forms of fish to 30-days following hatching.
[3] N/A (Not Applicable).
[4] All minima should be considered as instantaneous concentrations to be achieved at all times.

(16) Surface or groundwater concentrations may not exceed these values.

(17) Source of the criteria used to derive the standard:
PP = priority pollutant criteria
NPP = non-priority pollutant criteria
OL= organoleptic pollutant criteria
MCL = Maximum contaminant level from the drinking water regulations
HA = health advisory developed from EPA's "Drinking Water Standards and Health Advisories" (October 1996) guidance, using recent scientific evidence and verified by EPA Region VIII toxicologist

(18) The Narrative Standards are located in the Administrative Rules of Montana (ARM) 17.30.601 et seq. and ARM 17.30.1001 et seq.

(19) The required reporting value (RRV) is the Department's selection of a laboratory reporting limit that is sufficiently sensitive to meet the most stringent numeric water quality standard. The RRV shall be used when reporting surface water or ground water monitoring or compliance data to the Department unless otherwise specified by the Department in a permit, approval or authorization issued by the Department. It is the responsibility of the sampling entity to ensure that appropriate methods and reporting limits are requested from the laboratory to meet analytical and reporting limit needs.

(20) Applicable to surface waters only.

(21) Based on taste and odor thresholds given in EPA 822-f-97-008 December 1997.

(22) Trigger Values are used to determine if a given increase in the concentration of toxic parameters is significant or non-significant as per the non-degradation rules ARM 17.30.701 et seq. The acronym "N/A" means "not applicable".

(23) Reserved

(24) Reserved

(25) CASRN is an acronym for the American Chemical Society's Chemical Abstracts Service Registry Number.

(26) The NIOSH RTECS number is a unique number used for identification in the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances.

(27) SAX number, in the format AAA123, is a unique number for identification of materials in the Dangerous Properties of Industrial Materials, authors N. Irving Sax and Richard J. Lewis, publisher Van Nostrand Reinhold.

(28) The sum of the concentrations of tralkoxydim and its breakdown products shall not exceed the standards listed. For a list of known breakdown products, see EPA memorandum "EFED's Section 3 Review for Tralkoxydim (Chemical #121000; Case # 060780; DP Barcodes 0234682, 0234752, 0238697, 0235723 & 0239519)," and the associated "Environmental Fate Assessment for Tralkoxydim."

(29) Ground water human health standard is based on the relative potency for selected PAH compounds listed in Table 8 of the EPA “Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons” July 1993, EPA/600/R-93/089.

(30) The sum of the concentrations of acetochlor and the breakdown products, acetochlor ESA and acetochlor OA, shall not exceed the standards listed.

(31) The sum of the concentrations of alachlor and the breakdown products, alachlor ESA and alachlor OA, shall not exceed the standards listed.

(32) The sum of the concentrations of atrazine and the breakdown products, deethyl atrazine, deisopropyl atrazine, and deethyl deisopropyl atrazine, shall not exceed the standards listed.

(33) The sum of the concentrations of imazamethabenz-methyl ester and the breakdown product, imazamethabenz-methyl acid, shall not exceed the standards listed.

(34) The sum of the concentrations of metolachlor and the breakdown products, metolachlor ESA and metolachlor OA, shall not exceed the standards listed.

(35) The sum of the concentrations of pinoxaden (NOA 407855) and the breakdown products, pinoxaden NOA 407854 and pinoxaden NOA 447204, shall not exceed the standards listed.

(36) The human health criteria for arsenic is the more restrictive of the risk based level of 1 in 1000 [$1x10^{-3}$], or the MCL.

(37) The quantitative combination of two or more of Aldicarb, Aldicarb sulfone and Aldicarb sulfoxide shall not exceed 7 µg/L because each has a similar mode of action.

(38) The quantitative sum of all listed Haloacetic acids is used in determining the total Haloacetic acid concentration.

(39) The sum of the concentrations of Endosulfan and its isomers Endosulfan I and Endosulfan II shall not exceed the standards listed.